

## 350-501 Dumps

# Implementing and Operating Cisco Service Provider Network Core Technologies

<https://www.certleader.com/350-501-dumps.html>



**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**

A network engineer is testing an automation platform that interacts with Cisco networking devices via NETCONF over SSH. In accordance with internal security requirements:

NETCONF sessions are permitted only from trusted sources in the 172.16.20.0/24 subnet. CLI SSH access is permitted from any source.

Which configuration must the engineer apply on R1?

- A. configure terminal hostname R1ip domain-name mydomain.com crypto key generate rsaip ssh version 1access-list 1 permit 172.16.20.0 0.0.0.255 netconf ssh acl 1line vty 0 4 transport input ssh end
- B. configure terminal hostname R1ip domain-name mydomain.com crypto key generate rsaip ssh version 2access-list 1 permit 172.16.20.0 0.0.0.255 access-list 1 permit anynetconf ssh line vty 0 4access-class 1 in transport input ssh end
- C. configure terminal hostname R1ip domain-name mydomain.com crypto key generate rsaip ssh version 1access-list 1 permit 172.16.20.0 0.0.0.255 access-list 2 permit anynetconf ssh line vty 0 4access-class 2 in transport input ssh end
- D. configure terminal hostname R1ip domain-name mydomain.com crypto key generate rsaip ssh version 2access-list 1 permit 172.16.20.0 0.0.0.255 netconf ssh acl 1line vty 0 4 transport input ssh end

**Answer: D**

**NEW QUESTION 3**

Refer to the exhibit.

Router 1:	Router 2:
Interface gigabitethernet0/1 ip address 192.168.1.1 255.255.255.0	Interface gigabitethernet0/1 ip address 192.168.1.2 255.255.255.0
router ospf 1 network 192.168.1.0 0.0.0.255 area 1	Interface loopback 0 ip address 192.168.2.1 255.255.255.0
	router ospf 2 network 192.168.1.2 0.0.0.0 area 2 network 192.168.2.1 0.0.0.0 area 1

Router 1 is missing the route for the router 2 loopback 0. What should the engineer change to fix the problem?

- A. the area numbers on Router 1 and Router 2 to be similar
- B. the wildcard mask network statement in OSPF of Router 2
- C. Router 1 to be an ABR
- D. the hello timers on Router 1 and Router 2 to be different

**Answer: A**

**NEW QUESTION 4**

What does DWDM use to combine multiple optical signals?

- A. frequency
- B. IP protocols
- C. time slots

D. wavelength

**Answer:** D

#### NEW QUESTION 5

An ISP Is Implementing end-to-end fault monitoring for a customer based on the IEEE 802.3ah standard. The solution must detect when 15 or more corrupted Ethernet packets arrive within 10 ms and stop propagating traffic through the ISP backbone network or to the customer side. Which configuration must the ISP engineer apply?

- A. ethernet oam link-monitoring enableethernet oam link-monitor crc-errors ingress time-window 10ethernet oam link-monitor crc-errors ingress threshold high 15ethernet oam link-monitor crc-errors egress time-window 10 ethernet oam link-monitor crc-errors egress threshold high 15 ethernet oam link-monitor high-threshold action shutdown-interface
- B. ethernet oam link-monitoringethernet oam link-monitor receive-crc window 15 ethernet oam link-monitor receive-crc threshold high 10ethernet oam link-monitor high-threshold action disable-interface
- C. ethernet oamethernet oam link-monitor receive-crc window 10 ethernet oam link-monitor receive-crc threshold high 15 ethernet oam link-monitor transmit-crc window 10 ethernet oam link-monitor transmit-crc threshold high 15ethernet oam link-monitor high-threshold action error-disable-interface
- D. ethernet oam link-monitoring global enableethernet oam link-monitor receive crc-errors period 15 ethernet oam link-monitor receive crc-errors limit 15 ethernet oam link-monitor transmit crc-errors period 10 ethernet oam link-monitor transmit crc-errors limit 15 ethernet oam link-monitor limit action error-disable interface

**Answer:** C

#### NEW QUESTION 6

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

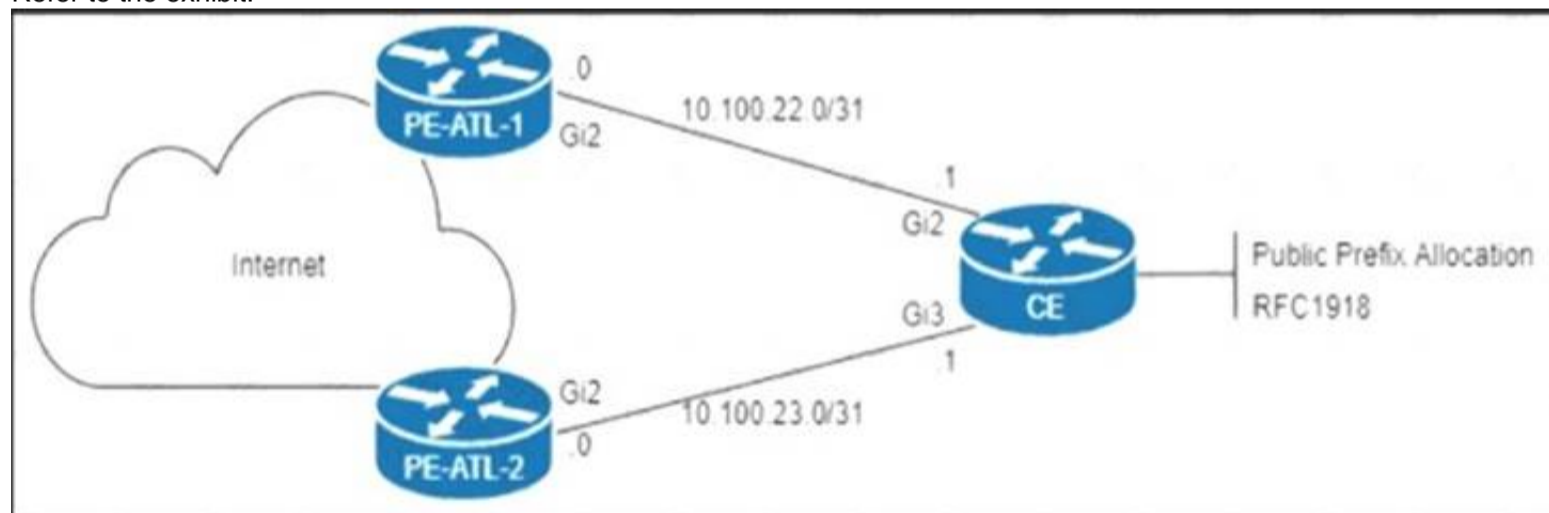
#### Explanation:

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

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

#### NEW QUESTION 7

Refer to the exhibit.



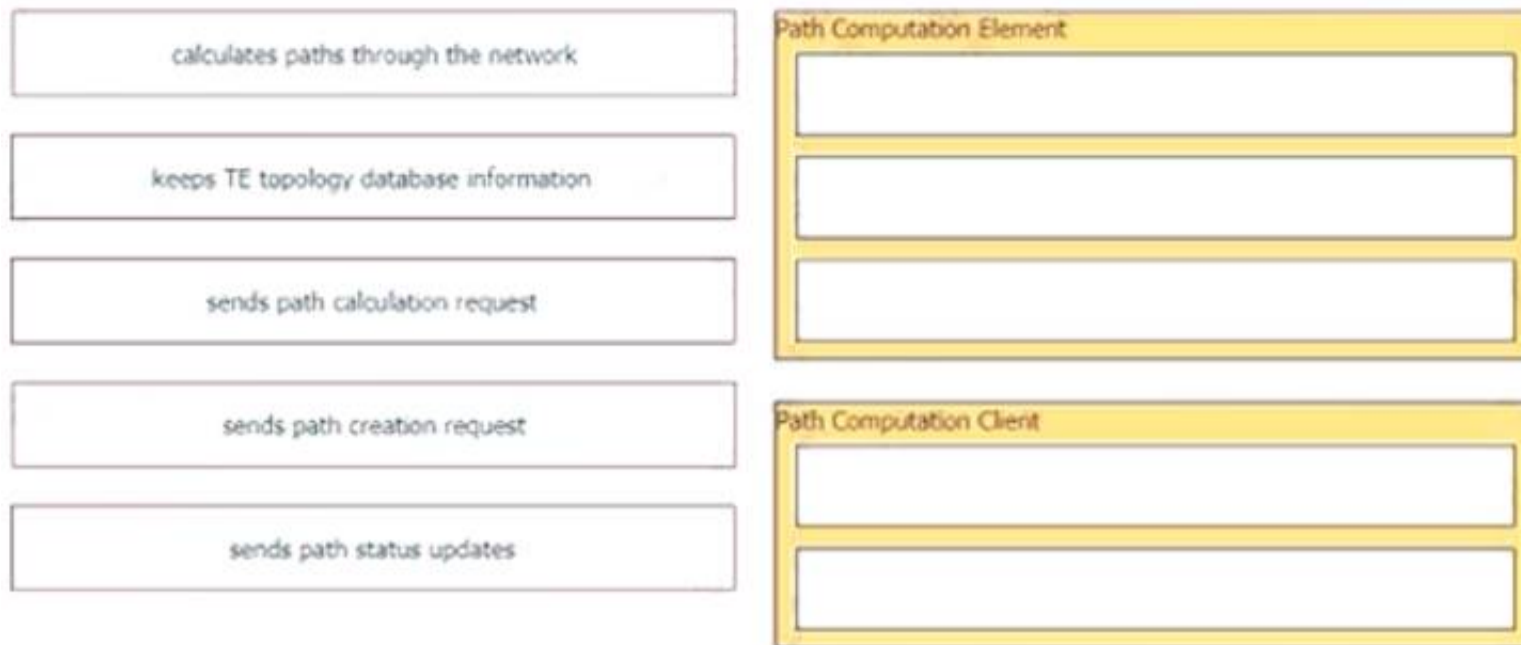
The CE router is peering with both PE routers and advertising a public prefix to the internet. Routing to and from this prefix will be asymmetric under certain network conditions, but packets must not be discarded. Which configuration must an engineer apply to the two PE routers so that they validate 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 2ip 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 8

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



- 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

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#### NEW QUESTION 9

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 10

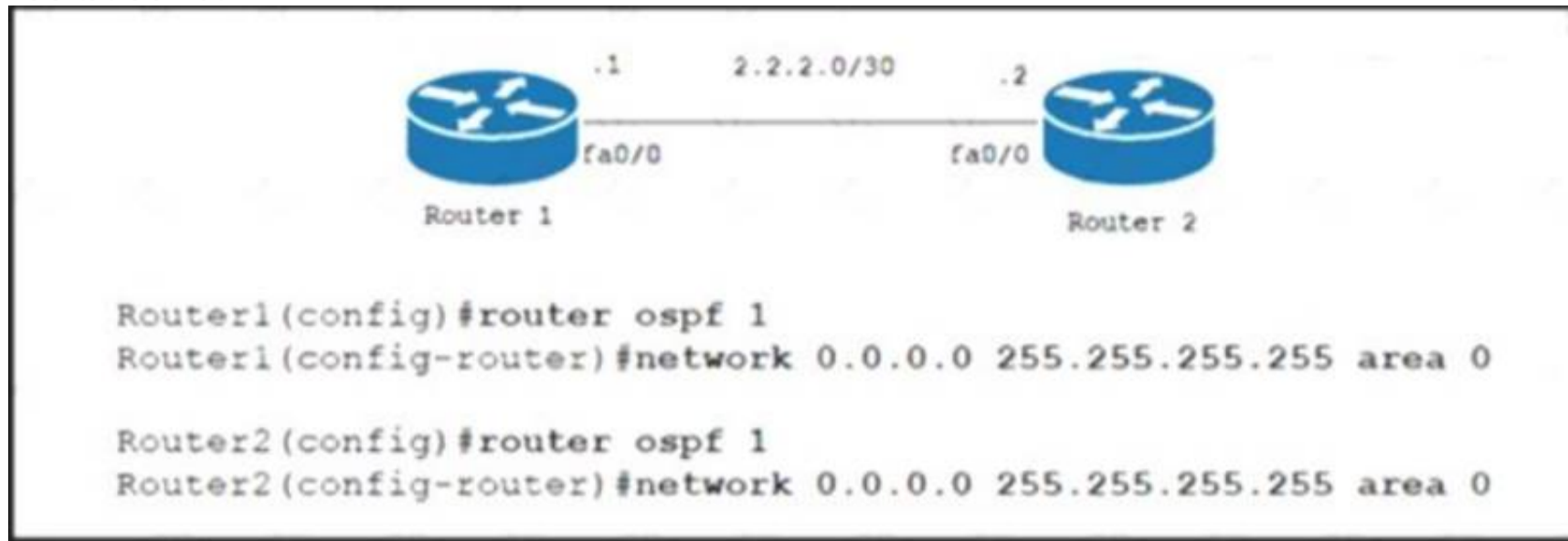
Which BGP attribute is used first when determining the best path?

- A. origin
- B. AS path
- C. local preference
- D. weight

**Answer:** D

#### NEW QUESTION 10

Refer to the exhibit.



A network engineer must configure an LDP neighborship between two newly installed routers that are located in two different offices. Router 1 is the core router in the network and it has already established OSPF adjacency with router 2. On router 1 and router 2, interface fa0/0 is configured for BFD. Which additional configuration must the engineer apply to the two devices to meet the requirement?

- A. Router1(config)#int fa0/0 - Router1(config-if)#mpls ldp autoconfig Router2(config)#router ospf 1 - Router2(config-router)#mpls ip
- B. Router1(config)#int fa0/0 - Router1(config-if)#mpls ip Router1(config-if)#mpls ldp discovery transport-address interface Router2(config)#int fa0/0 Router2(config-if)#mpls ip Router2(config-if)#mpls ldp discovery transport-address interface
- C. Router1(config)#int fa0/0 - Router1(config-if)#mpls ldp autoconfig Router1(config-if)#mpls ldp discovery interface Router2(config)#router ospf 1 Router2(config-router)#mpls ldp autoconfig Router2(config-if)#mpls ldp discovery interface
- D. Router1(config)#int fa0/0 - Router1(config-if)#mpls ip - Router2(config)#router ospf 1 Router2(config-router)#mpls ldp autoconfig

**Answer: D**

#### NEW QUESTION 15

What is the role of NFVI?

- A. domain name service
- B. intrusion detection
- C. monitor
- D. network address translation

**Answer: C**

#### NEW QUESTION 18

Refer to the exhibit.



```

CPE-1#show run int gig 0/0
interface GigabitEthernet0/0
 ip address 100.65.15.2 255.255.255.252
 negotiation auto
 ipv6 address 2001:DB8:0:A000:100:65:15:2/126
 service-policy output WAN-OUTPUT
end

CPE-1#show run int gig 0/1
interface GigabitEthernet0/1
 ip address 192.168.2.1 255.255.255.0
 negotiation auto
 ipv6 address 2001:DB8:0:A001:192:168:2:1/120
 service-policy input LAN-INPUT
end

CPE-1#show access-list
Standard IP access list SELF_V4
 10 permit 100.65.15.2
IPv6 access list SELF_V6
 permit ipv6 host 2001 :DB8:0:A000:100:65:15:2 any sequence 10

CPE-1#show policy-map
Policy Map WAN-OUTPUT

Policy Map LAN-INPUT
  
```

A network engineer configures CPE-1 for QoS with these requirements: IPv4 and IPv6 traffic originated by the CPE-1 WAN IP address must be marked with DSCP CS3. IPv4 LAN traffic must be marked with DSCP CS1. IPv6 LAN traffic must be marked with DSCP default. Which configuration must the engineer implement on CPE-1?

- A. class-map match-any SELF\_TRAFFIC match access-group name SELF\_V4 match access-group name SELF\_V6 class-map match-all V4\_TRAFFIC match protocol ip class-map match-all V6\_TRAFFIC match protocol ipv6 class-map match-all QG\_4 match qos-group 4 class-map match-all QG\_6 match qos-group 6! policy-map LAN-INPUT class V4\_TRAFFIC set qos-group 4 class V6\_TRAFFIC set qos-group 6! policy-map WAN-OUTPUT class SELF\_TRAFFIC set ip dscp cs3 class QG\_4 set ip dscp cs1 class QG\_6 set ip dscp default
- B. class-map match-all SELF\_TRAFFIC match access-group name SELF\_V4 match access-group name SELF\_V6 class-map match-all V4\_TRAFFIC match protocol ip class-map match-all V6\_TRAFFIC match protocol ipv6 class-map match-all QG\_4 match qos-group 4 class-map match-all QG\_6 match qos-group 6! policy-map LAN-INPUT class V4\_TRAFFIC set qos-group 4 class V6\_TRAFFIC set qos-group 6! policy-map WAN-OUTPUT class SELF\_TRAFFIC set dscp cs3 class QG\_4 set ip dscp cs1 class QG\_6 set dscp default
- C. class-map match-all SELF\_TRAFFIC match access-group name SELF\_V4 match access-group name SELF\_V6 class-map match-all V4\_TRAFFIC match protocol ip class-map match-all V6\_TRAFFIC match protocol ipv6 class-map match-all QG\_4 match qos-group 4 class-map match-all QG\_6 match qos-group 6! policy-map LAN-INPUT class V4\_TRAFFIC set qos-group 4 class V6\_TRAFFIC set qos-group 6! policy-map WAN-OUTPUT class SELF\_TRAFFIC set ip dscp cs3 class QG\_4 set ip dscp cs1 class QG\_6 set ip dscp default
- D. class-map match-any SELF\_TRAFFIC match access-group name SELF\_V4 match access-group name SELF\_V6 class-map match-all V4\_TRAFFIC match protocol ip class-map match-all V6\_TRAFFIC match protocol ipv6 class-map match-all QG\_4 match qos-group 4 class-map match-all QG\_6 match qos-group 6! policy-map LAN-INPUT class V4\_TRAFFIC set qos-group 4 class V6\_TRAFFIC set qos-group 6! policy-map WAN-OUTPUT class SELF\_TRAFFIC set dscp cs3 class QG\_4 set ip dscp cs1 class QG\_6 set dscp default

**Answer:** A

#### NEW QUESTION 22

Refer to the exhibit.

```
router bgp 100
 address-family ipv4 unicast
 address-family vpnv4 unicast
 !
 neighbor 10.19.20.20
 remote-as 1
 address-family ipv4 unicast
 !
 !
 !
 !
 !
 commit
 !
```

An engineer is trying to implement BGP configuration on a router. Which configuration error prevents the ASBR from establishing a BGP neighborhood to a directly connected BGP speaker?

- A. The routing policy is absent for this Cisco IOS XR eBGP instance.
- B. The IPv4 address family configuration under neighbor configuration-mode must be removed.
- C. The VPNv4 address family interferes with the 8GP IPv4 address family negotiations.
- D. The TCP session parameters are not specified.

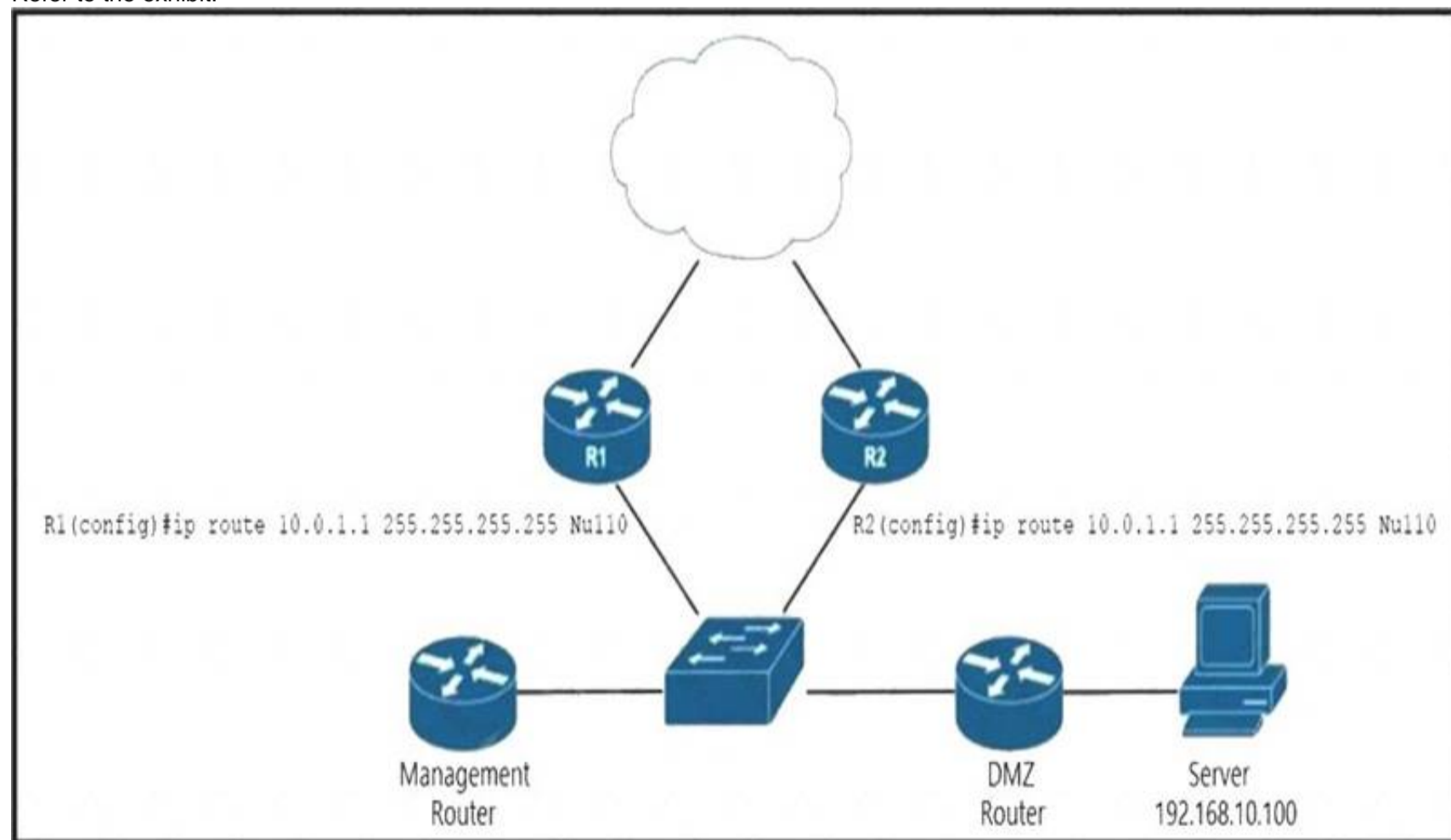
**Answer:** D

**Explanation:**

[https://www.cisco.com/c/en/us/td/docs/routers/xr12000/software/xr12k\\_r41/routing/configuration/guide/routing](https://www.cisco.com/c/en/us/td/docs/routers/xr12000/software/xr12k_r41/routing/configuration/guide/routing)

#### NEW QUESTION 25

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

Refer to the exhibit. EIGRP is running across the core to exchange internal routes, and each router maintains iBGP 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 to the management router to create a route map that will redistribute tagged static routes into BGP and create a static route to blackhole traffic with tag 777 that is destined to the server at 192.168.10.100?

- A. router(config)# router bgp 55100router(config-router)# redistribute static route-map blackhole-trigger router(config)# ip route 10.0.1.1 255.255.255.255 Null0 tag 777
- B. router(config)# router bgp 55100router(config-router)# redistribute static route-map blackhole-trigger router(config)# ip route 192.168.10.100 255.255.255.255 Null0 tag 777
- C. router(config)# router bgp 55100 router(config-router)# redistribute connectedrouter(config)# ip route 192.168.10.100 255.255.255.255 tag 777
- D. router(config)# router bgp 55100router(config-router)# redistribute connected route-map blackhole-trigger router(config)# ip route 192.168.10.100 255.255.255.255 Null0 tag 777

**Answer:** B

### NEW QUESTION 28

Which configuration mode do you use to apply the mpls ldp graceful-restart command in IOS XE Software? MPLS

- A. MPLS
- B. LDP neighbor
- C. global
- D. interface

**Answer: C**

### NEW QUESTION 29

Refer to the exhibit.



Refer to the exhibit. An ISP provides shared VoIP Extranet services to a customer in VRF-100 with these settings:

The VoIP services are hosted in the 198.19.100.0/24 space.

The customer has been assigned the 198.18.1.0/29 IP address block. VRF-100 is assigned import and export route target 65010:100.

Which configuration must the engineer apply to PE-1 to provision VRF-100 and provide access to the shared services?

- A. vrf definition VRF-100 rd 172.17.255.1:100!address-family ipv4export map VRF-100-EXPORT import map VRF-100-IMPORT 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 rt 65010:100!route-map VRF-100-IMPORT permit 10match extcommunity VRF-100-RT SHARED-SERVICES!ip extcommunity-list standard SHARED-SERVICES permit rt 65010:1999 ip extcommunity-list standard VRF-100-RT permit rt 65010:100ip prefix-list VRF-100-ALLOWED-EXPORT seq 5 permit 198.18.1.0/29
- B. vrf definition VRF-100 rd 172.17.255.1:100!address-family ipv4export map VRF-100-EXPORT route-target import 65010:100route-target import 65010:2999 exit-address-family!route-map VRF-100-EXPORT permit 10match ip address prefix-list VRF-100-ALLOWED-EXPORT set extcommunity rt 65010:100 65010:1999route-map VRF-100-EXPORT permit 20 set extcommunity rt 65010:100!ip prefix-list VRF-100-ALLOWED-EXPORT seq 5 permit 198.18.1.0/29
- 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 31

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 35

Refer to the exhibit:

```

R1
router bgp 65000
router-id 192.168.1.1
neighbor 192.168.1.2 remote-as 65012
neighbor 192.168.1.2 local-as 65112
  
```

A network engineer is implementing a BGP protocol. Which effect of the local-as keyword in this configuration is true?

- A. It enables peer 192.168.1.2 to establish a BGP relationship with R1 using AS 65012 and the VPNv4 address family
- B. It enables peer 192.168.1.2 to establish a BGP relationship with R1 using AS 65012 without additional configuration
- C. It enables peer 192.168.1.2 to establish a BGP relationship with R1 using AS 65112 and the VPNv4 address family
- D. It enables peer 192.168.1.2 to establish a BGP relationship with R1 using AS 65112 without additional configuration.

**Answer: D**

**Explanation:**

<https://www.cisco.com/c/en/us/support/docs/ip/border-gateway-protocol-bgp/13761-39.html>

#### NEW QUESTION 39

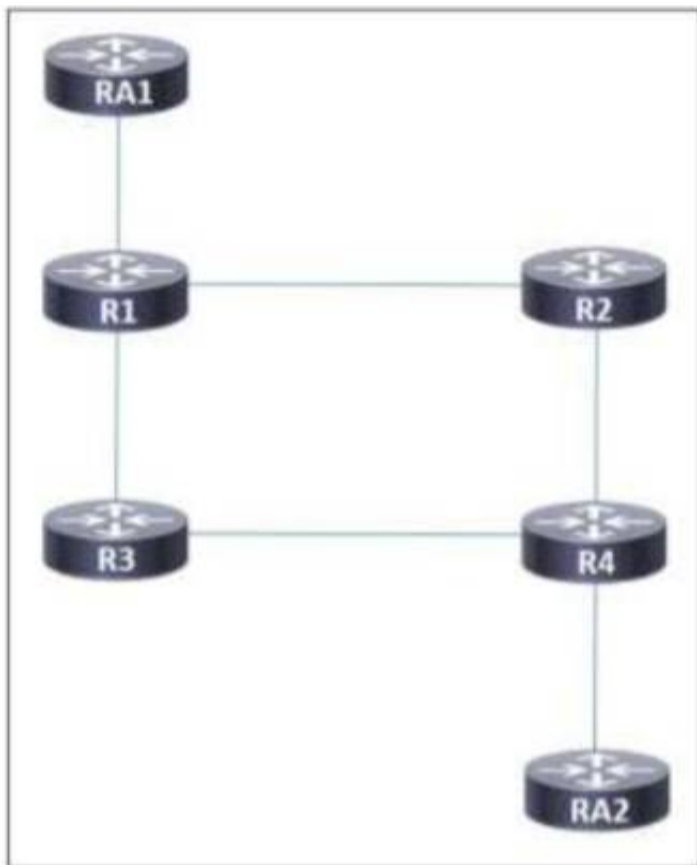
What is the characteristic of the TI-LFA?

- 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 m 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

Refer to the exhibit:



BGPsec is implemented on R1, R2, R3, and R4 BGP peering is established between neighboring autonomous systems Which statement about implementation is true?

- A. BGP updates from the eBGP peers are appended with an additional AS path value that is statically set by the domain administrator
- B. BGP updates from the iBGP peers are appended with a community of local-as
- C. BGP updates from the all BGP peers are appended with a community of no export
- D. BGP updates from the eBGP peers are appended with a BGPsec attribute sequence that includes a public key hash and digital signature

**Answer: D**

#### NEW QUESTION 46

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 51

Refer To the exhibit:

```
R2#sh cins neighbors detail
Tag TEST:
System Id   Interface   SNPA        State Holdtime   Type Protocol
R1          Fa0/0       ca01.2178.0008 Up    89          L1L2 IS-IS
Area Address(es): 49
Uptime: 00:03:29
NSF capable
Interface name: FastEthernet0/0
```

On R1, which output does the show isis neighbors command generate?

A)

```
Tag TEST
System Id   Type Interface IP Address   State Holdtime Circuit Id
R2          L1 Fa0/0              UP    7          R2 01
```

B)

```
Tag TEST:
System Id   Type Interface IP Address   State Holdtime Circuit Id
R2          L2 Fa0/0              UP    9          R2 01
```

C)

```
Tag TEST:
System Id   Type Interface IP Address   State Holdtime Circuit Id
R2          L2 Fa0/0              UP    7          R2 01
R2          L2 Fa0/0              UP    9          R2 01
```

D)

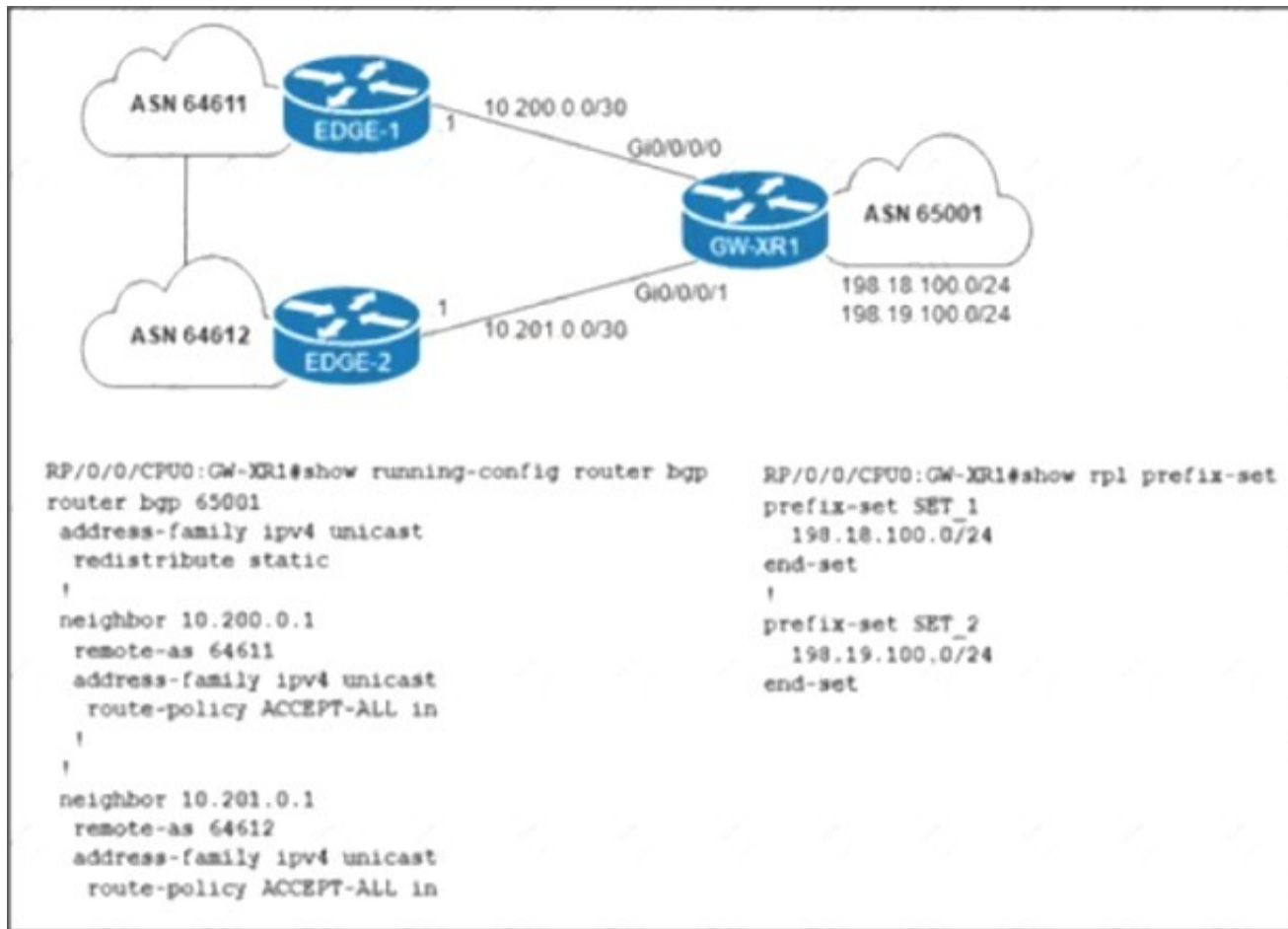
```
Tag TEST:
System Id   Type Interface IP Address   State Holdtime Circuit Id
R2          L1 Fa0/0              UP    7          R2 01
R2          L2 Fa0/0              UP    9          R2 01
```

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

Answer: D

#### NEW QUESTION 56

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
```

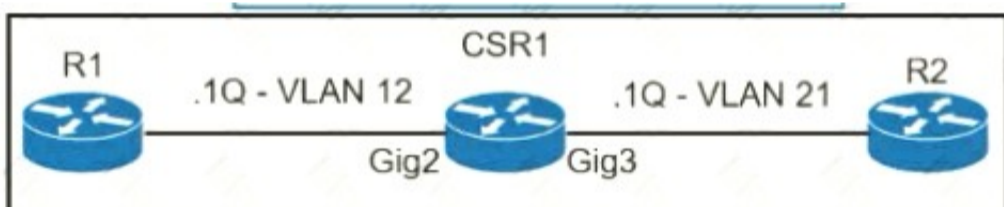
**Answer:** B

**Explanation:**

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

**NEW QUESTION 58**

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

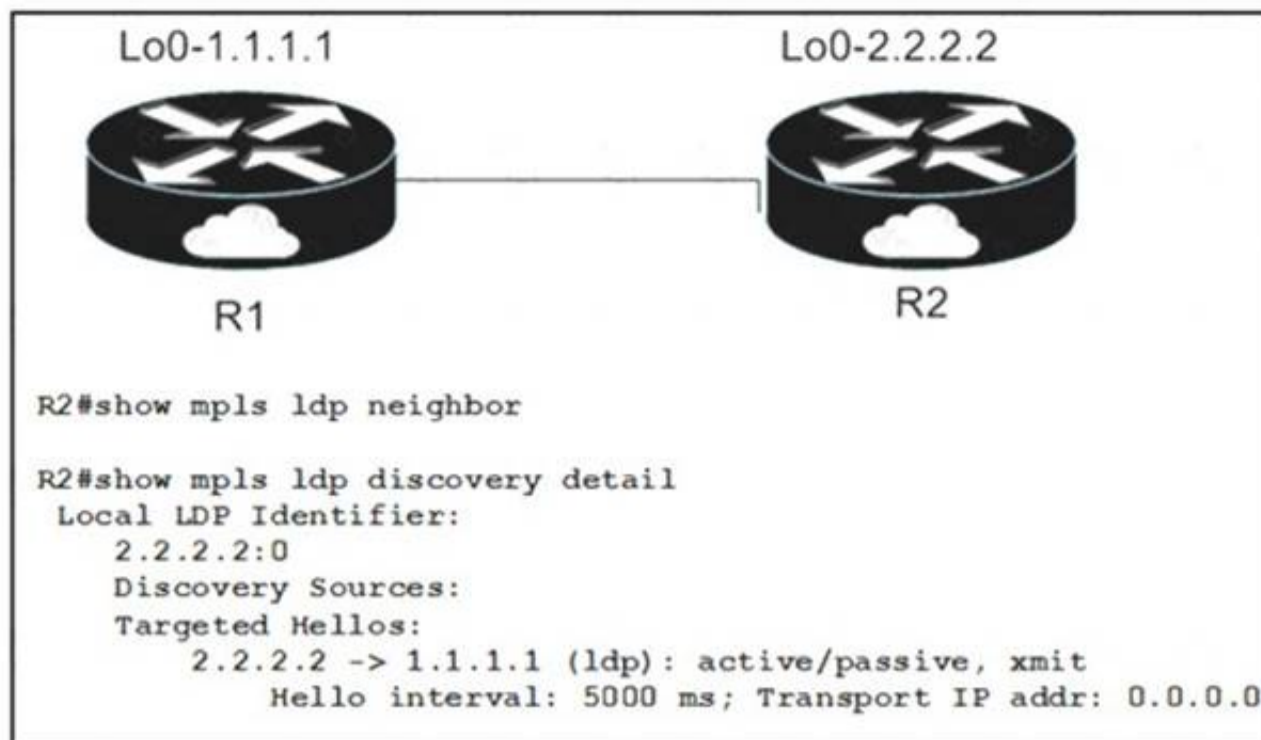
```
interface GigabitEthernet2
no ip address
service instance 12 ethernet
encapsulation dot1q 12
rewrite ingress tag translate 1-to-1 dot1q 21
rewrite egress tag translate 1-to-1 dot1q 12
!
interface GigabitEthernet3
no ip address
service instance 21 ethernet
encapsulation dot1q 21
rewrite ingress tag 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 59**

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 61

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 66

Which action does the ingress VTEP perform on traffic between EVPN VXLAN overlays?

- A. routing and tunneling when doing symmetric IRB
- B. routing when doing asymmetric IRB
- C. routing and bridging when doing asymmetric IRB
- D. bridging when doing symmetric IRB

**Answer: C**

#### Explanation:

Asymmetric IRB

With asymmetric IRB, the ingress VTEP performs both Layer-2 bridging and Layer-3 routing lookup, whereas the egress VTEP performs only Layer-2 bridging lookup.

<https://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-series-switches/guide-c07-734107.html>

#### NEW QUESTION 71

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 76**

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 79**

Refer to the exhibit.

```
snmp-server view ViewDefault iso included
snmp-server group GrpMonitoring v3 priv read ViewDefault
```

A network engineer must implement SNMPv3 on a Cisco IOS XR router running BGP. The engineer configures SNMPv3 to use SHA for authentication and AES for privacy on the routers, which are in a different data center in the same exchange as other routers. The engineer must also verify the associated MIB view family name, storage type, and status. Which set of actions meets these requirements?

- A. Add configuration `snmp-server user UserJustMe GrpMonitoring v3 auth sha AuthPass1 priv 3des 128 PrivPass2` and use `show snmp interface` to verify the configuration.
- B. Add configuration `snmp-server user AuthUser group2 remote 10.1.1.1 v3 auth sha` and use `show snmp mib` to verify the configuration.
- C. Add configuration `snmp-server user AuthUser group2 remote 10.1.1.1 v3 auth sha` and use `show snmp engineid` to verify the configuration.
- D. Add configuration `snmp-server user UserJustMe GrpMonitoring v3 auth sha AuthPass1 priv aes 128 PrivPass2` and use `show snmp view` to verify the configuration.

**Answer: D**

**NEW QUESTION 84**

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 88**

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 90

Refer to the exhibit:

```
class-map match-any class1
 match-protocol ipv4
 match qos-group 4
```

A network engineer is implementing QoS services. Which two statements about the QoS-group keyword on Cisco IOS XR 3 are true? (Choose two )

- A. The QoS group numbering corresponds to priority level
- B. QoS group marking occurs on the ingress
- C. It marks packets for end-to-end QoS policy enforcement across the network
- D. QoS group can be used in fabric QoS policy as a match criteria
- E. It cannot be used with priority traffic class

**Answer:** BD

#### Explanation:

[https://www.cisco.com/c/en/us/td/docs/routers/ncs6000/software/ncs6k\\_r6-1/qos/configuration/guide/b-qos-cg-n](https://www.cisco.com/c/en/us/td/docs/routers/ncs6000/software/ncs6k_r6-1/qos/configuration/guide/b-qos-cg-n) Fabric QoS policy class maps are restricted to matching a subset of these classification options:

precedence dscp  
qos-group discard-class  
mpls experimental topmost

#### NEW QUESTION 94

Refer to the exhibit.

```
mpls traffic-eng tunnels
segment-routing mpls
connected-prefix-sid-map
address-family ipv4
 192.168.1.1/32 index 10 range 1
exit-address-family

set-attributes
address-family ipv4
sr-label-preferred
exit-address-family

interface Loopback1
ip address 192.168.1.1 255 255.255.255
ip router isis 1

int gig0/0
ip address 192.168.1.2 255.255.255.0
ip router isis 1
mpls traffic-eng tunnels
isis network point-to-point

router isis 1
net 50.0000.0000.0000.0001.00
metric-style wide
is-type level-1
segment-routing mpls
segment-routing prefix-sid-map advertise-local
mpls traffic-eng router-id Loopback1
mpls traffic-eng level-1
```

What type of configuration is it?

- A. It is configuration that requires an explicit Cisco MPLS TE path to be configured for the tunnel to run.
- B. It is configuration that requires OSPF to also be running to have optimized Cisco MPLS TE tunnels.
- C. It is configuration for the head-end router of a Cisco MPLS TE tunnel with segment routing.
- D. It is configuration that requires a dynamic Cisco MPLS TE path to be configured for the tunnel to run.

**Answer: C**

#### NEW QUESTION 95

Which two features will be used when defining SR-TE explicit path hops if the devices are using IP unnumbered interfaces? (Choose two.)

- A. router ID
- B. labels
- C. node address
- D. next hop address
- E. output interface

**Answer: BC**

#### NEW QUESTION 98

What is a characteristic of prefix segment identifier?

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

**Answer: C**

#### NEW QUESTION 101

A network engineer has configured TE tunnels in the MPLS provider core. Which two steps ensure traffic traverse? (Choose two.)

- A. Static routes is the only option for directing traffic into a tunnel.
- B. ECMP between tunnels allows RSVP to function correctly.
- C. Forwarding adjacency features allows a tunnel to be Installed in the IGP table as a link.
- D. The IGP metric of a tunnel is configured to prefer a certain path
- E. A tunnel weight is configured in SPF database the same way as a native link.

**Answer: CD**

#### NEW QUESTION 105

Which service is a VNF role?

- A. Compute
- B. Network
- C. Firewall
- D. Storage

**Answer: B**

#### NEW QUESTION 109

What causes multicast traffic to permanently stay on the shared tree and not switch to the source tree?

- A. The SPT threshold is set to infinity.
- B. The RP IP address is configured incorrectly.
- C. The RP announcements are being filtered.
- D. SSM range is being used.

**Answer: C**

**Explanation:**

Network administrators can force traffic to stay on the shared tree by using the Cisco IOS `ip pim spt-threshold infinity` command.

[https://www.cisco.com/c/en/us/td/docs/ios/solutions\\_docs/ip\\_multicast/White\\_papers/mcst\\_ovr.html](https://www.cisco.com/c/en/us/td/docs/ios/solutions_docs/ip_multicast/White_papers/mcst_ovr.html)

**NEW QUESTION 110**

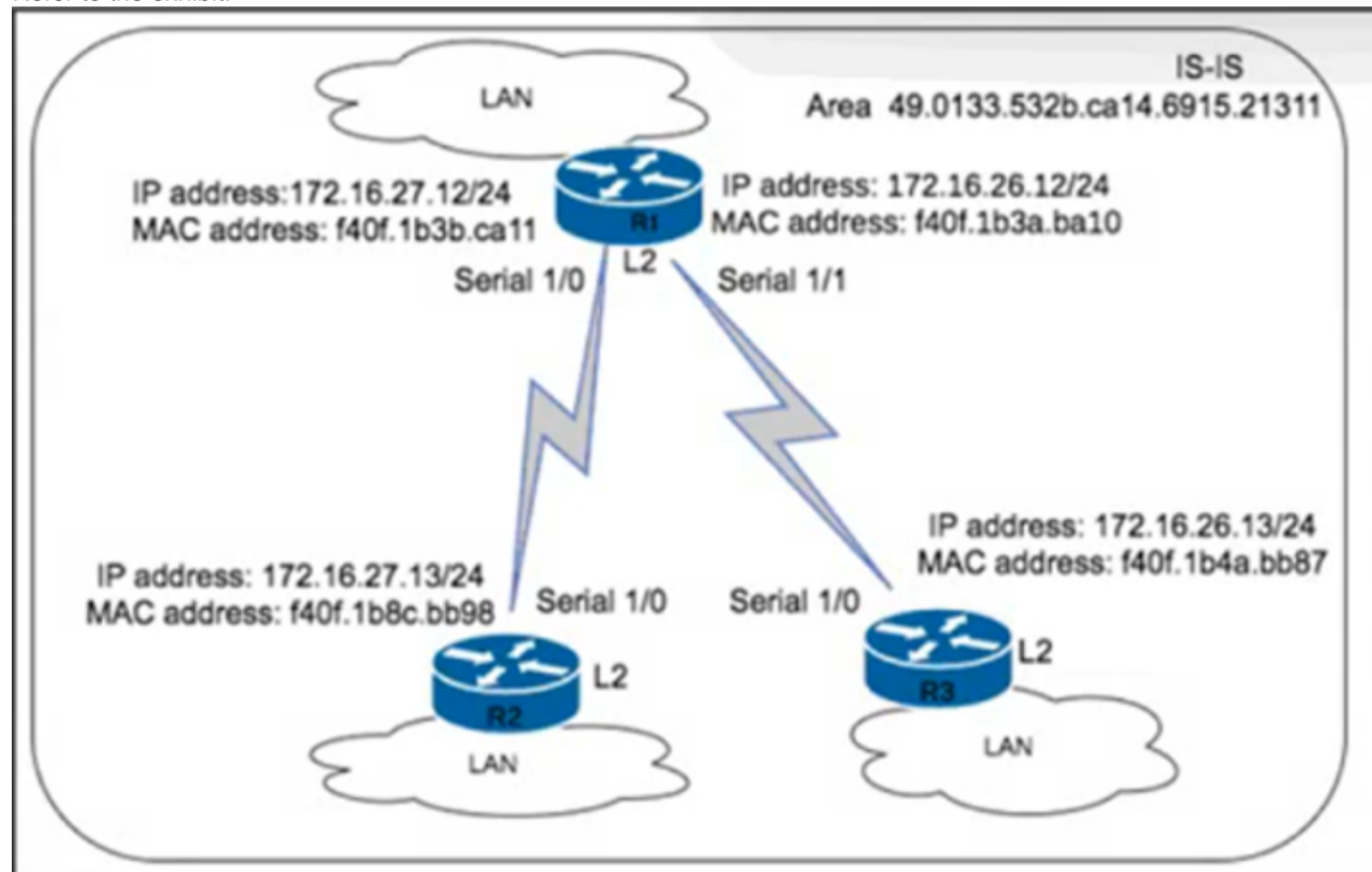
Which condition must be met for TI-LFA to protect LDP traffic?

- 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 115**

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

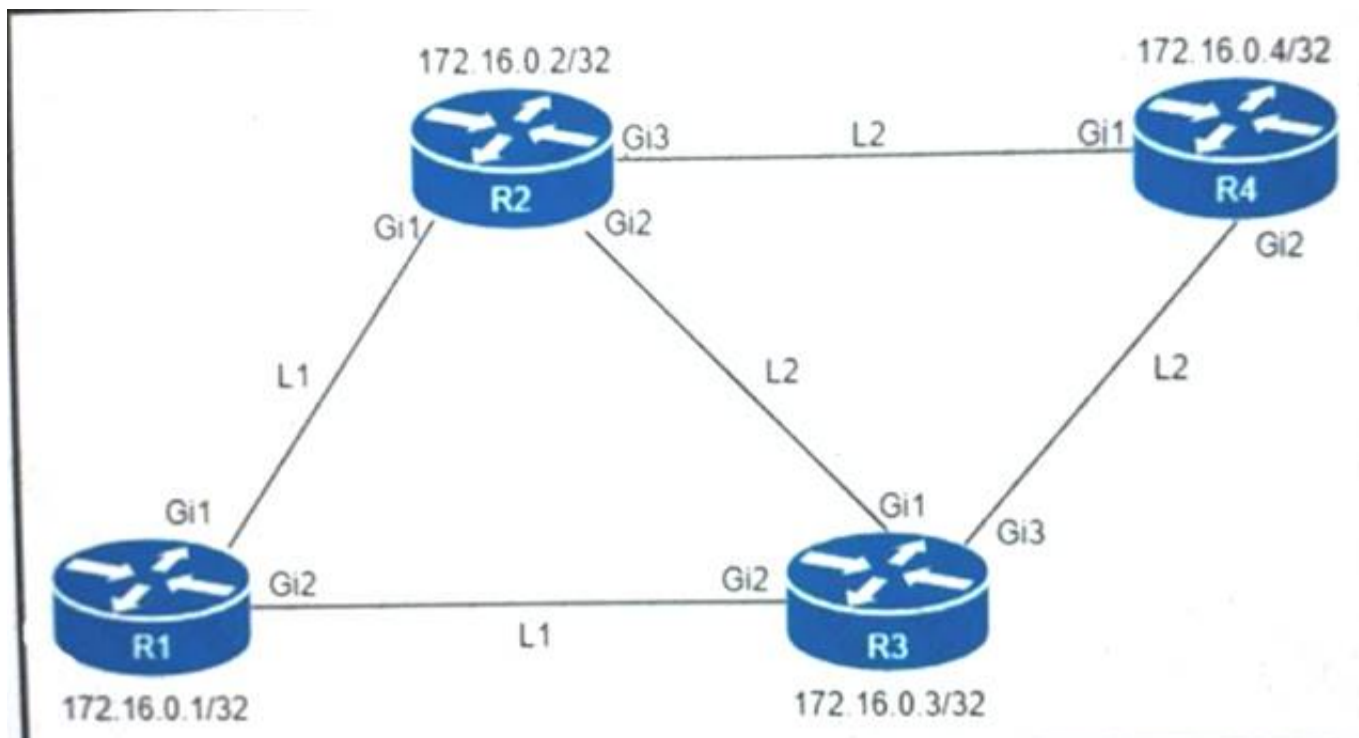
**Answer:** A

**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 116**

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 121

What is the function of the FEC field within the OTN signal structure?

- A. It allows the sending devices to apply QoS within the OTN forwarding structure.
- B. It allows source nodes to discard payload errors before transmitting data on the network.
- C. It allows receivers to correct errors upon data arrival.
- D. It allows deep inspection of data payload fields.

**Answer: C**

#### NEW QUESTION 125

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 130

Refer to the exhibit.

```
encoding = gpbkv
```

An engineer applied a gRPC dial-in configuration on customer's router to provide connection multiplexing and two-way streaming. What does this configuration accomplish in a gRPC?

- A. It is the encoding requested by the gRPC server.
- B. It is the encoding that is used for dial-in and dial-out.
- C. It is used for encoding with the default protocol buffers
- D. It is the encoding requested by the gRPC client.

**Answer: A**

**Explanation:**

<https://www.ciscolive.com/c/dam/r/ciscolive/emea/docs/2019/pdf/BRKNMS-3537.pdf> <https://xrdocs.io/telemetry/tutorials/2018-03-01-everything-you-need-to-know-about-pipeline/> <https://community.cisco.com/t5/service-providers-documents/implementing-grpc-telemetry-on-xr-devices/ta-p/3>

**NEW QUESTION 135**

Refer to the exhibit:

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

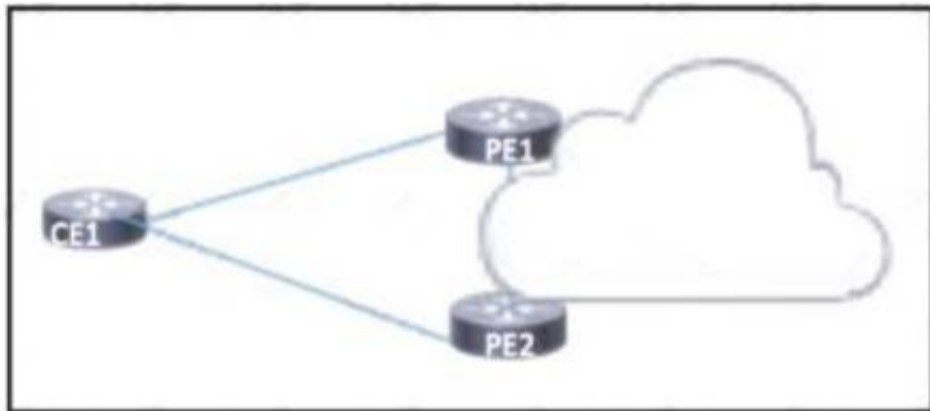
Which statement describes the effect of this configuration?

- 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 138**

Refer To the exhibit.



Which BGP attribute should be manipulated to have CE1 use PE1 as the primary path to the Internet?

- A. The weight attribute should be manipulated on PE1 on outbound routes advertised to CE1.
- B. The MED should be manipulated on CE1 on inbound routes from PE1.
- C. The local preference attribute should be manipulated on PE2 on inbound routes advertised to CE1.
- D. The origin of all routes should be modified on each router on inbound and outbound routes advertised to CE1.

**Answer: B**

**NEW QUESTION 139**

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 140**

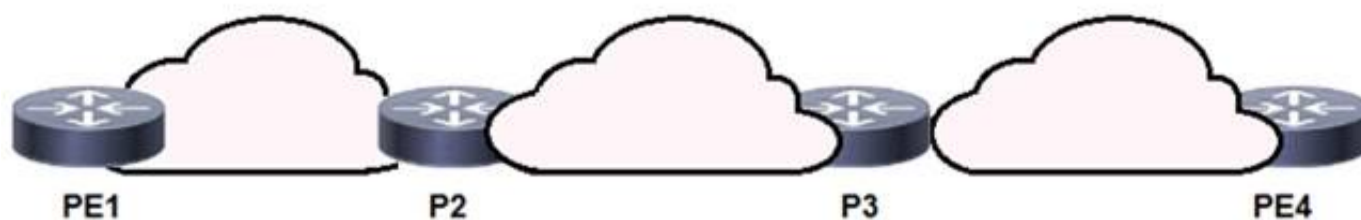
Egress PE NAT is being used via a single centralized router to provide Internet access to L3VPN customers. Which description of the NAT operation is true?

- 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 141

Refer to the exhibit:



P3 and PE4 are at the edge of the service provider core and serve as ABR routers. Aggregation areas are on either side of the core. Which statement about the architecture is true?

- A. If each area is running its own IGP
- B. the ABR routers must redistribute the IGP routing table into BGP
- C. To support seamless MPLS
- D. TDP must be used as the label protocol
- E. If each area is running its own IGP
- F. BGP must provide an end-to-end MPLS LSP
- G. To support seamless MPLS, the BGP route reflector feature must be disabled

Answer: C

#### NEW QUESTION 144

Refer to the exhibit.

```
router bgp 65515
  bgp router-id 192.168.1.1
  no bgp default ipv4-unicast
  bgp log-neighbor-changes
  neighbor 192.168.1.2 remote-as 65515
  neighbor 192.168.2.2 remote-as 65515
```

A network engineer is configuring a new router for iBGP to improve the capacity of a growing network. The router must establish an iBGP peer relationship with its neighbor. The underlay network is already configured with the correct IP addresses. Which step should the engineer apply to complete this task?

- A. Implement multicast routing on the router to support BGP hellos.
- B. Configure the AS number for the router to share with its iBGP peers.
- C. Configure the new router as an iBGP route reflector to support multiple iBGP peers.
- D. Activate the BGP peers under the correct address family on the router.

Answer: C

#### NEW QUESTION 146

Which two features describe TI-LFA? (Choose two.)

- A. TI-LFA uses PQ or P and Q nodes on the post-convergence path to compute the backup path.
- B. Post-convergence, TI-LFA considers the next-hop neighbor to calculate the backup repair path.
- C. TI-LFA works with point of local repair when the PQ node supports only LDP capability.
- D. Unlike RLFA, TI-LFA works without the PQ node and provides double segment failure protection.
- E. TI-LFA leverages the post-convergence path that carries data traffic after a failure.

Answer: AE

#### NEW QUESTION 148

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 152

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 153

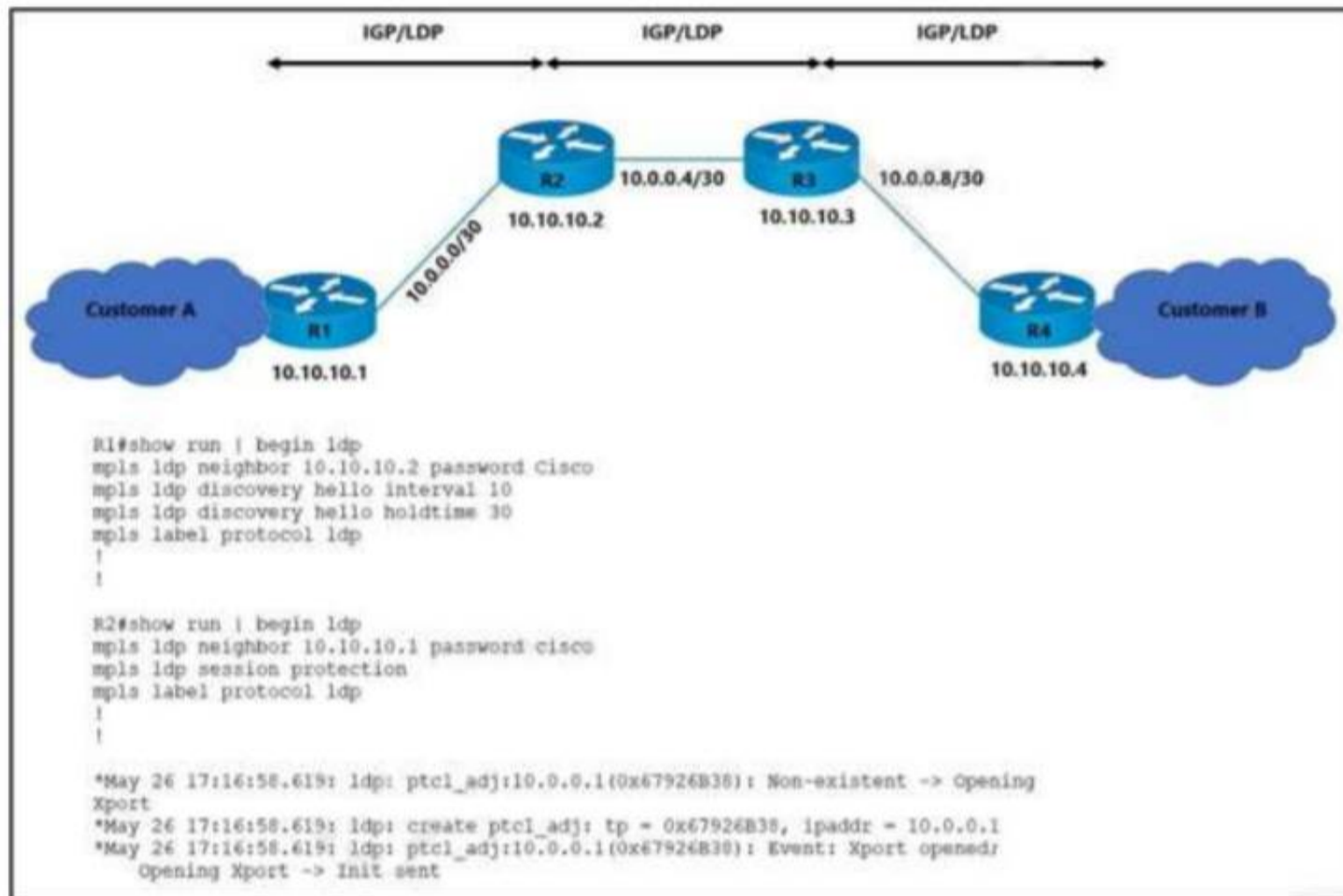
How is a telemetry session established for data analytics?

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

Answer: A

#### NEW QUESTION 156

Refer to the exhibit.



The operations team is implementing an LDP-based configuration in the service provider core network with these requirements: R1 must establish LDP peering with the loopback IP address as its Router-ID. Session protection must be enabled on R2. How must the team update the network configuration to successfully enable LDP peering between R1 and R2?

- A. Change the LDP password on R2 to Cisco.
- B. Configure mpls ldp router-id loopback0 on R1 and R2.
- C. Configure LDP session protection on R1.
- D. Change the discover hello hold time and interval to their default values.

Answer: B

#### NEW QUESTION 157

Which benefit is provided by FRR?

- A. It provides fast forwarding path failure detection times for all media.
- B. It provides rapid failure detection between forwarding engines.
- C. It provides performance data for the service provider network.
- D. It protects Cisco MPLS TE LSPs from link and node failures.

Answer: D

#### NEW QUESTION 158

After implement MPLS protocol for multiple VRFs on a single Cisco device, the engineer notices all VRFs on the router still do not have LDP session protection feature enabled. Which configuration must the engineer apply to enable the LDP session protection feature FOR LDP neighbors within each VRF?

- A. Configure LDP session protection globally on the device only.
- B. Configure LDP session protection globally on the device and on each neighbor that requires session protection.
- C. Configure LDP session authentication on the device to enable LDP session protection on each VRF automatically.
- D. Configure LDP session protection within the individual VRFs.

Answer: D

#### NEW QUESTION 159

A remote operation center is deploying a set of I-BGP and E-BGP connections for multiple IOS-XR platforms using the same template. The I-BGP sessions

exchange prefixes with no apparent issues, but the E-BGP sessions do not exchange routes. What causes this issue?

- A. A PASS ALL policy has not been implemented for the I-BGP neighbors.
- B. The next-hop-self command is not implemented on both E-BGP neighbors.
- C. The E-BGP neighbors are not allowed to exchange information due to the customer platform's default policy.
- D. The I-BGP neighbors are mistyped and HELLO packets cannot be exchanged successfully between routers.

**Answer: C**

**Explanation:**

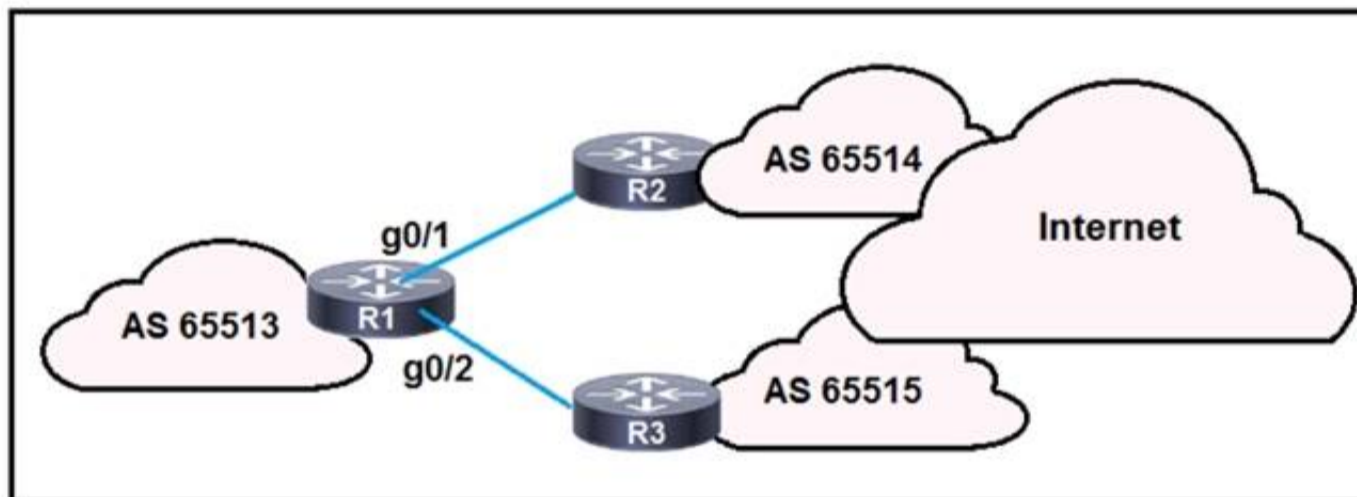
## Routing Policy Enforcement

External BGP (eBGP) neighbors must have an inbound and outbound policy configured. If no policy is configured, no routes are accepted from the neighbor, nor are any routes advertised to it. This added security measure ensures that routes cannot accidentally be accepted or advertised in the case of a configuration omission error.

<https://www.cisco.com/c/en/us/td/docs/routers/asr9000/software/asr9k-r6-2/routing/configuration/guide/b-routin>

### NEW QUESTION 161

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 163

After a possible security breach, the network administrator of an ISP must verify the times that several different users logged into the network. Which command must the administrator enter to display the login time of each user that activated a session?

- A. show netconf-yang sessions detail
- B. show netconf-yang datastores
- C. show platform software yang-management process
- D. show netconf-yang sessions

**Answer: A**

**Explanation:**

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/167/b\\_167\\_programmability\\_cg/configur](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/167/b_167_programmability_cg/configur)

```
Device# show netconf-yang sessions detail
```

```
R: Global-lock on running datastore
C: Global-lock on candidate datastore
S: Global-lock on startup datastore
```

```
Number of sessions      : 1

session-id              : 19
transport               : netconf-ssh
username               : admin
source-host             : 2001:db8::1
login-time              : 2018-10-26T12:37:22+00:00
in-rpcs                 : 0
in-bad-rpcs             : 0
out-rpc-errors          : 0
out-notifications       : 0
global-lock             : None
```

**NEW QUESTION 166**

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 170**

A customer of an ISP requests support to setup a BGP routing policy. Which BGP attribute should be configured to choose specific BGP speakers as preferred exit points for the customer AS?

- A. highest local preference outbound
- B. lowest local preference inbound
- C. highest local preference inbound
- D. lowest multi-exit discriminator

**Answer:** A

**NEW QUESTION 172**

Which function does RSVP perform in a Cisco MPLS TE environment?

- A. It establishes targeted LDP sessions between neighbors that are directly connected.
- B. It signals to LDP protocol along the path that a Cisco MPLS TE will be configured.
- C. It reserves bandwidth for LDP sessions between routers participating in a Cisco MPLS TE.
- D. It reserves the bandwidth along the path between the head-end and tail-end router.

**Answer:** D

**NEW QUESTION 176**

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 181**

What is a role of NSO?

- A. It automates the deployment of access points with its built-in wireless LAN controller.
- B. It manages WAN infrastructure using a virtual switch.
- C. It provides full lifecycle management of a device.
- D. It resides on a hypervisor that runs the Windows OS.

**Answer: C**

#### NEW QUESTION 185

After troubleshooting multiple outages on the network due to repeated configuration errors, the network architect asked an engineer to enable NETCONF to facilitate future configurations. The configuration must enable syslog messaging to record NETCONF notifications from each of the numerous devices on the network. Which configuration must the engineer apply?

- A. username cisco test taker privilege 15 password 0 cisco test aaa new-modelaaa authorization exec default local snmp-server community cisco test RWnetconf-yang cisco-ia snmp-community-string ciscotest logging history warnings
- B. username cisco test taker privilege 15 password 0 ciscotest aaa new-modelaaa authorization exec default local snmp-server community ciscotest RW netconf-yang ciscologging history critical
- C. netconf-yangusername ciscotesttaker privilege 15 password 0 ciscotest aaa new-modelaaa authorization exec default local snmp-server community ciscotest RWnetconf-yang cisco-ia snmp-community-string ciscotest logging history debugging
- D. netconf-yangusername ciscotesttaker privilege 15 password 0 ciscotest snmp-server community ciscotest RWnetconf-yang cisco-ia snmp-community-string ciscotestlogging history informational

**Answer: C**

#### Explanation:

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b\\_166\\_programmability\\_cg/ne](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b_166_programmability_cg/ne) ➤ <https://tools.ietf.org/html/rfc6241>

#### NEW QUESTION 190

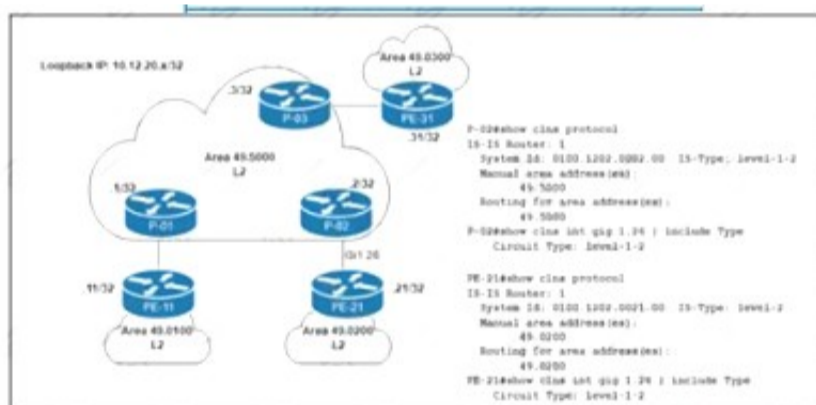
A network architect decides to expand the scope of the multicast deployment within the company network the network is already using PIM-SM with a static RP that supports a high-bandwidth. video-based training application that s heavily used by the employees, but excessive bandwidth usage is a concern How must the engineer update the network to provide a more efficient multicast implementation'?

- A. Configure IGMP to manage the multicast hosts on each LAN
- B. implement BSR to support dynamic RP notification.
- C. Deploy ICMP to Improve multicast reachability across the network using static RP.
- D. Implement STP to improve switching performance for multicast data.

**Answer: B**

#### NEW QUESTION 192

Refer to me exhibit.



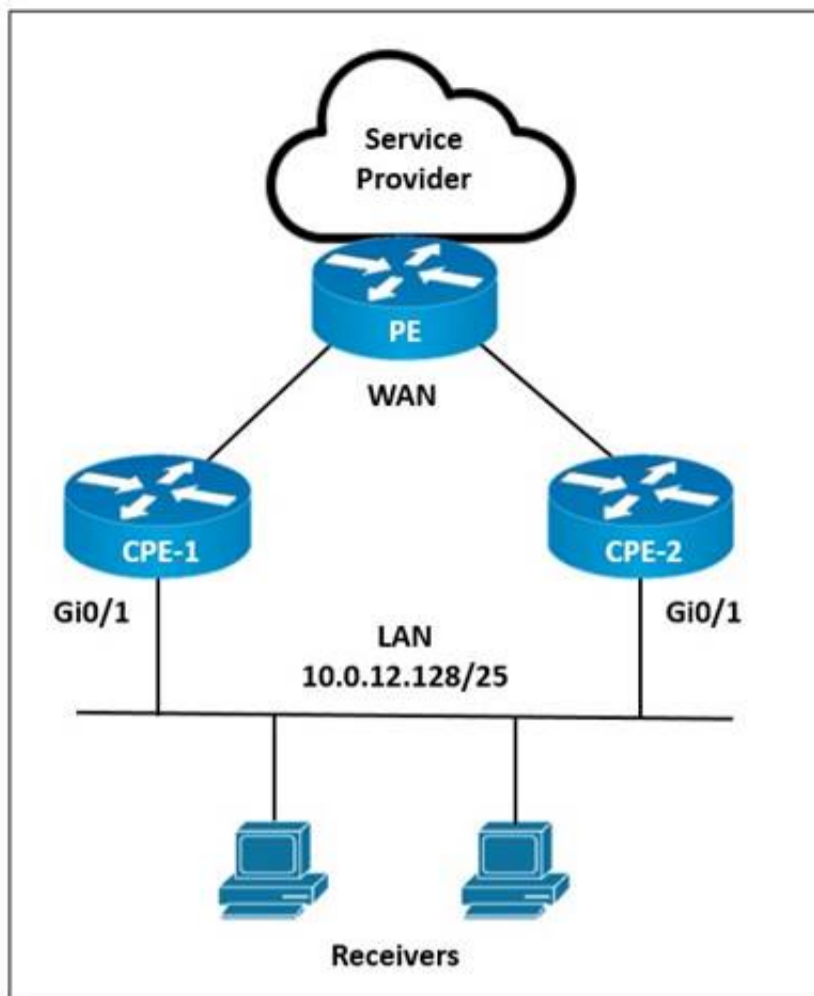
Refer to the exhibit. A network engineer notices PE-21 convergence degradation due to the growing LSDB size of Level 2 areas in the network. The engineer decides to migrate router PE-21 from an inter-area design to an intra-area implementation. Inter-area routing must be accomplished via an ATT-bit set 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 1no net 49.0200net 49.5000is-type level-1-2 end
- B. configure terminal router isis 1net 49.5000.0100.1202.0021.00is-type level-1-2 end
- C. configure terminal router isis 1net 49.5000.0100.1222.0022.00is-type level-1 end
- D. configure terminal router isis 1no net 49.0200.0100.1202.0021.00net 49.5000.0100.1202.0021.00is-type level-1 end

**Answer: D**

#### NEW QUESTION 194

Refer to the exhibit.



A network engineer is implementing multicast services on CPE-1 and CPE-2. CPE-1 must be configured as the preferred IGMP querier for the LAN segment. PIM-SM must be implemented on the LAN interfaces with an IGMP version that supports (\*, G) joins only. Which configurations must the engineer implement on CPE-1 and CPE-2?

- A. On CPE-1:interface GigabitEthernet0/1ip address 10.0.12.129 255.255.255.128ip pim sparse-mode ip igmp version 2 On CPE-2:interface GigabitEthernet0/1ip address 10.0.12.130 255.255.255.128ip pim sparse-mode ip igmp version 2
- B. On CPE-1:interface GigabitEthernet0/1ip address 10.0.12.130 255.255.255.128ip pim sparse-mode ip igmp version 3 On CPE-2:interface GigabitEthernet0/1ip address 10.0.12.129 255.255.255.128ip pim sparse-mode ip igmp version 3
- C. On CPE-1:interface GigabitEthernet0/1ip address 10.0.12.130 255.255.255.128ip pim sparse-mode ip igmp version 2 On CPE-2:interface GigabitEthernet0/1ip address 10.0.12.129 255.255.255.128ip pim sparse-mode ip igmp version 2
- D. On CPE-1:interface GigabitEthernet0/1ip address 10.0.12.129 255.255.255.128ip pim sparse-mode ip igmp version 3 On CPE-2:interface GigabitEthernet0/1ip address 10.0.12.130 255.255.255.128ip pim sparse-mode ip igmp version 3

**Answer: A**

#### NEW QUESTION 199

The engineering team at a large ISP has been alerted a customer network is experiencing high traffic congestion. After a discussion between the ISP and technical personnel at the customer site, the team agrees that traffic to the customer network that exceeds a specific threshold will be dropped. Which task must the engineer perform on the network to implement traffic policing changes?

- A. Configure RSVP to reserve bandwidth on all interfaces when a path is congested.
- B. Enable Cisco Discovery Protocol on the interface sending the packets.
- C. Enable Cisco Express Forwarding on the interfaces sending and receiving the packets.
- D. Set IP precedence values to take effect when traffic exceeds a given threshold.

**Answer: D**

#### NEW QUESTION 203

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 205

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 209**

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 214**

Refer to the exhibit.

```
R10(config)#interface G0/1  
R10(config-if)#ip address 172.16.0.1 255.255.255.0  
R10(config-if)#ip ospf 1 area 0  
R10(config-if)#ip ospf multi-area 10  
R10(config-if)#ip ospf multi-area 10 cost 5
```

A network engineer is implementing OSPF multiarea. Which command on interface G0/1 resolves adjacency issues in the new area?

- A. ip ospf network broadcast
- B. ip ospf network point-to-point
- C. ip ospf network non-broadcast
- D. ip ospf network point-to-multipoint

**Answer:** B

**NEW QUESTION 219**

Refer to the exhibit.

```
R1  
interface gigabitethernet1/0/0  
  ipv6 enable ipv6 ospf 1 area 1  
interface gigabitethernet2/0/0  
  ipv6 enable ipv6 ospf 1 area 2
```

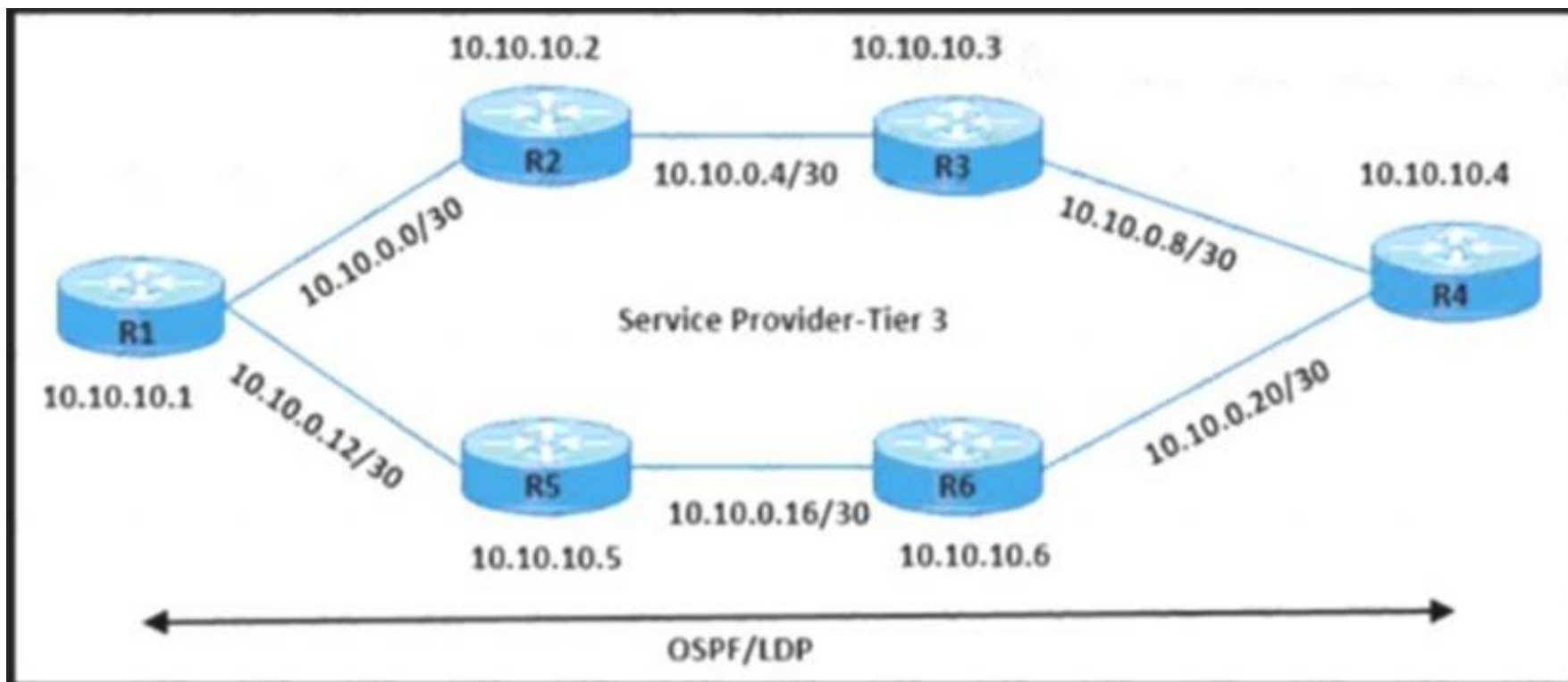
An engineer implemented OSPF neighbor relationship on an IOS device. Which configuration must be applied to get the OR/BOR election removed from interfaces running OSPF?

- A. ip ospf network broadcast on interfaces running OSPF
- B. ip ospf network point-to-point on interfaces running OSPF
- C. ip ospf network multipoint-point on interfaces running OSPF
- D. ip ospf network non-broadcast on n:erfaces running OSPF

**Answer:** B

**NEW QUESTION 222**

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 223

An engineer is implementing MPLS to monitor within the MPLS domain. Which must the engineer perform to prevent packets from being forwarded beyond the service provider domain when the LSP is down?

- ☒ Disable IP redirects only on outbound interfaces.
- ☐ Implement the destination address for the LSP echo request packet in the 127 x y z/8 network.
- ☐ Disable IP redirects on all ingress interfaces.
- ☐ Configure a private IP address as the destination address of the headend router of Cisco MPLS TE.

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

**Answer: B**

#### NEW QUESTION 226

What is a characteristic of MVPN?

- A. It bypasses the use of MPLS in the service provider core and transmits packets using IP only.
- B. It uses pseudowires to route unicast and broadcast traffic over either a service provider MPLS or IP core.
- C. It allows VRF traffic to use the service provider MPLS VPN to route multicast traffic.
- D. It creates GRE tunnels to route multicast traffic over a service provider IP core.

**Answer: C**

#### NEW QUESTION 227

Refer to the exhibit.



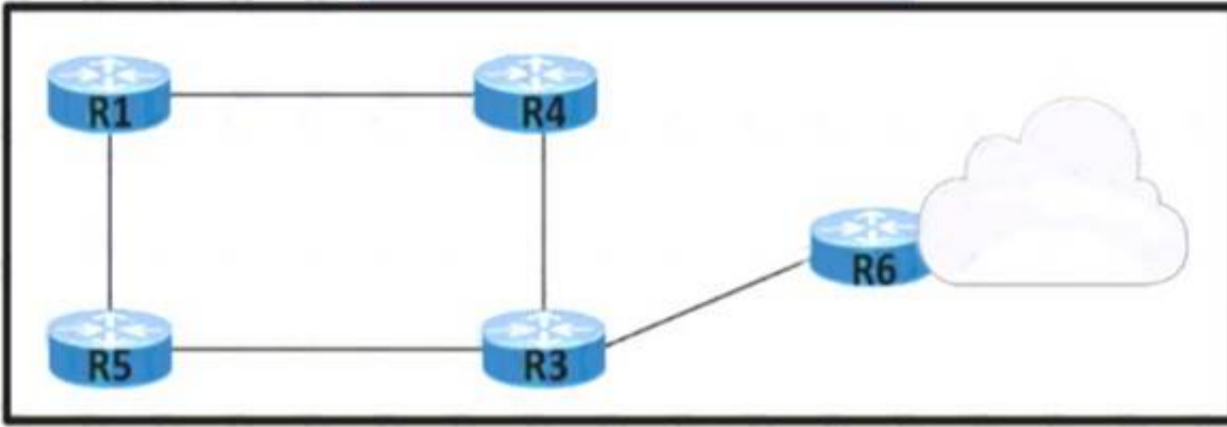
A network operator working for a private telecommunication company with an employee id: 7138: 13:414 just added new users to the network, which resides in VLANs connected to routers R1 and R4. The engineer now must configure the network so that routers R1 and R4 share routes to the VLANs, but routers R2 and R3 are prevented from including the routes in their routing tables. Which configuration must the engineer apply to R4 to begin implementing the request?

- A. `pseudowire -class ciscotest encapsulation mpls interface gigabitethernet 1/0/1 connect neighbor 192.168.1.1 101 pw-class cisco`
- B. `pseudowire -class ciscotest encapsulation mpls interface gigabitethernet 1/0/1 xconnect 192.168.1.1 101 pw-class ciscotest`
- C. `pseudowire-class ciscotest encapsulation mpls service-policy output ciscotest`
- D. `interface serial 2/0/0 frame-relay encapsulation ip address 192.168.1.4 255.255.255.0 service-policy output ciscotest`

Answer: B

#### NEW QUESTION 231

Refer to the exhibit. An organization's network recently experienced several significant outages due to device failures. The network administrator just moved the network devices to a new central data center, and packets are switched using labels. The administrator is now implementing NSF on the network to reduce potential risk factors in the event of another outage. Which task must the administrator perform on each router as part of the process?



- A. Remove route filtering to speed repopulation of the link-state database
- B. Copy the router's existing state information and share the file with its peers to enable BGP soft resets
- C. Implement MPLS to forward packets while the RIB updates after a failover.
- D. Implement Graceful Restart to mitigate the delay in MPLS LDP synchronization when the IGP starts up.

Answer: D

#### NEW QUESTION 236

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>
```

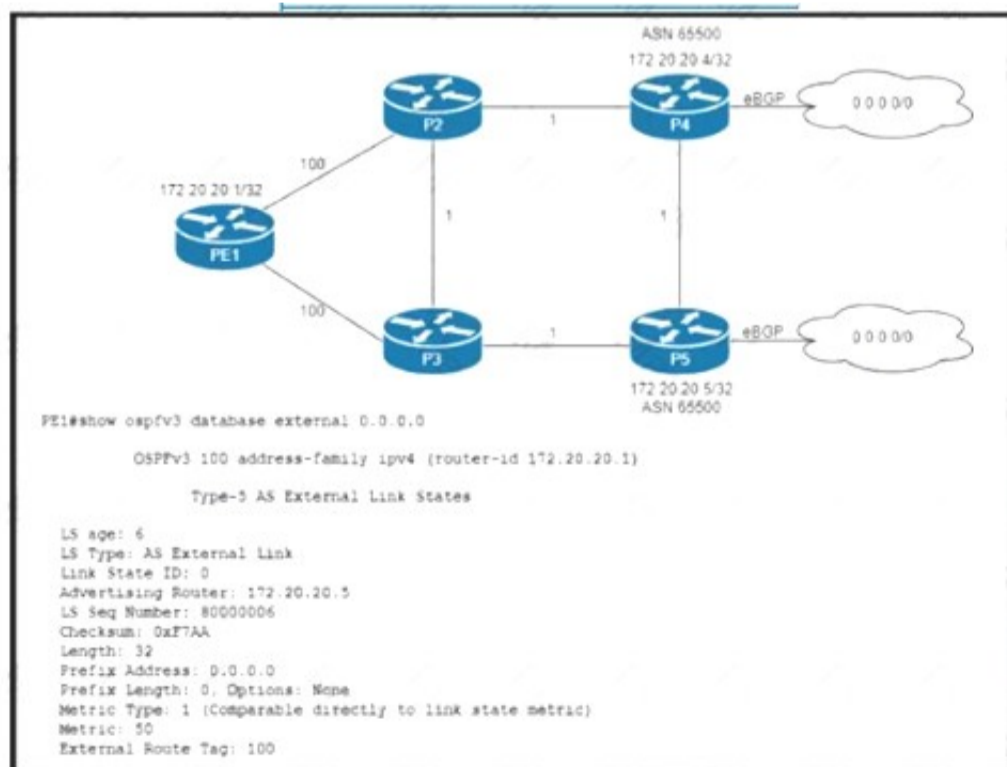
What does this REST API script configure?

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

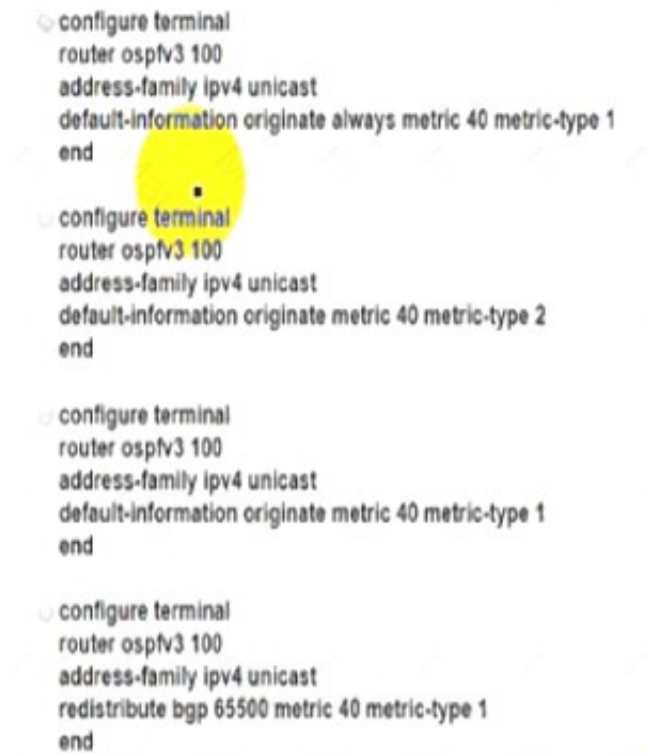
Answer: D

#### NEW QUESTION 239

Refer to the exhibit.



Router P4 and P5 receive the 0.0.0.0/0 route from the ISP via eBGP peering P4 is the primary Internet gateway router, and P5 is its Backup. P5 is already advertising a default route into OSPF domain. Which configuration must be applied to P4 so that advertises a default route into OSPF and becomes the primary internet gateway for the network?



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

**Answer: C**

#### NEW QUESTION 243

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 1 issues In data centers that span more than one city block.
- C. It is used to deploy IPv6 configuration is networks That are dual slack.
- D. It is used as a network automation provisioning and configuration tool.

**Answer: D**

#### NEW QUESTION 244

How does Inter-AS Option-A function when two PE routers in different autonomous systems are directly connected?

- A. The two routers share all Inter-AS VPNv4 routes and redistribute routes within an IBGP session to provide end-to-end reach.
- B. The two routers establish an MP-EBGP session to share their customers' respective VPNv4 routes.
- C. The two routers treat one another as CE routers and advertise unlabeled IPv4 routes through an EBGP session.
- D. The two routers share VPNv4 routes over a multihop EBGP session and set up an Inter-AS tunnel using one another's label.

**Answer: C**

#### NEW QUESTION 248

Which CLI mode must be used to configure the BGP keychain in Cisco IOS XR software?

- A. global configuration mode
- B. routing configuration mode
- C. BGP neighbor configuration
- D. mode BGP address-family configuration mode

**Answer: A**

#### NEW QUESTION 250

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 251

Refer to the exhibit.

```
R1#show ip bgp
BGP table version is 3, local router ID is 50.50.50.1
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
               r RIB-failure, S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete

   Network        Next Hop           Metric LocPrf Weight Path
*> 22.22.22.22/32  50.50.50.2              0             100 500 ?
*                  40.40.40.2              0            200   0 400 ?
*                  30.30.30.2              0             0 300 300 ?
*                  20.20.20.2              0             0 200 ?
R1#show ip bgp 22.22.22.22
BGP routing table entry for 22.22.22.22/32, version 3
Paths: (4 available, best #1, table Default-IP-Routing-Table)
Flag: 0x820
Advertised to update-groups:
  1
 500
   50.50.50.2 from 50.50.50.2 (50.50.50.2)
     Origin incomplete, metric 0, localpref 100, weight 100, valid, external, best
 400
   40.40.40.2 from 40.40.40.2 (40.40.40.2)
     Origin incomplete, metric 0, localpref 200, valid, external
300 300
   30.30.30.2 from 30.30.30.2 (30.30.30.2)
     Origin incomplete, metric 0, localpref 100, valid, external
200
   20.20.20.2 from 20.20.20.2 (20.20.20.2)
     Origin incomplete, metric 0, localpref 100, valid, external
```

An engineer wants to determine which paths are best, second best, third best, and fourth best. Drag and drop the peer addresses on the left to the corresponding BGP best-path selection order on the right.

20.20.20.2	Best Path
30.30.30.2	2nd Best Path
40.40.40.2	3rd Best Path
50.50.50.2	4th Best Path

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Best – 50.50.50.2  
2nd Best – 40.40.40.2

3rd Best – 20.20.20.2  
44th Best – 30.30.30.2

#### NEW QUESTION 254

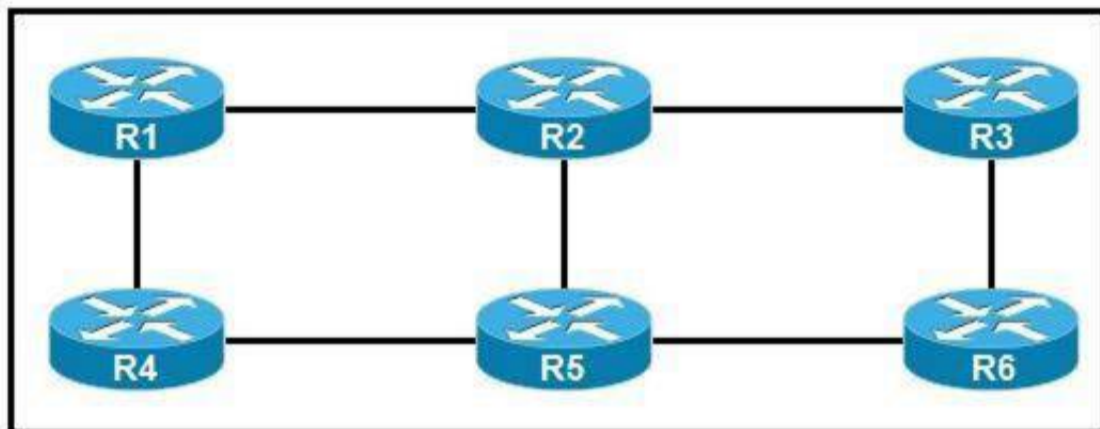
A network engineer must enable the helper router to terminate the OSPF graceful restart process if it detects any changes in the LSA. Which command enables this feature?

- A. nsf ietf helper disable
- B. nsf cisco enforce global
- C. nsf ietf helper strict-lsa-checking
- D. nsf Cisco helper disable

**Answer: C**

#### NEW QUESTION 255

Refer to the exhibit:



You are configuring an administrative domain implement so that devices can dynamically learn the RP?

- A. SSM
- B. BID1R-PIM
- C. BSR
- D. Auto-RP

**Answer: C**

#### NEW QUESTION 260

Refer to the exhibit:

```
R1:
!
interface FastEthernet0/0
 ip address 10.1.12.1 255.255.255.0
 duplex full
!
router ospf 1
 network 0.0.0.0 255.255.255.255 area 0
R2:
!
interface FastEthernet0/0
 ip address 10.1.12.2 255.255.255.252
 duplex full
!
router ospf 1
 network 0.0.0.0 255.255.255.255 area 0
```

R1 and R2 are directly connected with Fast Ethernet interfaces and have the above configuration applied OSPF adjacency is not formed. When the debug ip ospf hello command is issued on R1. these log messages are seen.

```
*Mar 6 21:57:33.051: OSPF-1 HELLO Fa0/0: Mismatched hello parameters from 10.1.12.2
*Mar 6 21:57:33.051: OSPF-1 HELLO Fa0/0: Dead R 40 C 40, Hello R 10 C 10 Mask R
255.255.255.252 C 255.255.255.0
```

Which command can be configured on routers R1 and R2 on f0/0 interfaces to form OSPF adjacency?

- A. ip ospf network non-broadcast
- B. ip ospf network point-to- multipoint non-broadcast
- C. ip ospf network point-to-point
- D. ip ospf network broadcast

**Answer: C**

#### NEW QUESTION 262

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 267

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 272

What are the two uses of the YANG data modeling language? (Choose two.)

- A. It is used to access a device by HTTP.
- B. It is used to model the configuration used by NETCONF operations.
- C. It is used to shape state data of network elements.
- D. It is used to replace RESTCONF as a mechanism to install and manipulate configuration.
- E. It is used to replace the OSI model for troubleshooting.

**Answer: BC**

#### NEW QUESTION 274

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 confidentiality. 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 279

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 281

Refer to the exhibit.

```
!  
configure terminal  
ip cef distributed  
  
interface gigabitethernet 1/0  
ip verify unicast reverse-path 12  
  
!
```

Which show command should be implemented to display per-interface statistics about uRPF drops and suppressed drops?

- A. show ip traffic
- B. show ip interface
- C. show cef interface
- D. show ip interface brief

**Answer:** B

#### NEW QUESTION 284

Refer to the exhibit:

```
PE-A#show ip bgp vpnv4 vrf Customer-A neighbors 10.10.10.2 routes  
BGP table version is 13148019, local router ID is 10.10.10.10  
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,  
               r RIB-failure, S Stale, m multipath, b backup-path, f RT-Filter,  
               x best-external, a additional-path, c RIB-compressed,  
Origin codes: i - IGP, e - EGP, ? - incomplete  
RPKI validation codes: V valid, I invalid, N Not found  
  
      Network          Next Hop           Metric LocPrf Weight Path  
Route Distinguisher: 65000:1111 (default for vrf Customer-A)  
*>  192.168.0.0/19     10.10.10.2             0           0 4282 65001 ?  
*>  192.168.0.0/17     10.10.10.2             0           0 4282 65001 ?  
*>  192.168.0.0/16     10.10.10.2             0           0 4282 65001 ?  
  
Total number of prefixes 5  
  
PE-A#config t  
Enter configuration commands, one per line. End with CNTL/Z.  
PE-A(config)#ip prefix-list ALLOW permit 192.168.0.0/16 ge 17 le 19  
PE-A(config)#router bgp 65000  
PE-A(config-router)#address-family ipv4 vrf Customer-A  
PE-A(config-router-af)#neighbor 10.10.10.2 prefix-list ALLOW in
```

Which three outcomes occur if the prefix list is added to the neighbor? (Choose three)

- A. 192.168 0.0/19 is denied
- B. 192.168 0.0/17 is denied.
- C. 192.168 0.0/17 is permitted
- D. 192.168.0.0/16 is denied
- E. 192.168 0.0/16 is permitted
- F. 192.168 0.0/19 is permitted

**Answer:** CDF

#### NEW QUESTION 287

Refer to the exhibit:

snmp-server host 192.168.1.1 version 2c public

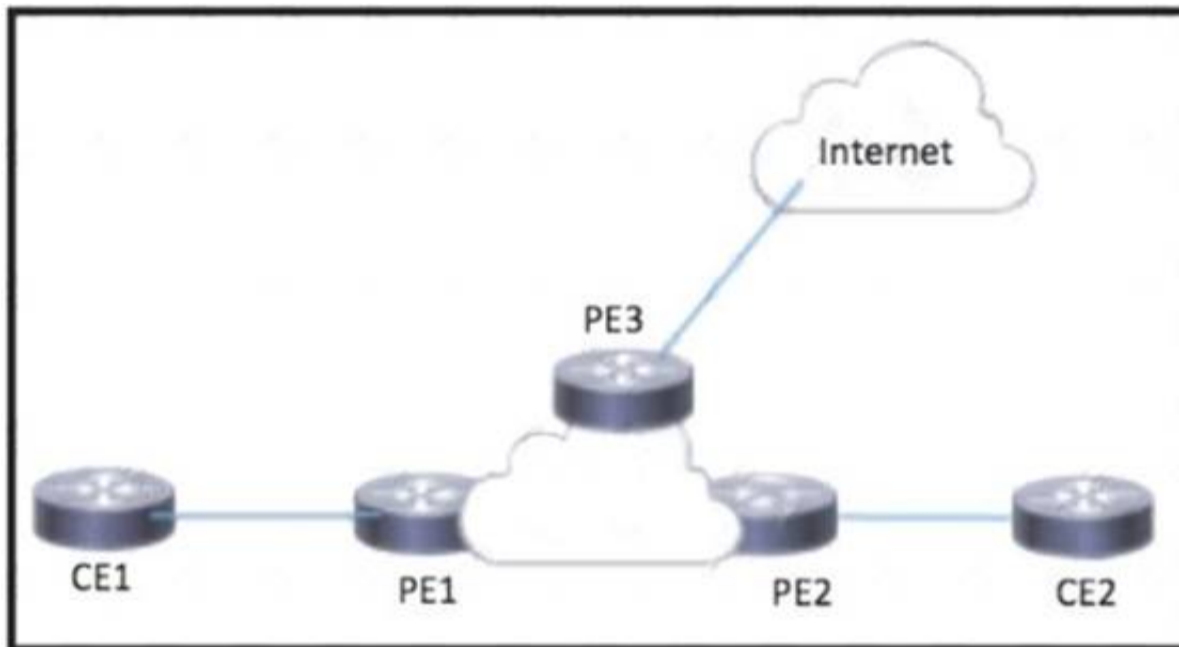
A network administrator wants to enhance the security for SNMP for this configuration. Which action can the network administrator implement?

- A. Re-configure to use SNMPv2 with MD5 authentication
- B. Add a community string to the existing entry
- C. Re-configure to use SNMPv3.
- D. Maintain the configuration but switch to an encrypted password for device access through SSH

**Answer: C**

#### NEW QUESTION 291

Refer to the exhibit.



CE1 and CE2 require connectivity to the internet through the ISP connected to PE3 What should an engineer configure to complete this task?

- A. PE2 must be configured to serve as a route reflector for PE3 routes learned from the internet
- B. PE2 then shares the routes with CE1 and CE2.
- C. CE1 and CE2 must be configured with a route distinguisher in the PE1 VRF that dynamically imports the route from the internet.
- D. CE1 and CE2 must be configured to use a static default route with a next-hop of PE3 to reach internet routes.
- E. PE1 must be configured with an import route target in the CE1 VRF that matches the export route target for the internet VRF on PE3.

**Answer: A**

#### NEW QUESTION 292

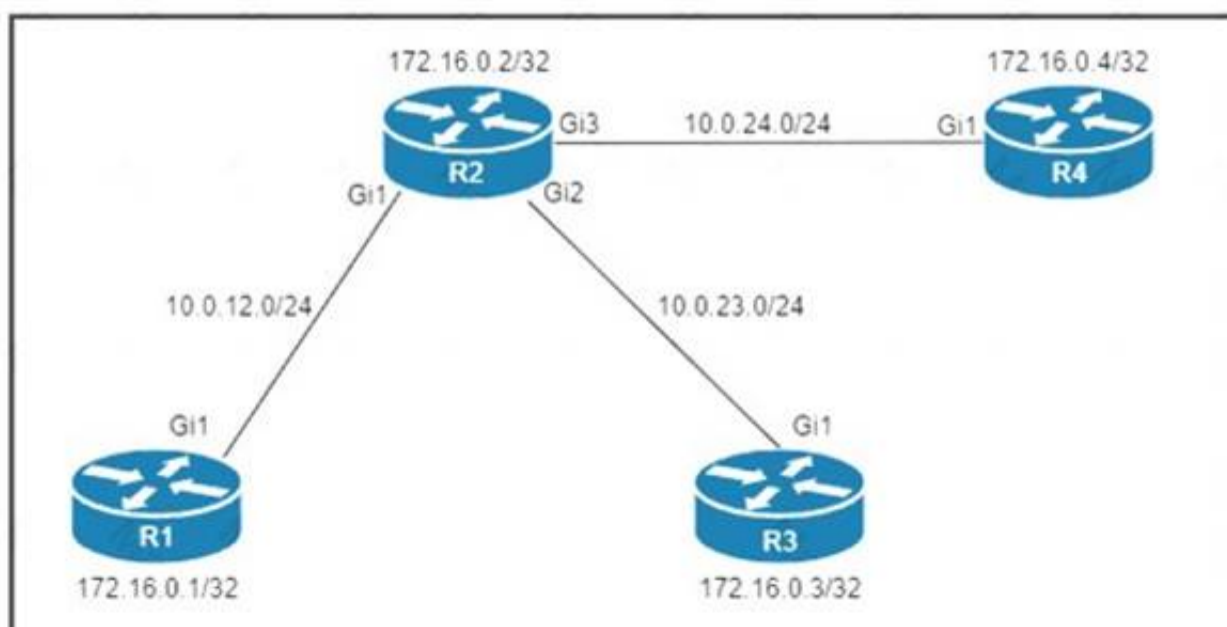
Which protocol is used for communication between the PCE and PCC?

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

**Answer: B**

#### NEW QUESTION 297

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 0.0.0.0/0 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

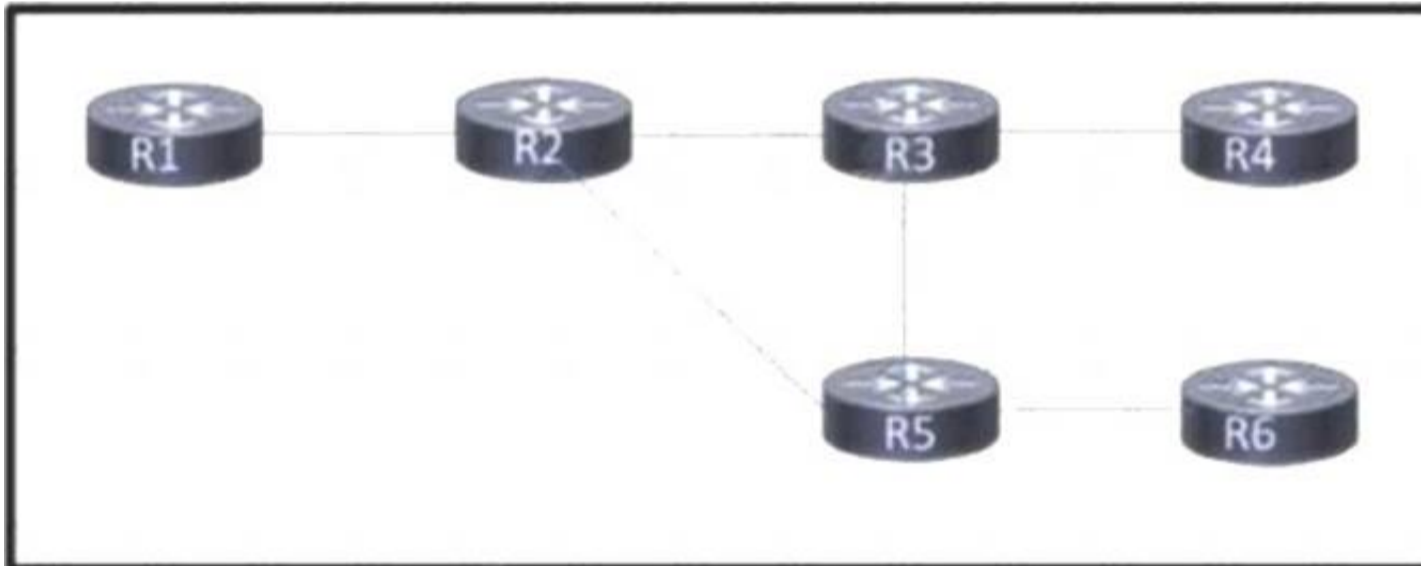
☐ config t  
mpls ldp label  
allocate global host-routes  
end

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

**Answer: A**

#### NEW QUESTION 298

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 301

Refer to the exhibit:

```

router bgp 1
network 192.168.1.2 mask 255.255.255.255
neighbor 192.168.1.1 remote-as 64512
neighbor 192.168.1.1 update-source Loopback0
neighbor 192.168.1.1 send-label
  
```

Which statement about the neighbor statements for 192.168.1.1 is true?

- A. The router must have TDP configured for the send-label command to operate
- B. The neighbor router receives at least four labels from this router
- C. The router sends BGP labels for its prefixes to this peer
- D. The router sends only a label for the prefix for Loopback0.

Answer: C

**NEW QUESTION 304**

Refer to the exhibit.

```
Control Plane Interface
Service policy CoPP-normal
Hardware Counters:
class-map: CoPP-normal (match-all)
Match: access-group 100
police :
6000 bps 1000 limit 1000 extended limit
Earl in slot 3 :
0 bytes
5 minute offered rate 0 bps
aggregate-forwarded 0 bytes action: transmit
exceeded 0 bytes action: drop
aggregate-forward 0 bps exceed 0 bps
Earl in slot 5 :
0 bytes
5 minute offered rate 0 bps
aggregate-forwarded 0 bytes action: transmit
exceeded 0 bytes action: drop
aggregate-forward 0 bps exceed 0 bps
```

Which show command shows statistics for the control plane policy and is used to troubleshoot?

- A. show control-plane CoPP
- B. show control-plane
- C. show policy-map control-plane
- D. show policy control-plane

Answer: C

**Explanation:**

```
Router# show policy-map control-plane
```

```
Control Plane
```

```
Service-policy input:TEST
```

```
Class-map:TEST (match-all)
```

```
20 packets, 11280 bytes
```

```
5 minute offered rate 0 bps, drop rate 0 bps
```

```
Match:access-group 101
```

```
police:
```

```
8000 bps, 1500 limit, 1500 extended limit
```

```
conformed 15 packets, 6210 bytes; action:transmit
```

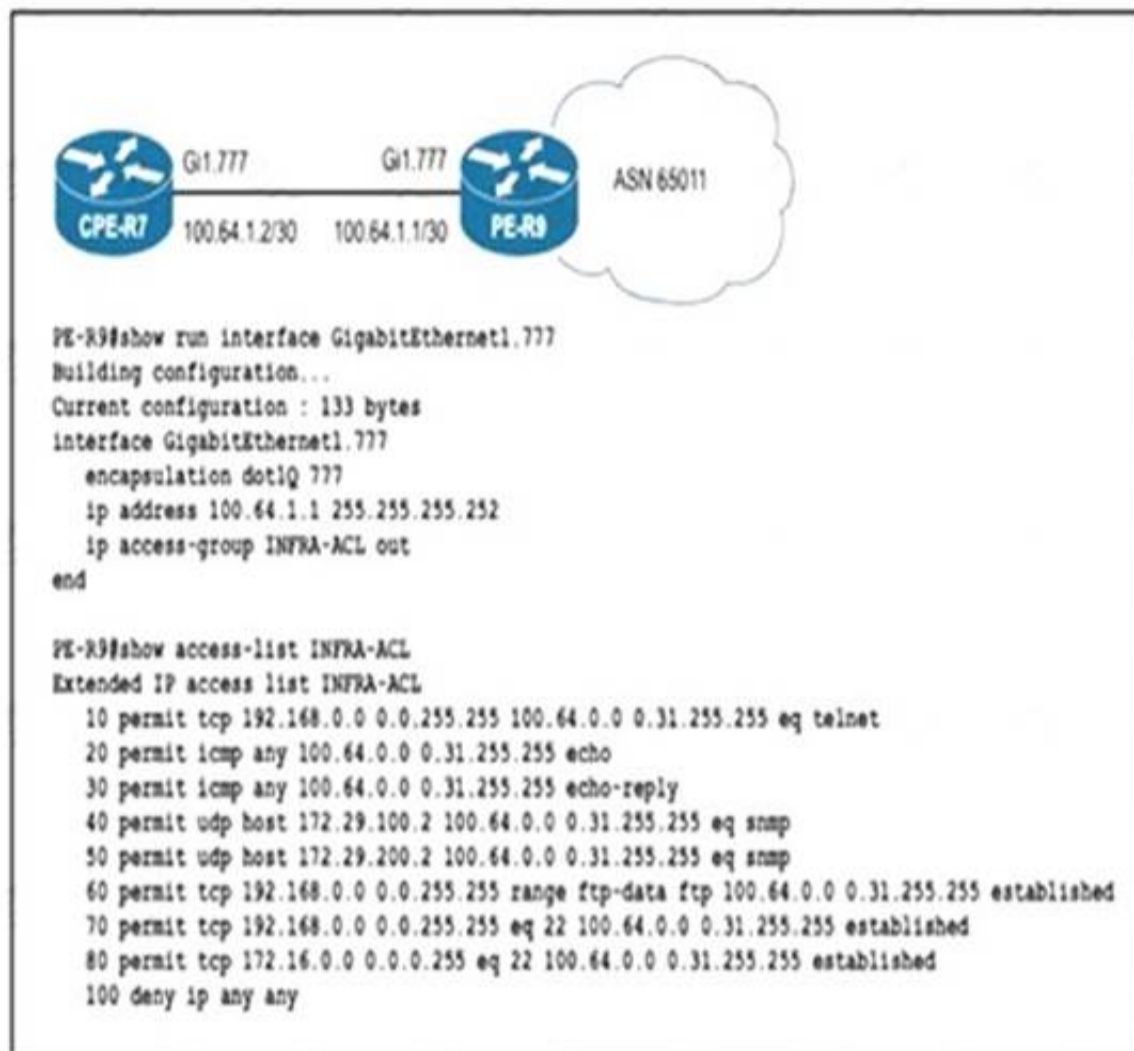
```
exceeded 5 packets, 5070 bytes; action:drop
```

```
violated 0 packets, 0 bytes; action:drop
```

```
conformed 0 bps, exceed 0 bps, violate 0 bps
```

**NEW QUESTION 307**

Refer to the exhibit.



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 312

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 316

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				

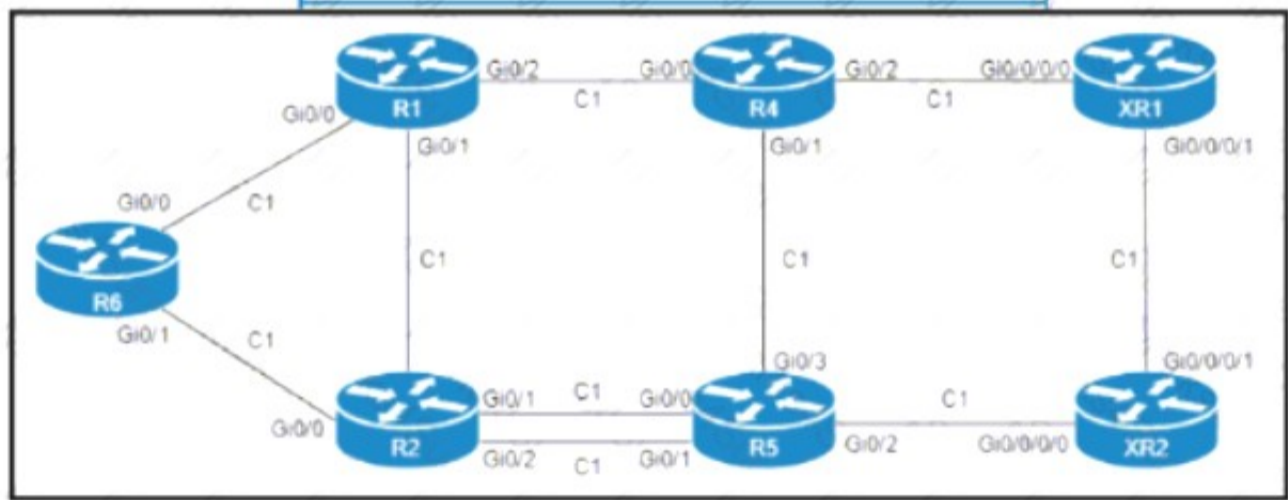
A network operator needs to shut down interface Gi0/0/0/2 for maintenance. What occurs to the interface states of Gi0/0/0/0 and Gi0/0/0/1?

- 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 317**

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 322**

Refer to the exhibit.

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

An engineer is configuring multiprotocol 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 327

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 329

A router is configured to perform MPLS LDP graceful restart.

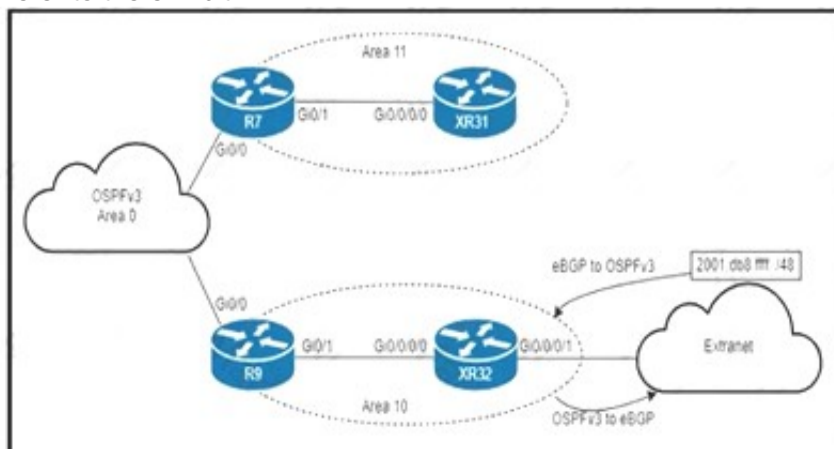
Which three steps are included when the RP sends an LDP initialization to a neighbor to establish an LDP session? (Choose three)

- A. Reconnect Timeout field
- B. Learn from Neighbor (N) flag, set to 1
- C. Graceful restart capability in OPEN message
- D. Recovery Time field
- E. Learn from Network (L.) flage, set to 1
- F. Type-9 LSA

**Answer:** ADE

#### NEW QUESTION 333

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 337

A network operator working for a private outsourcing company with an employee id: 4261:72:778 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 gigabitethernet0/1router(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 gigabitethernet0/1router(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
- C. router(config)# interface gigabitethernet0/1router(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 gigabitethernet0/1router(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

**Answer:** A

#### NEW QUESTION 341

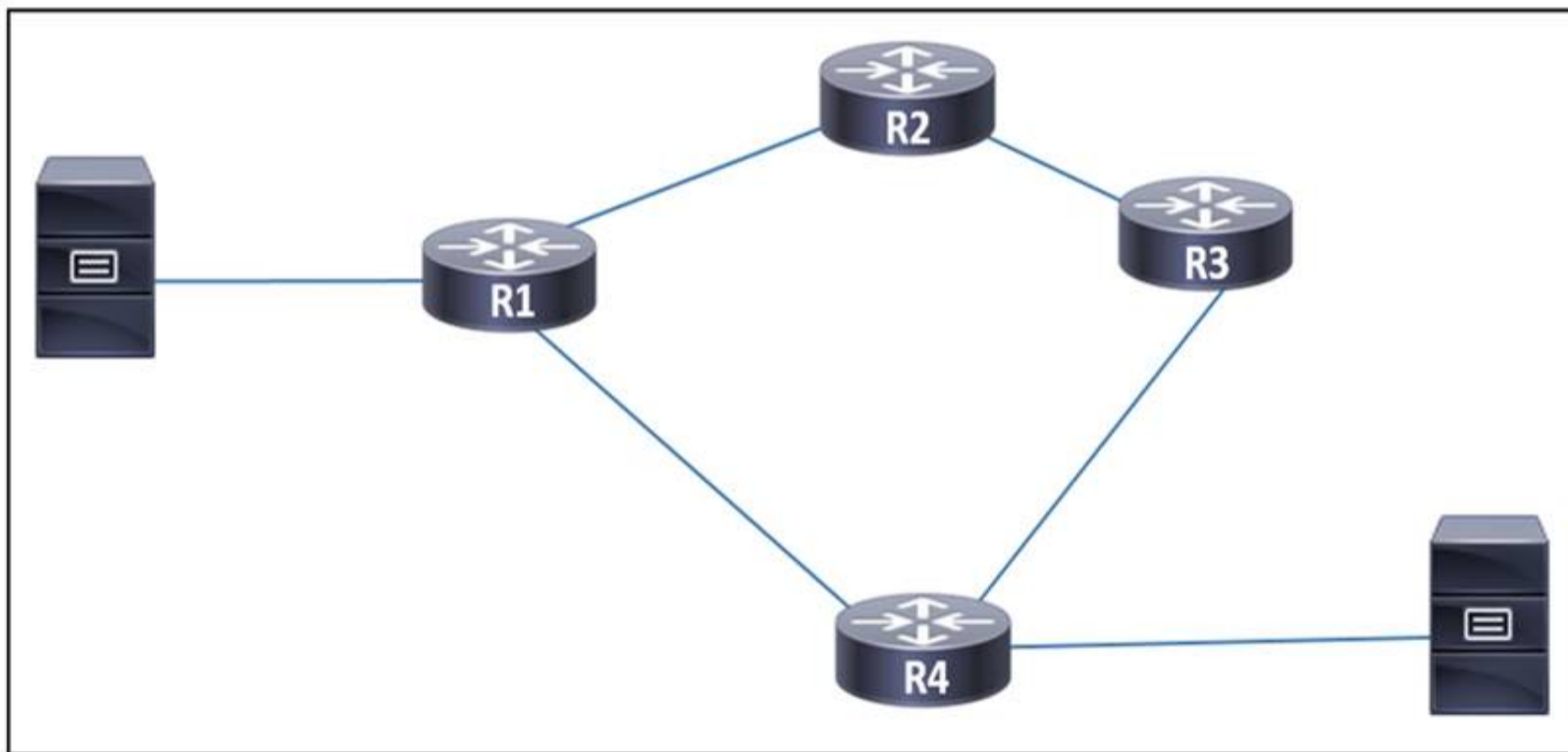
What is the function of Cisco NFV infrastructure platform?

- 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 345

Refer to the exhibit.



A network engineer observed congestion between routers R1 and R4, which are connected on a point-to-point link. Two servers that reside on networks on R1 and R4 generate heavy traffic between them with most traffic going from R4 to R1. To improve overall performance, the engineer wants to drop inbound packets that exceed a configured threshold, without disrupting traffic that passes from R4 to R3. Which action must the engineer take to resolve the issue?

- A. Implement traffic policing to drop packets that exceed the given threshold.
- B. Implement FIFO to queue excess traffic for transmission when bandwidth is available.
- C. Implement traffic shaping to drop excess packets.
- D. Implement a service policy in the outbound direction on each interface on the link to tag traffic exiting each router.

**Answer:** A

#### NEW QUESTION 349

An engineer a cisco MPLS tunnel to improve the streaming experience for the clients of a video -on-demand server. Which action must the engineer perform to

configure extended discovery to support the MPLS LDP session between the headend and tailend routers?

- ☒ Configure the interface bandwidth to handle TCP and UDP traffic between the LDP peers.
- ☐ Configure a Cisco MPLS TE tunnel on both ends of the session.
- ☐ Configure an access list on the interface to permit TCP and UDP traffic.
- ☐ Configure a targeted neighbor session.

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

**Answer: D**

#### NEW QUESTION 352

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 356

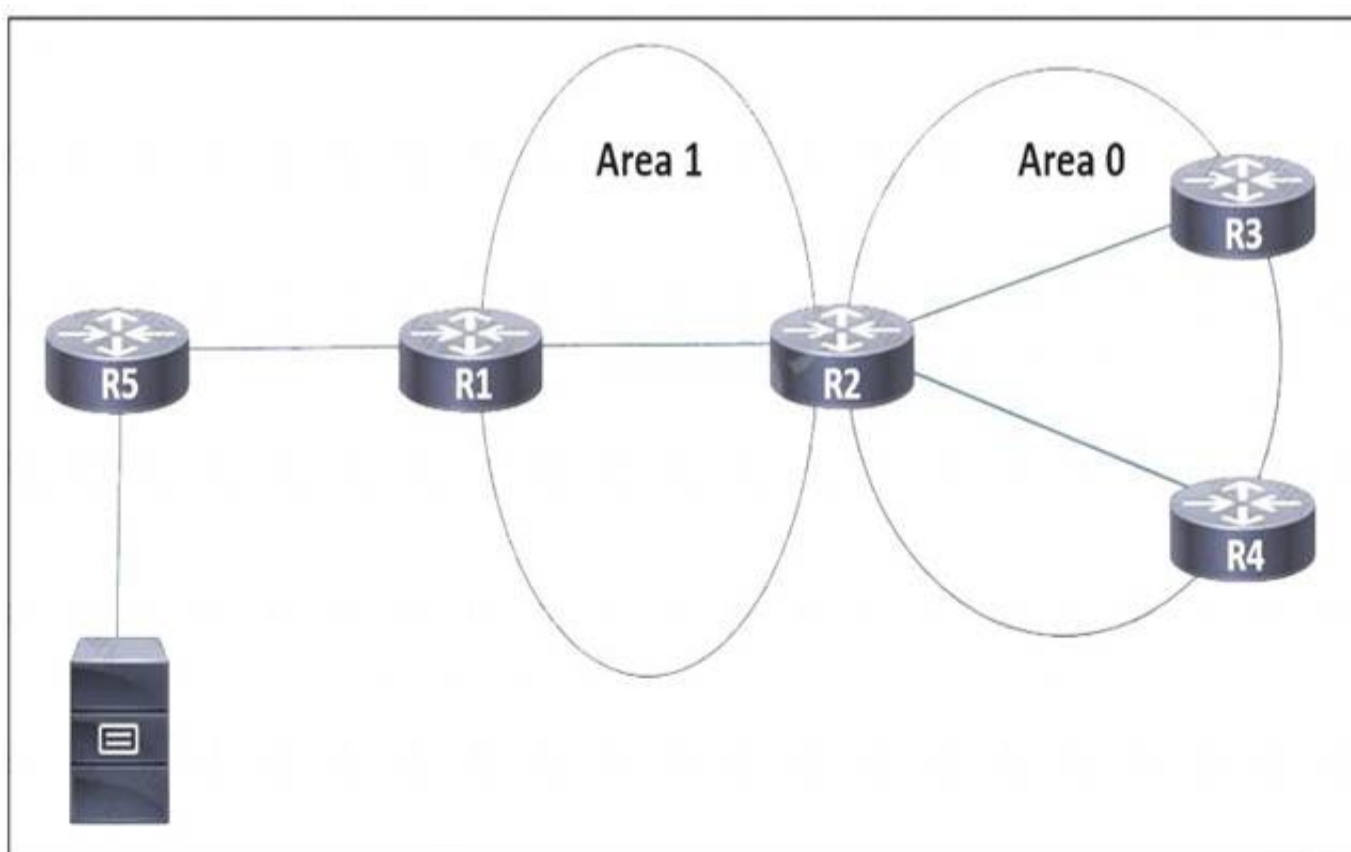
A network engineer is configuring a newly installed PE router at the regional gateway location. The new PE router must use MPLS core routing protocols with the existing P router, and LDP sessions between the two routers must be protected to provide faster MPLS convergence. Which configuration must the engineer perform on the network so that LDP sessions are established?

- A. Enable communication over TCP port 646 for T-LDP hello messages.
- B. Enable RSVP-TE FRR on the LDP interface to protect the LDP session between routers.
- C. Enable LDP session protection on either one of the routers, which allows them to autonegotiate.
- D. Set the LDP session protection timer on each router to the same value.

**Answer: C**

#### NEW QUESTION 358

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?

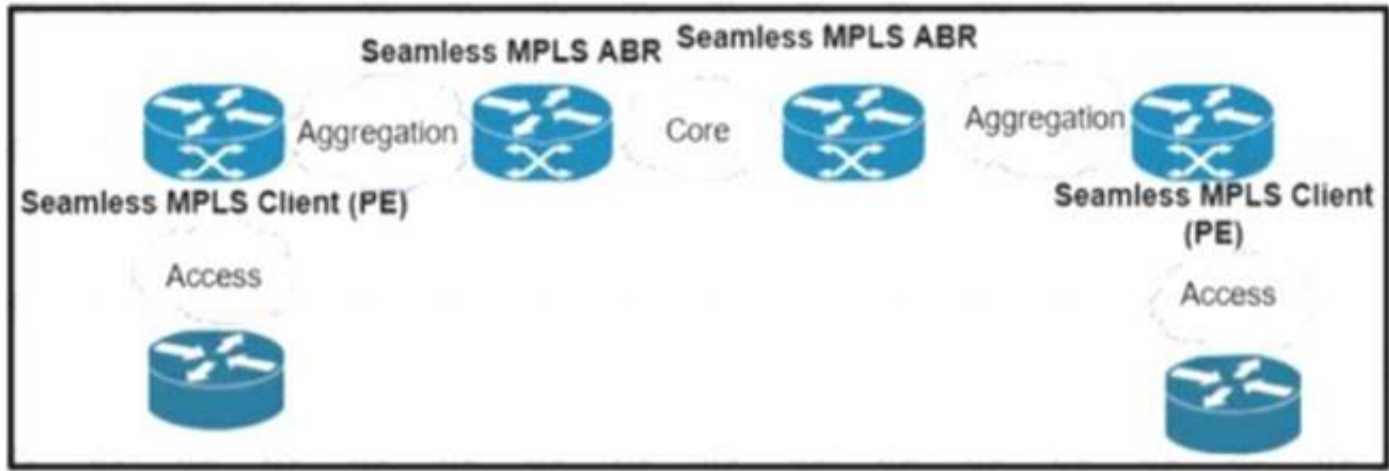
- A. Configure redistribution using route maps to filter the routes that are shared

- 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 359**

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 IGP's (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 364**

Refer to the exhibit:

```
telemetry model-driven
subscription cisco
sensor-group-id ciscotest sample-interval 60000
commit
```

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

- A. It is used to set up configuration to poll network data
- B. It is used to enable gRPC
- C. It is used to create a streaming subscription with a 60-second interval
- D. It is used to create a streaming subscription with a 600-second interval

Answer: C

**NEW QUESTION 365**

Refer to the exhibit:

```
RP/0/0/CPU0:iosxrv-1#show mpls ldp discovery brief
Sat Apr  2 22:43:11.362 UTC

Local LDP Identifier: 192.168.0.2:0
```

Discovery Source Session	VRF Name	Peer LDP Id	Holdtime	
--				
Gi0/0/1	default	192.168.0.3:0	15	Y
Gi0/0/2	default	192.168.0.4:0	15	Y
Gi0/0/3	default	192.168.0.5:0	15	Y
Tgt:192.168.0.1	default	192.168.0.1:0	90	Y
Tgt:192.168.0.3	default	192.168.0.3:0	90	Y
Tgt:192.168.0.5	default	-	-	N

With which router does IOSXRV-1 have LDP session protection capability enabled but session hold up is not active?

- A. 192.168.0.1
- B. 192.168.0.3

- C. 192.168.0.4  
D. 192.168.0.5

**Answer: B**

**NEW QUESTION 368**

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 371

Which regular expression query modifier function indicates the start of a string?

- A. ^
- B. [^]
- C. +
- D. \$

**Answer: A**

#### NEW QUESTION 373

What is a constraint of Cisco MPLS TE tunnel configurations?

- A. Tunnels cannot span multiple OSPF areas.
- B. With ISIS as an IG
- C. only older-style metrics are used.
- D. Tunnels cannot be configured over IP unnumbered links.
- E. QoS-aware tunneling is not supported.

**Answer: C**

**Explanation:**

### Restrictions for MPLS Traffic Engineering and Enhancements

- MPLS traffic engineering supports only a single IGP process/instance. Multiple IGP processes/instances are not supported and MPLS traffic engineering should not be configured in more than one IGP process/instance.
- MPLS traffic engineering does not support ATM MPLS-controlled subinterfaces.
- The MPLS traffic engineering feature does not support routing and signaling of LSPs over unnumbered IP links. Therefore, do not configure the feature over those links.

#### NEW QUESTION 375

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 take 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 378

Refer to the exhibit.

```
router(config)# router ospf 11
router(config-if)# passive-interface default
```

An engineer started to configure a router for OSPF. Which configuration must the engineer perform on the router without changing any interface configuration so that the router establishes an OSPF neighbor relationship with its peer?

- A. router(config)# router ospf 11router(config-if)# no passive-interface ethernet 1/1
- B. router(config)# interface ethernet 1/1router(config-if)# no shutdown
- C. router(config)# interface ethernet 1/1router(config-if)# ip ospf hello-interval
- D. router(config)# interface ethernet 1/1router(config-if)# ip ospf priority 0

**Answer:** A

#### NEW QUESTION 381

Why do Cisco MPLS TE tunnels require a link-state routing protocol?

- A. Link-state routing protocols use SPF calculations that the tunnel endpoints leverage to implement the tunnel
- B. The link-state database provides a data repository from which the tunnel endpoints can dynamicallyselect a source ID
- C. The tunnel endpoints can use the link-state database to evaluate the entire topology and determine the best path
- D. The link state database provides segmentation by area, which improves the path-selection process

**Answer:** C

#### NEW QUESTION 383

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 386

A network engineer is configuring RIP as the routing protocol between multiple PEs and CEs. The engineer must avoid advertising the same routes back to their sources. Which action should be performed on the routers to accomplish this task?

- A. Configure a different route distinguisher for each prefix.
- B. Define the site of origin on each interface.
- C. Define VRFs on each device to separate the traffic.
- D. Enable bidirectional forwarding detection on each device.

**Answer:** B

#### Explanation:

Although the SoO is set on BGP address family configuration mode not interface mode, but it is applied to the interface based on this reference. "The configuration of the SoO extended community allows MPLS VPN traffic to be filtered on a per-site basis. The SoO extended community is configured in an inbound BGP route map on the PE router and is applied to the interface."

[https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst3850/software/release/16-12/configuration\\_guide/m](https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst3850/software/release/16-12/configuration_guide/m)

#### NEW QUESTION 389

Refer to the exhibit:

```
route-policy qppb-as6000
if as-path in (ios-regex '61100, 61200, 61300') then
set qos-group 10

router bgp 100 bgp
table-policy qppb-as6000
```

Which statement supports QPPB implementation?

- A. QoS policies are identified in the MPLS forwarding table
- B. QoS policies rely exclusively on BGP attributes to manipulate traffic
- C. QoS policies use BGP to gain full coverage on the network.
- D. QPPB policies affect only egress traffic

**Answer:** B

#### NEW QUESTION 391

An engineer working for telecommunication company with an employee id: 3715 15 021 needs to secure the LAN network using a prefix list Which best practice should the engineer follow when he implements a prefix list?

- A. An engineer must use non sequential sequence numbers in the prefix list so that he can insert additional entries later.
- B. The final entry in a prefix list must be /32
- C. An engineer must identity the prefix list with a number only
- D. An engineer must include only the prefixes for which he needs to log activity.

**Answer:** A

#### NEW QUESTION 396

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 distinguishes 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 401

What is a feature of model-driven telemetry?

- A. It occasionally streams to multiple servers in the network.
- B. It is less secure because it uses community strings.
- C. It uses the pull model to send requested data to a client when polled.
- D. It uses the push model to stream data to desired destinations.

**Answer: D**

#### NEW QUESTION 406

The network team is planning to implement IPv6 on the company's existing IPv4 network infrastructure. The network currently uses IS-IS to share routes between peers. Which task must the team perform so that IS-IS will run in multitopology mode on the updated IPv6 network?

- A. Configure the links between the network routers as point-to-point.
- B. Configure the network routers to use metric-style wide.
- C. Configure the network routers as Level 2 routers.
- D. Configure the IS-IS IPv6 metric on the dual-stack links.

**Answer: D**

#### NEW QUESTION 409

Drag and drop the functionalities from the left onto the target fields on the right.

MAP-T	Can translate RFC1918 IPv4 to Public IPv4
NAT 64	Can be Stateless or stateful
NAT 44	Provides reachability of IPv6 host over IPv4 domains
DS Lite	Provides reachability of IPv4 host over IPv6 domains
6RD	Requires IPv6 access network.

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

MAP-T	NAT 44
NAT 64	NAT 64
NAT 44	6RD
DS Lite	DS Lite
6RD	MAP-T

**NEW QUESTION 410**

Refer to the exhibit:

```
R1

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

Which effect of this configuration is true?

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

**Answer: B**

**NEW QUESTION 411**

Refer to the exhibit.

```
R1

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

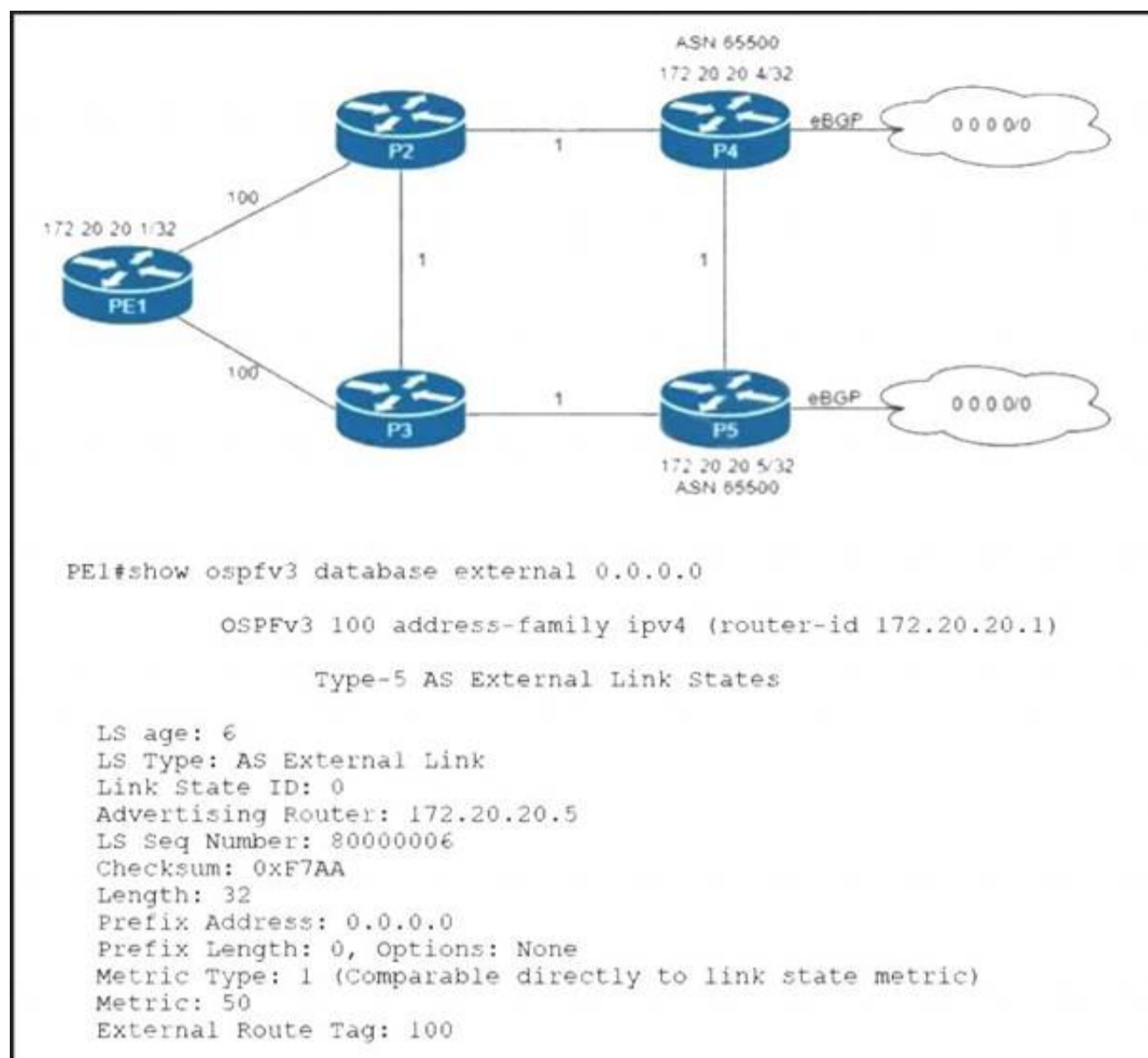
What is the effect of this configuration?

- 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 414**

Refer to the exhibit.



Routers P4 and P5 receive the 0.0.0.0/0 route from the ISP via eBGP peering. P4 is the primary Internet gateway router, and P5 is its backup. P5 is already advertising a default route into the OSPF domain. Which configuration must be applied to P4 so that it advertises a default route into OSPF and becomes the primary Internet gateway for the network?

- A. configure terminalrouter ospfv3 100address-family ipv4 unicastdefault-information originate metric 40 metric-type 2 end
- B. configure terminal router ospfv3 100address-family ipv4 unicastdefault-information originate metric 40 metric-type 1 end
- C. configure terminal router ospfv3 100address-family ipv4 unicastredistribute bgp 65500 metric 40 metric-type 1 end
- D. configure terminal router ospfv3 100address-family ipv4 unicastdefault-information originate always metric 40 metric-type 1 end

**Answer: A**

#### NEW QUESTION 419

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 424

An engineer is implementing NSR with OSPF on a large campus that requires high availability. Which task must an engineer perform to complete the process with minimal disruption to traffic?

- A. Reset OSPF neighbor sessions to maintain state information during router switchover
- B. Configure the device to repopulate state information using routing updates received from the BDR
- C. increase the keepalive interval on the OSPF neighbors so that traffic continues to pass during the switchover.
- D. Ensure that the dual RP has synchronized their state information before performing the switchover operation.

**Answer: D**

#### NEW QUESTION 429

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 433

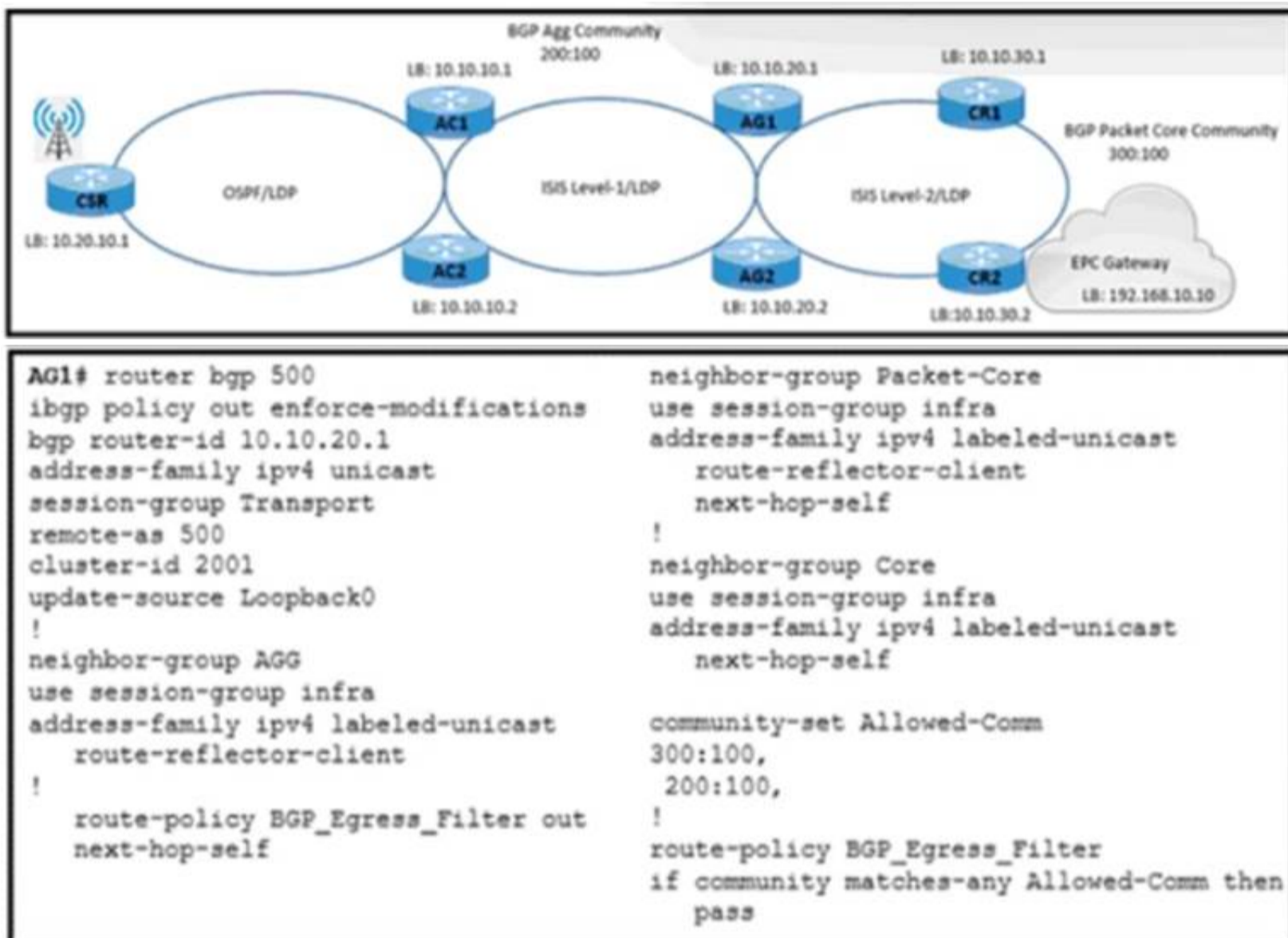
A network operator working for a telecommunication company with an employee Id: 4065 96080 is trying to implement BFD configuration on an existing network of Cisco devices. Which task must the engineer perform to enable BFD on the interfaces?

- 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 436

Refer to the exhibit.



A NOC engineer is configuring label-based forwarding from CSR to the EPC gateway. Cell-site operation and maintenance for IPv4 traffic between 10.20.10.1 and 192.168.10.10 is already up. CR1 and CR2 are configured as route reflectors for AG1 and AG2. Which action completes the configuration?

- A. Remove address-family labeled-unicast from the BGP session-group infra on AG1 for neighbor-group core.
- B. Apply the BGP\_Egress\_Filter route policy to the BGP neighbor-group packet core on AG1.
- C. Configure AG1 to allocate a label to the BGP routes that are received in the BGP session group transport.
- D. Configure AG1 to allow the 300:100 and 200:100 communities in the BGP\_Egress\_Filter route policy.

**Answer: B**

#### NEW QUESTION 441

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 442

Drag and drop the functions from the left onto the correct 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 (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 445

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