

Cisco

Exam Questions 350-501

Implementing and Operating Cisco Service Provider Network Core Technologies



NEW QUESTION 1

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 2

Refer to the exhibit:

```

<data>
<rpc-reply>
```

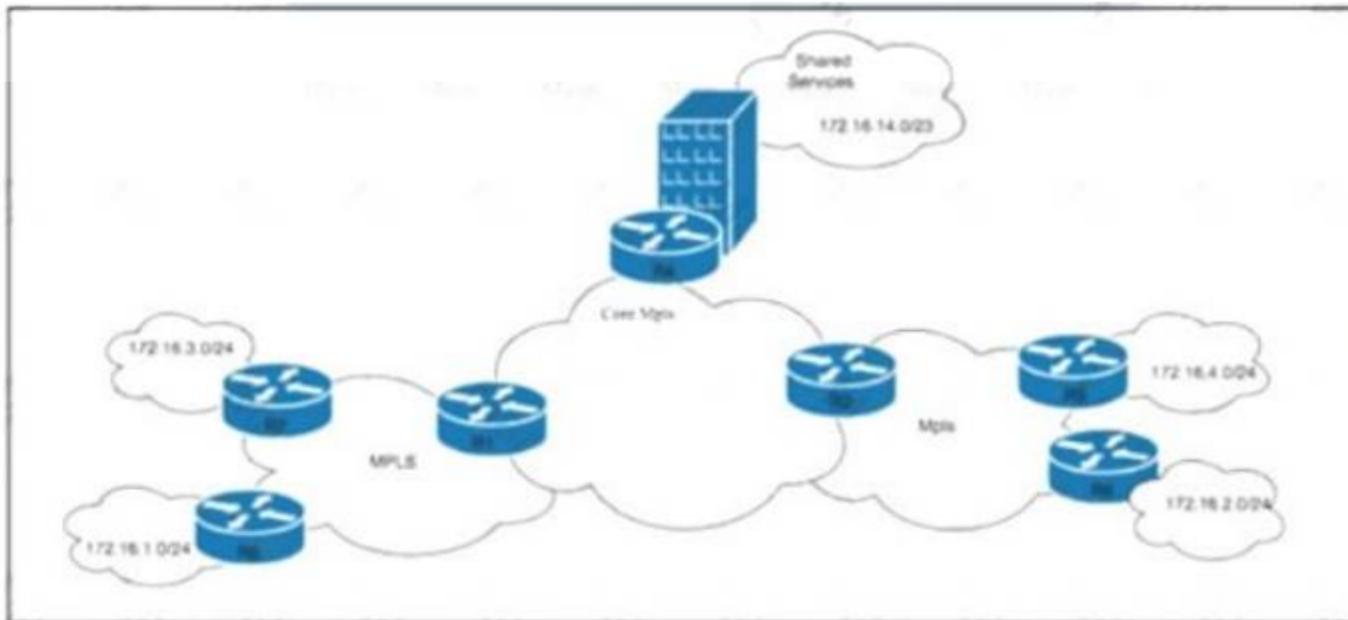
This output is included at the end of an output that was provided by a device using NETCONF. What does the code show?

- A. It shows the hostname of the device as rpc-reply
- B. It shows that the running configuration is blank
- C. It shows NETCONF uses remote procedure calls.
- D. It shows that the full configuration is being modeled by YANG

Answer: C

NEW QUESTION 3

Refer to the exhibit.



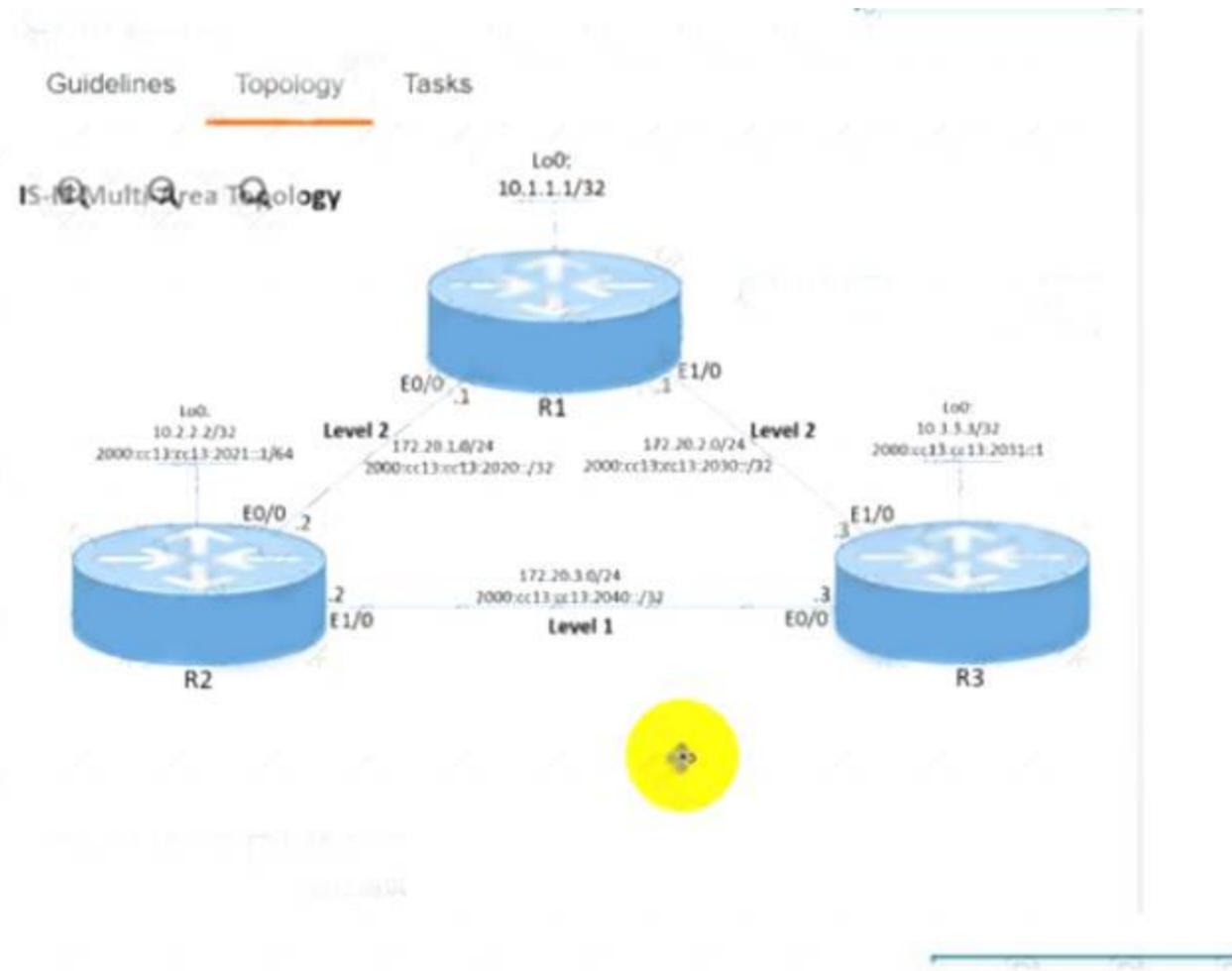
The ISP is implementing a new hosting-as-a-service solution for its business customers. Service accessibility must be unique and separate for each customer. The network architect must ensure that multiple paths toward the hosting-as-a-service solution are always available. Basic protection against traffic black-holing on the MPLS network is required in case of link failure. Which two actions must the engineering team perform to meet the requirements? (Choose two.)

- A. Create the hosting-as-a-service VRF on router R4 and configure it with the route target both 65123:88 command.
- B. Configure the fast-reroute per-prefix command for the IS-IS protocol in the MPLS network and enable the BGP route-reflector feature on R2.
- C. Enable the VRF-Lite feature on router R4 and enable BGP address-family VPNv4.
- D. Configure the mpls ldp sync command in the MPLS network with the BGP additional-paths receive and additional-paths send options.
- E. Configure the fast-hello command under the IS-IS routing protocol with the BGP multipath 2 option enabled.

Answer: BD

NEW QUESTION 4

Simulation 7



Guidelines Topology Tasks

Configure the IS-IS routing protocol for R1, R2, and R3 according to the topology to achieve these goals:

1. Configure HMAC-MD5 authentication for R1, R2, and R3 links that form the IS-IS adjacency using the ISIS commands on the interfaces using these parameters:
 - key-chain name: AUTH_ISIS
 - key ID: 2
 - password: C1sc0!
2. Configure ISIS metric on R1, R2, and R3 to:
 - 15 for each level on all interfaces that form adjacency on router R1
 - 20 for each level on all interfaces that form adjacency on router R2
 - 25 for each level on all interface that form adjacency on R3

- A. Mastered
- B. Not Mastered

Answer: A

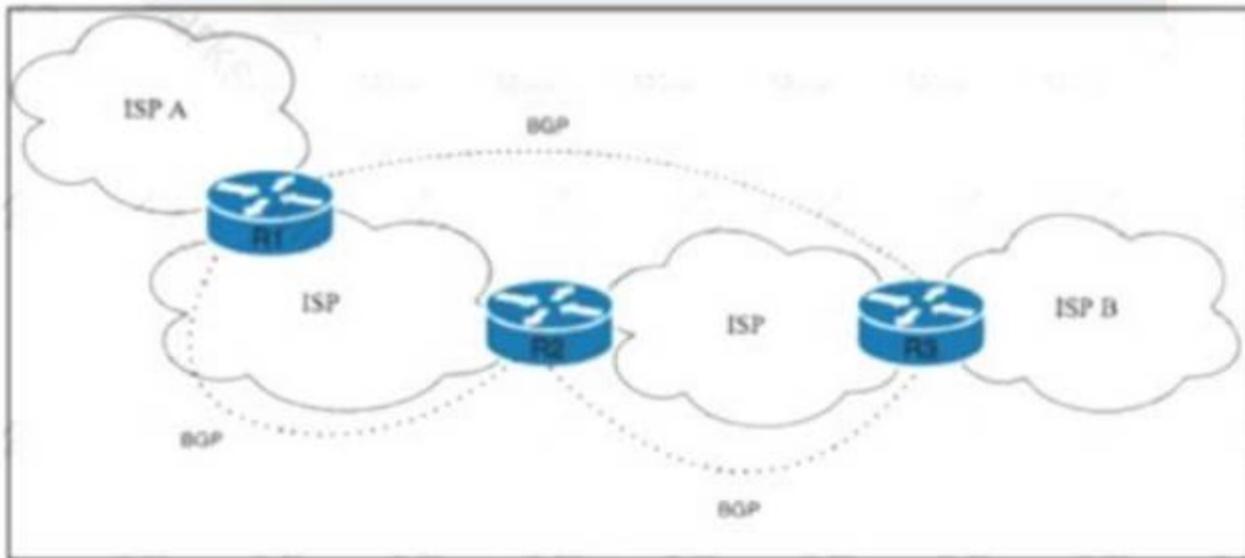
Explanation:

```
R1
key chain AUTH_ISIS key 2
key-string C1sc0! exit
int range et0/0 , et1/0
isis authen key-chain AUTH_ISIS ip isis
isis metric 15 Copy run start R2
key chain AUTH_ISIS key 2
key-string C1sc0! exit
int range et0/0 , et1/0
isis authen key-chain AUTH_ISIS ip isis
```

```
isis metric 20 Copy run start R3
key chain AUTH_ISIS key 2
key-string C1sco! exit
int range et0/0 , et1/0
isis authen key-chain AUTH_ISIS ip isis
isis metric 25 Copy run start
```

NEW QUESTION 5

Refer to the exhibit.



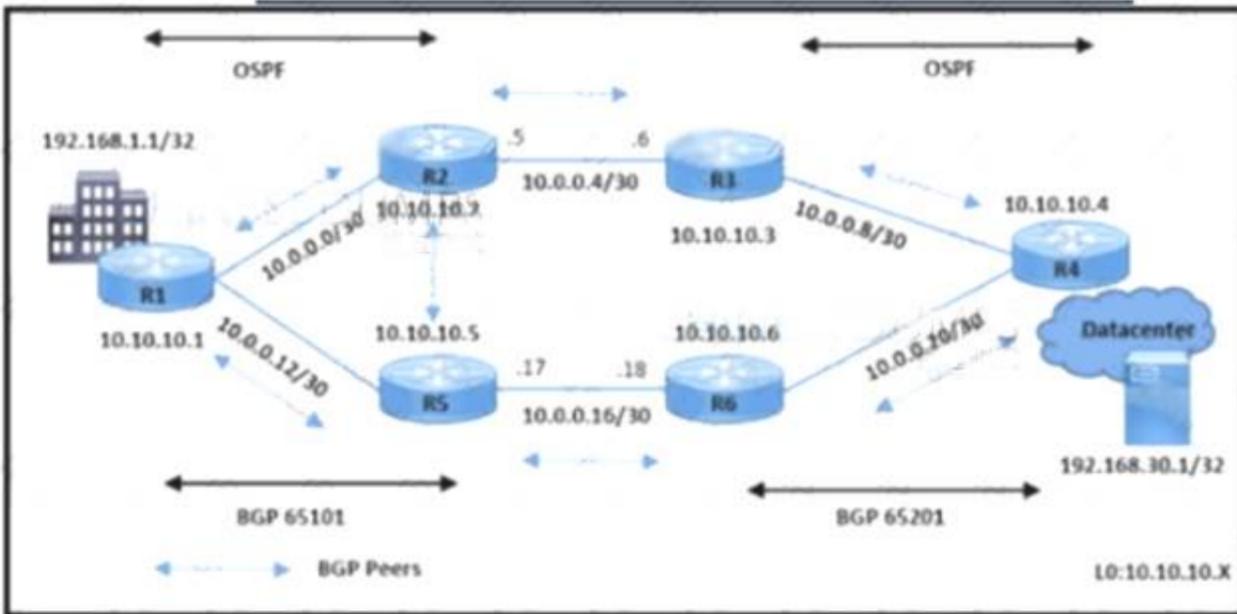
Tier 1 ISP A is connected to small Tier 3 ISP B. The EBGP routing protocol is used for route exchange. The networking team at ISP A noticed the flapping of BGP sessions with ISP B. The team decides to improve stability on the network by suppressing the subnet for 30 minutes when a session begins to flap. Which action must the team perform to meet this goal?

- A. Implement a BGP route-penalty timer on ISP A router R1 with the `bgp penalty-timer 30 250 750 15` command.
- B. Implement BGP route dampening on ISP A router R1 with the `bgp dampening 15 700 1500 30` command.
- C. Implement BGP route suppression on ISP A router R2 with the `bgp suppression 30 600 1200 30` command.
- D. Implement a BGP route withdraw-delay timer on ISP B router R3 with the `bgp withdraw-delay 30 15 90 30` command.

Answer: B

NEW QUESTION 6

Refer to the exhibit.



```

R5#show ip bgp 192.168.1.1/32
BGP routing table entry for 192.168.1.1/32, version 25
Paths: (1 available, best #1, table Default-IP-Routing-Table)
Advertised to update-groups:
 3
Local
 10.10.10.1 (metric 2) from 10.10.10.1 (192.168.1.1)
  Origin IGP, metric 0, localpref 100, valid, internal, best

R2#show ip bgp 192.168.1.1/32
BGP routing table entry for 192.168.1.1/32, version 13
Paths: (1 available, no best path)
Not advertised to any peer
Local
 10.10.10.1 (metric 2) from 10.10.10.1 (192.168.1.1)
  Origin IGP, metric 0, localpref 100, valid, internal, not synchronized

R1#show ip bgp 192.168.1.1/32
BGP routing table entry for 192.168.1.1/32, version 15
Paths: (1 available, best #1, table Default-IP-Routing-Table)
Advertised to update-groups:
 1
Local
 0.0.0.0 from 0.0.0.0 (192.168.1.1)
  Origin IGP, metric 0, localpref 100, weight 32768, valid, sourced, local, best
    
```

All BGP peering in AS 65101 and 65201 is enabled. The operations team is told that traffic destined to 192.168.1.1/32 from R4 does not use the path R3-R2-R1 as expected. An engineer debugs the issue and determines that 192.168.1.1/32 is advertised in the BGP routing table on R1. Which action resolves the issue?

- A. Enable no synchronization on R2 in AS65101.
- B. Apply route-map High-LP out for prefix 192.168.1.1/32 on R1 with R2 BGP peering.
- C. Apply redistribute ospf 10 on R1 in BGP AS 65101.
- D. Configure network 192.168.1.1 mask 255.255.255.255 in BGP AS 65101 on R2

Answer: A

NEW QUESTION 7

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

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

Answer: B

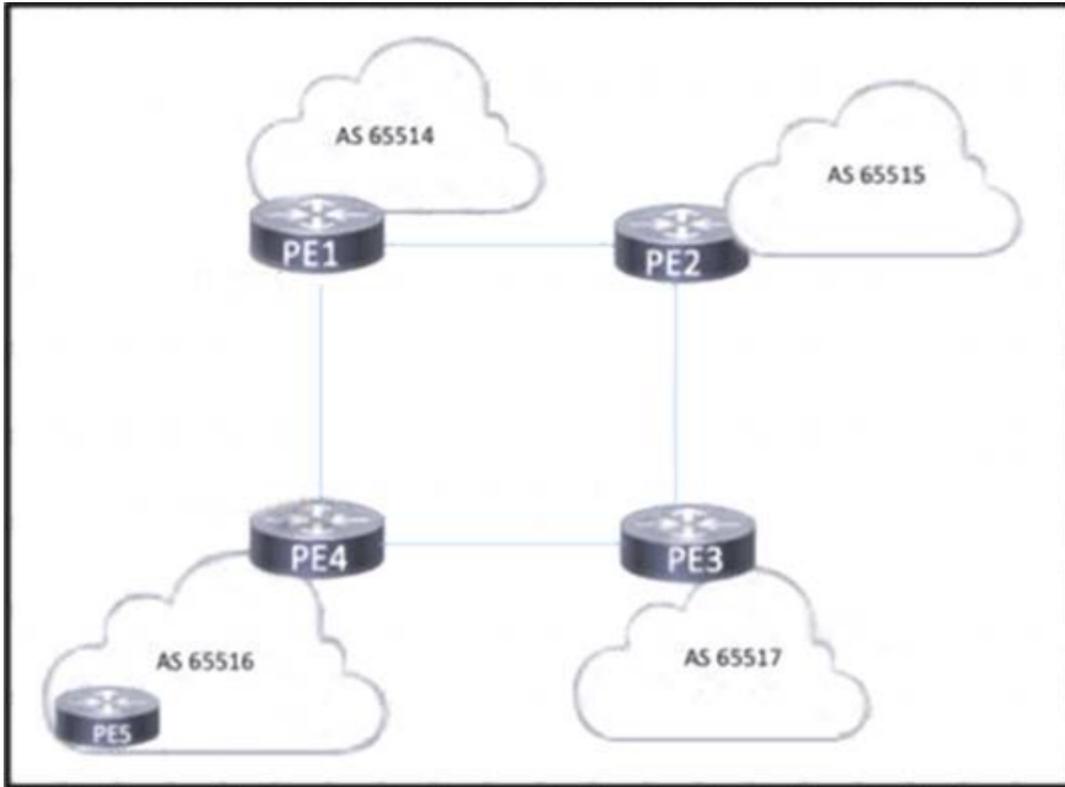
Explanation:

Traffic Identification and Traceback

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

NEW QUESTION 8

Refer to the exhibit.



Four midsize service providers provide access to different customers that use Layer 3 VPN services to enable communication across geographic regions. The service providers are connected as shown in the exhibit, and the PEs have established eBGP relationships. PE4 has an IBGP relationship with PE5. The routes that PE4 learns from PE5 must reach the other PE routers, but they are absent from the routing tables on the other PEs. Which action should the engineers take to correct the problem?

- A. Configure a peering between all five PEs.
- B. Disable BGP synchronization on PE4.
- C. Enable BGP IPv4 unicast on PE4 and PE5
- D. Advertise the route targets for PE5 to the other PEs

Answer: A

NEW QUESTION 9

Drag and drop the descriptions from the left onto the corresponding OS types on the right.

It is monolithic	IOS XE
It uses a Linux-based kernel	
It has a separate control plane	IOS
It shares memory space	

- A. Mastered
- B. Not Mastered

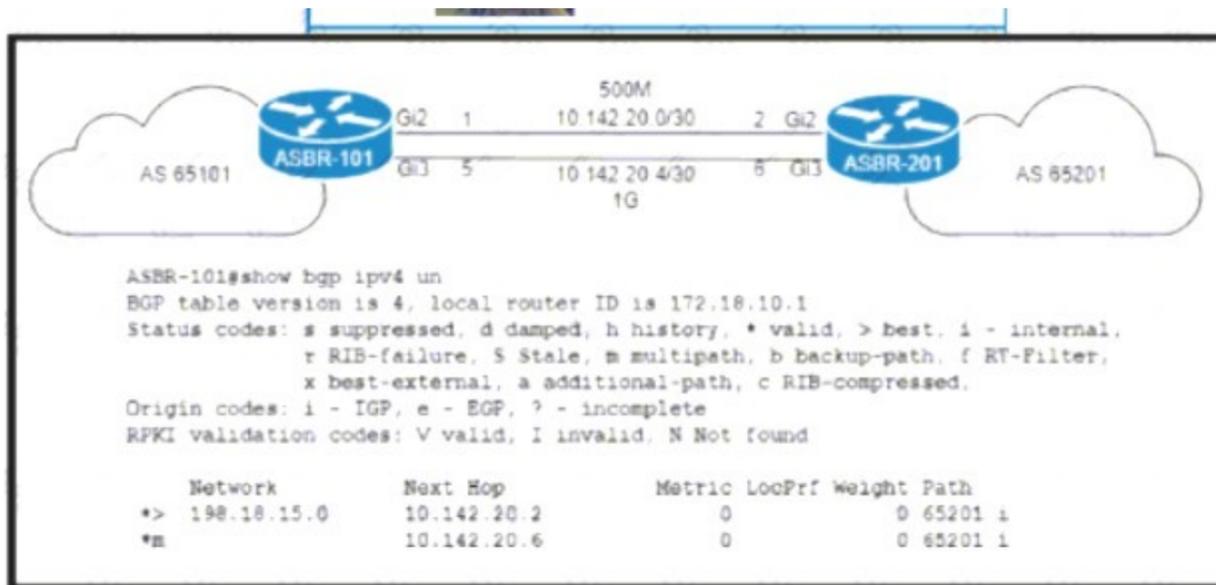
Answer: A

Explanation:

IOS XE:
 It uses linux-based kernel
 It has a separate control plane
 IOS:
 It is monolithic
 It shares memory space

NEW QUESTION 10

Refer to the exhibit



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

configure terminal
ip prefix-list ALLOWED_PREFIXES seq 5 permit 198.18.15.0/24

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

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

configure terminal
ip prefix-list ALLOWED_PREFIXES seq 5 permit 198.18.15.0/24

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

configure terminal
ip prefix-list ALLOWED_PREFIXES seq 5 permit 198.18.15.0/24

route-map AS65101-OUT permit 10
match ip address prefix-list ALLOWED_PREFIXES
set metric 100

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

configure terminal
ip prefix-list ALLOWED_PREFIXES seq 5 permit 198.18.15.0/24

route-map AS65101-OUT permit 10
match ip address prefix-list ALLOWED_PREFIXES
set metric 100

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

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

Answer: C

NEW QUESTION 10

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 13

Refer to the exhibit:

```
R1
router ospf 1
  area 2 stub no-summary

R2
router ospf 1
  area 3 nssa
```

In which way does router R1 operate differently than router R2?

- A. R1 sends LSA type 2 only, while R2 sends type 1 and type 7 LSAs
- B. R1 sends LSA types 1 and 2, while R2 sends type 1, 2, and 7 LSAs
- C. R1 sends LSA type 2 only and R2 sends LSA type 1 only
- D. R1 sends LSA types 5 and 7, while R2 sends type 1, 2, and 7 LSAs

Answer: B

NEW QUESTION 17

Exhibit:

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

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

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

Answer: C

NEW QUESTION 22

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
```

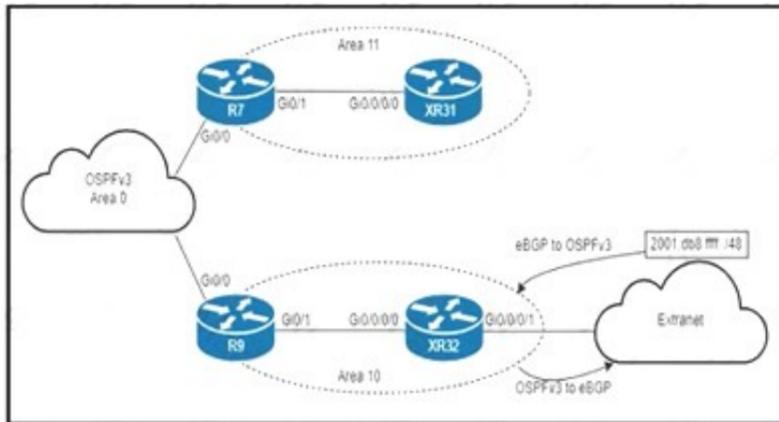
What type of configuration is it?

- 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 25

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 26

Which configuration modifies Local Packet Transport Services hardware policies?

A)

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

B)

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

C)

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

D)

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

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

Answer: C

NEW QUESTION 27

Which fact must a network engineer consider when planning to deploy RSVP-TE FRR?

- A. The FRR backup tunnel reserves the total bandwidth of all protected tunnels
- B. FRR protects MPLS LDP and RSVP-TE LSPs.
- C. PLR prefers FRR NHOP backup tunnels over NNHOP tunnels.
- D. PLR prefers FRR NNHOP backup tunnels over NHOP tunnels.

Answer: D

NEW QUESTION 30

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 32

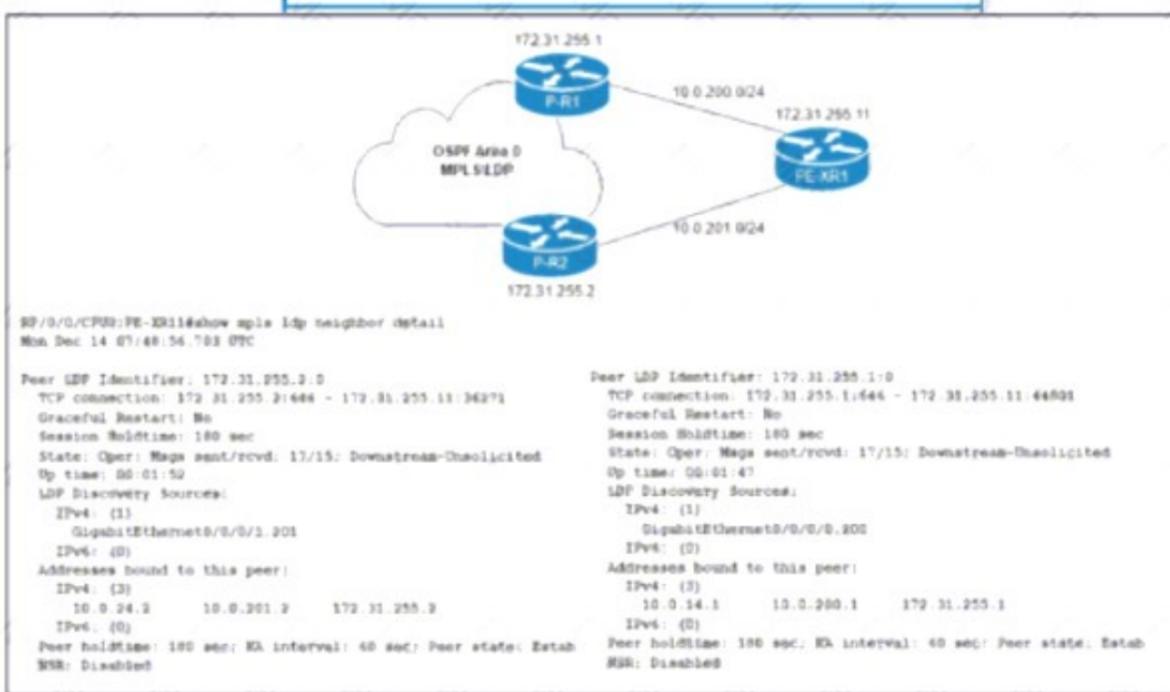
Which type of attack is an application attack?

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

Answer: C

NEW QUESTION 37

Refer to the exhibit.



The network team must implement MPLS LDP session protection with two requirements:
 Session protection is provided for core loopback IP addresses only.

The LDP session must remain operational for one hour when the WAN link on PE-XR1 fails. Which configuration must the team implement on PE-XR1?

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

Answer: D

NEW QUESTION 38

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 41

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

It is limited on the number of endpoints.	Stateful <div style="border: 1px solid black; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 30px;"></div>
It uses address overloading.	
It conserves IPv4 addresses.	
It mandates IPv4-translatable IPv6 address allocation.	
It has 1:N translation.	
	Stateless <div style="border: 1px solid black; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 30px;"></div>

- A. Mastered
- B. Not Mastered

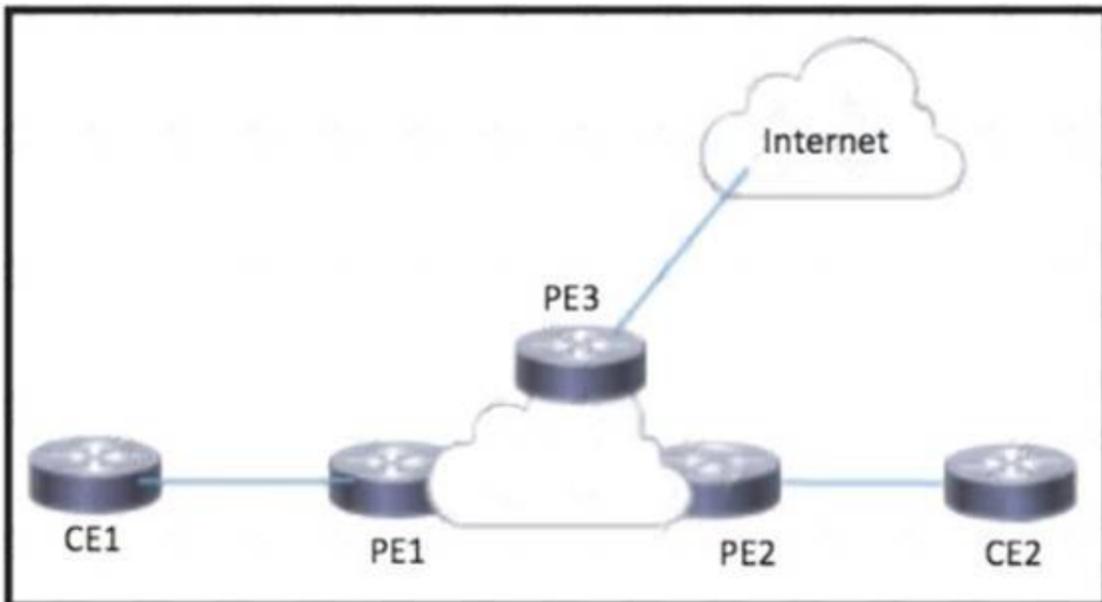
Answer: A

Explanation:

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

NEW QUESTION 42

Refer to the exhibit.



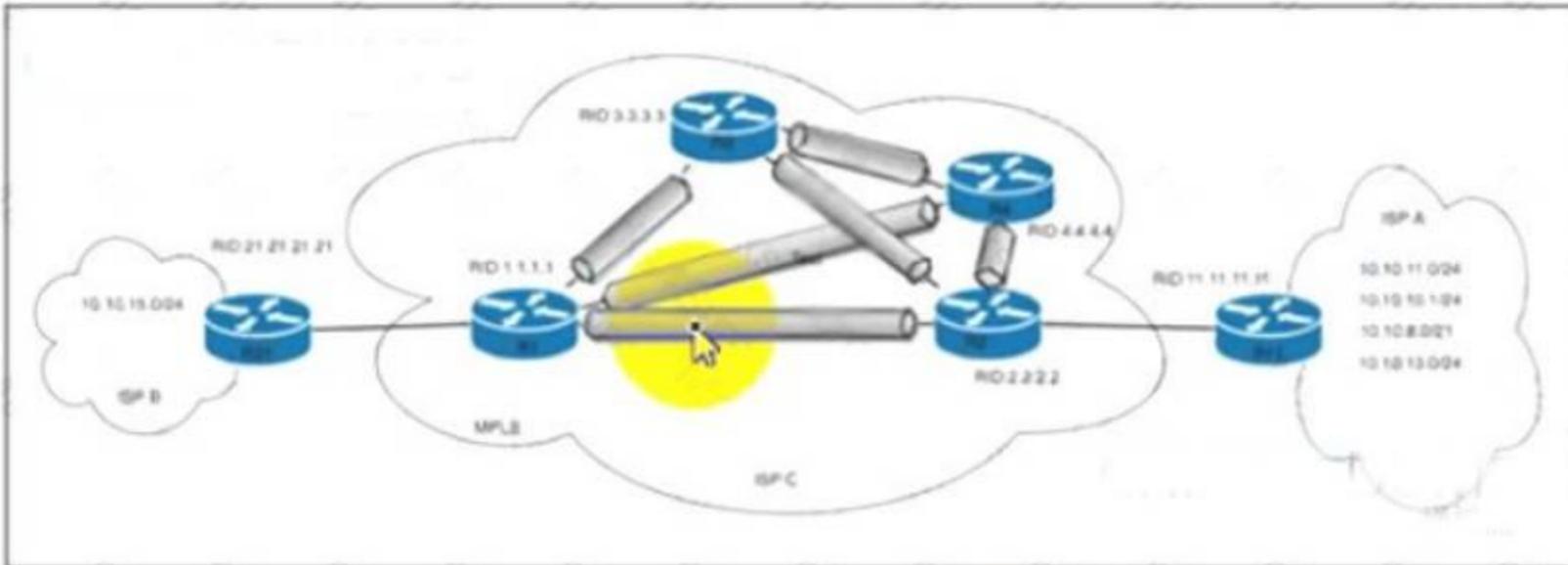
CE1 and CE2 require connectivity to the internet through the ISP connected to PE3 What should an engineer configure to complete this task?

- 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: D

NEW QUESTION 44

Refer to the exhibit



An engineer at ISP C is configuring a new interconnection with ISPs A and B using the BGP protocol After the initial configuration the engineer noticed high memory usage and an abnormally large LIB table on router R2 Which two actions must the engineer take on R2 to minimize memory usage? (Choose two.)

- A. Configure Extended ACL 101 with accepted prefixes.
- B. Configure the mpls idp neighbor 11.11.11.11 labels accept1 command.
- C. Configure Standard ACL 1 with accepted prefixes.
- D. Configure the mpls idp neighbor 1.1.1.1 labels accept 101 command.
- E. Configure the mpls idp neighbor 21.21.21.21 labels accept 101 command.

Answer: BC

NEW QUESTION 49

Refer to the exhibit.

```
RP/0/0/CPU0:R2#debug isis adjacencies
RP/0/0/CPU0:Apr 2 20:57:00.421 : isis[1010]: RECV P2P IIH (L2)
from GigabitEthernet0/0/0/0 SNPA fal6.3ebe.a7bc: System ID R2,
Holdtime 30, length 1429
RP/0/0/CPU0:Apr 2 20:57:01.761 : isis[1010]: SEND P2P IIH (L1)
on GigabitEthernet0/0/0/0: Holdtime 30s, Length 41
```

A network operator is attempting to configure an IS-IS adjacency between two routers, but the adjacency cannot be established. To troubleshoot the problem, the operator collects this debugging output. Which interface are misconfigured on these routers?

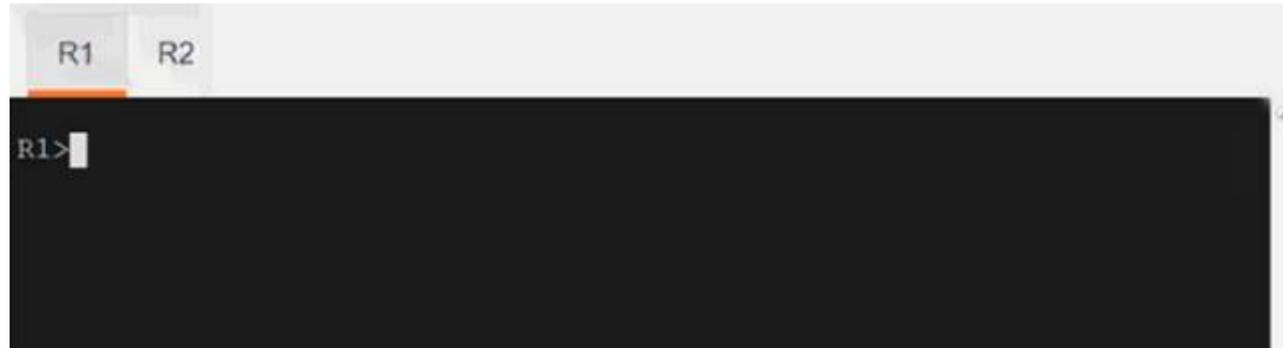
- The peer router interface is configured as Level 1 only, and the R2 interface is configured as Level 2 only
- The R2 interface is configured as Level 1 only, and the peer router interface is configured as Level 2 only
- The R2 interface is configured as point-to-point, and the peer router interface is configured as multipoint
- The peer router interface is configured as point-to-point, and the R2 interface is configured as multipoint

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

Answer: B

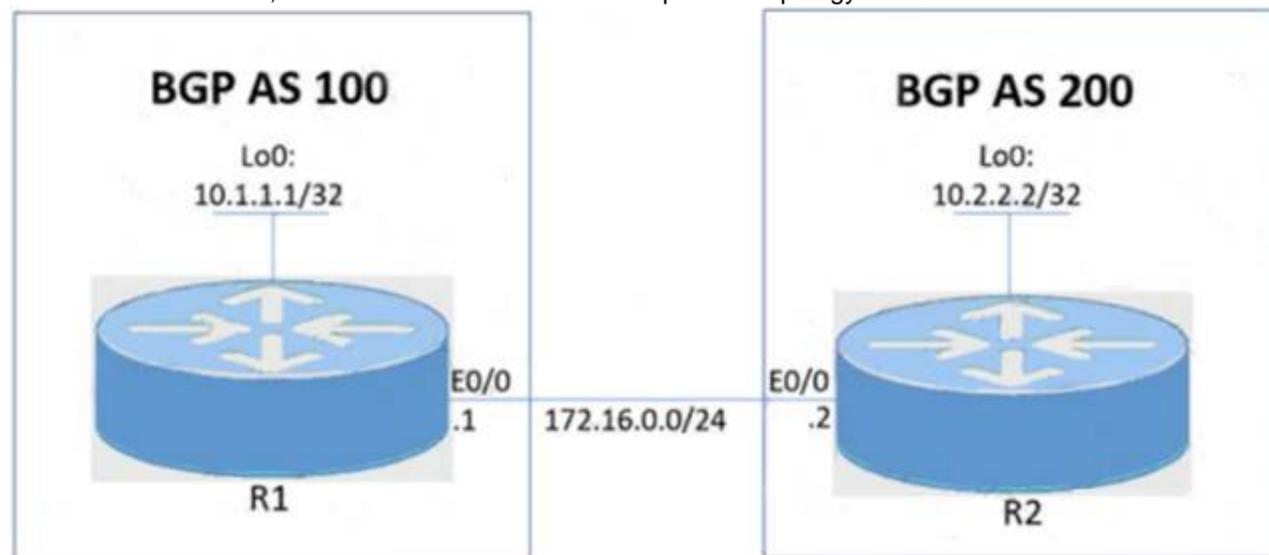
NEW QUESTION 54

Guidelines



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

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



Tasks

R1 and R2 are having issues forming an eBGP neighbor relationship. Troubleshoot and resolve the issue to achieve these goals:

- * 1. Configure R1 and R2 to form a BGP neighborhood using their Loopback interfaces.
- * 2. Form the neighbor relationship using a BGP multihop mechanism. Use minimal values to solve the issue.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Here is the solution:

Text Description automatically generated

```
R1:
conf t

ip route 10.2.2.2 255.255.255.255 172.16.0.2

router bgp 100
neighbor 10.2.2.2 remote-as 200
neighbor 10.2.2.2 update-source lo0
neighbor 10.2.2.2 disable-connected-check
neighbor 10.2.2.2 ebgp-multihop 2

address-family ipv4 unicast
neighbor 10.2.2.2 activate
do copy running-config startup-config
```

```
R2:
conf t

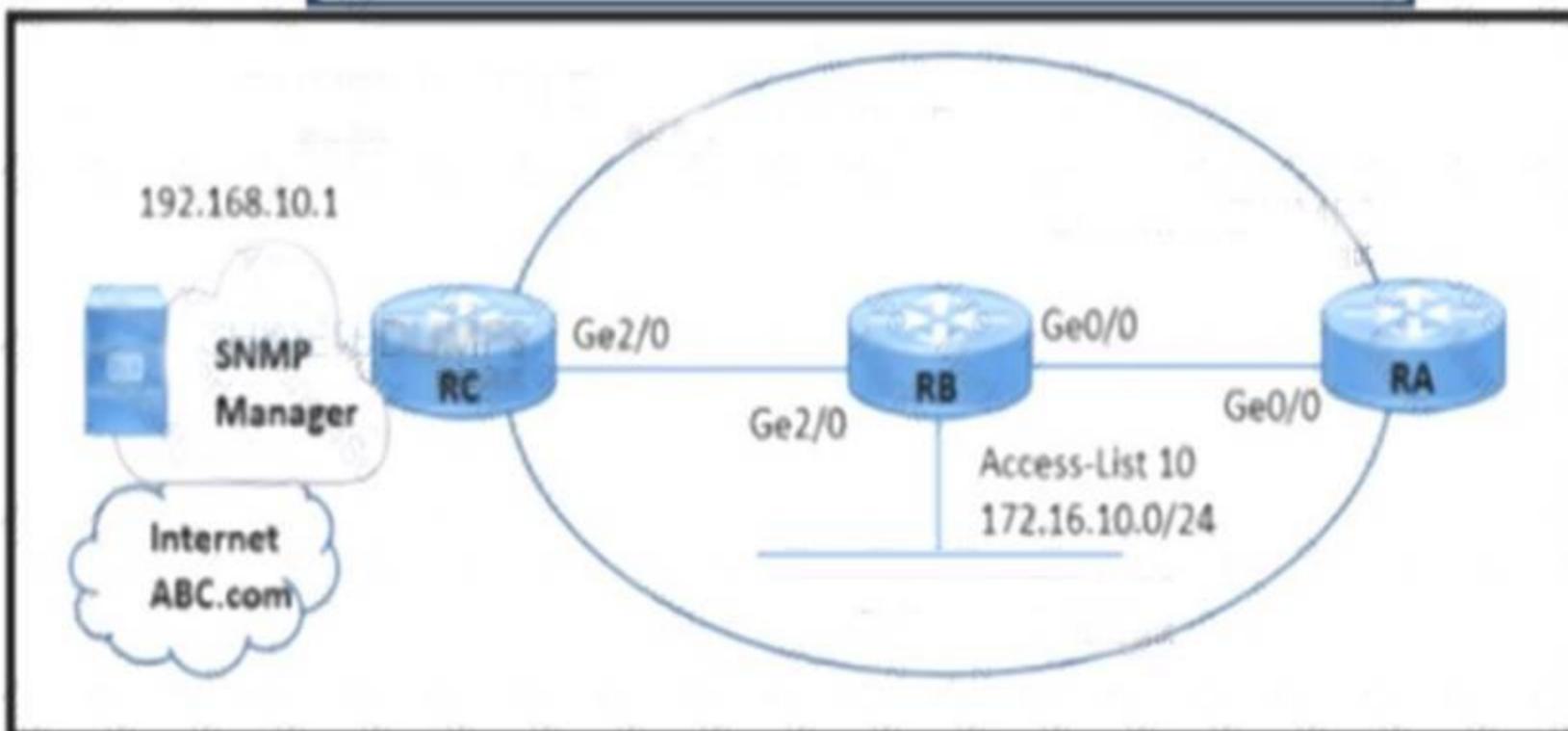
ip route 10.1.1.1 255.255.255.255 172.16.0.1

router bgp 200
neighbor 10.1.1.1 remote-as 100
neighbor 10.1.1.1 update-source lo0
neighbor 10.1.1.1 disable-connected-check
neighbor 10.1.1.1 ebgp-multihop 2

address-family ipv4 unicast
neighbor 10.1.1.1 activate
do copy running-config startup-config
```

NEW QUESTION 59

Refer to the exhibit.



A network engineer is configuring an SNMP community on router RB with these requirements:

- Allow read-only access for all objects to members of Access-List 10 that use the comaccess community string.
- Other SNMP managers must not have access to objects.
- SNMP authentication failure traps must be sent to SNMPv2c and then to the host using SNMPv2c with the public community string.

Which configuration meets these requirements?

- RB(config)# snmp-server community comaccess ro 10
 RB(config)# snmp-server enable traps snmp authentication
 RB(config)# snmp-server host ABC.com version 2c public
- RB(config)# snmp-server community comaccess ro 10
 RB(config)# snmp-server enable traps snmp authentication
 RB(config)# snmp-server host ABC.com
 RB(config)# snmp-server host informs ABC.com restricted entity
- RB(config)# snmp-server community comaccess ro 10
 RB(config)# snmp-server enable traps snmp authentication
 RB(config)# snmp-server enable traps entity
 RB(config)# snmp-server host informs ABC.com restricted entity
- RB(config)# snmp-server community comaccess ro 10
 RB(config)# snmp-server enable traps
 RB(config)# snmp-server host 192.168.10.1 informs version 2c public
 RB(config)# snmp-server host ABC.com public

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

Answer: A

NEW QUESTION 62

How is RSVP used with MPLS traffic engineering tunnels?

- A. It assigns a tag to a packet as it travels through the tunnel.
- B. It removes and reassigns an MPLS label when the packet enters the tunnel.
- C. It reduces the CPU burden when a packet travels through the tunnel.
- D. It reserves bandwidth along the path of the tunnel.

Answer: C

NEW QUESTION 63

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

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

Answer: B

NEW QUESTION 65

Which OS uses a distributed subsystem architecture?

- A. IOS XE
- B. IOS
- C. IOS XR
- D. CatOS

Answer: C

NEW QUESTION 69

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 72

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

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

Answer: BE

NEW QUESTION 76

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 77

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

DWDM	IPoDWDM
ROADM	EDFA
IPoDWDM	ROADM
EDFA	DWDM

NEW QUESTION 78

Refer to the exhibit.

```

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

R2#show ip ospf database
      OSPF Router with ID (100.0.0.2) (Process ID 1)
      Router Link States (Area 0)
Link ID      ADV Router   Age         Seq#         Checksum    Link count
100.0.0.1    100.0.0.1    22         0x80000005  0x0090D8    3

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

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

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

Answer: C

NEW QUESTION 83

Which programmable API allows the service provider to plan and optimize the automation of network operations and achieve closed-loop operations?

- A. Network Services Orchestrator
- B. WAN Automation Engine
- C. Evolved Programmable Network Manager
- D. Crosswork Network Automation

Answer: D

NEW QUESTION 85

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 87

How much must the MTU be increased when configuring the 802.1q VLAN tag?

- A. 2 bytes
- B. 4 bytes
- C. 8 bytes
- D. 12 bytes

Answer: B

NEW QUESTION 88

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. A.-192.0.0.0/16
- B. 192.168.0.0/16
- C. 192.168.1.0/24
- D. 192.168.0.5/30

Answer: B

NEW QUESTION 90

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

Answer: D

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_ospf/configuration/xr-16/iro-xe-16-book/iro-multi-ar

NEW QUESTION 94

Simulation1

The screenshot shows a Cisco Packet Tracer simulation titled "Implementing and Operating Cisco Service Provider Network". On the left, there is a network diagram titled "IS-IS Multi-Area Topology" showing three routers: R1 (Level 2), R2 (Level 1), and R3 (Level 2). R1 is connected to R2 and R3. R2 and R3 are also connected to each other. The diagram includes interface names (E0/0, E1/0) and IP addresses for each router. On the right, a terminal window shows the configuration for R1. The terminal output indicates several errors when configuring the domain server: "% Bad IP address or host name" and "% Unknown command or computer name, or unable to find computer address". The terminal prompt is R1>.

Guidelines
Topology
Tasks

Guidelines

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

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

R1
R2
R3

R3>

Guidelines
Topology
Tasks

Configure the IS-IS routing protocol for R1, R2, and R3 according to the topology to achieve these goals:

1. Enable IS-IS routing protocol parameters:
 - R1: Routing area tag: 1, Net: 49.0001.0010.0001.0101.00
 - R2: Routing area tag: 2, Net: 49.0001.0010.0002.0202.00
 - R3: Routing area tag: 3, Net: 49.0001.0010.0003.0303.00
2. Configure IS-IS IPv4 and IPv6:
 - Only Level 1 adjacency for: R2 and R3 links
 - Only Level 2 adjacency for: R1 and R2 links
 - Only Level 2 adjacency for: R1 and R3 links.
3. Configure CLNS Domain and Area password **C1sc0!** for the authentication of all IS-IS adjacency links on R1, R2, and R3. Use the clear text ISIS authentication mechanism for this task.

R1
R2
R3

```
R1>enable
R1>config
R1>router isis 1
R1>net 49.0001.0010.0001.0101.00
R1>area-password C1sc0! int et0/0
R1>ip router isis 1
R1>isis authen mode text level-2 isis circuit-type level-2
R1>isis tag 1 int et1/0
R1>ip router isis 1
R1>isis authen mode text level-2 isis circuit-type level-2
R1>isis tag 1 R2
R1>router isis 2
R1>net 49.0001.0010.0002.0202.00
R1>area-password C1sc0! int et0/0
R1>ip router isis 2
R1>isis authen mode text level-2 isis circuit-type level-2
R1>isis tag 2 int et1/0
R1>ip router isis 2
R1>isis authen mode text level-1 isis circuit-type level-1
R1>isis tag 2 R3
R1>router isis 3
R1>net 49.0001.0010.0003.0303.00
R1>area-password C1sc0! int et0/0
R1>ip router isis 3
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

SOLUTION:R1
 Config t router isis 1
 net 49.0001.0010.0001.0101.00
 area-password C1sc0! int et0/0
 ip router isis 1
 isis authen mode text level-2 isis circuit-type level-2
 isis tag 1 int et1/0
 ip router isis 1
 isis authen mode text level-2 isis circuit-type level-2
 isis tag 1 R2
 router isis 2
 net 49.0001.0010.0002.0202.00
 area-password C1sc0! int et0/0
 ip router isis 2
 isis authen mode text level-2 isis circuit-type level-2
 isis tag 2 int et1/0
 ip router isis 2
 isis authen mode text level-1 isis circuit-type level-1
 isis tag 2 R3
 router isis 3
 net 49.0001.0010.0003.0303.00
 area-password C1sc0! int et0/0
 ip router isis 3

```
isis authen mode text level-1 isis circuit-type level-1
isis tag 3 int et1/0
ip router isis 3
isis authen mode text level-2 isis circuit-type level-2
isis tag 3
R1 Verification:
```

```
R1#show isis neighbors

Tag 1:
System Id      Type Interface      IP Address      State Holdtime Circu
it Id
R2             L2 Et0/0             172.20.1.2     UP      8      R2.02
R3             L2 Et1/0             172.20.2.3     UP      8      R3.02

Tag null:
```

```
R1
Config t
Ipv6 unicast-routing Router isis 1
Metric-style wide
Address-family ipv6 unicast Multi-topology
Int loop0
Ip router isis 1 Ipv6 router isis 1 Isis tag 1
Int et0/0
Ipv6 router isis 1 Int et1/0
Ipv6 router isis 1 R2
Config t
Ipv6 unicast-routing Router isis 2
Metric-style wide
Address-family ipv6 unicast Multi-topology
Int loop0
Ip router isis 2 Ipv6 router isis 2 Isis tag 2
Int et0/0
Ipv6 router isis 2 Int et1/0
Ipv6 router isis 2 R3
Config t
Ipv6 unicast-routing Router isis 3
Metric-style wide
Address-family ipv6 unicast Multi-topology
Int loop0
Ip router isis 3 Ipv6 router isis 3 Isis tag 3
Int et0/0
Ipv6 router isis 3 Int et1/0
Ipv6 router isis 3
```

```
R1#show clns neighbors

Tag 1:
System Id      Interface      SNPA           State Holdtime Type
Protocol
R2             Et0/0         aabb.cc00.0200 Up      9      L2
IS-IS
R3             Et1/0         aabb.cc00.0301 Up      7      L2
IS-IS

Tag null:
```

R1 Ipv6 Verification:

- L

```
R1#sh ipv6 route
IPv6 Routing Table - default - 8 entries
Codes: C - Connected, L - Local, S - Static, U - Per-user Static route
        B - BGP, HA - Home Agent, MR - Mobile Router, R - RIP
        H - NHRP, I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea
        IS - ISIS summary, D - EIGRP, EX - EIGRP external, NM - NEMO
        ND - ND Default, NDp - ND Prefix, DCE - Destination, NDr - Redir
ect
        RL - RPL, O - OSPF Intra, OI - OSPF Inter, OE1 - OSPF ext 1
        OE2 - OSPF ext 2, ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
        la - LISP alt, lr - LISP site-registrations, ld - LISP dyn-eid
        lA - LISP away, a - Application
C   2000:CC13:CC13:2020::/64 [0/0]
    via Ethernet0/0, directly connected
L   2000:CC13:CC13:2020::1/128 [0/0]
    via Ethernet0/0, receive
I2  2000:CC13:CC13:2021::/64 [115/20]
    via FE80::A8BB:CCFF:FE00:200, Ethernet0/0
C   2000:CC13:CC13:2030::/64 [0/0]
    via Ethernet1/0, directly connected
L   2000:CC13:CC13:2030::1/128 [0/0]
    via Ethernet1/0, receive
I2  2000:CC13:CC13:2031::/64 [115/20]
    via FE80::A8BB:CCFF:FE00:301, Ethernet1/0
I2  2000:CC13:CC13:2040::/64 [115/20]
    via FE80::A8BB:CCFF:FE00:301, Ethernet1/0
L   FF00::/8 [0/0]
    via Null0, receive
R1#
```

R1
Copy run start R2
Copy run start R3
Copy run start

NEW QUESTION 95

Which protocol does a Cisco MPLS TE tunnel use to maintain paths within the core?

- A. RSVP
- B. VTP
- C. STP
- D. RPF

Answer: A

NEW QUESTION 100

Refer to the exhibit:

```
ip flow-export source loopback 0
ip flow-export destination 192.168.1.1
ip flow-export version 5 origin-as
```

If the NetFlow configuration is updated to version 9, which additional piece of information can be reported?"

- A. IPv6 flow information
- B. flow sequence numbers
- C. BGP AS information
- D. IPv4 flow information

Answer: A

NEW QUESTION 105

FRR is configured on a network. What occurs when the headend router on the path is alerted to a link failure over IGP?

- A. LSP attempts fast switching on the backup path until the primary path returns to the active state.
- B. The headend router uses a presignaled LSP to bypass the failure point.
- C. A new backup tunnel is established past the PLR to pass through the protected nodes
- D. Backup tunnel is established and intersects with the primary tunnel at the headend.

Answer: A

NEW QUESTION 107

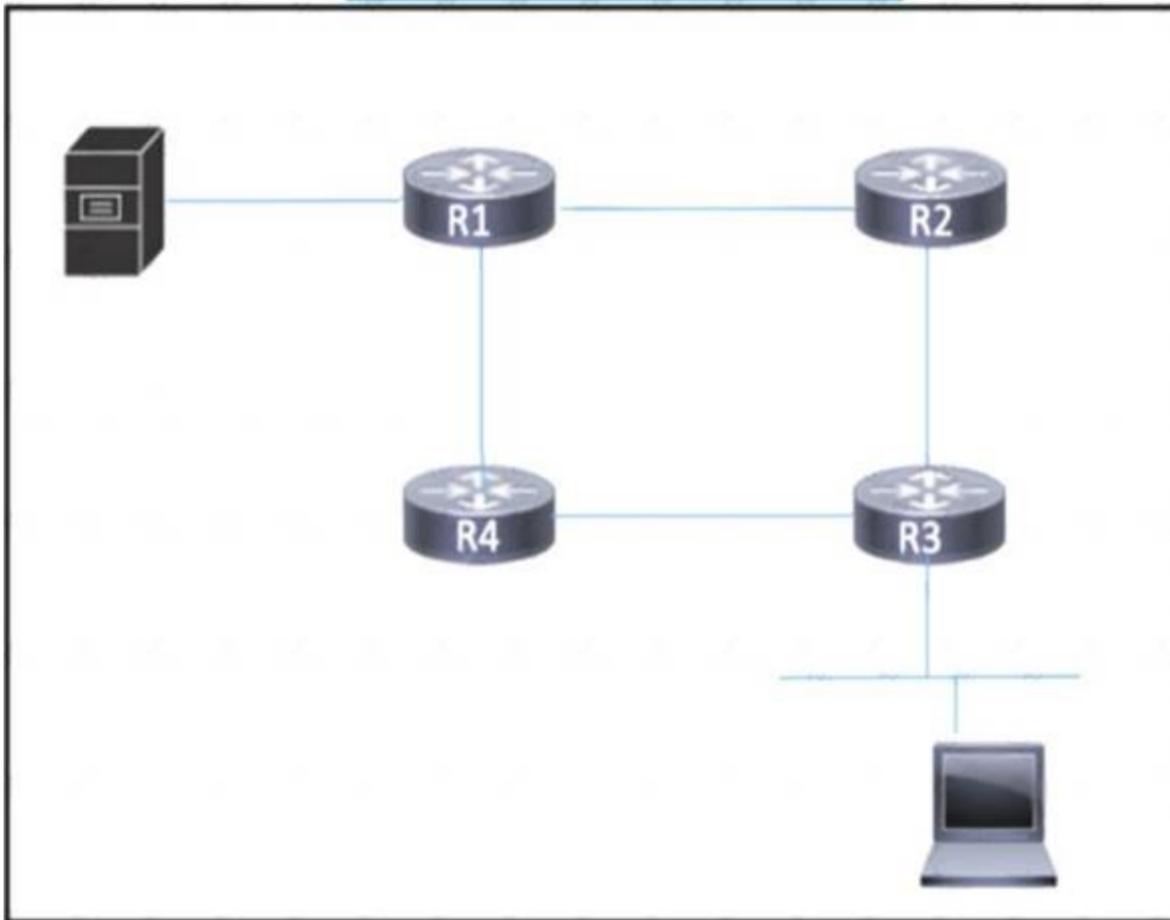
Which protocol is used for communication between the PCE and PCC?

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

Answer: B

NEW QUESTION 112

Refer to the exhibit.



A host connected to R3 must connect with a server on R1 that provides critical, time-sensitive data. Traffic between the host and server must always be given bandwidth to traverse the links when they are congested, with other traffic being dropped. How must the network engineer implement a QoS strategy with classification to ensure that the traffic is given the appropriate bandwidth?

- A. Implement FIFO to guarantee that the server traffic is sent first while other traffic is queued.
- B. Implement policing to rate-limit noncritical traffic that exceeds designated thresholds.
- C. Implement traffic shaping to delay noncritical traffic when the link is congested.
- D. Implement strict priority to guarantee bandwidth for the server traffic.

Answer: D

NEW QUESTION 117

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
    
```

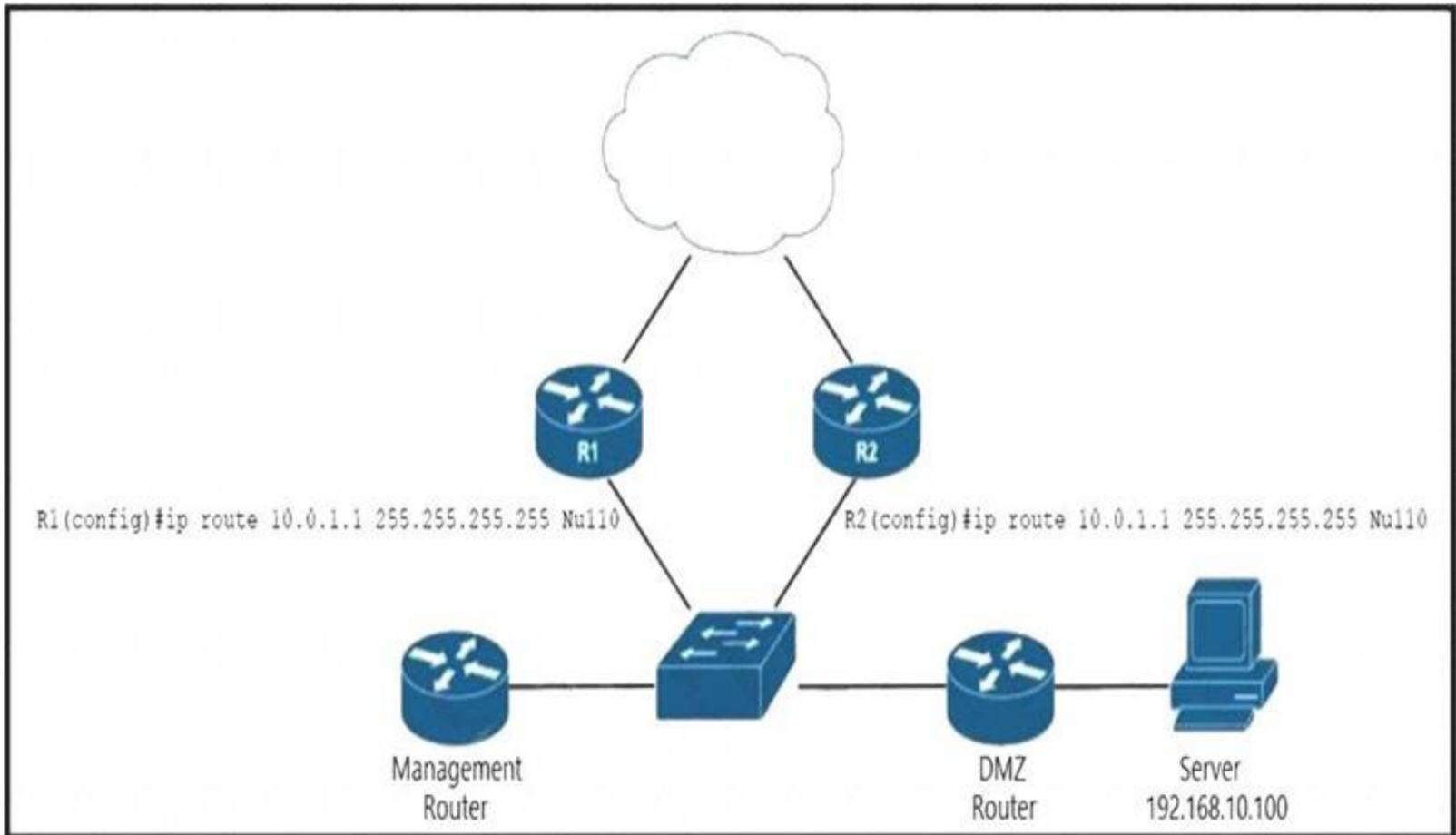
Which command can be configured on routers R1 and R2 on f0/O interfaces to form OSPF adjacency?

- 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 119

Refer to the exhibit.



router(config)# route-map blackhole-trigger router(config-route-map)# match tag 777 router(config-route-map)# set ip next-hop 10.0.1.1 router(config-route-map)# set origin igp router{config-route-map)# set community no-export
 EIGRP is running across the core to exchange internal routes, and each router maintains 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 123

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

- graceful restart
- IGP synchronization
- session protection
- targeted-hello accept

NEW QUESTION 128

Refer to the exhibit. Which additional configuration must an engineer to the edge router to inject a default router into the MP-BGP address family for the internet_Shared_Services dedicated VRF?

A)

```
router bgp 100
address-family vpnv4
neighbor 1.1.1.1 activate

neighbor 1.1.1.1 send-community extended
neighbor 1.1.1.1 next-hop-self
address-family ipv4 vrf Internet_Shared_Service
network 1.1.1.1
```

B)

```
router bgp 100
address-family vpnv4
neighbor 1.1.1.1 send-community both
exit-address-family

address-family ipv4 vrf Internet
no synchronization
network 0.0.0.0
```

C)

```
router bgp 100
address-family vpnv4
neighbor 1.1.1.1 activate
neighbor 1.1.1.1 send-community extended
exit-address-family

address-family ipv4 vrf Internet
no synchronization
network 0.0.0.0
```

D)

```
router bgp 100
address-family vpnv4
neighbor 1.1.1.1 activate
neighbor 1.1.1.1 send-community both
exit-address-family

address-family ipv4 vrf Internet_Shared_Service
no synchronization
network 0.0.0.0
```

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

Answer: D

NEW QUESTION 129

Refer to the exhibit.

```

R1
ip multicast-routing
ip pim rp-candidate GigabitEthernet1/0/0

interface g1/0/0
  ip pim sparse-mode

R2
ip multicast-routing
ip pim bsr-candidate GigabitEthernet1/0/0

interface g1/0/0
  ip pim sparse-mode
  
```

An engineer configured multicast routing on client's network. What is the effect of this multicast implementation?

- A. R2 floods information about R1 throughout the multicast domain.
- B. R2 is unable to share information because the ip pim autorp listener command is missing.
- C. R1 floods information about R2 throughout the multicast domain.
- D. R2 is elected as the RP for this domain.

Answer: B

NEW QUESTION 131

An engineer is implementing IGMP with SSM on a multicampus network that supports video streaming. Which task must the engineer perform as part of the process?

- A. Configure the network to use IGMPv3.
- B. Configure the network to use bidirectional PIM.
- C. Configure an RP that uses static assignments only.
- D. Configure the network to use the PIM bsr-candidate

Answer: A

NEW QUESTION 136

Which statement about segment routing prefix segments is true?

- A. It is linked to a prefix SID that is globally unique within segment routing domain.
- B. It is the longest path to a node.
- C. It is linked to an adjacency SID that is globally unique within the router.
- D. It requires using EIGRP to operate.

Answer: A

NEW QUESTION 141

What is a characteristics of the Pipe model for MPLS QoS?

- A. The same QoS policy is applied to all customer traffic on the egress PE.
- B. If the outer EXP is changed, it is copied to the DSCP value.
- C. The MPLS EXP bits are set by the CE.
- D. The DSCP value determines how the packet is forwarded

Answer: A

NEW QUESTION 146

Which statement about the Cisco MPLS TE forwarding adjacency feature is true?

- A. It enables the headend and tailend routers to establish a bidirectional tunnel
- B. It enables the tailend router to advertise routes to the headend router over the tunnel
- C. It enables the MPLS core to use EIGRP as the routing protocol
- D. It enables the Cisco MPLS TE tunnel to be advertised into the running IGP.

Answer: D

NEW QUESTION 149

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: D

NEW QUESTION 150

Which action occurs during the traceback phase of the six-phase approach to service provider security?

- A. Trace action occur flows from the stacked sections of the network toward the network edges
- B. Detect unusual activity or behavior and activate appropriate measures after an alert is raised.
- C. Review the whole attack-handling process
- D. Mitigate the attack that flows using various mechanisms.

Answer: A

NEW QUESTION 153

Refer to the exhibit.

```
RouterX# show telemetry model-driven subscription SUB11
Sun Jul 11 21:32:25.231949501 UTC
Subscription: SUB11
-----
State: ACTIVE
Sensor groups:
Id: SGroup13
  Sample Interval: 20000 ms
  Sensor Path: openconfig-interfaces:interfaces/interface
  Sensor Path State: Resolved
Destination Groups:
Group Id: DialIn_1002
  Destination IP: 172.16.10.1
  Destination Port: 22471
  Encoding: self-describing-gpb
  Transport: dialin
  State: Active
  Total bytes sent: 13909
  Total packets sent: 14
  Last sent time: 2021-07-11 21:32:25.231964501 +0000
Collection Groups:
-----
Id: 2
  Sample Interval: 20000 ms
  Encoding: self-describing-gpb
  Num of collections: 7
  Collection time: Min: 32 ms Max: 39 ms
  Total time: Min: 34 ms Avg: 37 ms Max: 40 ms
  Total Deferred: 0
  Total Send Errors: 0
  Total Send Drops: 0
  Total Other Errors: 0
  Last Collection Start: 2021-07-11 21:32:25.231930501 +0000
  Last Collection End: 2021-07-11 21:32:25.231969501 +0000
  Sensor Path: openconfig-interfaces:interfaces/interface
```

An engineer ran this show telemetry command to view subscription SUB11 on RouterX. The engineer then decided that RouterY should provide the same output for sensor group SGroup13 as RouterX. The engineer cannot access RouterX to copy its configuration. No access lists on the router block user access. Which configuration must the engineer apply on RouterY to provide the same output from the show telemetry command?

A)

```
RouterY(config)# telemetry model-driven
RouterY(config-model-driven)# subscription SUB11
RouterY(config-model-driven-subs)# sensor-group-id SGroup13 sample-interval 20000
RouterY(config-model-driven-subs)# destination-id DGroup1
```

B)

```
RouterY(config)# telemetry model-driven
RouterY(config-model-driven)# subscription SGroup13
RouterY(config-model-driven-subs)# sensor-group-id SGroup13 sample-interval 20000
```

C)

```
RouterY(config)# telemetry model-driven
RouterY(config-model-driven)# destination-group SUB11
RouterY(config-model-driven-dest)# address family ipv4 172.16.10.1 port 22471
RouterY(config-model-driven-dest-addr)# encoding self-describing-gpb
RouterY(config-model-driven-dest-addr)# protocol tcp
```

D)

```
RouterY(config)# telemetry model-driven
RouterY(config-model-driven)# sensor-group SGroup13
RouterY(config-model-driven-snsr-grp)# sensor-path openconfig-interfaces:interfaces/interface
```

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

Answer: C

NEW QUESTION 156

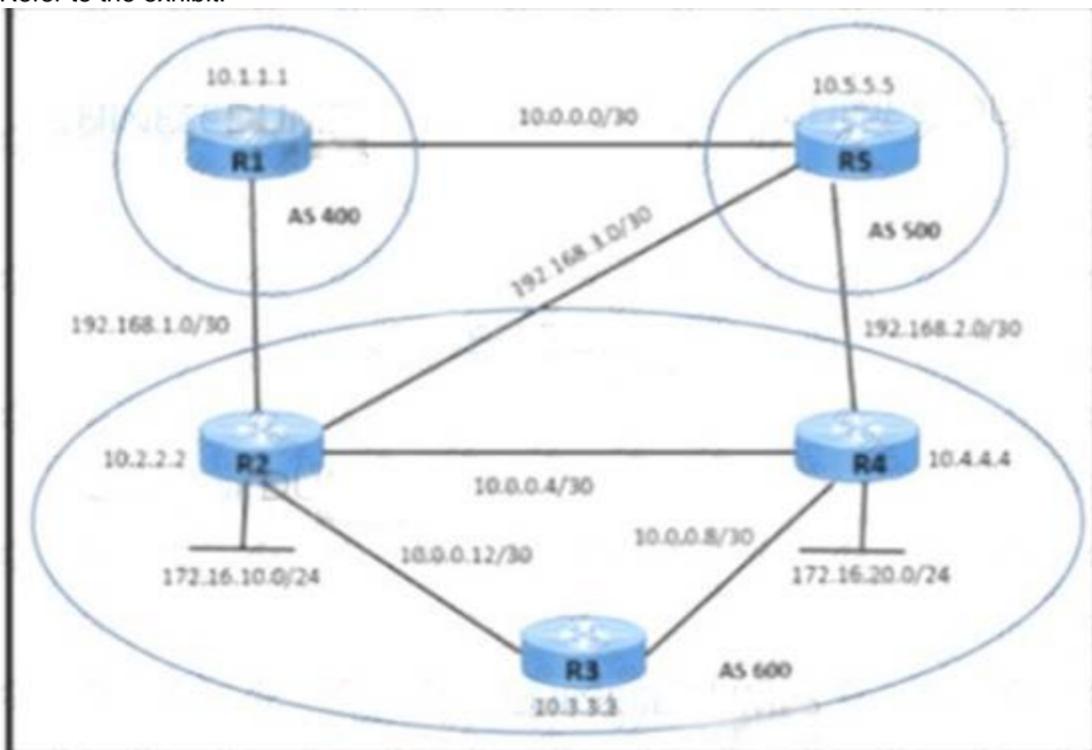
Which function does RSVP perform in a Cisco MPLS TE environment?

- 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 158

Refer to the exhibit.



A network engineer is implementing iBGP and eBGP between AS 600 and AS 500 with these requirements:

- R2 must wait for 30 seconds before sending BGP updates to R5 for multicast traffic.

Which action must be taken on R2 to meet the requirements?

- A. Configure advertisement-interval 30 In address-family ipv4 unicast
- B. Configure advertisement-Interval 30 in address-family Ipv4 multicast
- C. Apply timers bgp 30 in address-family ipv4 unicast
- D. Apply timers bgp 30 in address-family ipv4 multicast.

Answer: B

NEW QUESTION 160

Which service is a VNF role?

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

Answer: B

NEW QUESTION 165

Which utility can you use to locate MPLS faults?

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

Answer: C

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 167

What is an enhancement that Cisco IOS XE Software has over Cisco IOS Software?

- A. It support symmetric multiprocessing
- B. It allows all processes to use the same pool of memory.
- C. It runs on a 32-bit operating system.
- D. It is built on a GNX Neutrino Microkernel.

Answer: A

NEW QUESTION 169

A customer site is being connected to a Frame Relay network via a T1 link. The customer has a contract for 512 kbps service with a Tc value of 125 ms. Under peak line conditions, customer traffic can reach four times the contracted speed. Which QoS configuration must the service provider implement to limit the customer to the contracted values?

- policy-map policy_map
 class class_map
 police cir 512000 bc 64000 pir 20480000 be 192000
 conform-action transmit
 exceed-action drop
- policy-map policy_map
 class class_map
 police cir 512kbps bc 256kbps pir 2Mbps be 9600 kbps
 conform-action transmit
 exceed-action set-de-bit transmit
 violate-action drop
- policy-map policy_map
 class class_map
 police cir 512000 bc 128000 pir 256000 be 32000
 conform-action transmit
 exceed-action set-be-bit transmit
 exceed-action drop
- policy-map policy_map
 class class_map
 police cir 512000 bc 32000 pir 64000 be 6400
 conform-action transmit
 violate-action set-dscp-transmit default
 exceed-action drop

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

Answer: A

NEW QUESTION 171

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

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

Answer: D

NEW QUESTION 174

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 175

Which two routing protocols support Cisco MPLS TE tunnels? (Choose two.)

- A. IS-IS
- B. RIP
- C. BGP
- D. OSPF
- E. EIGRP

Answer: AD

NEW QUESTION 177

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

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

Answer: A

NEW QUESTION 179

What are two features of 6RD IPv6 transition mechanism? (Choose two.)

- A. It inserts IPv4 bits into an IPv6 delegated prefix.
- B. It uses a native IPv6-routed network between CE routers and the BR router.
- C. It allows dynamic 1:N translation of IPv6 address.
- D. It uses stateful automatic 6to4 tunnels between CE routers and the BR router.
- E. It uses stateless automatic 6to4 tunnels between CE routers and the BR router.

Answer: AE

NEW QUESTION 183

What does DWDM use to combine multiple optical signals?

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

Answer: D

NEW QUESTION 184

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 187

How does SR policy operate in Segment Routing Traffic Engineering?

- A. An SR policy for color and endpoint is deactivated at the headend as soon as the headend learns a valid candidate path for the policy.
- B. When "invalidation drop" behavior occurs, the SR policy forwarding entry is removed and the router drops all traffic that is steered into the SR policy.
- C. When a set of SID lists is associated with the SR policy designated path, traffic steering is ECMP-based according to the qualified cost of each SID-list.
- D. An active SR policy installs a BSID-keyed entry in the forwarding table to steer the packets that match the entry to the SR policy SID-list.

Answer: D

NEW QUESTION 189

Refer to the exhibit.

```
PE-A:

vrf definition Customer-A
 rd 65000:1111
  route-target export 65000:1111
  route-target import 65000:1111
 !
 address-family ipv4
  mdt default 233.15.38.120
  mdt data 233.15.38.121 0.0.0.0 threshold 100
  mdt mtu 5000
 !
 interface GigabitEthernet0/0
  vrf forwarding Customer-A
  ip address 10.10.10.1 255.255.255.252
 !
 ip multicast-routing vrf Customer-A
```

An engineer is implementing Auto-RP and reviewing the configuration of the PE-A. Which configuration permits Auto-RP messages to be forwarded over this interface?

- A. PE-A(config-if)#ip pim sparse-mode
- B. PE-A(config-if)#no ip pim bsr-border
- C. PE-A(config-if)#ip igmp version 3
- D. PE-A(config-if)#ip pim sparse-dense-mode

Answer: D

NEW QUESTION 194

Refer to the exhibit:

```
PE-A#config t
PE-A(config)#interface FastEthernet0/0
PE-A(config-if)#ip ospf message-digest-key 1 md5 44578611
PE-A(config-if)#ip ospf authentication message-digest

PE-B#config t
PE-B(config)#interface FastEthernet0/0
```

An engineer wants to authenticate the OSPF neighbor between PEA and PE-B using MD5. Which command on PE-B successfully completes the configuration?

A)

```
PE-B(config-if)#ip ospf message-digest-key 1 md5 44578611
PE-B(config-if)#ip ospf authentication message-digest
```

B)

```
PE-B(config-if)#ip ospf message-digest-key 1 md5 44568611
PE-B(config-if)#ip ospf authentication null
```

C)

```
PE-B(config-if)#ip ospf message-digest-key 1 md5 44578611
PE-B(config-if)#ip ospf authentication null
```

D)

```
PE-B(config-if)#ip ospf message-digest-key 1 md5 44578611
PE-B(config-if)#ip ospf authentication key-chain 44578611
```

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

Answer: A

NEW QUESTION 196

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: DE

NEW QUESTION 199

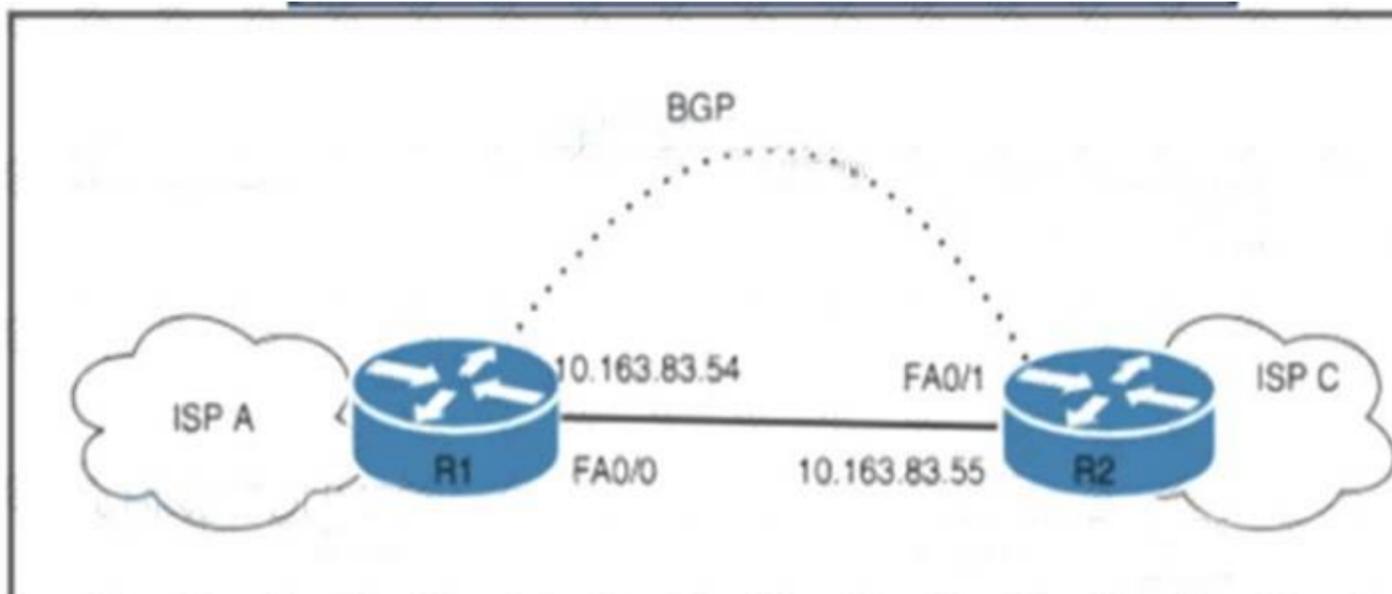
A network administrator must monitor network usage to provide optimal performance to the network end users when the network is under heavy load. The administrator asked the engineer to install a new server to receive SNMP traps at destination 192.168.1.2. Which configuration must the engineer apply so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

- A. snmp-server enable traps entity snmp-server host 192.168.1.2 public
- B. snmp-server enable traps bgpsnmp-server host 192.168.1.2 public
- C. snmp-server enable traps isdnsmmp-server host 192.168.1.2 public
- D. snmp-server enable trapssnmp-server host 192.168.1.2 public

Answer: D

NEW QUESTION 204

Refer to the exhibit.



ISP A has a BGP peering with ISP C with the maximum-prefix 150 configuration on R1. After a recent security breach on the ISP A network, a network engineer has been asked to enable a lightweight security mechanism to protect the R1 CPU and BGP membership from spoofing attacks. Which solution must ISP A implement?

- A. Configure bgp maxas-limit 1 in the IPv4 address family urateUhe global BGP configuration.

- B. Configure neighbor 10.163.83.54 enable-connected-check under the BGP IPv4 address family.
- C. Configure neighbor 10.163.83.55 password Cisco under the global BGP IPv4 address family.
- D. Configure neighbor 10.163.83.55 ttl-stcurity hops 2 under the global BGP configuration.

Answer: D

NEW QUESTION 206

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 210

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
```

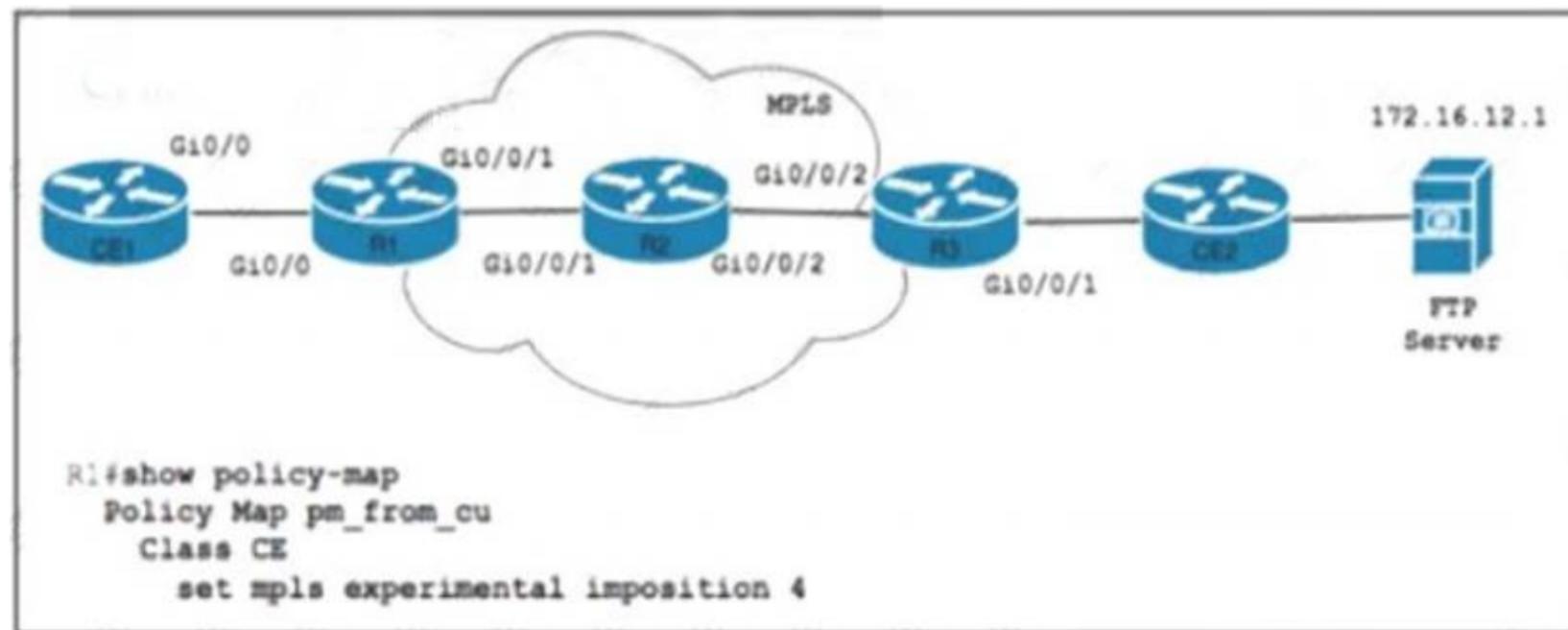
Export statistics received do not include the BGP next hop. Which statement about the NetFlow export statistics is true?

- 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 212

Refer to the exhibit.



Router R1 is configured with class map CE with match Ip precedence critical to align with customer contract SLAs. The customer is sending all traffic from CE1 toward the FTP server with IP precedence 5 A network engineer must allow 10% of interface capacity on router R3 Which two actions must the engineer take to accomplish the task? (Choose two)

- A. Implement a class map on R1 to match all packets with QoS IP precedence value 100.
- B. Implement a class map on R3 to match all packets with QoS IP precedence value 101.
- C. Apply a policy map to R1 to reserve the remaining 10% of interface bandwidth.
- D. Apply a policy map to R3 to reserve 10% of interface bandwidth.
- E. Implement a class map on R3 to match all packets with QoS IP precedence.

Answer: BD

NEW QUESTION 215

What is the primary role of a BR router in a 6rd environment?

- A. It provides connectivity between end devices and the IPv4 network.
- B. It embeds the IPv4 address in the 2002::/16 prefix.
- C. It connects the CE routers with the IPv6 network.
- D. It provides IPv4-in-IPv6 encapsulation

Answer: C

NEW QUESTION 220

A network operator with an employee ID 4531 26:504 must implement a PIM-SSM multicast configuration on the customer's network so that users in different domains are able to access and stream live traffic. The IGMP version must be enabled to support the SSM implementation. Which action must the engineer perform on R1 to complete the SSM implementation?

- R1(config)# ip multicast-routing
R1(config)# ip pim ssm default
R1(config)# interface ethernet 1/0
R1(config-if)# ip pim sparse-mode
R1(config-if)# ip igmp version 3
- R1(config)# ip routing multicast
R1(config)# ip pim ssm range 1
R1(config)# ip pim passive
R1(config)# ip plm dense-mode
R1(config-if)# ip igmp version 3
- R1(config)# ip pim ssm range 1
R1(config)# interface ethernet 1/0
R1(config-if)# ip pim sparse-dense-mode
R1(config-if)# ip igmp version 2
- R1(config)# ip pim bidir-enable
R1(config)# ip multicast-routing
R1(config)# ip pim autorp listener
R1(config-if)# ip igmp version 2

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

Answer: A

NEW QUESTION 225

Refer to the exhibit.

```
telemetry model-driven
destination-group ciscotest
address family ipv4 192.168.1.1 port 1025
encoding self-describing-gpb
[ ]
```

A Cisco engineer is implementing gRPC dial-out on an ASR. Receiver 192.168 1.1 will be assigned one of the subscriptions, and it will manage the ASR. Which command is needed to complete the router configuration?

- A. protocol grpc
- B. protocol all
- C. protocol tcp
- D. protocol any

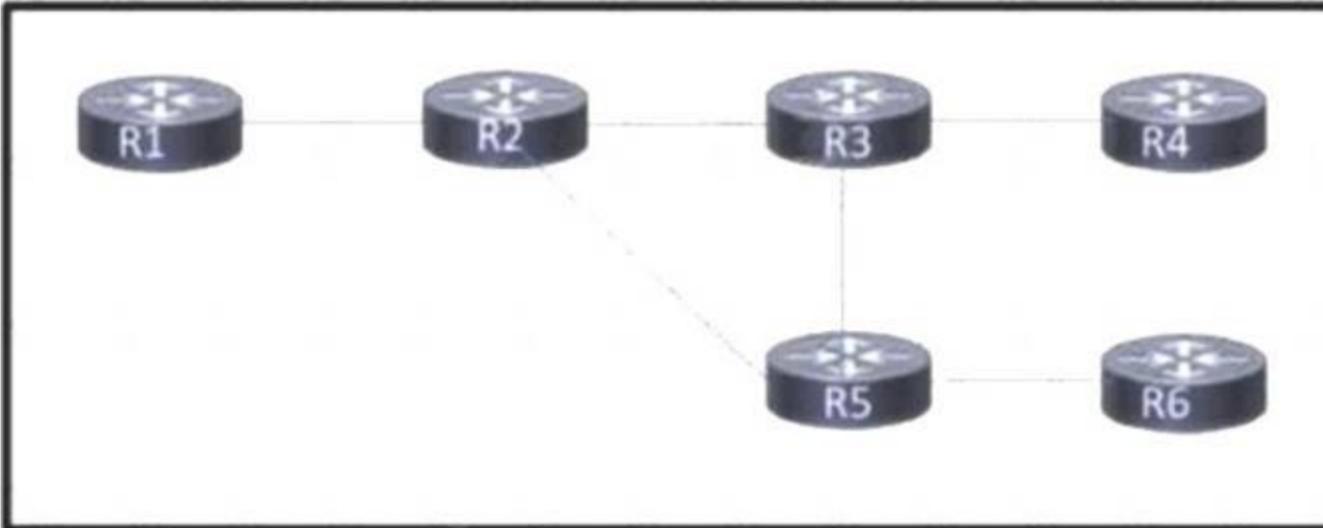
Answer: C

Explanation:

- Transmission Control Protocol (TCP): used for only dial-out mode.
- User Datagram Protocol (UDP): used for only dial-out mode.

NEW QUESTION 230

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 233

Refer to the exhibit:

```

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

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

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

Answer: A

NEW QUESTION 235

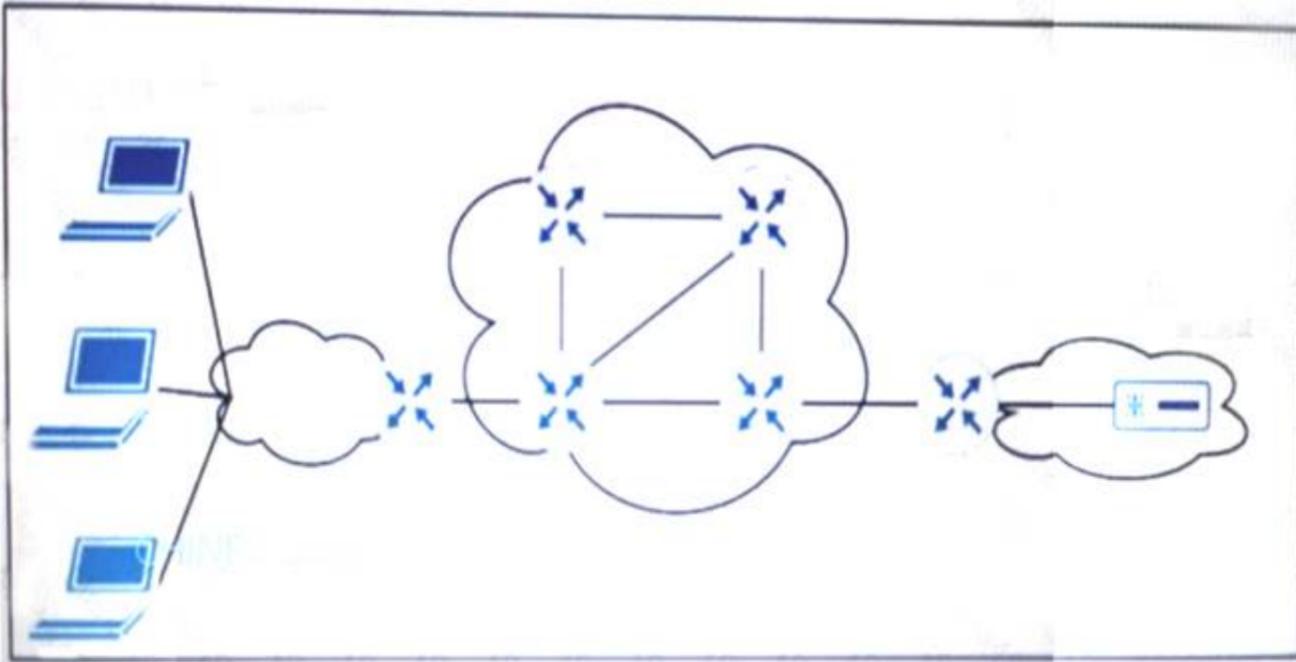
How does Cisco DNA Center enhance network automation?

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

Answer: B

NEW QUESTION 237

Refer to the exhibit.



ISP A provides VPLS services and DDoS protection to Company XYZ to connect their branches across the North America and Europe regions. The uplink from the data center to the ISP is Mbps. The company XYZ security team asked the ISP to redirect ICMP requests which are currently going to the web server to a new local security appliance which configuration must an ISPP engineer apply to router R2 to redirect the ICMP traffic?

A)

```
class-map type traffic match-all B_210.10.65.1
match destination-address ipv4 210.10.65.1
match protocol 7
match ipv4 icmp-type 3
```

B)

```
class-map type traffic match-all B_210.10.65.1
match destination-address ipv4 210.10.65.1
match protocol 3
match ipv4 icmp-type 5
```

C)

```
class-map type traffic match-all B_210.10.65.1
match destination-address ipv4 210.10.65.1
match protocol 6
match ipv4 icmp-type 9
```

D)

```
class-map type traffic match-all B_210.10.65.1
match destination-address ipv4 210.10.65.1
match protocol 1
match ipv4 icmp-type 8
```

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

Answer: D

NEW QUESTION 239

What is the role of NSO in network automation?

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

Answer: D

Explanation:

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

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

NEW QUESTION 242

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

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

Which configuration must the engineer implement to satisfy the requirements?

A)

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

B)

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

C)

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

D)

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

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

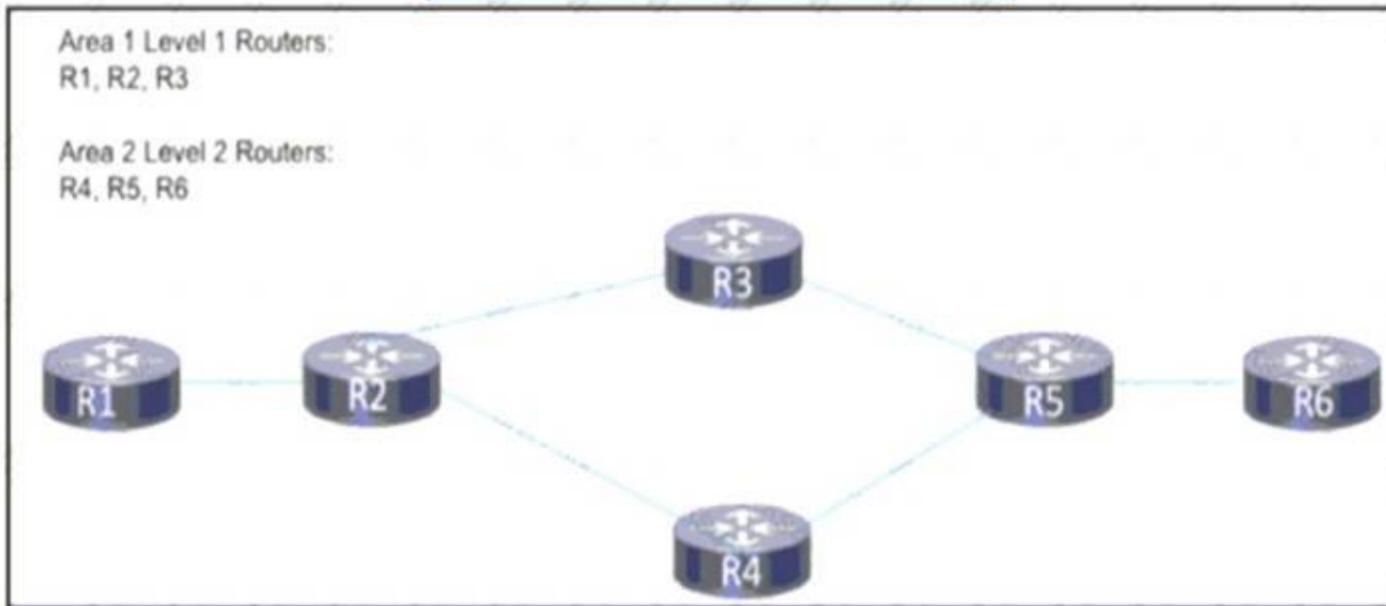
Answer: C

Explanation:

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

NEW QUESTION 245

Refer to the exhibit A network engineer is in the process of implementing IS-IS Area 1 and Area 2 on this network to segregate traffic between different segments of the network The hosts in the two new areas must maintain the ability to communicate with one another In both directions. Which additional change must be applied?



- A. Reconfigure either R3 or R4 as a Level 1/Level 2 router.
- B. Reconfigure routers R1, R2 R5. and R6 as Level 1/Level 2 routers.
- C. Reconfigure routers R2 and R5 as Level 1/Level 2 routers.
- D. Reconfigure routers R4, R5 and R6 as Level 1 routers

Answer: A

NEW QUESTION 246

Refer to the exhibit:

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

What is significant about the number 2 in the configuration?

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

Answer: A

NEW QUESTION 251

Drag and drop the characteristics from the left onto the corresponding radio splitting approaches on the right

Answer Area

- It requires lower RTT delays.
- It is also known as the fronthaul network.
- It requires high bandwidth.
- It is also known as the midhaul network.

Low-level split

High-level split

- A. Mastered
- B. Not Mastered

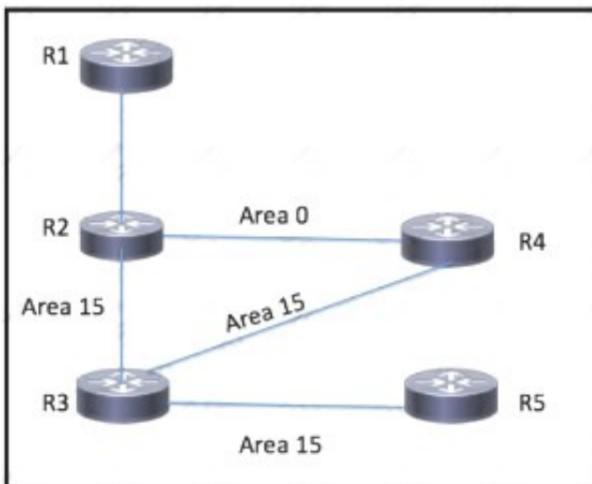
Answer: A

Explanation:

<https://www.cisco.com/c/en/us/solutions/service-provider/mobile-internet/5g-transport/converged-5g-xhaul-tran>

NEW QUESTION 254

Refer to the exhibit.



An engineer has started to configure a router for OSPF, as shown. Which configuration must an engineer apply on the network so that area 15 traffic from R5 to R1 will prefer the route through R4?

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

Answer: B

NEW QUESTION 259

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

- A)

```
flowspec
address-family ipv4
local-install all-interface
```
- B)

```
flowspec
address-family ipv4
install interface-all
```
- C)

```
flowspec
address-family ipv4
local-install interface-all
```
- D)

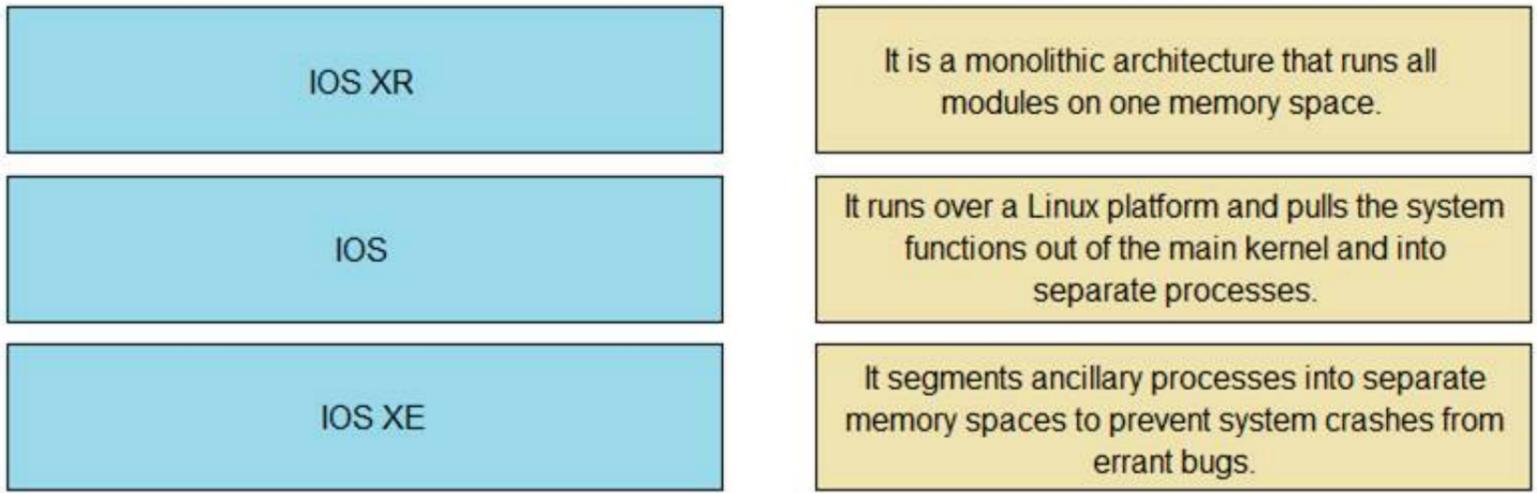
```
flowspec
address-family ipv4
install interface-all local
```

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

Answer: C

NEW QUESTION 264

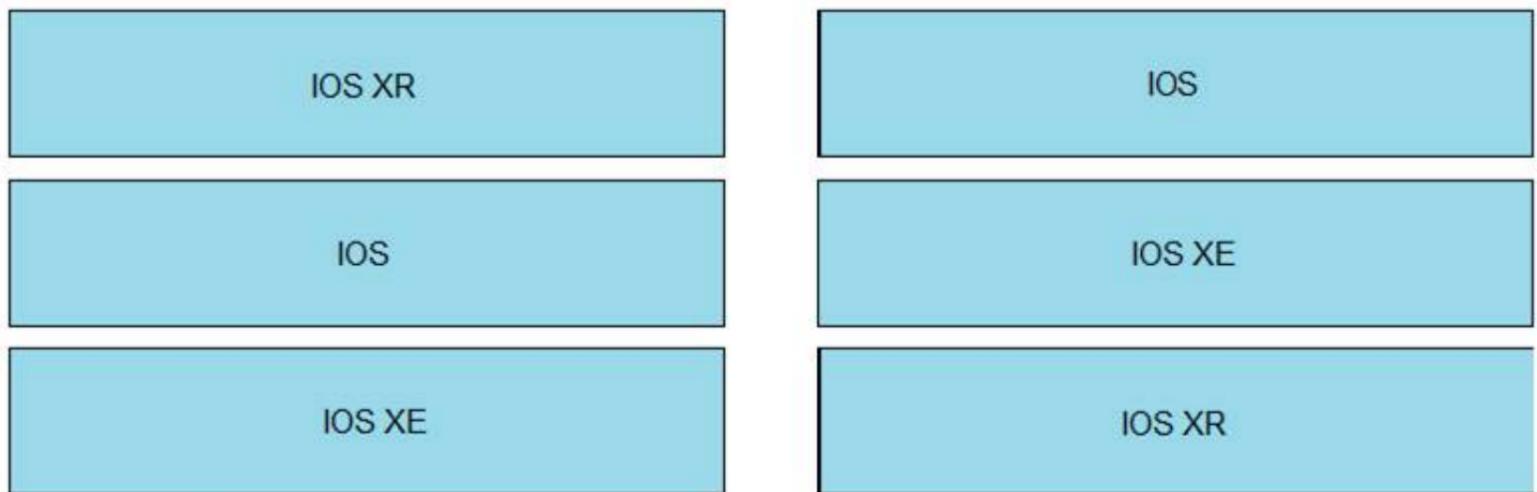
Drag and drop the OSs from the left onto the correct deceptions on the right.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 269

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 274

Refer to the exhibit.

```

CE1#
interface FastEthernet0/0/1
description **** HUB CE router ****
ip address 10.0.12.1 255.255.255.0

router ospf 100
log-adjacency-changes
network 10.0.12.0 0.0.255.255 area 0

CE2#
interface Serial0/0/9
description **** SPOKE CE router ****
encapsulation ppp
ip address 10.0.12.12 255.255.255.0

router ospf 100
log-adjacency-changes
network 10.0.12.0 0.0.255.255 area 0
    
```

A network engineer is configuring customer edge routers to finalize a L2VPN over MPLS deployment. Assume that the AToM L2VPN service that connects the two CEs is configured correctly on the service provider network. Which action causes the solution to fail?

- A. A loopback with a /32 IP address has not been used
- B. OSPF does not work with L2VPN services
- C. The xconnect statement has not been defined
- D. The routing protocol network types are not compatible

Answer: D

NEW QUESTION 277

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 279

Refer to the exhibit:

```

Router 1:

ip route 192.0.2.0 255.255.255.0 null 0
ip route 192.168.1.0 255.255.255.0 null 0 tag 1

route-map ddos
match tag 1
set ip next-hop 192.0.2.1
set local-preference 150
set community no export

route-map ddos permit 20

router bgp 65513
redistribute static route-map ddos

Router 2:

ip route 192.0.2.0 255.255.255.0 null 0
    
```

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

- A. Router 1 drops all traffic with a local-preference set to 150
- B. All traffic is dropped
- C. All traffic to 192.168.1.0/24 is dropped
- D. Router 1 and Router 2 advertise the route to 192.0.2.0/24 to all BGPFD peers.

Answer: C

NEW QUESTION 281

Refer to the exhibit.

Router 1: Interface gigabitethernet0/1 ip address 192.168.1.1 255.255.255.0 ip ospf hello-interval 1 router ospf 1 network 192.168.1.0 0.0.0.255 area 1	Router 2: Interface gigabitethernet0/1 ip address 192.168.1.2 255.255.255.0 ip ospf hello-interval 2 router ospf 2 network 192.168.1.2 0.0.0.0 area 1
---	---

What reestablishes the OSPF neighbor relationship between Router 1 and Router 2?

- A. authentication is added to the configuration
- B. correct wildcard mask is used on Router 2
- C. OSPF process IDs match
- D. hello intervals match

Answer: D

NEW QUESTION 285

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 288

Refer to the exhibits:

```
Apr 30 14:33:43.619: %CLNS-4-AUTH_FAIL: ISIS: LAN IIH authentication failed".
```

```
R1#show isis neighbors
Tag TEST:
System Id  Type Interface  IP Address  State Holdtime Circuit Id
R2         L2    Fa0/0      UP    9          R2.01

R2#show isis neighbors
Tag TEST:
System Id  Type Interface  IP Address  State Holdtime Circuit Id
R2         L1    Fa0/0      INIT 22          R2.01
R2         L2    Fa0/0      UP    24          R2.01
```

R1 and R2 are directly connected and IS-IS routing has been enabled between R1 and R2 R1 message periodically Based on this output, which statement is true?

- A. IS-IS neighbor authentication is failing for Level 2 first and then for Level 1 PDUs
- B. IS-IS neighbor authentication is failing for Level 1 and Level 2 PDUs .
- C. IS-IS neighbor authentication is failing for Level 1 PDUs only
- D. IS-IS neighbor authentication is failing for Level 2 PDUs only.

Answer: C

NEW QUESTION 290

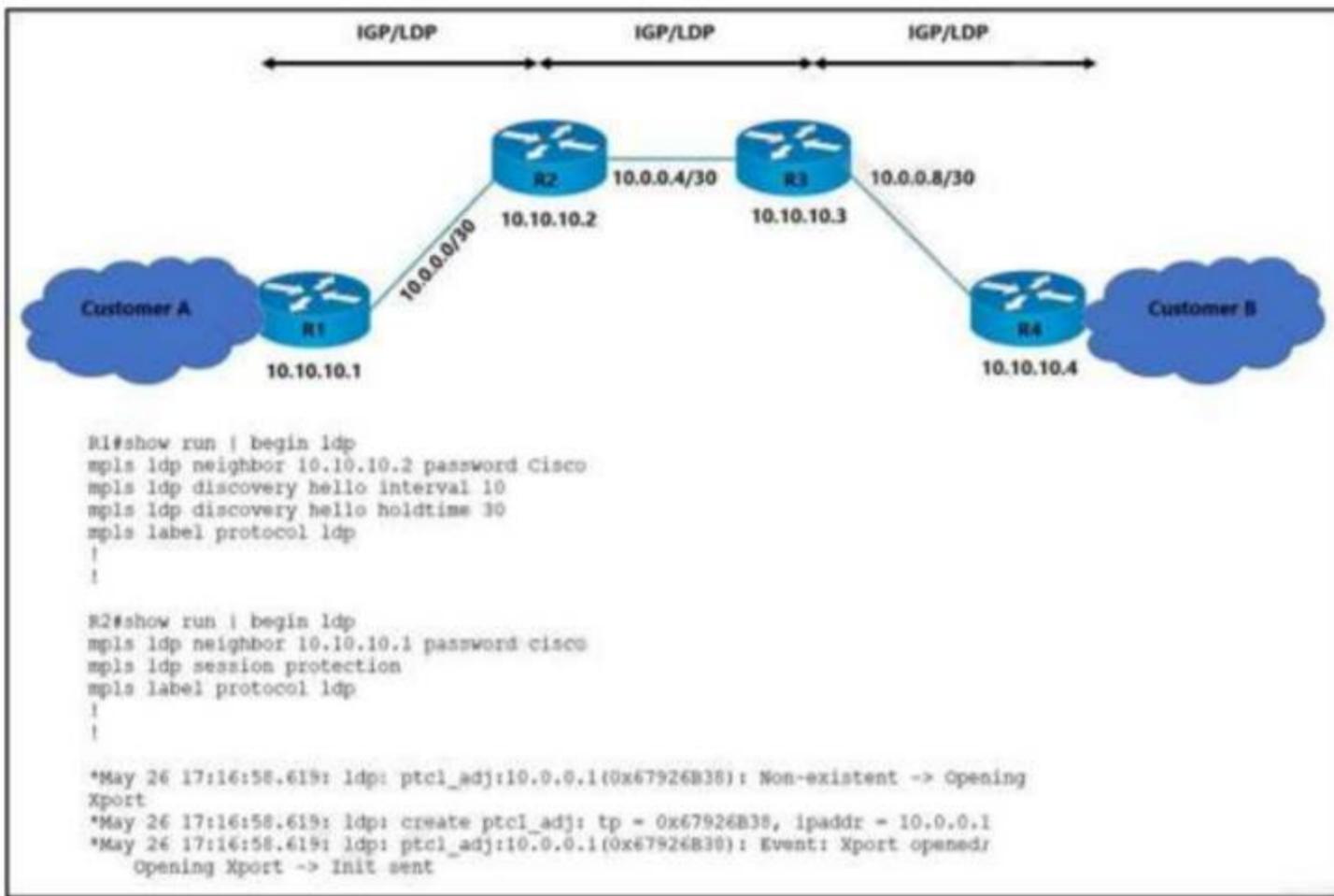
Which role does the Adjacency-SID sub-TLV extension perform in the IS-IS routing protocol?

- A. It is advertised within a TLV-24 (IS-IS Neighbor Adjacency Attribute) to label a specific adjacency between Level1 routers within one IS-IS area.
- B. It is advertised within TLV-136 (Extended IP Reachability) to label a specific node in the network.
- C. It is advertised within TLV-22 (Extended IS Reachability) to label a specific link in a segment routing domain.
- D. It is advertised within TLV-145 (IS-IS Prefix Reachability Information) to label host prefixes on loopback interfaces on Level 2 routers within one

Answer: C

NEW QUESTION 293

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 295

Refer to the exhibit.

```

restconf_headers["Content-Type"] = "application/ yang-data+json"

loopback = {"name": "Loopback101",
            "description": "Router-1",
            "ip": "192.168.11.11",
            "netmask": "255.255.255.0"}

data = {
    "ietf-interfaces:interface": {
        "name": loopback["name"],
        "description": loopback["description"],
        "type": "iana-if-type:softwareLoopback",
        "enabled": True,
        "ietf-ip:ipv4": {
            "address": [
                {"ip": loopback["ip"],
                 "netmask": loopback["netmask"]}
            ]
        }
    }
}

url = interface_url.format(ip= core1_ip, int_name= loopback["name"])
r = requests.put(url,
                 headers = restconf_headers,
                 auth=(username, password),
                 json= data,
                 verify=False)

print("Request Status Code: {}".format(r.status_code))
    
```

An engineer at a new ISP must configure many Cisco devices in the data center. To make the process more efficient, the engineer decides to automate the task with a REST API. Which action does this JSON script automate?

- A. Configure the IP address for the existing loopback interface.
- B. Configure a physical interface on the router with an IP address and then create a loopback interface.
- C. Configure a physical interface on the router with an IP address.
- D. Delete the existing loopback interface and replace it with a new loopback interface.

Answer: A

NEW QUESTION 300

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 302

Which set of facts must the network architect consider when deciding whether to implement SaltStack or Chef?

- A. Chef is an agent-based on Ruby, and SaltStack is a module tool based on Python.
- B. Chef refers to its automation instructions as manifests, and SaltStack refers to its instructions as a playbook.
- C. Chef is written in Python, and SaltStack is written in Ruby.
- D. Chef uses a message-based system, and SaltStack uses an agent to deliver messages

Answer: A

NEW QUESTION 306

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 309

What is one of the differences between Ansible and Chef?

- A. Ansible uses YAML and Chef uses Ruby.
- B. Chef requires the use of Windows in the environment and Ansible requires Linux.
- C. Chef is highly scalable and Ansible is highly secure.
- D. Ansible uses Ruby and Chef uses Python.

Answer: A

NEW QUESTION 311

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

calculates paths through the network	Path Computation Element <div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
keeps TE topology database information	
sends path calculation request	
sends path creation request	
sends path status updates	
	Path Computation Client <div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>

- A. Mastered
- B. Not Mastered

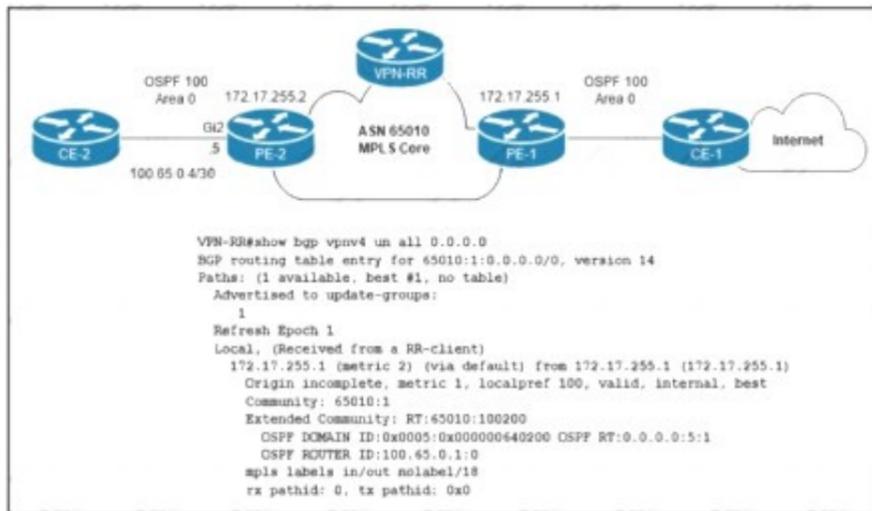
Answer: A

Explanation:

PCE – 1,2,5
PCC- 3,4

NEW QUESTION 312

Refer to the exhibit.



The network engineer who manages ASN 65010 is provisioning a customer VRF named CUSTOMER-ABC on PE-2. The PE-CE routing protocol is OSPF Internet reachability is available via the OSPF 0 0 0.0/0 route advertised by CE-1 to PE-1 In the customer VRF Which configuration must the network engineer Implement on PE-2 so that CE-2 has connectivity to the Internet?

A)

```

vrf definition CUSTOMER-ABC
rd 65010:1
address-family ipv4
route-target both 65010:1
!
router ospf 100 vrf CUSTOMER-ABC
network 100.65.0.4 0.0.0.3 area 0
redistribute bgp 65010 subnets
default-information originate
!
router bgp 65010
address-family ipv4 unicast vrf CUSTOMER-ABC
redistribute ospf 100 match internal external
    
```

B)

```

vrf definition CUSTOMER-ABC
rd 65010:2
address-family ipv4
route-target both 65010:100200
!
router ospf 100 vrf CUSTOMER-ABC
network 100.65.0.4 0.0.0.3 area 0
redistribute bgp 65010 subnets
!
router bgp 65010
address-family ipv4 unicast vrf CUSTOMER-ABC
redistribute ospf 100 match internal external
    
```

C)

```

vrf definition CUSTOMER-ABC
rd 65010:1
address-family ipv4
route-target both 65010:100200
!
router ospf 100 vrf CUSTOMER-ABC
network 100.65.0.4 0.0.0.3 area 0
redistribute bgp 65010 subnets
default-information originate
!
router bgp 65010
address-family ipv4 unicast vrf CUSTOMER-ABC
redistribute ospf 100 match internal external
    
```

D)

```
vrf definition CUSTOMER-ABC
rd 65010:2
address-family ipv4
route-target both 65010:1
!
router ospf 100 vrf CUSTOMER-ABC
network 100.65.0.4 0.0.0.3 area 0
redistribute bgp 65010 subnets
!
router bgp 65010
address-family ipv4 unicast vrf CUSTOMER-ABC
redistribute ospf 100 match internal external
```

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

Answer: C

NEW QUESTION 314

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

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

Answer: B

NEW QUESTION 318

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
```

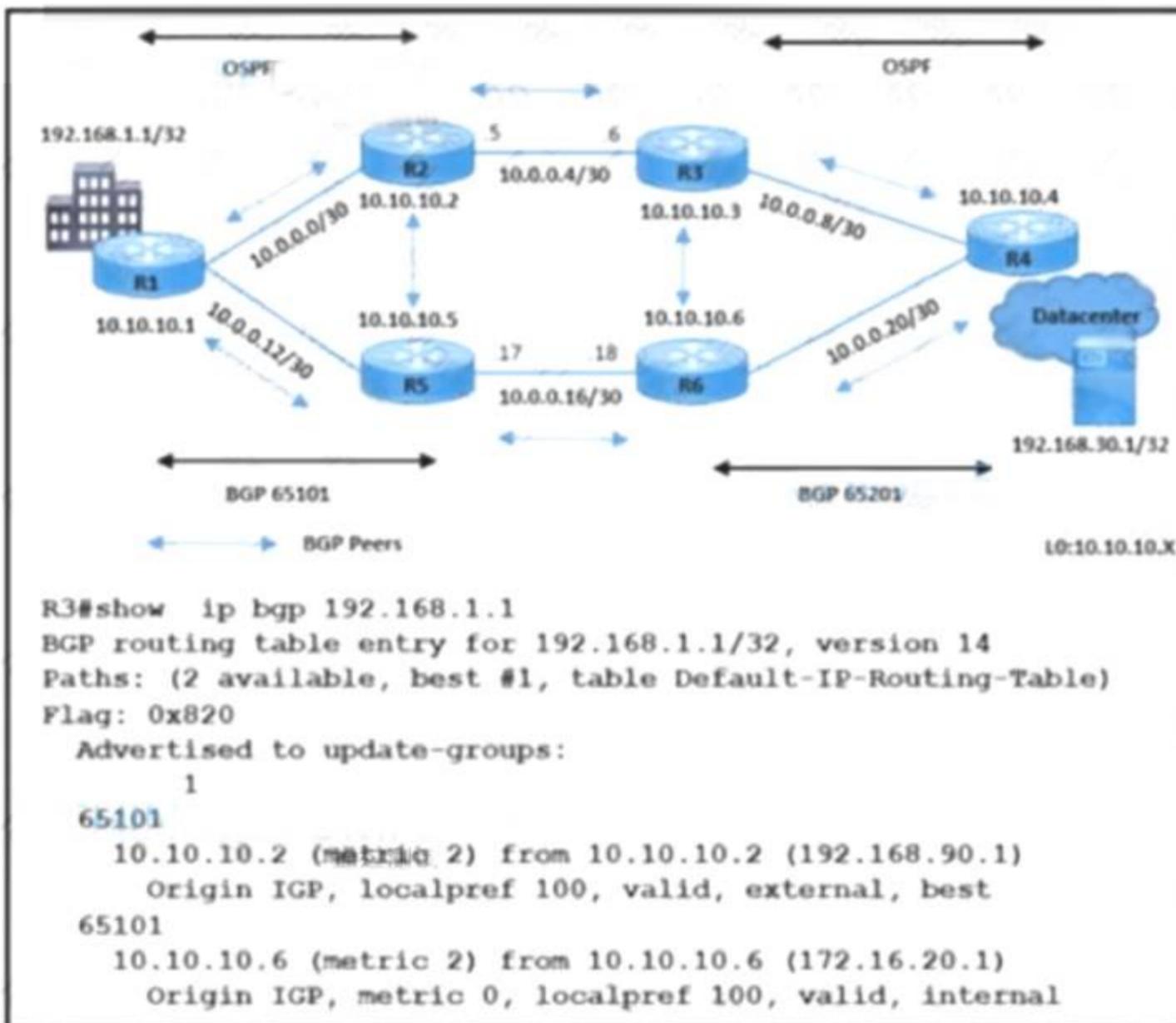
```
 exceeded 5 packets, 5070 bytes; action:drop
```

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

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

NEW QUESTION 323

Refer to the exhibit.



A network engineer is implementing BGP in AS 65101 and AS 65201. R3 sends data traffic to 192.168.1.1 /32 via the path R3-R2-R1. The traffic must travel via alternate path R6-R5 for prefix 192.168.1.1/32. Which action must be taken to meet the requirement?

- A. Apply route-map HIGH-MED out on R2 for neighbor R3.
- B. Apply route-map HIGH-LP in on R3 for neighbor R6
- C. Apply route-map LOW-LP out on R2 for neighbor R3.
- D. Apply route-map LOW-MED in on R5 for neighbor R2

Answer: A

NEW QUESTION 326

Refer to the exhibit.

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

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

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

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

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

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

Answer: A

NEW QUESTION 331

What are two features of stateful NAT64?

- A. It provides 1: N translations, so it supports an unlimited number of endpoints
- B. It provides 1:1 translation so it supports a limited number of end points
- C. It requires the ipv6 hosts to use either DHCPv6 based address assignments or manual address assignments
- D. It uses address overloading
- E. It requires IPv4 translatable IPv6 address assignments

Answer: AD

NEW QUESTION 334

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

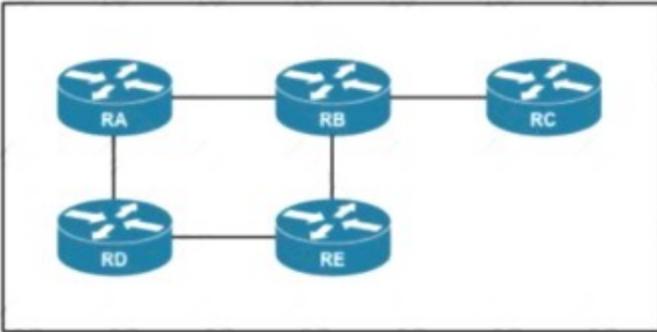
Answer: DE

Explanation:

https://www.cisco.com/c/en/us/td/docs/routers/crs/software/crs_r4-1/interfaces/command/reference/interfaces_cr

NEW QUESTION 335

Refer to the exhibit.



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

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

Answer: C

NEW QUESTION 337

Refer to the exhibit.

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

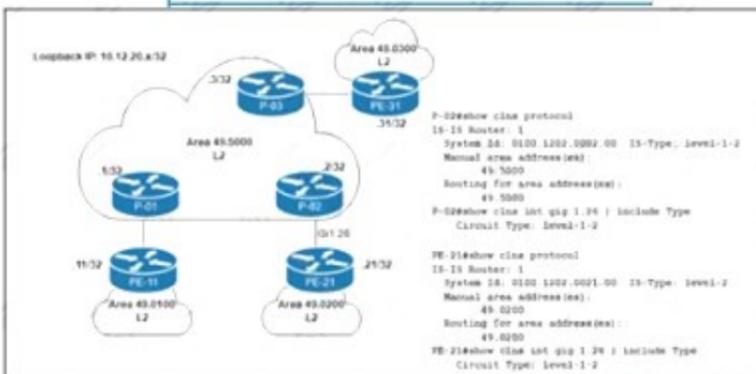
AN engineer is configuring segment routing on an ISP to simplify traffic engineering and management across network domains. What should the engineer do to complete the implementation of segment routing?

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

Answer: C

NEW QUESTION 339

Refer to me exhibit.



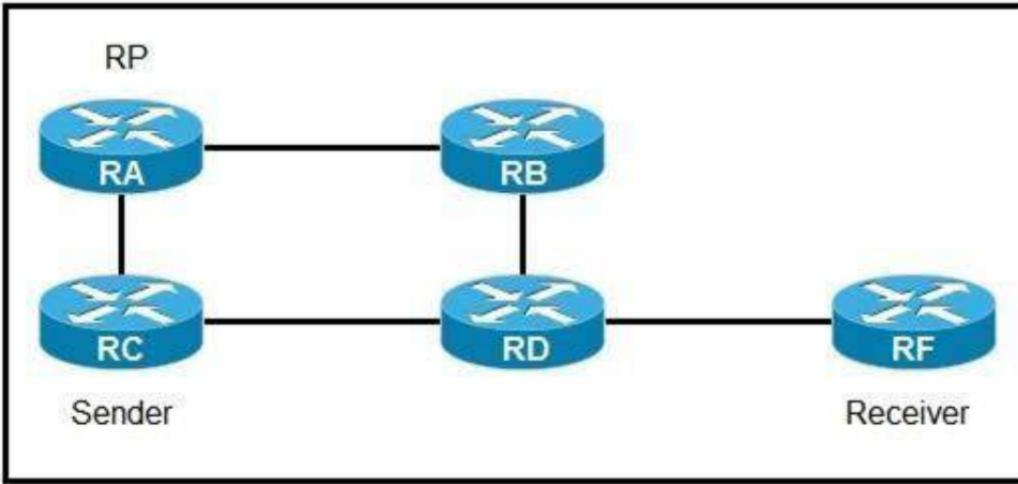
Refer to the exhibit. A network engineer notices PE-21 convergence degradation due to the growing LSDB size of Level 2 areas in the network. The engineer decides to migrate router PE-21 from an inter-area design to an intra-area implementation. Inter-area routing must be accomplished via an ATT-bit set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

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

Answer: D

NEW QUESTION 343

Refer to the exhibit:



If router A is the RP, which PIM mode can you configure so that devices will send multicast traffic toward the RP?

- A. PIM-SM
- B. PIM-DM
- C. BIDIR-PIM
- D. PIM-SSM

Answer: C

NEW QUESTION 348

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

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

Answer: A

NEW QUESTION 352

Refer to the exhibit.

```

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

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

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

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

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

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

Answer: D

NEW QUESTION 357

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

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

Answer: D

NEW QUESTION 361

An engineer must extend Layer 2 Between two campus sites connected through an MPLS backbone that encapsulates Layer 2 and Layer 3 data Which action must the engineer perform on the routers to accomplish this task?

- A. Configure a EtherChannel for E-LAN.
- B. Configure a pseudowire for E-LINE.
- C. Configure Cisco MPLS TE for use with E-TREE.
- D. Configure QoS for MPLS and E-ACCESS

Answer: B

NEW QUESTION 366

A network engineer must configure a router for Flexible NetFlow IPFIX export. The IP address of the destination server is 172.17.12.1. The source address must be set to the Loopback0 IPv4 address and exported packets must be set to DSCP CS3. The TTL must be 64 and the transport protocol must be set to UDP with destination port 4739. Which configuration must the engineer apply to the router?

- A. `configure terminalflow exporter EXPORTER-1destination 172.17.12.1 source Loopback0 dscp 3ttl 64export-protocol netflow-v9 transport udp 4739end`
- B. `configure terminalflow exporter EXPORTER-1 destination 172.17.12.1 source Loopback0dscp 24ttl 64export-protocol ipfix end`
- C. `configure terminalflow exporter EXPORTER-1 destination 172.17.12.1 source Loopback0dscp 24ttl 64export-protocol netflow-v9 transport udp 4739end`
- D. `configure terminalflow exporter EXPORTER-1 destination 172.17.12.1 source Loopback0dscp 3ttl 64export-protocol ipfix end`

Answer: B

Explanation:

<https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/fnetflow/configuration/xr-3s/fnf-xr-3s-book/fnf-ipfix-export>

NEW QUESTION 371

Drag and drop the message types from the left onto the target field of the message originator on the right.

Close	Originated by PCC to a PCE
Error	
Path Computation Reply	Originated by PCE to PCC
Path Computation Request	Originated by either PCE or PCC

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 373

Refer to the exhibit:

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

Router R1 and its peer R2 reside on the same subnet in the network, If does it make connections to R27

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

Answer: D

NEW QUESTION 376

Refer to the exhibit.

```
172.16.0.0/16

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

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

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

Answer: A

NEW QUESTION 381

Which utility must be used to locate MPLS faults?

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

Answer: C

NEW QUESTION 386

Refer to the exhibit.

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

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

A. Text, letter Description automatically generated

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

B. Text Description automatically generated

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

C. Graphical user interface, text Description automatically generated

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

D. Text, letter Description automatically generated

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

Answer: D

NEW QUESTION 388

Refer to the exhibit:

```
PE-A#config t
PE-A(config)#class-map VOIP
PE-A(config-cmap)#match precedence 5
PE-A(config-cmap)#policy-map MARK-TRAFFIC
PE-A(config-pmap)#class VOIP
```

Which command is used to complete this configuration for QoS class-based marking?

- A. PE-A(config-pmap-c)#set dscp ef
- B. PE-A(config-pmap-c)#fair-queue
- C. PE-A(config-pmap-c)#random-detect
- D. PE-A(config-pmap-c)#priority

Answer: A

NEW QUESTION 392

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>
```

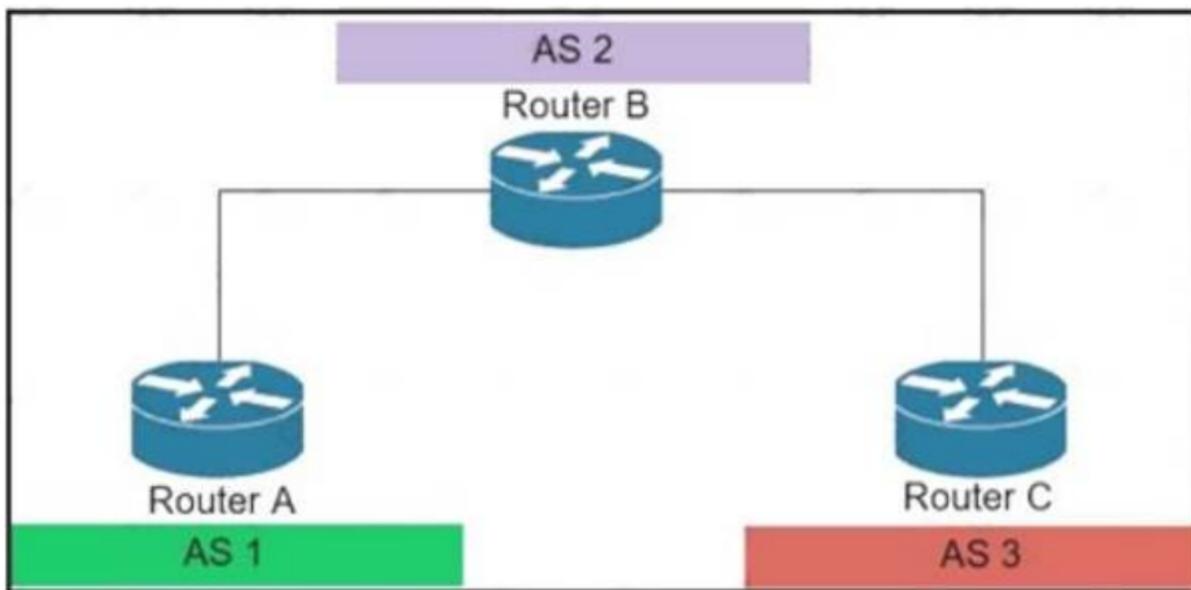
What does this REST API script configure?

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

Answer: D

NEW QUESTION 394

Refer to the exhibit.



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

- A. BGPsec uses IPsec tunnel for security.
- B. The BGPsec framework secures the AS path.
- C. In BGPse
- D. all route advertisements are given an expiry time by the originator of the route.
- E. Private keys are part of the router key pair used to sign route updates.
- F. In BGPse
- G. route advertisements are not given an expiration time by the originator of the route.

Answer: BC

Explanation:

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

NEW QUESTION 395

Refer to the exhibit.

```
POST http://192.168.1.1 api/changeSelfPassword.json

{
  "aaaChangePassword" : {
    "attributes" : {
      "userName" : "ciscotest",
      "oldPassword" : "s@nfr@nc1sc0",
      "newPassword" : "s@nfr@nc1sco"
    }
  }
}
```

What is the purpose of this JSON script?

- A. It changes the existing password.

- B. It updates a user authentication record.
- C. It deletes a user's authentication record.
- D. It confirms a user's login credentials.

Answer: A

NEW QUESTION 396

How do intent APIs make it easier for network engineers to deploy and manage networks?

- They allow the engineer to use a single interface as the entry point for control access to the entire device
- They pull stored SNMP data from a single network location to multiple monitoring tools
- They extend the Layer 2 infrastructure and reduce the necessary number of virtual connections to Layer 3 devices
- They streamline repetitive workflows and support more efficient implementation.

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

Answer: D

NEW QUESTION 397

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 398

Refer to the exhibit.

```

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

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

- A)
R1# configure terminal
R1(config)# router isis area2
R1(config-router)# address-family ipv6
R1(config-router-af)# multi-topology
- B)
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
- C)
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
- D)
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

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

Answer: C

NEW QUESTION 400

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 402

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 404

Which Cisco software OS uses monolithic architecture?

- A. NX-OS
- B. IOS XE
- C. IOS XR
- D. IOS

Answer: D

Explanation:

Cisco Internetwork Operating System (IOS) is the software used on most Cisco Systems routers and current Cisco network switches. IOS is a package of routing, switching, internetworking and telecommunications functions integrated into a multitasking operating system. IOS uses a monolithic architecture, meaning that all processes run in a single address space, making it a single-image system.

NEW QUESTION 406

What is a feature of mVPN?

- A. It requires-uncast to be disabled on the multicast domain
- B. It establishes multiple static MDTs for each multicast domain.
- C. It provides the ability to support multicast over a Layer 3 VPN.
- D. It requires the no ip mroute-cache command to be configured on the loopback interface of each BGP peer

Answer: C

NEW QUESTION 410

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 413

Which core component of MDT describes the data that an MDT-capable device streams to a collector?

- A. subscription
- B. encoder
- C. sensor path
- D. transport protocol

Answer: C

NEW QUESTION 417

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

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

Answer: A

NEW QUESTION 420

A network architect must implement CSC VPN services for a new backbone carrier. Which two benefits does the architecture provide? (Choose two.)

- A. It maintains a single backbone, which simplifies the VPN implementation to customers.
- B. It eliminates the need to maintain a centralized network-maintenance and operations strategy.
- C. It leverages IPsec to establish connections within the backbone
- D. which eliminates the need for BGP to distribute routes.
- E. It supports a scalable growth strategy that services multiple customers efficiently
- F. It relies on IP communications, which simplifies the network design.

Answer: AD

NEW QUESTION 421

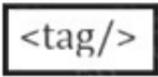
Why do Cisco MPLS TE tunnels require a link-state routing protocol?

- 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 dynamically select 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 426

Refer to the exhibit:



What does this value mean when it is received in XML?

- A. It shows the ending of the script
- B. It indicates a break in a sequence
- C. It indicates a value assigned by a network administrator to tag a route
- D. It means a data field is blank

Answer: D

NEW QUESTION 431

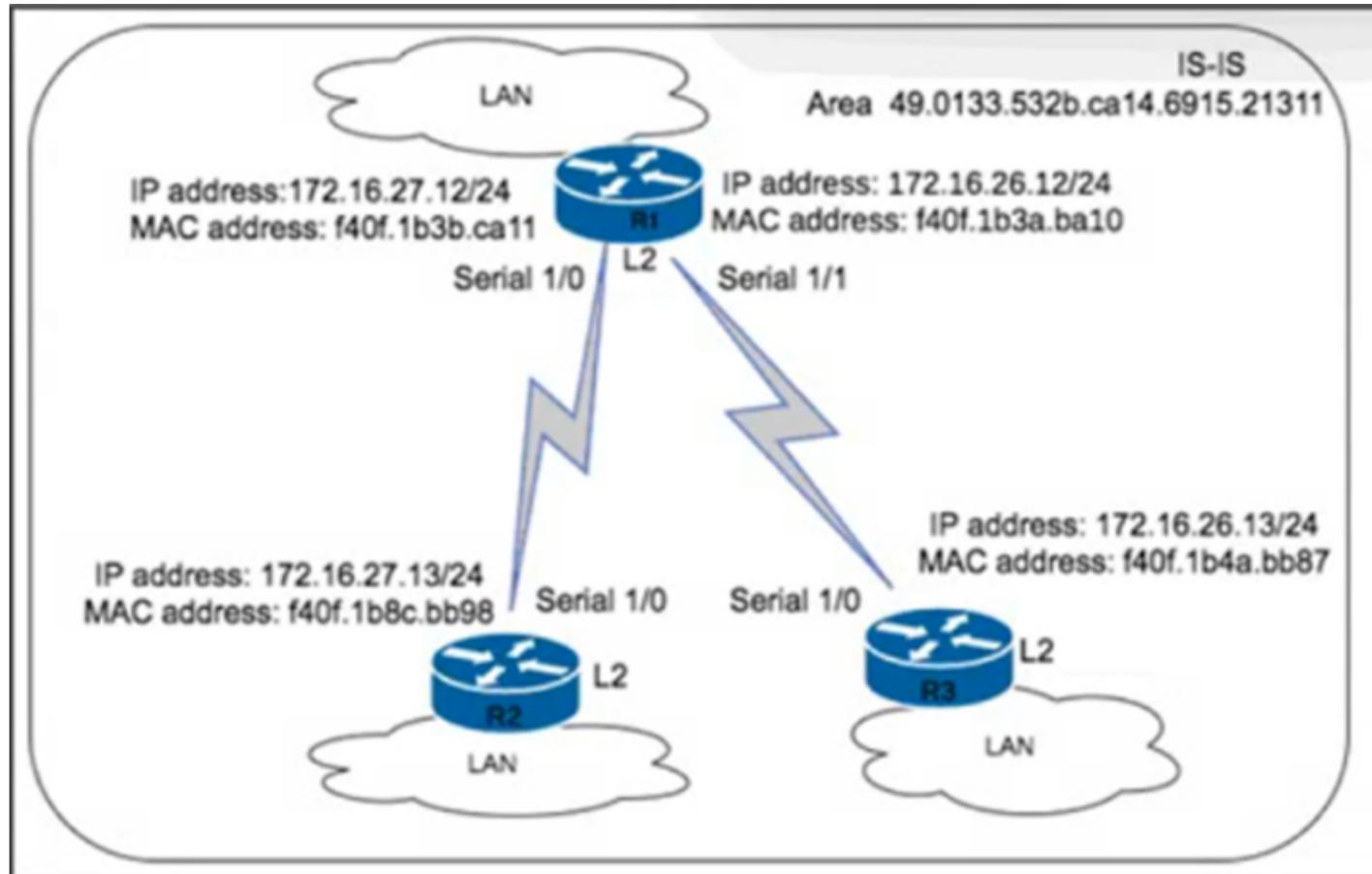
What is the primary role of Ansible in a network?

- 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 in networks that are dual stack.
- D. It is used as a network automation provisioning and configuration tool.

Answer: D

NEW QUESTION 435

Refer to the exhibit.



An engineer with an employee ID 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

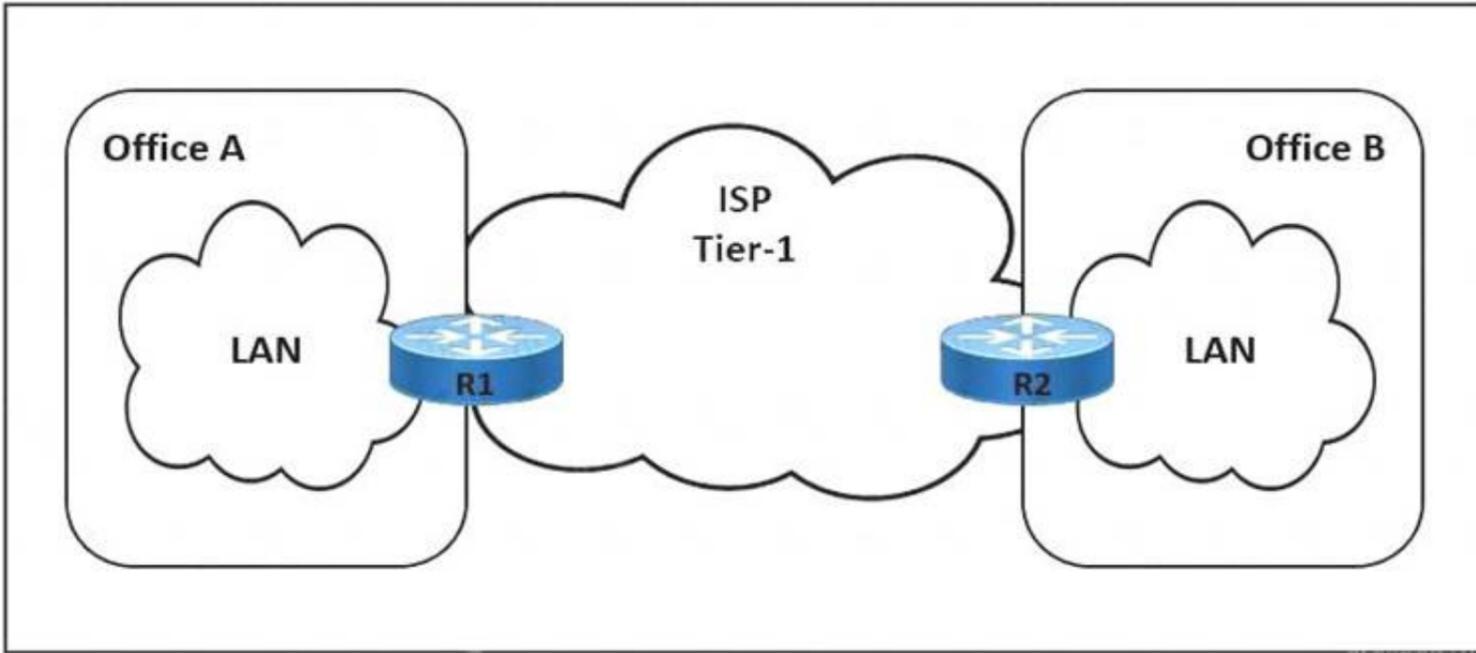
Answer: A

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 437

Refer to the exhibit.



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

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

Answer: D

NEW QUESTION 440

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
```

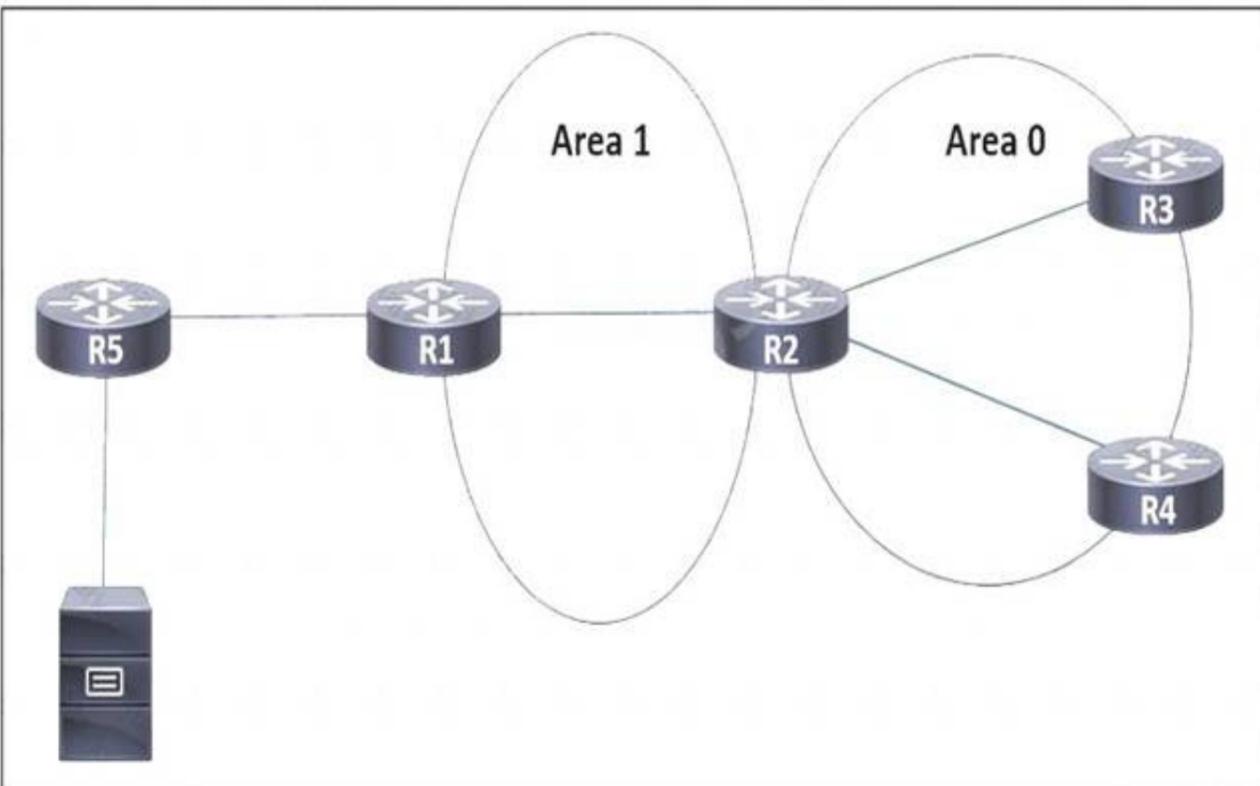
A network engineer is implementing OSPF multiarea. Which command on interface G0/1 resolves adjacency issues in the new area?

- 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 442

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 445

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 446

Refer to the exhibit.

```

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

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

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

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

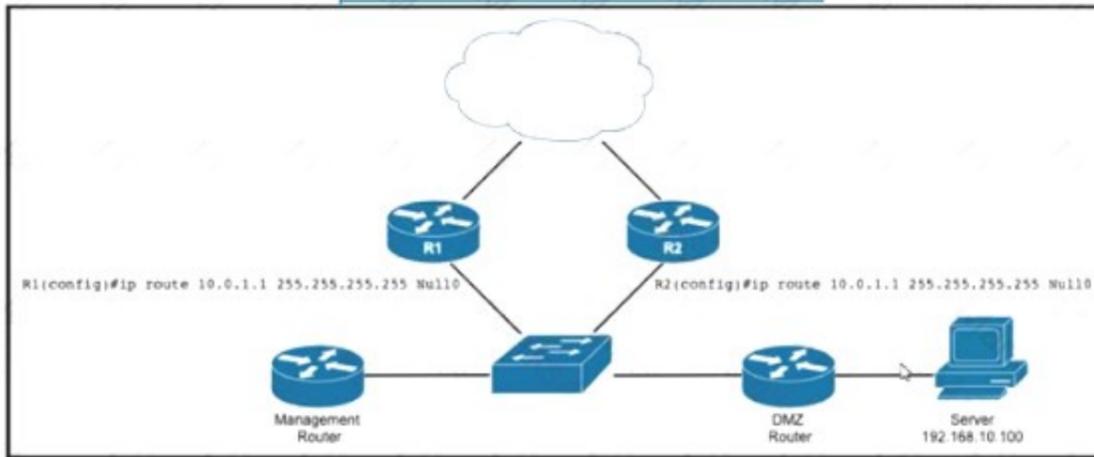
Answer: B

Explanation:

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

NEW QUESTION 450

Refer to the exhibit.



```

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

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

- router(config)# router bgp 55100
router(config-router)# redistribute connected

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

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

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

router(config)# ip route 10.0.1.1 255.255.255.255 Null0 tag 777

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

Answer: D

NEW QUESTION 451

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 456

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
    
```

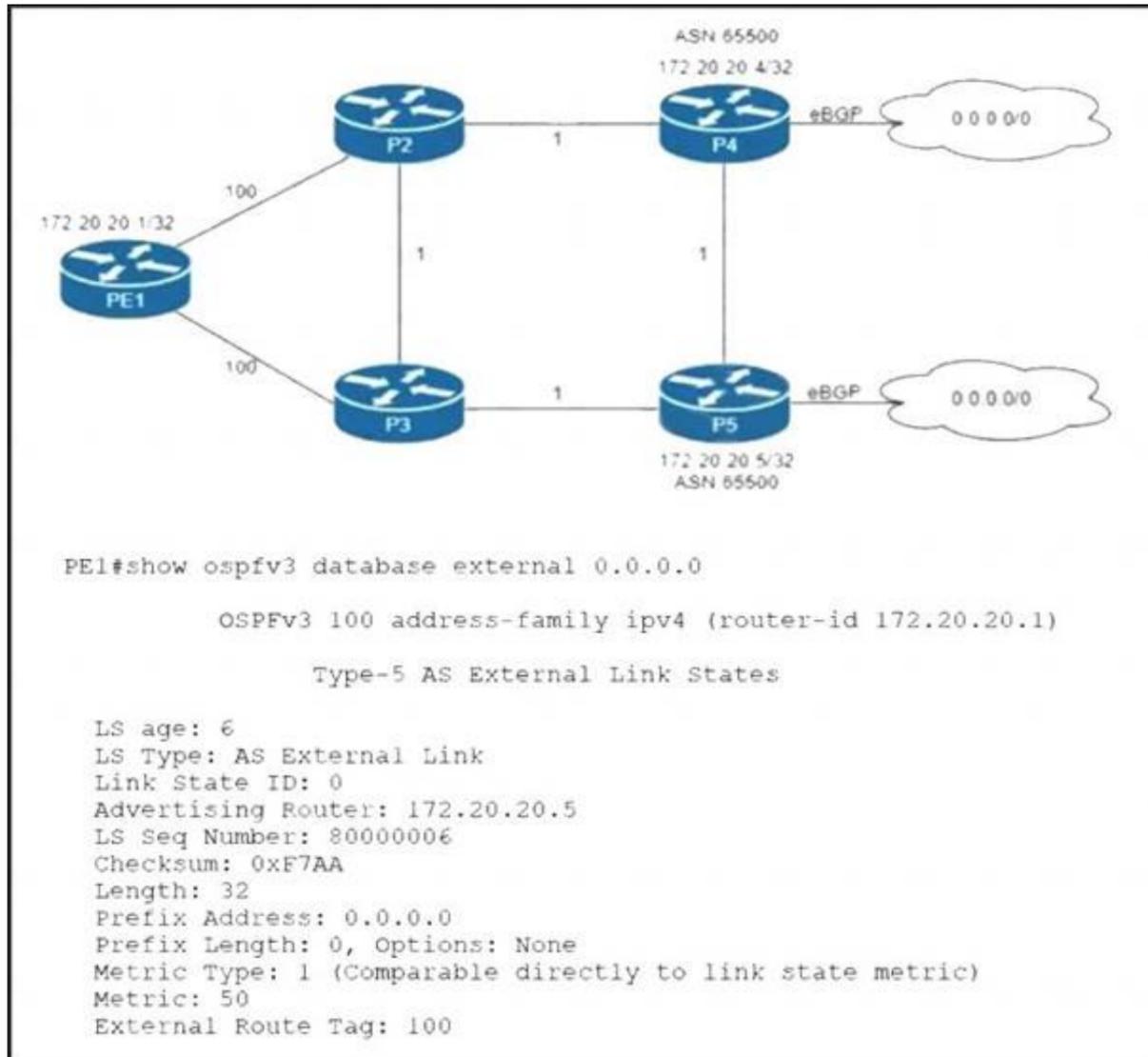
D)
 Router (config)# router bgp 300
 Router(config-router)# aggregate-address 10.16.0.0 255.255.255.0 as-set suppress-map unSuppressMap

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

Answer: B

NEW QUESTION 458

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 463

Refer to the exhibit:

```

Router 1:

netconf-yang
netconf-yang feature candidate-datastore
  
```

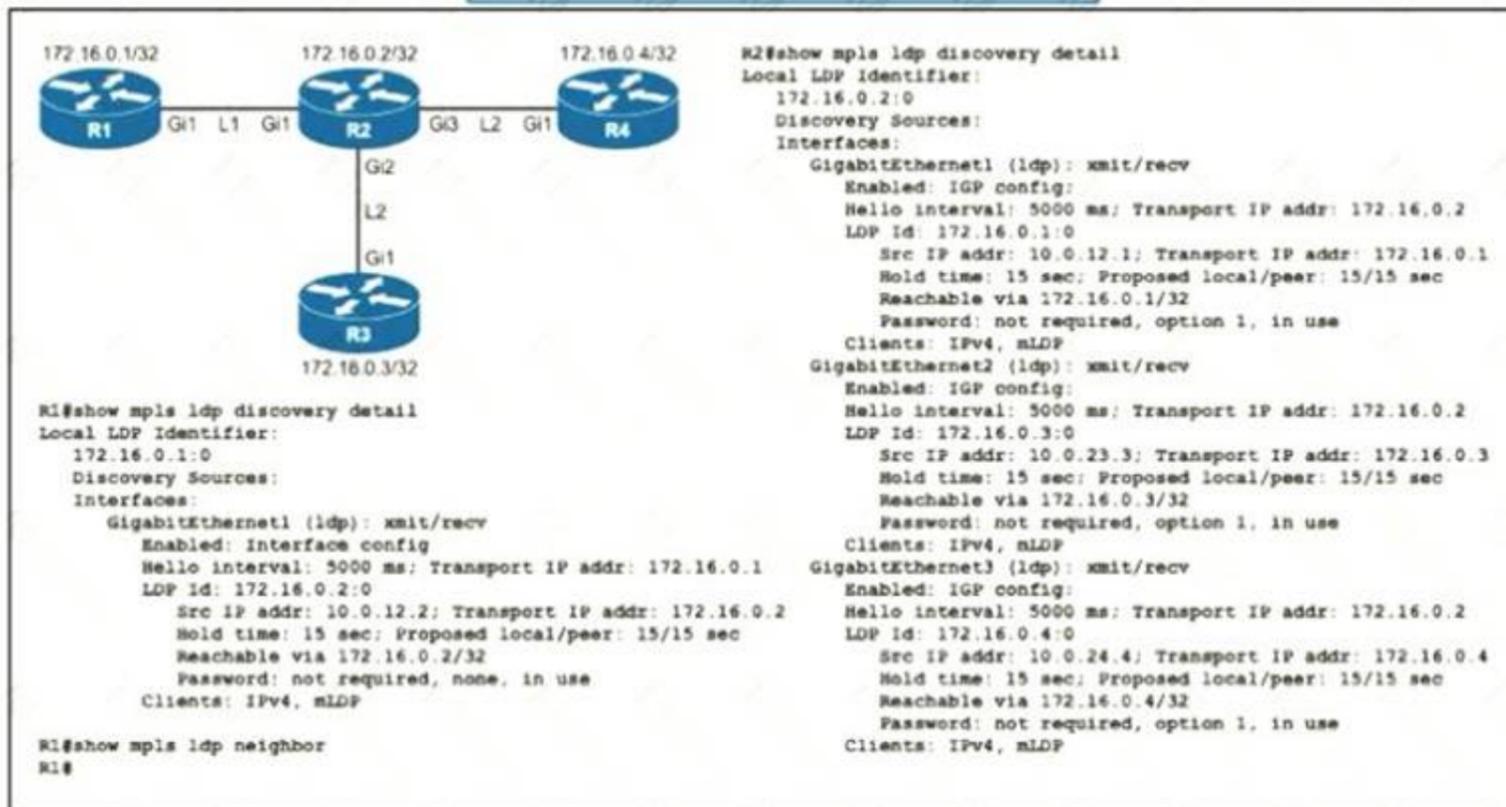
Which statement describes this configuration?

- A. Router 1 has its running configuration locked so changes can be made only when the administrator issues a kill session
- B. Router 1 can be remotely managed by the CLI using Telnet
- C. Router 1 has a new data store to collect SNMP information, but configuration must still be done at the CLI only
- D. Router 1 has a temporary data store where a copy of the running configuration can be manipulated and verified before committing the configuration

Answer: D

NEW QUESTION 468

Refer to the exhibit.



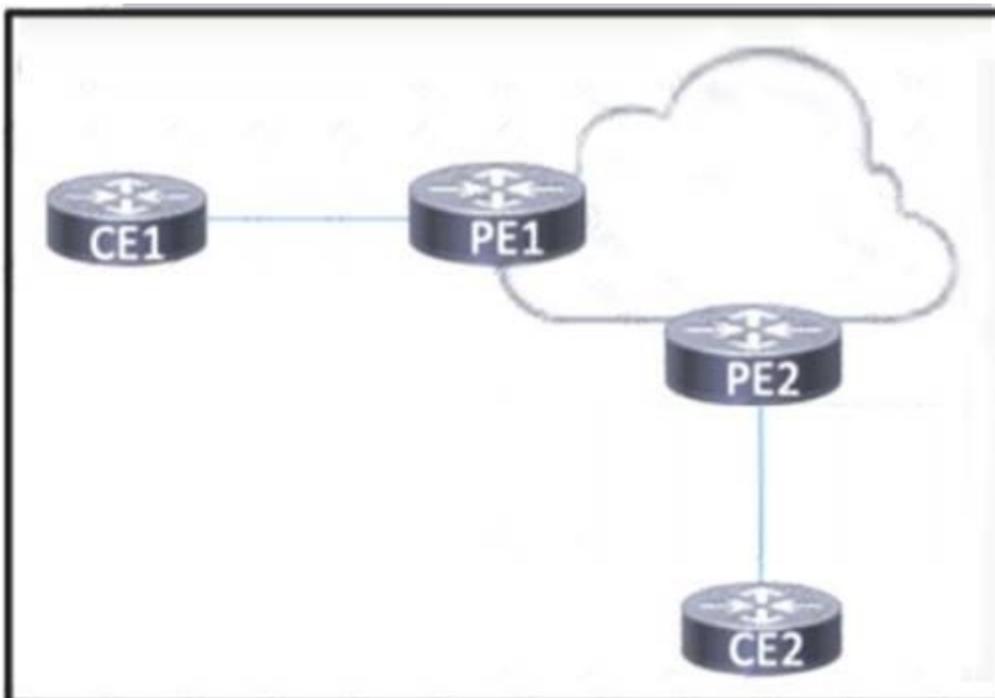
An engineer began to configure LDP between R1 and R2, but R1 and R2 cannot yet establish an LDP TCP connection. Which additional task must be completed to finish the implementation?

- A. Configure the mpls ldp neighbor 172.16.0.1 password command on R1
- B. Configure the mpls ldp neighbor 10.0.12.1 password command on R1
- C. Configure the no mpls ldp password option 1 command on R2
- D. Configure the no mpls ldp password option 1 command on R1

Answer: A

NEW QUESTION 472

Refer to the exhibit



BGP is running in the core of the service provider to exchange routes for its customers, and OSPF serves as the PE-CE routing protocol. The service provider's existing customer at CE1 is opening a new office in a different geographical location connected via CE2. A network engineer must update the BGP implementation so that PE1 and PE2 will share routes and provide communication between CE1 and CE2. Which action must the engineer take?

- A. Configure CE2 to establish a BGP relationship with PE1 and PE2
- B. Configure CE1 and CE2 with a pseudowire that will run over the service provider core.
- C. Configure PE1 and PE2 to mutually redistribute BGP and OSPF in the VRF for the customer.
- D. Configure PE1 and PE2 to redistribute OSPF from the VRF for the customer into BGP

Answer: C

NEW QUESTION 473

You are creating new Cisco MPLS TE tunnels. Which type of RSVP message does the headend router send to reserve bandwidth on the path to the tunnel's router?

- A. error
- B. reservation
- C. path
- D. tear

Answer: C

NEW QUESTION 477

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

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

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

Answer: A

NEW QUESTION 481

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

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

Answer: D

NEW QUESTION 482

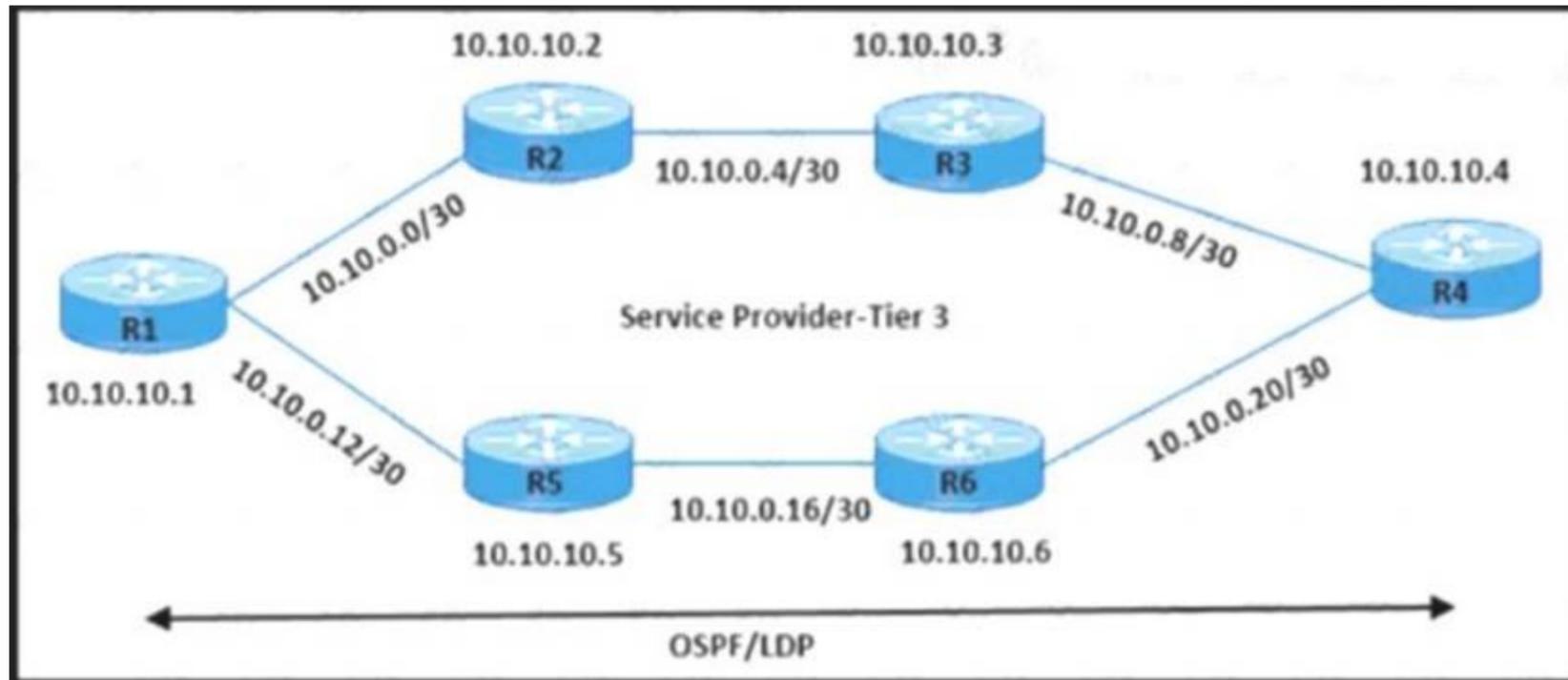
What is a role of NSO?

- 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 483

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: B

NEW QUESTION 487

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

- A)


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


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


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


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

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

Answer: A

Explanation:

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

NEW QUESTION 492

A company is expanding its existing office space to a new floor of the building, and the networking team is installing a new set of switches. The new switches are

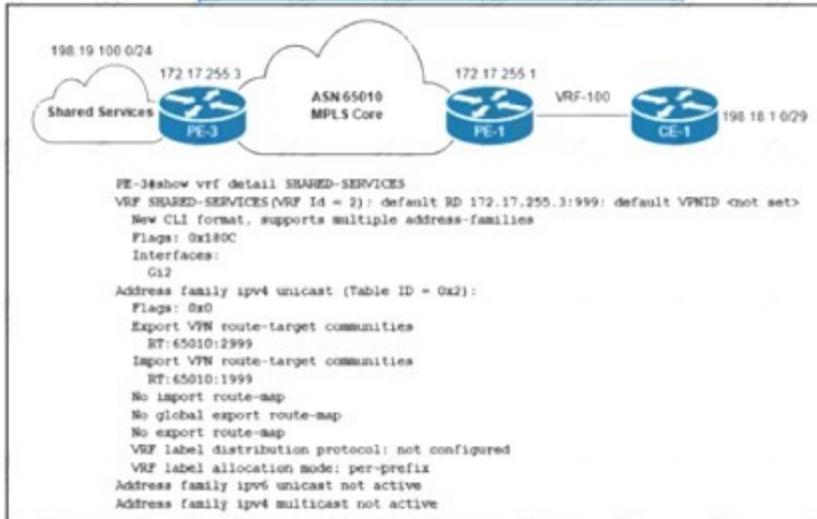
running IGMPv2, and the engineers configured them for VLAN10 only. The rest of the existing network includes numerous Layer 2 switches in multiple other VLANs, all running IGMPv3. Which additional task must the team perform when deploying the new switches so that traffic is switched correctly through the entire network?

- A. Configure the new switches to use IGMPv3 on all VLANs on the network.
- B. Configure all switches on the network to support IGMPv2 and IGMPv3 on all VLANs on the network.
- C. Configure the new switches to use IGMPv3 on VLAN10 only.
- D. Configure all switches on the network to support IGMPv2 and IGMPv3 on VLAN10 only.

Answer: C

NEW QUESTION 497

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 498

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 500

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 501

Refer to the exhibit.

```
<l3extOut name="l3out1">
  <l3extLNodeP name="cisconode1">
    <bgpPeerP addr="192.168.1.2">
      <bgpAsP asn="65514"/>
    </bgpPeerP>
  </l3extLNodeP>
</l3extOut>
```

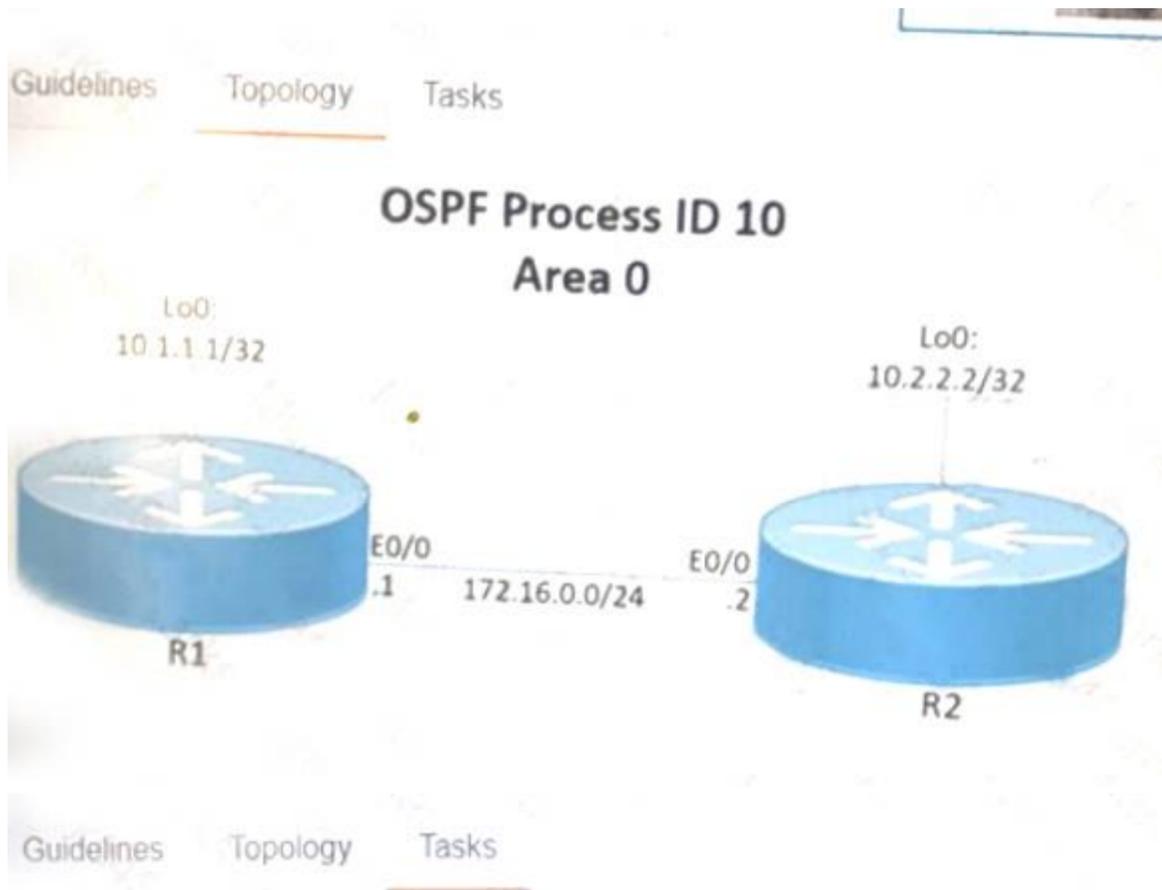
A global company plans to implement BGP at its newest location to provide connectivity to other offices. The global infrastructure of the company is a multivendor environment. An engineer must review the BGP core configurations at headquarters to determine if they can be repurposed at the new location. The engineer copied this JSON script for review. What is the effect of the script?

- A. It configures BGP with neighbor 192.168.1.2 residing in AS 65514.
- B. It sets the BGP router-ID to 192.168.1.2 and sets the AS of the router to 65514.
- C. It configures BGP on the device and inserts 192.168.1.0/24 into the BGP table using the origin AS 65514.
- D. It configures a VRF named cisconode1 and a BGP instance using the VPNv4 address family.

Answer: A

NEW QUESTION 505

Simulation 3



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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

TASK1:Run "sh run" command on both routers, check if there is any "router ospf" configured. If it's configured, check if Loopback0 ip it's being used as OSPF ID. If it's, jump to TASK2. Otherwise run:R1

```
router ospf 10
router-id 10.1.1.1 R2
router ospf 10
router-id 10.2.2.2 TASK2:
```

```
R1 & R2
int lo0
ip ospf 10 area 0
ip ospf network point-to-point
!
int e0/0
ip ospf network point-to-point ip ospf 10 area 0
ip ospf authentication message-digest
ip ospf message-digest-key 1 md5 C1sc0!
!
```

NEW QUESTION 510

An engineer is configuring IEEE 802.1 ad on the access port on a new Cisco router. The access port handles traffic from multiple customer VLANs, and it is expected to mark all customer traffic to the same VLAN without dropping any traffic. Which configuration must the engineer apply?

A)

```
interface gigabitEthernet0/0/1
 ethernet dot1ad uni c-port
```

- B) interface gigabitEthernet0/0/1
ethernet dot1ad uni nni
- C) interface gigabitEthernet0/0/1
encapsulation dot1q 10
- D) interface gigabitEthernet0/0/1
ethernet dot1ad uni s-port

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

Answer: D

NEW QUESTION 515

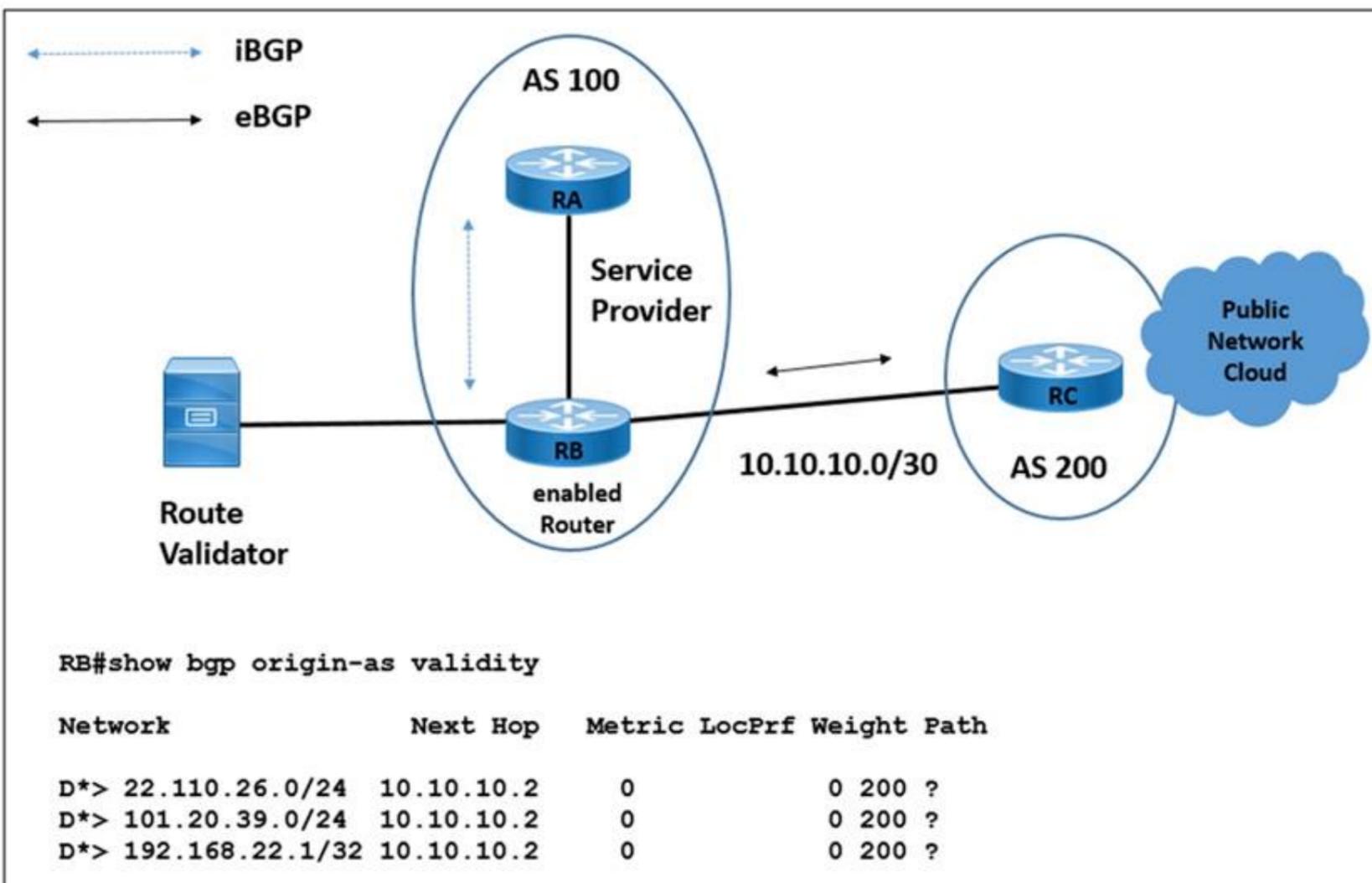
BGP has been implemented on a IOS XR router. Which configuration sends BGP IPv4 labels to build inter-domain LSPs?

- A. router bgp 65515 address-family ipv4 unicast neighbor 172.16.70.23 send-community extended
- B. router bgp 65515 no bgp default ipv4-unicast
- C. router bgp 65515 address-family ipv4 unicast neighbor 172.16.70.23 send-community
- D. router bgp 65515 neighbor 172.16.70.23 address-family ipv4 labeled-unicast

Answer: D

NEW QUESTION 516

Refer to the exhibit.



A network engineer is configuring router RB to secure BGP advertisements against route hijacking activity. RB must validate all prefixes that it receives from origin AS 200 before installing them in the BGP route table. Which configuration meets the requirement?

- A. RB(config)# router bgp 100RB(config-router)# address-family ipv4 unicast RB(config-router-af)# bgp bestpath origin-as use validity
- B. RB(config-bgp)# router bgp 100RB(config-bgp)# bgp origin-as validation signal ibgp RB(config-bgp)# bgp bestpath origin-as allow invalid
- C. RB(config-bgp)# router bgp 100RB(config-bgp)# bgp origin-as validation time off
- D. RB(config)# router bgp 100RB(config-router)# address-family ipv4 unicast RB(config-router-af)# bgp origin-as validation enable

Answer: C

NEW QUESTION 517

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 ciscotest logging history informational`

Answer: C

Explanation:

> <https://tools.ietf.org/html/rfc6241>

NEW QUESTION 521

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 525

Which type of attack is a Protocol attack?

- A. HTTP flood
- B. TFTP flood
- C. SYN flood
- D. Slowloris

Answer: C

Explanation:

Protocol Attacks

Includes SYN floods, fragmented packet attacks, Ping of Death, Smurf DDoS and more. This type of attack consumes actual server resources,

NEW QUESTION 529

A network team has failed to implement IS-IS multitenancy. What is the reason for it?

- A. The router did not support VRFs.
- B. The routing process did not support extended metrics.
- C. The router did not have Cisco Discovery Protocol and Cisco Express Forwarding disabled.
- D. The routing process supported Level 1 only.

Answer: B

NEW QUESTION 533

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

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

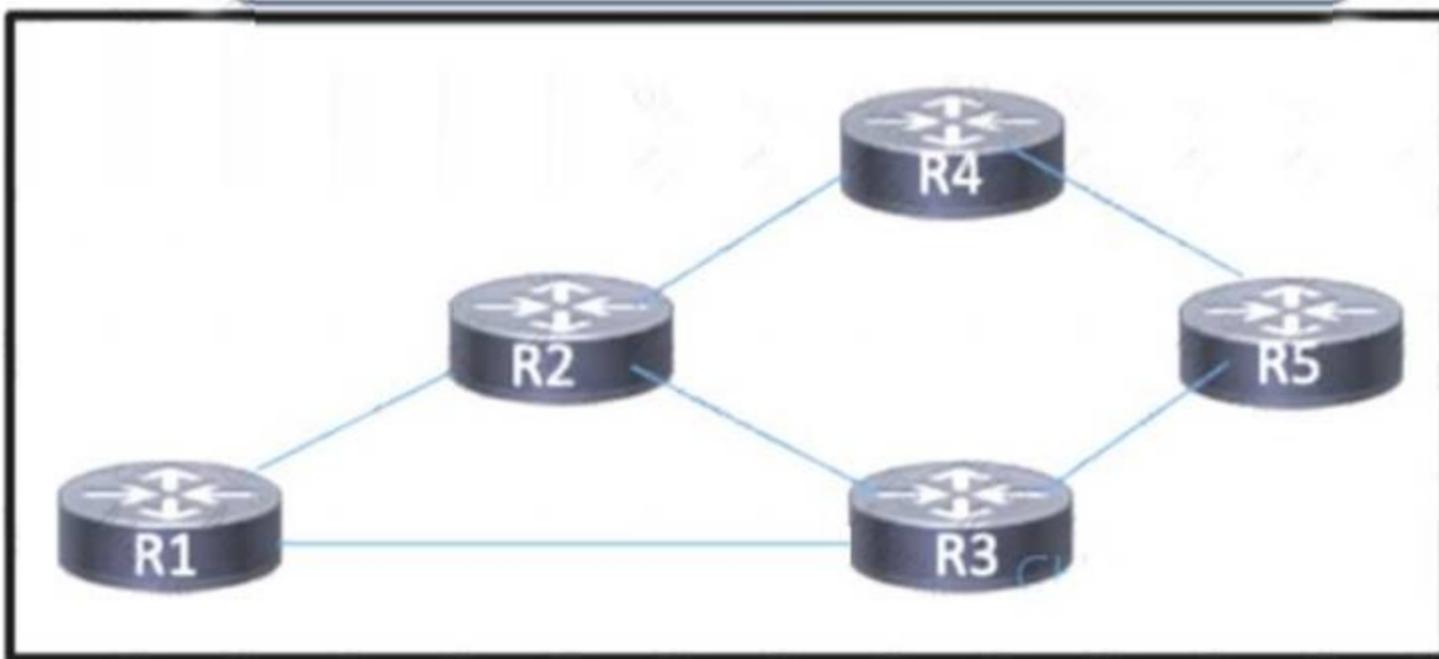
Answer: C

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 537

Refer to the exhibit.



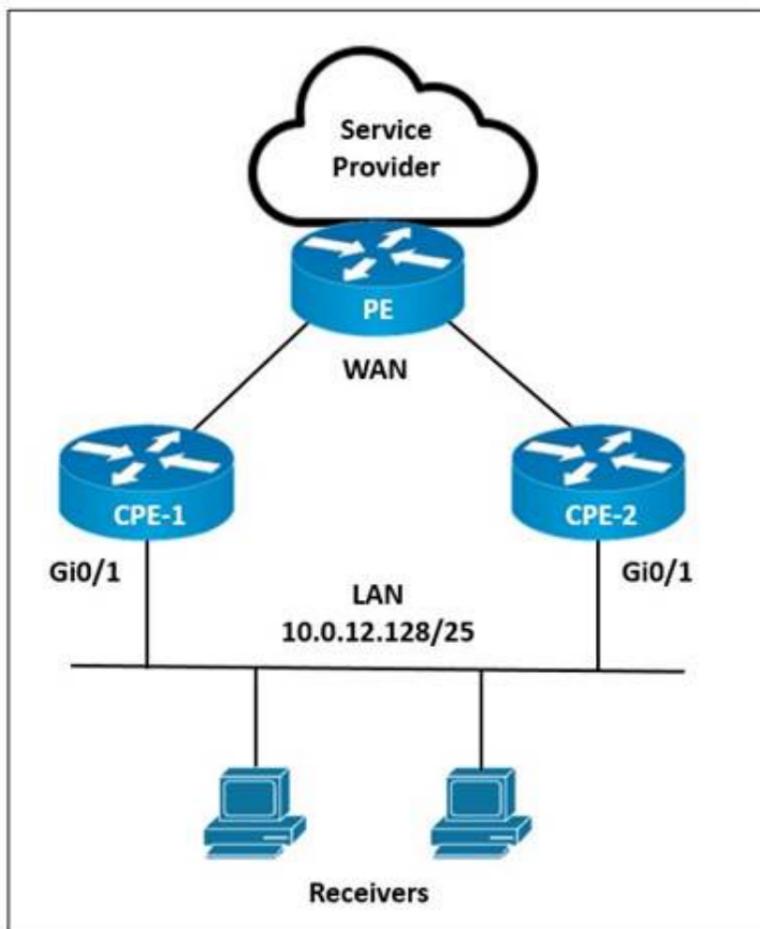
Routers R1 through R5 are being deployed within the core of a service provider running BGP. The core supports distribution of VPNv4 routes using MPLS. R3 currently has multiple paths to reach R4. A network engineer must implement BGP attributes so that R3 can reach R4 via R1. Which action must the engineer take to meet the requirement?

- A. Configure R3 so the route to R4 through R1 will have a higher weight than the route from R2 or R5.
- B. Configure R2 to send the route from R4 to R1 using a higher metric than what is advertised to R3.
- C. Configure R5 to send the route from R4 to R1 using a longer AS path than the AS path that it receives from R1 or R2.
- D. Configure R3 so the route to R4 through R1 will have a lower local preference than the route from R2 or R5.

Answer: D

NEW QUESTION 538

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

Answer: A

NEW QUESTION 543

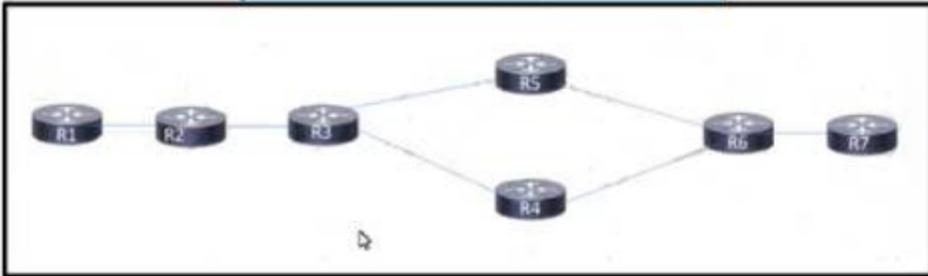
According to RFC5305 on IS-IS extensions for traffic engineering, what is the 4-octet sub-TLV type 10 of extended IS-IS reachability TLV type 22?

- A. TE default metric
- B. maximum reservable link bandwidth
- C. administrative group (color)
- D. IPv4 neighbor address

Answer: B

NEW QUESTION 546

Refer to the exhibit. After a networking team configured this MPLS topology, the supervisor wants to view MPLS labels to verify the path that packets take from router R1 to router R7. The team already issued an ICMP ping to verify connectivity between the devices. Which task must the team perform to allow the supervisor to view the label switch path?



- A. Configure MPLS TE to display the labels in the stack between the head and tail-end routers
- B. Implement MPLS LDP to assign labels to all the routes in the transit path.
- C. Configure MPLS LDP Sync to sync labels from the routing table to the MPLS forwarding table.
- D. Implement MPLS OAM to display the labels for each hop along the path

Answer: D

NEW QUESTION 550

Which additional feature does MPLS DiffServ tunneling support?

- A. matching EXP and DSCP values
- B. interaction between MPLS and IGP
- C. using GRE tunnels to hide markings
- D. PHB layer management

Answer: D

Explanation:

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

NEW QUESTION 552

An engineer is developing a configuration script to enable dial-out telemetry streams using gRPC on several new devices. TLS must be disabled on the devices. Which configuration must the engineer apply on the network?

A)

```
telemetry model-driven
 destination-group ciscotest
 address family ipv4 192.168.1.0 port 57500
 encoding self-describing-gpb
 protocol grpc no-tls
 commit
```

B)

```
telemetry model-driven
 destination-group ciscotest
 address family ipv4 192.168.1.0 port 57500
 encoding self-describing-gpb
 protocol grpc
 commit
```

C)

```
telemetry model-driven
 destination-group ciscotest
 address family ipv4 192.168.1.0 port 57500
 encoding self-describing-gpb
 protocol grpc tls-hostname ciscotest.com
 commit
```

D)

```
telemetry model-driven
 destination-group DGroup1
 address family ipv4 172.0.0.0 port 5432
 encoding self-describing-gpb
 protocol tcp
 commit
```

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

Answer: A

NEW QUESTION 554

Refer to the exhibit:

POST https://router1:8000/api/mo/uni/Descriptions.xml

What does the REST API command do?

- A. It retrieves the information requested by Descriptions xml
- B. It removes the information identified by Descriptions xml
- C. It executes the commands specified in Descriptions xml
- D. It displays the information identified by Descriptions xml

Answer: C

NEW QUESTION 559

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