

Exam Questions 350-501

Implementing and Operating Cisco Service Provider Network Core Technologies

<https://www.2passeasy.com/dumps/350-501/>



NEW QUESTION 1

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

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

Which configuration must the engineer apply on R1?

- A. configure terminal hostname R1 ip domain-name mydomain.com crypto key generate rsa ip ssh version 1 access-list 1 permit 172.16.20.0 0.0.0.255 netconf ssh acl 1 line vty 0 4 transport input ssh end
- B. configure terminal hostname R1 ip domain-name mydomain.com crypto key generate rsa ip ssh version 2 access-list 1 permit 172.16.20.0 0.0.0.255 access-list 1 permit any netconf ssh line vty 0 4 access-class 1 in transport input ssh end
- C. configure terminal hostname R1 ip domain-name mydomain.com crypto key generate rsa ip ssh version 1 access-list 1 permit 172.16.20.0 0.0.0.255 access-list 2 permit any netconf ssh line vty 0 4 access-class 2 in transport input ssh end
- D. configure terminal hostname R1 ip domain-name mydomain.com crypto key generate rsa ip ssh version 2 access-list 1 permit 172.16.20.0 0.0.0.255 netconf ssh acl 1 line vty 0 4 transport input ssh end

Answer: D

NEW QUESTION 2

What does DWDM use to combine multiple optical signals?

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

Answer: D

NEW QUESTION 3

What is the role of NSO in network automation?

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

Answer: D

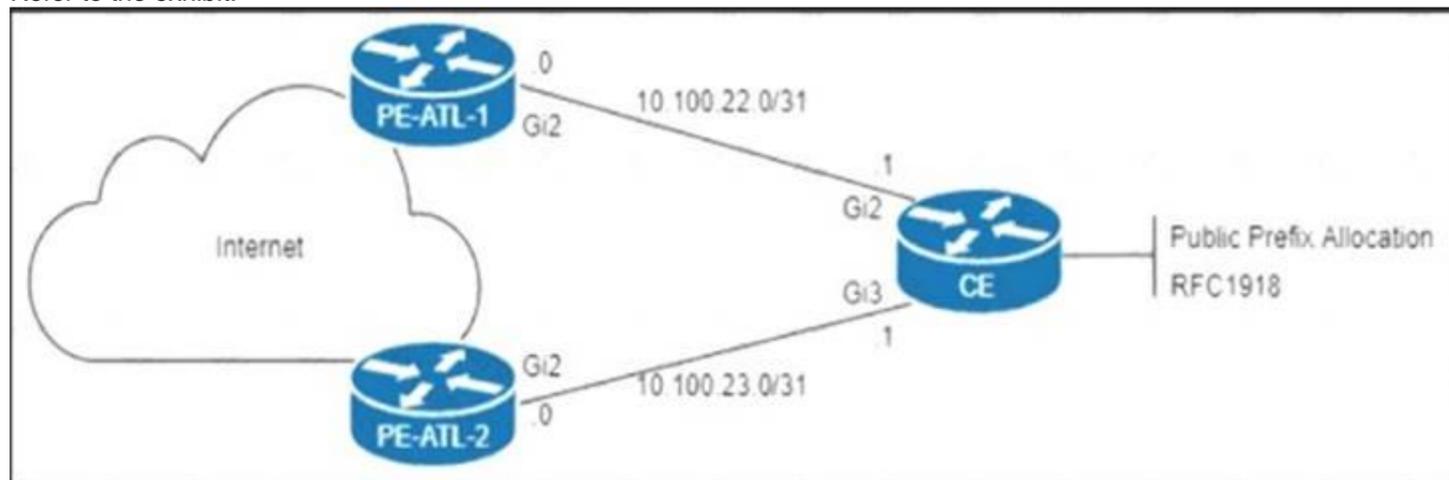
Explanation:

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

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

NEW QUESTION 4

Refer to the exhibit.



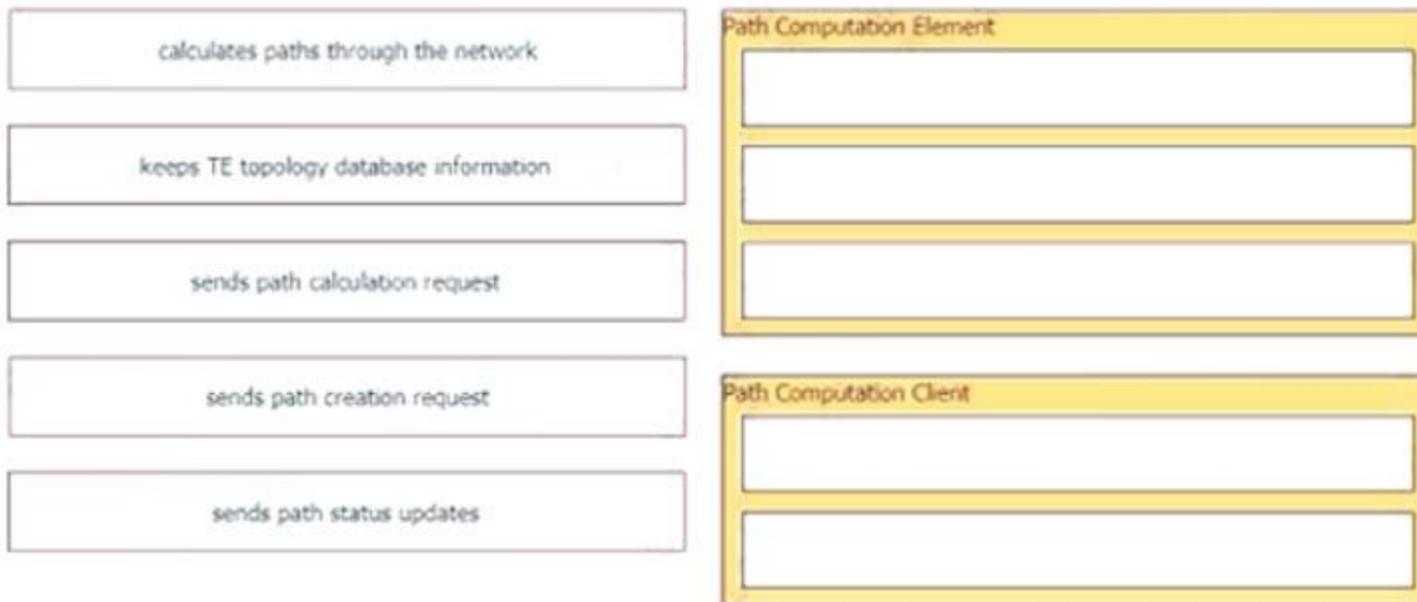
The CE router is peering with both PE routers and advertising a public prefix to the internet. Routing to and from this prefix will be asymmetric under certain network conditions, but packets must not be discarded. Which configuration must an engineer apply to the two PE routers so that they validate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

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

Answer: D

NEW QUESTION 5

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



- A. Mastered
- B. Not Mastered

Answer: A

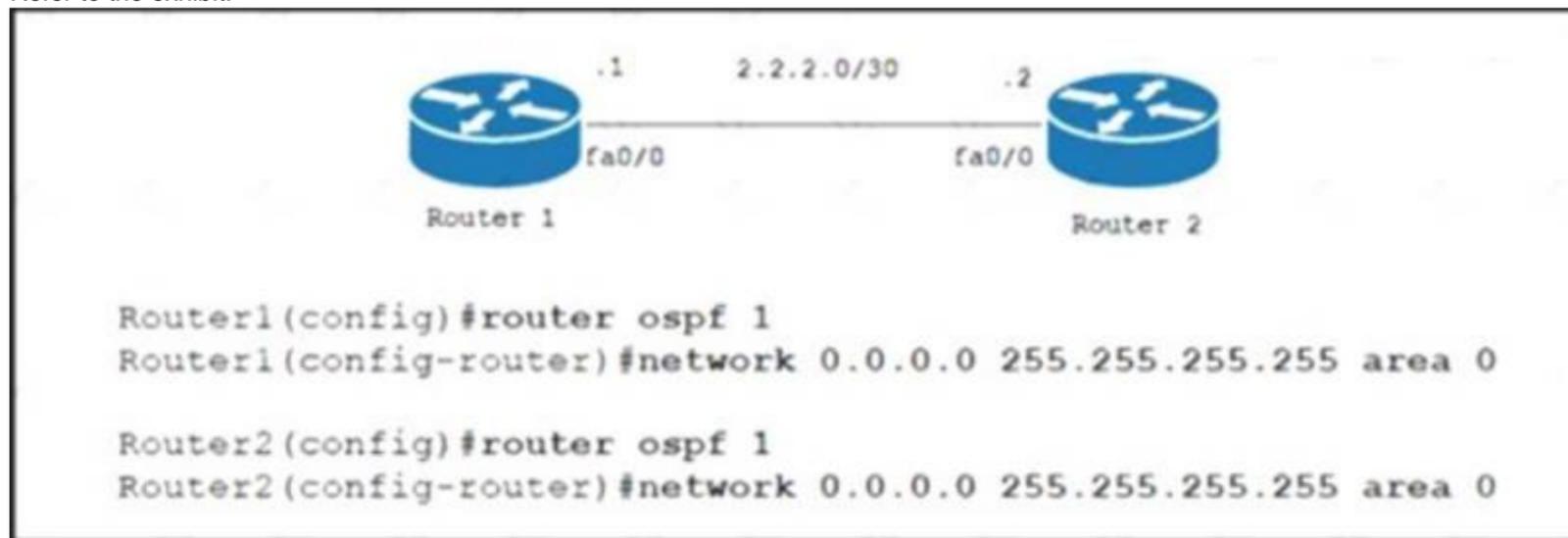
Explanation:

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



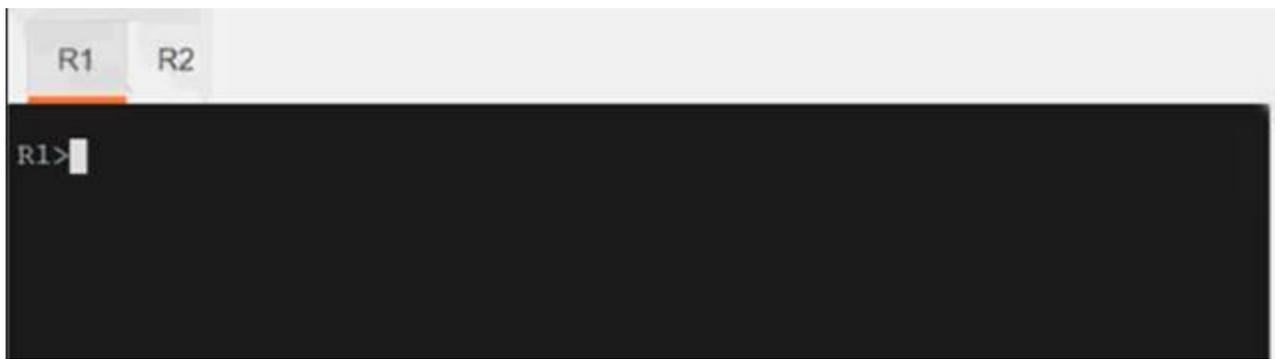
NEW QUESTION 6

Refer to the exhibit.



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

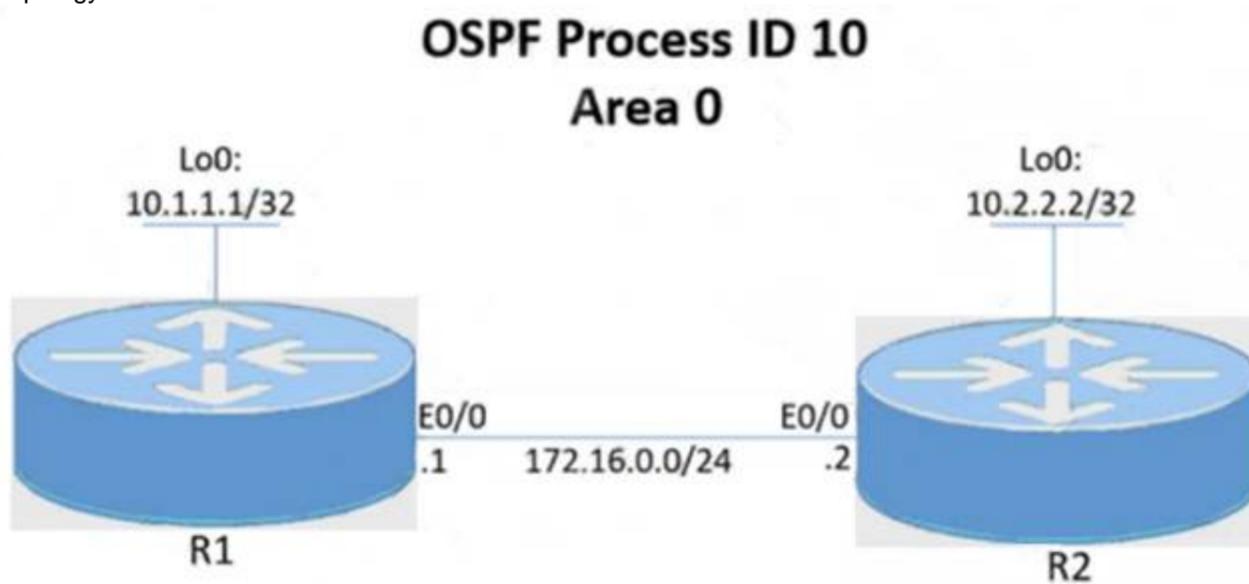
- A. Router1(config)#int fa0/0 - Router1(config-if)#mpls ldp autoconfig Router2(config)#router ospf 1 - Router2(config-router)#mpls ip
- B. Router1(config)#int fa0/0 - Router1(config-if)#mpls ip Router1(config-if)#mpls ldp discovery transport-address interface Router2(config)#int fa0/0 Router2(config-



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

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Here is the solution:

Graphical user interface, text Description automatically generated

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

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

int lo0
ip ospf 10 area 0

R2:
Conf t
Router ospf 10
Router-id 10.2.2.2

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

int lo0
ip ospf 10 area 0
```

NEW QUESTION 10

Refer to the exhibit:

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

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

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

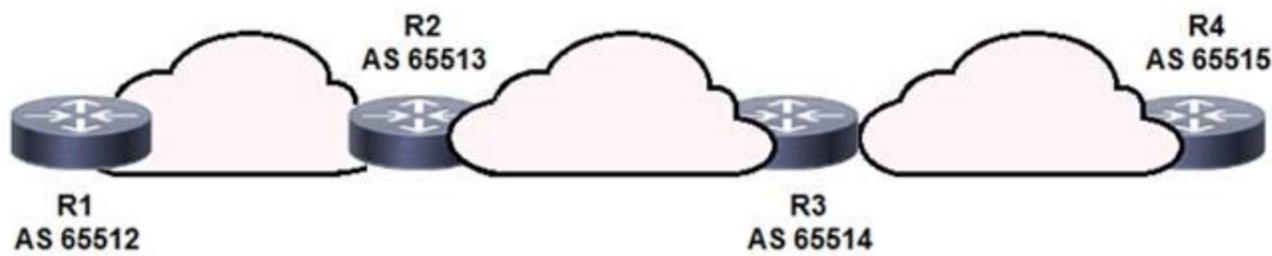
Answer: D**Explanation:**<https://www.cisco.com/c/en/us/support/docs/ip/border-gateway-protocol-bgp/13761-39.html>**NEW QUESTION 14**

What is the characteristic of the TI-LFA?

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

Answer: A**NEW QUESTION 19**

Refer to the exhibit:



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

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

Answer: D

NEW QUESTION 21

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 26

Refer to the exhibit.

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

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

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

Answer: C

NEW QUESTION 31

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 34

Refer to the exhibit:

```
https://192.168.1.100/api/mo/uni/tn-ciscotest.xml
```

What is the URL used for with REST API?

- A. It is used to contact a URL filter to determine the efficacy of a web address
- B. It is used to send a TACACS+ authentication request to a server
- C. It is used to send a message to the APIC to perform an operation on a managed object or class operator
- D. It is used to initiate an FTP session to save a running configuration of a device.

Answer: C**NEW QUESTION 38**

What is a characteristic of prefix segment identifier?

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

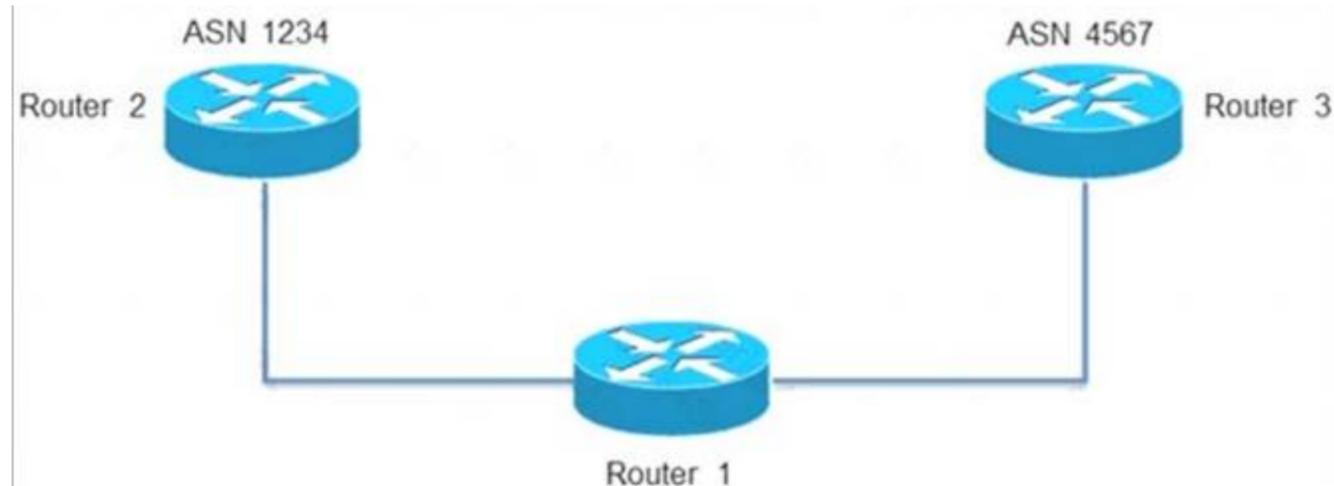
Answer: C**NEW QUESTION 42**

Which service is a VNF role?

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

Answer: B**NEW QUESTION 44**

Refer to the exhibit.



An engineer is configuring path selection on router R1 for two ASNs as shown. Which additional task must the engineer perform on Router 1 so that all outbound traffic utilizes the link between R1 and R3 to reach ASN 4567?

- A. Configure a low weight on the peer to ASN 4567.
- B. Configure a high weight on the peer to ASN 4567.
- C. Configure an AS path prepend on the peer to ASN 4567.
- D. Configure a high med on the peer to ASN 4567.

Answer: B**NEW QUESTION 46**

Refer to the exhibit.

```
!  
interface Bundle-Ether1  
description link-aggregation  
mtu 9216  
bundle minimum-active links 2  
load interval 30  
!
```

Which the link aggregation configuration router is running on Cisco IOS XR software, which LACP interface configuration is needed to add the interface to the bundle?

A.

```
interface TenGigE0/1/0/5  
description bundle_1_link  
bundle mode active  
load interval 30  
  
interface TenGigE0/1/0/6  
description bundle_1_link  
bundle mode active  
load interval 30
```

B.

```
interface TenGigE0/1/0/5  
description bundle_1_link  
bundle id 1 mode active  
load interval 30  
  
interface TenGigE0/1/0/6  
description bundle_1_link  
bundle id 1 mode active  
load interval 30
```

C.

```
interface TenGigE0/1/0/5  
description bundle_1_link  
id 1 mode active  
load interval 30  
  
interface TenGigE0/1/0/6  
description bundle_1_link  
id 1 mode active  
load interval 30
```

D.

```
interface TenGigE0/1/0/5
description bundle_1_link
bundle id 1
load interval 30

interface TenGigE0/1/0/6
description bundle_1_link
bundle id 1
load interval 30
```

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

Answer: B

NEW QUESTION 47

Refer to the exhibit.

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

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

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

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

A)

```
R1
router bgp 5400
neighbor 2.2.2.2 remote-as 5400
```

```
R2
router bgp 5400
neighbor 1.1.1.1 remote-as 5400
```

B)

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

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

C)

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

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

D)

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

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

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

Answer: C

NEW QUESTION 52

Which two tasks must an engineer perform when implementing LDP NSF on the network? (Choose two.)

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

Answer: CE

Explanation:

LDP NSF works with LDP sessions between directly connected peers and with peers that are not directly connected (targeted sessions).
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_ha/configuration/15-sy/mp-ha-15-sy-book/mp-ldp-grace

NEW QUESTION 56

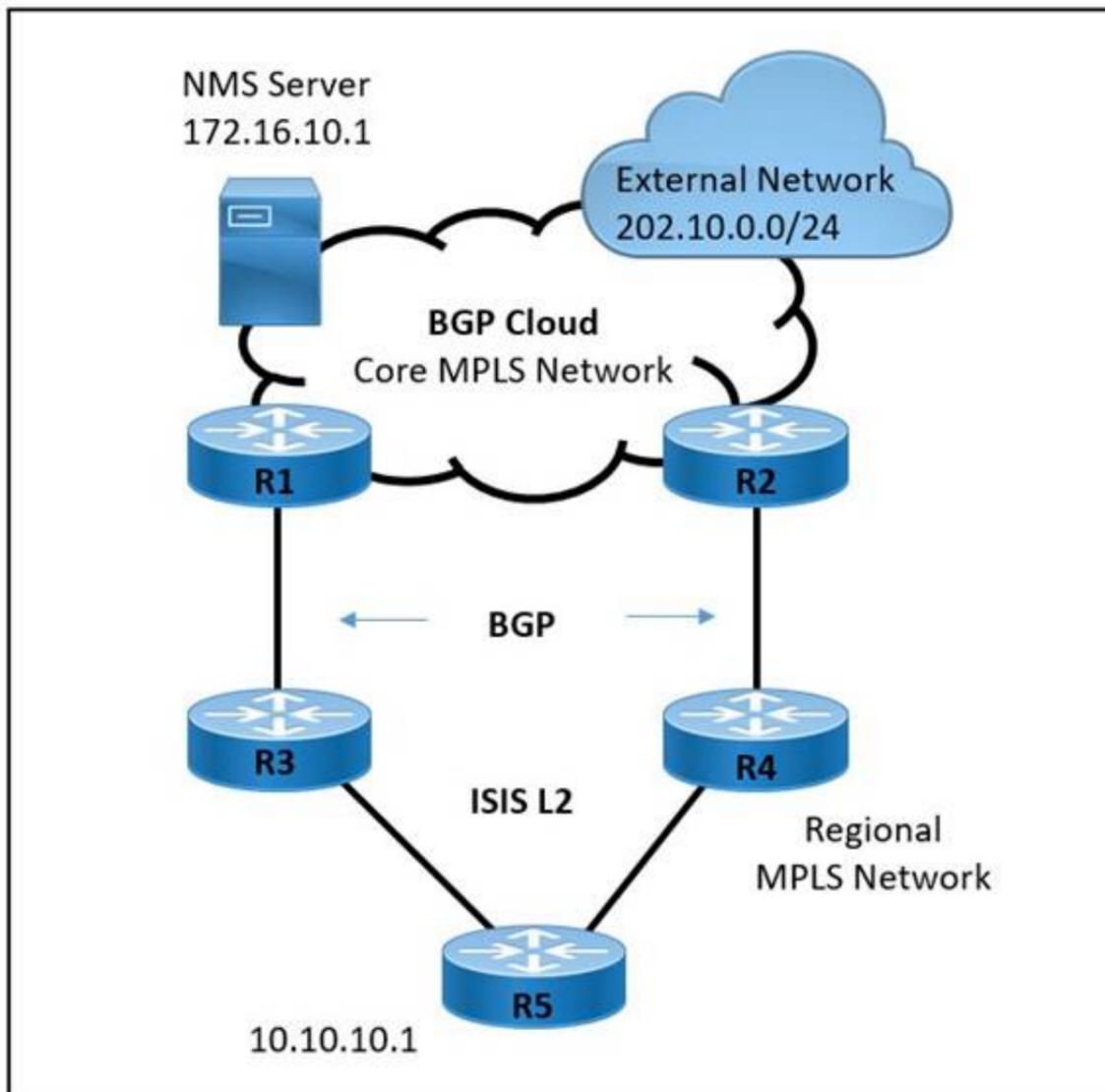
What is the function of the FEC field within the OTN signal structure?

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

Answer: C

NEW QUESTION 57

Refer to the exhibit.



A large service provider is migrating device management from Layer 2 VLAN-based to Layer 3 IP-based solution. An engineer must configure the ISIS solution with these requirements:

Network management server IP 172.16.10.1 must be advertised from the core MPLS network to the regional domain.

The external network 202.10.0.0/24 must not establish ISIS peering with the R5 router.

The regional network must prevent sending unnecessary hello packets and flooding the routing tables of the R5 router.

Which two ISIS parameters must be implemented to meet these requirements? (Choose two.)

- A. LSP lifetime maximum
- B. advertise-passive-only
- C. overload bit passive
- D. attached bit on ISIS instance
- E. passive-interface Loopback0

Answer: AD

NEW QUESTION 61

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 64

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 65

Refer to the exhibit.

```
encoding = gpbkv
```

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

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

Answer: A

Explanation:

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

NEW QUESTION 70

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 74

Refer to the exhibit:

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

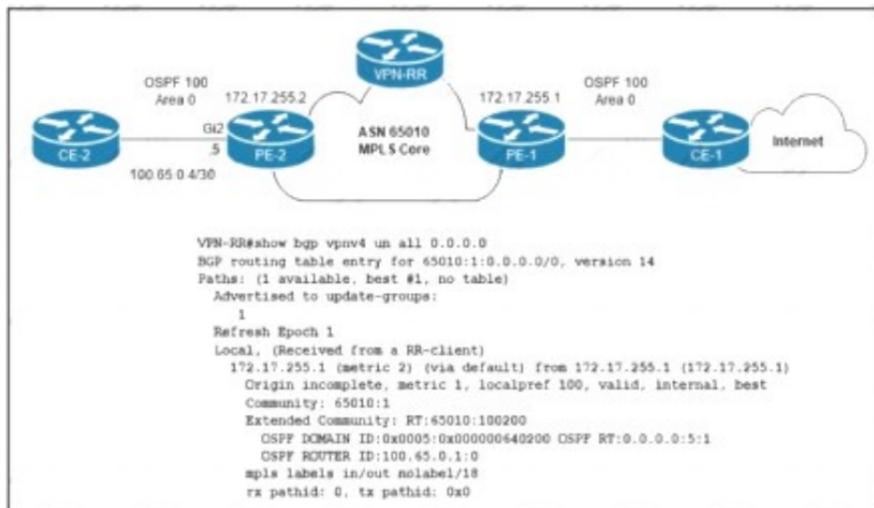
Which statement describes the effect of this configuration?

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

Answer: C

NEW QUESTION 77

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 82

Refer to the exhibit.

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

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

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

Answer: C

NEW QUESTION 87

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 91

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

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

Answer: AB

NEW QUESTION 93

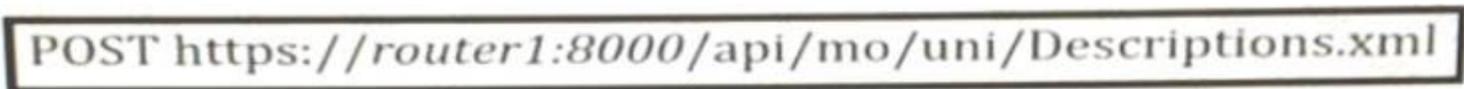
An engineer working for a private service provider with employee id: 3994 37 650 is configuring a Cisco device to redistribute OSPF into BGP. Which task enables the device to filter routes?

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

Answer: C

NEW QUESTION 98

Refer to the exhibit:



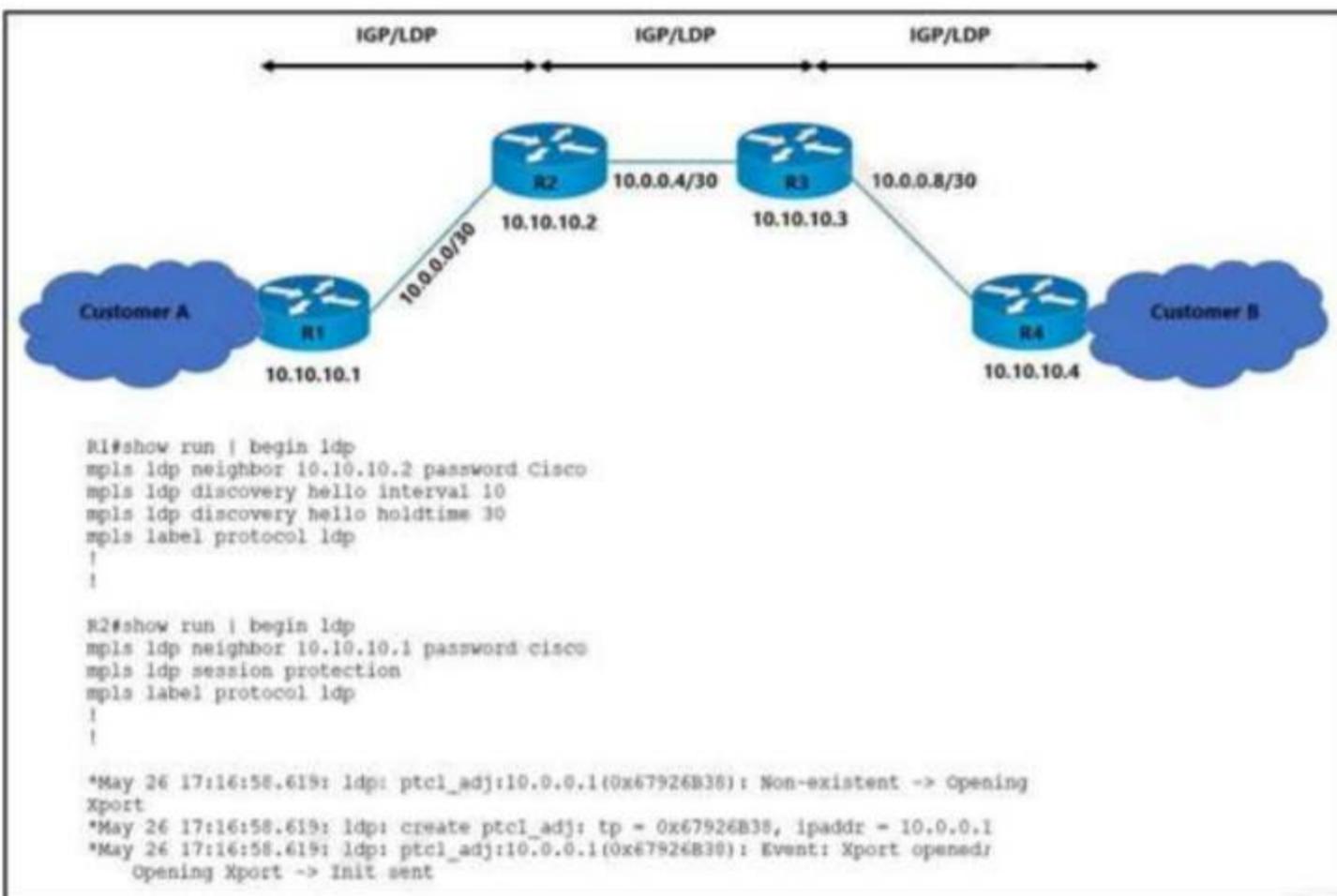
What does the REST API command do?

- 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 99

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 104

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

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

Answer: D

NEW QUESTION 106

When configuring traffic engineering tunnels in Cisco MPLS core network, you see the traffic is not taking the expected path in the core. Which command do you use to quickly check path of a TE tunnel?

- A. Traceroute mpls ipv4 -tunnel destination
- B. Ping <tunnel destination IP>
- C. show mpls traffic-engineering tunnels
- D. traceroute <tunnel destination IP>

Answer: A

NEW QUESTION 108

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 113

What is a primary benefit of IPoATM or MPLS over ATM backbone service provider networks?

- A. dedicated circuits
- B. variable-length packets
- C. isochronous system
- D. fixed-length cells

Answer: A

NEW QUESTION 118

Refer to the exhibit:

```
ip flow-export destination 192.168.1.2
ip flow-export version 9

interface gigabitethernet0/1
ip flow ingress
```

Which information is provided for traceback analysis when this configuration is applied?

- A. BGP version
- B. packet size distribution
- C. source interface
- D. IP sub flow cache

Answer: B

NEW QUESTION 119

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

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

Answer: A

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/167/b_167_programmability_cg/configur

```
Device# show netconf-yang sessions detail

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

Number of sessions      : 1

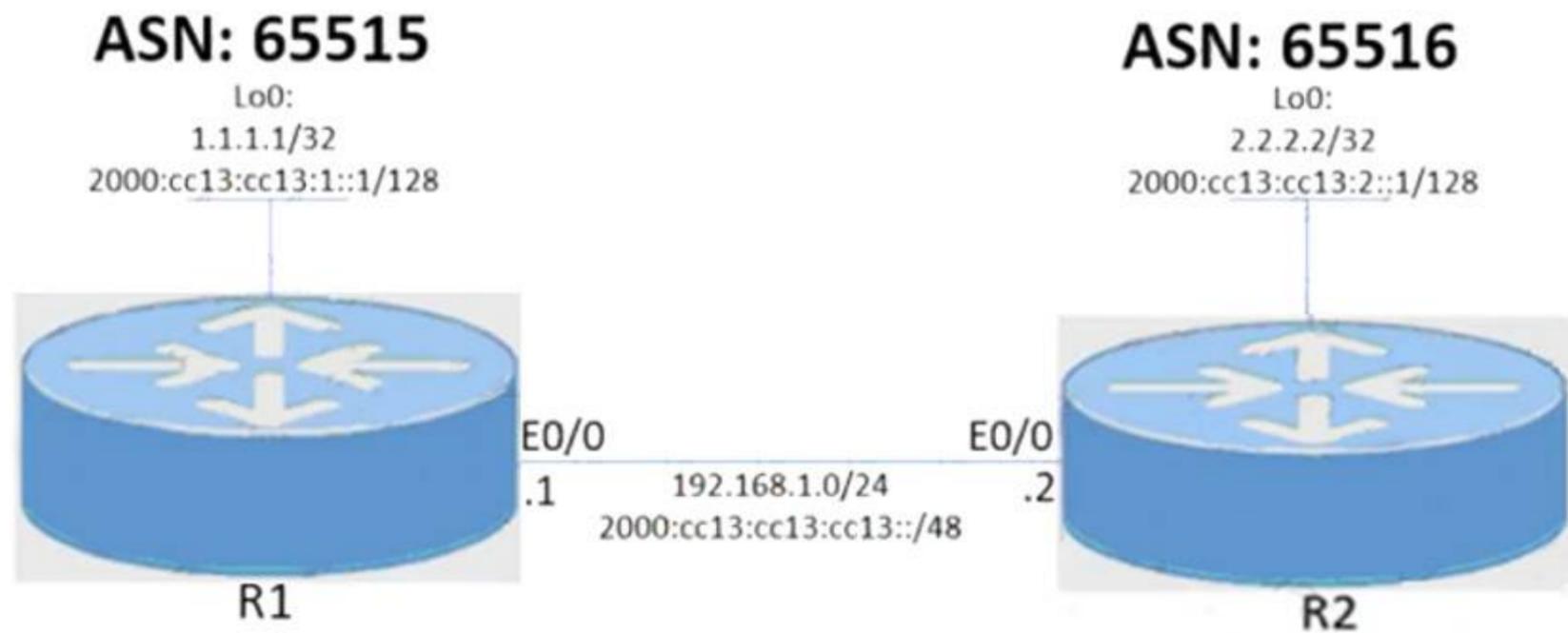
session-id              : 19
transport               : netconf-ssh
username                : admin
source-host             : 2001:db8::1
login-time              : 2018-10-26T12:37:22+00:00
in-rpcs                 : 0
in-bad-rpcs             : 0
out-rpc-errors          : 0
out-notifications       : 0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

NEW QUESTION 124

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

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

EBGP Neighbor Adjacency



Tasks

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Here is the solution:

Text Description automatically generated

R1:

conf t

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

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

```
address-family ipv4 unicast
neighbor 2.2.2.2 activate
```

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

R2:

conf t

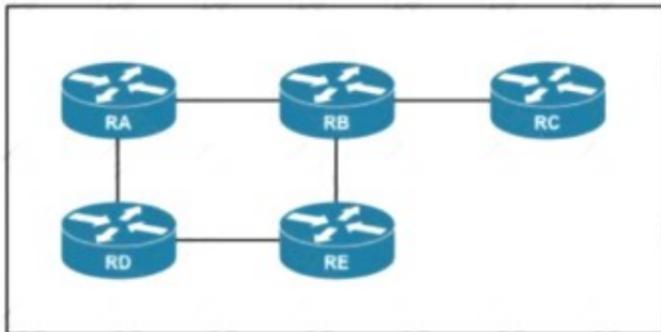
```
ip route 1.1.1.1 255.255.255.255 192.168.1.1
ip route 2000:cc13:cc13:1::1/128 2000:cc13:cc13:cc13::1
```

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

```
address-family ipv4 unicast
neighbor 1.1.1.1 activate
```

NEW QUESTION 128

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 132

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

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

Answer: AD

NEW QUESTION 136

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

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

Answer: D

NEW QUESTION 137

The NOC team must update the BGP forwarding configuration on the network with these requirements: BGP peers must establish a neighborhood with NSF capability and restart the session for the capability to be exchanged after 120 seconds. BGP peers must delete routes after 360 seconds of inactivity. Which action meets these requirements?

- A. Set the BGP restart-time to 120 seconds and the BGP ha-mode sso to 360 seconds.
- B. Set the stalepath-time to 120 seconds and the BGP restart-time to 360 seconds.
- C. Set the BGP ha-mode sso to 120 seconds and the BGP restart-time to 360 seconds.
- D. Set the BGP restart-time to 120 seconds and the stalepath-time to 360 seconds.

Answer: D

NEW QUESTION 139

Refer to the exhibits:

```
Apr 30 14:33:43.619: %CLNS-4-AUTH_FAIL: ISIS: LAN I1H 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
```

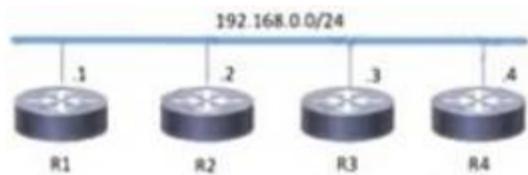
R1 and R2 are directly connected and IS-IS routing has been enabled between R1 and R2 R1 message periodically Based on this output, which statement is true?

- A. IS-IS neighbor authentication is failing for Level 2 first and then for Level 1 PDUs
- B. 1S-1S 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 144

Refer to the exhibit.



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

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

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

Answer: DE

NEW QUESTION 149

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

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

Answer: C

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b_166_programmability_cg/ne > <https://tools.ietf.org/html/rfc6241>

NEW QUESTION 150

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

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

Answer: B

NEW QUESTION 153

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 isdn snmp-server host 192.168.1.2 public
- D. snmp-server enable trapssnmp-server host 192.168.1.2 public

Answer: D

NEW QUESTION 156

What do Chef and Puppet have in common?

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

Answer: B

NEW QUESTION 159

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 161

Refer to the exhibit.

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

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

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

Answer: B

NEW QUESTION 166

Refer to the exhibit.



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

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

Answer: B

NEW QUESTION 167

Refer to the exhibit:

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

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

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

Answer: D

NEW QUESTION 170

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 174

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 176

Refer to the exhibit.

```
RP/0/0/CPU0:BRDR-1#show route ipv4 0.0.0.0
Routing entry for 0.0.0.0/0
  Known via "bgp 65001", distance 20, metric 0, candidate default path
  Tag 65002, type external
  Installed Jan  2 08:40:59.889 for 00:01:18
  Routing Descriptor Blocks
    100.65.19.1, from 100.65.19.1, BGP external
    Route metric is 0
  No advertising protos.

RP/0/0/CPU0:BRDR-1#show run router ospf
router ospf 1
 redistribute bgp 65001 route-policy BGP-TO-OSPF
 area 0
  mpls traffic-eng
  interface Loopback0
  interface GigabitEthernet0/0/0/0.92
  interface GigabitEthernet0/0/0/0.3132
  mpls traffic-eng router-id Loopback0

RP/0/0/CPU0:BRDR-1#show rpl route-policy BGP-TO-OSPF
route-policy BGP-TO-OSPF
 if destination in (0.0.0.0/0) then
  set metric-type type-1
 endif
 set metric-type type-2
 set ospf-metric 100
end-policy
```

Router BRDR-1 is configured to receive the 0.0.0.0/0 and 172.17.1.0/24 network via BGP and advertise then into OSPF area 0. An engineer has noticed that the OSPF domain is receiving only the 172.17.1.0/24 route and default router 0.0.0.0/0 is still missing. Which configuration must an engineer apply to resolve this problem?

- router ospf 1
 - default-information originate always
 - end
- router ospf 1
 - redistribute bgp 65001 metric 100 route-policy BGP-TO-OSPF
 - end
- router ospf 1
 - default-metric 100
 - end
- router ospf 1
 - default-information originate
 - end

A. Option A

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

Answer: D

NEW QUESTION 179

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 180

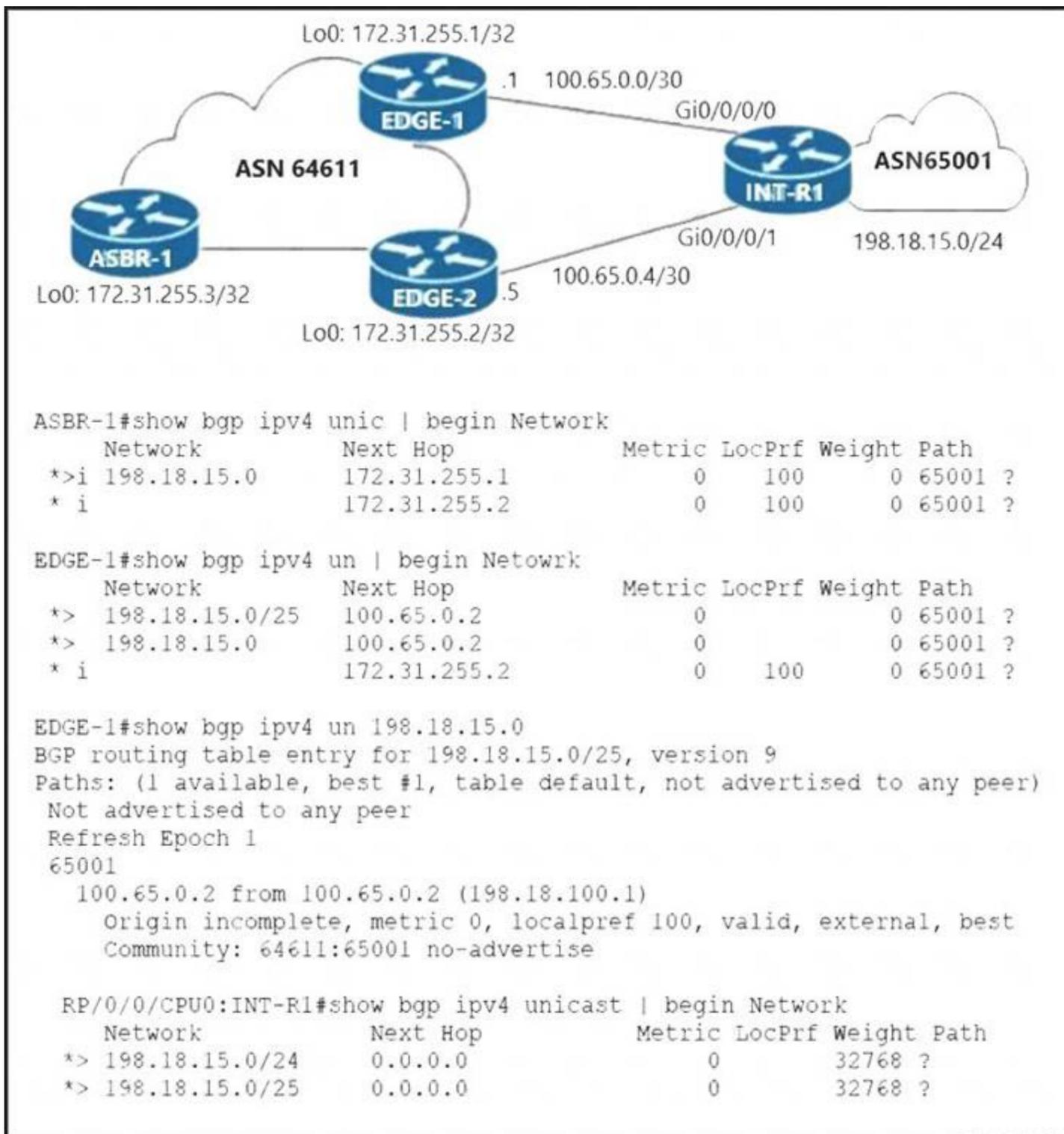
What is the difference between SNMP and model-driven telemetry?

- A. Telemetry allows for modeled network data to be pushed to the network administrator on an as-needed basis
- B. Telemetry uses traps and inform messages to deliver data to a network administrator on a polling basis
- C. SNMP uses the YANG data modeling language
- D. SNMP pushes network data to the network administrator whenever it is queried

Answer: A

NEW QUESTION 185

Refer to the exhibit.



The network engineer who manages ASN 65001 is troubleshooting suboptimal routing to the 198.18.15.0/24 prefix. According to the network requirements: Routing to IP destinations in the 198.18.15.0/25 block must be preferred via the EDGE-1 PE. Routing to IP destinations in the 198.18.15.128/25 block must be preferred via the EDGE-2 PE.

More specific prefixes of the 198.18.15.0/24 block must not be advertised beyond the boundaries of ASN 64611.

Routing to 198.18.15.0/24 must be redundant in case one of the uplinks on INT-R1 fails.

Which configuration must the network engineer implement on INT-R1 to correct the suboptimal routing and fix the issue?

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

Answer: B

NEW QUESTION 187

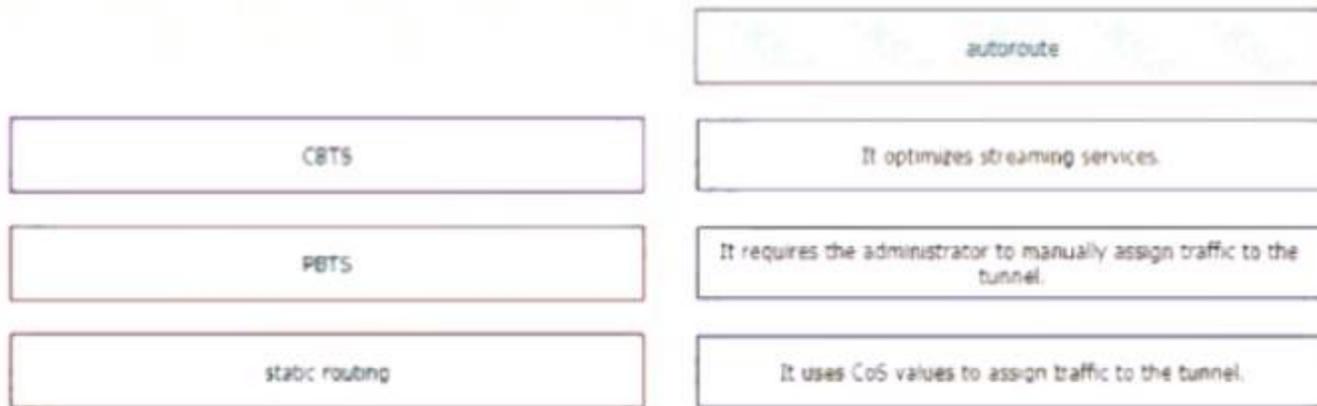
What is the primary role of Ansible in a network?

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

Answer: D

NEW QUESTION 192

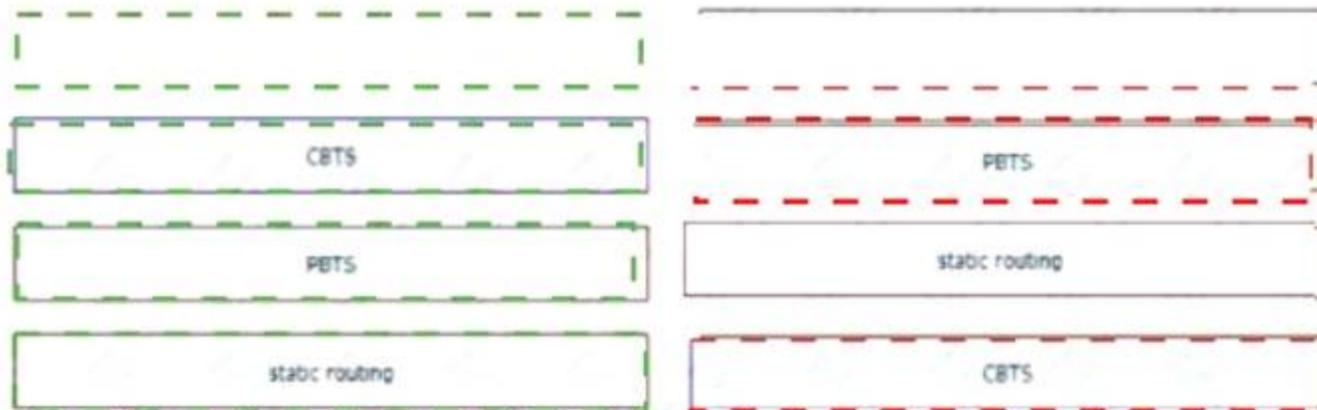
Drag and drop the methods of Cisco MPLS TE tunnel traffic assignment from the left onto their characteristics on the right.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 194

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 195

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

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

Answer: A

NEW QUESTION 197

Refer to the exhibit.

```
R5#show run | s router ospf
router ospf 1
  router-id 172.16.0.5
  network 192.168.0.0 0.0.63.255 area 0

R5#show run int GigabitEthernet1.58
Building configuration...
Current configuration : 245 bytes
interface GigabitEthernet1.58
  description LINK TO R8 G11.58
  encapsulation dot1Q 58
  ip address 192.168.58.5 255.255.255.0
  ip mtu 1600
  ip ospf network point-to-point
  ip ospf 1 area 0.0.0.2
end
```

Which configuration must be implemented on router R8 so that it will establish OSPF adjacency with R5?

A)

```
router ospf 1
network 192.168.58.0 0.0.0.255 area 0.0.0.2
interface GigabitEthernet 1.58
ip mtu 1600
ip ospf network point-to-multipoint
```

B)

```
router ospf 1
network 192.168.58.0 0.0.0.255 area 2
interface GigabitEthernet 1.58
ip mtu 1600
```

C)

```
router ospf 1
network 192.168.58.0 0.0.0.255 area 0.0.0.2
interface GigabitEthernet 1.58
ip ospf network point-to-point
```

D)

```
router ospf 1
network 192.168.58.0 0.0.0.255 area 0.0.0.2
interface GigabitEthernet 1.58
ip mtu 1600
ip ospf network point-to-point
ip ospf 1 area 0
```

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

Answer: A

NEW QUESTION 200

Refer to the exhibit.

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

   Network          Next Hop          Metric LocPrf Weight Path
*> 22.22.22.22/32   50.50.50.2         0             100 500 ?
*                  40.40.40.2         0             200   0 400 ?
*                  30.30.30.2         0             300   0 300 300 ?
*                  20.20.20.2         0             200   0 200 ?

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

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

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

- A. Mastered
- B. Not Mastered

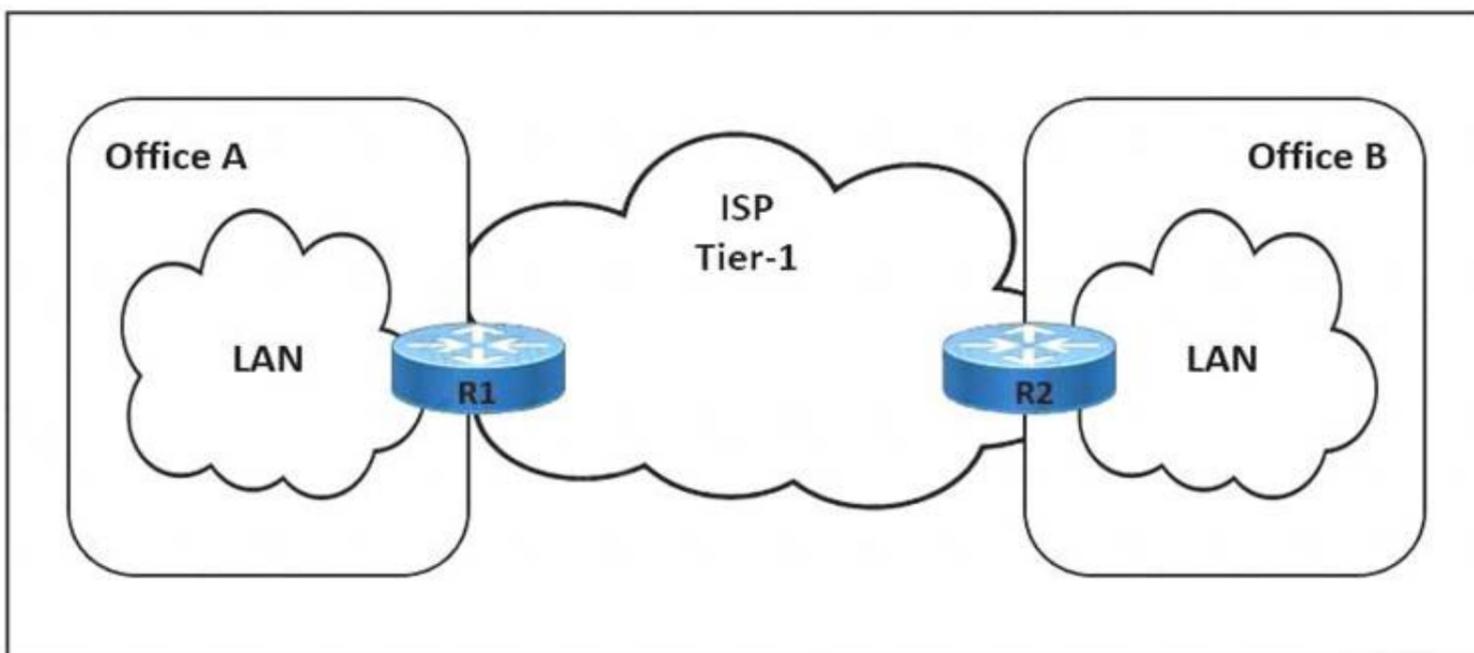
Answer: A

Explanation:

- Best – 50.50.50.2
- 2nd Best – 40.40.40.2
- 3rd Best – 20.20.20.2
- 4th Best – 30.30.30.2

NEW QUESTION 203

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 204

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 209

Refer to the exhibit:

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

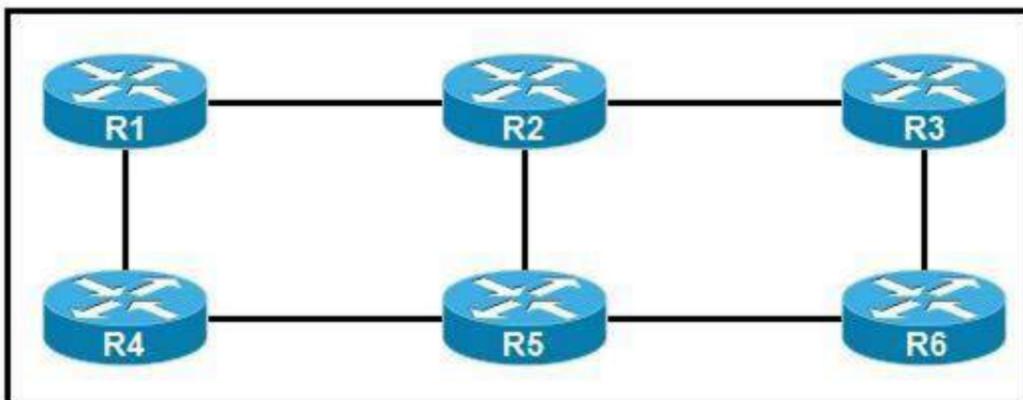
Which condition must be met by the OSPF peer of router R1 before the two devices can establish communication?

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

Answer: A

NEW QUESTION 211

Refer to the exhibit:



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

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

Answer: C

NEW QUESTION 216

Refer to the exhibit:

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

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

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

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

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

Answer: C

NEW QUESTION 218

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 220

Which utility can you use to locate MPLS faults?

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

Answer: C

NEW QUESTION 225

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 228

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 233

A company needs to improve the use of the network resources that is used to deploy internet access service to customers on separate backbone and internet access network. Which two major design models should be used to configure MPLS L3VPNs and internet service in the same MPLS backbone? (Choose two.)

- A. Carriage of full internet routes in a VPN, in the case of internet access VPNS
- B. Internet routing through global routing on a PE router.
- C. Internet access routing as another VPN in the ISP network.
- D. Internet access through leaking of internet routed from the global table into the L3VPN VRF
- E. Internet access for global routing via a separate interface in a VRF

Answer: CE

Explanation:

<http://etutorials.org/Networking/MPLS+VPN+security/Part+II+Advanced+MPLS+VPN+Security+Issues/Chapter+4.+Secu>

NEW QUESTION 236

Refer to the exhibit:

```
snmp-server host 192.168.1.1 version 2c public
```

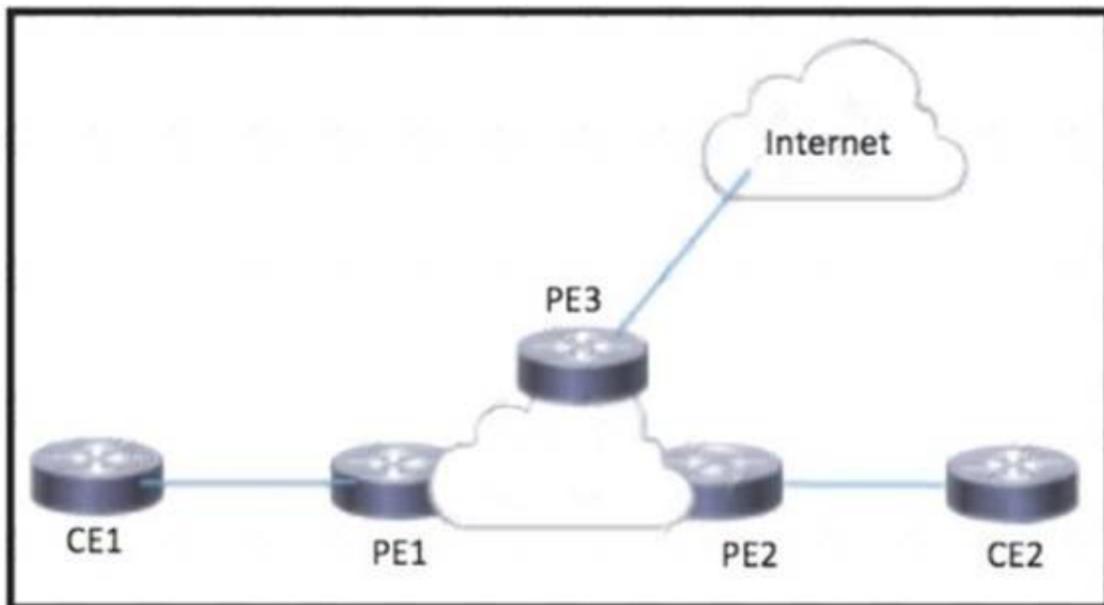
A network administrator wants to enhance the security for SNMP for this configuration. Which action can the network administrator implement?

- 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 238

Refer to the exhibit.



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

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

Answer: A

NEW QUESTION 241

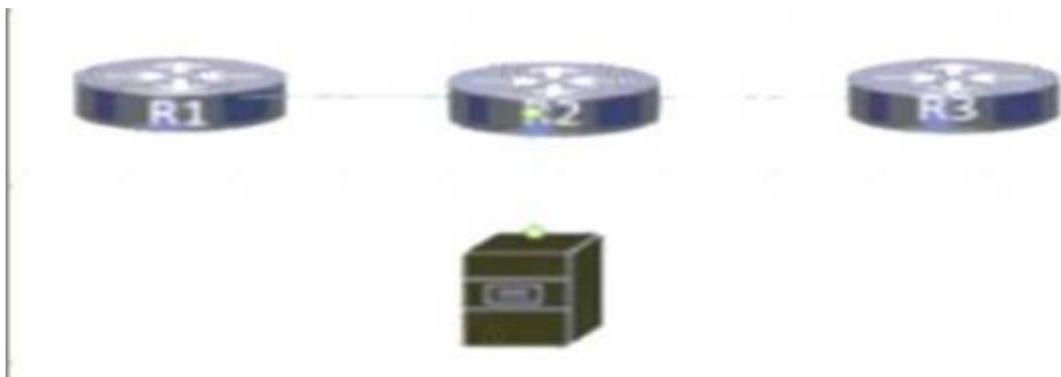
Which protocol is used for communication between the PCE and PCC?

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

Answer: B

NEW QUESTION 246

Refer the exhibit.



Users on a network connected to router R3 report slow speeds when they connect to the server connected to R2. After analyzing traffic on the network, a network engineer identified congestion on the link between R2 and R3 as the cause. Which QoS service must the engineer implement to drop traffic on the link when it exceeds a configured threshold?

- A. first-in, first-out
- B. traffic shaping
- C. class-based weighted fair queueing
- D. traffic policing

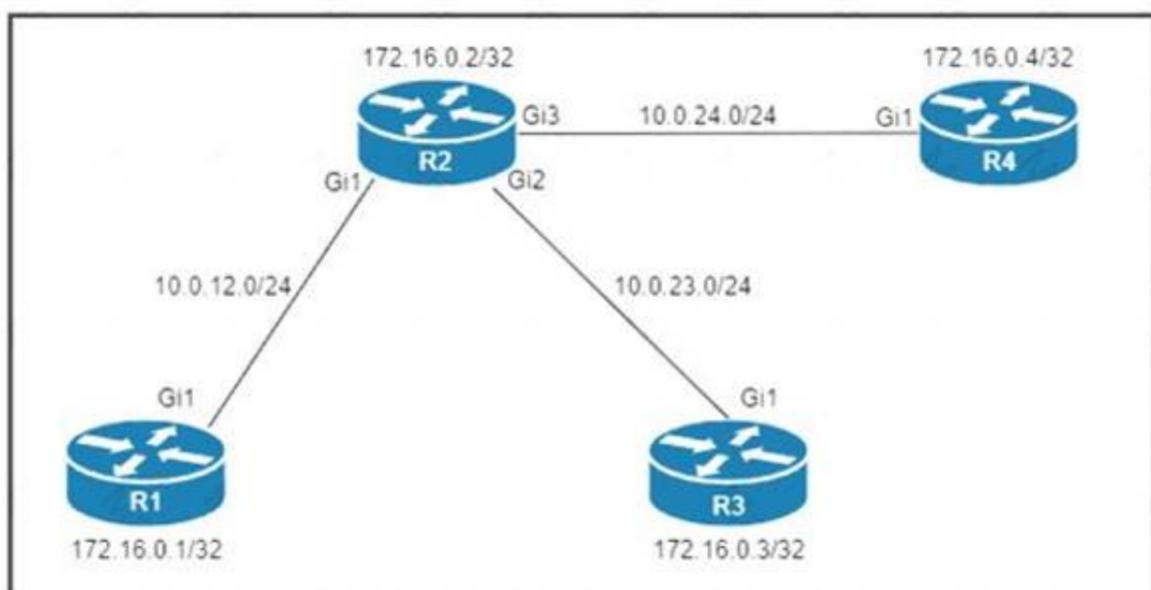
Answer: D

Explanation:

<https://www.cisco.com/c/en/us/support/docs/quality-of-service-qos/qos-policing/19645-policevsshape.html>

NEW QUESTION 250

Refer to the exhibit.



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

- `config t`
`ip prefix-list LOOPBACKS seq 5 permit 0.0.0.0/0 le 32`
`mpls ldp label`
`allocate global prefix-list LOOPBACKS`
`end`
- `config t`
`access-list 10 permit 172.16.0.0 0.0.0.7`
`access-list 20 permit 10.0.0.0 0.0.31.255`
`no mpls ldp advertise-labels`
`mpls ldp advertise-labels for 10 to 20`
`end`
- `config t`
`access-list 10 permit 172.16.0.0 0.0.0.7`
`access-list 20 permit 172.16.0.0 0.0.0.7`
`no mpls ldp advertise-labels`
`mpls ldp advertise-labels for 10 to 20`
`end`
- `config t`
`mpls ldp label`
`allocate global host-routes`
`end`

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

Answer: A

NEW QUESTION 255

Which utility must be used to locate MPLS faults?

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

Answer: C

NEW QUESTION 260

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 262

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 263

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 265

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 270

Refer to the exhibit.

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

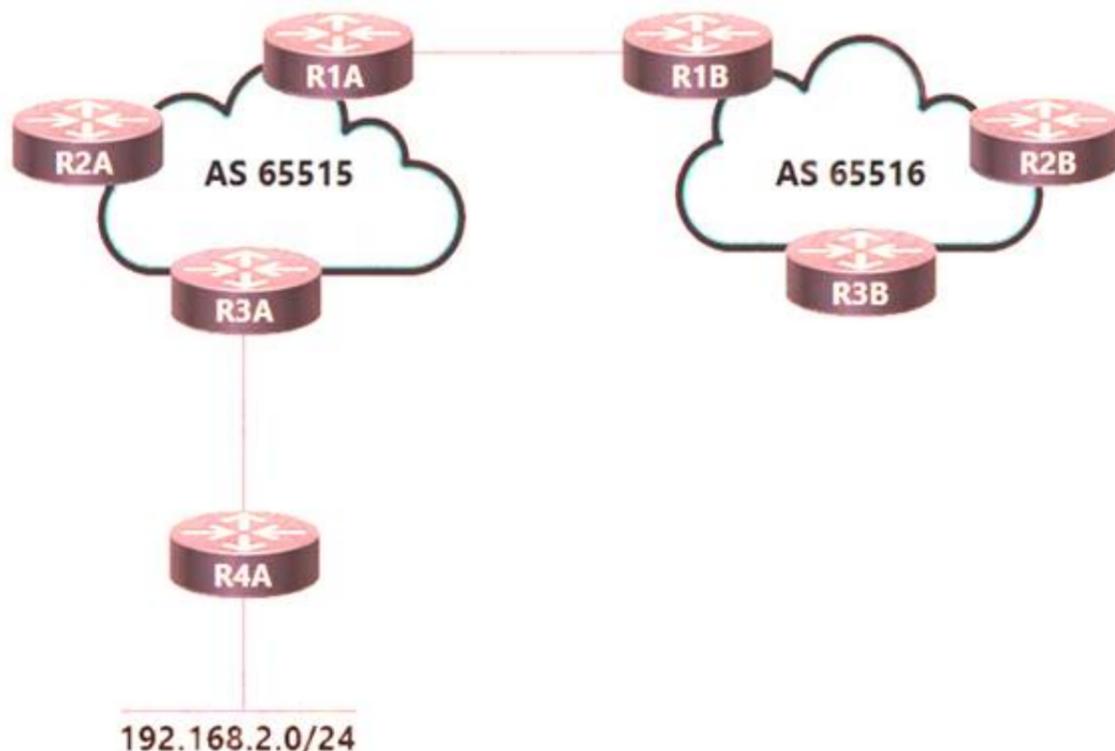
An engineer needs to implement this QoS policy on customer's network due to ongoing slow network issues. What will be the effect on the network when the engineer implements this configuration?

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

Answer: D

NEW QUESTION 271

Refer to the exhibit.



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

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

Answer: C

NEW QUESTION 273

Refer to the exhibit.

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

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

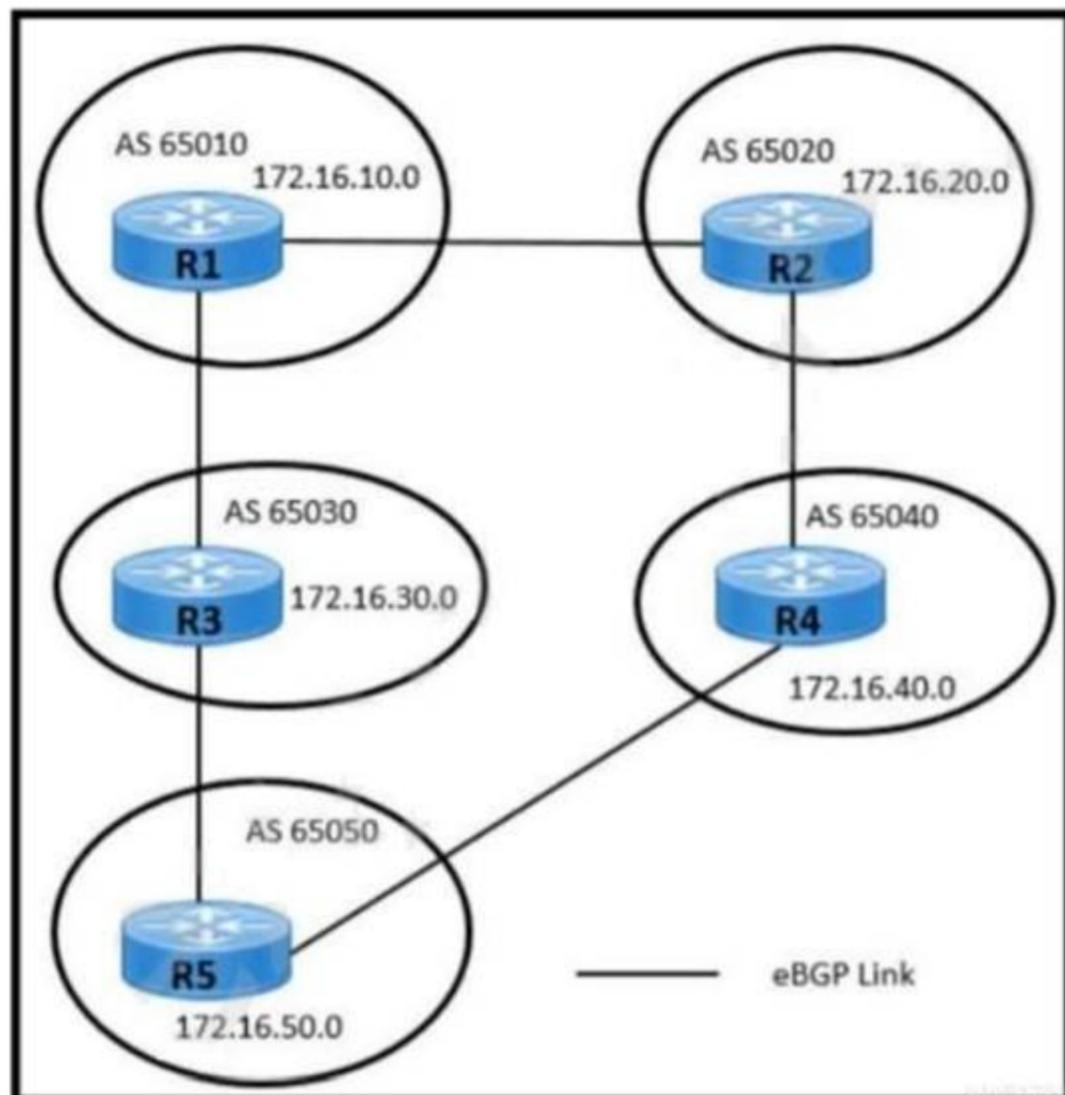
- R1# configure terminal
 - R1(config)# router isis area1
 - R1(config-router)# metric-style wide level-1
 - R1(config-router)# address-family ipv6
 - R1(config-router-af)# multi topology
- R1# configure terminal
 - R1(config)# router isis area2
 - R1(config-router)# metric-style wide
 - R1(config-router)#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

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

Answer: D

NEW QUESTION 274

Refer to the exhibit.



Users in AS 65010 are connected with the application server in AS 65050 with these requirements:
 AS 65010 users are experiencing latency and congestion to connect with application server 172.16.50.10. AS 65030 must be restricted to become Transient Autonomous System for traffic flow.
 Links connected to AS 65020 and AS 65040 are underutilized and must be used efficiently for traffic. Which two configurations must be implemented to meet these requirements? (Choose two.)

- A. Apply the AS-Path route-map policy for traffic received from R3.
- B. Configure the route map to prepend the AS-Path attribute for R5-R3 BGP peering.
- C. Apply the MED route-map policy for traffic received from R4.
- D. Configure a higher Local preference for R5-R4 BGP peering.
- E. Configure the route map to set the MED 50 attribute for R5-R4 BGP peering.

Answer: BE

NEW QUESTION 278

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 279

Refer to the exhibit.

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

Which task completes the configuration?

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

Answer: C

NEW QUESTION 280

Refer to the exhibit.

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

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

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

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

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

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

Answer: A

NEW QUESTION 283

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 287

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

IGMP	multicast routing protocol that floods traffic to all peers
PIM-DM	technology that manages the process of joining and leaving multicast groups
PIM-SM	technology that requires an RP
shared tree	technology that uses the RP as the single common root
source tree	shortest-path tree

- A. Mastered
- B. Not Mastered

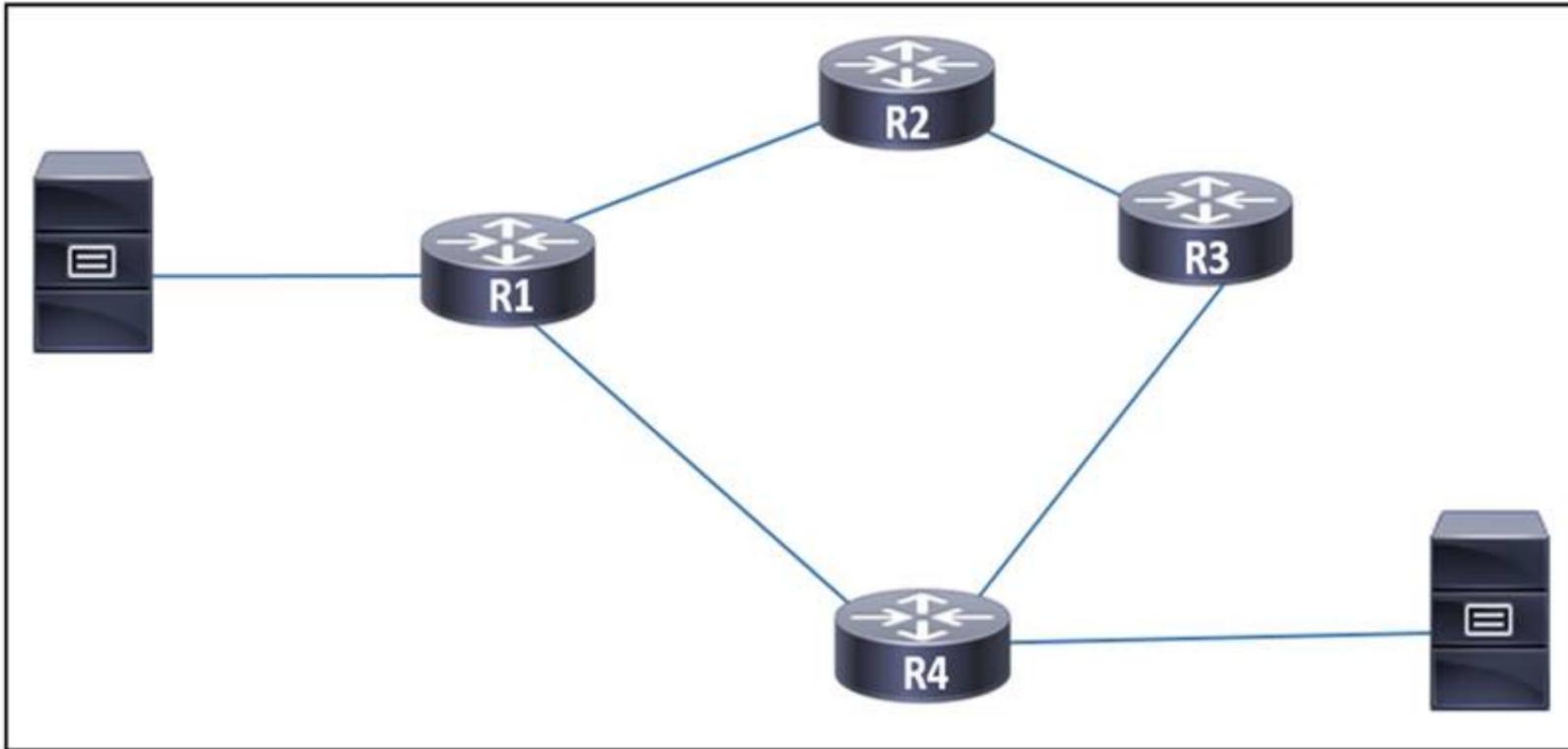
Answer: A

Explanation:

1: PIM-DM 2:IGMP 3:PIM-SM 3:shared tree 4:source tree

NEW QUESTION 291

Refer to the exhibit.



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

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

Answer: A

NEW QUESTION 295

An engineer configures 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 296

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

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

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

Answer: D

NEW QUESTION 300

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

- A. Enable communication over TCP port 646 for T-LDP hello messages.
- B. Enable RSVP-TE FRR on the LDP interface to protect the LDP session between routers.

- C. Enable LDP session protection on either one of the routers, which allows them to autonegotiate.
- D. Set the LDP session protection timer on each router to the same value.

Answer: C

NEW QUESTION 304

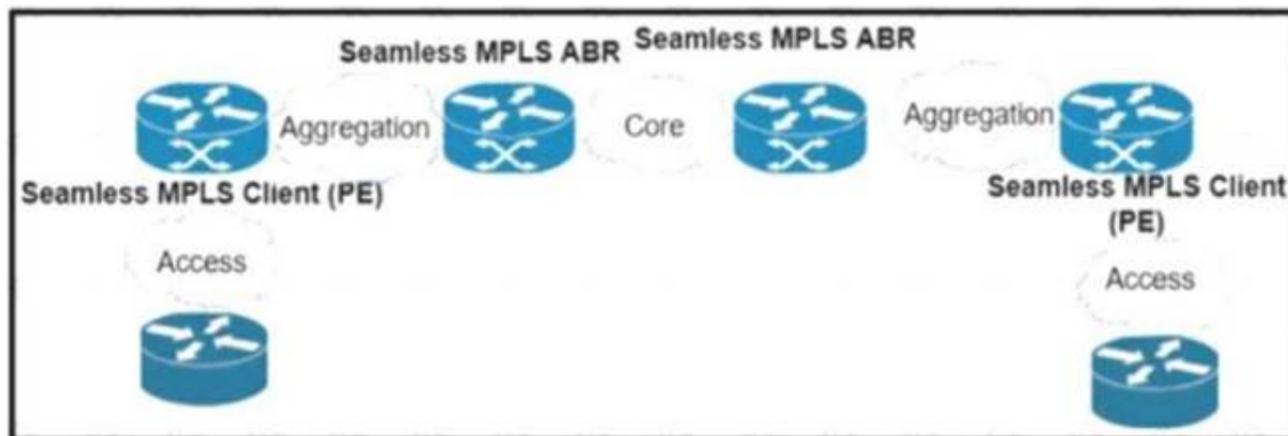
The service provider is serving hosts with two different multicast streams from source X and source Y. Source X is multicast group 224.0.0.0/8, and source Y is multicast group 226.0.0.0/8. Multicast source X should send its stream through bidirectional RP address 10.20.1.1, and multicast source Y should send its stream through RP address 10.20.2.1. Which configuration meets these requirements?

- A. Enable ip pim ssm default on RA and RB.
- B. Add ip pim bidir-enable in global mode on RB.
- C. Permit the source X and source Y IP addresses in the access list on RB.
- D. Set PIM sparse mode with a static RP address of 10.20.2.1 on RA and RC.

Answer: B

NEW QUESTION 306

Refer to the exhibit.



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

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

Answer: D

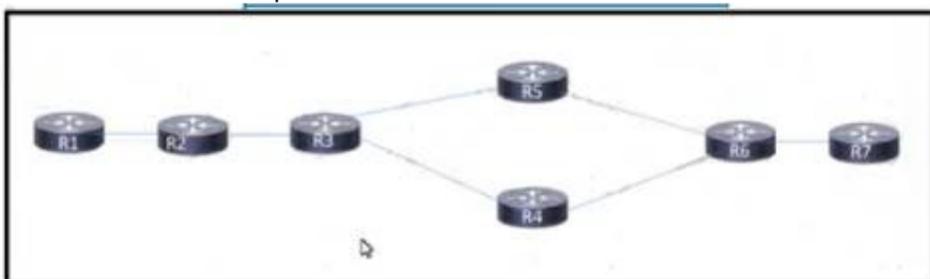
Explanation:

Carry Label Information in BGP-4 (RFC 3107)

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

NEW QUESTION 307

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 311

Refer to the exhibit:

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

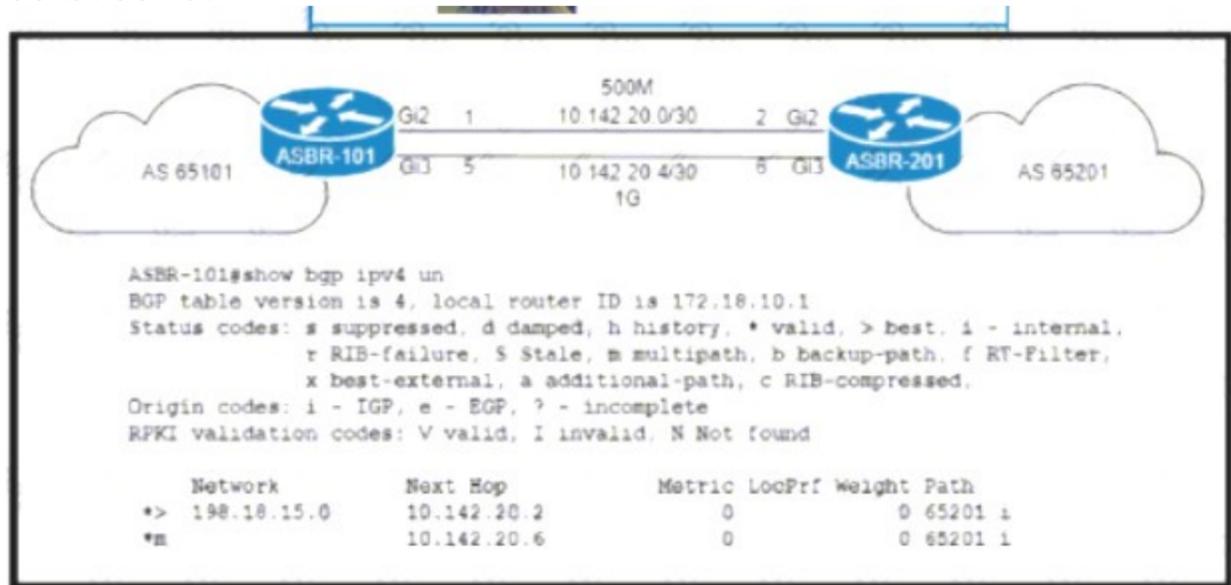
This configuration is being applied on an IOS XR router. Which statement about this configuration is true?

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

Answer: C

NEW QUESTION 316

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 320

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 323

Refer to the exhibit:

```
router ospf 1
  nsf ietf restart interval 90
```

Which purpose of implementing NSF with this configuration is true?

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

Answer: D

NEW QUESTION 326

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

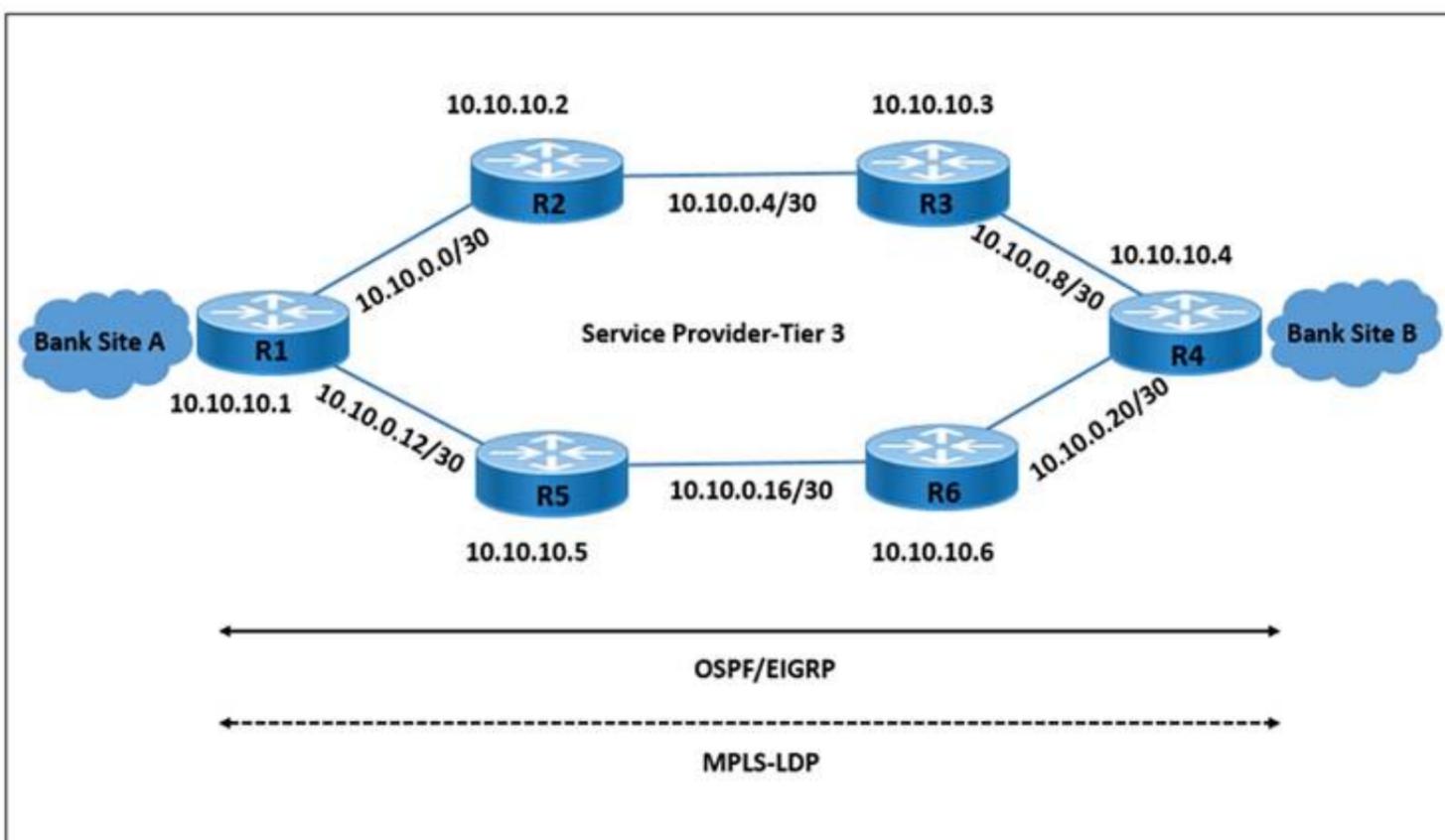
Answer: A

NEW QUESTION 327

Refer to the exhibit.

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

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



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

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

Answer: B

NEW QUESTION 332

A network engineer is configuring a router to send multicast traffic for the 239.10.10.10 group. Which configuration must an forward the traffic?

- A. Cisco(config)# interface ethernet 1/0 Cisco(config-if)# ip igmp max-groups action replace
- B. Cisco(config)# interface ethernet 1/0 Cisco(config-if)# ip igmp filter
- C. Cisco(config)# interface ethernet 1/0 Cisco(config-if)# ip igmp access-group 239.10.10.10
- D. Cisco(config)# interface ethernet 1/0 Cisco(config-if)# ip igmp join-group 239.10.10.10

Answer: D

NEW QUESTION 333

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Application, table Description automatically generated with medium confidence

NEW QUESTION 334

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 336

Which feature will an operator use while implementing MPLS TE on customer's network, to prevent an LSP from using any overseas inks?

- A. bandwidth
- B. affinity
- C. explicit path
- D. SLRG

Answer: C

NEW QUESTION 338

Refer to the exhibit:

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

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

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

Answer: B

NEW QUESTION 339

Refer to the exhibit:

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

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

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

Answer: D

NEW QUESTION 344

Which two IS-IS parameters must match before two Level 2 peers can form an adjacency? (Choose two)

- A. authentication settings
- B. area ID
- C. system ID
- D. MTU
- E. hello timer setting

Answer: AD

NEW QUESTION 348

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

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

Answer: B

NEW QUESTION 351

Refer to the exhibit.

```

RP/0/0/CPS0:PE-XR1#show mpls ldp neighbor detail
Mon Dec 14 07:48:56.793 UTC

Peer LDP Identifier: 172.31.255.2:0
TCP connection: 172.31.255.2:4444 - 172.31.255.11:34271
Graceful Restart: No
Session Holdtime: 180 sec
State: Oper: Msgs sent/rcvd: 17/15: Downstream-Unsolicited
Up time: 00:01:52
LDP Discovery Sources:
  IPv4: (1)
    GigabitEthernet0/0/0/0.201
  IPv6: (0)
Addresses bound to this peer:
  IPv4: (3)
    10.0.24.0 10.0.201.0 172.31.255.0
  IPv6: (0)
Peer holdtime: 180 sec; KA interval: 60 sec; Peer state: Estab
SR: Disabled

Peer LDP Identifier: 172.31.255.1:0
TCP connection: 172.31.255.1:4444 - 172.31.255.11:44508
Graceful Restart: No
Session Holdtime: 180 sec
State: Oper: Msgs sent/rcvd: 17/15: Downstream-Unsolicited
Up time: 00:01:47
LDP Discovery Sources:
  IPv4: (1)
    GigabitEthernet0/0/0/0.200
  IPv6: (0)
Addresses bound to this peer:
  IPv4: (3)
    10.0.14.0 10.0.200.0 172.31.255.0
  IPv6: (0)
Peer holdtime: 180 sec; KA interval: 60 sec; Peer state: Estab
SR: Disabled
    
```

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 355

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

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

Answer: C

NEW QUESTION 356

Drag and drop the functionalities from the left onto the correct 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 359

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 360

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 364

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

- A. IP address
- B. interface cost
- C. subnet mask
- D. process ID

- E. hello timer setting
- F. area number

Answer: CEF

NEW QUESTION 368

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
It uses address overloading.	
It conserves IPv4 addresses.	
It mandates IPv4-translatable IPv6 address allocation.	Stateless
It has 1:N translation.	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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

NEW QUESTION 370

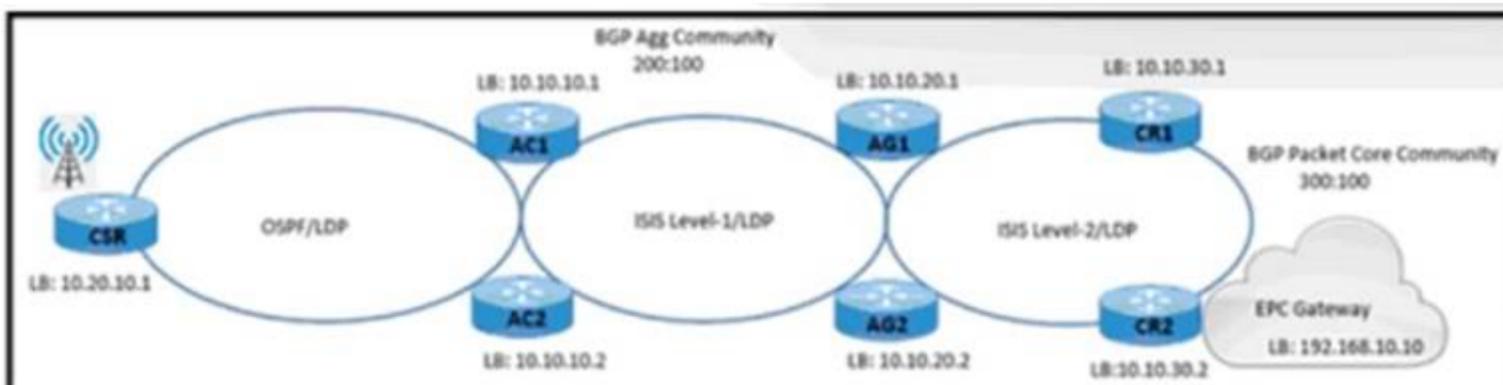
A network operator working for a telecommunication company with an employee Id: 4065 96080 it trying to implement BFD configuration on an existing network of Cisco devices Which task must the engineer perform to enable BFD on the interfaces?

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

Answer: D

NEW QUESTION 373

Refer to the exhibit.



```
AG1# router bgp 500
ibgp policy out enforce-modifications
bgp router-id 10.10.20.1
address-family ipv4 unicast
session-group Transport
remote-as 500
cluster-id 2001
update-source Loopback0
!
neighbor-group AGG
use session-group infra
address-family ipv4 labeled-unicast
route-reflector-client
!
route-policy BGP_Egress_Filter out
next-hop-self

neighbor-group Packet-Core
use session-group infra
address-family ipv4 labeled-unicast
route-reflector-client
next-hop-self
!
neighbor-group Core
use session-group infra
address-family ipv4 labeled-unicast
next-hop-self

community-set Allowed-Comm
300:100,
200:100,
!
route-policy BGP_Egress_Filter
if community matches-any Allowed-Comm then
pass
```

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

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

Answer: B

NEW QUESTION 375

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 376

.....

THANKS FOR TRYING THE DEMO OF OUR PRODUCT

Visit Our Site to Purchase the Full Set of Actual 350-501 Exam Questions With Answers.

We Also Provide Practice Exam Software That Simulates Real Exam Environment And Has Many Self-Assessment Features. Order the 350-501 Product From:

<https://www.2passeasy.com/dumps/350-501/>

Money Back Guarantee

350-501 Practice Exam Features:

- * 350-501 Questions and Answers Updated Frequently
- * 350-501 Practice Questions Verified by Expert Senior Certified Staff
- * 350-501 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * 350-501 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year