

# Cisco

## Exam Questions 350-501

Implementing and Operating Cisco Service Provider Network Core Technologies



**NEW QUESTION 1**

Refer to the exhibit.

```
Router 1:
tacacs-server host 192.168.1.2 single-connection
tacacs-server key ciscotest
```

What is the result of this configuration?

- A. Router 1 opens and closes a TCP connection to the TACACS+ server every time a user requires authorization.
- B. Router 1 and the TACACS+ server maintain one open connection between them only when network administrator is accessing the router with password ciscotest.
- C. Router 1 and the TACACS+ server maintain one open connection between them.
- D. Router 1 opens and closes a TCP connection to the TACACS+ server every time a user requires authentication.

**Answer: C**

**Explanation:**

<https://www.ccexpert.us/cisco-secure/configuring-tacacs-on-cisco-ios.html>

single-connection (Optional) Used to specify a single connection. Rather than have the router open and close a TCP connection to the daemon each time it must communicate, the single-connection option maintains a single open connection between the router and the daemon. This is more efficient because it allows the daemon to handle a higher number of TACACS operations.

**NEW QUESTION 2**

Refer to the exhibit.

```
R1#show ip ospf interface gig 2
GigabitEthernet2 is up, line protocol is up
Internet Address 172.20.1.12/31, Area 0.0.1.255, Attached via Interface Enable
Process ID 1, Router ID 10.255.255.1, Network Type POINT_TO_POINT, Cost: 1
Topology-MTID Cost Disabled Shutdown Topology Name
0 1 no no Base
Enabled by interface config, including secondary ip addresses
Transmit Delay is 1 sec, State POINT_TO_POINT
Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5

R1#show ip interface gig 2
GigabitEthernet2 is up, line protocol is up
Internet address is 172.20.1.12/31
MTU is 9216 bytes

R2#show ip ospf interface gig 2
GigabitEthernet2 is up, line protocol is up
Internet Address 172.20.1.13/31, Area 511, Attached via Interface Enable
Process ID 1, Router ID 10.255.255.2, Network Type POINT_TO_MULTIPOINT, Cost: 1
Topology-MTID Cost Disabled Shutdown Topology Name
0 1 no no Base
Enabled by interface config, including secondary ip addresses
Transmit Delay is 1 sec, State POINT_TO_MULTIPOINT
Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5

R2#show ip interface gig 2
GigabitEthernet2 is up, line protocol is up
Internet address is 172.20.1.13/31
MTU is 1500 bytes
```

While troubleshooting the OSPF adjacency between routers R1 and R2 an engineer noticed that both routers are stuck in the EXCHANGE/EXSTART state. What should the engineer fix to solve the ongoing issue?

- A. match IPv4 addresses
- B. match OSPF areas
- C. match OSPF network types
- D. match MTU values

**Answer: D**

**NEW QUESTION 3**

What is the role of NSO in network automation?

- A. It is GUI used to manage wireless devices in a campus infrastructure.
- B. It is a type of REST API used to configure an APIC.
- C. It is a tool that uses CLI only to configure virtual network devices.
- D. It is a tool used to bridge automation to the physical network infrastructure.

Answer: D

**Explanation:**

<https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/network-services-orchestrator/da>

NSO provides a robust bridge linking network automation and orchestration tools with the underlying physical and virtual infrastructure.

**NEW QUESTION 4**

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

session protection	It prevents valid routes from being overwritten with new ones until labels are assigned.
IGP synchronization	It allows stale label bindings to be used for a period of time while an LDP neighbor is unreachable.
targeted-hello accept	It uses LDP Targeted hellos to protect LDP sessions.
graceful restart	It uses LDP to form neighborhood between non-directly connected routers.

- A. Mastered
- B. Not Mastered

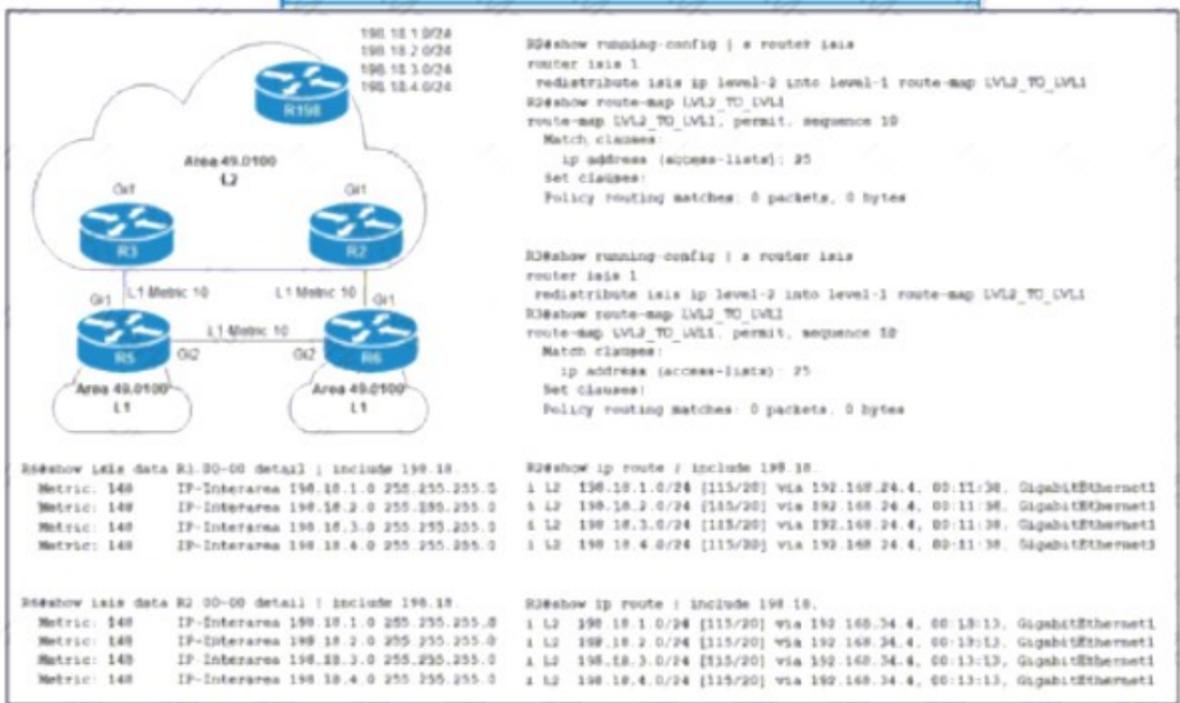
Answer: A

**Explanation:**

graceful restart
IGP synchronization
session protection
targeted-hello accept

**NEW QUESTION 5**

Refer to the exhibit.



Routers R2 and R3 are Level 1/Level 2 IS-IS routers that redistribute 198.18.x.x/24 prefixes to routers R5 and R6 in the Level 1 area. R2 is to be the preferred router for all redistributed prefixes in the Level 1 area. Which configuration sets this preference?

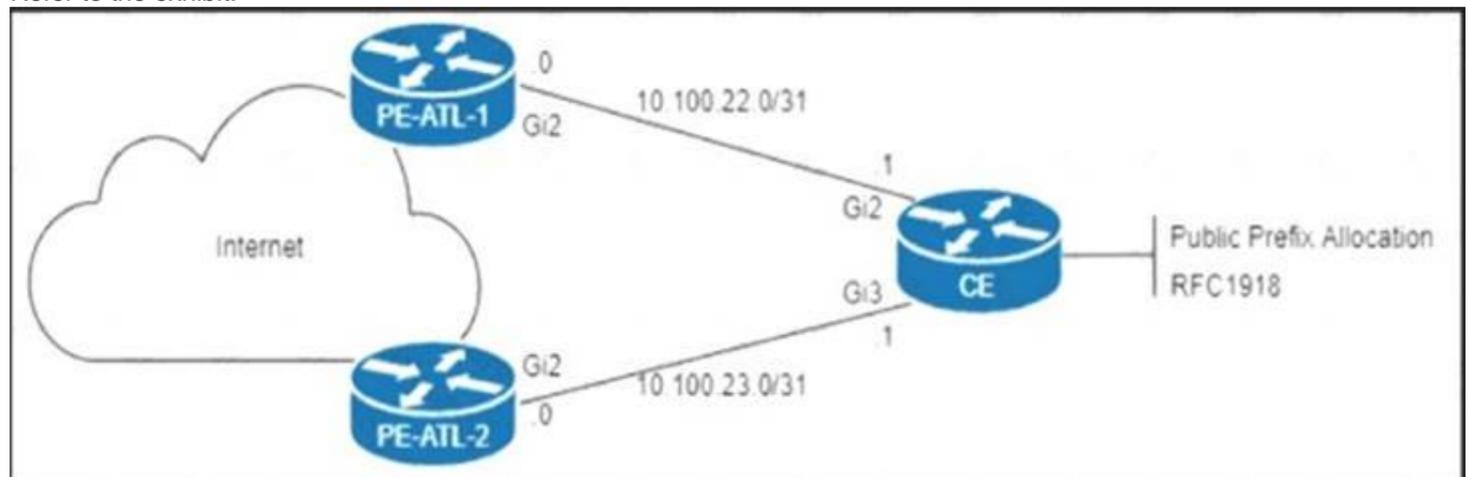
- On R2:  
**configure terminal**  
**route-map LVL2\_TO\_LVL1 permit 10**  
**set metric 5**  
**end**
- On R2:  
**configure terminal**  
**route-map LVL2\_TO\_LVL1 permit 10**  
**set metric 25**  
**end**
- On R3:  
**configure terminal**  
**route-map LVL2\_TO\_LVL1 permit 10**  
**set metric 5**  
**end**
- On R3:  
**configure terminal**  
**route-map LVL2\_TO\_LVL1 permit 10**  
**set metric 25**  
**end**

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

**Answer: A**

**NEW QUESTION 6**

Refer to the exhibit.



The CE router is peering with both PE routers and advertising a public prefix to the internet. Routing to and from this prefix will be asymmetric under certain network conditions, but packets must not be discarded. Which configuration must an engineer apply to the two PE routers so that they validate reverse packet forwarding for packets entering their Gi2 interfaces and drop traffic from the RFC1918 space?

- A. ip verify unicast source reachable-via rx allow-default
- B. interface GigabitEthernet 2 ip verify unicast source reachable-via rx
- C. ip verify unicast source reachable-via any allow-default interface GigabitEthernet 2
- D. ip verify unicast source reachable-via any

**Answer: D**

**NEW QUESTION 7**

Drag and drop the functions from the path computation element protocol roles on the right.

calculates paths through the network	Path Computation Element
keeps TE topology database information	
sends path calculation request	
sends path creation request	Path Computation Client
sends path status updates	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

- Path computation element (**PCE**)
  - Computes network paths (topology, paths, etc.)
  - Stores TE topology database (synchronized with network)
  - May initiate path creation
  - Stateful - stores path database included resources used (synchronized with network)
- Path computation client (**PCC**)
  - May send path computation requests to PCE
  - May send path state updates to PCE
- Used between head-end router (PCC) and PCE to:
  - Request/receive path from PCE subject to constraints
  - State synchronization between PCE and router
  - Hybrid CSPF



**NEW QUESTION 8**

An engineer needs to implement QOS mechanism on customer's network as some applications going over the internet are slower than others. Which two actions must the engineer perform when implementing traffic shaping on the network in order to accomplish this task? (Choose two)

- A. Configure a queue with sufficient memory to buffer excess packets.
- B. Configure the token values in bytes.
- C. Implement packet remarking for excess traffic.
- D. Implement a scheduling function to handle delayed packets.
- E. Configure a threshold over which excess packets are discarded.

Answer: AD

**NEW QUESTION 9**

Which two tasks must you perform when you implement LDP NSF on your network? (Choose two.)

- A. Enable NSF for EIGRP
- B. Enable NSF for the link-state routing protocol that is in use on the network.
- C. Disable Cisco Express Forwarding
- D. Implement direct connections for LDP peers
- E. Enable NSF for BGP



C. vrf definition VRF-100 rd 172.17.255.1:100!address-family ipv4export map VRF-100-EXPORT route-target import 65010:100route-target import 65010:1999 exit address-family!route-map VRF-100-EXPORT permit 10match ip address prefix-list VRF-100-ALLOWED-EXPORT set extcommunity rt 65010:100 65010:2999route-map VRF-100-EXPORT permit 20 set extcommunity r 65010:100!ip prefix-list VRF-100-ALLOWED-EXPORT seq 5 permit 198.18.1.0/29

D. vrf definition VRF-100 rd 172.17.255.1:100!address-family ipv4route-target export 65010:100route-target export 65010:1999route-target import 65010:100route-target import 65010:2999 exit-address-family

**Answer:** D

**NEW QUESTION 15**

Refer to the exhibit:

```
interface gigabitethernet1/0/1
switchport mode access
switchport access vlan 5
channel-group 1 mode desirable
```

An engineer is preparing to implement link aggregation configuration. Which statement al about this configuration is true?

- A. The switch port actively sends packets to negotiate an EtherChannel using PAgP
- B. The switch port accepts LACP and PAgP packets from a connected peer and negotiate an EtherChannel using the common EtherChannel mode.
- C. The switch port passively negotiates an EtherChannel if it receives PAgP packets from a connected peer
- D. The switch port negotiates an EtherChannel if it receives LACP packets from a connected peer

**Answer:** A

**NEW QUESTION 17**

What is the role of NSO?

- A. Provides public cloud services for customers that need Internet access.
- B. Controls the turn-up of a device.
- C. Provides network monitoring services for Layer 3 devices.
- D. Maintains data storage.

**Answer:** B

**NEW QUESTION 21**

ASN 65001 is peering with ASN 65002 to exchange IPv6 BGP routes. All routes that originate in ASN 65001 have a standard community value of 65001:100, and ASN 65002 is allowed to advertise only 2001

:db8:aaaa::/48. An engineer needs to update the ASN 65001 route-filtering configuration to meet these conditions:

\* Looped routes into ASN 65001 and routes that have traversed 10 or more ASNs must be denied.

\* Routes accepted into ASN 65001 must be assigned a community value of 65001:200. Which configuration must the engineer apply to the ASN 65001 border router?

- route-policy PEER-AS65002-IN
  - > if as-path length ge 10 or as-path passes-through '65001' or community matches-any (65001:100) then
    - drop
    - endif
    - if destination in (2001:db8:aaaa::/48) then
      - done
      - else
        - drop
      - endif
      - set community (65001:200)
    - end-policy
  - route-policy PEER-AS65002-IN
    - if as-path length ge 10 and as-path passes-through '65001' or community matches-any (65001:100) then
      - drop
      - endif
      - if destination in (2001:db8:aaaa::/48) then
        - pass
        - endif
        - set community (65001:200)
      - end-policy

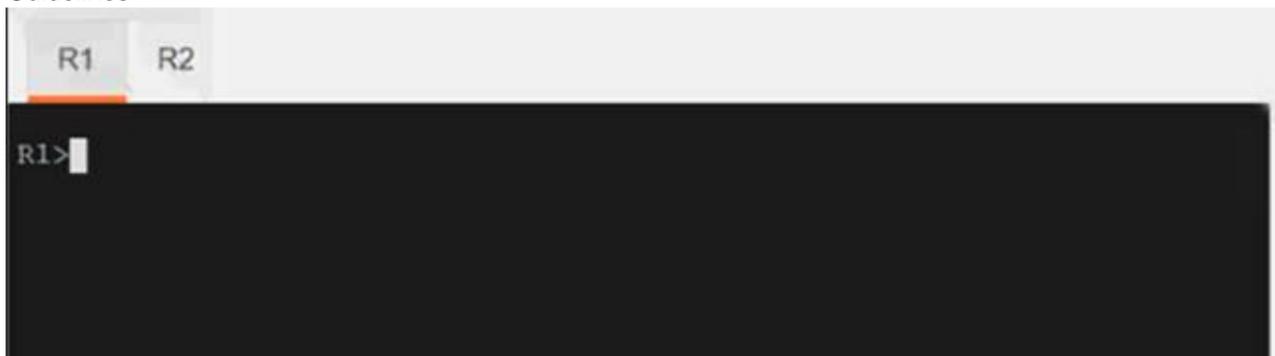
- route-policy PEER-AS65002-IN
    - if as-path length ge 10 then
      - drop
    - endif
    - if as-path passes-through '65001' or community matches-any (65001:100) then
      - drop
    - endif
    - if destination in (2001:db8:aaaa::/48) then
      - pass
    - endif
    - set community (65001:200)
  - end-policy
- route-policy PEER-AS65002-IN
    - if as-path length ge 10 then
      - drop
    - endif
    - if as-path passes-through '65001' or community matches-any (65001:100) then
      - drop
    - endif
    - if destination in (2001:db8:aaaa::/48) then
      - set community (65001:200)
- route-policy PEER-AS65002-IN
    - if as-path length ge 10 then
      - drop
    - endif
    - if as-path passes-through '65001' or community matches-any (65001:100) then
      - drop
    - endif
    - if destination in (2001:db8:aaaa::/48) then
      - set community (65001:200)
    - else
      - drop
    - endif
  - end-policy

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

**Answer: D**

**NEW QUESTION 26**

Guidelines

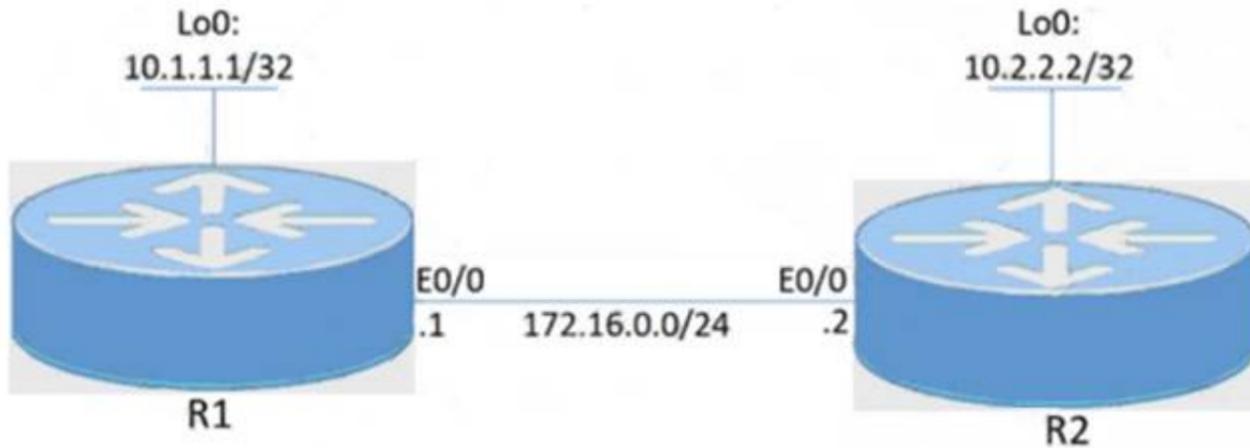


This is a lab item in which tasks will be performed on virtual devices.

- Refer to the Tasks tab to view the tasks for this lab item.
- Refer to the Topology tab to access the device console(s) and perform the tasks.
- Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
- All necessary preconfigurations have been applied.
- Do not change the enable password or hostname for any device.
- Save your configurations to NVRAM before moving to the next item.
- Click Next at the bottom of the screen to submit this lab and move to the next question.
- When Next is clicked, the lab closes and cannot be reopened.

Topology

## OSPF Process ID 10 Area 0



**Tasks**

Configure and verify the OSPF neighbor adjacency between R1 and R2 in OSPF area 0 according to the topology to achieve these goals:

- \* 1. Establish R1 and R2 OSPF adjacency. All interfaces must be advertised in OSPF by using the OSPF interface command method. Use Loopback0 as the OSPF ID.
- \* 2. There must be no DR/BDR elections in OSPF Area 0 when establishing the neighbor relationship between R1 and R2. OSPF must not generate the host entries /32 for the adjacent interfaces.
- \* 3. Enable OSPF MD5 Authentication between both routers at the interface level with password C1sc0!.

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Here is the solution:

Graphical user interface, text Description automatically generated

```
R1:
Conf t
Router ospf 10
Router-id 10.1.1.1
```

```
interface e0/0
ip ospf 10 area 0
ip ospf network point-to-point
ip ospf message-digest-key 1 md5 C1sc0!
```

```
int lo0
ip ospf 10 area 0
```

```
R2:
Conf t
Router ospf 10
Router-id 10.2.2.2
```

```
interface e0/0
ip ospf 10 area 0
ip ospf network point-to-point
ip ospf message-digest-key 1 md5 C1sc0!
```

```
int lo0
ip ospf 10 area 0
```

**NEW QUESTION 31**

A network engineer is implementing NetFlow to observe traffic patterns on the network. The engineer is planning to review the patterns to help plan future strategies for monitoring and preventing congestion as the network grows. If the captures must include BGP next-hop flows, which configuration must the engineer apply to the router?

- A. ip cefip flow-export version 5 bgp-next-hopip flow-export destination 192.168.1.1 9995 interface gigabitethernet 1/0/1ip flow egress
- B. ip cefip flow-export version 9 bgp-next-hopip flow-export destination 192.168.1.1 9996 interface gigabitethernet 1/0/1ip flow ingress
- C. ip cefip flow-export version 5ip flow-export destination 192.168.1.1 9995 interface gigabitethernet 1/0/1ip flow ingress cdp enable
- D. no ip cefip flow-export version 9ip flow-export destination 192.168.1.1 9996 interface gigabitethernet 1/0/1ip flow ingressip flow egress

Answer: B

**NEW QUESTION 34**

Refer to the exhibit.

```

!
router bgp 65001
 no synchronization
  bgp log-neighbor-changes
  neighbor 10.10.10.1 remote-as 4282
  neighbor 10.10.10.1 distribute-list 1 out
  no auto-summary
!
ip as-path access-list 1 permit ^$
!

```

An engineer is reviewing the BGP configuration. Which routes must be advertised to 10.10.10.1

- A. Local routes are permitted, and routes from other ASNs are denied.
- B. All routes whether local or from other ASNs are denied.
- C. Local routes are denied, and routes from other ASNs are permitted.
- D. All routes whether local or from other ASNs are permitted.

Answer: D

**NEW QUESTION 36**

Which task must be performed first to Implement BFD in an IS-IS environment?

- A. Disable Cisco Express Forwarding on all interfaces running routing protocols other than IS-IS
- B. Configure BFD under the IS-IS process
- C. Configure all ISIS routers as Level 2 devices
- D. Configure BFD in an interface configuration mode

Answer: D

**NEW QUESTION 40**

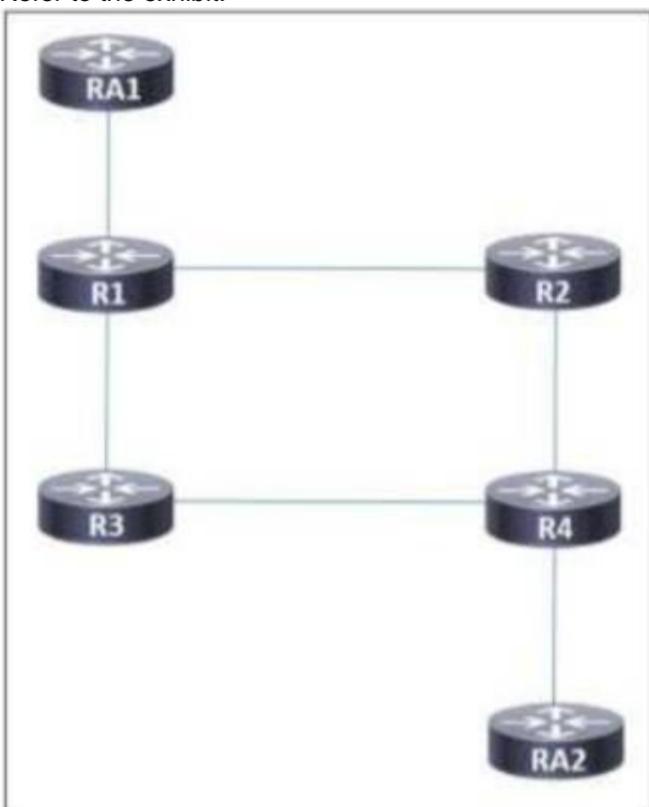
What is the characteristic of the TI-LFA?

- A. It guarantees a loop-free path for all interfaces in the OSPF- super backbone .
- B. It applies on each area and instance and makes all the interfaces inherit the configuration
- C. It guarantees a loop-free path for all areas configured in OSPF
- D. It applies only on the instance and makes at the interfaces inherit the configuration

Answer: A

**NEW QUESTION 44**

Refer to the exhibit.



A network administrator implemented MPLS routing between routers R1, R2, R3, and R4. AToM is configured between R1 and R4 to allow Layer 2 traffic from hosts on RA1 and RA2. A targeted MPLS session is established between R1 and R4. Which additional action must the administrator take on all routers so that LDP synchronization occurs between connected LDP sessions?

- A. Disable the MPLS LDP IGP sync holddown.
- B. Configure OSPF or IS-IS as the routing protocol.

- C. Configure EIGRP as the routing protocol using stub areas only.
- D. Enable MPLS LDP sync delay timers.

**Answer: A**

**NEW QUESTION 45**

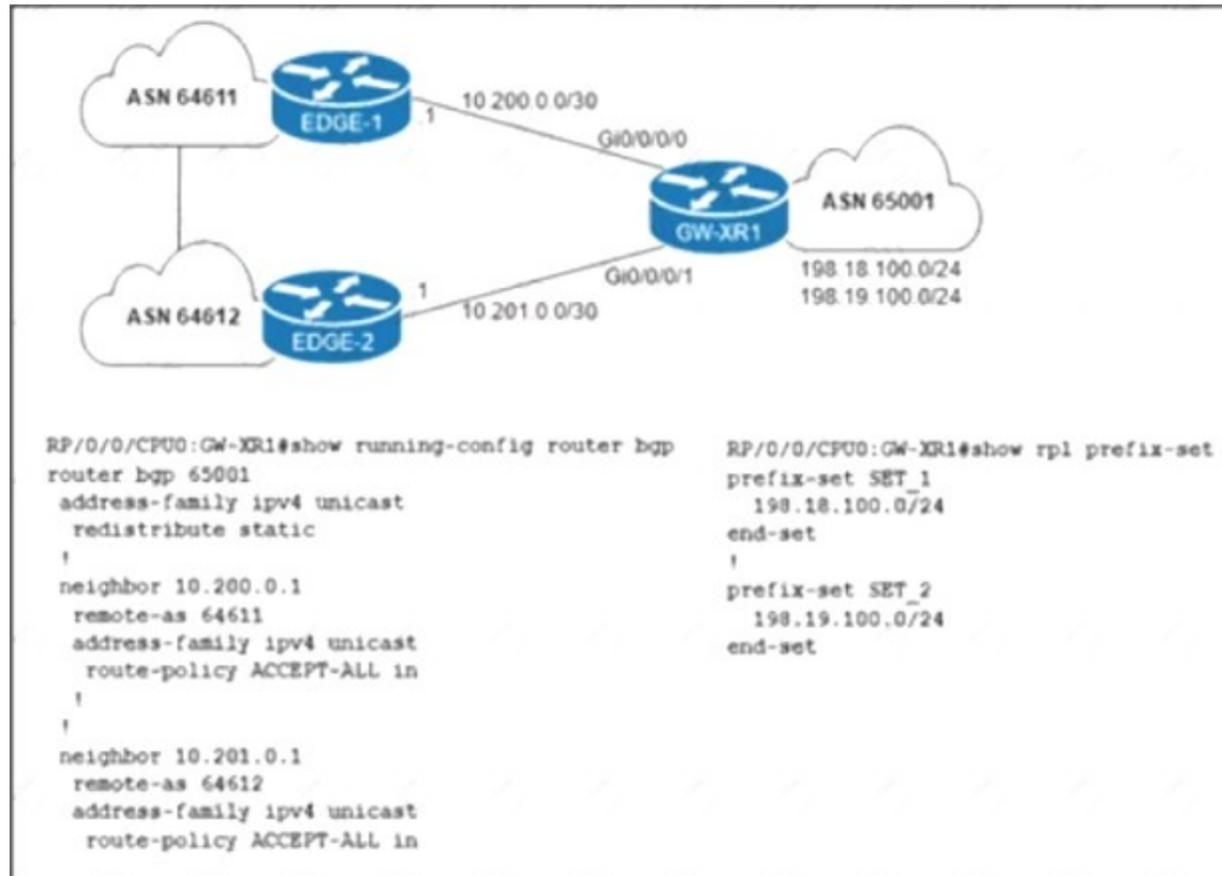
While an engineer deploys a new Cisco device to redistribute routes from OSPF to BGP, they notice that not all OSPF routes are getting advertised into BGP. Which action must the engineer perform so that the device allows O, OIA, OE1, and OE2 OSPF routes into other protocols?

- A. Configure the device to pass only O and E2 routes through it.
- B. Configure the synchronization keyword in the global BGP configuration.
- C. Configure the keyword nssa in the redistribution entry.
- D. Configure the keywords internal and external in the redistribution entry.

**Answer: D**

**NEW QUESTION 49**

Refer to the exhibit.



The network engineer who manages ASN 65001 must configure a BGP routing policy on GW-XR1 with these requirements:

- Advertise locally-originated routes and /24 prefixes assigned within the 198.18.0.0/15 range. All other prefixes must be dropped.
- Reachability to 198.18.100.0/24 must be preferred via the EDGE-1 connection.
- Reachability to 198.19.100.0/24 must be preferred via the EDGE-2 connection. Which configuration must the network engineer implement on GW-XR1?

- A. Graphical user interface, text, application Description automatically generated

```
configure terminal
route-policy EBGP-STANDARD-OUT($PREFIX_LIST, $PREPEND, $NUM_TIMES)
  if as-path is-local then
    pass
  else
    drop
  endif
  if destination in (198.18.0.0/15 eq 24) then
    pass
  else
    drop
  endif
  if destination in $PREFIX_LIST then
    prepend as-path $PREPEND $NUM_TIMES
  else
    done
  endif
end-policy
!
router bgp 65001
neighbor 10.200.0.1
address-family ipv4 unicast
route-policy EBGP-STANDARD-OUT(SET_1, 64611, 1) out
!
neighbor 10.201.0.1
address-family ipv4 unicast
route-policy EBGP-STANDARD-OUT(SET_2, 64612, 1) out
end
```

B. Text Description automatically generated

```
configure terminal
route-policy EBGP-STANDARD-OUT($PREFIX_LIST, $PREPEND, $NUM_TIMES)
  if as-path is-local then
    pass
  else
    drop
  endif
  if destination in (198.18.0.0/15 eq 24) then
    pass
  else
    drop
  endif
  if destination in $PREFIX_LIST then
    prepend as-path $PREPEND $NUM_TIMES
  else
    done
  endif
end-policy
!
router bgp 65001
neighbor 10.200.0.1
address-family ipv4 unicast
route-policy EBGP-STANDARD-OUT(SET_2, 65001, 2) out
!
neighbor 10.201.0.1
address-family ipv4 unicast
route-policy EBGP-STANDARD-OUT(SET_1, 65001, 2) out
end
```

C. Graphical user interface, text, application, letter, email Description automatically generated

```
configure terminal
route-policy EBGP-STANDARD-OUT($PREFIX_LIST, $PREPEND, $NUM_TIMES)
  if as-path is-local then
    done
  endif
  if destination in (198.18.0.0/15 eq 24) then
    pass
  endif
  if destination in $PREFIX_LIST then
    prepend as-path $PREPEND $NUM_TIMES
  else
    done
  endif
end-policy
!
router bgp 65001
neighbor 10.200.0.1
address-family ipv4 unicast
route-policy EBGP-STANDARD-OUT(SET_2, 65001, 2) out
!
neighbor 10.201.0.1
address-family ipv4 unicast
route-policy EBGP-STANDARD-OUT(SET_1, 65001, 2) out
end
```

D. Text, letter, email Description automatically generated

```
configure terminal
route-policy EBGP-STANDARD-OUT($PREFIX_LIST, $PREPEND, $NUM_TIMES)
  if as-path is-local then
    pass
  else
    drop
  endif
  if destination in (198.18.0.0/15) then
    pass
  else
    drop
  endif
  if destination-prefix in $PREFIX_LIST then
    prepend as-path $PREPEND $NUM_TIMES
  else
    done
  endif
end-policy
!
router bgp 65001
neighbor 10.200.0.1
address-family ipv4 unicast
route-policy EBGP-STANDARD-OUT(SET_2, 65001, 2) out
!
neighbor 10.201.0.1
address-family ipv4 unicast
route-policy EBGP-STANDARD-OUT(SET_1, 65001, 2) out
end
```

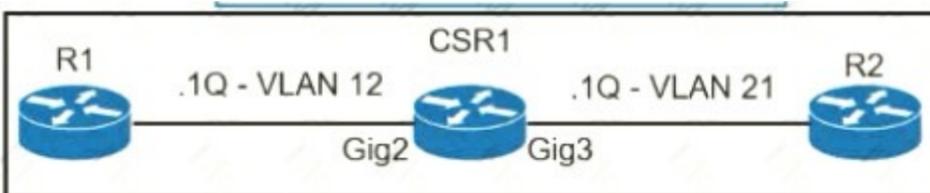
**Answer:** B

**Explanation:**

<https://community.cisco.com/t5/mpls/cisco-xr-rpl-destination-vs-destination-prefix/td-p/4587693>

**NEW QUESTION 50**

Refer to the exhibit.



A network operator must configure CSR1 interlaces GigabitEihernet2 and GigabitEthemet to rewrite VLAN tags 12 and 21 for traffic between R1 and R2 respectively. Which configurator accomplishes this task?

A)

```
#CSR1
interface GigabitEthernet2
no ip address
service instance 21 ethernet
encapsulation dot1q 21
rewrite ingress tag translate 1-to-1 dot1q 12
rewrite egress tag translate 1-to-1 dot1q 21
bridge-domain 10
!
interface GigabitEthernet3
no ip address
service instance 12 ethernet
encapsulation dot1q 12
rewrite ingress tag translate 1-to-1 dot1q 21
rewrite egress tag translate 1-to-1 dot1q 12
bridge-domain 10
```

B)

```
#CSR1
interface GigabitEthernet2
no ip address
service instance 12 ethernet
encapsulation dot1q 12
rewrite ingress tag translate 1-to-1 dot1q 21
rewrite egress tag translate 1-to-1 dot1q 12
bridge-domain 10
!
interface GigabitEthernet3
no ip address
service instance 21 ethernet
encapsulation dot1q 21
rewrite ingress tag translate 1-to-1 dot1q 12
rewrite egress tag translate 1-to-1 dot1q 21
bridge-domain 10
```

C)

```
#CSR1
interface GigabitEthernet2
!
interface GigabitEthernet3
no ip address
service instance 21 ethernet
encapsulation dot1q 21
rewrite ingress tag translate 1-to-1 dot1q 12
rewrite egress tag translate 1-to-1 dot1q 21
bridge-domain 21
```

D)

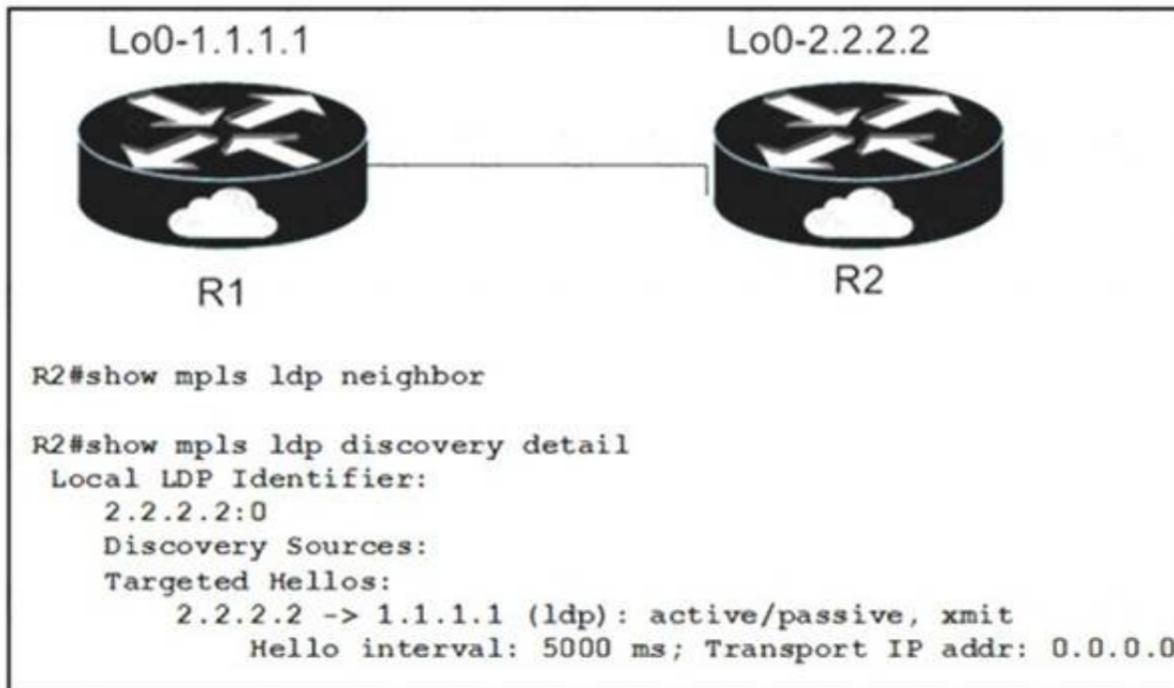
```
#CSR1
interface GigabitEthernet2
no ip address
service instance 12 ethernet
encapsulation dot1q 12
rewrite ingress tag translate 1-to-1 dot1q 21
rewrite egress tag translate 1-to-1 dot1q 12
!
interface GigabitEthernet3
no ip address
service instance 21 ethernet
encapsulation dot1q 21
rewrite ingress tag translate 1-to-1 dot1q 12
rewrite egress tag translate 1-to-1 dot1q 21
```

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

Answer: B

**NEW QUESTION 54**

Refer to the exhibit:



When implementing an LDP protocol, an engineer experienced an issue between two directly connected routers and noticed that no LDP neighbor exists for 1.1.1.1.

Which factor should be the reason for this situation?

- A. LDP needs to be enabled on the R2 physical interface
- B. R2 does not see any hellos from R1
- C. LDP needs to be enabled on the R2 loopback interface
- D. R2 sees the wrong type of hellos from R1

Answer: B

**NEW QUESTION 57**

Refer to the exhibit.

```

RP/0/RP0/CPU0:router(config)# router bgp 65534
RP/0/RP0/CPU0:router(config-bgp)# neighbor 192.168.223.7
RP/0/RP0/CPU0:router(config-bgp-nbr)# remote-as 65507
RP/0/RP0/CPU0:router(config-bgp-nbr)#
    
```

An engineer is securing a customer's network. Which command completes this configuration and the engineer must use to prevent a DoS attack?

- A. neighbor ebgp-multihop
- B. ebgp-multihop
- C. ttl-security
- D. neighbor-ttl-security

Answer: C

**NEW QUESTION 59**

What are two features of stateful NAT64? (Choose two.)

- A. It uses address overloading.
- B. It provides 1:N translations, so it supports an unlimited number of endpoints.
- C. It requires IPv4-translatable IPv6 address assignments.
- D. It requires the IPv6 hosts to use either DHCPv6-based address assignments or manual address assignments.
- E. It provides 1:1 translation, so it supports a limited number of endpoints.

Answer: AB

**NEW QUESTION 61**

Refer to the exhibit:

```

ip flow-export source loopback 0
ip flow-export destination 192.168.1.1
ip flow-export version 9 origin-as
    
```

Export statistics received do not include the BGP next hop. Which statement about the NetFlow export statistics is true?

- A. Only the origin AS of the source router will be included in the export statistics.
- B. Loopback 0 must be participating in BGP for it to be included in the export statistics.
- C. The origin AS and the peer-as will be included in the export statistics.
- D. To include the BGP next hop in the export statistics, those keywords must be included with the version 9 entry.

Answer: D

**NEW QUESTION 64**

What is a characteristic of data modeling language?

- A. It provides an interface for state data.
- B. It separates configuration and state data.
- C. It ensures devices are individually configured.
- D. It replaces SNMP.

**Answer: B**

**NEW QUESTION 66**

Refer to the exhibit:

```
Router 1:

ip route 192.168.1.0 255.255.255.0 null 0 tag 1

route-map ddos
 match tag 1
 set local preference 150
 set community no export

route-map ddos permit 20

router bgp 65513
 redistribute static route-map ddos

Router 2:

Interface gigabitethernet0/1
 ip verify unicast reverse-path
```

An engineer is preparing to implement data plane security configuration. Which statement about this configuration is true?

- A. Router 2 must configure a route to null 0 for network 192 168.1 0/24 for the RTBH implementation to be complete.
- B. Router 1 is the trigger router in a RTBH implementation.
- C. Router 1 must be configured with uRPF for the RTBH implementation to be effective.
- D. Router 2 is the router receiving the DDoS attack

**Answer: B**

**NEW QUESTION 69**

Exhibit:

```
R1#show ip bgp 35.33.13.0
BGP routing table entry for 35.33.13.0/24, version 24
Paths: (3 available, best #3, table Default-IP-Routing-Table)
...
10
 172.31.1.99 from 172.31.1.99 (1.1.1.1)
   Origin IGP, metric 100, localpref 200, valid, internal
10
 172.26.11.100 from 172.26.11.100 (3.3.3.3)
   Origin IGP, metric 120, localpref 200, valid, external
18293
 172.21.71.1 from 172.21.71.1 (2.2.2.2)
   Origin IGP, metric 150, localpref 200, valid, external, best
```

A network engineer must update the routing toward the web server with IP address 35.22.13.1. The primary path must be configured via the neighbor router with ID 1.1.1.1. However, local-preference configuration is not permitted on R1. Which task must the engineer perform on R1 to complete the implementation?

- A. Configure the device to choose the best MED from the same AS.
- B. Set the device to ignore the conditional MED if the route originated in a different autonomous system.
- C. Enable MED comparison between routes from neighbors in different AS.
- D. Implement deterministic MED to choose the best route from the different AS.

Answer: B

**NEW QUESTION 73**

Which configuration modifies Local Packet Transport Services hardware policies?

A)

```
configure
lpts pifib hardware police
flow ospf unicast default rate 200
flow bgp configured rate 200
flow bgp default rate 100
!
lpts pifib hardware police location 0/2/CPU0
flow ospf unicast default rate 100
flow bgp configured rate 300
flow icmp application rate 100
flow icmp default rate 100
!
```

B)

```
configure
lpts punt police location 0/0/CPU0
exception invalid rate 400
protocol cdp rate 50
protocol arp rate 5000
protocol ipv4 options rate 100
exception icmp rate 200
```

C)

```
configure
lpts pifib police hardware
flow ospf unicast default rate 200
flow bgp configured rate 200
flow bgp default rate 100
!
lpts pifib police hardware location 0/2
flow ospf unicast default rate 100
flow bgp configured rate 300
flow icmp application rate 100
flow icmp default rate 100
!
```

D)

```
configure
lpts police
exception invalid rate 400
protocol cdp rate 50
protocol arp rate 5000
```

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

**Answer: C**

**NEW QUESTION 74**

An engineer is moving all of an organization's Cisco IOS XE BGP routers to the address-family identifier format. Which command should be used to perform this upgrade quickly with the minimum service disruption?

- A. vrf upgrade-cli
- B. bgp upgrade-cli
- C. address-family ipv4
- D. ip bgp-community new-format

**Answer: B**

**NEW QUESTION 77**

Refer to the exhibit:

```

R1
router isis
  net 49.0012.1111.1111.1111.00
  is-type level-1
  area-password cisco
R2
router isis
  net 49.0022.1111.1111.1112.00
  is-type level-1-2
  area-password cisco
  
```

What is the effect of this configuration?

- A. The two routers fail to form a neighbor relationship because their system IDs are different.
- B. The two routers successfully form a neighbor relationship
- C. The two routers fail to form a neighbor relationship because the authentication configuration is missing
- D. The two routers fail to form a neighbor relationship because they have different ISIS area types.

**Answer: B**

**NEW QUESTION 82**

Which statement describes the advantage of a Multi-Layer control plane?

- A. It automatically provisions monitors, and manages traffic across Layer 0 to Layer 3
- B. It minimizes human error configuring converged networks
- C. It supports dynamic wavelength restoration in Layer 0
- D. It provides multivendor configuration capabilities for Layer 3 to Layer 1

**Answer: C**

**NEW QUESTION 87**

Which condition must be met for TI-LFA to protect LDP traffic?

- A. For single-segment protection, the PQ node must be LDP and SR-capable.
- B. The protected destination must have an associated LDP label and prefix-SID.
- C. The point of local repair must be LDP-capable.
- D. For double-segment protection, the P and Q nodes must be SR-capable.

**Answer: D**

**NEW QUESTION 88**

Refer to the exhibit.

```

R1# show ip bgp summary
Neighbor      V AS   MsgRcvd  MsgSent  TblVer  InQ  OutQ  Up/Down  State/PfxRcd
11.11.11.11  4 5400   0         0         0       0     0     never    Active

R1
interface Loopback0
 ip address 2.2.2.2 255.255.255.255
interface Ethernet1/0
 ip address 11.11.11.11 255.255.255.0
router bgp 5400
 neighbor 11.11.11.12 remote-as 5400
 neighbor 11.11.11.12 update-source Loopback0
 ip route 1.1.1.1 255.255.255.255 11.11.11.12

R2
interface Loopback0
 ip address 1.1.1.1 255.255.255.255
interface Ethernet1/0
 ip address 11.11.11.12 255.255.255.0
router bgp 5400
 neighbor 11.11.11.11 remote-as 5400
 neighbor 11.11.11.11 update-source Loopback0
 ip route 2.2.2.2 255.255.255.255 11.11.11.11

```

Router R1 is reporting that its BGP neighbor adjacency to router R2 is down, but its state is Active as shown. Which configuration must be applied to routers R1 and R2 to fix the problem?

A)

```

R1
router bgp 5400
neighbor 2.2.2.2 remote-as 5400

```

```

R2
router bgp 5400
neighbor 1.1.1.1 remote-as 5400

```

B)

```

R1
router bgp 5400
 neighbor 11.11.11.11 remote-as 5400
 neighbor 11.11.11.11 update-source Loopback0

```

```

R2
router bgp 5400
 neighbor 11.11.11.12 remote-as 5400
 neighbor 11.11.11.12 update-source Loopback0

```

C)

```

R1
router bgp 5400
 neighbor 1.1.1.1 remote-as 5400
 neighbor 1.1.1.1 update-source Loopback0

```

```

R2
router bgp 5400
 neighbor 2.2.2.2 remote-as 5400
 neighbor 2.2.2.2 update-source Loopback0

```

D)

```

R1
router bgp 5400
 neighbor 2.2.2.2 remote-as 5400
 neighbor 2.2.2.2 update-source Loopback0

```

```

R2
router bgp 5400
 neighbor 1.1.1.1 remote-as 5400
 neighbor 1.1.1.1 update-source Loopback0

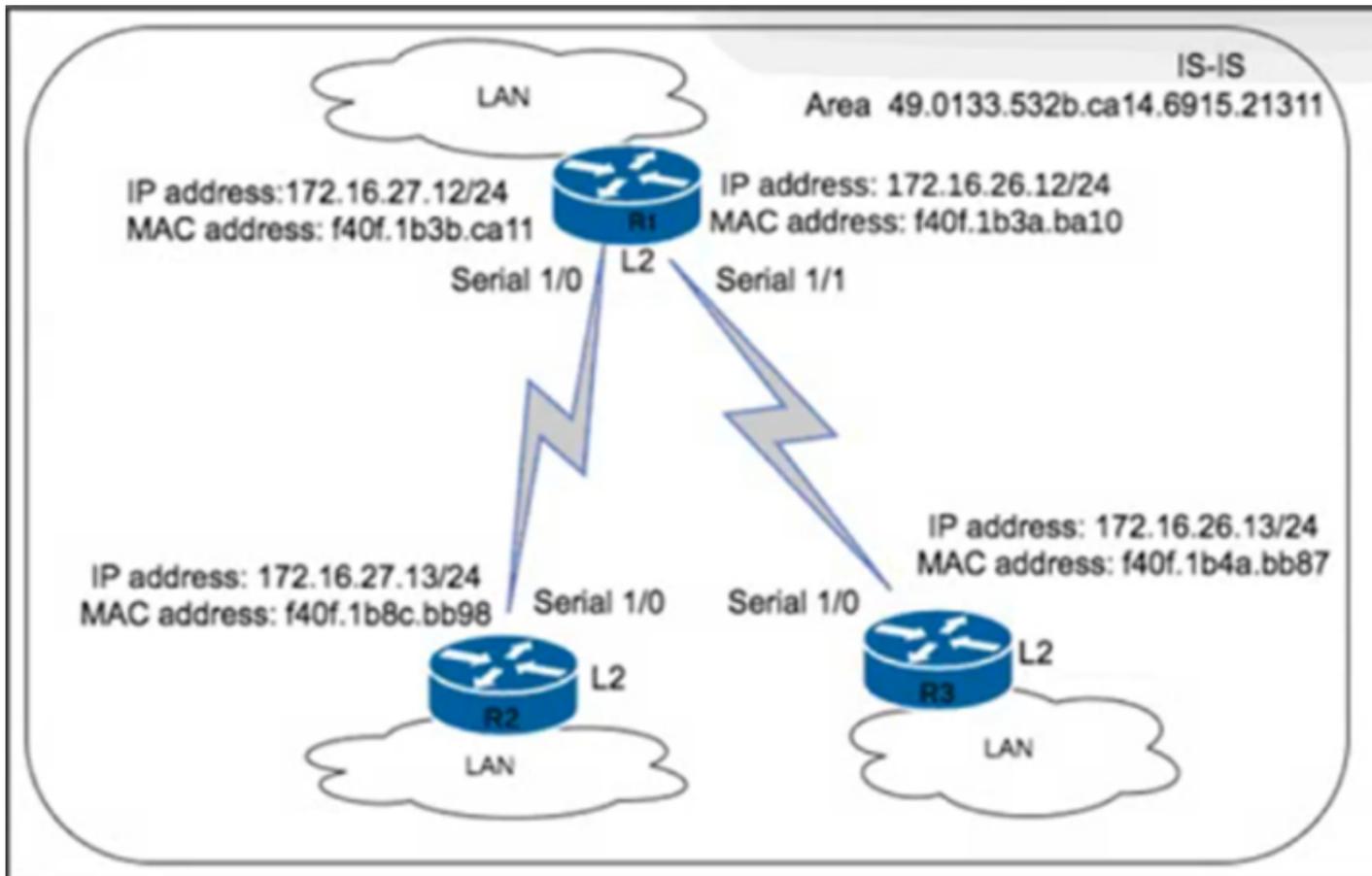
```

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

Answer: C

**NEW QUESTION 91**

Refer to the exhibit.



An engineer with an employee 10:4350:47:853 is implementing IS-IS as the new routing protocol in the network. All routers in the network operate as Level 2 routers in the same private autonomous system, and the three branches are connected via dark fibre. The engineer has already implemented IS-IS on router R1 with NET address 49.0133.532b.ca14.6915.21311.F40F.1B3a.ba10.00. Which IS-IS NET address configuration must be implemented on R3 to establish IS-IS connectivity?

- A. 49.0133.532b.ca14.6915.21311.f40f.1b4a.bb87.00
- B. 49.0135.332b.ca14.6975.28371.1721.1b3b.ca11.10
- C. 48.0133.532b.ca14.6915.21311.f40f.1626.bb98.00
- D. 49.0133.532b.ca14.6915.21311.1721.1b4a.0013.01

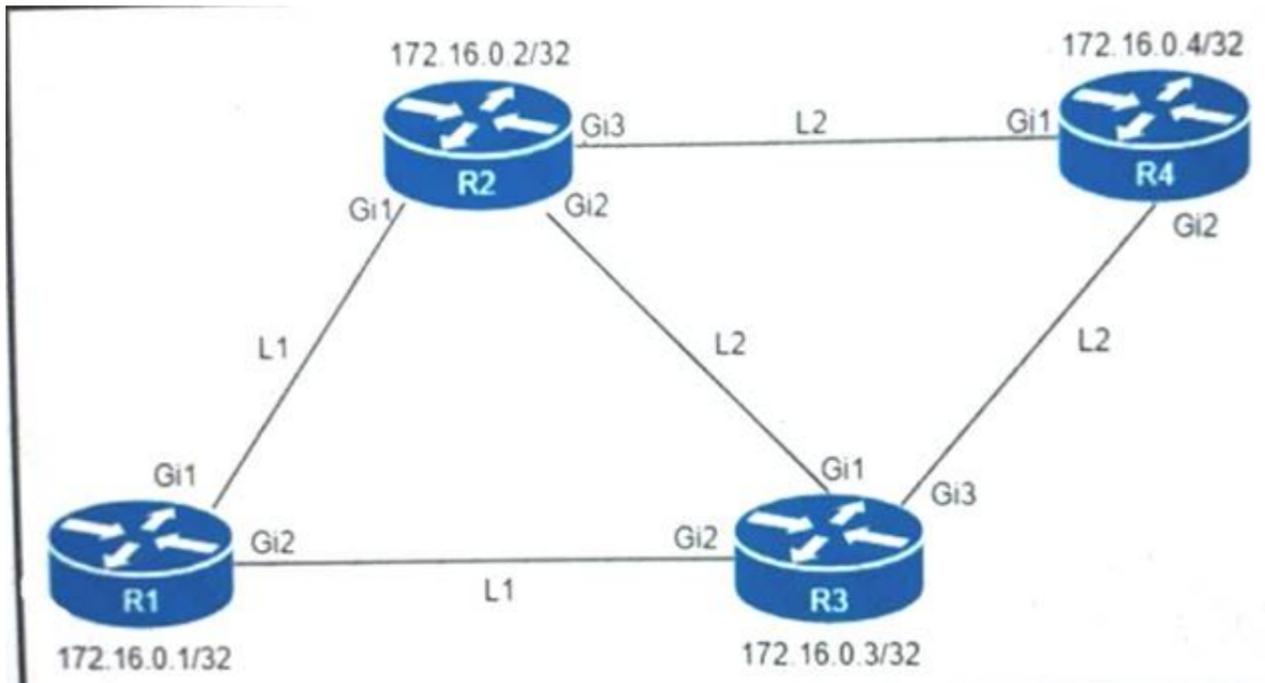
**Answer:** A

**Explanation:**

IS-IS uses NET addresses to identify each router in the network, and the NET address of each router must be unique. In order for IS-IS to establish connectivity between R1 and R3, the NET address of R3 must be different from the NET address of R1, but it must also follow the same structure. In this case, the NET address of R1 is 49.0133.532b.ca14.6915.21311.F40F.1B3a.ba10.00, so the NET address of R3 must be 49.0133.532b.ca14.6915.21311.F40F.1B4a.bb87.00.

**NEW QUESTION 92**

Refer to the exhibit.



An engineer must configure router R2 as the new P router in the network. Which configuration must be applied to R2 to enable LDP-IGP Sync on its L2 IS-IS adjacencies?

- config t  
router isis 1  
mpls ldp igp sync  
interface GigabitEthernet1  
mpls ldp igp sync delay 5
- config t  
interface range GigabitEthernet 1-3  
mpls ldp igp sync delay 5
- config t  
router isis 1  
mpls ldp sync
- config t  
router isis 1  
mpls ldp sync  
interface GigabitEthernet1  
no mpls ldp igp sync

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

Answer: D

#### NEW QUESTION 94

A network administrator is planning a new network with a segment-routing architecture using a distributed control plane. How is routing information distributed on such a network?

- A. Each segment is signaled by a compatible routing protocol, and each segment makes its own steering decisions based on SR policy.
- B. Each segment is signaled by MPLS, and each segment makes steering decisions based on the routing policy pushed by BGP.
- C. Each segment is signaled by an SR controller, but each segment makes its own steering decisions based on SR policy.
- D. Each segment is signaled by an SR controller that makes the steering decisions for each node.

Answer: D

#### NEW QUESTION 98

An engineer implemented LDP protocol on the ISP network. The engineer must ensure that there are no packet loss issues when IGP and LDP protocols are not synchronized. Which configuring must the engineer implement so that the IGP routing protocol will wait until LDP convergence is completed?

- A. Disable IP CEF routers running LDP and enable LDP protocol.
- B. Configure MPLS LDP IGP synchronization on the network.
- C. Configure LDP sessions protection on the network.
- D. Disable MPLS LDP IGP synchronization on the network.

Answer: B

#### NEW QUESTION 102

Which technology enables the addition of new wavelengths in a fiber-optic network?

- A. IPoDWDM
- B. CWDM
- C. DWDM
- D. ROADM

Answer: C

#### Explanation:

Wavelength-division multiplexing (WDM) is a technology which multiplexes a number of optical carrier signals onto a single fiber [1], using different wavelengths of light to carry different signals. This allows for a greater capacity for data transfer and enables the addition of new wavelengths in a fiber-optic network

#### NEW QUESTION 106

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

session protection	It prevents valid routes from being overwritten with new ones until labels are assigned.
IGP synchronization	It allows stale label bindings to be used for a period of time while an LDP neighbor is unreachable.
targeted-hello accept	It uses LDP Targeted hellos to protect LDP sessions.
graceful restart	It uses LDP to form neighborship between non-directly connected routers.

- A. Mastered
- B. Not Mastered

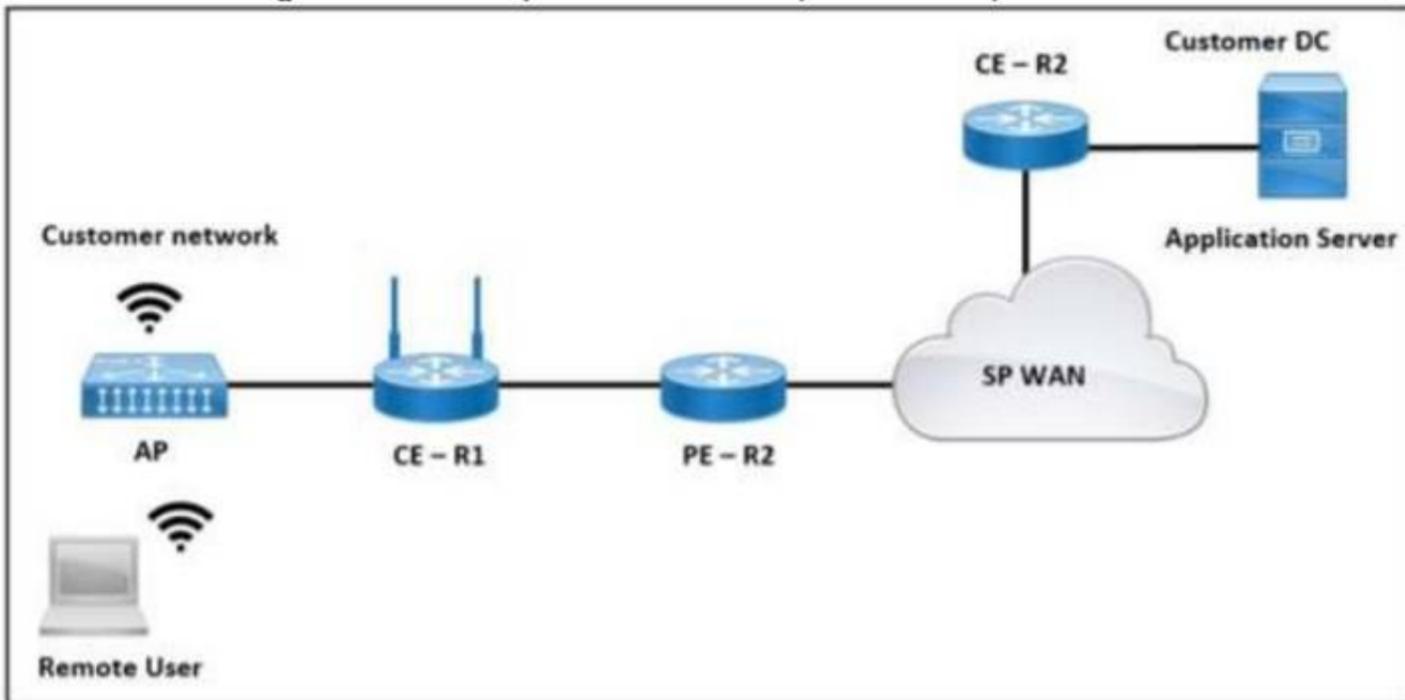
**Answer:** A

**Explanation:**

1: graceful restart 2: IGP synchronization 3: session protection 4: targeted-hello accept

**NEW QUESTION 110**

Refer to the exhibit.



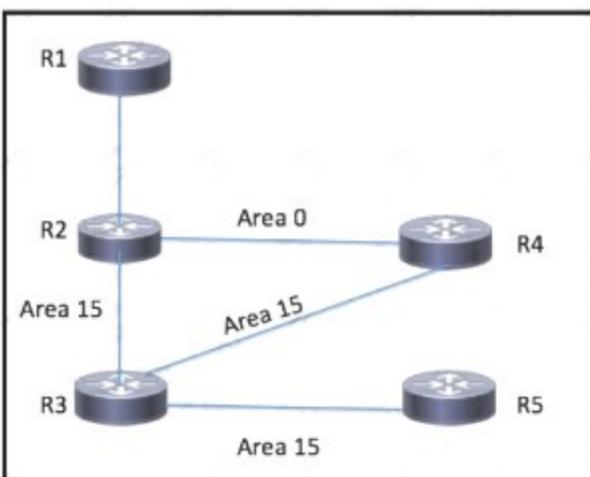
The application server in the data center hosts voice, video, and data applications over the internet. The data applications run more slowly than the voice and video applications. To ensure that all applications run smoothly, the service provider decided to implement a QoS policy on router PER 2 to apply traffic shaping. Which two actions must an engineer take to implement the task? (Choose two.)

- A. Configure the scheduling function to handle delayed packets.
- B. Enable packet remarking for priority traffic.
- C. Configure a queue to buffer excess traffic.
- D. Set the token value for secondary traffic.
- E. Set a threshold to discard excess traffic.

**Answer:** A

**NEW QUESTION 114**

Refer to the exhibit.



An engineer has started to configure a router for OSPF, as shown. Which configuration must an engineer apply on the network so that area 15 traffic from R5 to R1

will prefer the route through R4?

- A. Place the link between R3 and R5 in a stub area to force traffic to use the route through R4.
- B. Increase the cost on the link between R2 and R4, to influence the path over R3 and R4.
- C. Implement a multiarea adjacency on the link between R2 and R4, with the cost manipulated to make the path through R4 preferred.
- D. Implement a sham link on the between R3 and R2 to extend area 0 area 15.

**Answer: B**

**NEW QUESTION 116**

Refer to the exhibit:

```
R1
router bgp 65000
router-id 192.168.1.1
neighbor 192.168.1.2 remote-as 65001
neighbor 192.168.1.2 password cisco
```

Router R1 and its peer R2 reside on the same subnet in the network, If does it make connections to R2?

- A. R1 establishes UDP connections that are authenticated with an MD5 password
- B. R1 establishes TCP connections that are authenticated with a clear-text password
- C. R1 establishes UDP connections that are authenticated with a clear-text password
- D. R1 establishes TCP connections that are authenticated with an MD5 password

**Answer: D**

**NEW QUESTION 118**

Refer to the exhibit:

```
class-map WEB
match protocol http
```

Which statement describes the effect of this configuration?

- A. It applies a service policy to all interfaces remarking HTTP traffic
- B. It creates an ACL named WEB that filters HTTP traffic.
- C. It matches HTTP traffic for use in a policy map
- D. It modifies the default policy map to allow all HTTP traffic through the router

**Answer: C**

**NEW QUESTION 123**

You are configuring MPLS traffic-engineering tunnels in the core. Which two ways exist for the tunnel path across the core? (Choose two )

- A. Tunnel links inherit IGP metrics by default unless overridden
- B. Tunnels can be configured with dynamic path or explicitly defined path
- C. A zero bandwidth tunnel is not a valid option
- D. The bandwidth statement creates a "hard" reservation on the link-The dynamic path option is supported only with IS-IS

**Answer: AB**

**NEW QUESTION 128**

Refer to the exhibit.

```
snmp-server community ciscotest ro 2
```

What does the number 2 mean in the configuration?

- A. It dictates the number of sessions that will be open with the SNMP manager
- B. It represents the version of SNMP running.
- C. It indicates two SNMP managers are able to read and write with the agent using community string ciscotest.
- D. It is the numeric name of the ACL that contains the list of SNMP managers with access to the agent.

**Answer: D**

**NEW QUESTION 129**

Egress PE NAT is being used via a single centralized router to provide Internet access to L3VPN customers. Which description of the NAT operation is true?

- A. Users in different VRFs cannot share the same outside global IP address
- B. The NAT table contains a field to identify the inside VRF of a translation
- C. Multiple address pools are needed for the same L3VPN because each site has a separate NAT
- D. The different L3VPNs using the Internet access must not have IP overlaps internally

Answer: B

**NEW QUESTION 131**

Refer to the exhibit.

```

line vty 0 4
  access-class 100 in
  transport input ssh
  login local
line vty 5 15
  access-class 100 in
  transport input ssh
  login local
  
```

An engineer has started to configure a router for secure remote access as shown. All users who require network access need to be authenticated by the SSH Protocol. Which two actions must the engineer implement to complete the SSH configuration? (Choose two.)

- A. Configure an IP domain name.
- B. Configure service password encryption.
- C. Configure crypto keys
- D. Configure ACL 100 to permit access to port 22.
- E. Configure a password under the vty lines.

Answer: AC

**NEW QUESTION 132**

Which type of attack is an application attack?

- A. ping of death
- B. ICMP (ping) flood
- C. HTTP flood
- D. SYN flood

Answer: C

**NEW QUESTION 137**

You are testing the capabilities of MPLS OAM ping. Which statement is true?

- A. MPLS OAM ping works solely with Cisco MPLS TE
- B. MPLS OAM ping works solely with P2P LSPs
- C. An LSP breakage results in the ingress MPLS router never receiving any reply
- D. An LSP is not required for the reply to reach the ingress MPLS router

Answer: D

**NEW QUESTION 142**

Refer to the exhibit.

```

router ospf 1
  segment-routing mpls
  segment-routing forwarding mpls
  
```

An engineer is configuring segment routing on an ISP to simplify traffic engineering and management across network domains. What should the engineer do to complete the implementation of segment routing?

- A. OSPF must be configured with wide area metrics to support routing.
- B. The segment will run without any further configuration.
- C. Area authentication must be enable before segment routing will run.
- D. Area Authentication must be enable before segment routing will run.

Answer: C

**NEW QUESTION 145**

What are two factors to consider when implementing NSR High Availability on an MPLS PE router? (Choose two.)

- A. It consumes more memory and CPU resources than NSF
- B. It operates normally without NSR support on the PE peers.
- C. It requires all PE-CE sessions to support NSR
- D. It requires routing protocol extensions
- E. It cannot sync state information across redundant RPs

Answer: AB

**NEW QUESTION 147**

An engineer working for a private service provider with employee id: 3994 37 650 is configuring a Cisco device to redistribute OSPF into BGP. Which task enables

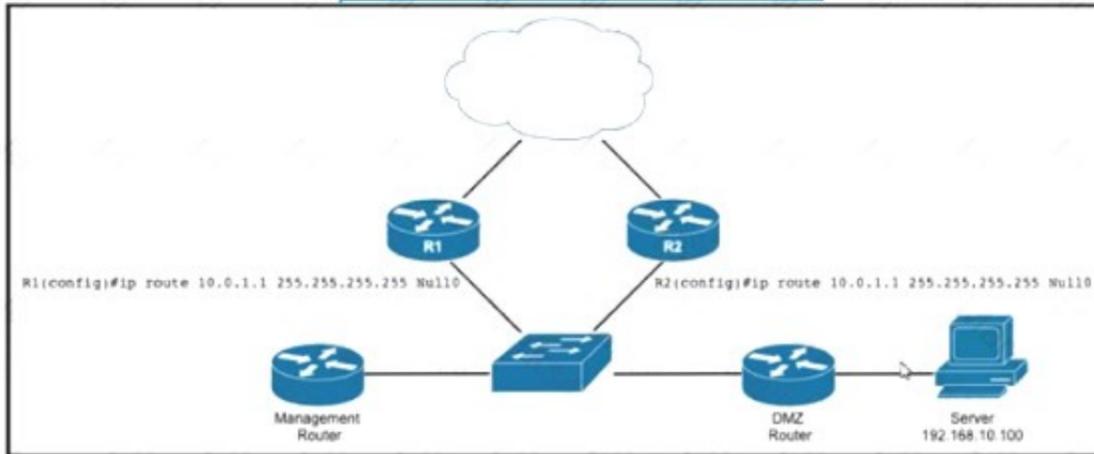
the device to filter routes?

- A. Configure a distribute list and associate it to the BGP peer interface
- B. Configure a prefix list and associate it to the BGP peer interface
- C. Configure a route map and reference it with the redistribute command
- D. Configure an access list and reference it with the redistribute command

**Answer: C**

**NEW QUESTION 148**

Refer to the exhibit.



```

router(config)# route-map blackhole-trigger
router(config-route-map)# match tag 777
router(config-route-map)# set ip next-hop 10.0.1.1
router(config-route-map)# set origin igp
router(config-route-map)# set community no-export
    
```

EIGRP is running across the core to exchange internal routes, and each router maintains BGP adjacency with the other routers on the network. An operator has configured static routes on the edge routers R1 and R2 for IP address 10.0.1.1, which is used as a black hole route as shown. Which configuration should the operator implement on the management router to create a route map that will redistribute lagged static routes into BGP and create a static route to blackhole traffic with tag 777 that is destined to server at 192.168.10.100?

- router(config)# router bgp 55100  
 router(config-router)# redistribute connected  
  
 router(config)# ip route 192.168.10.100 255.255.255.255 tag 777
- router(config)# router bgp 55100  
 router(config-router)# redistribute static route-map blackhole-trigger  
  
 router(config)# ip route 192.168.10.100 255.255.255.255 Null0 tag 777
- router(config)# router bgp 55100  
 router(config-router)# redistribute connected route-map blackhole-trigger  
  
 router(config)# ip route 192.168.10.100 255.255.255.255 Null0 tag 777
- router(config)# router bgp 55100  
 router(config-router)# redistribute static route-map blackhole-trigger  
  
 router(config)# ip route 10.0.1.1 255.255.255.255 Null0 tag 777

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

**Answer: D**

**NEW QUESTION 150**

Which MPLS design attribute can you use to provide Internet access to a major customer through a separate dedicated VPN?

- A. The customer that needs the Internet access service is assigned to the same RTs as the Internet gateway
- B. The Internet gateway inserts the full Internet BGP routing table into the Internet access VPN
- C. The Internet gateway router is connected as a PE router to the MPLS backbone.
- D. The CE router supports VRF-UTE and the full BGP routing table.

**Answer: B**

**NEW QUESTION 155**

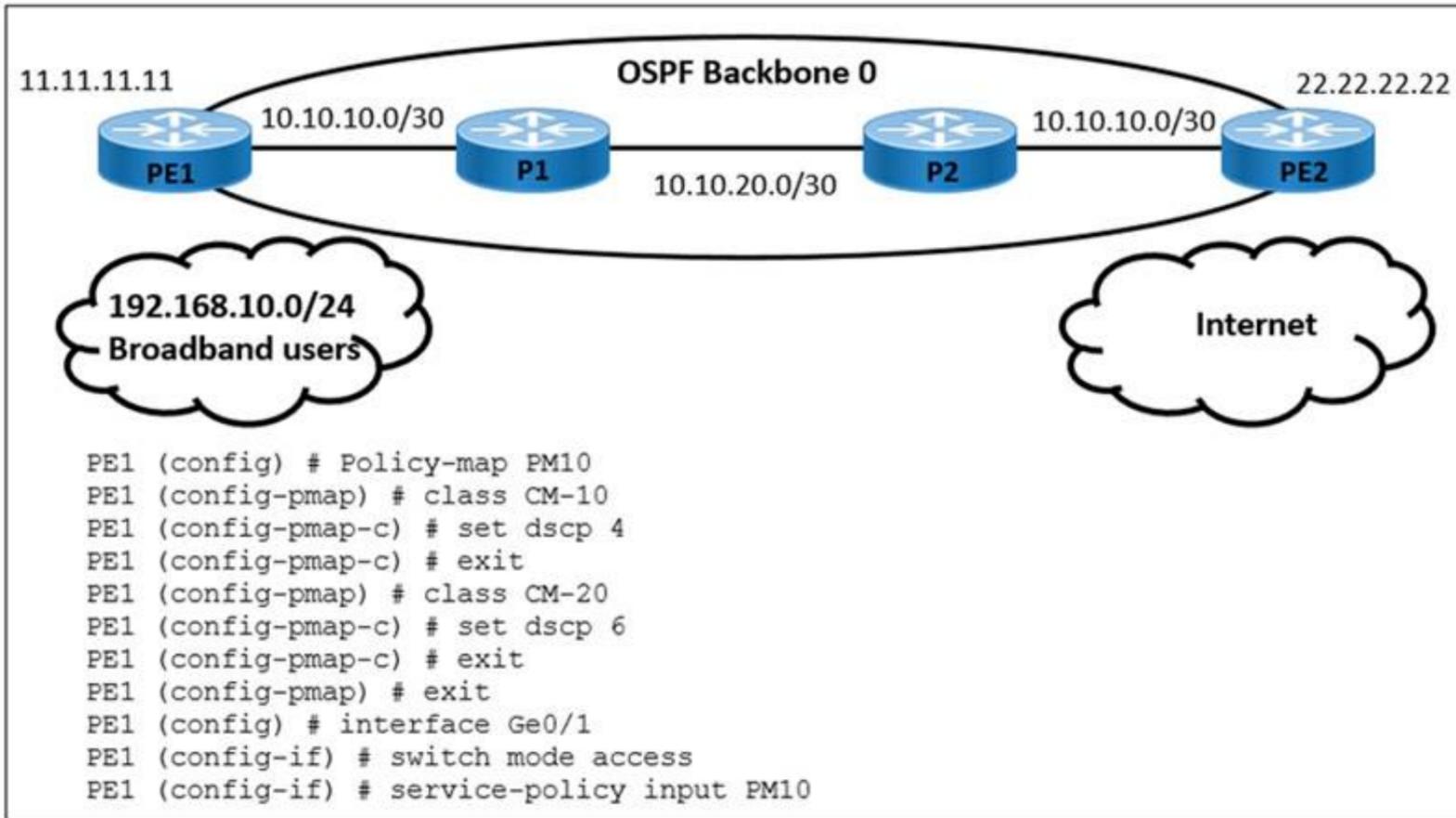
How is a telemetry session established for data analytics?

- A. A router initiates a session using the dial-out to a destination.
- B. A destination initiates a session to a router.
- C. The destination initiates a session using the dial-out more to the router.
- D. A router requests the data using Teinet.

**Answer: A**

**NEW QUESTION 160**

Refer to the exhibit



A user is performing QoS marking on internet traffic and sending it with IPv4 and IPv6 headers on the provider edge device PE1. IPv4 traffic is classified with DSCP 4 and IPv6 traffic is classified with DSCP 6. Which action must the engineer take to begin implementing a QoS configuration on PE1 for the IPv6 traffic?

- A. Create an access list that includes any IPv6 traffic and apply it to CM-20.
- B. Create access list IPv6-match and configure match ip dscp 4 and match ip dscp 6 in class maps CM-10 and CM-20.
- C. Configure match ip dscp 4 in class map CM-10 and match ip dscp 6 in class map CM-20.
- D. Create access list IPv6-filter and remove DSCP value 4 and 6 in class maps CM-10 and CM-20.

**Answer:** A

**NEW QUESTION 164**

A network engineer is configuring a BGP route policy for the SUBNET prefix set. Matching traffic must be dropped, and other traffic must have its MED value set to 400 and community 4:400 added to the route. Which configuration must an engineer apply?

- route-policy CISCO
  - if destination in SUBNET then
  - drop
  - else
  - set med 400
  - set community (4:400) additive
  - endif
  - end-policy
  - end
- route-policy CISCO
  - if destination in SUBNET then
  - drop
  - endif
  - set med 400
  - if community matches-any SUBNET then
  - set local-preference 400
  - set med 500
  - set community (4:400) additive
  - endif
  - end-policy
  - end

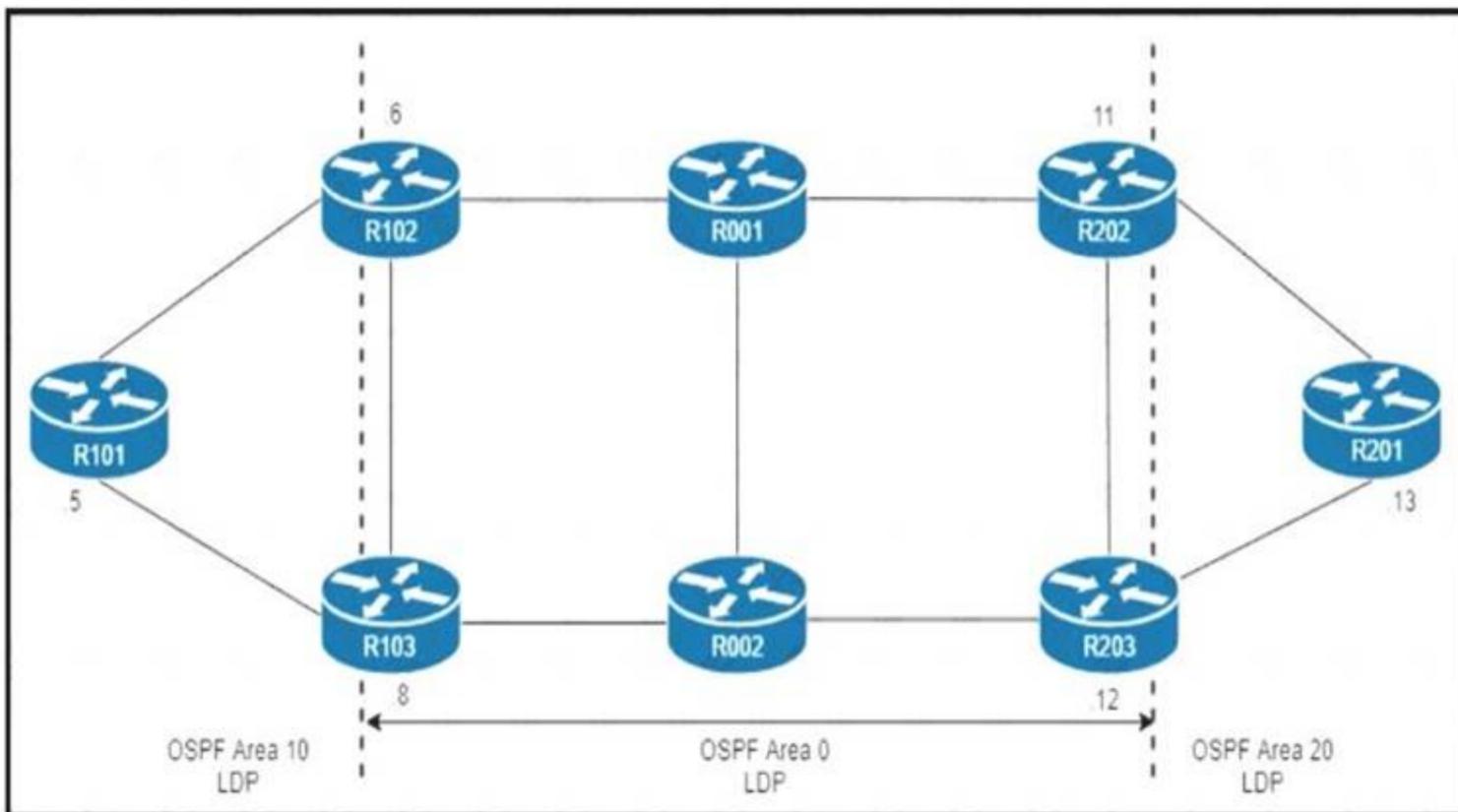
- route-policy SUBNET
  - if destination in SUBNET then
  - drop
  - endif
  - set med 400
  - set local-preference 400
  - if community matches-any SUBNET then
  - set community (4:400)
  - endif
  - end-policy
  - end
- route-policy SUBNET
  - if destination in BGP then
  - drop
  - else
  - set med 400
  - set community (4:400)
  - endif
  - end-policy
  - end

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

Answer: A

**NEW QUESTION 165**

Refer to the exhibit.



R101 is peering with R102 and R103, and R201 is peering with R202 and R203 using iBGP Labeled Unicast address families. The OSPF area 0 border routers are in a full iBGP Labeled Unicast mesh, and VPNv4 routes are exchanged directly between PE routers R101 and R201 through iBGP. Which address family-level configuration must be applied on ABR R102 to support a Unified MPLS routing architecture with partitioned IGP domains?

- A)
 

```
router bgp 65512
address-family ipv4
neighbor 172.16.0.5 route-reflector-client
neighbor 172.16.0.5 send-label
neighbor 172.16.0.11 route-reflector-client
neighbor 172.16.0.11 send-label
neighbor 172.16.0.12 route-reflector-client
```

B)

```
router bgp 65512
address-family ipv4
neighbor 172.16.0.5 route-reflector-client
neighbor 172.16.0.5 next-hop-self all
neighbor 172.16.0.5 send-label
neighbor 172.16.0.11 next-hop-self all
neighbor 172.16.0.11 send-label
neighbor 172.16.0.12 next-hop-self all
neighbor 172.16.0.12 send-label
```

C)

```
router bgp 65512
address-family ipv4
neighbor 172.16.0.5 route-reflector-client
neighbor 172.16.0.5 next-hop-self all
neighbor 172.16.0.11 next-hop-self all
neighbor 172.16.0.12 next-hop-self all
```

D)

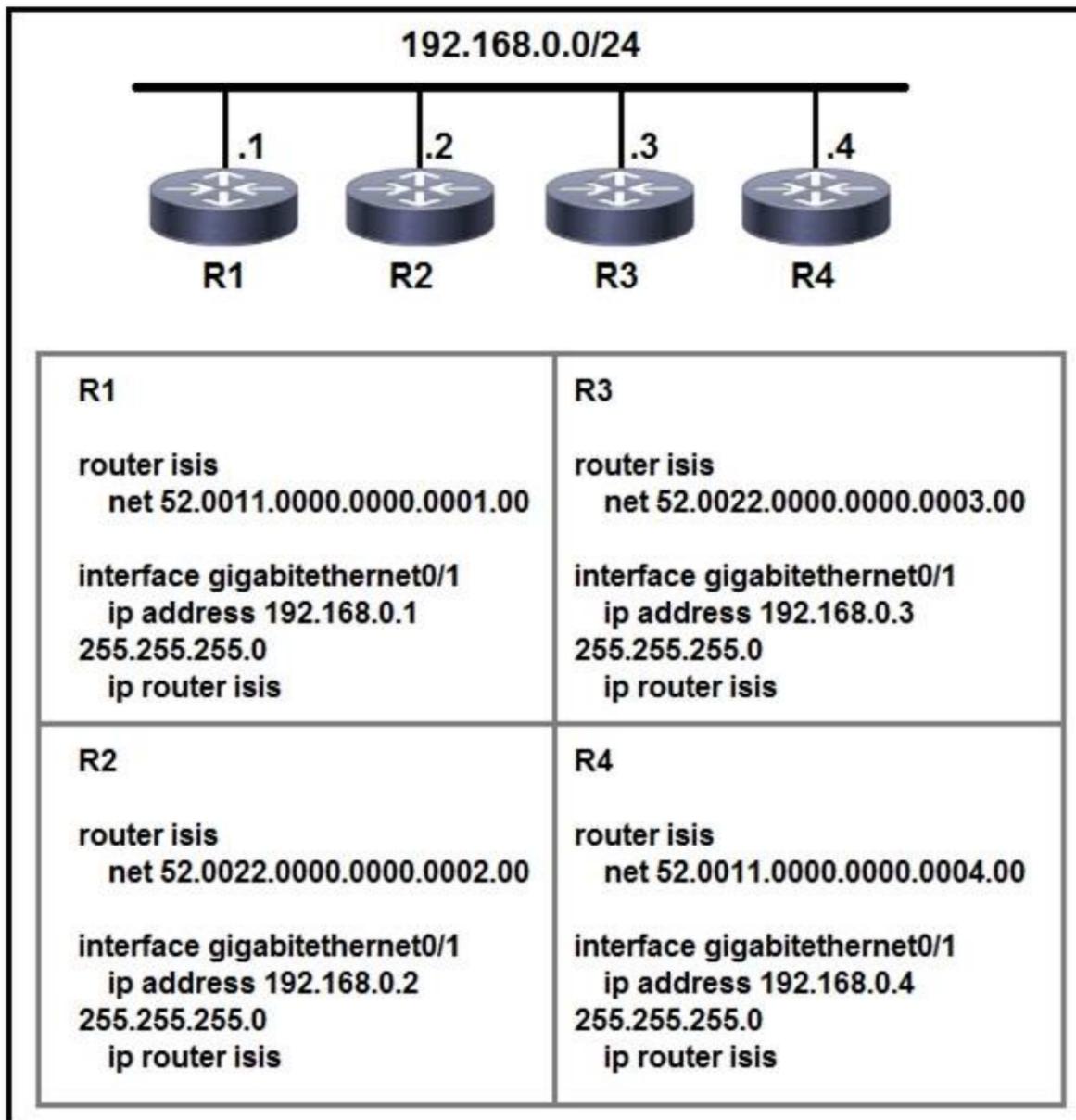
```
router bgp 65512
address-family ipv4
neighbor 172.16.0.5 route-reflector-client
neighbor 172.16.0.5 next-hop-self
neighbor 172.16.0.5 send-label
neighbor 172.16.0.11 next-hop-self
neighbor 172.16.0.11 send-label
neighbor 172.16.0.12 next-hop-self
neighbor 172.16.0.12 send-label
```

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

Answer: B

**NEW QUESTION 167**

Refer to the exhibit:



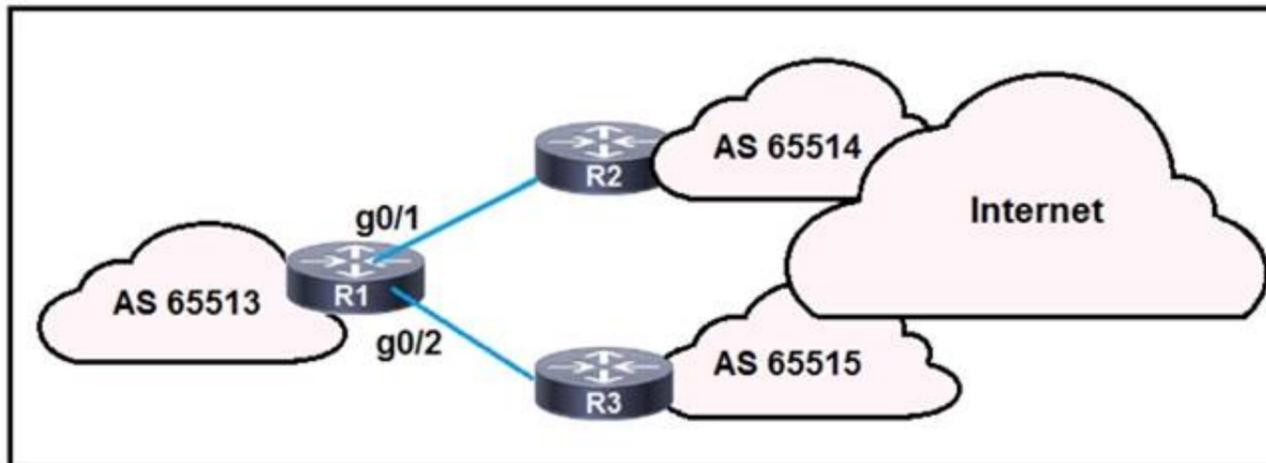
Which two statements about the ISIS topology are true? (Choose two.)

- A. All four routers are operating as Level 1 routers only.
- B. All four routers are operating as Level 2 routers only.
- C. All four routers are operating as Level 1-2 routers.
- D. R1 and R2 are Level 2 neighbors.
- E. R1 and R4 are Level 2 neighbors

**Answer:** CD

**NEW QUESTION 168**

Refer to the exhibit:



R1 is connected to two service providers and is under a DDoS attack Which statement about this design is true if uRPF in strict mode is configured on both interfaces'?

- A. R1 accepts source addresses on interface gigabitethernet0/1 that are private addresses
- B. R1 permits asymmetric routing as long as the AS-RATH attribute entry matches the connected AS
- C. R1 drops destination addresses that are routed to a null interface on the router
- D. R1 drops all traffic that ingresses either interface that has a FIB entry that exits a different interface

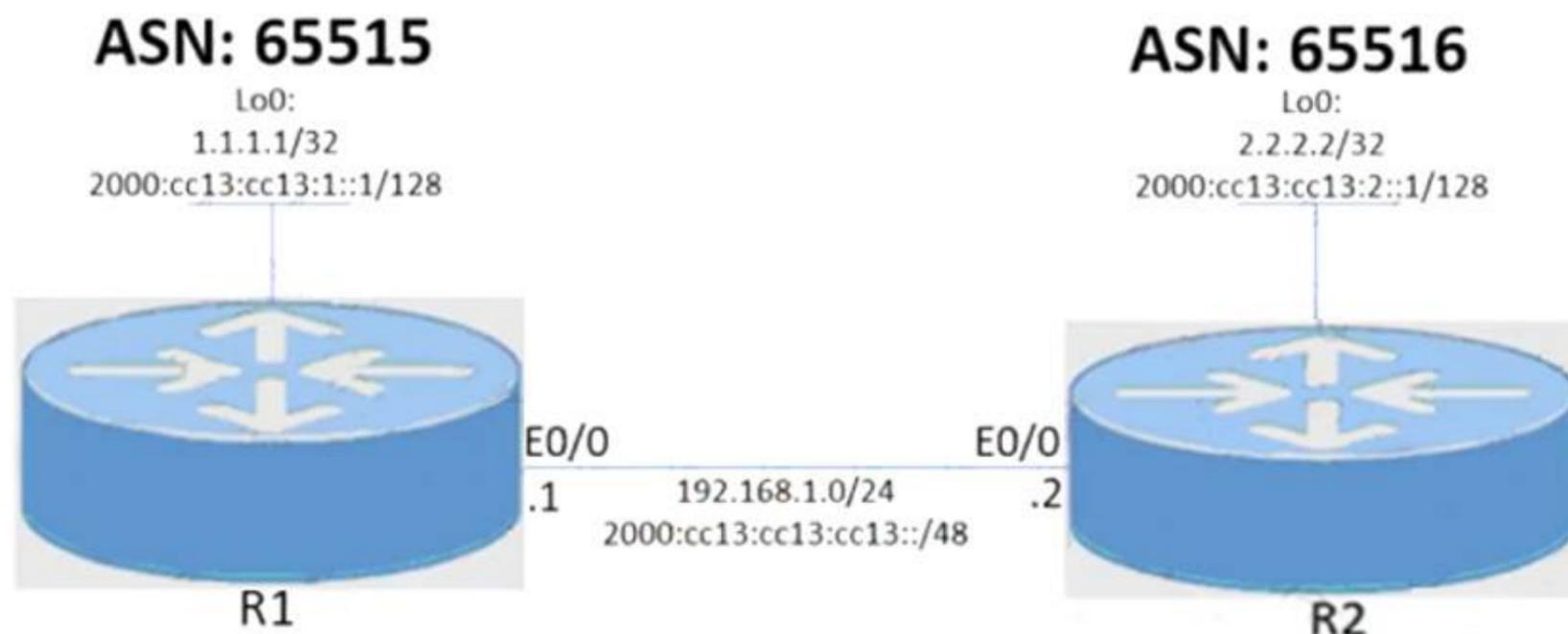
**Answer:** D

**NEW QUESTION 172**

Guidelines This is a lab item in which tasks will be performed on virtual devices.

- Refer to the Tasks tab to view the tasks for this lab item.
- Refer to the Topology tab to access the device console(s) and perform the tasks.
- Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
- All necessary preconfigurations have been applied.
- Do not change the enable password or hostname for any device.
- Save your configurations to NVRAM before moving to the next item.
- Click Next at the bottom of the screen to submit this lab and move to the next question.
- When Next is clicked, the lab closes and cannot be reopened. Topology:

## EBGP Neighbor Adjacency



**Tasks**

Configure the BGP routing protocol for R1 and R2 according to the topology to achieve these goals:

- \* 1. Configure EBGP neighbor adjacency for the IPv4 and IPv6 address family between R1 and R2 using Loopback0 IPv4 and IPv6 addresses. All BGP updates must come from the Loopback0 interface as the source. Do not use IGP routing protocols to complete this task.
- \* 2. Configure MD5 Authentication for the EBGP adjacency between R1 and R2. The password is clear text C1sc0!.

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Here is the solution:

Text Description automatically generated

**R1:**

```
conf t

ip route 2.2.2.2 255.255.255.255 192.168.1.2
ip route 2000:cc13:cc13:2::1/128 2000:cc13:cc13:cc13::2

router bgp 65515
neighbor 2000:cc13:cc13:2::1 remote-as 65516
neighbor 2000:cc13:cc13:2::1 update-source lo0
neighbor 2000:cc13:cc13:2::1 disable-connected-check
neighbor 2000:cc13:cc13:2::1 ebgp-multihop 2
neighbor 2000:cc13:cc13:2::1 password C1sc0!
neighbor 2.2.2.2 remote-as 65516
neighbor 2.2.2.2 update-source lo0
neighbor 2.2.2.2 disable-connected-check
neighbor 2.2.2.2 ebgp-multihop 2
neighbor 2.2.2.2 password C1sc0!

address-family ipv4 unicast
neighbor 2.2.2.2 activate

address-family ipv6
neighbor 2000:cc13:cc13:2::1 activate
do copy running-config startup-config
```

**R2:**

```
conf t

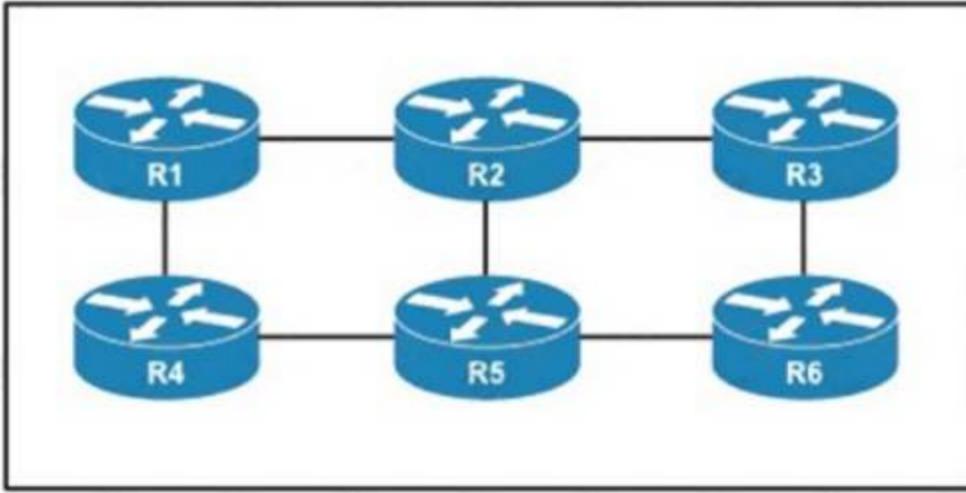
ip route 1.1.1.1 255.255.255.255 192.168.1.1
ip route 2000:cc13:cc13:1::1/128 2000:cc13:cc13:cc13::1

router bgp 65516
neighbor 2000:cc13:cc13:1::1 remote-as 65515
neighbor 2000:cc13:cc13:1::1 update-source lo0
neighbor 2000:cc13:cc13:1::1 disable-connected-check
neighbor 2000:cc13:cc13:1::1 ebgp-multihop 2
neighbor 2000:cc13:cc13:1::1 password C1sc0!
neighbor 1.1.1.1 remote-as 65515
neighbor 1.1.1.1 update-source lo0
neighbor 1.1.1.1 disable-connected-check
neighbor 1.1.1.1 ebgp-multihop 2
neighbor 1.1.1.1 password C1sc0!

address-family ipv4 unicast
neighbor 1.1.1.1 activate
```

**NEW QUESTION 174**

Refer to the exhibit.



An engineer is configuring an administrative domain in the given multi-vendor environment with PIM-SM. Which feature must the engineer implement so that devices will dynamically learn the RP?

- A. Auto-RP
- B. BIDIR-PIM
- C. SSM
- D. BSR

**Answer: D**

**NEW QUESTION 175**

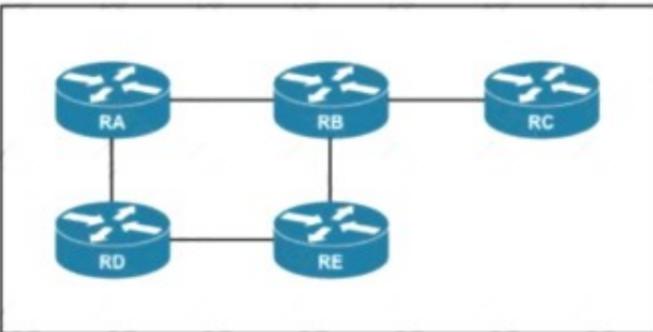
What do Ansible and Salt Stack have in common?

- A. They both use DSL configuration language
- B. They both use YAML configuration language
- C. They both have agents running on the client machine
- D. They both can be designed with more than one master server

**Answer: D**

**NEW QUESTION 179**

Refer to the exhibit.



If RC is a stub router, which entry must be injected so that it will send traffic outside the OSPF domain?

- A. virtual link between RB and RC
- B. sham link
- C. more specific route
- D. default route

**Answer: C**

**NEW QUESTION 181**

Refer to the exhibit.

```

RTBH-1#show run | s router bgp
router bgp 65100
  bgp log-neighbor-changes
  neighbor 172.27.20.130 remote-as 65001
  neighbor 172.27.20.130 description CE-1
  neighbor 172.27.20.130 ebgp-multihop 3
  neighbor 198.19.13.1 remote-as 65100
  neighbor 198.19.13.1 description AGG-PE-1
  !
  address-family ipv4
    redistribute static route-map STATIC-TO-BGP
    neighbor 172.27.20.130 activate
    neighbor 172.27.20.130 prefix-list DENY-ALL-ROUTES out
    neighbor 172.27.20.130 route-map RTBH-CUSTOMER-IN in
    neighbor 198.19.13.1 activate
    neighbor 198.19.13.1 send-community
  exit-address-family

RTBH-1#show ip prefix-list
ip prefix-list AS65001-PREFIXES: 1 entries
  seq 5 permit 198.18.18.0/24 le 32

RTBH-1#show ip community-list
Community standard list 99
  permit 65100:123

AGG-PE-1#show ip route static
Gateway of last resort is not set

  192.168.255.0/32 is subnetted, 1 subnets
  S    192.168.255.255 is directly connected, Null0

AGG-PE-1#show bgp ipv4 unicast 198.18.18.0
BGP routing table entry for 198.18.18.0/24, version 52
Paths: (1 available, best #1, table default)
  Advertised to update-groups:
    9
  Refresh Epoch 29
  65001
  172.27.20.130 from 172.27.20.130 (198.18.18.1)
    Origin IGP, metric 0, localpref 150, valid, external, best
    rx pathid: 0, tx pathid: 0x0
  
```

ISP ASN 65100 provides Internet services to router CE-1 and receives customer prefix 198.18.18.0/24 via eBGP. An administrator for the ISP is now provisioning RTBH services to provide on-demand data-plane security for the customer's IP space. Which route-map configuration must the administrator apply to router RTBH-1 to complete the implementation of RTBH services to CE-1?

- A. route-map RTBH-CUSTOMER-IN permit 10 description AS65001 match ip address prefix-list AS65001-PREFIXES match community 99 set local-preference 200 set community no-export additive set ip next-hop 192.168.255.255 route-map RTBH-CUSTOMER-IN deny 65535 description DEFAULT DENY
- B. route-map RTBH-CUSTOMER-IN permit 10 description AS65001 match ip address prefix-list AS65001-PREFIXES match community 99 set local-preference 200 set community local-as additive set ip next-hop 192.168.255.255 route-map RTBH-CUSTOMER-IN deny 65535 description DEFAULT DENY
- C. route-map RTBH-CUSTOMER-IN permit 10 description AS65001 match ip address prefixlist AS65001-PREFIXES match community 99 set local-preference 200 set community no-advertise additive set ip next-hop local-address route-map RTBH-CUSTOMER-IN deny 65535 description DEFAULT DENY
- D. route-map RTBH-CUSTOMER-IN permit 10 description AS65001 match ip address prefix-list AS65001-PREFIXES match community 99 set local-preference 200 set community no-advertise additive set ip next-hop 192.168.255.255 route-map RTBH-CUSTOMER-IN deny 65535 description DEFAULT DENY

**Answer: A**

**NEW QUESTION 183**

Which characteristic describes prefix segment identifier?

- A. It contains the interface address of the device per each link.
- B. It is globally unique.
- C. It is locally unique.
- D. It contains a router to a neighbor.

**Answer: B**

**NEW QUESTION 187**

A network operator needs to implement PIM-SSM multicast configuration on customer's network so that users in different domains are able to access and stream live traffic. Which two actions must the engineer perform on the network to make the streaming work? (Choose two.)

- A. Configure at least one MSDP peer on the network
- B. Enable IGMP version 2 at the interface lever.
- C. Enable PIM sparse mode on the device.
- D. Enable IGMP version 3 at the interface level.
- E. Enable PM dense mode on the device.

**Answer: AD**

**NEW QUESTION 188**

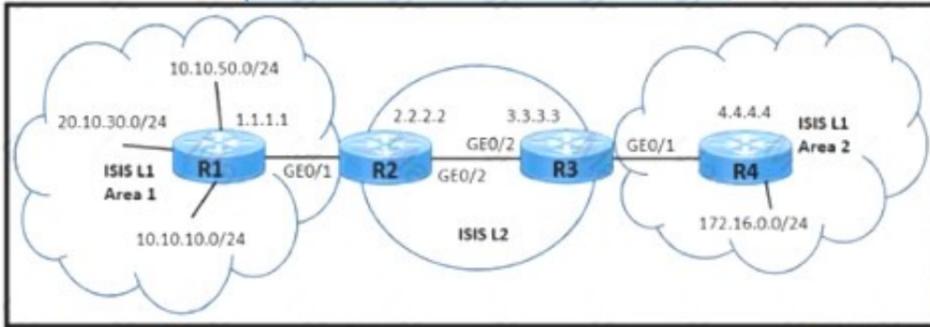
After you analyze your network environment, you decide to implement a full separation model for Internet access and MPLS L3VPN services For which reason do you make this decision?

- A. It enables you to choose whether to separate or centralize each individual service.
- B. It is easier to manage a system in which services are mixed
- C. It requires only one edge router
- D. It enables EGP and IGP to operate independently

**Answer: D**

**NEW QUESTION 189**

Refer to the exhibit.



A network engineer must meet these requirements to provide a connects, solution:

- > The customer connected to Area 2 needs to access the application in Area 1 on the 10.10.10.0/24 subnet
- > The Customer must not have access to the 20.10 30.0/24 subnet.
- > The service provider must make sure that the Area 2 routing database limits the number of IP addresses in the routing table

Which two configurations must be implemented to meet the requirements? (Choose two)

- A. Set a tag value of 200 to match the summary address 10.0.0/16 on R2.
- B. Set a tag value of 200 to match the summary address 10.0.0.0/16 on R3.
- C. Apply the route map for tag 200 and leak Level 2 routes into Level 1 Area 2 on R3
- D. Apply the route map for tag 200 and teak Level 2 routes into Level 1 Area 2 on R4.
- E. Set a tag value of 200 to match the summary address 10.0.0./16 on R1.

**Answer: BC**

**NEW QUESTION 191**

Which two PHY modes are available to implement an IOS XR Gigabit Ethernet interface interface? (Choose two.)

- A. SONET
- B. MAN
- C. WDM
- D. LAN
- E. WAN

**Answer: DE**

**Explanation:**

[https://www.cisco.com/c/en/us/td/docs/routers/crs/software/crs\\_r4-1/interfaces/command/reference/interfaces\\_cr](https://www.cisco.com/c/en/us/td/docs/routers/crs/software/crs_r4-1/interfaces/command/reference/interfaces_cr)

**NEW QUESTION 194**

Refer to the exhibit.

```

R1#show ip ospf int
Loopback2 is up, line protocol is up
  Internet Address 200.0.0.1/24, Area 0, Attached via Interface Enable
  Process ID 1, Router ID 100.0.0.1, Network Type LOOPBACK, Cost: 1
  Loopback interface is treated as a stub Host
Loopback0 is up, line protocol is up
  Internet Address 100.0.0.1/24, Area 0, Attached via Interface Enable
  Process ID 1, Router ID 100.0.0.1, Network Type LOOPBACK, Cost: 1
  Loopback interface is treated as a stub Host
Serial1/0 is up, line protocol is up
  Interface is unnumbered. Using address of Loopback0 (100.0.0.1), Area 0, Attached via Interface Enable
  Process ID 1, Router ID 100.0.0.1, Network Type POINT_TO_POINT, Cost: 64

R2#show ip ospf database
  OSPF Router with ID (100.0.0.2) (Process ID 1)
  Router Link States (Area 0)

Link ID      ADV Router   Age         Seq#         Checksum     Link count
100.0.0.1    100.0.0.1    22         0x80000005   0x0090D8     3

R2#show ip route
  100.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    100.0.0.0/24 is directly connected, Serial1/0
L    100.0.0.2/32 is directly connected, Serial1/0
    
```

While troubleshooting a connectivity issue on router R2, a network engineer with an employee id:3876.13.497 notices that although it detects three OSPF links from R1, the OSPF prefixes are missing from the routing table. What is the reason for the problem?

- A. The serial interfaces have different MTUs
- B. Both loopback interfaces on R1 are configured as stub
- C. The R2 Serial 1/0 interface is configured with an IP address, but the R1 Serial R1 Serial 1/0 interface is unnumbered.
- D. The subnet masks on the serial interfaces are mismatched.

**Answer: C**

**NEW QUESTION 196**

Drag and drop the functions from the left onto the Path Computation Element Protocol roles on the right.

calculates paths through the network	<b>Path Computation Element</b> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
keeps TE topology database information	
sends path calculation request	
sends path creation request	<b>Path Computation Client</b> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
sends path status updates	

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

PCE – 1,2,5  
 PCC- 3,4

**NEW QUESTION 199**

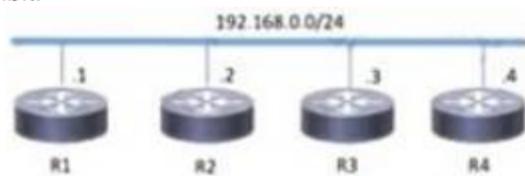
A network architect plans to implement MPLS OAM to provide additional troubleshooting functionality for the NOC team. After analyzing the configuration on the MPLS P/PE nodes, the architect decides to revise the CoPP policies. Which two actions ensure that the new solution is secure? (Choose two.)

- A. Allow port 3505 in the outbound direction only.
- B. Allow the ICMP protocol only.
- C. Allow the TCP and UDP protocols.
- D. Allow the UDP protocol only.
- E. Allow port 3503 in the inbound direction only.

**Answer: DE**

**NEW QUESTION 202**

Refer to the exhibit.



<pre> R1 router isis  net 52.0011.0000.0000.0001.00  interface gigabitethernet0/1  ip address 192.168.0.1  255.255.255.0  ip router isis                     </pre>	<pre> R3 router isis  net 52.0022.0000.0000.0003.00  interface gigabitethernet0/1  ip address 192.168.0.3  255.255.255.0  ip router isis                     </pre>
<pre> R2 router isis  net 52.0022.0000.0000.0002.00  interface gigabitethernet0/1  ip address 192.168.0.2  255.255.255.0  ip router isis                     </pre>	<pre> R4 router isis  net 52.0011.0000.0000.0004.00  interface gigabitethernet0/1  ip address 192.168.0.4  255.255.255.0  ip router isis                     </pre>

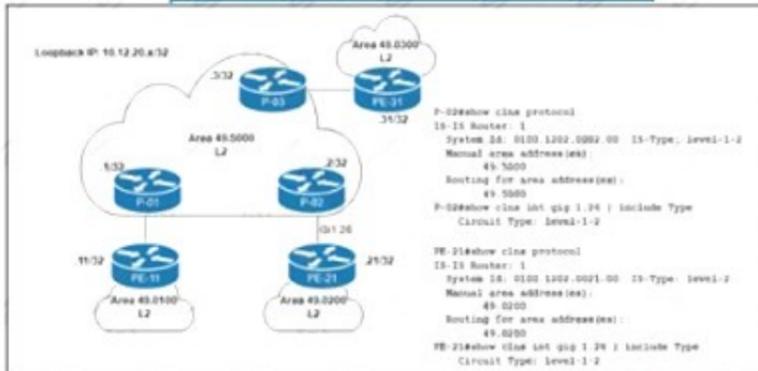
Which two topology changes happen to the IS-IS routers? (Choose two.)

- A. All four routers are operating as Level 1 routers only.
- B. All four routers are operating as Level 2 routers only.
- C. R1 and R4 are Level 2 neighbours.
- D. R1 and R2 are Level 2 neighbours.
- E. All four routers are operating as Level 1-2 routers.

**Answer: DE**

**NEW QUESTION 205**

Refer to me exhibit.



Refer to the exhibit. A network engineer notices PE-21 convergence degradation due to the growing LSDB size of Level 2 areas in the network. The engineer decides to migrate router PE-21 from an inter-area design to an intra-area implementation. Inter-area routing must be accomplished via an ATT-bit set by the Level 1/Level 2 router. Which configuration must the engineer implement on PE-21 to complete the migration?

- A. configure terminal router isis 1 no net 49.0200 net 49.5000 is-type level-1-2 end
- B. configure terminal router isis 1 net 49.5000.0100.1202.0021.00 is-type level-1-2 end
- C. configure terminal router isis 1 net 49.5000.0100.1222.0022.00 is-type level-1 end
- D. configure terminal router isis 1 no net 49.0200.0100.1202.0021.00 net 49.5000.0100.1202.0021.00 is-type level-1 end

**Answer: D**

**NEW QUESTION 207**

A network administrator must monitor network usage to provide optimal performance to the network end users when the network is under heavy load. The administrator asked the engineer to install a new server to receive SNMP traps at destination 192.168.1.2. Which configuration must the engineer apply so that all traps are sent to the new server?

- A. snmp-server enable traps entity snmp-server host 192.168.1.2 public
- B. snmp-server enable traps bgp snmp-server host 192.168.1.2 public
- C. snmp-server enable traps isdn snmp-server host 192.168.1.2 public
- D. snmp-server enable traps snmp-server host 192.168.1.2 public

**Answer: D**

**NEW QUESTION 208**

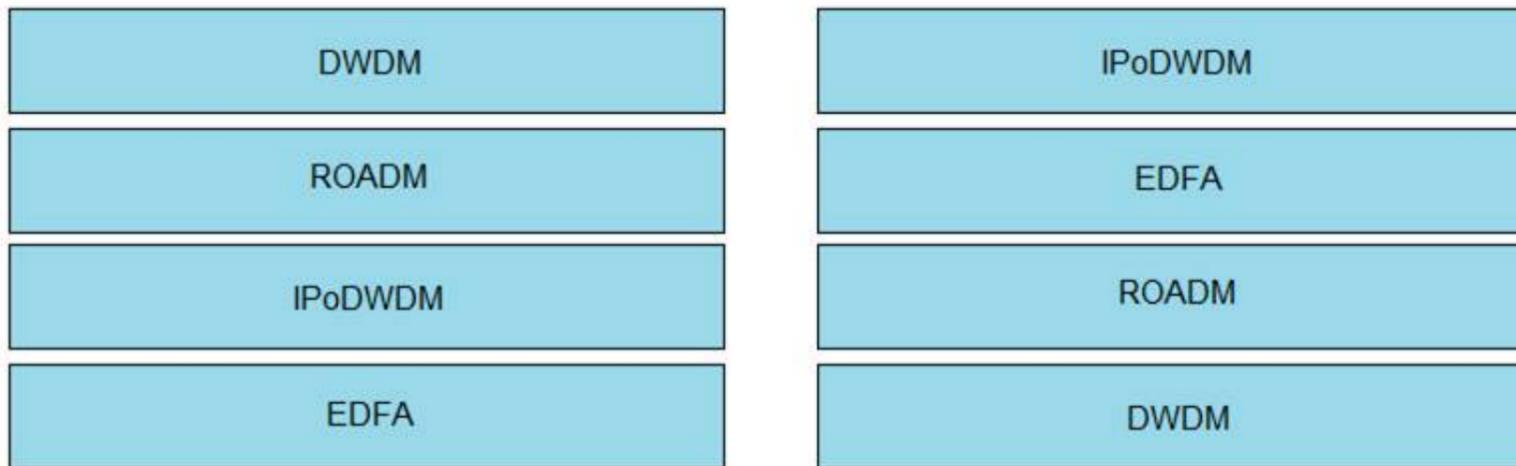
Drag and drop the technologies from the left onto the correct definitions on the right.

DWDM	required for routes and switches to have DWDM and ITU-T G.709 implemented
ROADM	used to amplify an optical signal
IPoDWDM	used to drop certain lambdas within a DWDM ring at a specific location
EDFA	increases bandwidth over a single fiber by using different wavelengths

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**



**NEW QUESTION 210**

What do Chef and Puppet have in common?

- A. use Ruby
- B. use a master server
- C. require modules to be created from scratch
- D. manage agents referred to as minions

**Answer: B**

**NEW QUESTION 212**

A regional MPLS VPN provider operates in two regions and wants to provide MPLS L3VPN service for a customer with two sites in these separate locations. The VPN provider approaches another organization to provide backbone carrier services so that the provider can connect to these two locations. Which statement about this scenario is true?

- A. When edge routers at different regional sites are connected over the global carrier backbone, MP-eBGP must run between the routers to exchange the customer VPNv4 routes
- B. When eBGP is used for label exchange using the send label option, MPLS-BGP forwarding is configured under the global ABC CSC PE-to CE interface
- C. When IGP is used for route exchange and LDP for label exchange, MPLS is enabled only on the VRF interface on the backbone-earner PE side.
- D. When BGP is used for both route and label exchange, the neighbor a.b.c.d send-label command is used under the address family VPNv4 command mode.

**Answer: B**

**NEW QUESTION 216**

After a series of unexpected device failures on the network, a Cisco engineer is deploying NSF on the network devices so that packets continue to be forwarded during switchovers. The network devices reside in the same holding, but they are physically separated into two different data centers. Which task must the engineer perform as part of the deployment?

- A. implement OSPF to maintain the link-state database during failover.
- B. implement VRFs and specify the forwarding instances that must remain active during failover.
- C. implement an L2VPN with the failover peer to share state information between the active and standby devices.
- D. implement Cisco Express Forwarding to provide forwarding during failover

**Answer: B**

**NEW QUESTION 218**

What must a network engineer consider when designing a Cisco MPLS TE solution with OSPF?

- A. The OSPF extensions and RSVP-TE must be enabled on all routers in the network.
- B. OSPF extensions for RSVP-TE are supported in Area 1.
- C. The OSPF extensions and RSVP-TE must be enabled on the egress routers.
- D. OSPF extensions for RSVP-TE are implemented in Type 6, 7, and 8 LSAs.

**Answer: A**

**NEW QUESTION 221**

A network engineer is configuring Flexible NetFlow and enters these commands

```
sampler NetFlow1
mode random one-out-of 100

interface fastethernet 1/0
flow-sampler NetFlow1
```

What are two results of implementing this feature instead of traditional NetFlow? (Choose two.)

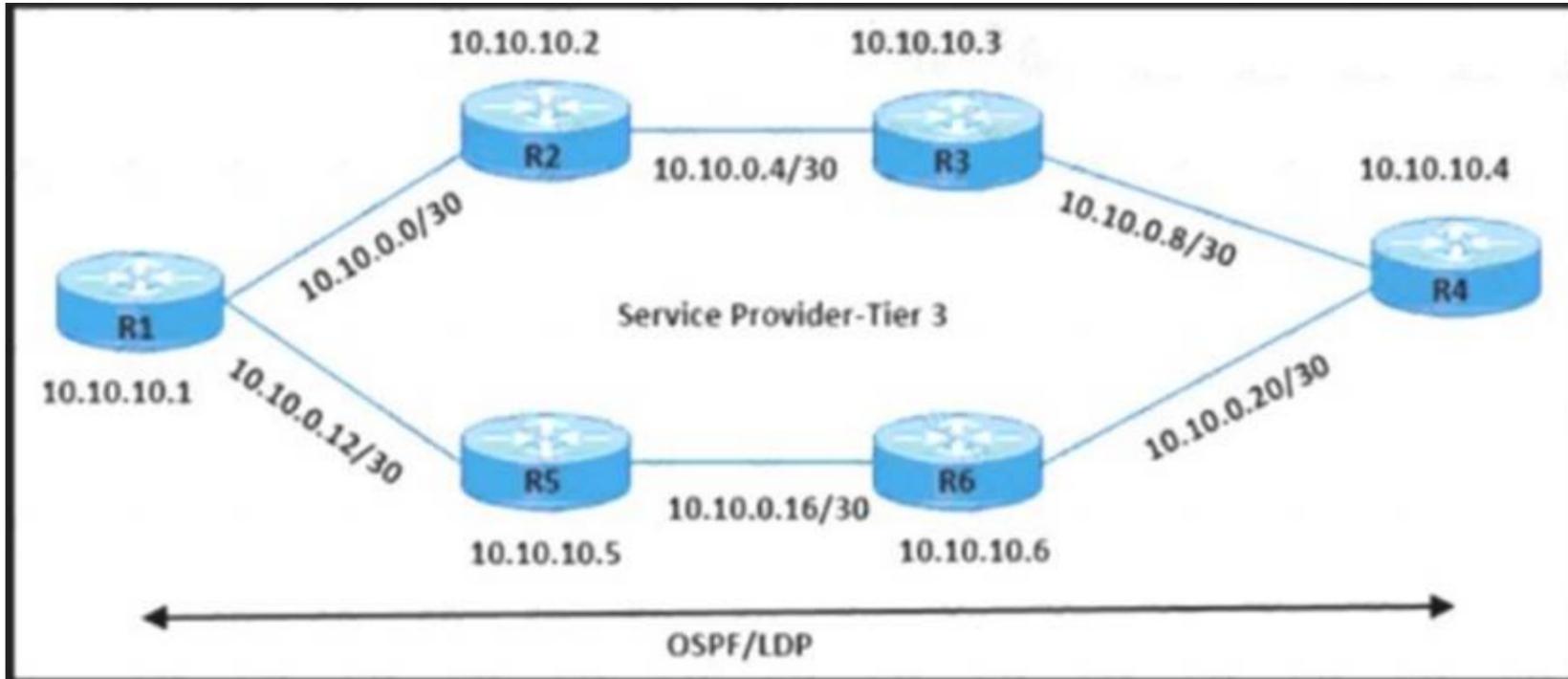
- A. CPU and memory utilization are reduced.
- B. Only the flows of top 100 talkers are exported.
- C. The data export flow is more secure

- D. The number of packets to be analyzed are reduced.
- E. The accuracy of the data to be analyzed is improved.

**Answer:** AD

**NEW QUESTION 226**

Refer to the exhibit.



The network engineer is performing end-to-end MPLS path testing with these conditions:

- Users must perform MPLS OAM for all available same-cost paths from R1 to R4.
- Traceroute operations must return all of the next-hop IP details. Which configuration meets these requirements?

- A. traceroute mpls ipv4 10.10.10.4 255.255.255.255 verbose
- B. traceroute mpls multipath ipv4 10.10.10.4 255.255.255.255
- C. traceroute mpls multipath ipv4 10.10.10.4 255.255.255.255 verbose
- D. traceroute mpls ipv4 10.10.10.4 255.255.255.255 source 10.10.10.1

**Answer:** C

**NEW QUESTION 228**

Refer to the exhibit:

```
telemetry model-driven
sensor-group cisco
sensor-path Cisco-IOS-XR-infra-statsd-oper:infra-statistics/interfaces/interface/latest/generic-counters
commit
```

This configuration is being applied on an IOS XR router. Which statement about this configuration is true?

- A. It is used to create a subscription to specify the streaming interval
- B. It is used to identify traps for SNMP polling
- C. It is used to identify MIB entries and has a list of YANG models
- D. It is used to create a sensor-group and has a list of YANG models for streaming

**Answer:** D

**NEW QUESTION 233**

Refer to the exhibit:

<pre> PE-A ! interface FastEthernet0/0  ip address 10.10.10.1 255.255.255.252  ip ospf authentication null  ip ospf 1 area 0  duplex full end  ! router ospf 1  log-adjacency-changes  passive-interface Loopback0  network 10.10.10.0 0.0.0.3 area 0  default-metric 200 ! </pre>	<pre> PE-B ! interface FastEthernet0/0  ip address 10.10.10.2 255.255.255.252  ip ospf authentication null  ip mtu 1400  ip ospf 1 area 0  duplex half end !  R1#sho run   b router ospf router ospf 1  log-adjacency-changes  passive-interface Loopback10  network 10.10.10.0 0.0.0.255 area 0  default-metric 100 </pre>
--	---

Which configuration prevents the OSPF neighbor from establishing?

- A. mtu
- B. duplex
- C. network statement
- D. default-metric

Answer: A

**NEW QUESTION 237**

How does Cisco DNA Center enhance network automation?

- A. It allows network administrators to quickly deploy Cisco Layer 2 devices without requiring STP and broadcast transport.
- B. It allows network administrators to reduce inconsistencies when they deploy and validate network configurations.
- C. It allows network administrators to reduce the number of VRFs in a multi customer environment by automatically implementing a single VLAN per customer.
- D. It allows network administrators to combine voice and data networks into a single topology without manual configuration.

Answer: B

**NEW QUESTION 242**

Refer to the exhibit.

```

<fvTenant name="customer">
  <fvCtx name="customervrf"/>
  <fvBD name="bd1">
    <fvRsCtx tnFvCtxName=" customervrf "/>
    <fvSubnet ip="192.168.0.1/24" scope="public"/>
    <fvRsBDToOut tnL3extOutName="l3out1"/>
  </fvBD>
</fvTenant>

```

What does this REST API script configure?

- A. application profile
- B. VRF
- C. public community string for SNMP
- D. interface with IP address 192.168.0.1

Answer: D

**NEW QUESTION 245**

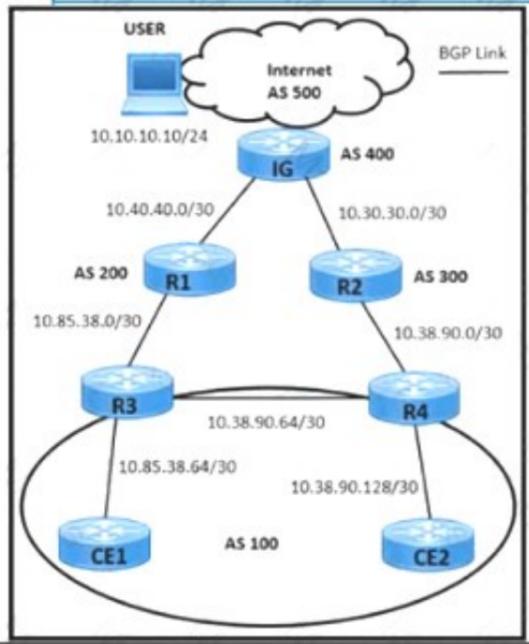
An engineer is trying to implement BGP in a multihomed architecture. What must the engineer configure to influence inbound path selection?

- A. A route map with WEIGHT attribute to control the inbound traffic.
- B. An offset list to set the metric for routes received from neighboring autonomous systems.
- C. An access list to identify traffic and enable it on both of the provider-facing interfaces.
- D. A route map with AS\_PATH attribute to control the inbound traffic.

Answer: D

**NEW QUESTION 250**

Refer to the exhibit.



```

R3#
router bgp 100
no synchronization
bgp log-neighbor-changes
network 10.38.90.0 mask 255.255.255.252
network 10.38.90.64 mask 255.255.255.252
network 10.38.90.128 mask 255.255.255.252
network 10.85.38.0 mask 255.255.255.252
network 10.85.38.64 mask 255.255.255.252
neighbor 24.38.90.65 remote-as 100
neighbor 24.38.90.65 next-hop-self
neighbor 10.85.38.1 remote-as 400
neighbor 10.85.38.1 ebgp-multihop 10
neighbor 10.85.38.66 remote-as 100
neighbor 10.85.38.66 next-hop-self
no auto-summary

R4#
router bgp 100
no synchronization
bgp log-neighbor-changes
network 10.38.90.0 mask 255.255.255.252
network 10.38.90.64 mask 255.255.255.252
network 10.38.90.128 mask 255.255.255.252
network 10.85.38.0 mask 255.255.255.252
network 10.85.38.64 mask 255.255.255.252
neighbor 10.38.90.1 remote-as 300
neighbor 10.38.90.1 ebgp-multihop 10
neighbor 10.38.90.66 remote-as 100
neighbor 10.38.90.66 next-hop-self
neighbor 10.38.90.130 remote-as 100
neighbor 10.38.90.130 next-hop-self
no auto-summary
    
```

The USER mat is connecting an application on an Internet connection in AS 100 is facing these issues:

- > The USER lost the connection to the application during a failure Between IG and R2.
- > Router R2 configuration a lost due to a power outage.
- > The application the USER is connecting to a hosted behind CE2.

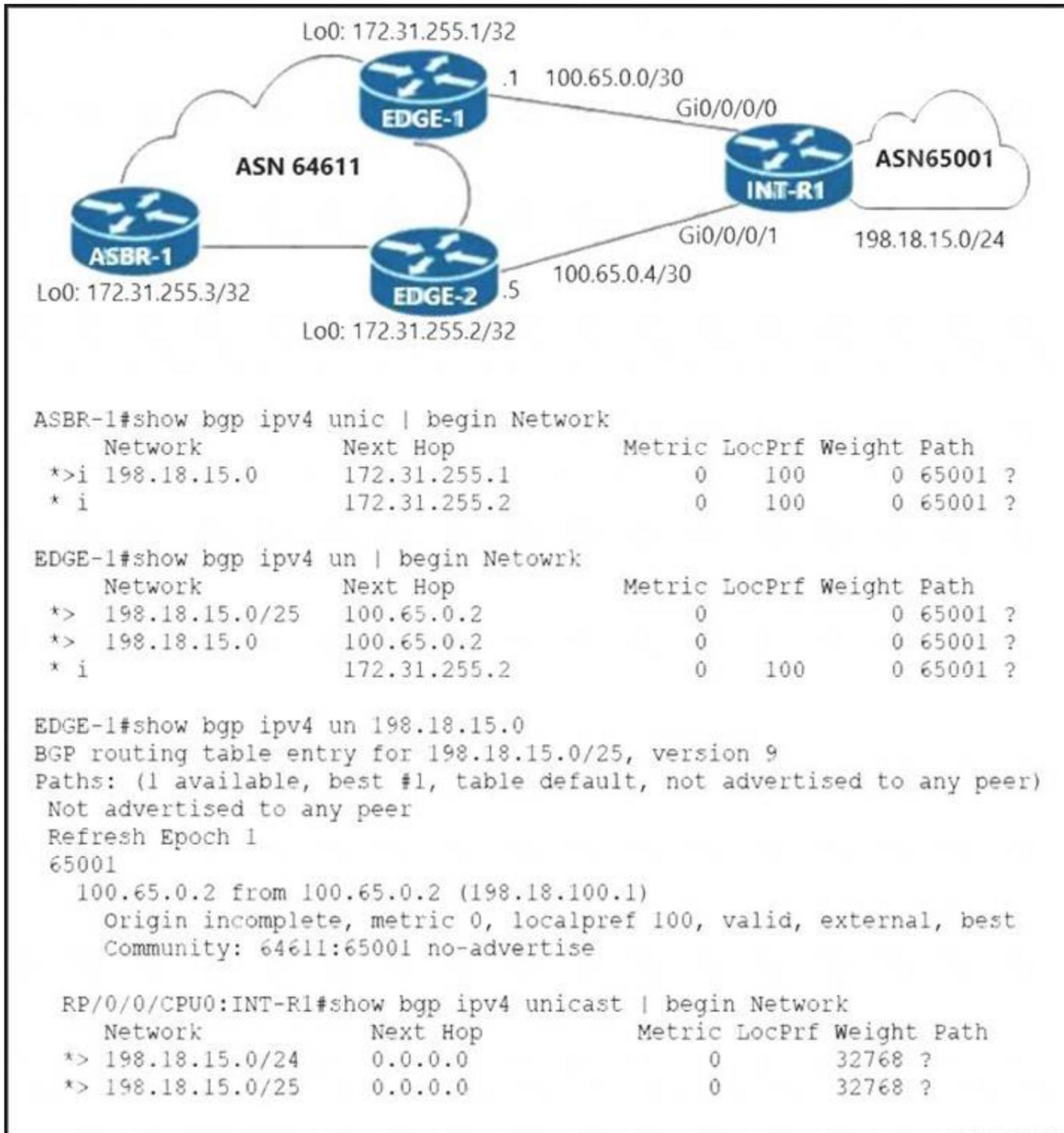
What action resolves the issues on R3 and R4 routers?

- A. Set R4 as a route reflector for R3 and CE2
- B. Apply high Local Preference on R3 toward R1
- C. Set R3 as a route reflector for R4 and CE1
- D. Apply low Local Preference on R4 toward R2.

**Answer: D**

**NEW QUESTION 254**

Refer to the exhibit.



The network engineer who manages ASN 65001 is troubleshooting suboptimal routing to the 198.18.15.0/24 prefix. According to the network requirements: Routing to IP destinations in the 198.18.15.0/25 block must be preferred via the EDGE-1 PE. Routing to IP destinations in the 198.18.15.128/25 block must be preferred via the EDGE-2 PE. More specific prefixes of the 198.18.15.0/24 block must not be advertised beyond the boundaries of ASN 64611. Routing to 198.18.15.0/24 must be redundant in case one of the uplinks on INT-R1 fails. Which configuration must the network engineer implement on INT-R1 to correct the suboptimal routing and fix the issue?

- A. configure terminal route-policy ASN65001-SPECIFIC-OUT if destination in (198.18.15.0/25) then set community (no-export, peer-as:65001) done endif if destination in (198.18.15.0/24) then prepend as-path 65001 3 done endif dropend-policy! router bgp 65001 neighbor 100.65.0.1 address-family ipv4 unicast route-policy ASN65001-SPECIFIC-OUT out end
- B. configure terminal route-policy ASN65001-SPECIFIC-OUT if destination in (198.18.15.0/25) then set community (internal, peer-as:65001) done endif if destination in (198.18.15.0/24) then done endif dropend-policy! router bgp 65001 neighbor 100.65.0.1 address-family ipv4 unicast route-policy ASN65001-SPECIFIC-OUT out end
- C. configure terminal route-policy ASN65001-SPECIFIC-OUT if destination in (198.18.15.0/25) then set community (no-advertise, peer-as:65001) done endif if destination in (198.18.15.128/25) then prepend as-path 65001 3 done endif dropend-policy! router bgp 65001 neighbor 100.65.0.1 address-family ipv4 unicast route-policy ASN65001-SPECIFIC-OUT out end
- D. configure terminal route-policy ASN65001-SPECIFIC-OUT if destination in (198.18.15.0/25) then set community (no-export, peer-as:65001) done endif if destination in (198.18.15.128/25) then prepend as-path 65001 3 done endif dropend-policy! router bgp 65001 neighbor 100.65.0.1 address-family ipv4 unicast route-policy ASN65001-SPECIFIC-OUT in end

**Answer: B**

**NEW QUESTION 258**

What is the primary role of Ansible in a network?

- A. It is used as a debugging tool for connectivity issues between the DMZ and an enterprise intranet.
- B. It is used to diagnose Layer 11 issues in data centers that span more than one city block.
- C. It is used to deploy IPv6 configuration in networks that are dual stack.
- D. It is used as a network automation provisioning and configuration tool.

**Answer: D**

**NEW QUESTION 262**

Refer to the exhibit.

```
R1(config)# ipv6 unicast-routing
R1(config)# ipv6 router ospf 100
R1(config-rtr)# router-id 1.1.1.1
```

An engineer is configuring router R1 for OSPFv3 as shown. Which additional configuration must be performed so that the three active interfaces on the router will advertise routes and participate in OSPF IPv6 processes?

A)

```
R1(config)# interface Ethernet1/1
R1(config-if)# ipv6 ospf 100 area 0
```

```
R1(config)# interface Ethernet1/2
R1(config-if)# ipv6 ospf 100 area 10
```

```
R1(config)# interface Ethernet1/3
R1(config-if)# ipv6 ospf 100 area 20
```

B)

```
R1(config)# interface Ethernet1/1
R1(config-if)# ip ospf hello-interval 1
R1(config-if)# ip ospf 1 area 0
```

```
R1(config)# interface Ethernet1/2
R1(config-if)# ip ospf hello-interval 1
R1(config-if)# ip ospf 1 area 10
```

```
R1(config)# interface Ethernet1/3
R1(config-if)# ip ospf hello-interval 1
R1(config-if)# ip ospf 1 area 20
```

C)

```
R1(config)# interface Ethernet1/1
R1(config-if)# ip ospf 1 area 0
```

```
R1(config)# interface Ethernet1/2
R1(config-if)# ip ospf 1 area 10
```

```
R1(config)# interface Ethernet1/3
R1(config-if)# ip ospf 1 area 20
```

A.

Answer: A

**NEW QUESTION 265**

Refer to the exhibit.

```
!
telemetry model-driven
destination-group DGroup2
address family ipv4
172.10.10.10 port 57500
encoding self-describing-gpb
protocol grpc
commit
!
```

A network engineer at a large ISP is configuring telemetry streams to monitor the health status of PE routers on the network using gRPC dial-out. The PE routers are located at several data centers in different physical locations, and they are using IS-IS and BGP for routing. Which additional configuration must the engineer implement on the PE routers to meet the goal?

A. Text, letter Description automatically generated

```
sensor-group SGroup2
sensor-path openconfig-interfaces:interfaces/interface
!
subscription Sub3
sensor-group-id SGroup3 sample-interval 30000
```

B. Text Description automatically generated

```

sensor-group SGroup2
  sensor-path Cisco-IOS-XR-plat-chas-invmgr-oper:platform-inventory/racks/rack
!
subscription Sub1
  sensor-group-id SGroup1 sample-interval 30000
  destination-id DGroup1
    
```

C. Graphical user interface, text Description automatically generated

```

sensor-group SGroup2
  sensor-path Cisco-IOS-XR-infra-statsd-oper:infra-statistics/interfaces/interface/latest/generic-cou
!
subscription Sub1
  sensor-group-id SGroup1 sample-interval 30000
  destination-id DGroup1
    
```

D. Text, letter Description automatically generated

```

sensor-group SGroup2
  sensor-path Cisco-IOS-XR-nto-misc-oper:memory-summary/nodes/node/summ
!
subscription Sub2
  sensor-group-id SGroup2 sample-interval 30000
  destination-id DGroup2
    
```

**Answer: D**

**NEW QUESTION 266**

Drag and drop the methods of Cisco MPLS TE tunnel traffic assignment from the left onto their characteristics on the right.

CBTS	autoroute
PBTS	It optimizes streaming services.
static routing	It requires the administrator to manually assign traffic to the tunnel.
	It uses CoS values to assign traffic to the tunnel.

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

**NEW QUESTION 271**

Refer to me exhibit.

```

CSR1#show flowspec ipv4 detail
AFI: IPv4
Flow      :Dest:10.6.5.0/24,DPort:=80|=443
Actions  :Traffic-rate: 0 bps (bgp.1)
Statistics (packets/bytes)
Matched   :      12/696
Dropped   :      12/696
    
```

A network operator recently configured BGP FlowSpec for me internal IT network What will be inferred from the configuration deployed on me network?

- A. The policy is configured locally on CSRI and drops all traffic for TCP ports 80 and 443
- B. The policy is learned via BGP FlowSpec and drops all traffic for TCP ports 80 and 443
- C. The policy is warned via BC FlowSpec aid has active traffic
- D. The policy is configured locally on CSR1 and currently has no active traffic

Answer: A

**NEW QUESTION 275**

Refer to the exhibit.

```
Router(config)# ip access-list standard Suppressed
Router(config-std-nacl)# permit 10.16.6.0 0.0.0.255
Router(config)# route-map SuppressMap
Router(config-route-map)# match ip address Suppressed
```

An engineer is implementing BGP selective prefix suppression. The router must advertise only 10.16.4.0/24, 10.16.5.0/24, and summarized route 10.16.0.0/21, and suppress 10.16.6.0/24. Which configuration must the engineer apply to the router?

- A)
 

```
Router (config)# router bgp 300
Router(config-router)# aggregate-address 10.16.6.0 255.255.252.0 as-set suppress-map SuppressMap
```
- B)
 

```
Router (config)# router bgp 300
Router(config-router)# aggregate-address 10.16.0.0 255.255.248.0 as-set suppress-map SuppressMap
```
- C)
 

```
Router (config)# router bgp 300
Router(config-router)# aggregate-address 10.16.6.0 255.255.255.0 as-set suppress-map SuppressMap
```
- D)
 

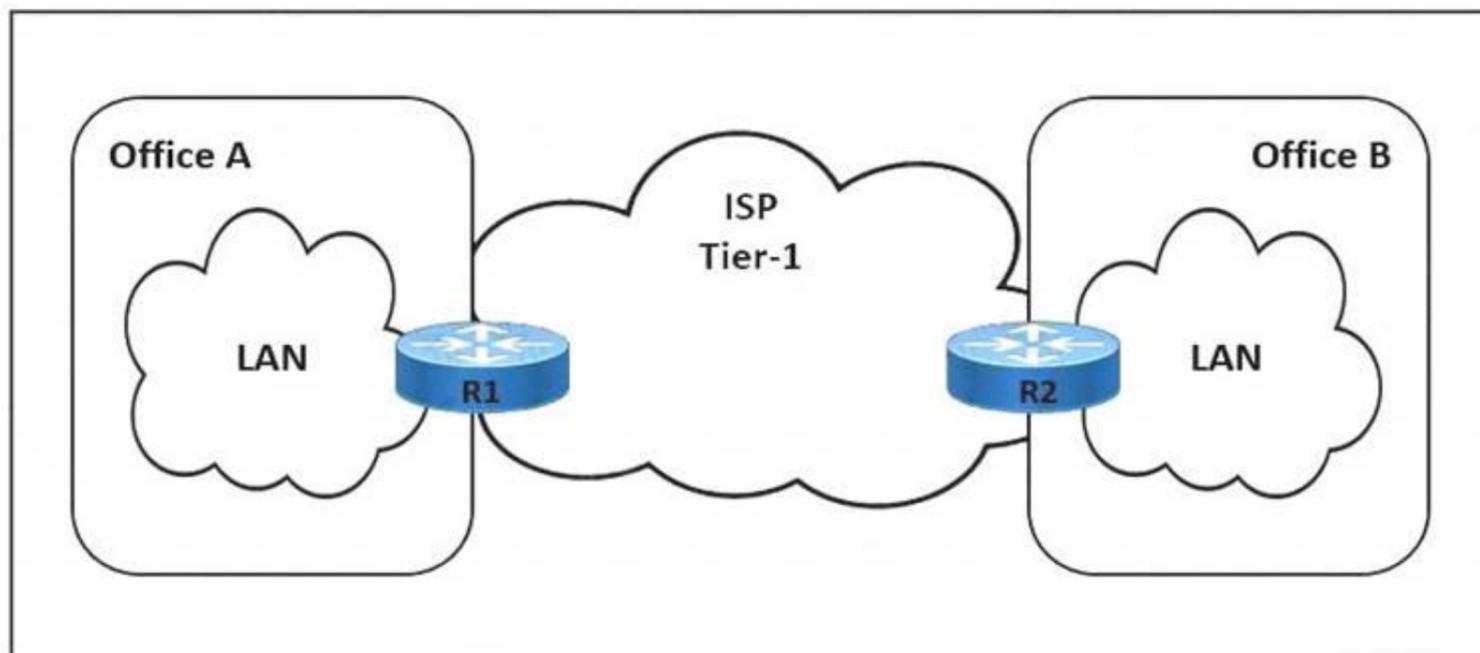
```
Router (config)# router bgp 300
Router(config-router)# aggregate-address 10.16.0.0 255.255.255.0 as-set suppress-map unSuppressMap
```

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

Answer: B

**NEW QUESTION 279**

Refer to the exhibit.



The link between Office A and Office B is running at 90% load, and occasionally the CPU on router R1 is overloaded. The company implemented QoS for business-critical applications at both offices as a temporary solution. A network engineer must update the R1 configuration to 600 ms to reduce CPU load and limit downtime after connection failure to avoid data loss. Which action meets this requirement?

- A. Configure the fast-hello feature for OSPF with the command `ip ospf dead-interval minimal hello-multiplier 3`.
- B. Configure BFD demand mode with the command `bfd-demand timer 150 interval 250 retransmit 5`.
- C. Configure BFD non-echo mode with the command `echo interval 250 minimal 300 echo-multiplier 2`.
- D. Configure BFD echo mode with the command `bfd interval 150 min_rx 200 multiplier 3`.

Answer: D

**NEW QUESTION 282**

Refer to the exhibit.

```

R1
interface Ethernet1/1
 ip address 172.16.33.1 255.255.255.255
interface Ethernet1/0
 ip address 172.16.32.1 255.255.255.0
router ospf 20
 network 172.16.0.0 0.0.255.255 area 0

R2
interface Ethernet1/1
 ip address 172.16.30.1 255.255.255.255
interface Ethernet1/0
 ip address 172.16.32.2 255.255.255.0
router ospf 20
 network 172.16.0.0 0.0.255.255 area 0
 distribute-list 1 in
 access-list 1 permit 172.16.32.0. 0.0.0.255

R2# show ip route
172.16.0.0/16 is variably subnetted, 3 subnets, 2 masks
C    172.16.32.0/24 is directly connected, Ethernet1/0
C    172.16.30.1/32 is directly connected, Ethernet1/1

```

A network engineer notices that router R2 is failing to install network 172.16.33.1/32 in the routing table. Which configuration must the engineer apply to R2 to fix the problem?

- A. R2(config)# access-list 1 permit 172.16.33.0 255.0.0.0
- B. R2(config)# access-list 1 permit 172,16,33.0 255,255,255,0
- C. R2(config)# access-list 1 permit 172.16.33.0 0.0.0.255
- D. R2(config)# access-list 1 permit 172,16,33.0 255.255,0,0

Answer: C

**NEW QUESTION 285**

Refer to the exhibit:

```

R1
interface fastethernet1/0
 ip address 192.168.2.14 255.255.255.0
 ip ospf message-digest-key 1 md5 cisco
 ip ospf authentication message-digest

```

Which condition must be met by the OSPF peer of router R1 before the two devices can establish communication?

- A. The interface on the OSPF peer must use the same key ID and key value as the configured interface
- B. The interface on the OSPF peer may have a different key ID, but it must use the same key value as the configured interface
- C. The OSPF peer must be configured as an OSPF stub router
- D. The OSPF peer must use clear-text authentication

Answer: A

**NEW QUESTION 286**

Refer to Exhibit.

```

username cisco privilege 15 password 0 cisco
!
ip http server
ip http authentication local
ip http secure-server
!
snmp-server community private RW
!
netconf-yang
netconf-yang cisco-ia snmp-community-string cisco
restconf

```

A network engineer is trying to retrieve SNMP MIBs with RESTCONF on the Cisco switch but fails. End-to-end routing is in place. Which configuration must the engineer implement on the switch to complete?

- A. netconf-yang cisco-ia snmp-community -string Public
- B. snmp-server community cisco RW
- C. snmp-server community public RO
- D. netconf-yang cisco-ia snmp-community-string Private

Answer: B

**NEW QUESTION 289**

Refer to the exhibit.

```
R1#configure terminal
R1(config)# mpls ip
R1(config)# mpls label protocol ldp

R1(config)# interface Ethernet1/0
R1(config-if)# ip address 10.1.1.1 255.255.255.255
R1(config-if)# mpls ip

R1(config)# router ospf 1
R1(config-router)# network 10.0.0.0 0.255.255.255 area 3
```

A network engineer is configuring MPLS LDP synchronization on router R1. Which additional configuration must an engineer apply to R1 so that it will synchronize to OSPF process 1?

- R1(config)# router ospf 1  
R1(config-router)# mpls ldp sync
- R1(config)# router ospf 1  
R1(config-router)# mpls ldp autoconfig
- R1(config)# router ospf 1  
R1(config-router)# mpls ldp igp sync holddown 60
- R1(config)# router ospf 1  
R1(config-router)# no mpls ldp igp sync/strong>  
R1(config-router)# bfd all-interfaces

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

Answer: A

#### NEW QUESTION 294

The network-engineering team of a service provider is integrating several recently acquired networks into a more scalable common Unified MPLS architecture. The new network architecture will support end-to-end VPNv4 and VPNv6 services with these requirements:

- The IGP of the core layer is IS-IS In Area 0.
- The IGP of the aggregation layers is OSPF in Area 0.
- The LDP protocol is used to distribute label bindings within each IGP domain.

Which task must the network engineer perform when implementing this new architecture?

- A. Configure BGP-LU between ABR routers of each IGP domain to carry MPLS label information in NLRI.
- B. Configure a BGP session between the ABR routers of each IGP domain to exchange VPNv4 or VPNv6 prefixes
- C. Configure the ABR in each IGP domain to preserve next-hop information on all VPNv4 and VPNv6 prefixes advertised by the PE.
- D. Configure mutual redistribution of each IGP domain's loopback prefix to provide end-to-end LDP LSP

Answer: D

#### NEW QUESTION 296

A network engineer is implementing a QoS policy for outbound management traffic classification and marking on a CPE device with these requirements:

- Management protocols must be marked with DSCP AF class 2 with low drop probability.
- Monitoring protocols must be marked with DSCP AF class 1 with low drop probability.
- All remaining traffic must be marked with a DSCP value of 0.

Which configuration must the engineer implement to satisfy the requirements?

A)

```
policy-map cpe-mgmt-policy
class management
set ip dscp af21
class monitoring
set ip dscp af11
class class-default
set ip dscp af0
end
```

B)

```

policy-map cpe-mgmt-policy
  class management
    set ip dscp af23
  class monitoring
    set ip dscp af13
  class class-default
    set ip dscp af0
end

```

C)

```

policy-map cpe-mgmt-policy
  class management
    set ip dscp af21
  class monitoring
    set ip dscp af11
  class class-default
    set ip dscp default
end

```

D)

```

policy-map cpe-mgmt-policy
  class management
    set ip dscp af23
  class monitoring
    set ip dscp af13
  class class-default
    set ip dscp default
end

```

- 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/datacenter/nexus1000/sw/4\\_0/qos/configuration/guide/nexus10](https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus1000/sw/4_0/qos/configuration/guide/nexus10)

**NEW QUESTION 297**

Which utility can you use to locate MPLS faults?

- A. MPLS traceroute
- B. EEM
- C. MPLS LSP ping
- D. QoS

**Answer:** C

**NEW QUESTION 301**

Refer to the exhibit.

```

Router 1:

snmp-server group group1 v3 noauth
snmp-server user testuser group1 remote 192.168.0.254
snmp-server host 192.168.0.254 informs version 3 noauth testuser config

```

A network engineer is deploying SNMP configuration on client's routers. Encrypted authentication must be included on router 1 to provide security and protect

message confidentially. Which action should the engineer perform on the routers to accomplish this task?

- A. snmp-server host 192.168.0.254 informs version 3 auth testuser config.
- B. snmp-server user testuser group 1 remote 192.168.0.254 v3 auth md5 testpassword
- C. snmp-server group group 1 v3 auth.
- D. snmp-server community public

**Answer: B**

**NEW QUESTION 306**

Refer to the exhibit.

```
router bgp 65515
 aggregate-address 192.168.0.0 255.255.0.0 summary-only as-set
```

An engineer configured BGP summarization on a customer's network. Which route is advertised to BGP peers?

- A. 192.0.0.0/16
- B. 192168.0.0/16
- C. 192.168.1.0/24
- D. 192168.0.5/30

**Answer: B**

**NEW QUESTION 307**

Refer to the exhibit:

```
snmp-server community ciscotest ro 2
```

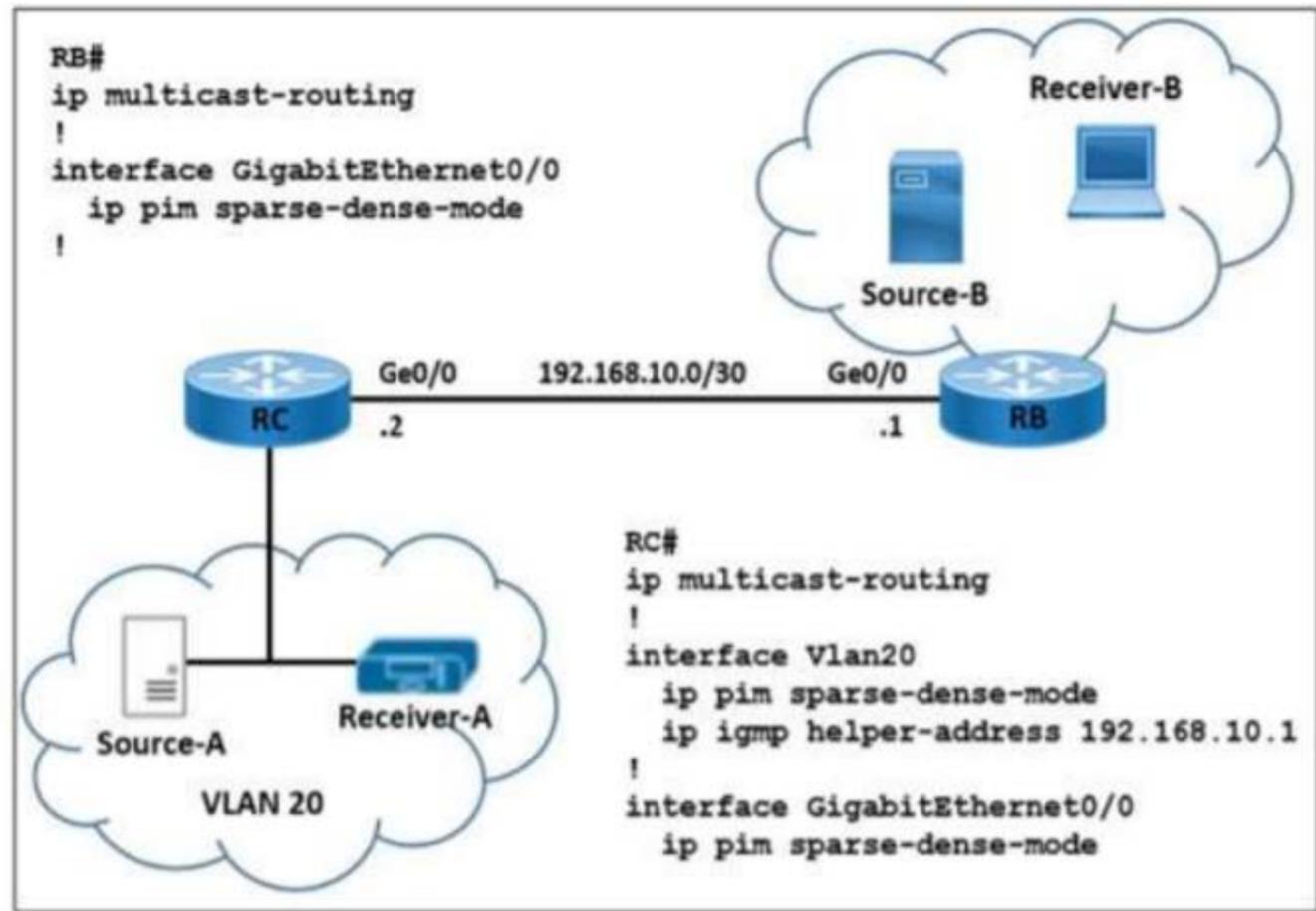
What is significant about the number 2 in the configuration?

- A. It is the numeric name of the ACL that contains the list of SNMP managers with access to the agent
- B. It dictates the number of sessions that can be open with the SNMP manager
- C. It indicates two SNMP managers can read and write with the agent using community string cisco test
- D. It represents the version of SNMP running

**Answer: A**

**NEW QUESTION 311**

Refer to the exhibit.



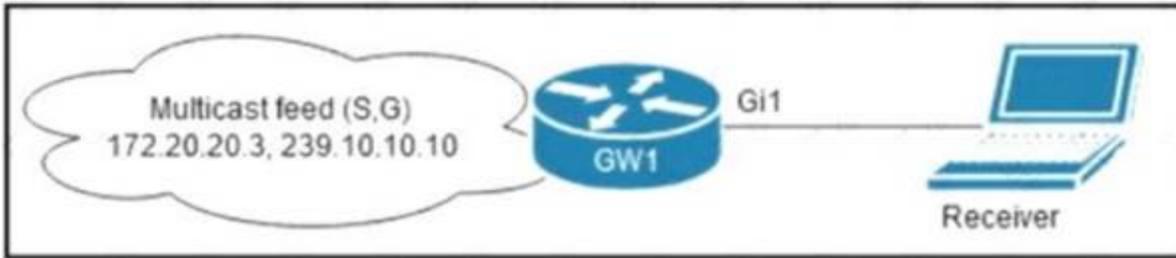
A network engineer is implementing multicast Source-A to send a multicast stream for Receiver-A, and multicast Source-B to send a multicast stream for Receiver-B. Router RC forwards the IGMP host a report and leaves messages to IP address 192.168.10.1. How must the multicast features be implemented to prevent RB from receiving multicast flooding from Source-A?

- A. Change the helper-address value to 192.168.10.2 on RC.
- B. Enable ip pim neighbor-filter on RC interface Ge0/0.
- C. Configure PIM-SSM on RB and RC interface Ge 0/0.
- D. Enable ip pim passive on RB interface Ge0/0.

Answer: D

**NEW QUESTION 314**

Refer to the exhibit.



A network administrator is implementing IGMP to enable multicast feed transmission to the receiver. Which configuration must the administrator deploy on GW1 to permit IGMP Joins only to the assigned (S, G) feed?

- A)
 

```

config t
access-list 100 permit igmp host 0.0.0.0 host 239.10.10.10
access-list 100 deny igmp any any
interface GigabitEthernet1
ip igmp access-group 100
ip igmp version 3
end
      
```
- B)
 

```

config t
access-list 100 permit igmp host 0.0.0.0 host 239.10.10.10
access-list 100 permit igmp host 172.20.20.3 host 239.10.10.10
access-list 100 deny igmp any any
interface GigabitEthernet1
ip igmp access-group 100
ip igmp version 3
end
      
```
- C)
 

```

config t
access-list 100 permit igmp host 0.0.0.0 host 239.10.10.10
access-list 100 deny igmp any any
interface GigabitEthernet1
ip igmp access-group 100
ip igmp version 2
end
      
```
- D)
 

```

config t
access-list 100 permit igmp host 0.0.0.0 host 239.10.10.10
access-list 100 permit igmp host 172.20.20.3 host 239.10.10.10
access-list 100 deny igmp any any
interface GigabitEthernet1
ip igmp access-group 100
ip igmp version 2
end
      
```

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

Answer: B

**Explanation:**

How IGMP Checks an Extended Access List

When an IGMP extended access list is referenced in the `ip igmp access-group` command on an interface, the (S, G) pairs in the `permit` and `deny` statements of the extended access list are matched against the (S, G) pair of the IGMP reports received on the interface. For example, if an IGMP report with (S1, S2...Sn, G) is received, first the group (0.0.0.0, G) is checked against the access list statements. The convention (0.0.0.0, G) means (\*, G), which is a wildcard source with a multicast group number. If the group is denied, the entire IGMP report is denied. If the group is permitted, each individual (S, G) pair is checked against the access list. Denied sources are taken out of the IGMP report, thereby denying the sources access to the multicast traffic.

**NEW QUESTION 319**

Which protocol is used for communication between the PCE and PCC?

- A. ICMP
- B. PCEP
- C. CEF
- D. POP

**Answer: B**

**NEW QUESTION 323**

Refer to the exhibit.

```

mpls label range 16 100000 static 100002 1048570
mpls label protocol ldp

mpls ldp graceful-restart
!
interface Loopback0
!
ip address 10.20.20.20 255.255.255.255
no ip directed-broadcast
no ip mroute-cache
!
interface Gi1/1/0
ip address 10.12.0.2 255.255.0.0
no ip directed-broadcast
mpls label protocol ldp
mpls ip
!
router ospf 100
log-adjacency-changes
nsf cisco enforce global
redistribute connected subnets
network 10.20.20.20 0.0.0.0 area 0
network 10.12.0.0 0.0.255.255 area 0
!
mpls ldp router-id Loopback0 force

```

A network administrator implemented MPLS LDP changes on PE-A LSR device. The engineer must ensure there are no LDP peers are fully operational. Which LDP feature must the engineer apply to the existing configuration to eliminate the problem?

- A. Configure MPLS LDP IGP synchronization on the network.
- B. Configure MPLS LDP NSR for all LDP sessions.
- C. Enable LDP session protection under the routing protocol.
- D. Disable IP CEF on routers running LDP and enable LDP.

**Answer: B**

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mpls/configuration/xr-3s/mp-ha-xr-3s-book/mp-nsr-ldp-suppl>

**NEW QUESTION 328**

Which module refers to the network automation using Ansible?

- A. the iosxr\_system module to collect facts from remote devices
- B. the iosxr\_user module to manage banners for users in the local database
- C. the iosxr\_logging module to run debugging for severity levels 2 to 5
- D. the iosxr\_command module to issue run commands on remote devices

**Answer: D**

**Explanation:**

[https://docs.ansible.com/ansible/latest/collections/cisco/iosxr/iosxr\\_command\\_module.html#ansible-collections](https://docs.ansible.com/ansible/latest/collections/cisco/iosxr/iosxr_command_module.html#ansible-collections)

**NEW QUESTION 331**

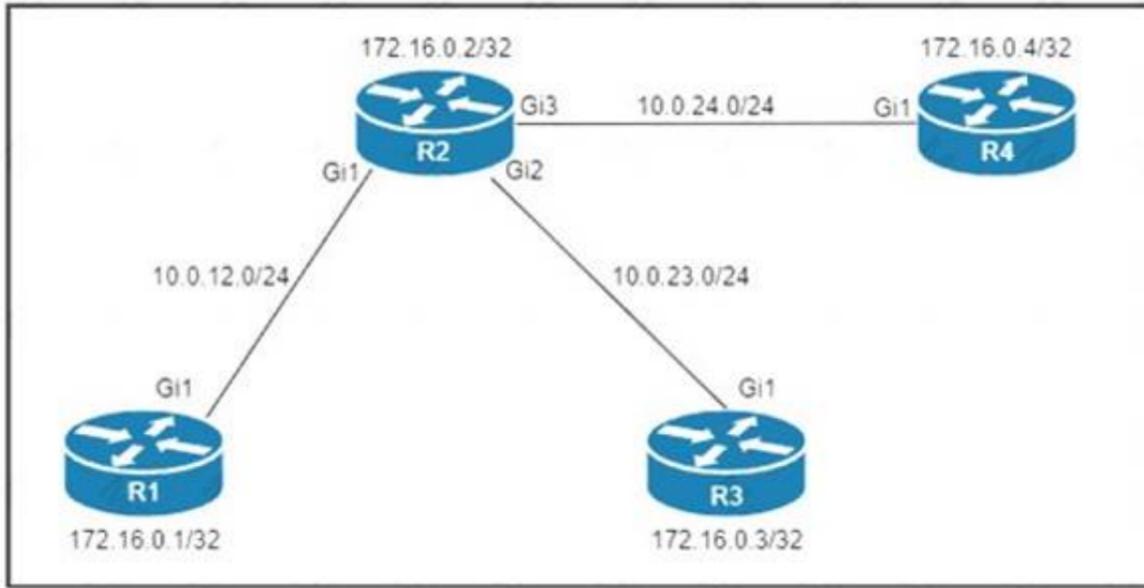
While implementing TTL security, an engineer issues the PE(config-router-af)#neighbor 2.2.2.2 ttl-security hops 2 command. After issuing this command, which BGP packets does the PE accept?

- A. from 2.2.2.2, with a TTL of less than 2
- B. to 2.2.2.2, with a TTL of less than 253
- C. from 2.2.2.2, with a TTL of 253 or more
- D. to 2.2.2.2, with a TTL of 2 or more

**Answer: C**

**NEW QUESTION 333**

Refer to the exhibit.



Which configuration must be applied to each of the four routers on the network to reduce LDP LIB size and advertise label bindings for the /32 loopback IP space only?

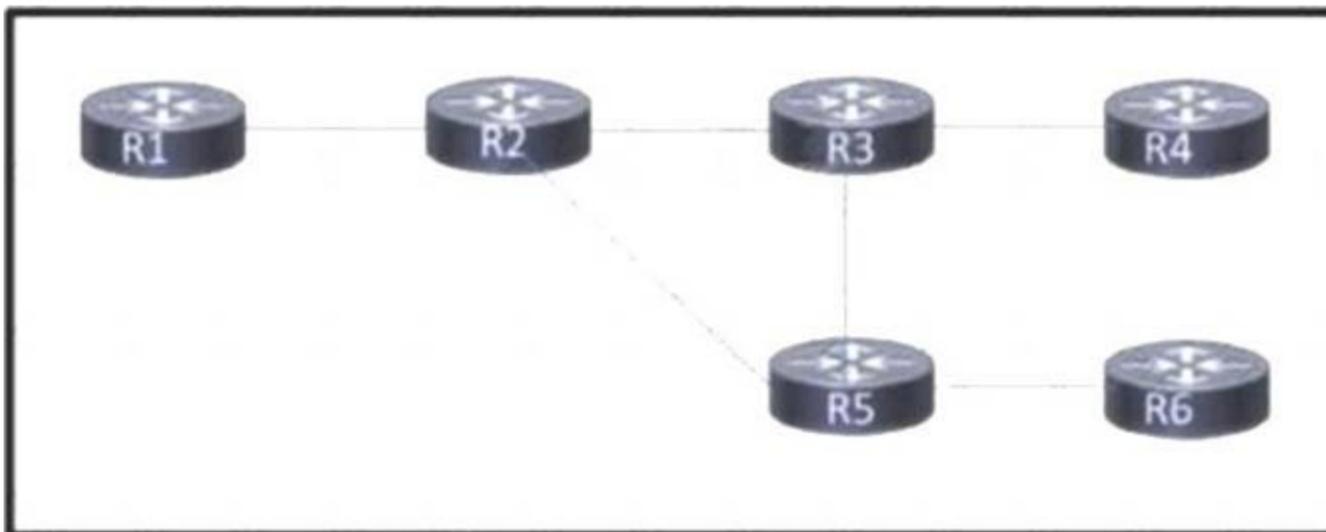
- config t**  
**ip prefix-list LOOPBACKS seq 5 permit 0.0.0.0 le 32**  
**mpls ldp label**  
**allocate global prefix-list LOOPBACKS**  
**end**
- config t**  
**access-list 10 permit 172.16.0.0 0.0.0.7**  
**access-list 20 permit 10.0.0.0 0.0.31.255**  
**no mpls ldp advertise-labels**  
**mpls ldp advertise-labels for 10 to 20**  
**end**
- config t**  
**access-list 10 permit 172.16.0.0 0.0.0.7**  
**access-list 20 permit 172.16.0.0 0.0.0.7**  
**no mpls ldp advertise-labels**  
**mpls ldp advertise-labels for 10 to 20**  
**end**
- config t**  
**mpls ldp label**  
**allocate global host-routes**  
**end**

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

**Answer:** A

**NEW QUESTION 336**

Refer to the exhibit.



Customers report occasional forwarding issues from hosts connected to R6 to hosts connected to R1. A network engineer has just updated the MPLS configuration on the network, and a targeted LDP session has been established between R1 and R5. Which additional task must the engineer perform so that the team can identify the path from R6 to R1 in case the forwarding issues continue?

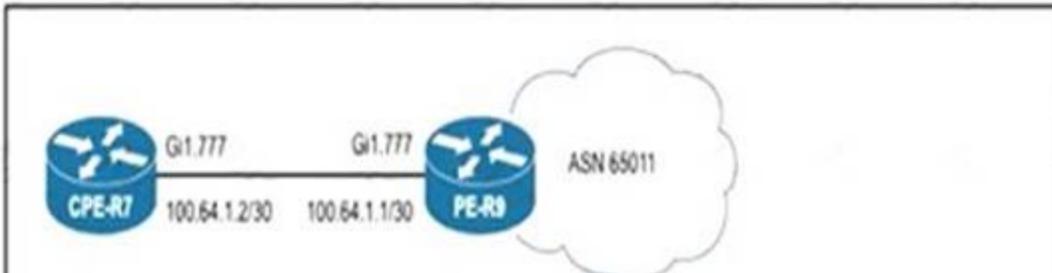
- A. Configure an MPLS TE from R4 to R1 that routes through R5.
- B. Implement MPLS OAM within the network.
- C. Implement MPLS VPLS within the network.

D. Configure MPLS LDP Sync on each router.

**Answer: B**

**NEW QUESTION 339**

Refer to the exhibit.



```

PE-R9#show run interface GigabitEthernet1.777
Building configuration...
Current configuration : 133 bytes
interface GigabitEthernet1.777
  encapsulation dot1q 777
  ip address 100.64.1.1 255.255.255.252
  ip access-group INFRA-ACL out
end

PE-R9#show access-list INFRA-ACL
Extended IP access list INFRA-ACL
 10 permit tcp 192.168.0.0 0.0.255.255 100.64.0.0 0.31.255.255 eq telnet
 20 permit icmp any 100.64.0.0 0.31.255.255 echo
 30 permit icmp any 100.64.0.0 0.31.255.255 echo-reply
 40 permit udp host 172.29.100.2 100.64.0.0 0.31.255.255 eq snmp
 50 permit udp host 172.29.200.2 100.64.0.0 0.31.255.255 eq snmp
 60 permit tcp 192.168.0.0 0.0.255.255 range ftp-data ftp 100.64.0.0 0.31.255.255 established
 70 permit tcp 192.168.0.0 0.0.255.255 eq 22 100.64.0.0 0.31.255.255 established
 80 permit tcp 172.16.0.0 0.0.0.255 eq 22 100.64.0.0 0.31.255.255 established
100 deny ip any any
  
```

To protect in-band management access to CPE-R7, an engineer wants to allow only SSH management and provisioning traffic from management network 192.168.0.0/16. Which infrastructure ACL change must be applied to router PE-R9 to complete this task?

A)

```
ip access-list extended INFRA-ACL
15 permit tcp 192.168.0.0 0.0.255.255 range 49152 65535 100.64.0.0 0.31.255.255 eq 443
```

B)

```
ip access-list extended INFRA-ACL
no 10
15 permit tcp 192.168.0.0 0.0.255.255 eq 22 100.64.0.0 0.31.255.255 eq 22
```

C)

```
ip access-list extended INFRA-ACL
15 permit tcp 192.168.0.0 0.0.255.255 range 49152 65535 100.64.0.0 0.31.255.255 eq 22
```

D)

```
ip access-list extended INFRA-ACL
no 10
15 permit tcp 192.168.0.0 0.0.255.255 range 49152 65535 100.64.0.0 0.31.255.255 eq 22
```

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

**Answer: B**

**NEW QUESTION 341**

Refer to the exhibit:

```
route-policy ciscotest
  if destination in acl10 then
    pass
  else
    set local-preference 300
  endif
end-policy end
```

A network engineer is implementing a BGP routing policy. Which effect of this configuration is true?

- A. All traffic that matches acl10 is allowed without any change to its local-preference

- B. All traffic that matches acl10 is dropped without any change to its local-preference
- C. If traffic matches acl10, it is allowed and its local-preference is set to 300
- D. All traffic is assigned a local-preference of 300 regardless of its destination

**Answer:** A

**NEW QUESTION 342**

Which additional configuration is required for NetFlow to provide traceback information?

- A. Cisco Express Forwarding must be configured for traffic that is egressing from the router to be properly reported.
- B. A classification ACL must be configured to identify which type of traffic will be analyzed.
- C. The BGP routing process must be started for any ingress or egress data to be reported when using NetFlow.
- D. Version 5.
- E. LLDP must be configured or the device will be unable to locate a NetFlow analyzer.

**Answer:** B

**Explanation:**

**Traffic Identification and Traceback**

At times, you can need to quickly identify and traceback network traffic, especially during incident response or poor network performance. NetFlow and Classification ACLs are the two primary methods to accomplish this with Cisco IOS software. NetFlow can provide visibility into all traffic on the network. Additionally, NetFlow can be implemented with collectors that can provide long-term trending and automated analysis. **Classification ACLs are a component of ACLs and require pre-planning to identify specific traffic and manual intervention during analysis.** These sections provide a brief overview of each feature.

**NEW QUESTION 344**

How does Cisco MPLS TE use OSPF extensions to allow for optimized transit between a headend router and a destination router?

- A. Router LSAs share router link advertisements to each router within the MPLS environment so that tunnels can be built bidirectionally.
- B. ASBR Summary LSAs share OSPF domain information so that the two routers know how to reach each other during tunnel setup.
- C. Network LSAs share RSVP information to build the tunnel between the two routers.
- D. Opaque LSAs calculate and establish unidirectional tunnels that are set according to the network constraint.

**Answer:** D

**Explanation:**

Cisco MPLS TE uses OSPF extensions to allow for optimized transit between a headend router and a destination router by utilizing Opaque LSAs. Opaque LSAs allow for the calculation and establishment of unidirectional tunnels that are set according to the network constraint. The tunnels are built bidirectionally by utilizing Router LSAs, which share router link advertisements to each router within the MPLS environment. ASBR Summary LSAs are also used to share OSPF domain information so that the two routers know how to reach each other during tunnel setup. Furthermore, Network LSAs are used to share RSVP information which is necessary for setting up the tunnel between the two routers.

**NEW QUESTION 345**

Refer to the exhibit.

```
RP/0/RP0/CPU0:XR1#do sh bundle

Bundle-Ether11
  Status: Up
  Local links <active/standby/configured>: 1 / 2 / 3
  Local bandwidth <effective/available>: 1000000 (1000000) kbps
  MAC address (source): 0007.ec14.cc2b (Chassis pool)
  Inter-chassis link: No
  Minimum active links / bandwidth: 1 / 1 kbps
  Maximum active links: 1
  Wait while timer: 2000 ms
  Load balancing:
    Link order signaling: Not configured
    Hash type: Default
    Locality threshold: None
  LACP: Operational
    Flap suppression timer: Off
    Cisco extensions: Disabled
    Non-revertive: Disabled
  mLACP: Not configured
  IPv4 BFD: Not configured
  IPv6 BFD: Not configured

Port          Device      State      Port ID      B/W, kbps
-----
Gi0/0/0/0    Local      Standby    0x8000, 0x0003  1000000
  Link is Standby due to maximum-active links configuration
Gi0/0/0/1    Local      Standby    0x8000, 0x0002  1000000
  Link is Standby due to maximum-active links configuration
Gi0/0/0/2    Local      Active     0x8000, 0x0001  1000000
  Link is Active
```

A network operator needs to shut down interface Gi0/0/0/2 for maintenance. What occurs to the interface states of Gi0/0/0/0 and Gi0/0/0/1?

- A. Gi0/0/0/1 and Gi0/0/0/0 become active
- B. Gi0/0/0/1 and Gi0/0/0/0 remains standby
- C. Gi0/0/0/0 becomes active
- D. Gi0/0/0/1 remains standby
- E. Gi0/0/0/1 becomes active Gi0/0/0/0 remains standby

**Answer: D**

**NEW QUESTION 347**

Which configuration enables BGP FlowSpec client function and installation of policies on all local interfaces?

- A)
  - flowspec
  - address-family ipv4
  - local-install all-interface
- B)
  - flowspec
  - address-family ipv4
  - install interface-all
- C)
  - flowspec
  - address-family ipv4
  - local-install interface-all
- D)
  - flowspec
  - address-family ipv4
  - install interface-all local

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

**Answer: C**

**NEW QUESTION 351**

Refer to the exhibit.

```

configure
policy-map ciscopolicy
  class ciscotest
    set precedence 1
  exit
exit
interface pos 0/2/0/0
  service-policy output ciscopolicy
commit
  
```

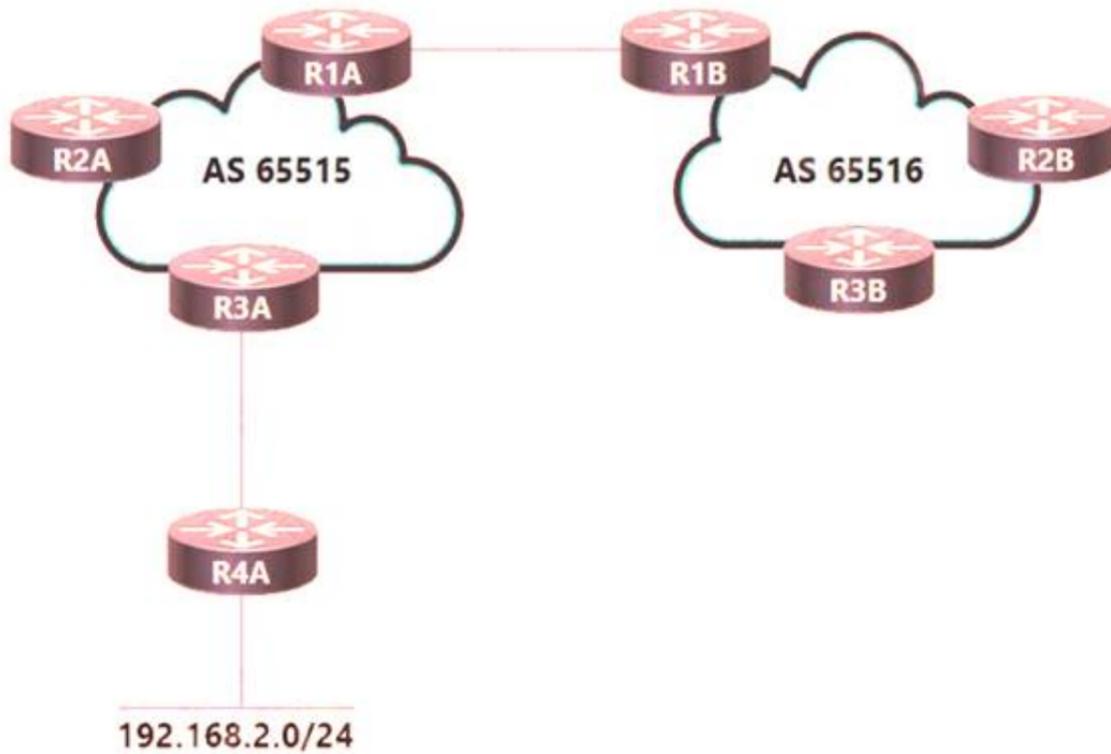
An engineer needs to implement this QoS policy on customer's network due to ongoing slow network issues. What will be the effect on the network when the engineer implements this configuration?

- A. Traffic that is identified in the ciscotest class map will be remarked from IP precedence 1 to DSCP AF11 when it enters the pos0/2/0/0 interface.
- B. Traffic that is identified in the ciscopolicy class map will be marked with IP precedence 1 when it enters the pos0/2/0/0 interface.
- C. Traffic that is identified in the ciscopolicy class map will be remarked from IP precedence 1 to DSCP AF11 when it exits the pos0/2/0/0 interface.
- D. Traffic that is identified in the ciscotest class map will be marked with IP precedence 1 when it exits the pos0/2/0/0 interface.

**Answer: D**

**NEW QUESTION 356**

Refer to the exhibit.



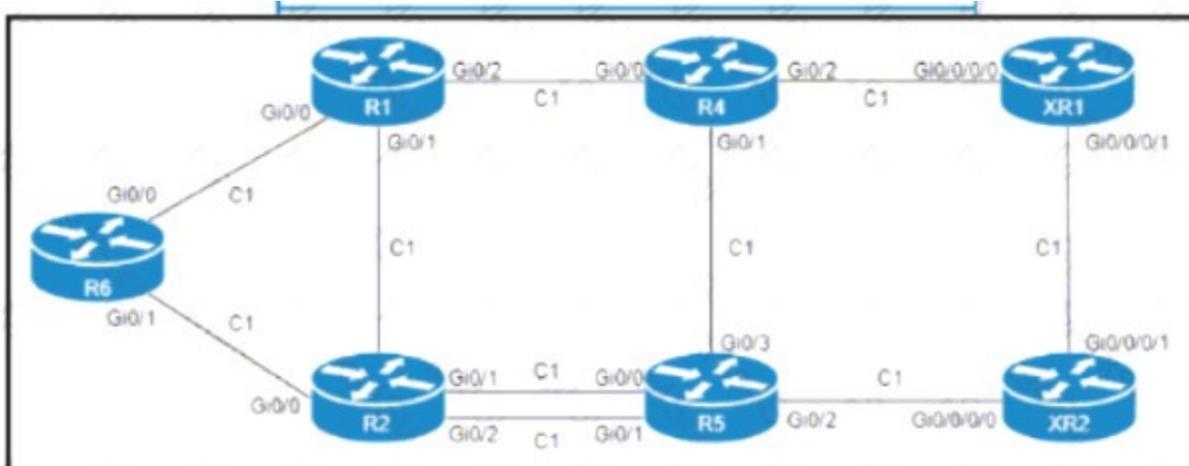
An engineer working for a private telecommunication company with an employee id: 3414:81:713 is implementing this network, in which: Routers R1A and R1B are eBGP neighbors. iBGP is configured within AS 65515 and AS 65516. Network 192.168.2.0/24 is shared with AS 65516. Router R3A has an iBGP relationship with router R2A only. Router R2A has an iBGP relationship with routers R1A and R3A. Which additional task must the engineer perform to complete the configuration?

- A. Configure router R2A to use the next-hop-self attribute when advertising the learned route to router R1A.
- B. Configure router R3A to redistribute route 192.168.2.0/24 into the configured IGP to advertise the prefix to router R1A.
- C. Configure router R2A as a route reflector to advertise the iBGP learned prefix from router R3A to R1A.
- D. Configure router R1A with a static route to 192.168.2.0/24 that is redistributed into BGP.

**Answer: C**

**NEW QUESTION 361**

Refer to the exhibit.



An engineer configured R6 as the headend LSR of an RSVP-TE LSP to router XR2, with the dynamic path signaled as R6-R2-R5-XR2. and set the OSPF cost of all links to 1. MPLS autotunnel backup is enabled on all routers to protect the LSP. Which two NNHOP backup tunnels should the engineer use to complete the implementation? (Choose two.)

- A. The R6 backup tunnel path R6-R1-R4-R5.
- B. The R2 backup tunnel path R2-R5 across the alternate link.
- C. The R2 backup tunnel path R2-R1-R4-XR1-XR2.
- D. The R6 backup tunnel path R6-R2-R5
- E. The R6 backup tunnel path R6-R1-R2.

**Answer: AC**

**NEW QUESTION 363**

Refer to the exhibit:

```

R1
router isis
 net 52.0011.0000.0000.0001.00
 is-type level-2

interface gigabitethernet0/1
 ip address 192.168.0.1 255.255.255.0
 ip router isis

R2
router isis
 net 52.0022.0000.0000.0002.00
 is-type level-1

interface gigabitethernet0/1
 ip address 192.168.0.2 255.255.255.0
 ip router isis
    
```

Which statement about the status of the neighbor relationship between R1 and R2 is true?

- A. The neighbor relationship is down because the two routers are configured with different area types
- B. The neighbor relationship is down because the two routers are in the same subnet.
- C. The neighbor relationship is up because R2 is level 1 and level 2 router.
- D. The neighbor relationship is down because R2 is operating as a Level 1 router and the two routers are in different area

Answer: D

**NEW QUESTION 367**

Refer to the exhibit.

```

R1# configure terminal
R1(config)# router isis area2
R1(config-router)# metric-style wide level-1
    
```

An engineer is configuring multitopology IS-IS for IPv6 on router R1. Which additional configuration must be applied to the router to complete the task?

- R1# configure terminal  
R1(config)# router isis area1  
R1(config-router)# metric-style wide level-1  
R1(config-router)# address-family ipv6  
R1(config-router-af)# multi topology
- R1# configure terminal  
R1(config)# router isis area2  
R1(config-router)# metric-style wide  
R1(config-router)# address-family ipv6  
R1(config-router-af)# multi topology
- R1# configure terminal  
R1(config)# router isis area1  
R1(config-router)# metric-style wide level-2  
R1(config-router)# address-family ipv6  
R1(config-router-af)# multi-topology
- R1# configure terminal  
R1(config)# router isis area2  
R1(config-router)# address-family ipv6  
R1(config-router-af)# multi-topology

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

Answer: D

**NEW QUESTION 369**

An engineer working for a private telecommunication company with an employe id:3948:613 needs to limit the malicious traffic on their network. Which configuration must the engineer use to implement URPF loose mode on the GigabitEthernet0/1 interface?

- A)

```

router(config)# interface gigabitethernet0/1
router(config-if)# ip address 192.168.200.1 255.255.255.0
router(config-if)# ip verify unicast source reachable-via any
router(config-if)# ipv6 address 2001:DB8:1::1/96
router(config-if)# ipv6 verify unicast source reachable-via any
        
```
- B)

```
router(config)# interface gigabitethernet0/1
router(config-if)# ip address 192.168.200.1 255.255.255.0
router(config-if)# ip verify unicast source reachable-via any
router(config-if)# ipv6 address 2001:DB8:1::1/96
router(config-if)# ipv6 verify unicast source reachable-via rx
```

C)

```
router(config)# interface gigabitethernet0/1
router(config-if)# ip address 192.168.200.1 255.255.255.0
router(config-if)# ip verify unicast source reachable-via rx
router(config-if)# ipv6 address 2001:DB8:1::1/96
router(config-if)# ipv6 verify unicast source reachable-via any
```

D)

```
router(config)# interface gigabitethernet0/1
router(config-if)# ip address 192.168.200.1 255.255.255.0
router(config-if)# ip verify unicast source reachable-via rx
router(config-if)# ipv6 address 2001:DB8:1::1/96
router(config-if)# ipv6 verify unicast source reachable-via rx
```

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

**Answer:** A

**Explanation:**

“reachable-via any” must be configured for Loose mode on both IPv4 & IPv6. [https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec\\_data\\_urpf/configuration/xr-3s/sec-data-urpf-xr-3s-book/](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_data_urpf/configuration/xr-3s/sec-data-urpf-xr-3s-book/)

**NEW QUESTION 373**

Refer to the exhibit.

```
R1
router bgp 65000
router-id 192.168.1.1
no bgp default ipv4-unicast
neighbor 192.168.1.2 remote-as 65001
```

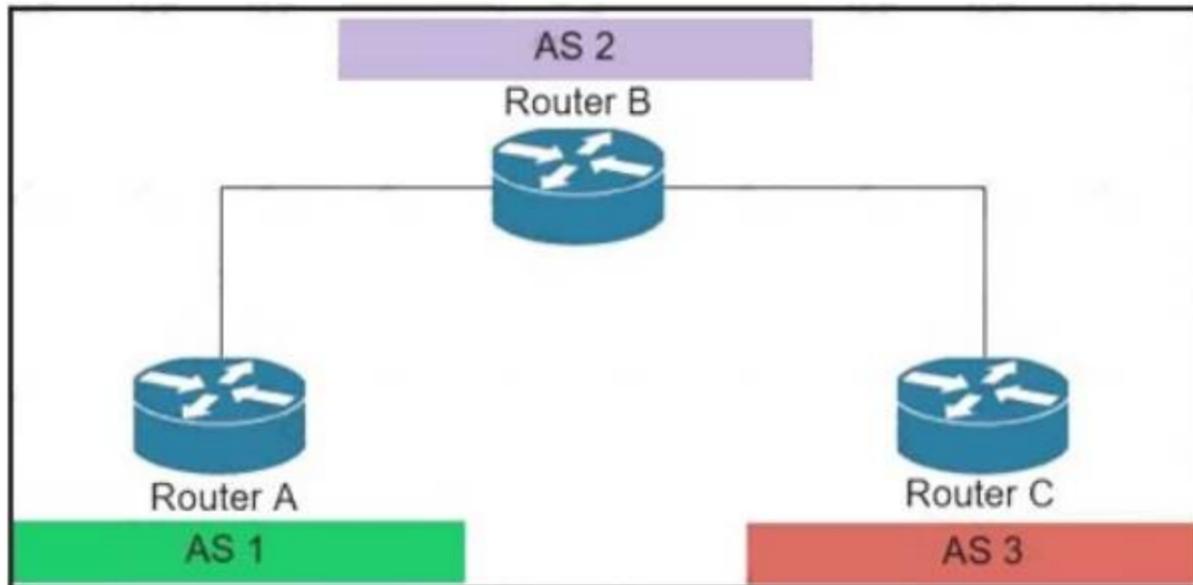
Which task completes the configuration?

- A. Specify the maximum number of prefixes that R1 receives from neighbor 192.168.1.2.
- B. Specify the source interface in the neighbor statement.
- C. Specify the activate neighbor 192.168.1.2 under the IPv4 address family.
- D. Specify the local-as value in the neighbor statement.

**Answer:** C

**NEW QUESTION 378**

Refer to the exhibit.



An engineer working for private Service Provider with employee id: 3948:11:613 is configuring the BGPsec framework. Which two conditions must the engineer take into account? (Choose two.)

- A. BGPsec uses IPsec tunnel for security.
- B. The BGPsec framework secures the AS path.
- C. In BGPse
- D. all route advertisements are given an expiry time by the originator of the route.
- E. Private keys are part of the router key pair used to sign route updates.

- F. In BGPse
- G. route advertisements are not given an expiration time by the originator of the route.

**Answer:** BC

**Explanation:**

<https://tools.ietf.org/html/rfc8374#section-3.2>

**NEW QUESTION 382**

Refer to the exhibit.

```
R1(config)# router isis area1
R1(config-router)# net 49.0001.0000.0000.000b.00

R1(config-router)# interface loopback 0
R1(config-if)# ipv6 address 2001:0000:1001:1000::1/128
R1(config-if)# exit

R1(config)# interface Ethernet 1/2
R1(config-if)# ipv6 address 2001:0000:1001:100A::1/64
R1(config-if)# ipv6 router isis area1
R1(config-if)# exit
```

A network engineer with an employee id: 3812:12:993 has started to configure router R1 for IS-IS as shown. Which additional configuration must be applied to configure the IS-IS instance to advertise only network prefixes associated to passive interfaces?

- R1(config)# router isis area1  
R1(config-router)# passive-interface loopback 0  
R1(config-router)# address-family ipv6  
R1(config-router-af)# advertise passive-only
- R1(config-router)# address-family ipv6  
R1(config-router-af)# advertise passive-only
- R1(config)# router isis area1  
R1(config-router)# loopback 0 passive-interface  
R1(config-router)# address-family ipv6  
R1(config-router-af)# prc-interval 20
- R1(config)# router isis area1  
R1(config-router)# passive-interface loopback 0

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

**Answer:** A

**NEW QUESTION 387**

Refer to the exhibit.

```
172.16.0.0/16

AS 321, med 420, external, rid 10.2.54.12 via 10.2.54.12
AS 51, med 500, external, rid 7.4.5.2 via 7.4.5.2
AS 321, med 300, internal, rid 10.2.34.5 via 10.2.34.5
```

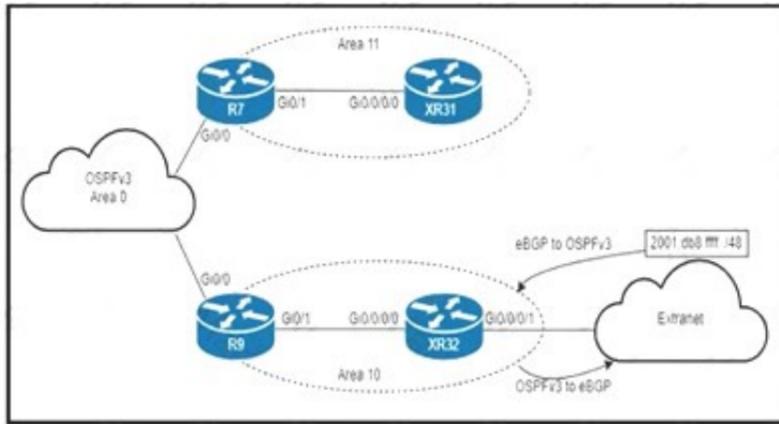
Tier 2 ISP A on AS 653 is connected to two Tier 1 ISPs on AS 321 and AS 51 respectively. The network architect at ISP A is planning traffic flow inside the network to provide predictable network services. Cisco Express Forwarding is disabled on the edge router. How should the architect implement BGP to direct all traffic via the Tier 1 ISP with next-hop 7.4.5.2?

- A. Implement the BGP routing protocol and run the bgp deterministic-med command.
- B. Implement MP-BGP with a 4-byte AS number with the bgp best path compare-routerid command.
- C. Implement the BGP routing protocol and the maximum-paths 2 configuration.
- D. Implement BGP route-reflector functionality with the bgp always-compare-med configuration.

**Answer:** A

**NEW QUESTION 392**

Refer to the exhibit.



An engineer is updating this network to meet these conditions:

- Area 10 will receive inter-area routes and support mutual redistribution of external routes with the extranet.
- The ::/0 route is prohibited in Area 10.
- Area 11 will receive only the ::/0 route from the ABR.
- External route redistribution is not supported in Area 11.
- The ABR in Area 11 will advertise no interarea routes.

Which two configurations must be performed to meet the requirements? (Choose two.)

- A. Configure area 11 as nssa no-summary on R7 and as nssa on XR31.
- B. Configure area 10 as stub on R9 and XR32.
- C. Configure area 11 as stub no-summary on R7 and as stub on XR31.
- D. Configure area 11 as nssa default-information-originate on R7 and as nssa on XR31.
- E. Configure area 10 as nssa on R9 and XR32.

**Answer: CE**

**NEW QUESTION 396**

Refer to the exhibit:

```
RP/0/RSP0/CPU0:JFK-PE#show mpls ldp bindings 192.168.10.10/32
Fri Nov 11 21:02:33.124 UTC
192.168.10.10/32, rev 2
  Local binding: label: ImpNull
  Remote bindings: (2 peers)
      Peer                Label
  -----
  10.10.10.2:0           562656
  10.10.10.5:0           378337
```

After implementing a new design for the network, a technician reviews the pictured CLI output as part of the MOP.

Which two statements describe what the technician can ascertain from the ImpNull output? (Choose two.)

- A. Label 0 is used for the prefix displayed but will not be part of the MPLS label stack for packets destined for 192.168.10.10.
- B. Ultimate Hop Popping is in use for the prefix displayed.
- C. Label 0 is used for the prefix displayed and will be part of the MPLS label stack for packets destined for 192.168.10.10
- D. Penultimate Hop Popping is in use for the prefix displayed
- E. Label 3 is in use for the prefix displayed and will be part of the MPLS label stack for packets destined for 192.168.10.10

**Answer: DE**

**NEW QUESTION 401**

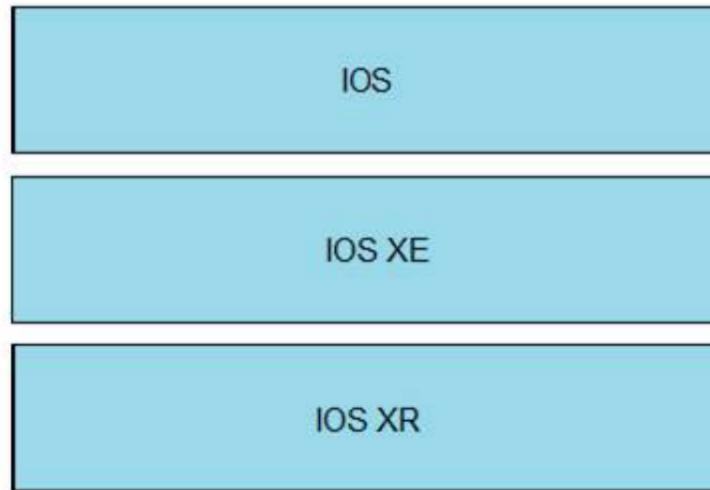
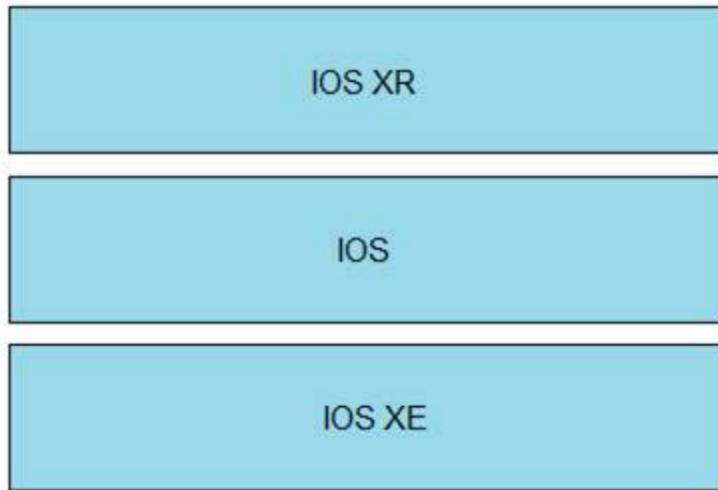
Drag and drop the OSs from the left onto the correct descriptions on the right.

IOS XR	It is a monolithic architecture that runs all modules on one memory space.
IOS	It runs over a Linux platform and pulls the system functions out of the main kernel and into separate processes.
IOS XE	It segments ancillary processes into separate memory spaces to prevent system crashes from errant bugs.

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**



**NEW QUESTION 406**

What is the function of Cisco NFV infrastructure platform?

- A. It does not have a security audit feature.
- B. It does not offer high availability.
- C. It offers consistent performance.
- D. It offers decentralized logging.

**Answer: C**

**NEW QUESTION 408**

Refer to the exhibit:

```
mpls label protocol ldp
mpls ldp router-id loopback 0
mpls ip
ip cef
```

A network operator working for service provider with an employee id 3715 15:021 applied this configuration to a router. Which additional step should the engineer use to enable LDP?

- A. Disable Cisco Express Forwarding globally
- B. Delete the static router ID
- C. Enable MPLS LDP on the interface
- D. Configure the both keyword to enable LDP globally

**Answer: C**

**NEW QUESTION 409**

Refer to the exhibit.

```
EDGE-GW-1#show bgp ipv4 unicast summary
BGP router identifier 198.19.45.6, local AS number 65502
BGP table version is 19, main routing table version 19

Neighbor      V      AS MsgRcvd MsgSent  TblVer  InQ  OutQ  Up/Down  State/PfxRcd
192.168.26.2  4      65503    0      0        1    0    0 00:09:56  Idle

EDGE-GW-1#show log
Log Buffer (4096 bytes):
BGP Notification sent
Dec 7 08:02:29.619: %BGP-5-ADJCHANGE: neighbor 192.168.26.2 passive Down BGP Notification sent
Dec 7 08:02:32.695: %BGP-3-NOTIFICATION: sent to neighbor 192.168.26.2 active 2/2 (peer in wrong AS) 2 bytes FE63
Dec 7 08:02:32.695: %BGP-4-MSGDUMP: unsupported or mal-formatted message received from 192.168.26.2:
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF 0039 0104 FE63 00B4 0AFF FF02 1C02 0601
0400 0100 0102 0280 0002 0202 0002 0246 0002 0641 0400 00FE 63
Dec 7 08:02:36.558: %BGP-3-NOTIFICATION: sent to neighbor 192.168.26.2 passive 2/2 (peer in wrong AS) 2 bytes FE63
Dec 7 08:02:36.558: %BGP-4-MSGDUMP: unsupported or mal-formatted message received from 192.168.26.2:
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF 0039 0104 FE63 00B4 0AFF FF02 1C02 0601
0400 0100 0102 0280 0002 0202 0002 0246 0002 0641 0400 00FE 63
Dec 7 08:02:37.812: %BGP-5-NBR_RESET: Neighbor 192.168.26.2 active reset (BGP Notification sent)
Dec 7 08:02:37.812: %BGP-5-ADJCHANGE: neighbor 192.168.26.2 active Down BGP Notification sent
Dec 7 08:02:37.812: %BGP_SESSION-5-ADJCHANGE: neighbor 192.168.26.2 IPv4 Unicast topology base removed from session
BGP Notification sent
Dec 7 08:02:40.883: %BGP-5-NBR_RESET: Neighbor 192.168.26.2 passive reset (BGP Notification sent)
Dec 7 08:02:40.884: %BGP-5-ADJCHANGE: neighbor 192.168.26.2 passive Down BGP Notification sent
Dec 7 08:02:47.822: %BGP-3-NOTIFICATION: sent to neighbor 192.168.26.2 passive 2/2 (peer in wrong AS) 2 bytes FE63
Dec 7 08:02:77.822: %BGP-4-MSGDUMP: unsupported or mal-formatted message received from 192.168.26.2:
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF 0039 0104 FE63 00B4 0AFF FF02 1C02 0601
0400 0100 0102 0280 0002 0202 0002 0246 0002 0641 0400 00FE 63
```

A network support engineer for ASN 65502 receives a technical support ticket from a customer in ASN 65503 who reports that an eBGP session is down. The engineer determines that the peering failed after a recent change to the device at 192.168.26.2. EDGE-GW-1 must establish an eBGP session with the peering router 192.168.26.2. Which configuration establishes this session?

- A. configure terminal no router bgp 65502 router bgp 65503 neighbor 192.168.26.2 remote-as 65503 address-family ipv4 neighbor 192.168.26.2 activate end
- B. configure terminal router bgp 65502 address-family ipv4 neighbor 192.168.26.2 activate end
- C. configure terminal no router bgp 65502 router bgp 65503 neighbor 192.168.26.2 remote-as 65123 address-family ipv4 neighbor 192.168.26.2 activate end
- D. configure terminal router bgp 65502 no neighbor 192.168.26.2 remote-as 65503 neighbor 192.168.26.2 remote-as 65123 address-family ipv4 neighbor 192.168.26.2 activate end

Answer: D

**NEW QUESTION 413**

What occurs when a high bandwidth multicast stream is sent over an MVPN using Cisco hardware?

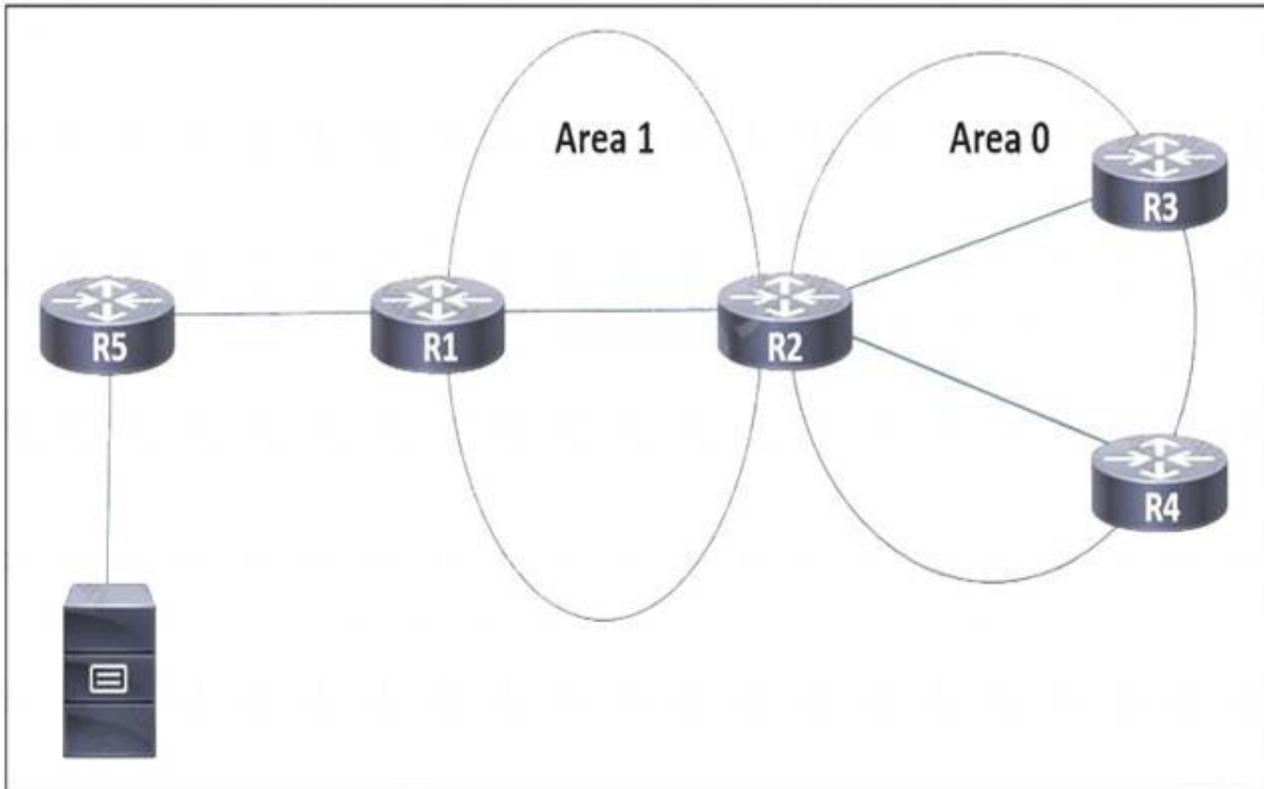
- The traffic uses the default MDT to transmit the data only if it is a (S, G) multicast route entry
- A data MDT is created to if it is a (\*, G) multicast route entries
- A data and default MDT are created to flood the multicast stream out of all PIM-SM neighbors.
- A data MDT is created to allow for the best transmission through the core for (S, G) multicast route entries

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

Answer: D

**NEW QUESTION 416**

Refer to the exhibit.



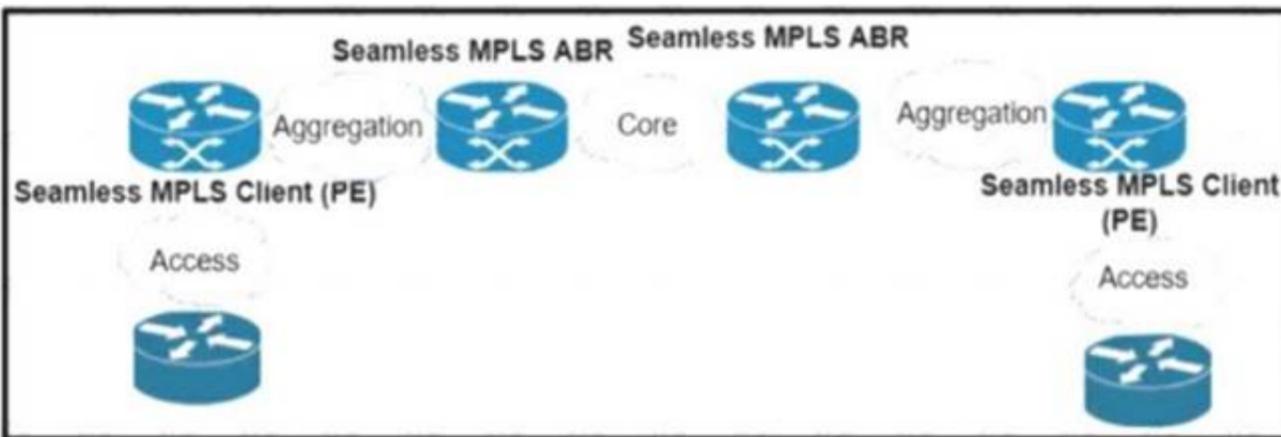
EIGRP is running between routers R5 and R1, and OSPF is used in the rest of the network. Users in a network attached to router R3 need to access a server connected to R5. Which task must the engineer perform so that only the users attached to R3 are able to access the server, but no other network is shared to OSPF?

- A. Configure redistribution using route maps to filter the routes that are shared
- B. Configure redistribution using an offset list to filter the routes that are shared.
- C. Configure an OSPF virtual link between R1 and R3 to route traffic between the two areas.
- D. Configure R1 as a stub router for EIGRP and OSPF so that only the default route is shared

**Answer:** A

**NEW QUESTION 419**

Refer to the exhibit.



A network operator working for a telecommunication company with an employee 3994:37:650 is implementing a cisco Unified MPLS solution. What is the effect of this implementation?

- A. EIGRP is deployed between the PEs and ABRs with RFC 3107.
- B. OSPF is deployed between the PEs and ABRs with RFC 3107.
- C. IS-IS is deployed between the PEs and ABRs with RFC 3107.
- D. BGP is deployed between the PEs and ABRs with RFC 3107.

**Answer:** D

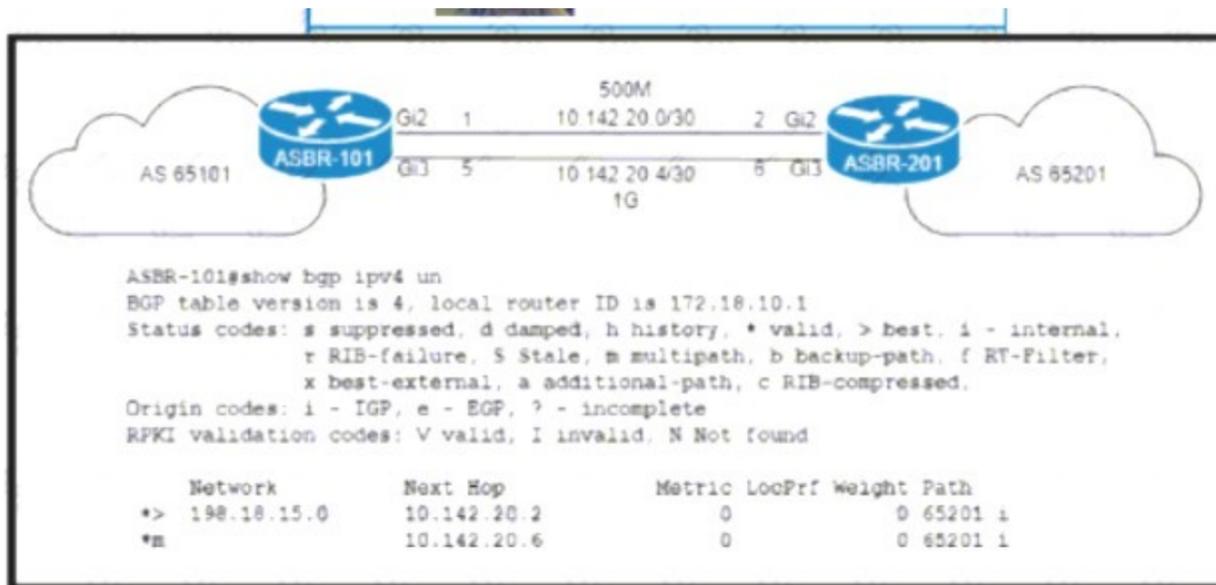
**Explanation:**

Carry Label Information in BGP-4 (RFC 3107)

It is a prerequisite to have a scalable method in order to exchange prefixes between network segments. You could simply merge the IGPs (Open Shortest Path First (OSPF), Intermediate System-to-Intermediate System (IS-IS), or Enhanced Interior Gateway Routing Protocol (EIGRP)) into a single domain. However an IGP is not designed to carry 100,000s of prefixes. The protocol of choice for that purpose is BGP. It is a

**NEW QUESTION 422**

Refer to the exhibit



an engineer working for a private telecommunication company with an employee Id: 4065:96:080 upgrades the WAN link between routers ASBR-101 and ASBR-201 to 1Gb by Installing a new physical connection between the Gi3 Interfaces. Which BGP attribute must the engineer configure on ASBR-201 so that the existing WAN link on Gi2 Is maintained as a backup?

configure terminal  
ip prefix-list ALLOWED\_PREFIXES seq 5 permit 198.18.15.0/24

route-map AS65101-OUT permit 10  
match ip address prefix-list ALLOWED\_PREFIXES  
set as-path prepend 65101 65101

router bgp 65201  
address-family ipv4  
neighbor 10.142.20.1 route-map AS65101-OUT out  
end

configure terminal  
ip prefix-list ALLOWED\_PREFIXES seq 5 permit 198.18.15.0/24

route-map AS65101-OUT permit 10  
match ip address prefix-list ALLOWED\_PREFIXES  
set as-path prepend 65101 65101

configure terminal  
ip prefix-list ALLOWED\_PREFIXES seq 5 permit 198.18.15.0/24

route-map AS65101-OUT permit 10  
match ip address prefix-list ALLOWED\_PREFIXES  
set metric 100

router bgp 65201  
address-family ipv4  
neighbor 10.142.20.1 route-map AS65101-OUT out  
end

configure terminal  
ip prefix-list ALLOWED\_PREFIXES seq 5 permit 198.18.15.0/24

route-map AS65101-OUT permit 10  
match ip address prefix-list ALLOWED\_PREFIXES  
set metric 100

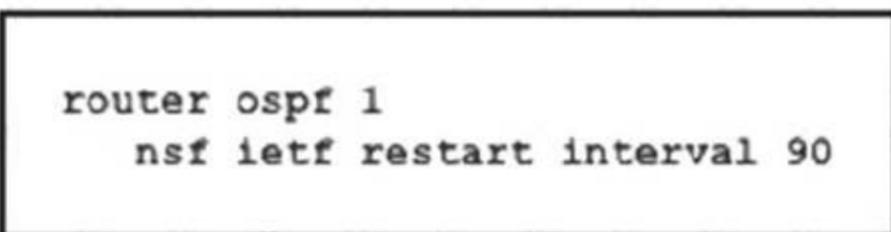
router bgp 65201  
address-family ipv4  
neighbor 10.142.20.5 route-map AS65101-OUT out  
end

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

**Answer: C**

**NEW QUESTION 426**

Refer to the exhibit:



Which purpose of implementing NSF with this configuration is true?

- A. The router uses NSF to load balance traffic between two links, with the primary link alternating every 90 seconds
- B. The router uses NSF to reduce neighbor-relationship downtime during RP switchover
- C. The router uses NSF to load balance traffic on a routed EtherChannel
- D. The router uses NSF to handle RP switchover while allowing neighbor relationships to remain up

Answer: D

**NEW QUESTION 431**

An engineer is setting up overlapping VPNs to allow VRF ABC and XYZ to communicate with VRF CENTRAL but wants to make sure that VRF ABC and XYZ cannot communicate. Which configuration accomplishes these objectives?

```

vrf ABC
 address-family ipv4 unicast
  import route-target
  65000:1111
  65000:3333
  !
  export route-target
  65000:1111
  65000:3333
  !
vrf XYZ
 address-family ipv4 unicast
  import route-target
  65000:2222
  65000:3333
  !
  export route-target
  65000:2222
  65000:3333
  !
vrf CENTRAL
 address-family ipv4 unicast
  import route-target
  65000:3333
  !
  export route-target
  65000:3333
  !
  
```

```

vrf ABC
 address-family ipv4 unicast
  import route-target
  65000:1111
  65000:4444
  !
  export route-target
  65000:1111
  65000:3333
  !
vrf XYZ
 address-family ipv4 unicast
  import route-target
  65000:2222
  65000:3333
  !
  export route-target
  65000:2222
  65000:4444
  !
vrf CENTRAL
 address-family ipv4 unicast
  import route-target
  65000:3333
  !
  export route-target
  65000:4444
  !
  
```

```

vrf ABC
 address-family ipv4 unicast
  import route-target
  65000:1111
  65000:4444
  !
  export route-target
  65000:1111
  65000:3333
  !
vrf XYZ
 address-family ipv4 unicast
  import route-target
  65000:2222
  65000:4444
  !
  export route-target
  65000:2222
  65000:3333
  !
vrf CENTRAL
 address-family ipv4 unicast
  import route-target
  65000:3333
  !
  export route-target
  65000:4444
  !
  
```

```

vrf ABC
 address-family ipv4 unicast
  import route-target
  65000:1111
  !
  export route-target
  65000:1111
  !
vrf XYZ
 address-family ipv4 unicast
  import route-target
  65000:2222
  !
  export route-target
  65000:2222
  65000:1111
  !
vrf CENTRAL
 address-family ipv4 unicast
  import route-target
  65000:3333
  65000:1111
  65000:2222
  !
  export route-target
  65000:3333
  65000:1111
  65000:2222
  !
  
```

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

Answer: C

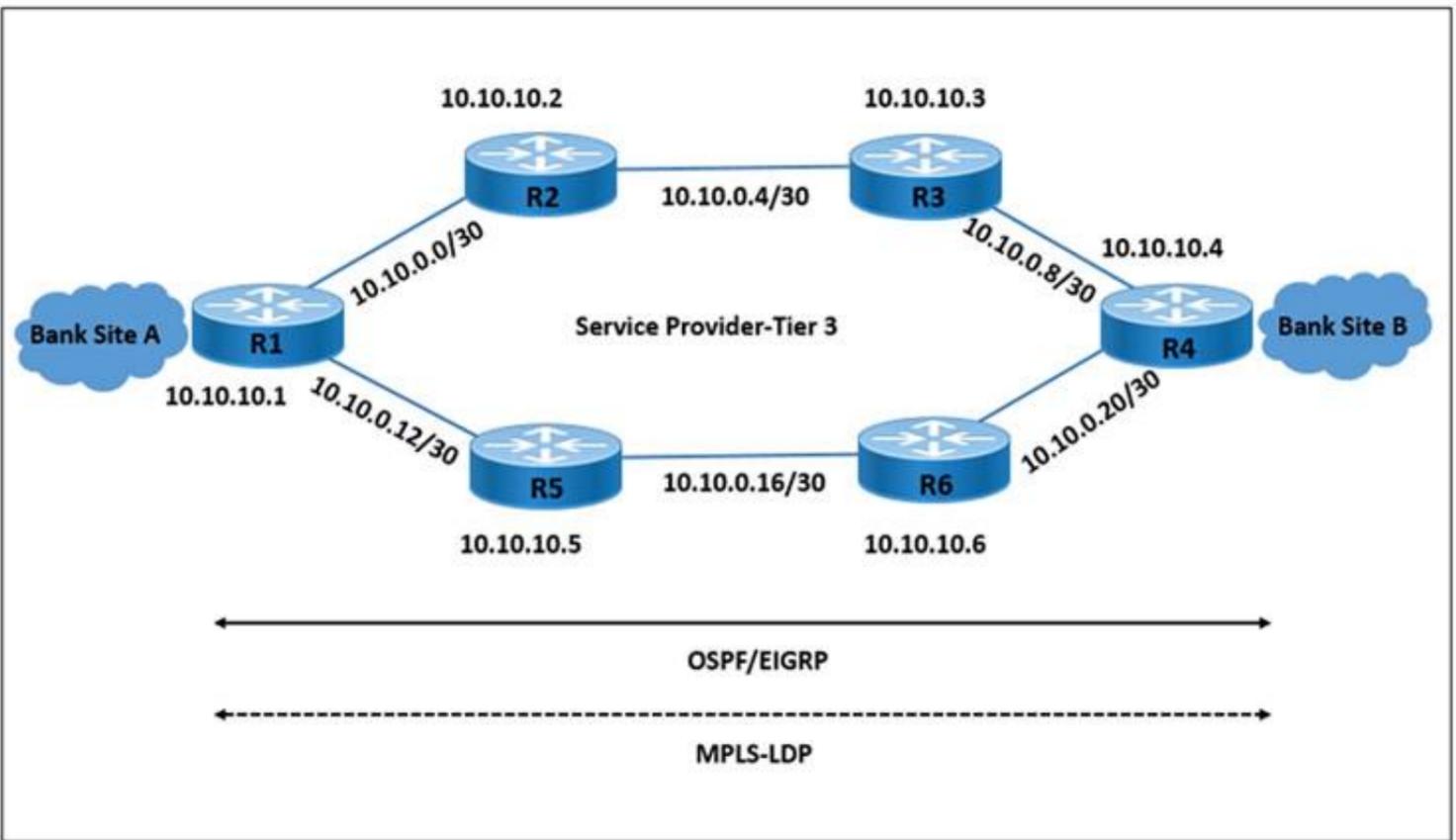
**NEW QUESTION 436**

Refer to the exhibit.

```

R2# show mpls ldp neighbor detail
Peer LDP Ident: 10.10.10.1:0; Local LDP Ident 10.10.10.2:0
TCP connection: 10.10.10.1.646 - 10.10.10.2.56531
Password: not required, none, in use
State: Oper; Msgs sent/rcvd: 18/18; Downstream; Last TIB rev sent 28
Up time: 00:01:08; UID: 3; Peer Id 2;
LDP discovery sources:
  GigabitEthernet2/0; Src IP addr: 10.0.0.1
    holdtime: 15000 ms, hello interval: 5000 ms
Addresses bound to peer LDP Ident:
  10.0.0.13 10.10.10.1 10.0.0.1
Peer holdtime: 180000 ms; KA interval: 60000 ms; Peer state: estab
Clients: Dir Adj Client
LDP Session Protection enabled, state: Incomplete
  duration: 86400 seconds

R1# show mpls ldp neighbor detail
Peer LDP Ident: 10.10.10.2:0; Local LDP Ident 10.10.10.1:0
TCP connection: 10.10.10.2.56531 - 10.10.10.1.646
Password: not required, none, in use
State: Oper; Msgs sent/rcvd: 19/19; Downstream; Last TIB rev sent 30
Up time: 00:02:27; UID: 2; Peer Id 1;
LDP discovery sources:
  GigabitEthernet2/0; Src IP addr: 10.0.0.2
    holdtime: 15000 ms, hello interval: 5000 ms
Addresses bound to peer LDP Ident:
  10.10.10.2 10.0.0.5 10.0.0.2 10.0.0.25
Peer holdtime: 180000 ms; KA interval: 60000 ms; Peer state: estab
    
```



LDP peering between routers R1 and R2 is dropped when the link between R1 and R2 is taken offline. However, LDP peering between R2 and R3 stays up when the link between R2 and R3 is taken offline. Which action allows MPLS traffic forwarding to continue normally if the link between R1 and R2 goes down?

- A. Enable IGP and LDP Synchronization on R1.
- B. Implement LDP Session Protection on R1.
- C. Enable IGP and LDP Synchronization on R2.
- D. Implement LDP Session Protection on R2.

**Answer: B**

**NEW QUESTION 440**

A network engineer is adding 10Gbps link to an existing 2X1Gbps LACP-based LAG to augment its capacity. Network standards require a bundle interface to be taken out of service if one of its member links does down, and the new link must be added with minimal impact to the production network. Drag and drop the tasks that the engineer must perform from the left into the sequence on the right. Not all options are used.

Execute the channel-group number mode active command to add the 10Gbps link to the existing bundle.	step 1
Execute the channel-group number mode on command to add the 10Gbps link to the existing bundle.	step 2
Execute the lacp min-bundle 3 command to set the minimum number of ports threshold.	step 3
Validate the network layer of the 10Gbps link.	step 4
Execute the channel-group number mode auto command to add the 10Gbps link to the existing bundle.	
Validate the physical and data link layers of the 10Gbps link.	

- A. Mastered
- B. Not Mastered

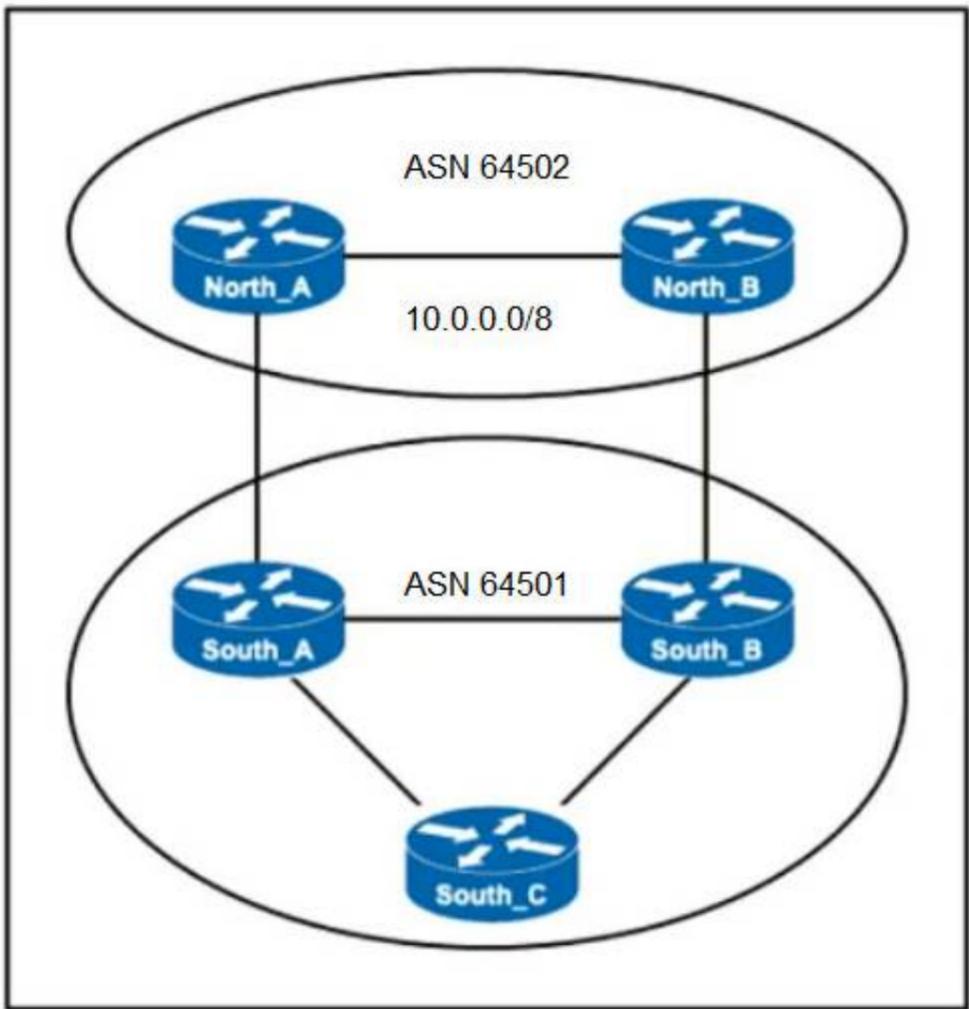
**Answer:** A

**Explanation:**

Application, table Description automatically generated with medium confidence

**NEW QUESTION 444**

Refer to the exhibit.



ASN 64501 currently reaches the networks under the 10.0.0.0/8 prefix via the North\_B router, which is a slow backup link. The administrator of ASN 64502 wants traffic from ASN 64501 to 10.0.0.0/8 to travel via the primary link North\_A. Which change to the network configuration accomplishes this task?

- A. Set a higher local preference between North\_A and South\_A
- B. Advertise the 10.0.0.0/8 prefix through North\_B and specific subnets through North\_A
- C. Set a Lower Weight value for incoming traffic on North\_A
- D. Set a lower MED between North\_B and South\_B

**Answer:** D

**NEW QUESTION 446**

Drag and drop the characteristics from the left onto the automation tool on the right.

**Answer Area**

- It is the standard transport protocol for communicating with network devices.
- It is a standard data modeling language.
- It retrieves operational data.
- It develops data models.
- It shapes state data.
- It sets and reads configuration data.

**NETCONF**

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

**Answer Area**

- It is the standard transport protocol for communicating with network devices.
- It is a standard data modeling language.
- It retrieves operational data.
- It develops data models.
- It shapes state data.
- It sets and reads configuration data.

**NETCONF**

It is a standard data modeling language.

It retrieves operational data.

It sets and reads configuration data.

**NEW QUESTION 450**

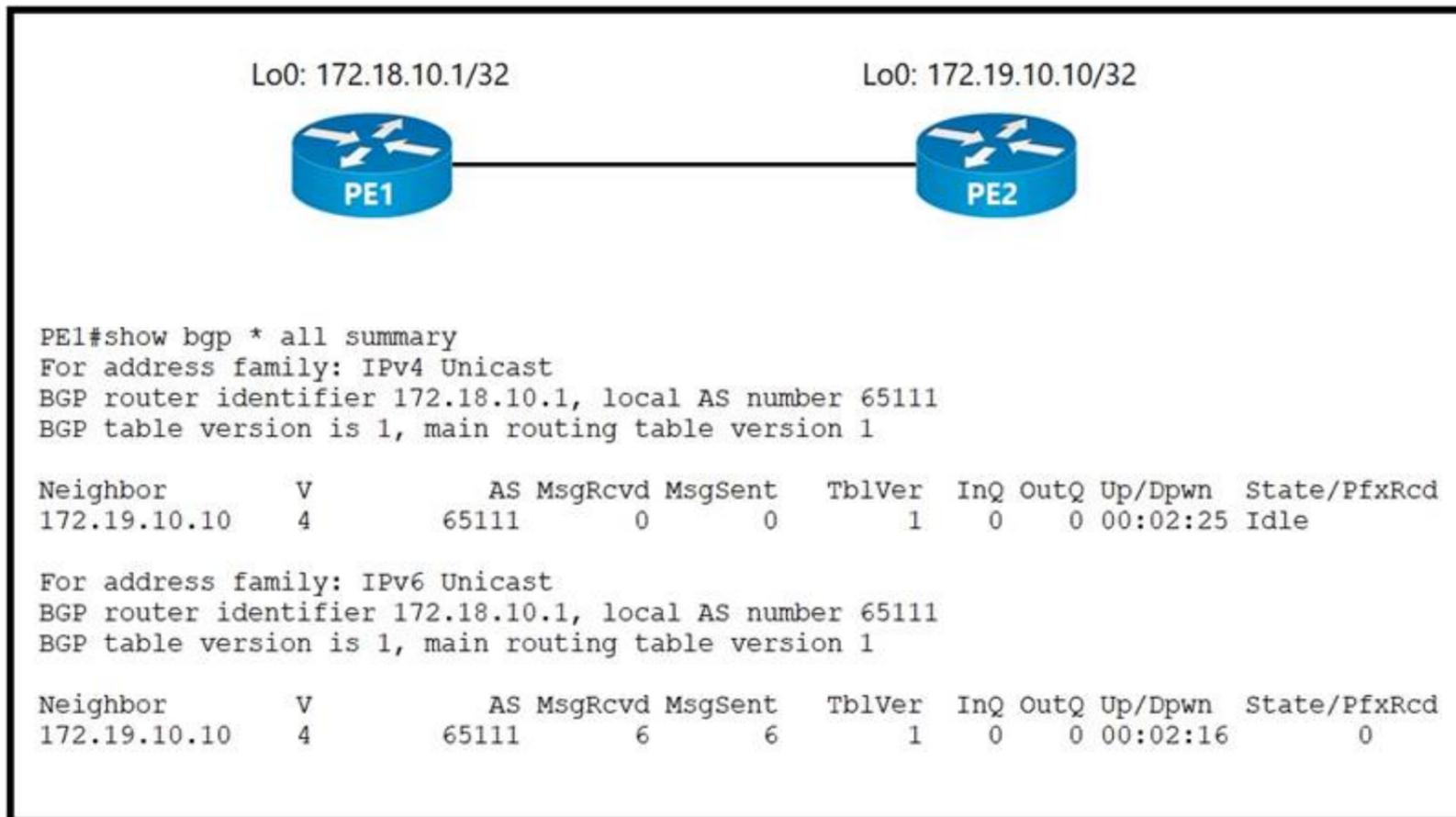
A network engineer is implementing BFD configuration changes on a customer's equipment. How is the bfd interval configuration on the interface disconnected?

- A. The status of the interface changes.
- B. The IPv4 or IPv6 address configuration on the interface changes.
- C. It is automatically disconnected when the BFD-configured subinterface is removed.
- D. It is automatically disconnected when the BFD main interface is removed.

**Answer:** D

**NEW QUESTION 453**

Refer to the exhibit.



An administrator working for large ISP must connect its two POP sites to provide internet connectivity to its customers. Which configuration must the administrator perform to establish an iBGP session between routers PE1 on POP site 1 and PE2 on POP site 2?

- A. PE2#configure terminal PE2(config)#router bgp 65111PE2(config-router)#no neighbor 172.18.10.1 shutdown PE2(config-router)#end
- B. PE1#configure terminal PE1(config)#router bgp 65111PE1(config-router)#no neighbor 172.19.10.10 shutdownPE1(config-router)#end
- C. PE1#configure terminal PE1(config)#router bgp 65111PE1(config-router)#address-family ipv4 unicast PE1(config-router-af)#neighbor 172.19.10.10 activate PE1(config-router-af)#end
- D. PE2#configure terminal PE2(config)#router bgp 65111PE2(config-router)#address-family ipv4 unicast PE2(config-router-af)#neighbor 172.18.10.1 activate PE2(config-router-af)#end

Answer: B

**NEW QUESTION 454**

Which two actions describe ISP delegation to PCE servers? (Choose two)

- A. adding a new PCE server with lower precedence than the primary PCE
- B. changing the precedence of any of the PCE servers
- C. removing TE re-optimization timer timeouts
- D. entering the mpls traffic-eng reoptimize command
- E. adding a new PCE server with higher precedence than the primary PCE

Answer: AC

**NEW QUESTION 456**

Refer to the exhibit:

```

R1:
interface FastEthernet0/0
ip address 10.1.12.1 255.255.255.0
duplex full
end
!
!
!
R1(config)#interface FastEthernet0/0
R1(config-if)#ospfv3 1 area 1 ipv4
% IPv6 routing not enabled
    
```

A network engineer is implementing an OSPF configuration Based on the output, which statement is true?

- A. In the ospfv3 1 area 1 ipv4 command, area 0 must be configured instead of area 1.
- B. OSPFv3 does not run for IPv4 on FastEthernet0/0 until IPv6 routing is enabled on the router and IPv6 is enabled on interface FastEthernet0/0
- C. OSPFv3 cannot be configured for IPv4; OSPFv3 works only for IPv6.
- D. "IPv6 routing not enabled" is just an informational message and OSPFv3 runs for IPv4 on interface FastEthernet0/0 anyway

Answer: B

**NEW QUESTION 458**

Refer to the exhibit:

```
ip cef
interface gigabitethernet0/1
ip verify unicast source reachable-via any
```

Router 1 was experiencing a DDoS attack that was traced to interface gigabitethernet0/1. Which statement about this configuration is true?

- A. Router 1 drops all traffic that ingresses interface gigabitethernet0/1 that has a FIB entry that exits a different interface
- B. Router 1 accepts source addresses on interface gigabitethernet0/1 that are private addresses
- C. Router 1 accepts all traffic that ingresses and egresses interface gigabitethernet0/1
- D. Router 1 accepts source addresses that have a match in the FIB that indicates it is reachable through a real interface

**Answer: D**

#### NEW QUESTION 461

How does an untrusted interface at the boundary of an administrative domain handle incoming packets?

- A. It remarks all values to a CoS of 0.
- B. It forwards only traffic with a DSCP value of 48.
- C. It translates the IP precedence value to the corresponding DSCP value.
- D. It drops all traffic ingressing the network.

**Answer: A**

#### NEW QUESTION 466

How can shared services in an MPLS Layer 3 VPN provide Internet access to the customers of a central service provider?

- A. The CE router can establish a BGP peering to a PE router and use the PE device to reach the Internet
- B. Route distinguishers are used to identify the routes that CEs can use to reach the Internet
- C. The customer VRF uses route targets to import and export routes to and from a shared services VRF
- D. Static routes on CE routers allow route leakage from a PE global routing table

**Answer: C**

#### NEW QUESTION 467

Why do packet loops occur during the configuration of BIDIR-PIM?

- A. The network does not support BIDIR-PIM
- B. The network is partially upgraded to support BIDIR-PIM
- C. No interface for carrying traffic for multicast groups has been configured
- D. The router has not been configured to advertise itself

**Answer: B**

#### NEW QUESTION 469

A service provider requires continuous real-time network monitoring to provide reliable SLAs to its customers. To satisfy this requirement, a network administrator is implementing gRPC dial out on an ASR with TLS. Receiver 192.168.10.2 will be assigned one of the subscriptions, and it will manage the ASR. Which configuration must the engineer apply to the router as part of the configuration process?

- A. snmp-server community public snmp-server enable trapssnmp-server host 192.168.10.2 version 2c public.
- B. telemetry model-driven destination-group DGroup1address family ipv4 192.168.10.2 1 port 10 encoding self-describing-gpb
- C. snmp-server community public snmp-server enable trapssnmp-server enable traps snmp authentication snmp-server managersnmp-server manager session-timeout 1000
- D. telemetry model-driven destination-group ciscotestaddress family ipv4 192.168.10.2 port 10 encoding self-describing-gpbprotocol grpc tis-hostname ciscotest.com

**Answer: D**

#### NEW QUESTION 473

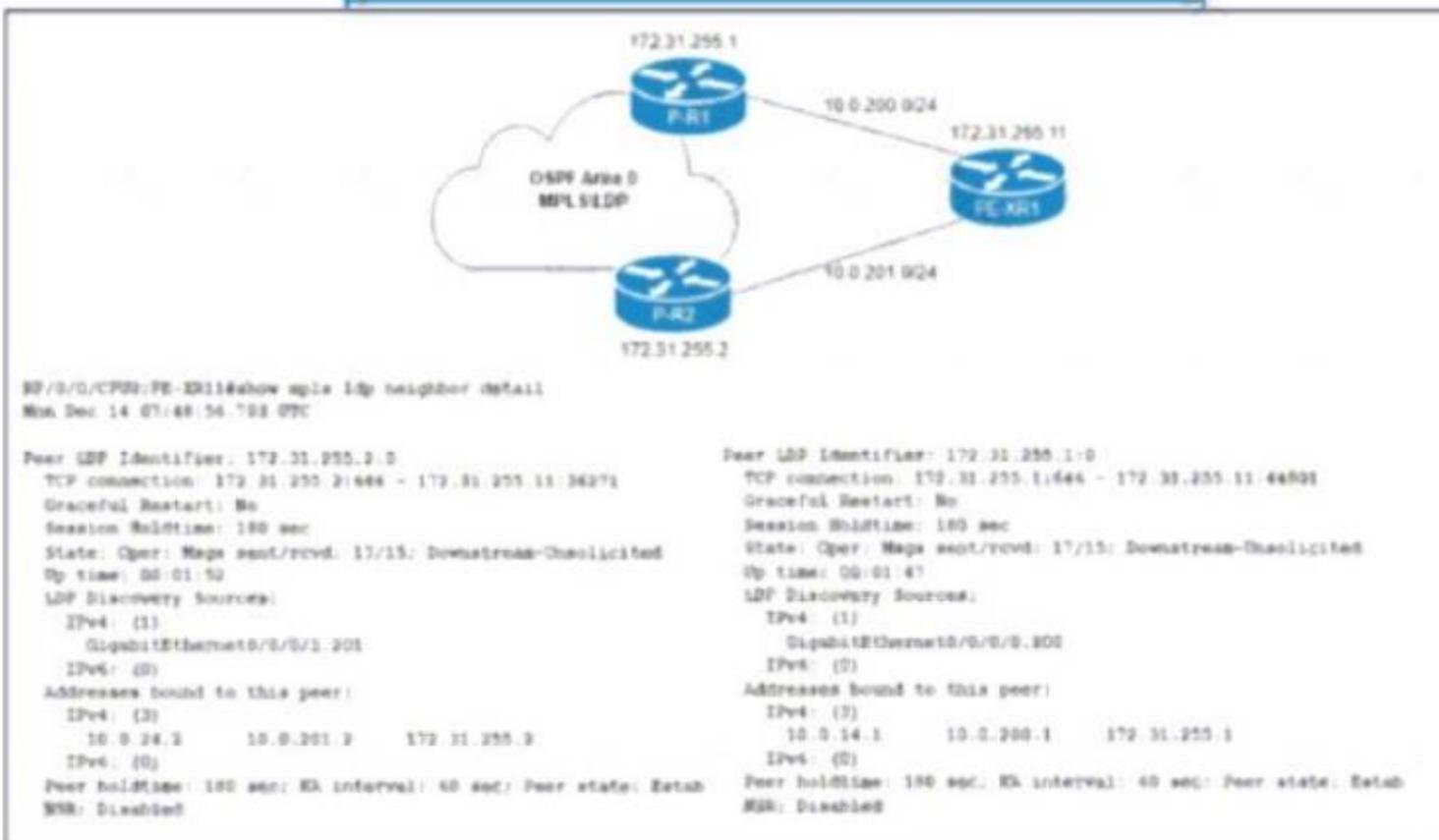
What are two characteristics of MPLS TE tunnels? (Choose two)

- A. They require EIGRP to be running in the core.
- B. They use RSVP to provide bandwidth for the tunnel.
- C. They are run over Ethernet cores only.
- D. The headend and tailend routes of the tunnel must have a BGP relationship
- E. They are unidirectional

**Answer: BE**

#### NEW QUESTION 476

Refer to the exhibit.



The network team must implement MPLS LDP session protection with two requirements: Session protection is provided for core loopback IP addresses only. The LDP session must remain operational for one hour when the WAN link on PE-XR1 fails. Which configuration must the team implement on PE-XR1?

- A. configure terminal ipv4 access-list LDP-SESSION-PROTECTION permit ipv4 172.31.255.0 0.0.0.255 any!mpls ldp session protection for LDP-SESSION-PROTECTION duration 60 end
- B. configure terminal ipv4 access-list LDP-SESSION-PROTECTION permit ipv4 172.31.255.0 0.0.0.255 any!mpls ldp session protection for LDP-SESSION-PROTECTION duration 3600 end
- C. configure terminal ipv4 access-list LDP-SESSION-PROTECTION permit ipv4 172.31.255.0 0.0.0.255 any permit ipv4 10.0.0.0 0.0.255.255 any!mpls ldp session protection for LDP-SESSION-PROTECTION duration 60 end
- D. configure terminal ipv4 access-list LDP-SESSION-PROTECTION permit ipv4 172.31.255.0 0.0.0.255 any permit ipv4 10.0.0.0 0.0.255.255 any!mpls ldp session protection for LDP-SESSION-PROTECTION duration 3600 end

**Answer: D**

**NEW QUESTION 479**

Which statement about Network Services Orchestrator (NSO) is true?

- A. It is used only in service provider environments
- B. It can be used only with XML coding
- C. It uses YANG modeling language to automate devices
- D. It must use SDN as an overlay for addressing

**Answer: C**

**NEW QUESTION 483**

Refer to the exhibit.

```

R1
ip cef distributed
mpls ldp graceful-restart
interface GigabitEthernet 0/0/1
 mpls ip
 mpls label protocol ldp
  
```

What is the effect of this configuration?

- A. R1 supports a graceful restart operation on the peer, even if graceful restart is disabled on the peer.
- B. R1 supports a peer that is configured for LDP SSO/NSF as the peer recovers from an outage.
- C. R1 failovers only to a peer that is configured for LDP SSO/NSF.
- D. R1 failovers to any peer.

**Answer: B**

**NEW QUESTION 486**

Which three OSPF parameters must match before two devices can establish an OSPF adjacency? (Choose three.)

- A. IP address
- B. interface cost

- C. subnet mask
- D. process ID
- E. hello timer setting
- F. area number

**Answer:** CEF

**NEW QUESTION 488**

Drag and drop the NAT64 descriptions from the left onto the correct NAT64 types on the right.

It is limited on the number of endpoints.	<b>Stateful</b>  <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
It uses address overloading.	
It conserves IPv4 addresses.	
It mandates IPv4-translatable IPv6 address allocation.	<b>Stateless</b>  <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
It has 1:N translation.	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Stateful (It has 1: N translation, It uses address overloading, It conserves IPv4 addresses)  
 Stateless (It is limited on the number of endpoints, It mandates IPv4-translatable IPv6 address allocation)

**NEW QUESTION 493**

Which statement about TLS is accurate when using RESTCONF to write configurations on network devices'?

- A. It requires certificates for authentication.
- B. It is provided using NGINX acting as a proxy web server
- C. It is used for HTTP and HTTPS requests.
- D. It is not supported on Cisco devices

**Answer:** A

**NEW QUESTION 497**

A network operator working for a telecommunication company with an employee Id: 4065 96080 it trying to implement BFD configuration on an existing network of Cisco devices Which task must the engineer perform to enable BFD on the interfaces?

- A. Disable Cisco Express Forwarding on the interfaces
- B. Disable SSO on the interfaces
- C. Remove any static routes that point to the interfaces
- D. Remove the log option from any ACLs on the interfaces.

**Answer:** D

**NEW QUESTION 498**

Refer to the exhibit.

```
RP/0/RP0/CPU0:XR1#sh lpts pifib hardware entry location 0/0/CPU0
-----
L4 Protocol      : ICMP
VRF ID           : any
Destination IP   : any
Source IP/BFD Disc: any
Port/Type        : Port:8
Source Port      : any
Is Fragment      : 0
Is SYN           : any
Is Bundle        : na
Is Virtual       : na
Interface        : any
Slice            : 0
V/L/T/F         : 0/IPv4_STACK/0/ICMP-local
DestNode         : Local
DestAddr         : Punt
Accepted/Dropped : 16810/14
Po/Ar/Bu         : 19/0pps/100ms
State            : pl_pifib_state_complete
-----
```

While troubleshooting the network, a network operator with an employee id: 3812:12:993 is trying to ping XR1. Which result should the operator expect when trying to ping to an XR1 local address?

- A. ICMP traffic works at a policed rate of 19 bytes per second every 100 ms
- B. All ICMP traffic responds successfully.
- C. All ICMP traffic is dropped.
- D. ICMP traffic works at a policed rate of 19 packets every 100 ms.

**Answer:** B

**NEW QUESTION 503**

Drag and drop the functions from the left onto the correct Path Computation Element Protocol roles on the right

calculates paths through the network	<b>Path Computation Element</b> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
keeps TE topology database information	
sends path calculation request	
sends path creation request	<b>Path Computation Client</b> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
sends path status updates	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Path Computation Element (Calculates paths through the network, keeps TE topology database information, sends path status updates)

Path computation Client (sends path calculation request, sends path creation request)

Path Computation Element (PCE)

Represents a software module (which can be a component or application) that enables the router to compute paths applying a set of constraints between any pair of nodes within the router's TE topology database. PCEs are discovered through IGP.

Path Computation Client (PCC)

Represents a software module running on a router that is capable of sending and receiving path computation requests and responses to and from PCEs. The PCC

is typically an LSR (Label Switching Router).

[https://www.cisco.com/c/en/us/td/docs/routers/crs/software/crs\\_r5-3/mpls/configuration/guide/b-mpls-cg53x-crs](https://www.cisco.com/c/en/us/td/docs/routers/crs/software/crs_r5-3/mpls/configuration/guide/b-mpls-cg53x-crs)

**NEW QUESTION 504**

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