

Cisco.300-440.by.Bean.17q

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Exam Code: 300-440

Exam Name: Designing And Implementing Cloud Connectivity



Exam A

QUESTION 1

DRAG DROP

An engineer must configure a CLI add-on feature template in Cisco vManage for enhanced policy-based routing (ePBR) for IPv4. These configurations were deleted:

- * licensing config enable false
- * licensing config privacy hostname true
- * licensing config privacy version false
- * licensing config utility utility-enable true

Drag and drop the steps from the left onto the order on the right to complete the configuration.

Select and Place:

Click Add Template, select the device, and then click Select Template.	Step 1
Click CLI Add-On Template and enter the name and description.	Step 2
Paste the CLI configuration and then click Save.	Step 3
Click Configuration, select Templates, and then select Feature Templates.	Step 4

Correct Answer:

	Click Configuration, select Templates, and then select Feature Templates.
	Click Add Template, select the device, and then click Select Template.
	Click CLI Add-On Template and enter the name and description.
	Paste the CLI configuration and then click Save.

Section:

Explanation:

CLI Add-On Feature Templates - Cisco

Cisco Catalyst SD-WAN Systems and Interfaces Configuration Guide, Cisco IOS XE Catalyst SD-WAN Release 17.x - CLI Add-On Feature Templates

QUESTION 2
DRAG DROP
An engineer must configure an AppGoE service node for WAN optimization for applications that are hosted in the cloud using Cisco vManage for C8000V or C8500L-8S4X devices. Drag and drop the steps from the left onto the order on the right to complete the configuration.

Select and Place:

Select Device, select Service Node, and then set Template Name and Description.	Step 1
Attach the device template to the device.	Step 2
Navigate to Configuration, select Templates, and then select Device Templates.	Step 3
Click Create Template, select From Feature Template, and then select the device model.	Step 4

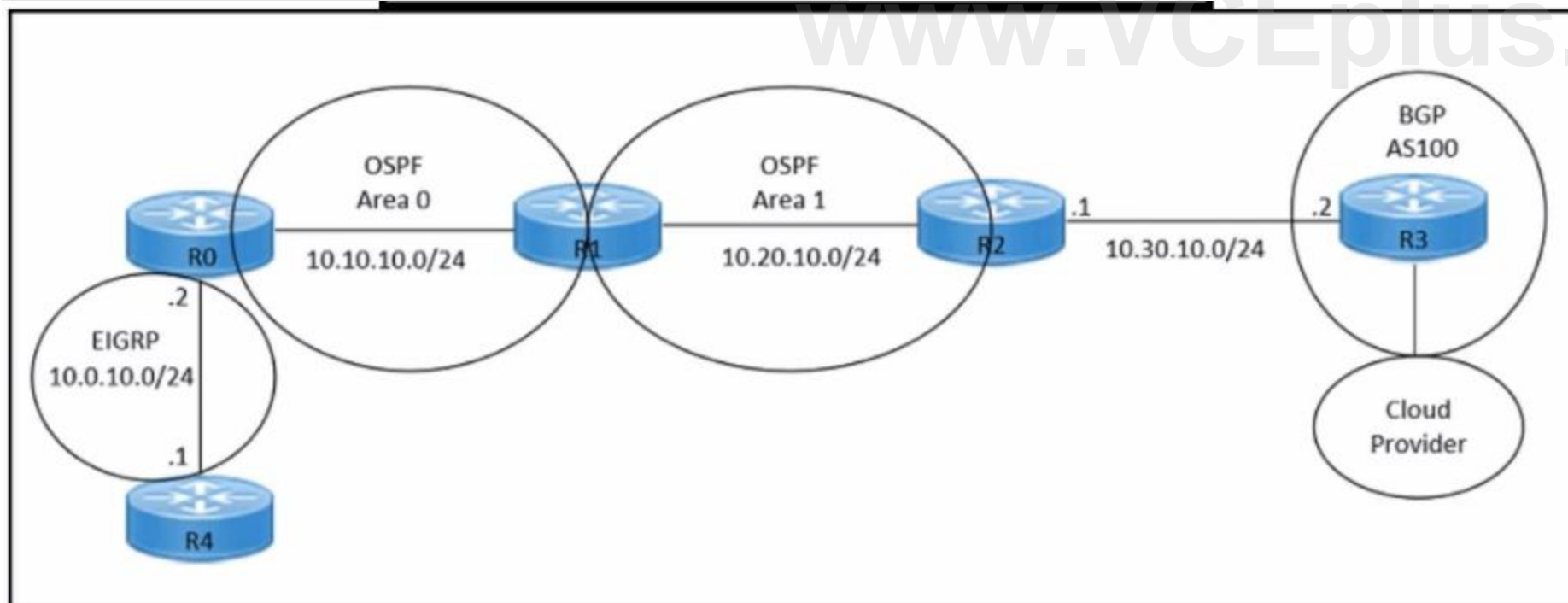
Correct Answer:

	Navigate to Configuration, select Templates, and then select Device Templates.
	Click Create Template, select From Feature Template, and then select the device model.
	Select Device, select Service Node, and then set Template Name and Description.
	Attach the device template to the device.

Section:
Explanation:
AppQoE - Step-by-Step Configuration - Cisco Community
Cisco Catalyst SD-WAN AppQoE Configuration Guide, Cisco IOS XE Catalyst SD-WAN Release 17.x

QUESTION 3
Refer to the exhibits.

```
hostname R2
!
interface GigabitEthernet0/0
 ip address 10.30.10.1 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 10.20.10.1 255.255.255.0
 duplex auto
 speed auto
!
router ospf 1
 network 10.20.10.0 0.0.0.255 area 1
!
router bgp 100
 neighbor 10.30.10.2 remote-as 100
 redistribute ospf 1
!
```



Refer to the exhibits. An engineer must redistribute only the 10.0.10.0/24 network into BGP to connect an on-premises network to a public cloud provider. These routes are currently redistributed:

*10.10.10.0/24

*10.20.10.0/24

Which command is missing on router R2?

A. neighbor 10.0.10.2 remote-as 100

- B. redistribute ospf 1 match internal
- C. redistribute ospf 1 match external
- D. neighbor 10.0.10.0/24 remote-as 100

Correct Answer: C

Section:

Explanation:

The command `redistribute ospf 1 match external` is missing on router R2. This command is needed to redistribute only the external OSPF routes into BGP. The external OSPF routes are those that are learned from another routing protocol or redistributed into OSPF. In this case, the 10.0.10.0/24 network is an external OSPF route, as it is redistributed from EIGRP into OSPF on router R1. The other commands are either already present or not relevant for this scenario. Reference:–

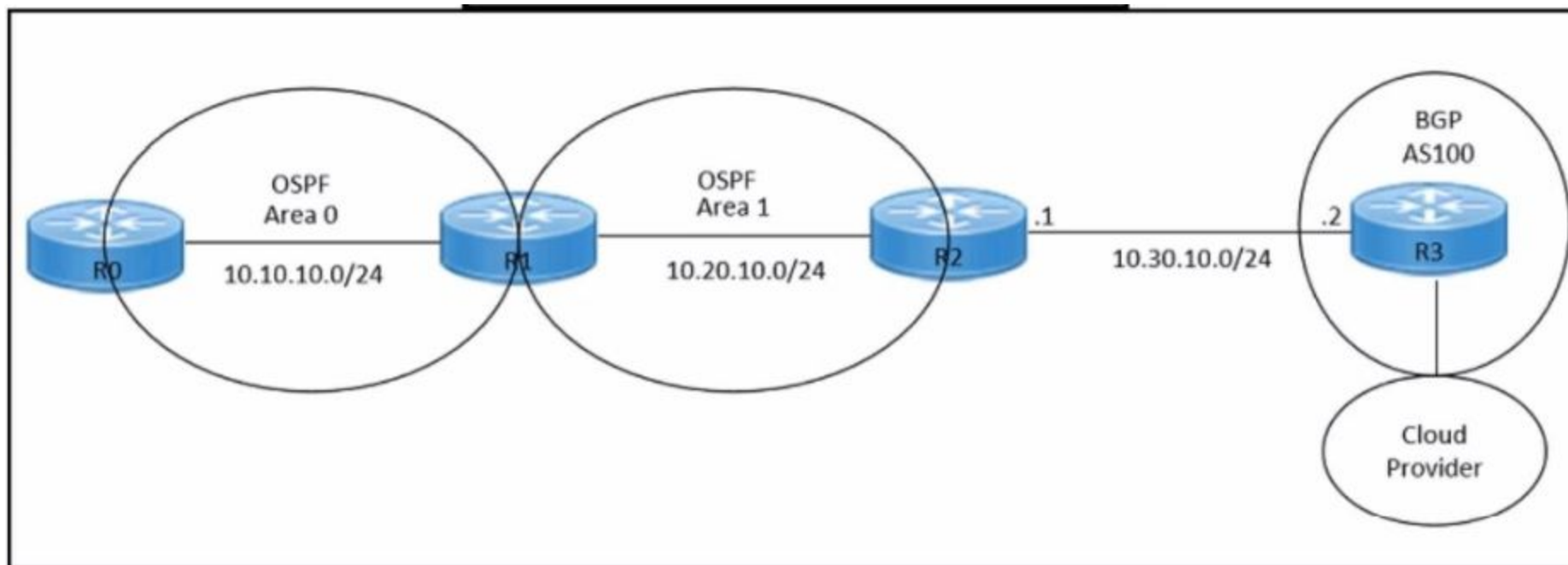
Designing and Implementing Cloud Connectivity (ENCC) v1.0, Module 3: Implementing Cloud Connectivity, Lesson 3.1: Implementing IPsec VPN from Cisco IOS XE to AWS, Topic 3.1.2: Configure BGP on the Cisco IOS XE Router Security for VPNs with IPsec Configuration Guide, Cisco IOS XE, Chapter: Configuring IPsec VPNs with Dynamic Routing Protocols, Section: Configuring BGP over IPsec VPNs

QUESTION 4

Refer to the exhibits.

```
hostname R2
!
interface GigabitEthernet0/0
 ip address 10.30.10.1 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 10.20.10.1 255.255.255.0
 duplex auto
 speed auto
!
router ospf 1
 network 10.20.10.0 0.0.0.255 area 1
!
neighbor 10.30.10.2 remote-as 100
!
end
```

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Refer to the exhibits. An engineer must redistribute OSPF internal routes into BGP to connect an on-premises network to a cloud provider. Which two commands should the engineer run on router R2? (Choose two.)

- A. router bgp 100
- B. redistribute bgp 100
- C. router ospf 1
- D. redistribute ospf 1
- E. redistribute ospf 100

Correct Answer: A, D

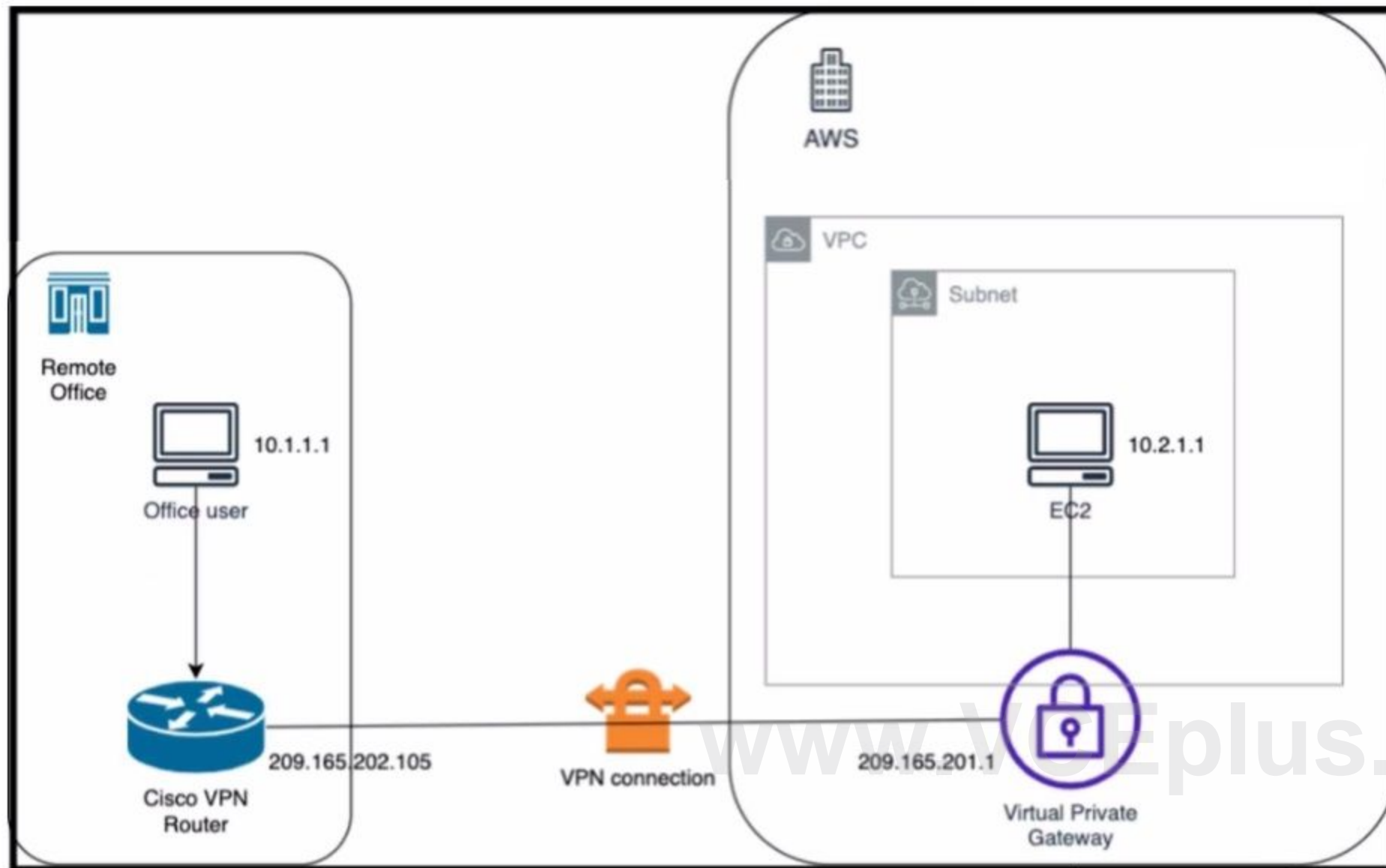
Section:

Explanation:

To redistribute OSPF internal routes into BGP for connecting an on-premises network to a cloud provider, the engineer should run the commands "router bgp 100" and "redistribute ospf 1" on router R2. The command "router bgp 100" is used to create a BGP routing process with AS number 100. The command "redistribute ospf 1" is used to redistribute OSPF routes from process ID 1 into BGP. Reference: = I need to access the specific content of Designing and Implementing Cloud Connectivity (ENCC) v1.0 from Cisco's official resources to provide exact references. However, I don't have direct access to external databases or resources, including the Cisco ENCC course materials. I recommend referring to the ENCC course materials for the most accurate and detailed information. Please note that this answer is based on general networking principles and may not reflect the specific content of the ENCC course. Always refer to the official course materials for the most accurate information.

QUESTION 5

Refer to the exhibits.



Refer to the exhibit. An engineer successfully brings up the site-to-site VPN tunnel between the remote office and the AWS virtual private gateway, and the site-to-site routing works correctly. However, the end-to-end ping between the office user PC and the AWS EC2 instance is not working. Which two actions diagnose the loss of connectivity? (Choose two.)

- A. Check the network security group rules on the host VNET.
- B. Check the security group rules for the host VPC.
- C. Check the IPsec SA counters.
- D. On the Cisco VPN router, configure the IPsec SA to allow ping packets.
- E. On the AWS private virtual gateway, configure the IPsec SA to allow ping packets.

Correct Answer: B, C

Section:

Explanation:

The end-to-end ping between the office user PC and the AWS EC2 instance is not working because either the security group rules for the host VPC are blocking the ICMP traffic or the IPsec SA counters are showing errors or drops. To diagnose the loss of connectivity, the engineer should check both the security group rules and the IPsec SA counters. The network security group rules on the host VNET are not relevant because they apply to Azure, not AWS. The IPsec SA configuration on the Cisco VPN router and the AWS private virtual gateway are not likely to be the cause of the problem because the site-to-site VPN tunnel is already up and the site-to-site routing works correctly. Reference: =

Designing and Implementing Cloud Connectivity (ENCC, Track 1 of 5), Module 3: Configuring IPsec VPN from Cisco IOS XE to AWS, Lesson 3: Verify IPsec VPN Connectivity

Security for VPNs with IPsec Configuration Guide, Cisco IOS XE, Chapter: IPsec VPN Overview, Section: IPsec Security Association

AWS Documentation, User Guide for AWS VPN, Section: Security Groups for Your VPC

QUESTION 6

Refer to the exhibit.

```
1-Aug-2021 20:12:11 EDT] Failed to apply policy - Failed to
process device request -
Error type : application
Error tag : operation-failed
Error Message : /apply-policy/site-list[name='All-Site']:
Overlapping apply-policy site-list Hub site id 200-299 with
site-list All-Site
Error info : <error-info>
<bad-element>site-list</bad-element>
</error-info>
```

A company uses Cisco SD-WAN in the data center. All devices have the default configuration. An engineer attempts to add a new centralized control policy in Cisco vManage but receives an error message. What is the problem?

- A. A centralized control policy is already applied to the specific site ID and direction
- B. The policy for 'Hub' should be applied in the outbound direction, and the policy for 'All-Site' should be applied inbound.
- C. Apply an additional outbound control policy to override the site ID overlaps.
- D. Site-list 'All-Site' should be configured with a new match sequence that is lower than the sequence for site-list 'Hub*'.

Correct Answer: D

Section:

Explanation:

The problem is that the site-list "All-Site" has a higher match sequence than the site-list "Hub", which means that the policy for "All-Site" will take precedence over the policy for "Hub" for any site that belongs to both lists. This creates a conflict and prevents the engineer from adding a new centralized control policy in Cisco vManage. To resolve this issue, the site-list "All-Site" should be configured with a new match sequence that is lower than the sequence for site-list "Hub", so that the policy for "Hub" will be applied first and then the policy for "All-Site" will be applied only to the remaining sites that are not in the "Hub" list. Reference:=

Designing and Implementing Cloud Connectivity (ENCC, Track 1 of 5), Module 3: Cisco SD-WAN Cloud OnRamp for Colocation, Lesson 3: Cisco SD-WAN Cloud OnRamp for Colocation - Centralized Control Policies

Cisco SD-WAN Cloud OnRamp for Colocation Deployment Guide, Chapter 4: Configuring Centralized Control Policies

Cisco SD-WAN Configuration Guide, Release 20.3, Chapter: Centralized Policy Framework, Section: Policy Configuration Overview

QUESTION 7

A company with multiple branch offices wants a suitable connectivity model to meet these network architecture requirements:

- * high availability
- * quality of service (QoS)
- * multihoming
- * specific routing needs

Which connectivity model meets these requirements?

- A. hub-and-spoke topology using MPLS with static routing and dedicated bandwidth for QoS
- B. star topology with internet-based VPN connections and BGP for routing
- C. hybrid topology that combines MPLS and SD-WAN
- D. fully meshed topology with SD-WAN technology using dynamic routing and prioritized traffic for QoS

Correct Answer: D

Section:

Explanation:

A fully meshed topology with SD-WAN technology using dynamic routing and prioritized traffic for QoS meets the network architecture requirements of the company. A fully meshed topology provides high availability by eliminating single points of failure and allowing multiple paths between branch offices. SD-WAN technology enables multihoming by supporting multiple transport options, such as MPLS, internet, LTE, etc. SD-WAN also provides QoS by applying policies to prioritize traffic based on application, user, or network conditions. Dynamic routing allows the SD-WAN solution to adapt to changing network conditions and optimize the path selection for each traffic type. A fully meshed topology with SD-WAN technology can also support specific routing needs, such as segment routing, policy-based routing, or application-aware routing. Reference:

Designing and Implementing Cloud Connectivity (ENCC) v1.0

[Cisco SD-WAN Design Guide]

[Cisco SD-WAN Configuration Guide]

QUESTION 8

An engineer must enable the OMP advertisement of BGP routes for a specific VRF instance on a Cisco IOS XE SD-WAN device. What should be configured after the global address-family ipv4 is configured?

- A. Set the VRF-specific route advertisements.
- B. Enable bgp advertisement.
- C. Enter sdwan mode.
- D. Disable bgp advertisement.

Correct Answer: B

Section:

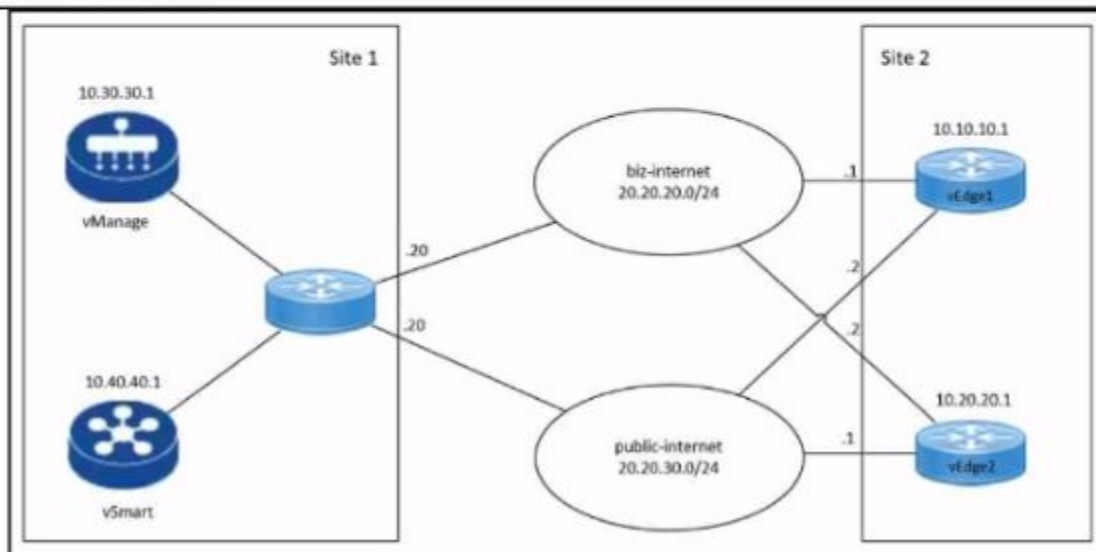
Explanation:

To enable the OMP advertisement of BGP routes for a specific VRF instance on a Cisco IOS XE SD-WAN device, the engineer must first configure the global address-family ipv4 and then enable bgp advertisement under the vrf definition. This will allow the device to advertise the BGP routes learned from the cloud provider to the OMP control plane, which will then distribute them to the other SD-WAN devices in the overlay network.

QUESTION 9

Refer to the exhibit.

```
local7.debug: Mar 11 11:31:11 VEDGE-1 VDAEMON[1136]: vdaemon_disable_my_tloc[1308]:
%VDAEMON_DBG_EVENTS-1: Disabling tloc ge0 1.
local7.info: Mar 11 11:31:11 VEDGE-1 VDAEMON[1136]: %Viptela-VEDGE-1-vdaemon-6-INFO-1400002:
Notification:
3/11/2023 11:31:11 control-connection-state-change severity-level:major host-name:"VEDGE-1"
system-ip:10.10.10.1
personality:vEdge peer-type:vmanage peer-system-ip:10.30.30.1 peer-vmanage-system-ip:0.0.0.0
public-ip:20.20.20.20
public-port:12947 src-color:biz-internet remote-color:public-internet uptime:"0:01:36:34" new-
state:down
local7.info: Mar 11 11:31:11 VEDGE-1 FTMD[1126]: %Viptela-VEDGE-1-ftmd-6-INFO-1400002:
Notification:
3/11/2023 11:31:11 bfd-state-change severity-level:major host-name:"VEDGE-1" system-
ip:10.10.10.1 src-ip:20.20.30.2
dst-ip:20.20.30.20 proto:ipseec src-port:12406 dst-port:12347 local-system-ip:10.10.10.1 local-
color:"biz-internet"
remote-system-ip:10.10.10.4 remote-color:"public-internet" new-state:down deleted:false flap-
reason:bfd-deleted
```



Refer to the exhibits. An engineer troubleshoots a Cisco SD-WAN connectivity issue between an on-premises data center WAN Edge and a public cloud provider WAN Edge. The engineer discovers that BFD is flapping on vEdge1. What is the problem?

- A. The remote Edge device BFD is down.
- B. The remote Edge device failed to respond BFD keepalives.
- C. The remote Edge device has a duplicate IP address.
- D. The control plane deleted the BFD session.

Correct Answer: B

Section:

Explanation:

BFD (Bidirectional Forwarding Detection) is a protocol that detects failures in the overlay tunnel between Cisco SD-WAN devices. BFD packets are sent and received periodically by each device to check the liveliness and quality of the connection. If a device does not receive a BFD packet from its peer within a specified timeout interval, it considers the peer to be unreachable and reports a BFD down event. This event triggers a control connection state change and a possible route change in the SD-WAN fabric.

In this scenario, the engineer discovers that BFD is flapping on vEdge1, which means that the BFD session between vEdge1 and the remote Edge device is going up and down repeatedly. This indicates a connectivity issue between the two devices, such as network congestion, packet loss, or misconfiguration. The most likely cause of the problem is that the remote Edge device failed to respond BFD keepalives within the timeout interval, which resulted in a BFD timeout event on vEdge1. This event caused vEdge1 to mark the remote Edge device as down and notify the control plane. The control plane then tried to establish a new BFD session with the remote Edge device, which may have succeeded or failed depending on the network condition. This cycle of BFD session creation and deletion caused the BFD flapping on vEdge1.

The other options are less likely to be the cause of the problem. Option A is incorrect because if the remote Edge device BFD was down, vEdge1 would not receive any BFD packets from it and would not flap. Option C is incorrect because if the remote Edge device had a duplicate IP address, vEdge1 would not be able to establish a BFD session with it in the first place. Option D is incorrect because the control plane does not delete the BFD session unless there is a configuration change or a port-hop event on the device. Reference: Bidirectional Forwarding Detection Flap-Reason Definitions on Cisco vEdge Routers, Cisco Catalyst SD-WAN BFD, Cisco SD-WAN: BFD (Bidirectional Forwarding Detection)

QUESTION 10

What is the role of service providers to establish private connectivity between on-premises networks and Google Cloud resources?

- A. facilitate direct, dedicated network connections through Google Cloud Interconnect
- B. enable intelligent routing and dynamic path selection using software-defined networking
- C. provide end-to-end encryption for data transmission using native IPsec
- D. accelerate content delivery through integration with Google Cloud CDN

Correct Answer: A

Section:

Explanation:

The role of service providers to establish private connectivity between on-premises networks and Google Cloud resources is to facilitate direct, dedicated network connections through Google Cloud Interconnect. Google Cloud Interconnect is a service that allows customers to connect their on-premises networks to Google Cloud through a service provider partner. This provides low latency, high bandwidth, and secure connectivity to Google Cloud services, such as Google Compute Engine, Google Cloud Storage, and Google BigQuery. Google Cloud Interconnect also supports hybrid cloud scenarios, such as extending on-premises networks to Google Cloud regions, or connecting multiple Google Cloud regions together. Google Cloud Interconnect offers two types of connections: Dedicated Interconnect and Partner Interconnect. Dedicated Interconnect provides physical connections between the customer's network and Google's network at a Google Cloud Interconnect location. Partner Interconnect provides virtual connections between the customer's network and Google's network through a supported service provider partner. Both types of connections use VLAN attachments to establish private connectivity to Google Cloud Virtual Private Cloud (VPC) networks. Reference:

Designing and Implementing Cloud Connectivity (ENCC) v1.0

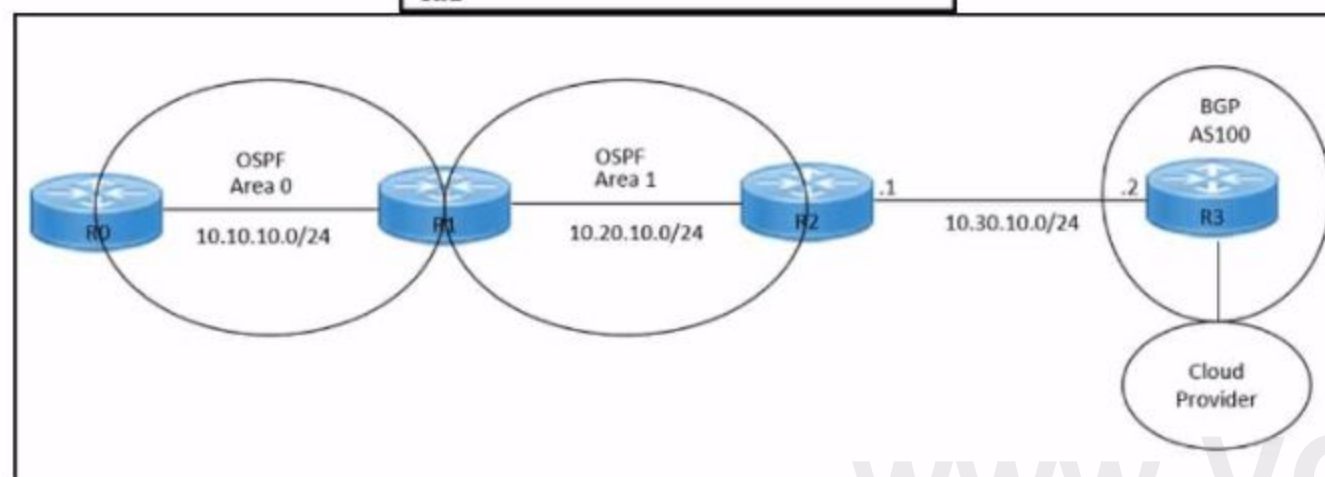
[Google Cloud Interconnect Overview]

[Google Cloud Interconnect Documentation]

QUESTION 11

Refer to the exhibit.

```
hostname R2
!
interface GigabitEthernet0/0
 ip address 10.30.10.1 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 10.20.10.1 255.255.255.0
 duplex auto
 speed auto
!
router ospf 1
 network 10.20.10.0 0.0.0.255 area 1
!
neighbor 10.30.10.2 remote-as 100
!
end
```



Refer to the exhibits. An engineer must redistribute IBGP routes into OSPF to connect an on-premises network to a cloud provider. Which command must be configured on router R2?

- A. redistribute ospf 1
- B. redistribute bgp 100 ospf 1
- C. redistribute bgp 100 subnets
- D. bgp redistribute-internal

Correct Answer: B

Section:

Explanation:

This command redistributes the routes learned from BGP AS100 into OSPF Area 1, which allows router R2 to advertise those routes to router R1 and connect the on-premises network to the cloud provider. The other options are incorrect because they either redistribute the wrong routes or use the wrong syntax.

I hope this helps you understand the question and the answer. If you have any other questions or requests, please let me know. I am always happy to help.

QUESTION 12

Which approach does a centralized internet gateway use to provide connectivity to SaaS applications?

- A. A cloud-based proxy server routes traffic from the on-premises infrastructure to the SaaS provider data center.
- B. Internet traffic from the on-premises infrastructure is routed through a centralized gateway that provides access controls for SaaS applications.
- C. VPN connections are used to provide secure access to SaaS applications from the on-premises infrastructure.
- D. A dedicated, private connection is established between the on-premises infrastructure and the SaaS provider data center using colocation services.

Correct Answer: B

Section:**Explanation:**

A centralized internet gateway is a network design that routes all internet-bound traffic from the on-premises infrastructure through a single point of egress, typically located at the data center or a regional hub¹. This approach allows the enterprise to apply consistent security policies and access controls for SaaS applications, as well as optimize the bandwidth utilization and performance of the WAN links². A centralized internet gateway can use various technologies to provide connectivity to SaaS applications, such as proxy servers, firewalls, web filters, and WAN optimizers³. However, a cloud-based proxy server (option A) is not a part of the centralized internet gateway, but rather a separate service that can be used to route traffic from the on-premises infrastructure to the SaaS provider data center⁴. VPN connections (option C) and dedicated, private connections (option D) are also not related to the centralized internet gateway, but rather alternative ways of providing secure and reliable access to SaaS applications from the on-premises infrastructure⁵. Therefore, the correct answer is option B, which describes the basic function of a centralized internet gateway. Reference: ¹: Designing and Implementing Cloud Connectivity (ENCC) v1.0, Module 1: Cloud Connectivity Overview, Lesson 1: Cloud Connectivity Concepts, Topic: Centralized Internet Gateway ²: Cloud OnRamp for SaaS, Cisco IOS XE Catalyst SD-WAN Release 17.3.1a and Later, Topic: Centralized Internet Gateway ³: Architect and optimize your internet traffic with Azure routing preference, Microsoft Azure Blog, Topic: Routing via the premium Microsoft global network ⁴: What is SaaS? Software as a Service, Microsoft Azure, Topic: How SaaS works ⁵: How an application gateway works, Microsoft Learn, Topic: Application gateway components

QUESTION 13

Refer to the exhibits.

```
crypto keyring keyring-vpn-000001
pre-shared-key address 192.10.10.10 key secretkey01
!
interface Tunnel1
ip address 20.20.20.21 255.255.255.252
tunnel destination 192.10.10.10
!
crypto ikev2 keyring AWS_Keyring
peer AWS_Peer
[ ]
pre-shared-key local awssecretkey01
pre-shared-key remote awssecretkey02
!
```

Refer to the exhibit. An engineer needs to configure a site-to-site IPsec VPN connection between an on-premises Cisco IOS XE router and Amazon Web Services (AWS). Which configuration command must be placed in the blank in the code to complete the tunnel configuration?

- A. address 20.20.20.21
- B. address 192.10.10.10
- C. tunnel source 20.20.20.21
- D. tunnel source 192.10.10.10

Correct Answer: C**Section:****Explanation:**

In the given scenario, an engineer is configuring a site-to-site IPsec VPN connection between an on-premises Cisco IOS XE router and AWS. The correct command to complete the tunnel configuration is "tunnel source 20.20.20.21". This command specifies the source IP address for the tunnel, which is essential for establishing a secure connection between two endpoints over the internet or another network¹. Reference: Configure IOS-XE Site-to-Site VPN Connection to Amazon Web Services - Cisco Community [Security for VPNs with IPsec Configuration Guide, Cisco IOS XE Release 3S - Config

QUESTION 14

An engineer is implementing a highly secure multitier application in AWS that includes S3, RDS, and some additional private links. What is critical to keep the traffic safe?

- A. VPC peering and bucket policies
- B. specific routing and bucket policies

- C. EC2 subnets and specific routing policies
- D. gateway load balancers and specific routing policies

Correct Answer: B

Section:

Explanation:

A highly secure multitier application in AWS that includes S3, RDS, and some additional private links requires specific routing and bucket policies to keep the traffic safe. The reasons are as follows:
Specific routing policies are needed to ensure that the traffic between the tiers is routed through the private links, which provide secure and low-latency connectivity between AWS services and on-premises resources¹².The private links can also prevent the exposure of the data and the application logic to the public internet¹².
Bucket policies are needed to control the access to the S3 buckets that store the application data³⁴.Bucket policies can specify the conditions under which the requests are allowed or denied, such as the source IP address, the encryption status, the request time, etc.³⁴.Bucket policies can also enforce encryption in transit and at rest for the data in S3³⁴.

- 1: AWS PrivateLink
- 2: AWS PrivateLink FAQs
- 3: Using Bucket Policies and User Policies
- 4: Bucket Policy Examples

QUESTION 15

DRAG DROP

Drag and drop the commands from the left onto the purposes on the right to identify issues on a Cisco IOS XE SD-WAN device.

Select and Place:

show sdwan policy app-route-policy-filter	Display the time and process information of the device, as well as CPU, memory, and disk usage data.
show sdwan security-info	Validate the configured zone-based firewall.
show sdwan system status	Display information about application-aware routing policy matched packet counts on the Cisco IOS XE SD-WAN devices.
show policy-firewall config	View the security information that is configured for IPsec tunnel connections.

Correct Answer:

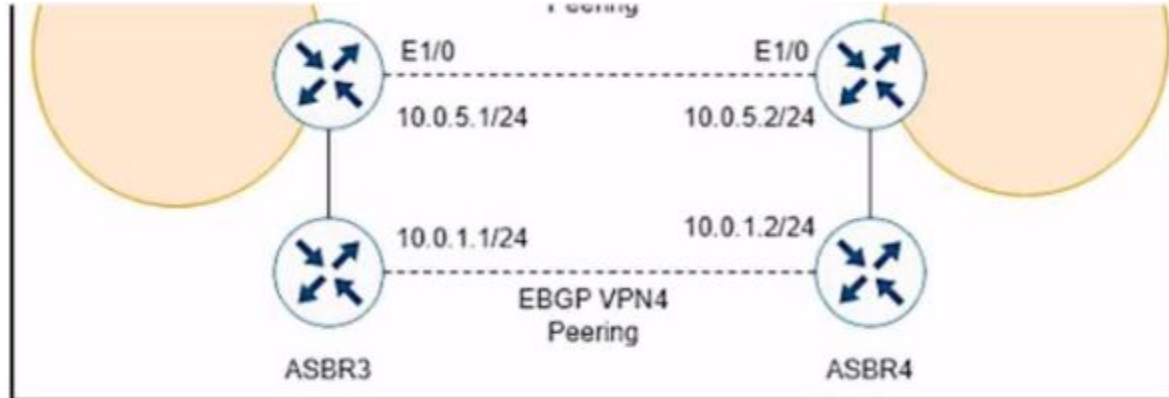
	show sdwan system status
	show policy-firewall config
	show sdwan policy app-route-policy-filter
	show sdwan security-info

Section:

Explanation:

QUESTION 16

Refer to the exhibits.



While troubleshooting, a network engineer discovers that the backup path fails between ASBR3 and ASBR4 for traffic between BGP AS6000 and BGP AS6500 when the connection between ASBR1 and ASBR2 goes down. The following configurations were performed on ASBR1:

```
ASBR1(config)# router bgp 6000
ASBR1 (config-router)# address-family vpn4
ASBR1 (config-router-af)# neighbor 10.0.5.2 remote-as 6500
ASBR1 (config-router-af)# neighbor 10.0.5.2 activate
ASBR1 (config-router-af)# neighbor 10.0.5.2 fall-over bfd
ASBR1 (config-router-af)# end
```

Which command is missing?

- A. bgp additional-paths install
- B. bgp additional-paths select
- C. redistribute static
- D. bgp advertise-best-external

Correct Answer: D

Section:

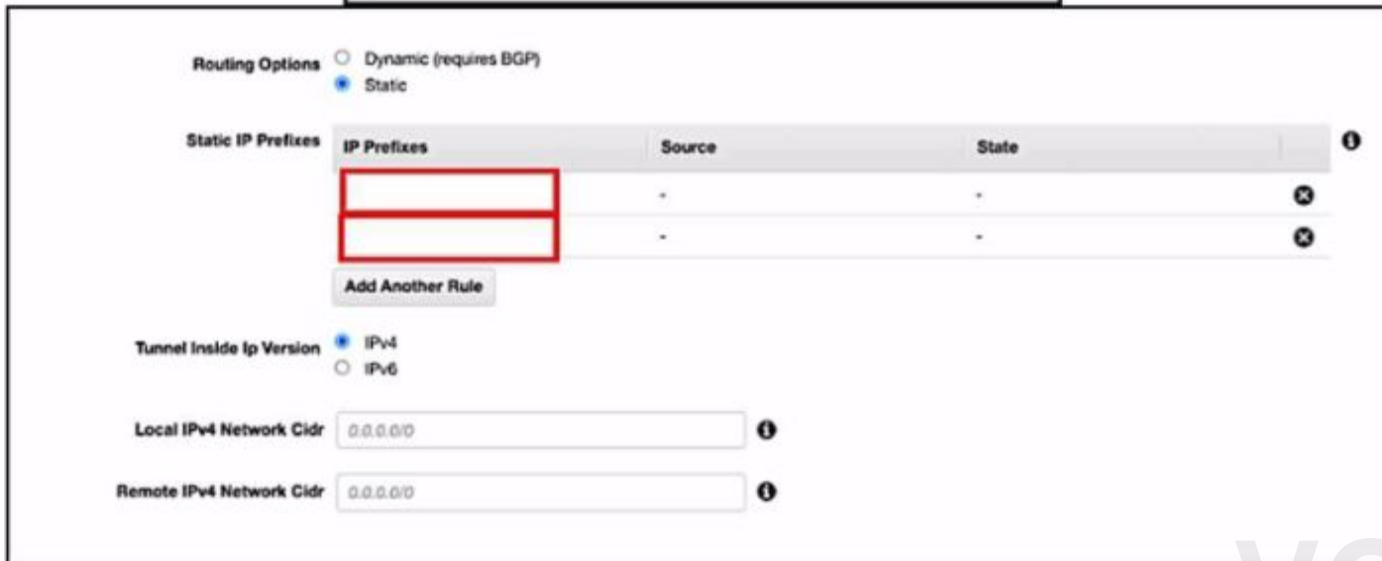
Explanation:

The `bgp advertise-best-external` command is used to enable the advertisement of the best external path to internal BGP peers. This command is useful when there are multiple exit points from the local AS to other ASes, and the local AS wants to use the closest exit point for each destination. By default, BGP only advertises the best path to its peers, and the best path is usually the one with the lowest IGP metric to the next hop. However, this may not be the optimal path for traffic leaving the local AS, as it may result in suboptimal hot-potato routing or MED oscillations. The `bgp advertise-best-external` command allows BGP to advertise the best external path, which is the path with the lowest MED among the paths from different neighboring ASes, in addition to the best path. This way, the internal BGP peers can choose the best exit point based on the MED value, rather than the IGP metric. In this scenario, ASBR1 is configured to receive additional paths from ASBR2, which is a route reflector. ASBR2 receives two paths for the same prefix from AS6500, one from ASBR3 and one from ASBR4. ASBR2 selects the best path based on the IGP metric to the next hop, and advertises it to ASBR1. However, this path may not be the best external path, as it may have a higher MED value than the other path. If the connection between ASBR1 and ASBR2 goes down, ASBR1 will not have any backup path to reach AS6500, as it does not know the other path from ASBR4. To prevent this situation, ASBR1 should be configured with the `bgp advertise-best-external` command, so that it can receive the best external path from ASBR2, along with the best path. This way, ASBR1 will have a backup path to reach AS6500, in case the primary path fails. Reference: IP Routing: BGP Configuration Guide - BGP Additional Paths ... - Cisco, BGP Additional Paths

QUESTION 17

Refer to the exhibits.


```
crypto keyring keyring-vpn-000001
pre-shared-key address 20.20.20.29 key awskey01
!
crypto keyring keyring-vpn-000002
pre-shared-key address 40.40.40.29 key awskey02
!
interface Tunnel1
ip address 30.30.30.29 255.255.255.252
tunnel destination 20.20.20.29
!
interface Tunnel2
ip address 30.30.30.33 255.255.255.252
tunnel destination 40.40.40.29
!
```



Routing Options ☐ Dynamic (requires BGP) ☒ Static

Static IP Prefixes

IP Prefixes	Source	State
	-	-
	-	-

Add Another Rule

Tunnel Inside Ip Version ☒ IPv4 ☐ IPv6

Local IPv4 Network Cidr

Remote IPv4 Network Cidr

Refer to the exhibits. An engineer needs to configure a site-to-site IPsec VPN connection between an on premises Cisco IOS XE router and Amazon Web Services (AWS). Which two IP prefixes should be used to configure the AWS routing options? (Choose two.)

- A. 30.30.30.0/30
- B. 20.20.20.0/24
- C. 30.30.30.0/24
- D. 50.50.50.0/30
- E. 40.40.40.0/24

Correct Answer: A, E

Section:

Explanation:

The correct answer is A and E because they are the IP prefixes that match the tunnel interfaces on the Cisco IOS XE router. The AWS routing options should include the local and remote IP prefixes that are used for the IPsec tunnel endpoints. The other options are either the public IP addresses of the routers or the LAN subnets that are not relevant for the IPsec tunnel configuration. Reference: Designing and Implementing Cloud Connectivity (ENCC) v1.0, Configure IOS-XE Site-to-Site VPN Connection to Amazon Web Services, Site-to-Site VPN with Amazon Web Services