

# Cisco

## Exam Questions 300-415

Implementing Cisco SD-WAN Solutions (ENSDWI)



**NEW QUESTION 1**

In a Cisco SD-WAN architecture, what is the role of the WAN Edge?

- A. It provides orchestration to assist in automatic provisioning of WAN Edge routers and overlay
- B. It is the management plane responsible for centralized configuration and monitoring
- C. It is the control plane that builds and maintains network topology
- D. It is the data plane that is responsible for forwarding traffic

**Answer: D**

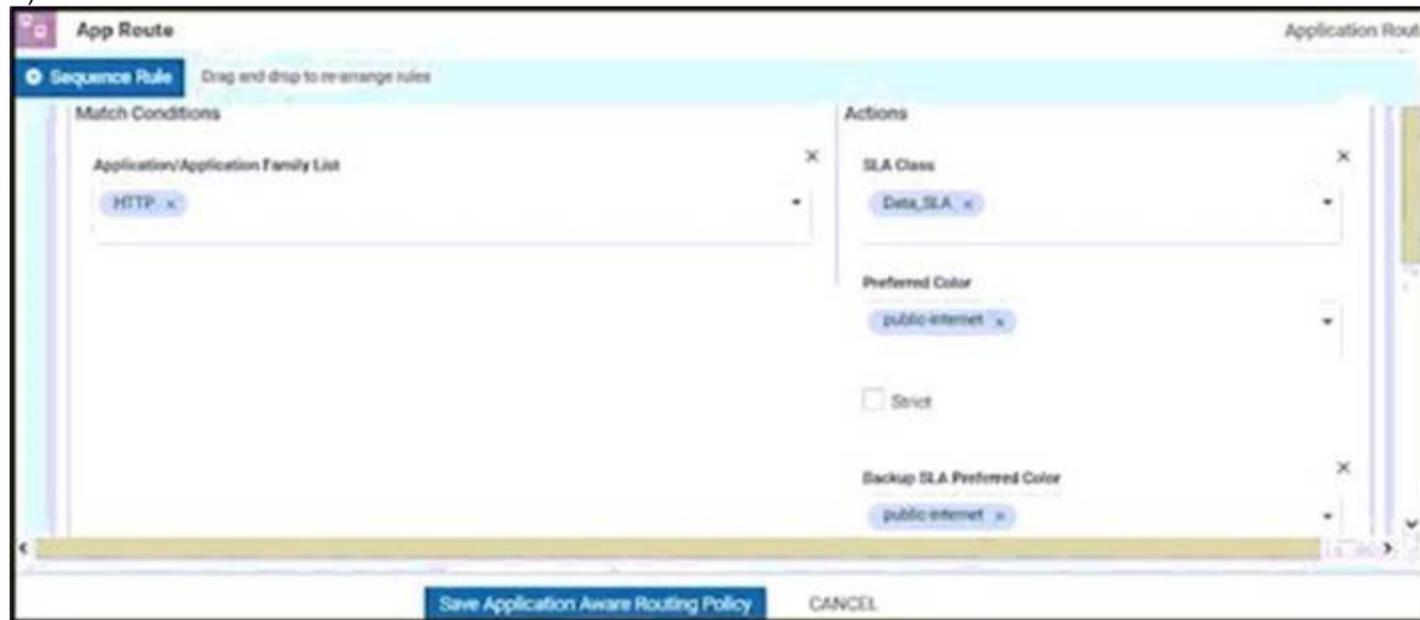
**Explanation:**

Cisco WAN Edge routers are responsible for establishing the network fabric and forwarding traffic. Cisco WAN Edge routers come in multiple forms, virtual and

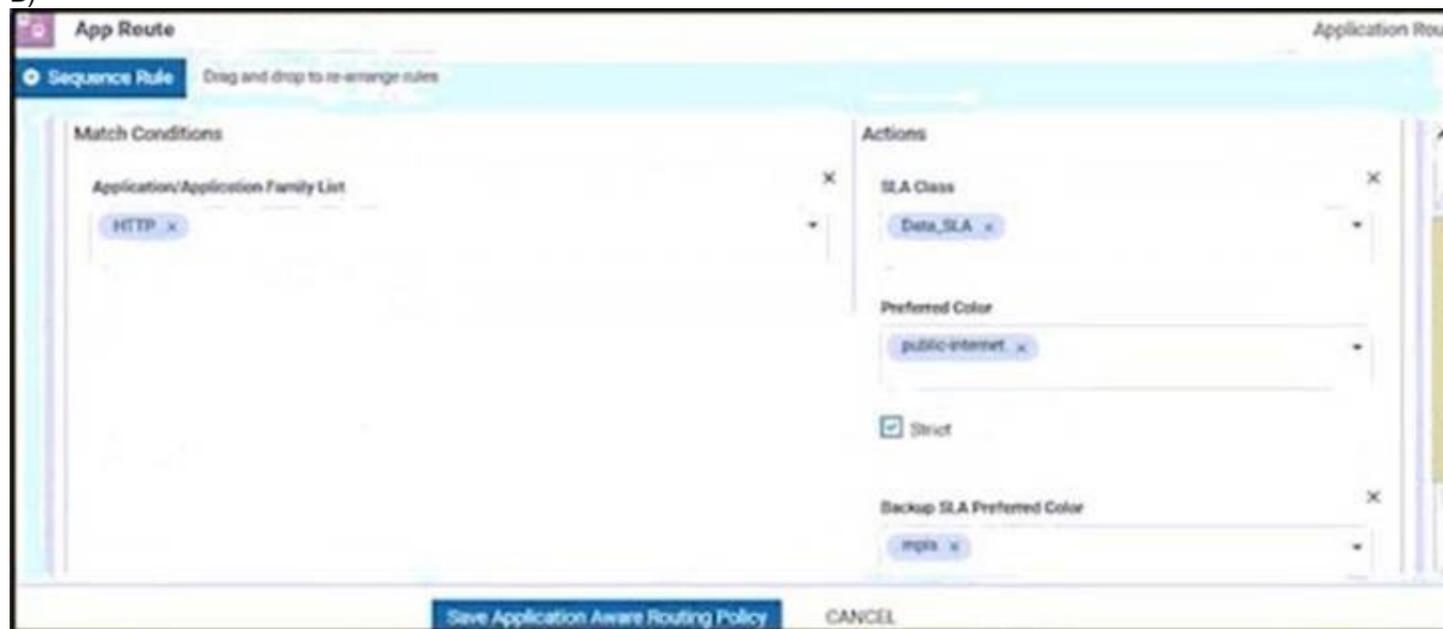
**NEW QUESTION 2**

An engineer must improve video quality by limiting HTTP traffic to the Internet without any failover. Which configuration in vManage achieves this goal?

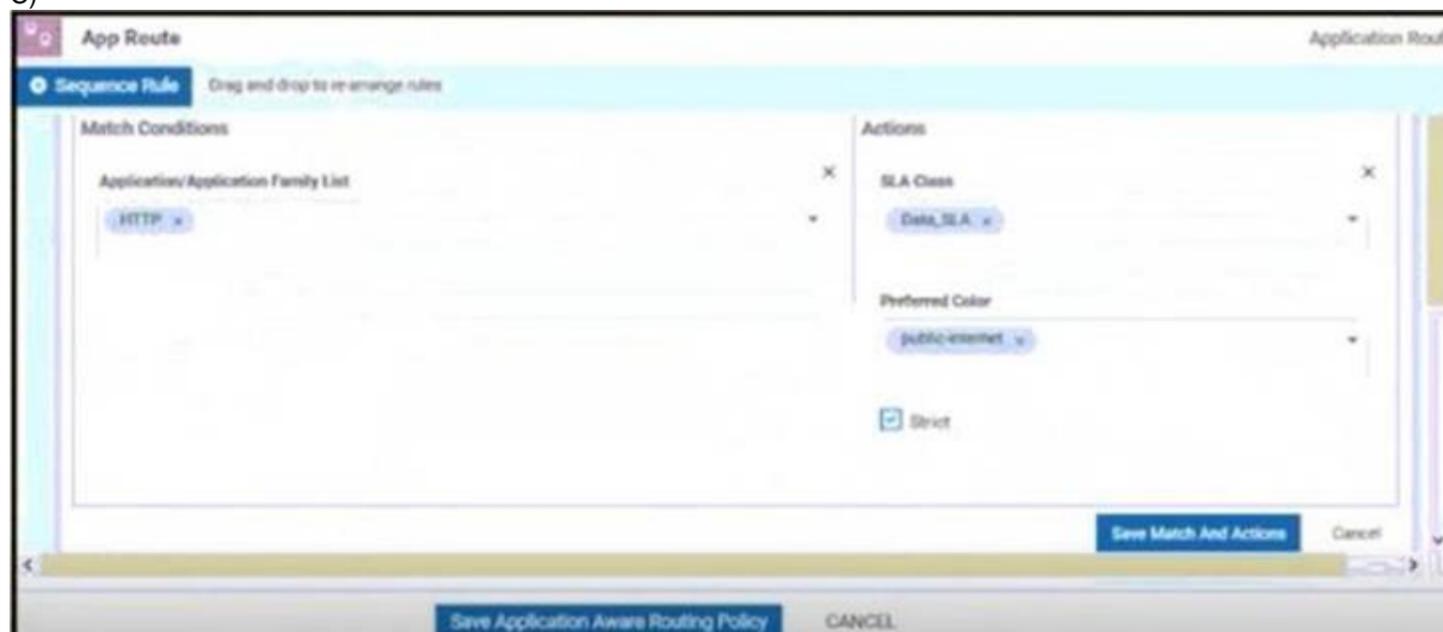
A)



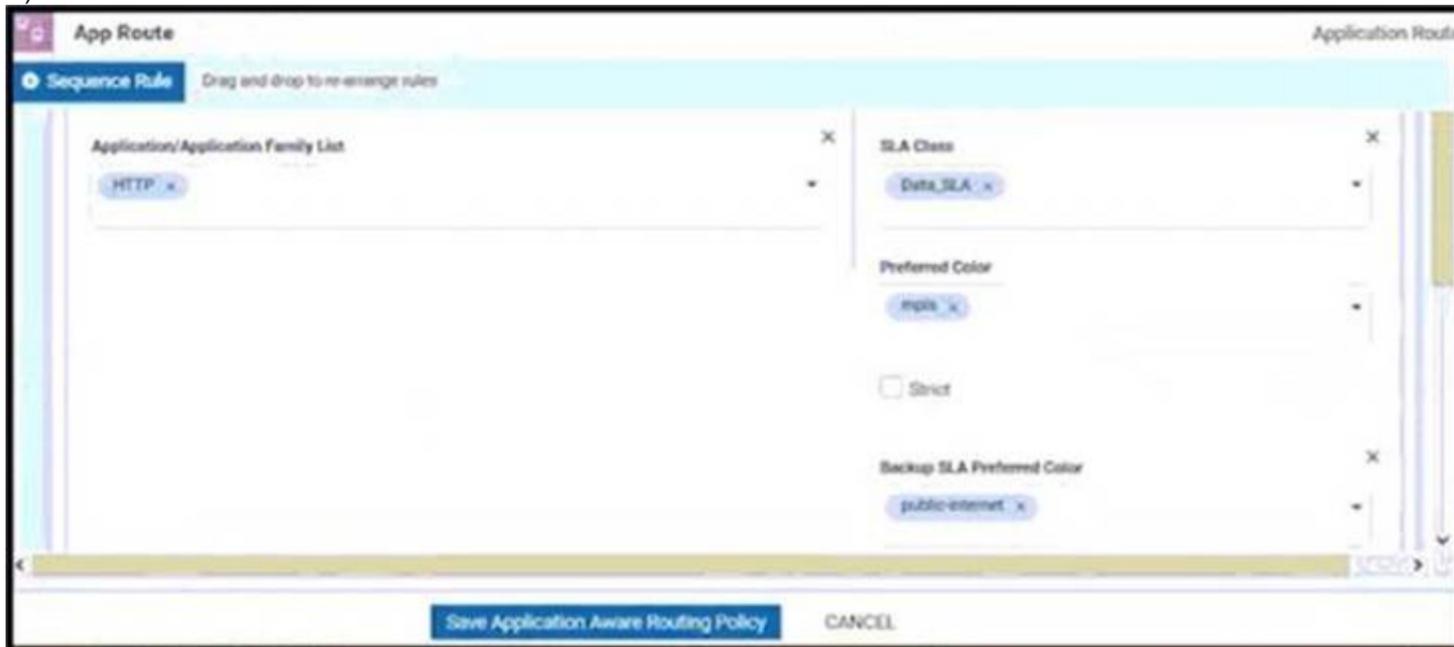
B)



C)



D)



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

**Answer: C**

**NEW QUESTION 3**

Which plane builds and maintains the network topology and makes decisions on traffic flows?

- A. orchestration
- B. management
- C. control
- D. data

**Answer: C**

**NEW QUESTION 4**

A customer is receiving routes via OMP from vSmart controller for a specific VPN. The customer must provide access to the W2 loopback received via OMP to the OSPF neighbor on the service-side VPN, which configuration fulfils these requirements?

```

vpn 0
router
  ospf
    redistribute omp route-policy OSPF_Route_Policy
  area 0
    interface ge0/2
    exit
  lists
    prefix-list W2_Loopback
    ip-prefix 10.10.10.5/24
    !
    route-policy OSPF_Route_Policy
    sequence 1
    match
      address W2_Loopback
    !
    default action accept
    set
      metric 100
      metric-type type1

vpn 0
router
  ospf
    redistribute omp route-policy OSPF_Route_Policy
  area 0
    interface ge0/2
    exit
  lists
    prefix-list W2_Loopback
    ip-prefix 10.10.10.5/32
    !
    route-policy OSPF_Route_Policy
    sequence 1
    match
      address W2_Loopback
    !
    default action accept
    set
      metric 100
      metric-type type1
  
```

```

vgn 0
router
ospf
 redistribute omp route-policy OSPF_Route_Policy
 area 0
 interface ge0/2
 exit
lists
 prefix-list W2_Loopback
 ip-prefix 10.10.10.5/32
!
 route-policy OSPF_Route_Policy
 sequence 1
 match
 address W2_Loopback
!
 action accept
 set
 metric 100
 metric-type type2

vpn 10
name "" Service VPN 10 ""
router
ospf
 redistribute omp route-policy OSPF_Route_Policy
 area 0
 interface ge0/2
 exit
lists
 prefix-list W2_Loopback
 ip-prefix 10.10.10.5/32
!
 route-policy OSPF_Route_Policy
 sequence 1
 match
 address W2_Loopback

ospf
 redistribute omp route-policy OSPF_Route_Policy
 area 0
 interface ge0/2
 exit
lists
 prefix-list W2_Loopback
 ip-prefix 10.10.10.5/32
!
 route-policy OSPF_Route_Policy
 sequence 1
 match
 address W2_Loopback
!
 action accept
 set
 metric 100
 metric-type type1
    
```

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

**Answer: D**

**Explanation:**

Answer must start with VPN 10(service side) & should have metric-type 1 and not with VPN 0 (transport side)

**NEW QUESTION 5**

Refer to the exhibit.

```

vEdge1# show control connections

```

PEER TYPE	PEER PROT	PEER SYSTEM IP	SITE ID	DOMAIN ID	PEER PRIVATE IP	PEER PRIV PORT	PEER PUBLIC IP
vsmart	dtls	10.2.2.2	1	1	10.50.0.5	12446	10.50.0.5
vsmart	dtls	10.2.2.2	1	1	10.50.0.5	12446	10.50.0.5
vbond	dtls	0.0.0.0	0	0	10.50.0.9	12346	10.50.0.9
vbond	dtls	0.0.0.0	0	0	10.50.0.9	12346	10.50.0.9
vmanage	dtls	10.1.1.1	1	0	10.50.0.1	12446	10.50.0.1

An organization is testing a Cisco SD-WAN solution and decided to have the control plane established first and not the data plane at the time of migration. Which configuration achieves this goal?

A)

State	Device Model	Chassis Number	Hostname	IP Address	Serial No./Token	Validate
Valid	vEdge Cloud	9a0cfea0-a463-7dec-c5...	vEdge1	10.10.10.1	BC42AE30	Invalid Pending Valid
Valid	vEdge Cloud	cc5daa8e-9bb1-7c9d-fs...	vEdge2	10.10.10.2	E1F0754E	Invalid Pending Valid
Valid	vEdge Cloud	d7b14bb6-f718-b111-8...	vEdge3	10.10.10.3	F5DA0A8D	Invalid Pending Valid
Valid	vEdge Cloud	92b4f92b-daff-7ce2-c3...	vEdge4	10.10.10.4	BD992059	Invalid Pending Valid
Valid	vEdge Cloud	0182a420-e93e-41f7-6f...	vEdge5	10.10.10.5	FA460EE6	Invalid Pending Valid

B)

**CONFIGURATION | DEVICES**

WAN Edge List    Controllers

Change Mode    Upload WAN Edge List    Export Bootstrap Configuration    Sync Smart Account

CLI mode    vManage mode    Search Options    Total Rows: 20

State	Device Model#	Chassis Number	Serial No./Token	Hostname	System IP	Site ID	Mode
🟢	vEdge Cloud	9a0cfea0-a463-7dec-c586-85f9d29cd56e	BC42AE30	vEdge1	10.10.10.1	1	vManage
🟢	vEdge Cloud	cc5daa8e-9bb1-7c9d-f545-1a9657a0b0...	E1F0754E	vEdge2	10.10.10.2	2	vManage
🟢	vEdge Cloud	d7b14bb6-f718-b111-8dd1-535fa9c96ba2	F5DA0A8D	vEdge3	10.10.10.3	3	vManage
🟢	vEdge Cloud	92b4f92b-daff-7ce2-c3da-622673be0329	BD992059	vEdge4	10.10.10.4	4	vManage
🟢	vEdge Cloud	0183a420-e93e-41f7-6fc6-f74bb8754881	FA460EE6	vEdge5	10.10.10.5	4	vManage

**CONFIGURATION | CERTIFICATES**

WAN Edge List    Controllers

Send to Controllers    Click Send to Controllers to sync the WAN Edge list on all controllers

Search Options

State	Device Model#	Chassis Number	Hostname	IP Address	Serial No./Token	Validate
🟢	vEdge Cloud	9a0cfea0-a463-7dec-c5...	vEdge1	10.10.10.1	BC42AE30	Invalid   Staging   Valid
🟢	vEdge Cloud	cc5daa8e-9bb1-7c9d-f5...	vEdge2	10.10.10.2	E1F0754E	Invalid   Staging   Valid
🟢	vEdge Cloud	d7b14bb6-f718-b111-8...	vEdge3	10.10.10.3	F5DA0A8D	Invalid   Staging   Valid
🟢	vEdge Cloud	92b4f92b-daff-7ce2-c3...	vEdge4	10.10.10.4	BD992059	Invalid   Staging   Valid
🟢	vEdge Cloud	0183a420-e93e-41f7-6f...	vEdge5	10.10.10.5	FA460EE6	Invalid   Staging   Valid

**CONFIGURATION | CERTIFICATES**

WAN Edge List    Controllers

Send to Controllers    Click Send to Controllers to sync the WAN Edge list on all controllers

Search Options    Total Rows: 20

State	Device Model#	Chassis Number	Hostname	IP Address	Serial No./Token	Validate
🟢	vEdge Cloud	9a0cfea0-a463-7dec-c5...	vEdge1	10.10.10.1	BC42AE30	Invalid   Staging   Valid
🟢	vEdge Cloud	cc5daa8e-9bb1-7c9d-f5...	vEdge2	10.10.10.2	E1F0754E	Invalid   Staging   Valid
🟢	vEdge Cloud	d7b14bb6-f718-b111-8...	vEdge3	10.10.10.3	F5DA0A8D	Invalid   Staging   Valid
🟢	vEdge Cloud	92b4f92b-daff-7ce2-c3...	vEdge4	10.10.10.4	BD992059	Invalid   Staging   Valid
🟢	vEdge Cloud	0183a420-e93e-41f7-6f...	vEdge5	10.10.10.5	FA460EE6	Invalid   Staging   Valid

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

**Answer: A**

**NEW QUESTION 6**

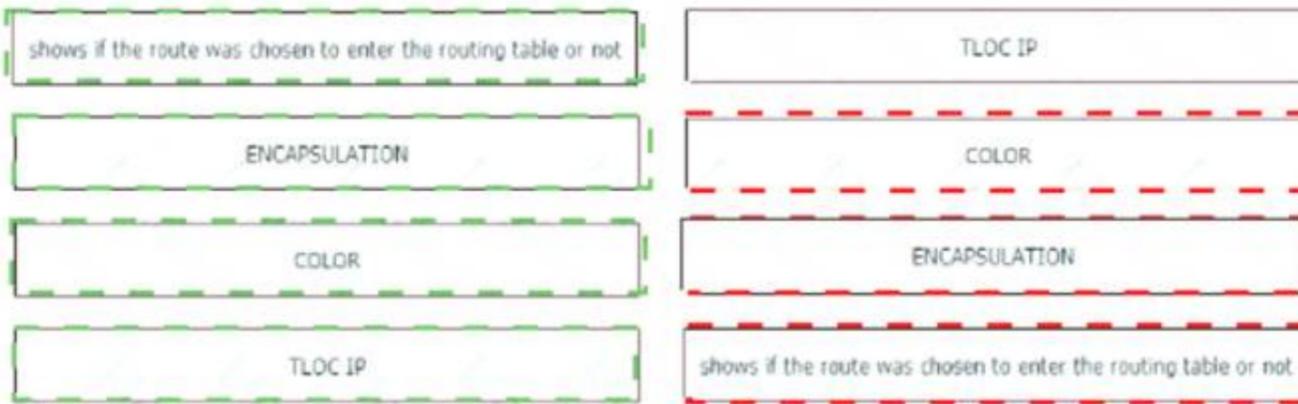
Drag and drop the route verification output from show omp tllocs from the left onto the correct explanations on the right.

shows if the route was chosen to enter the routing table or not	system ID
ENCAPSULATION	attribute of WAN link
COLOR	type of tunnel being used
TLOC IP	TLOC route status

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**



**NEW QUESTION 7**

Which device in the SD- WAN solution receives and categorizes event reports, and generates alarms?

- A. WAN Edge routers
- B. vSmart controllers
- C. vManage NMS
- D. vBond controllers

**Answer: C**

**Explanation:**

[https://sdwan-docs.cisco.com/Product\\_Documentation/vManage\\_Help/Release\\_17.1/vManage\\_NMS\\_Product\\_](https://sdwan-docs.cisco.com/Product_Documentation/vManage_Help/Release_17.1/vManage_NMS_Product_)

**NEW QUESTION 8**

Which two features does the application firewall provide? (Choose two.)

- A. classification of 1400+ layer 7 applications
- B. blocks traffic by application or application-family
- C. numbered sequences of match-action pairs
- D. classification of 1000+ layer 4 applications
- E. application match parameters

**Answer: AB**

**Explanation:**

This application aware firewall feature provides the following benefits:

- Application visibility and granular control
- Classification of 1400+ layer 7 applications
- Allows or blocks traffic by application, category, application-family or application-group

**NEW QUESTION 9**

What is a benefit of the application-aware firewall?

- A. It blocks traffic by MAC address
- B. It blocks traffic by MTU of the packet.
- C. It blocks traffic by application.
- D. It blocks encrypted traffic

**Answer: C**

**NEW QUESTION 10**

Which component is responsible for routing protocols such as BGP and OSPF in a Cisco SD-WAN solution?

- A. vSmart Controller
- B. vBond Orchestrator
- C. vManage
- D. WAN Edge Router

**Answer: D**

**Explanation:**

WAN Edge router - This device, available as either a hardware appliance or software-based router, sits at a physical site or in the cloud and provides secure data plane connectivity among the sites over one or more WAN transports. It is responsible for traffic forwarding, security, encryption, quality of service (QoS), routing protocols such as Border Gateway Protocol (BGP) and Open Shortest Path First (OSPF), and more.

**NEW QUESTION 10**

Refer to the exhibit,

```

from-vsmart data-policy_1_ServiceInsertionIPSec
direction from-service
vpn-list 1
  sequence 1
  match destination-ip 64.102.6.247/32
  action accept
  set
  service netsvc1
  service local
  default-action accept
    
```

which configuration configures IPsec tunnels in active and standby?

- vpn 1  
 service netsvc1 interface ipsec1 ipsec2  
  
 vpn-list 1  
   count ServicePsec1\_275676046  
 from-vsmart lists vpn-list 1  
 vpn 1
- vpn 0  
 service netsvc1 interface ipsec1 ipsec2  
  
 from-vsmart lists vpn-list 0  
 vpn 0
- vpn 1  
 service netsvc1 interface ipsec1 ipsec2  
  
 from-vsmart lists vpn-list 1  
 vpn 1
- vpn 0  
 service netsvc1 interface ipsec1 ipsec2  
  
 vpn-list 1  
   count ServicePsec1\_275676046  
 from-vsmart lists vpn-list 0  
 vpn 0

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

**Answer: C**

**NEW QUESTION 11**

When a WAN Edge device joins the SD-WAN overlay, which Cisco SD-WAN components orchestrates the connection between the WAN Edge device and a vSmart controller?

- A. vManage
- B. vBond
- C. OMP
- D. APIC-EM

**Answer: B**

**Explanation:**

When a vEdge device comes up, how does it automatically discover Cisco vManage and Cisco vSmart Controller and establish connections with them? **It does so with help from Cisco vBond Orchestrator.**

**NEW QUESTION 15**

Which two products that perform lifecycle management for virtual instances are supported by WAN Edge cloud routers? (Choose two.)

- A. OpenStack
- B. AWS
- C. VMware vCenter
- D. Azure
- E. IBM Cloud

**Answer: AC**

**Explanation:**

<https://www.cisco.com/c/en/us/solutions/collateral/enterprise-networks/sd-wan/nb-07-cloud-router-data-sheet-ct>

The following figure illustrates Cisco vEdge Cloud router solution elements.



**NEW QUESTION 20**

Which feature builds transport redundancy by using the cross link between two redundant WAN Edge routers?

- A. OMP
- B. zero-touch provisioning
- C. quality of service
- D. TLOC extension

**Answer: D**

**Explanation:**

Features like TLOC extension help to build transport redundancy by using the cross link between two redundant WAN Edge routers. Network level redundancy is implemented by multiple geo-redundant data centers.

**NEW QUESTION 24**

A vEdge platform is sending VRRP advertisement messages every 10 seconds. Which value configures the router back to the default timer?

- A. 2 seconds
- B. 3 seconds
- C. 1 second
- D. 5 seconds

**Answer: C**

**NEW QUESTION 26**

Which configuration allows users to reach YouTube from a local Internet breakout?

- A)
 

```
VPN 10
ip route 0.0.0.0/0 vpn 0
```
- B)
 

```
VPN 10
ip route 0.0.0.0/0 vpn 0
VPN 0
interface Gig1/1
nat
```
- C)

```
policy
data-policy DPI
vpn-list vpn10
sequence 10
match
app-list YouTube
destination-port 80 443
!
action accept
count Youtube
!
default-action accept
!
lists
vpn-list vpn10
vpn 10
!
app-list YouTube
app youtube
app youtube_hd
!
site-list Remote
site-id 14
site-id 15
!
!
!
apply-policy
site-list Remote
data-policy DPI from-transport
```

D)

```

policy
data-policy DPI
vpn-list vpn10
sequence 10
match
app-list YouTube
!
action drop
count Youtube
!
default-action accept
!
lists
vpn-list vpn10
vpn 10
!
app-list YouTube
app youtube
app youtube_hd
!
site-list Remote
site-id 14
site-id 15
!
apply-policy
site-list Remote
data-policy DPI from-transport

vpn 10
ip route 0.0.0.0/0 vpn 0

```

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

**Answer:** B

**Explanation:**

As explained in figure 7, within the direct Internet model, segmentation is leveraged by deploying centralized data policies or a NAT DIA route to leak Internet traffic from the service-side VPN (VPNs 0 - 511,513 - 65530) into the Internet transport VPN (VPN 0), which allows traffic to exit directly to the Internet through the NAT-enabled interface in VPN 0.

<https://www.cisco.com/c/dam/en/us/td/docs/solutions/CVD/SDWAN/sdwan-dia-deploy-2020aug.pdf>

**NEW QUESTION 29**

A network administrator is configuring VRRP to avoid a traffic black hole when the transport side of the network is down on the master device. What must be configured to get the fastest failover to standby?

- A. lower timer interval
- B. prefix-list tracking
- C. higher group ID number
- D. OMP tracking

**Answer:** B

**Explanation:**

```
vEdge(config-vrrp)# track-prefix-list list-name
```

If all OMP sessions are lost, VRRP failover occurs as described for the track-omp option. In addition, if reachability to all the prefixes in the list is lost, VRRP failover occurs immediately, without waiting for the OMP hold timer to expire, thus minimizing the amount of overlay traffic is dropped while the vEdge routers determine the VRRP master.

**NEW QUESTION 32**

Which command verifies a policy that has been pushed to the vEdge router?

- A. vEdge# show running-config data policy
- B. vEdge# show policy from-vsmart
- C. vSmart# show running-config policy
- D. vSmart# show running-config apply-policy

**Answer: B**

**NEW QUESTION 35**

Drag and drop the components from the left onto the corresponding Cisco NFV infrastructure Building Blocks on the right. Not all options are used.



- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

### Cisco NFV Infrastructure Building Blocks

- **Compute:** Cisco Unified Computing System™ (Cisco UCS®) for a carrier class and reliable compute infrastructure.
- **Storage:** Cisco UCS hardware and CEPH provide reliable storage. The user has the options to introduce additional storage as capacity needs grow.
- **Networking:** Cisco Nexus® 9000 series hardware provides high throughput, low latency, and rich feature sets.
- **Virtualized Infrastructure:** Fully integrated Red Hat Enterprise Linux and Red Hat OpenStack Platform runs on top of Cisco Unified Computing System™ (Cisco UCS®). It is open source yet hardened and mature.
- **Management:** Cisco UCS Director functions as a unified management tool across multiple virtual environments. SDN controller is optional.

**NEW QUESTION 37**

An engineer is adding a tenant with location ID 399533345 in vManage. What is the maximum number of alphanumeric characters that is accepted in the tenant name filed?

- A. 64
- B. 128
- C. 256
- D. 8

**Answer: B**

**Explanation:**

In the Add Tenant window:

- a. Enter a name for the tenant. It can be up to 128 characters and can contain only alphanumeric characters.

**NEW QUESTION 42**

Which policy configures an application-aware routing policy under Configuration > Policies?

- A. Localized policy
- B. Centralized policy
- C. Data policy
- D. Control policy

**Answer: B**

**NEW QUESTION 44**

Which two algorithms authenticate a user when configuring SNMPv3 monitoring on a WAN Edge router? (Choose two.)

- A. AES-256
- B. SHA-1
- C. AES-128
- D. MD5
- E. SHA-2

**Answer: AB**

**Explanation:**

Configure SNMPv3

Table 7. Feature History

Feature Name	Release Information	Description
Support for SNMPv3 AES-256 bit Authentication Protocol	Cisco SD-WAN Release 20.5.1	Support introduced for AES-256 bit Authentication Protocol called SHA-256.

To configure SNMPv3, in **SNMP Version**, click **V3**. For SNMPv3, you can configure groups, users, and trap information. Configure groups and trap information as described above.

To configure SNMPv3 users, in the **User** section, click **Add New User** and enter the following parameters:

Table 8.

Parameter Name	Description
User	Enter a name of the SNMP user. It can be 1 to 32 alphanumeric characters.
Authentication Protocol	<p>Select the authentication mechanism for the user:</p> <ul style="list-style-type: none"> <li>• SHA-1 message digest</li> <li>SHA-256 message digest</li> </ul> <p><b>Note</b> Starting from Cisco SD-WAN Release 20.5.1, SHA-256 authentication protocol was introduced. When you choose SHA-256 as the authentication protocol, you must set the security level as authPriv.</p> <p><b>Note</b> MD5 authentication protocol is deprecated for Cisco SD-WAN Release 20.3.2 and later releases.</p>

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/snmp/snmp-book.html>

**NEW QUESTION 47**

Which vBond system configuration under VPN 0 allows for a routable public IP address even if the DNS name, hostname, or IP address of the vBond orchestrator are omitted?

- A. local
- B. vbond-only
- C. dns-name
- D. WAN

**Answer: A**

**NEW QUESTION 51**

When VPNs are grouped to create destination zone in Zone-Based Firewall, how many zones can a single VPN be part of?

- A. two
- B. four
- C. one
- D. three

**Answer: C**

**NEW QUESTION 53**

Which protocol is used to measure loss latency, Jitter, and liveliness of the tunnel between WAN Edge router peers?

- A. OMP
- B. IP SLA
- C. NetFlow
- D. BFD

**Answer: D**

**NEW QUESTION 54**

What are the two protocols redistributed into OMP? (Choose two.)

- A. OSPF
- B. RIP
- C. LDP
- D. RSVP
- E. EIGRP

**Answer:** AE

**Explanation:**

## Supported Protocols

This section explains the protocols supported for unicast routing.

- OMP Routing Protocol
- BGP and OSPF Routing Protocols
- OSPFv3
- EIGRP

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/routing/ios-xe-17/routing-book-xe/m-unicas>

### NEW QUESTION 58

In which device state does the WAN edge router create control connections, but data tunnels are not created?

- A. valid
- B. backup
- C. active
- D. staging

**Answer:** D

**Explanation:**

**Staging** – In this state, the WAN Edge device establishes secure control plane connections to the SD-WAN controllers (vBond, vManage, and vSmart) only. It is important to note that no data plane connections are established with other WAN Edge devices in the overlay network.

### NEW QUESTION 63

Which VPN connects the transport-side WAN Edge interface to the underlay/WAN network?

- A. VPN 1
- B. VPN 511
- C. VPN 0
- D. VPN 512

**Answer:** C

**Explanation:**

transport network and the transport network itself. The network ports that connect to the underlay network are part of VPN 0, the transport VPN. Getting connectivity to the Service Provider gateway in the transport network usually involves configuring a static default gateway (most

### NEW QUESTION 67

Drag and drop the BFD parameters from the left onto the BFD configurations on the right.

- poll interval
- color
- hello interval
- PMTU discovery
- multiplier

**BFD for Transport Tunnel**

**BFD for Application-Aware Routing**

- A. Mastered
- B. Not Mastered

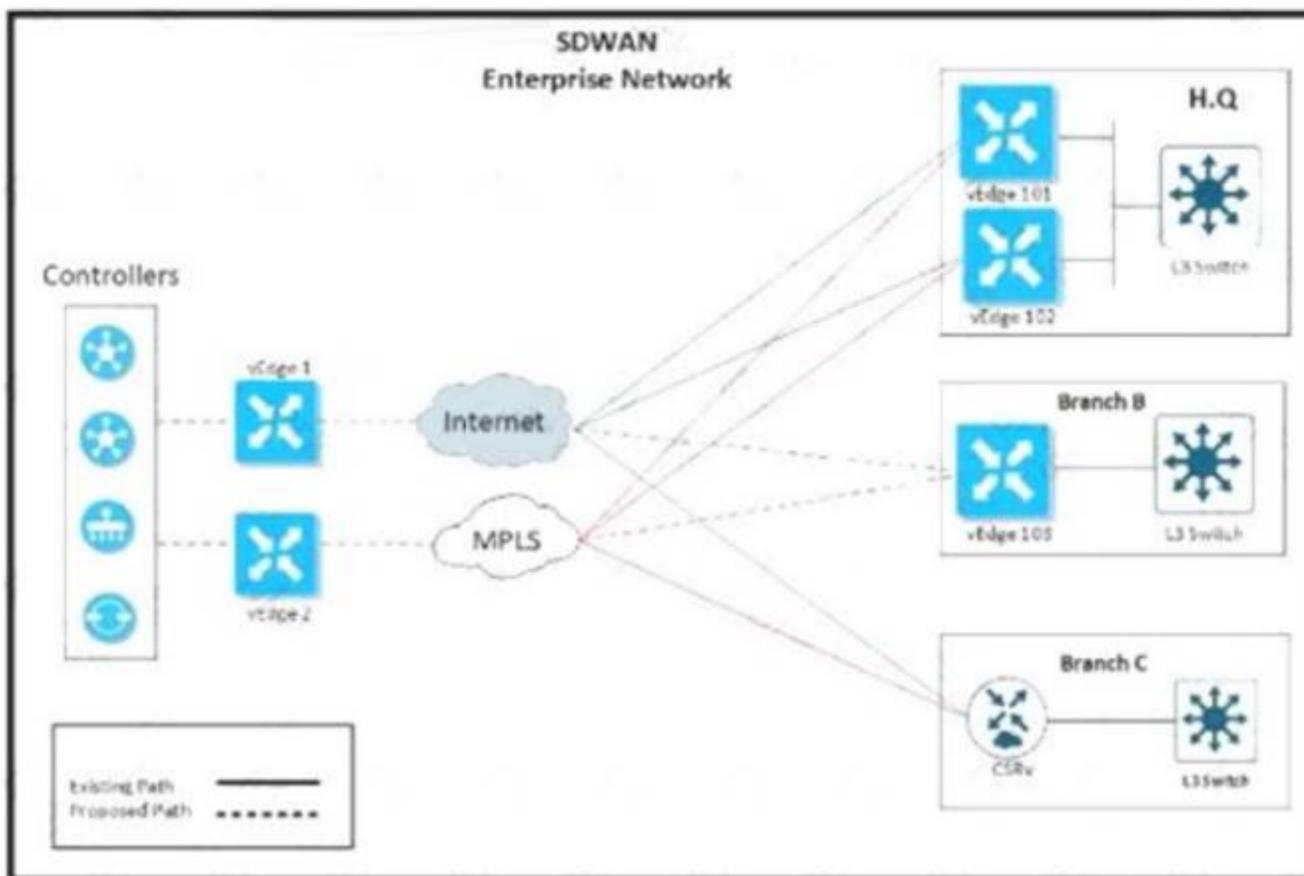
**Answer:** A

**Explanation:**

[https://sdwandocs.cisco.com/Product\\_Documentation/vManage\\_Help/Release\\_18.2/Configuration/Templates/B](https://sdwandocs.cisco.com/Product_Documentation/vManage_Help/Release_18.2/Configuration/Templates/B)

**NEW QUESTION 68**

Refer to the exhibit.



The network team must configure branch B WAN Edge device 103 to establish dynamic full-mesh IPsec tunnels between all colors with branches over MPLS and Internet circuits. The branch is configured with:

```
viptela-system:system
device-model vedge-cloud
host-name vEdge-Cloud
location CA
system-ip 10.4.4.4
domain-id 1
site-id 1
organization-name ABC
clock timezone US/Newyork
vbond 10.10.0.1 port 12346
```

```
omp
no shutdown
graceful-restart

vpn 512
interface eth0
ip address 10.0.0.1/24
no shutdown
```

Which configuration meets the requirement?

A)

```
vpn 0
interface ge0/0
description "Internet Circuit"
ip address 209.165.200.225/30
tunnel-interface
encapsulation ipsec
color public-internet
allow-service all

interface ge0/1
description "MPLS"
ip address 10.10.0.101/30
tunnel-interface
encapsulation ipsec
color mpls
allow-service all
```

B)

```
vpn 0
interface ge0/0
description "Internet Circuit"
ip address 209.165.200.225/30
tunnel-interface
encapsulation ipsec
color public-internet restrict
allow-service all

interface ge0/1
description "MPLS"
ip address 10.10.0.101/30
tunnel-interface
encapsulation ipsec
color mpls restrict
allow-service all
```

C)

```
vpn 0
interface ge0/0
description "Internet Circuit"
ip address 209.165.200.225/30
tunnel-interface
encapsulation ipsec
color public-internet restrict
allow-service all

interface ge0/1
description "MPLS"
ip address 10.10.0.101/30
tunnel-interface
encapsulation ipsec
color mpls restrict
allow-service all
```

D)

```
vpn 0
interface ge0/0
description "Internet Circuit"
ip address 209.165.200.225/30
tunnel-interface
encapsulation ipsec
color public-internet
allow-service all

vpn 1
interface ge0/1
description "MPLS"
ip address 10.10.0.101/30
tunnel-interface
encapsulation ipsec
color mpls
```

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

Answer: A

#### NEW QUESTION 71

Refer to the exhibit.

Hostname	State	System IP	Reachability	Site ID	Device Model	BFD	Control
 BR1-VEDGE1		10.3.0.1	reachable	300	vEdge Cloud	8	5

What does the BFD value of 8 represent?

- A. number of BFD sessions
- B. hello timer of BFD session
- C. poll-interval of BFD session.
- D. dead timer of BFD session

**Answer:** A

**NEW QUESTION 76**

What is the purpose of "vpn 0" in the configuration template when onboarding a WAN edge node?

- A. It carries control traffic over secure DTLS or TLS connections between vSmart controllers and vEdge routers, and between vSmart and vBond
- B. It carries control out-of-band network management traffic among the Viptela devices in the overlay network.
- C. It carries control traffic over secure IPsec connections between vSmart controllers and vEdge routers, and between vSmart and vManager
- D. It carries control traffic over secure IPsec connections between vSmart controllers and vEdge routers, and between vSmart and vBond

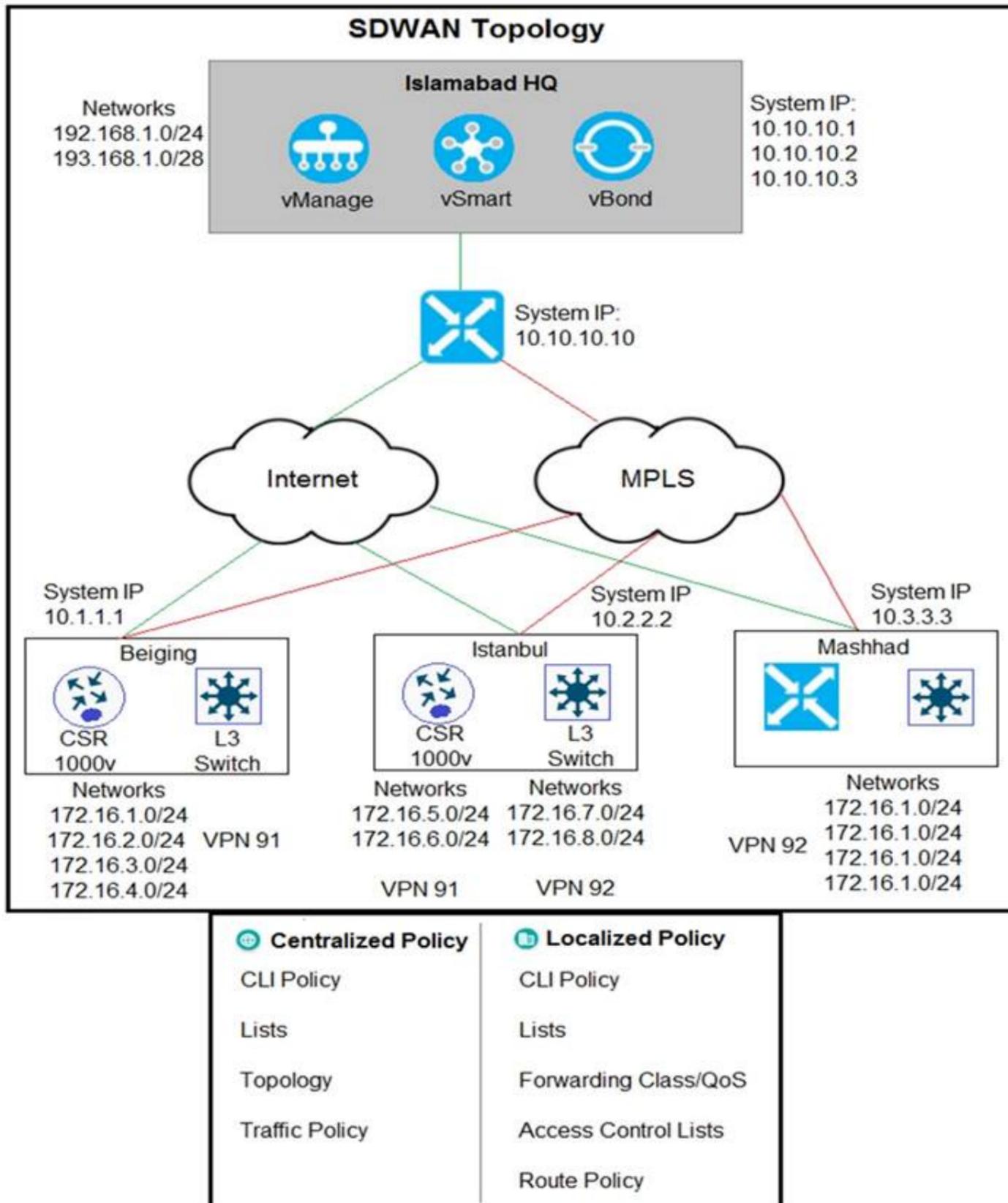
**Answer:** A

**Explanation:**

- VPN 0 is the transport VPN. It carries control traffic over secure DTLS or TLS connections between vSmart controllers and vEdge routers, and between vSmart controllers and vBond orchestrators. Initially, VPN 0 contains all a device's interfaces except for the management interface, and all the interfaces are disabled. For the control plane to establish itself so that the overlay network can function, you must configure WAN transport interfaces in VPN 0.

**NEW QUESTION 77**

Refer to the exhibit



The Cisco SD-WAN network is configured with a default full-mesh topology. Islamabad HQ and Islamabad WAN Edges must be used as the hub sites. Hub sites MPLS TLOC must be preferred when forwarding FTP traffic based on a configured SLA class list. Which policy configuration does the network engineer use to call the SLA class and set the preferred color to MPLS?

- A. Localized Policy, Route Policy
- B. Centralized Policy, Traffic Policy
- C. Localized Policy, Forwarding Class
- D. Centralized Policy Topology

**Answer: B**

**NEW QUESTION 79**

An administrator wants to create a policy to add a traffic policer called "politer-ccnp" to police data traffic on the WAN Edge. Which configuration accomplishes this task in vSmart?

- A. 

```
vpn 1
interface ge 0/4
policer policer-ccnp in
```
- B. 

```
policy
data-policy policy-ccnp
vpn-list list-ccnp
sequence number
action accept
set policer policer-ccnp
```
- C. 

```
policy
access-list list-ccnp
sequence number
action accept
policer policer-ccnp
```
- D. 

```
vpn 1
interface ge 0/4
policer policer-ccnp out
```

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

**Answer:** B

**NEW QUESTION 84**

Which two mechanisms are used to guarantee the integrity of data packets in the Cisco SD-WAN architecture data plane? (Choose two)

- A. transport locations
- B. authentication headers
- C. certificates
- D. TPM chip
- E. encapsulation security payload

**Answer:** BE

**Explanation:**

[https://sdwan-docs.cisco.com/Product\\_Documentation/Software\\_Features/Release\\_18.4/Security/01Security\\_Ov](https://sdwan-docs.cisco.com/Product_Documentation/Software_Features/Release_18.4/Security/01Security_Ov)

**NEW QUESTION 89**

Which two requirements must be met for DNS inspection when integrating with cisco umbrella? (Choose two)

- A. Upload the WAN Edge serial allow list to the Umbrella portal.
- B. Attach security policy to the device template.
- C. Configure the Umbrella token on the vManage
- D. Create and attach a System feature template with the Umbrella registration credentials.
- E. Register and configure the vManage public IP and serial number in the Umbrella portal.

**Answer:** BC

**Explanation:**

<https://www.connection.com/~media/pdfs/brands/c/cisco/security/cnrxn-cisco-sd-wan-and-umbrella.pdf?la=en>

**NEW QUESTION 91**

Drag and drop the attributes from the left that make each transport location unique onto the right. Not all options are used.

IP address	target1
color	target2
encapsulation	target3
VPN	
service	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

A TLOC, or Transport Location, is the attachment point where a WAN Edge router connects to the WAN transport network. A TLOC is uniquely identified and represented by a three-tuple, consisting of **system IP address**, **link color**, and **encapsulation** (Generic Routing Encapsulation [GRE] or IPsec).

**NEW QUESTION 92**

Which plane assists in the automatic onboarding of the SD-WAN routers into the SD-WAN overlay?

- A. Data
- B. Orchestration
- C. Management
- D. Control

**Answer:** B

**Explanation:**

The Cisco SD-WAN solution is comprised of separate orchestration, management, control, and data planes.

- The **orchestration plane** assists in the **automatic onboarding** of the **SD-WAN routers** into the **SD-WAN overlay**.

**NEW QUESTION 97**

An enterprise needs DIA on some of its branches with a common location ID: A041:B70C: D78E::18 Which WAN Edge configuration meets the requirement?

- A)
 

```
vpn 1
interface ge0/1
ip address 172.16.0.1/24
vpn 512
ip route 0.0.0.0/0 vpn 0
```
- B)
 

```
vpn 1
ip route 0.0.0.0/0 vpn 1
interface ge0/0
ip address 172.16.0.1/24
nat
```
- C)
 

```
vpn 0
interface ge0/0
ip address 172.16.0.1/24
nat
vpn 1
ip route 0.0.0.0/0 vpn 0
```
- D)
 

```
vpn 0
ip route 0.0.0.0/0 vpn 0
vpn 1
interface ge0/1
ip address 172.16.0.1/24
nat
```

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

**Answer:** C

**NEW QUESTION 100**

Refer to the exhibit.



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

**Answer:** A

**NEW QUESTION 105**

An engineer is configuring a shaping rate of 1 Mbps on the WAN link of a WAN Edge router Which configuration accomplishes this task'?

- vpn vpn-id  
interface interface-name  
shaping-rate 1000000
- vpn vpn-id  
interface interface-name  
shaping-rate 1000
- interface interface-name  
vpn vpn-id  
shaping-rate 1000000
- interface interface-name  
vpn vpn-id  
shaping-rate 1000

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

**Answer:** B

**NEW QUESTION 107**

If Smart Account Sync is not used, which Cisco SD-WAN component is used to upload an authorized serial number file?

- A. WAN Edge
- B. vManage
- C. vSmart
- D. vBond

**Answer:** B

**Explanation:**

[https://sdwan-docs.cisco.com/Product\\_Documentation/vManage\\_Help/Release\\_18.3/Configuration/Devices](https://sdwan-docs.cisco.com/Product_Documentation/vManage_Help/Release_18.3/Configuration/Devices)

**NEW QUESTION 109**

An engineer is adding a tenant with location JD 306432373 in vManage. What is the maximum number of alphanumeric characters that are accepted in the tenant name field?

- A. 64
- B. 128
- C. 256
- D. 8

**Answer:** B

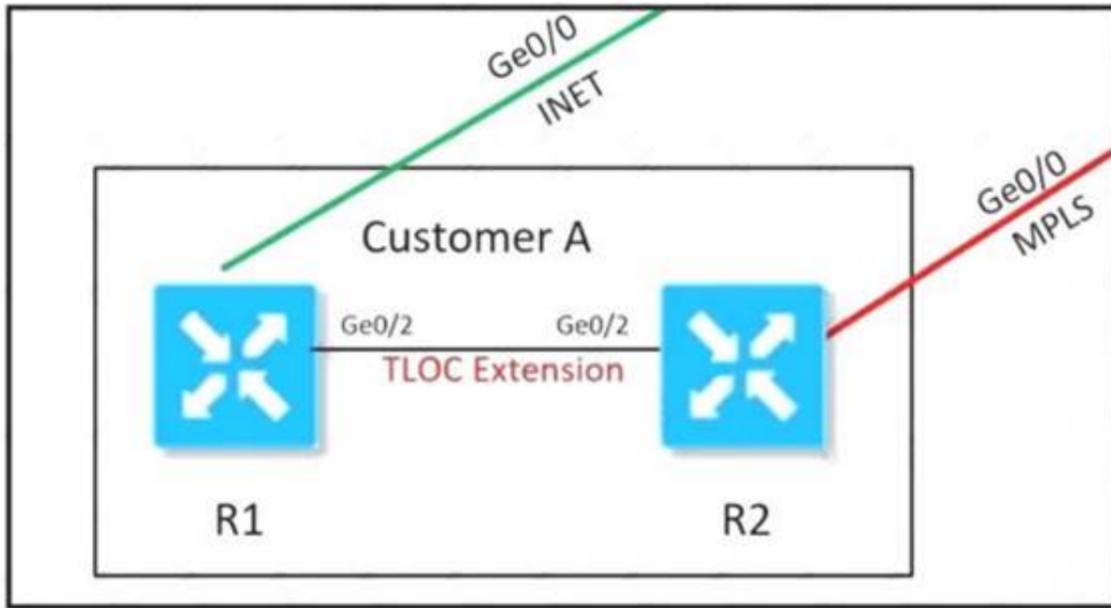
**Explanation:**

In the Add Tenant window:

1. Enter a name for the tenant. It can be up to 128 characters and can contain only alphanumeric characters.

**NEW QUESTION 114**

Refer to the exhibit.



An MPLS connection on R2 must extend to R1 Users behind R1 must have dual connectivity for data traffic Which configuration provides R1 control connectivity over the MPLS connection?

A)

```
R1
interface ge0/2
ip address 34.34.34.1/30
tloc-extension ge0/1
tunnel-interface
color mpls
```

```
R2
interface ge0/2
ip address 34.34.34.2/30
tloc-extension ge0/0
tunnel-interface
color public-internet
```

B)

```
R1
interface ge0/2
ip address 34.34.34.1/30
tloc-extension ge0/1
```

```
R2
interface ge0/0
ip address 34.34.34.2/30
tunnel-interface
color mpls
```

C)

```
vpn 0
router
ospf
redistribute omp route-policy OSPF_Route_Policy
area 0
interface ge0/2
exit
lists
prefix-list W2_Loopback
ip-prefix 10.10.10.5/32
!
route-policy OSPF_Route_Policy
sequence 1
match
address W2_Loopback
!
action accept
set
metric 100
metric-type type2
```

D)

```
vpn 10
name ***** Service VPN 10 *****
router
ospf
redistribute omp route-policy OSPF_Route_Policy
area 0
interface ge0/2
exit
lists
prefix-list W2_Loopback
ip-prefix 10.10.10.5/32
!
route-policy OSPF_Route_Policy
sequence 1
match
address W2_Loopback
!
action accept
```

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

Answer: D

**NEW QUESTION 116**

An engineer is configuring a data policy for IPv4 prefixes for a single WAN Edge device on a site with multiple WAN Edge devices How is this policy added using the policy configuration wizard?

- A. In vManage NMS, select the configure policies screen, select the localized policy tab and click add policy
- B. In vSmart controller, select the configure policies screen, select the localized policy ta
- C. and click add policy
- D. In vManage NM
- E. select the configure policies screen select the centralized policy tab and click add policy
- F. In vBond orchestrator
- G. select the configure policies screen, select the localized policy ta
- H. and click add policy

**Answer: A**

**NEW QUESTION 121**

What is a requirement for a WAN Edge to reach vManage, vBond, and vSmart controllers in a data center?

- A. IGP
- B. QoS
- C. TLS
- D. OMP

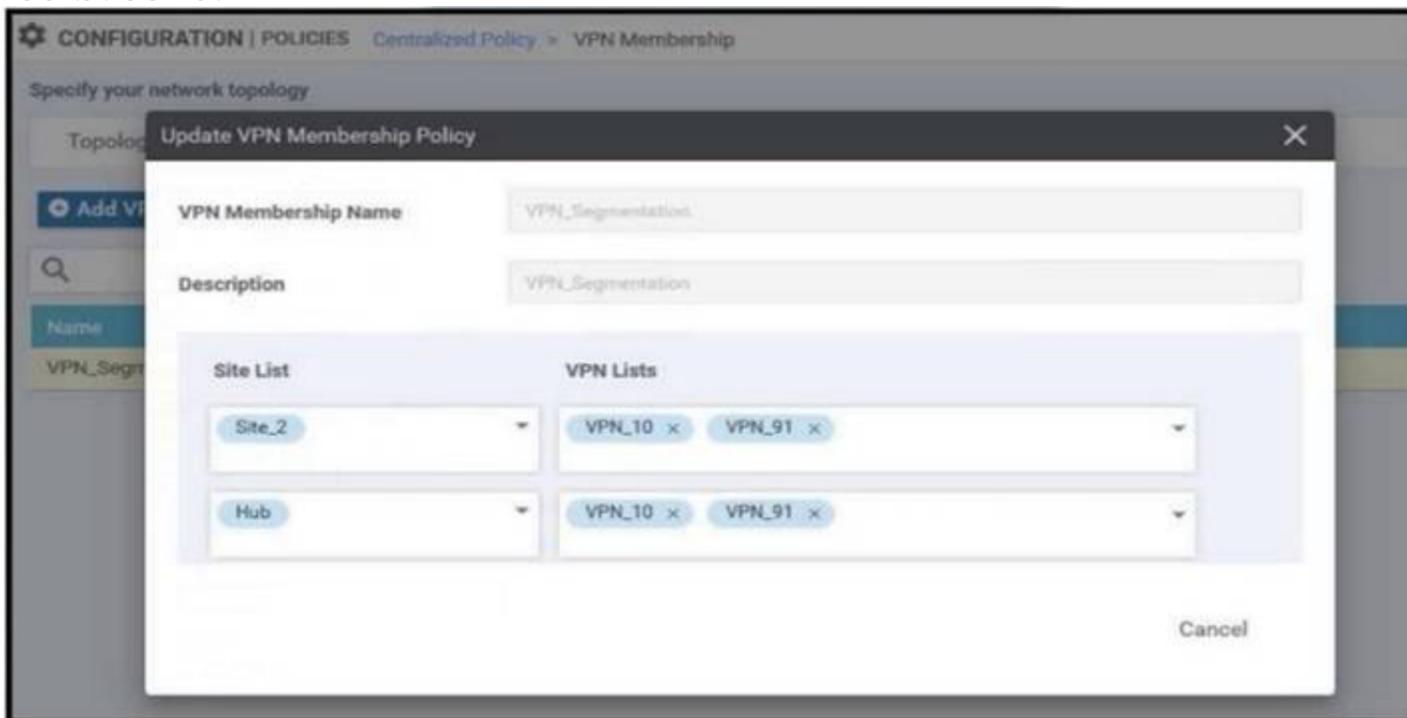
**Answer: A**

**Explanation:**

<https://www.cisco.com/c/dam/en/us/td/docs/solutions/CVD/SDWAN/sdwan-wan-edge-onboarding-deploy-guid>

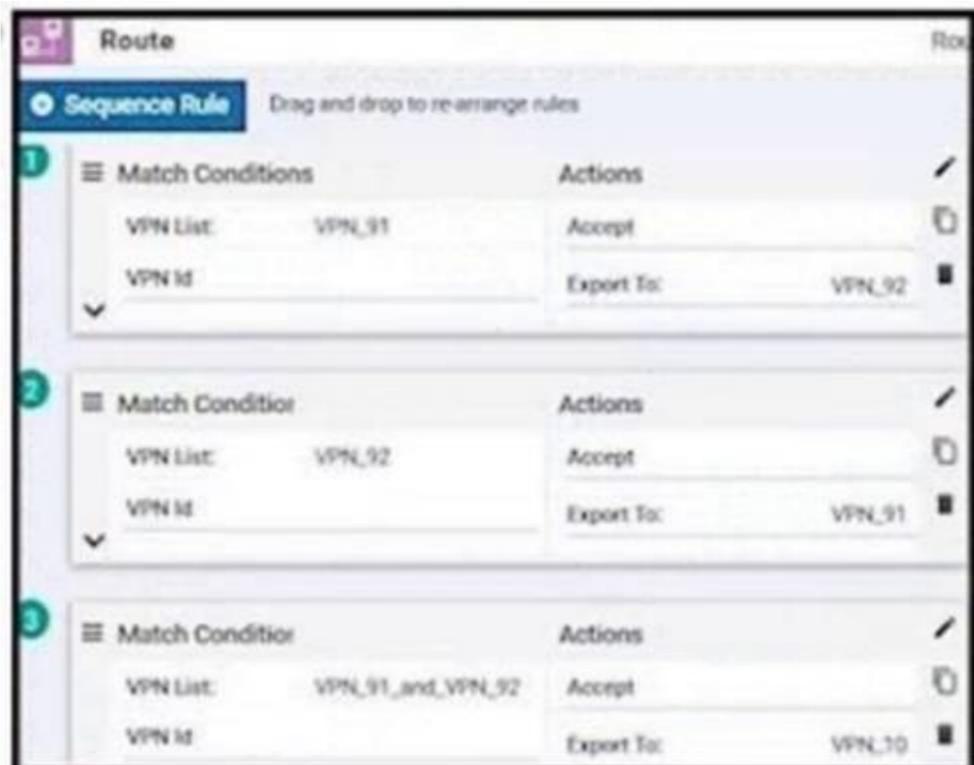
**NEW QUESTION 123**

Refer to the exhibit.



An enterprise has hub and spoke topology where it has several VPNs. An engineer must allow users in VPN91 to reach users in VPN92 and VPN10 to reach VPN91 and VPN92. Which configuration meets these requirements?

A)



B)

**Route**

**Sequence Rule** Drag and drop to re-arrange rules

Match Conditions	Actions
VPN List: VPN_10 VPN ID	Accept Export To: VPN_91_and_VPN_92
VPN List: All_9X_VPNs VPN ID	Accept Export To: All_9X_VPNs
VPN List: VPN_91_and_VPN_92 VPN ID	Accept Export To: VPN_10

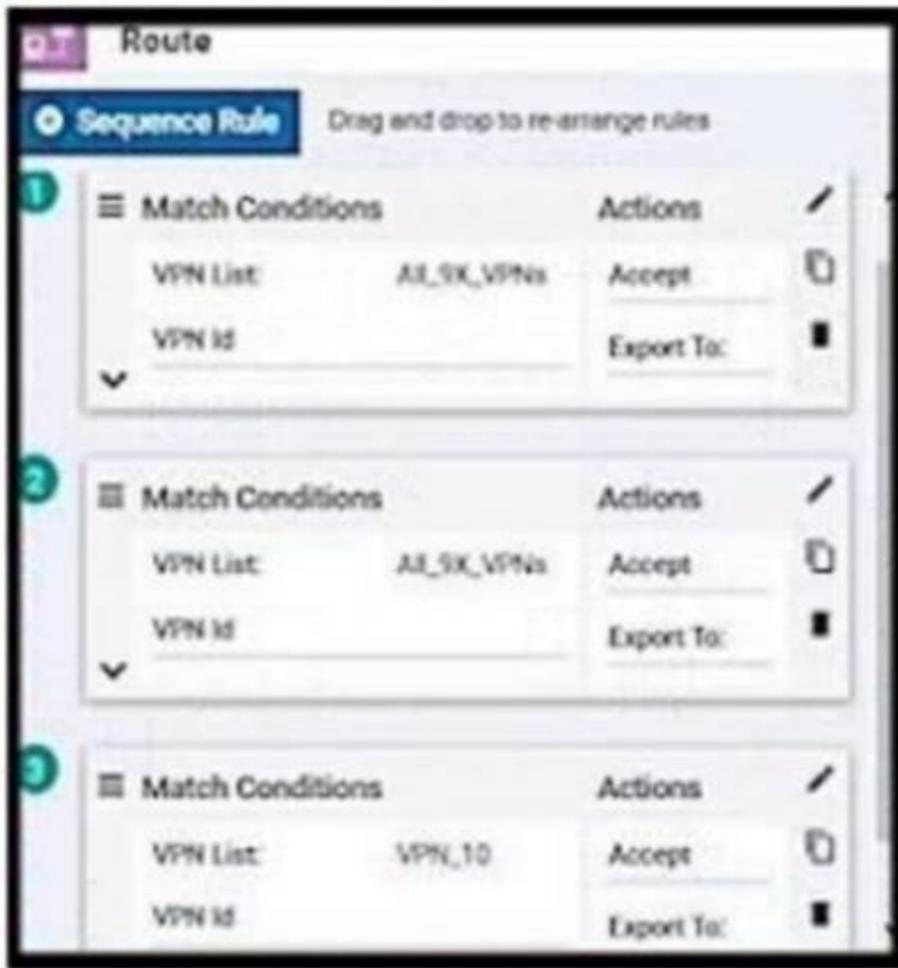
C)

**Route**

**Sequence Rule** Drag and drop to re-arrange rules

Match Conditions	Actions
VPN List: VPN_10 VPN ID	Accept Export To: VPN_91_and_VPN_92
VPN List: VPN_91_and_VPN_92 VPN ID	Accept Export To: VPN_91_and_VPN_92
VPN List: VPN_91_and_VPN_92 VPN ID	Accept Export To: VPN_10

D)

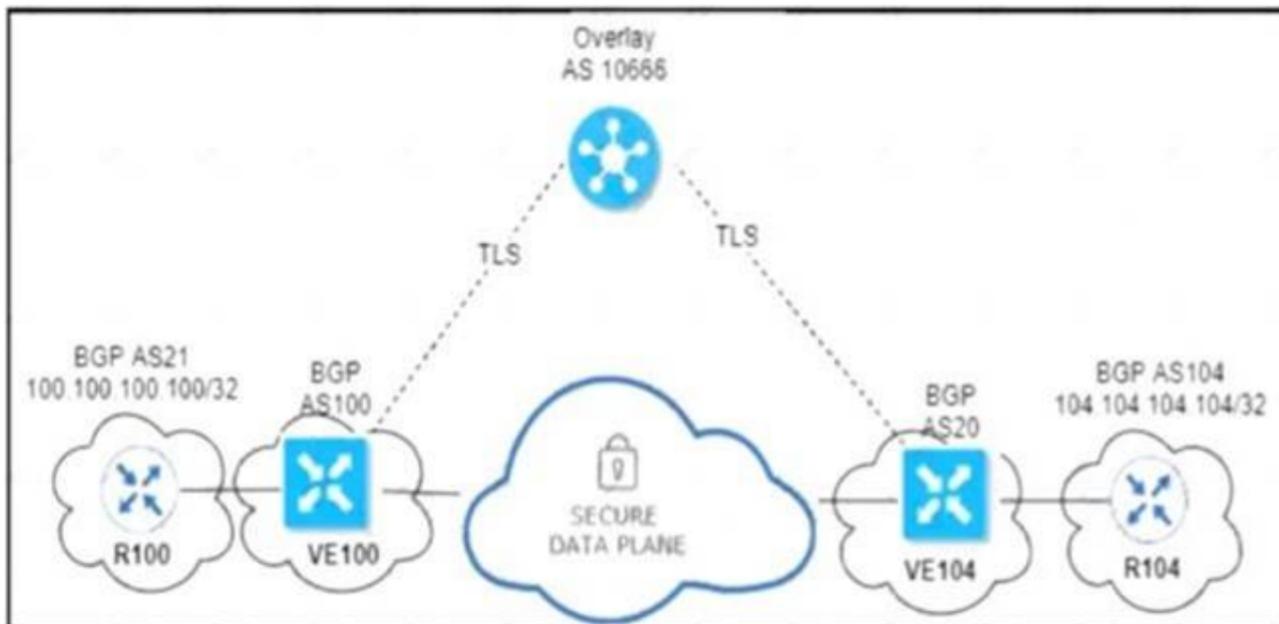


- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: C**

**NEW QUESTION 124**

Refer to the exhibit.



An engineer configured OMP with an overlay-as of 10666. What is the AS-PATH for prefix 104.104.104.104/32 on R100?

- A. 100 10666
- B. 100 20 104
- C. 100 10666 20 104
- D. 100 10666 104

**Answer: A**

**NEW QUESTION 129**

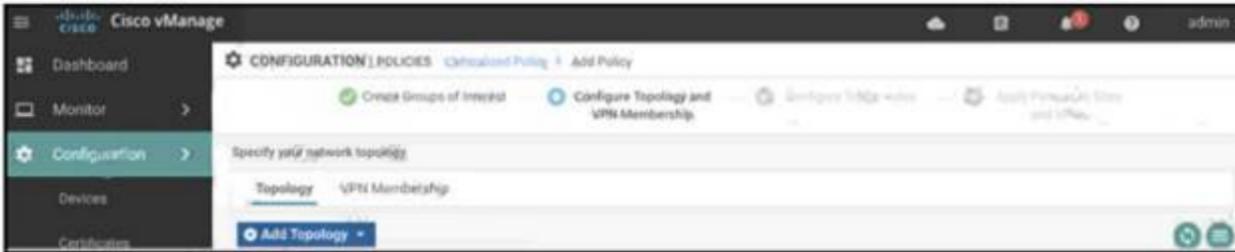
A Cisco SD-WAN customer has a requirement to calculate the SHA value for files as they pass through the device to see the returned disposition and determine if the file is good, unknown or malicious. The customer also wants to perform real-time traffic analysis and generate alerts when threats are detected Which two Cisco SD-WAN solutions meet the requirements? (Choose two.)

- A. Cisco Trust Anchor Module
- B. Cisco Threat Grid
- C. Cisco Snort IPS
- D. Cisco AMP
- E. Cisco Secure Endpoint

**Answer:** CD

**NEW QUESTION 133**

Refer to the exhibit.



An administrator is configuring a policy in addition to an existing hub-and-spoke policy for two sites that should directly communicate with each other. How is this policy configured?

- A. hub-and-spoke
- B. mesh
- C. import existing topology
- D. custom control (route and TLOC)

**Answer:** D

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/policies/vedge/policies-book/controlpolicies>

**NEW QUESTION 138**

An engineer must deploy a QoS policy with these requirements:

- policy name: App-police
- police rate: 1000000
- burst: 1000000
- exceed: drop

Which configuration meets the requirements?

- A. 

```
vpn-list VPN10
sequence 1
match
app-list youtube
action accept
set
policer App-police
```
- B. 

```
policy
data-policy policy-name
vpn-list 10
sequence 1
action accept
set
policer App-police
```
- C. 

```
vpn 10
interface ge0/0/0
set
policer App-police in
default action accept
```
- D. 

```
policy
action accept
set
policer App-police
```

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

**Answer:** B

**NEW QUESTION 139**

Which two platforms for the Cisco SD-WAN architecture are deployable in a hypervisor on-premises or in IAAS Cloud? (Choose two.)

- A. CSR 1000v
- B. vEdge 100c
- C. vEdge Cloud
- D. vEdge 2000
- E. ISR 4431

**Answer:** AC

**NEW QUESTION 144**

An engineer is configuring a list that matches all IP prefixes with lengths from /1 to /16 in a centralized control policy. Which list accomplishes this task?

- A. 0.0.0.0/1 le 16
- B. 0.0.0.0/0 ge 1
- C. 0.0.0.0/0 le 16
- D. 0.0.0.0/16 ge 1

Answer: A

**NEW QUESTION 145**

Which pathway under Monitor > Network > Select Device is used to verify service insertion configuration?

- A. Real Time
- B. System Status
- C. ACL Logs
- D. Events

Answer: A

**Explanation:**

- Using Cisco vManage:

View the configured services on the Real Time monitoring page (Monitor > Network > hub-device > Real Time). For Device Options, select OMP Services.

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/policies/vedge-20-x/policies-book/service-c>

**NEW QUESTION 149**

At which layer does the application-aware firewall block applications on a WAN Edge?

- A. 3
- B. 7
- C. 5
- D. 2

Answer: B

**NEW QUESTION 153**

Which feature allows reachability to an organization's internally hosted application for an active DNS security policy on a device?

- A. local domain bypass
- B. DHCP option 6
- C. DNSCrypt configurator
- D. data pokey with redirect

Answer: A

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/security/ios-xe-16/security-book-xe/umbrell>

- Local domain bypass list is global and each VRF can enable or disable the local domain bypass list. If enabled, the DNS packet will be matched against the local domain list.

**NEW QUESTION 154**

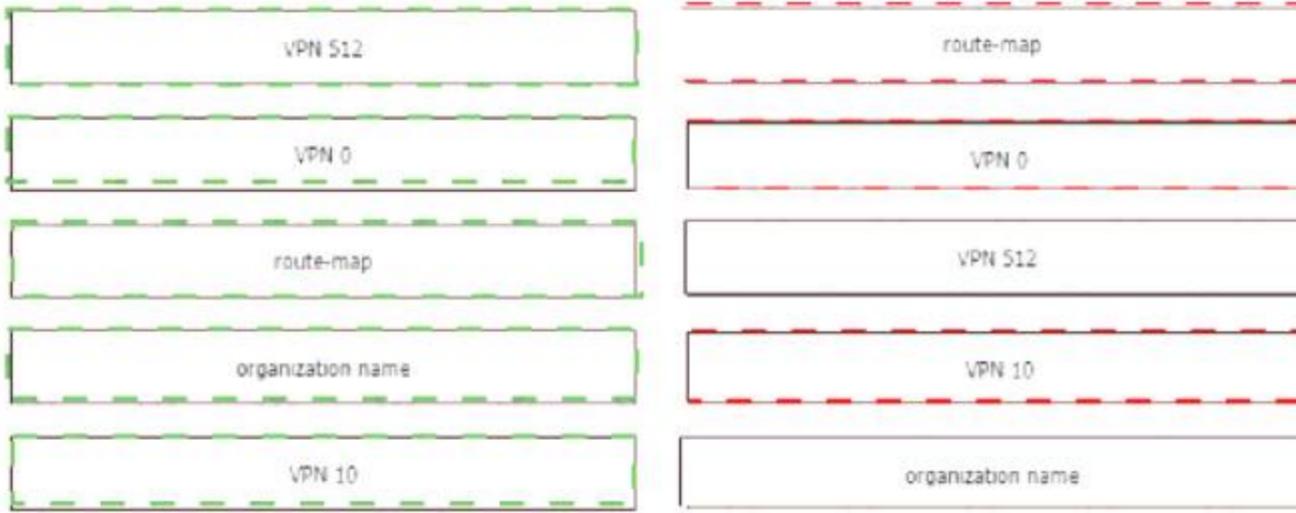
Drag and drop the functions from the left onto the correct templates on the right.

VPN 512	routing policy
VPN 0	transport VPN
route-map	management VPN
organization name	service VPN
VPN 10	system information

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**



**NEW QUESTION 157**

Refer to the exhibit.

Address Family	<input type="radio"/> IPv4	<input checked="" type="radio"/> On	<input type="radio"/> Off
Address Family	<input type="radio"/> IPv6	ipv4-unicast <input type="button" value="x"/>	
Maximum Number of Prefixes	<input checked="" type="checkbox"/>		
Route Policy In	<input checked="" type="checkbox"/>	<input type="radio"/> On	<input checked="" type="radio"/> Off
Route Policy Out	<input type="radio"/> IPv4	<input checked="" type="radio"/> On	<input type="radio"/> Off
Policy Name	<input type="radio"/> IPv6	eBGP_Community_Policy	

The engineer must assign community tags to 3 of its 74 critical server networks as soon as that are advertised to BGP peers. These server networks must not be advertised outside AS. Which configuration fulfill this requirement?

A)

```

policy
route-policy eBGP_Community_Policy
sequence 1
match
address Community_Prefix
action accept
set
community 999:65000 local-as
default-action reject
lists
prefix-list Community_Prefix
ip-prefix 20.20.20.0/24
ip-prefix 21.21.21.0/24
ip-prefix 22.22.22.0/24
    
```

B)

```

policy
route-policy eBGP_Community_Policy
sequence 1
match
address Community_Prefix
action accept
set
community 999:65000 no-export
default-action accept
lists
prefix-list Community_Prefix
ip-prefix 20.20.20.0/24
ip-prefix 21.21.21.0/24
ip-prefix 22.22.22.0/24
    
```

C)

```

policy
route-policy eBGP_Community_Policy
sequence 1
match
address Community_Prefix
action accept
set
community 999:65000 local-as
default-action reject
lists
prefix-list Community_Prefix
ip-prefix 20.20.20.0/24
ip-prefix 21.21.21.0/24
ip-prefix 22.22.22.0/24
    
```

D)

```

policy
route-policy eBGP_Community_Polic
sequence 1
match
address Community_Prefix
action accept
set
community 999:65000 no-export
default-action accept
lists
prefix-list Community_Prefix
ip-prefix 20.20.20.0/24
ip-prefix 21.21.21.0/24
ip-prefix 22.22.22.0/24

```

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

**Answer:** D

#### NEW QUESTION 160

An organization requires the use of integrated preventative engines, exploit protection, and the most updated and advanced signature-based antivirus with sandboxing and threat intelligence to stop malicious attachments before they reach users and get executed. Which Cisco SD-WAN solution meets the requirements?

- A. Cisco Trust Anchor module
- B. URL filtering and Umbrella DNS security
- C. Cisco AMP and Threat Grid
- D. Snort IPS

**Answer:** D

#### NEW QUESTION 162

When redistribution is configured between OMP and BGP at two Data Center sites that have Direct Connection interlink, which step avoids learning the same routes on WAN Edge routers of the DCs from LAN?

- A. Define different VRFs on both DCs
- B. Set same overlay AS on both DC WAN Edge routers
- C. Set down-bit on Edge routers on DC1
- D. Set OMP admin distance lower than BGP admin distance

**Answer:** B

#### Explanation:

Typically, there are more than one datacenters for HA/redundancy requirements. After successful migration of the first datacenter, migrate the second datacenter in a similar method as explained in this section. Note that a routing loop can occur if there is a backdoor link between the datacenter sites and route advertisement is configured between the two datacenters. To avoid the loop, any of the three methods explained below can be used:

1. Use the same Autonomous System Numbers (ASN) on edge routers of the two datacenters. Because of the same ASN, the AS-PATH attribute will avoid learning the same prefixes on the edge routers that are advertised by the other datacenter towards the LAN side.
2. Use overlay-AS to insert Overlay Management Protocol (OMP) AS number when redistributing the routes from OMP into LAN side towards DC LAN. Configure all DC SD-WAN edge routers with the same overlay-as. This allows the edges to filter the routes advertised by the other DCs edge devices towards the LAN side and prevents redistributing the same routes back into OMP.
3. Use tags or communities to mark the prefixes at one datacenter when redistributing to DC LAN and filter on the edge of the other datacenter when learning advertisements from the LAN side.

#### NEW QUESTION 164

A large retail organization decided to move some of the branch applications to the AWS cloud. How does the network architect extend the in-house Cisco SD-WAN branch to cloud network into AWS?

- A. Create virtual WAN Edge devices Cloud through the AWS online software store
- B. Create virtual instances of vSmart Cloud through the AWS online software store
- C. Create GRE tunnels to AWS from each branch over the Internet
- D. Install the AWS Cloud Router in the main data center and provide the connectivity from each branch

**Answer:** A

#### Explanation:

[https://www.cisco.com/c/en/us/td/docs/solutions/CVD/SDWAN/Cisco\\_Cloud\\_onRamp\\_for\\_IaaS\\_AWS\\_Versio](https://www.cisco.com/c/en/us/td/docs/solutions/CVD/SDWAN/Cisco_Cloud_onRamp_for_IaaS_AWS_Versio)

**NEW QUESTION 169**

A network administrator is configuring QoS on a vEdge 5000 router and needs to enable it on the transport side interface. Which policy setting must be selected to accomplish this goal?

- A. Cloud QoS Service side
- B. Cloud QoS
- C. NetFlow
- D. Application

**Answer: B**

**Explanation:**

9. Since the DC routers are vEdge 5000s, select the **Cloud QoS** checkbox to enable QoS on the transport side.

**NEW QUESTION 173**

Refer to the exhibit

PEER TYPE	PEER PROTOCOL	PEER SYSTEM	SITE IP	DOMAIN ID	PEER ID	PRIVATE PRIVATE IP	PRIVATE PORT	PEER PUBLIC IP	PUBLIC PORT	LOCAL LOCAL COLOR	STATE	LOCAL ERROR	REMOTE ERROR	REPEAT COUNT
vbond	dtls	-	0	0	209.165.200.230	12346	209.165.200.230	12346	biz-internet	tear_down	CTORGNMMIS	NOERR	14	
vbond	dtls	-	0	0	209.165.201.137	12346	209.165.201.137	12346	biz-internet	tear_down	CTORGNMMIS	NOERR	13	

An engineer is getting a CTORGNMMIS error on a controller connection Which action resolves this issue?

- A. Configure a valid serial number on the WAN Edge
- B. Configure a valid organization name
- C. Configure a valid certificate on vSMART
- D. Configure a valid product ID

**Answer: B**

**NEW QUESTION 177**

Refer to the exhibit.

```
LAB-ROUTER#show ip route vrf 100
Gateway of last resort is 10.1.9.2 to network 0.0.0.0

m* 0.0.0.0/0 [251/0] via 10.1.9.2, 06:10:53
    [251/0] via 10.1.9.3, 06:10:53
O   10.80.6.0/24
    [110/300] via 172.19.75.78, 20:35:33, GigabitEthernet0/0/2.10
    [110/300] via 172.19.75.66, 1w0d, GigabitEthernet0/0/1.11
O   10.80.56.0/24
    [110/300] via 172.19.75.78, 20:35:33, GigabitEthernet0/0/2.10
    [110/300] via 172.19.75.66, 1w0d, GigabitEthernet0/0/1.11
```

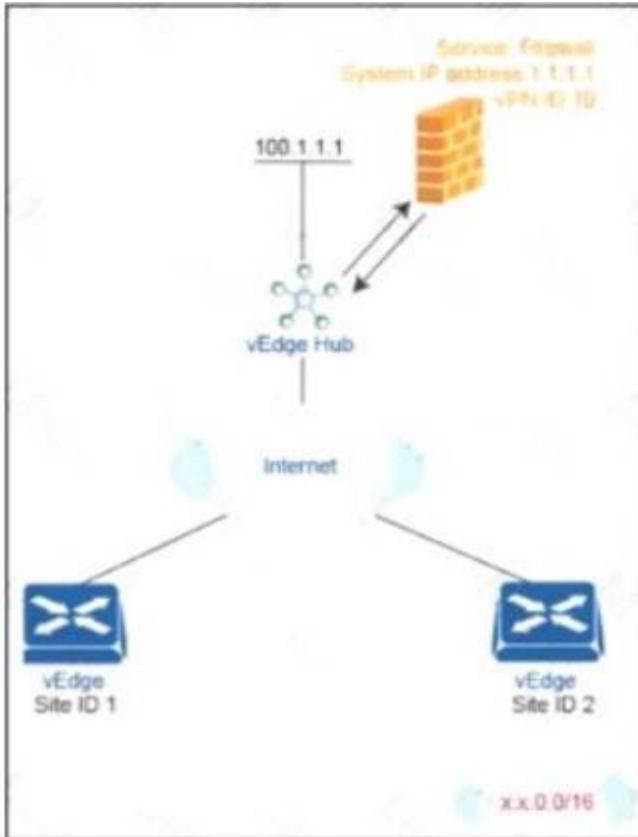
The network administrator has configured a centralized topology policy that results in the displayed routing table at a branch office. Which two configurations are verified by the output? [Choose two.]

- A. The routing table is for the transport VPN.
- B. The default route is learned via OMP.
- C. This routing table is from a cEdge router.
- D. The default route is configured locally.
- E. The configured policy is adding a route tag of 300 to learned routes.

**Answer: BC**

**NEW QUESTION 181**

Refer to the exhibit.



An engineer is configuring service chaining. Which set of configurations is required for all traffic from Site ID 1 going toward Site ID 2 to get filtered through the firewall on the hub site?

- A)
- ```

vpn 20
service FW address 1.1.1.1
policy
lists
site-list firewall-sites
site-id 1
control-policy firewall-service
sequence 10
match route
site-id 2
action accept
set service FW vpn 20
default-action accept
apply-policy
site-list firewall-sites control-policy firewall-service out
    
```
- B)
- ```

vpn 10
service FW address 1.1.1.1
policy
lists
site-list firewall-sites
site-id 1
control-policy firewall-service
sequence 10
match route
site-id 2
action accept
set service FW vpn 10
default-action accept
apply-policy
site-list firewall-sites control-policy firewall-service out
    
```
- C)
- ```

vpn 10
service FW address 1.1.1.1
policy
lists
site-list firewall-sites
site-id 1
control-policy firewall-service
sequence 10
match route
site-id 2
action accept
set service FW vpn 20
default-action accept
apply-policy
site-list firewall-sites control-policy firewall-service out
    
```
- D)
- ```

vpn 10
service FW address 1.1.1.2
policy
lists
site-list firewall-sites
site-id 1
control-policy firewall-service
sequence 10
match route
site-id 2
action accept
set service FW vpn 10
default-action accept
apply-policy
site-list firewall-sites control-policy firewall-service out
    
```

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

**Answer: B**

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/policies/vedge/policies-book/service-chainin>

**NEW QUESTION 186**

Drag and drop the definitions from the left to the configuration on the right.

matching condition that allows traffic flow between two zones	destination zone
grouping of VPNs where the data traffic flows originate	firewall policy
container that associates forwarding and blocking decisions	source zone
grouping of VPNs where the data traffic flows terminate	zone pair

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

- **Source zone**—A grouping of VPNs where the data traffic flows originate.
- **Destination zone**—A grouping of VPNs where the data traffic flows terminate. A VPN can be part of only one zone
- **Zone-based firewall policy**—A data policy, similar to a localized data policy, that defines the conditions that the data traffic flow from the source zone must match to allow the flow to continue to the destination zone. Zone-based firewalls can match IP prefixes, IP ports, and protocols TCP, UDP, and ICMP. Matching flows can be accepted or dropped, and the packet headers can be logged. Nonmatching flows are dropped by default.
- **Zone pair**—A container that associates a source zone with a destination zone and that applies a zone-based firewall policy to the traffic that flows between zones.

Service Chaining  
 Traffic Flow Monitoring with Cflow

**NEW QUESTION 191**

An engineer wants to change the configuration of the certificate authorization mode from manual to automated. Which GUI selection will accomplish this?

- A. Maintenance > Security
- B. Configuration > Certificates
- C. Administration > Settings
- D. Tools > Operational Commands

**Answer: C**

**Explanation:**

Runbook to Request and Install Cisco PKI Certificates

1. Verify that you have satisfied the prerequisites and that you have added the Smart Account credentials.
2. Navigate to **Administration > Settings** > Controller Certificate Authorization and press Edit.
3. Select the **radio button Cisco Automated (Recommended)**.

**NEW QUESTION 195**

How is multicast routing enabled on devices in the Cisco SD-WAN overlay network?

- A. The WAN Edge routers originate multicast service routes to the vSmart controller via OMP, which then forwards joins for requested multicast groups based on IGMP v1 or v2 toward the source or PIM-RP as specified in the original PIM join message.
- B. The vSmart controller originates multicast service routes to the WAN Edge routers via OMP, which then forwards joins for requested multicast groups based on IGMP v1 or v2 toward the source or PIM-RP as specified in the original PIM join message
- C. The vSmart controller originates multicast service routes to the WAN Edge routers via OMP, which then forwards joins (or requested multicast groups based on IGMP v2 or v3 toward the source or PIM-RP as specified in the original PIM join message
- D. The WAN Edge routers originate multicast service routes to the vSmart controller via OMP, which then forwards joins for requested multicast groups based on IGMP v2 or v3 toward the source or PIM-RP as specified in the original PIM join message
- E. The WAN Edge routers originate multicast service routes to the vSmart controller via OMP, which then forwards joins for requested multicast groups based on IGMP v2 or v3 toward the source or PIM-RP as specified in the original PIM join message

**Answer:** A

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/routing/ios-xe-17/routing-book-xe/m-multic>

**NEW QUESTION 200**

Which command displays BFD session summary information per TLOC on vEdge routers?

- A. show bfd history
- B. show bfd summary
- C. show bfd sessions
- D. show bfd tloc-summary-list

**Answer:** D

**NEW QUESTION 202**

Which third-party Enterprise CA server must be used (or a cloud-based vSmart controller)?

- A. RootCert
- B. Microsoft
- C. RADIUS
- D. VeriSign

**Answer:** A

**NEW QUESTION 203**

In Cisco SD-WAN, what protocol is used for control connections between SD-WAN devices?

- A. DTLS
- B. OMP
- C. BGP
- D. OSPF

**Answer:** A

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/security/vedge/security-book/security-overv>

**NEW QUESTION 208**

Which two WAN Edge devices should be deployed in a cloud? (Choose two.)

- A. vEdge 5000v
- B. ASR 1000v
- C. CSR 1000v
- D. vEdge 100wm
- E. vEdge cloud

**Answer:** CE

**Explanation:**

2. Virtual platforms

- Cloud Services Router (CSR) 1000v running IOS XE SD-WAN Software
- vEdge Cloud Router running Viptela OS

**NEW QUESTION 212**

What is the procedure to upgrade all Cisco SD-WAN devices to a recent version?

- A. The upgrade is performed for a group of WAN Edge devices first to ensure data-plane availability when other controllers are updated.
- B. The upgrade is performed first on vManage, then on WAN Edge devices, then on vBond and finally on vSmart. The reboot must start from WAN Edge devices.
- C. Upgrade and reboot are performed first on vManage then on vBond then on vSmart and finally on the Cisco WAN Edge devices.
- D. and finally on the Cisco WAN Edge devices.
- E. Upgrade and reboot are performed first on vBond then on vSmart then on vSmart and finally on the Cisco WAN Edge devices.
- F. then on vSmart
- G. and finally on the Cisco WAN Edge devices.

**Answer:** C

**NEW QUESTION 215**

Which value is verified in the certificates to confirm the identity of the physical WAN Edge device?

- A. Serial Number

- B. OTP
- C. System-IP
- D. Chassis-ID

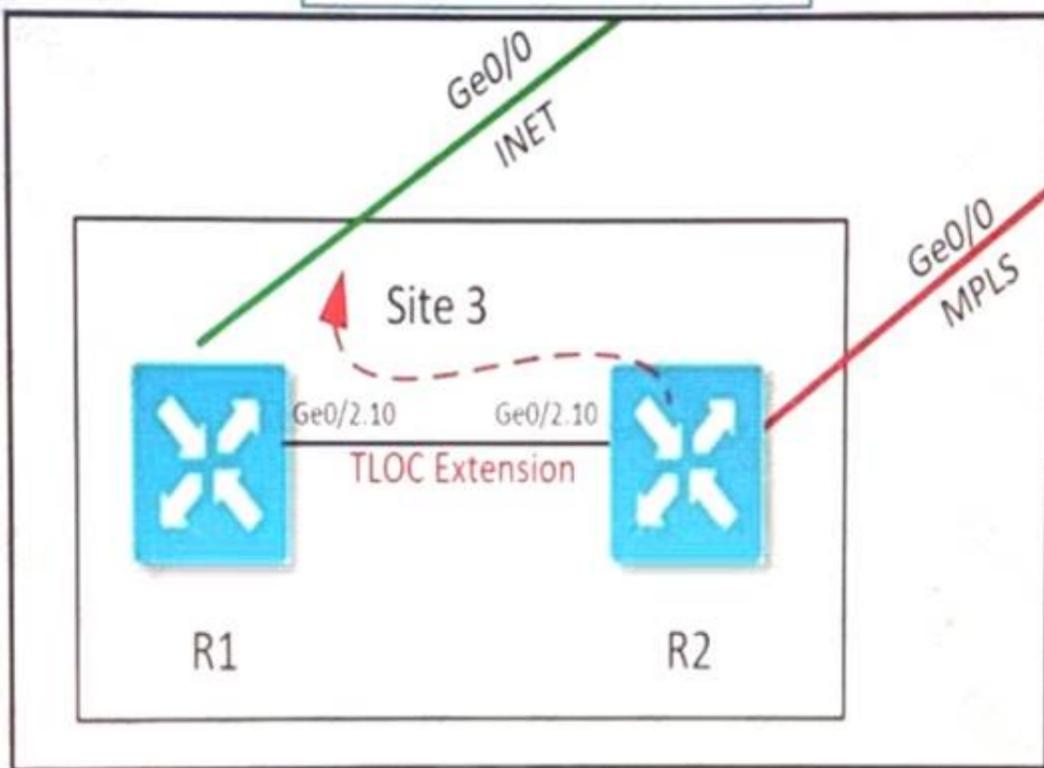
**Answer:** A

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/sdwan-xe-gs-book/manage-certificates.html>

**NEW QUESTION 220**

Refer to the exhibit.



Which configuration extends the INET interface on R1 to be used by R2 for control and data connections?

- A)
- ```

R1
interface ge0/2
no shutdown
interface ge0/2.10
ip address 43.43.43.2/30
tloc-extension ge0/0

R2
interface ge0/2
no shutdown
interface ge0/2.10
ip address 43.43.43.1/30
tloc-extension ge0/0
    
```
- B)
- ```

R1
interface ge0/2
interface ge0/2.10
ip address 43.43.43.2/30
tloc-extension ge0/0
tunnel-interface
color public-internet

R2
interface ge0/2
interface ge0/2.10
ip address 43.43.43.1/30
tunnel-interface
color public-internet
    
```
- C)
- ```

R1
interface ge0/2
mtu 1504
no shutdown
interface ge0/2.10
ip address 43.43.43.2/30
tloc-extension ge0/0

R2
interface ge0/2
mtu 1504
no shutdown
interface ge0/2.10
ip address 43.43.43.1/30
tunnel-interface
color public-internet
    
```

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

**Answer: C**

**Explanation:**

<https://www.ciscolive.com/c/dam/r/ciscolive/us/docs/2018/pdf/BRKRST-2091.pdf>

Subinterfaces require a physical, parent interface to be defined in VPN 0, and also require the subinterface MTU to be four bytes lower than the physical interface due to the 802.1q tag. It is recommended to configure the parent physical interface for an MTU of 1504 to take care of this requirement.

**NEW QUESTION 221**

WAN Edge routers are configured manually to use UDP port offset to use nondefault offset values when IPsec tunnels are created. What is the offset range?

- A. 1-19
- B. 0-18
- C. 0-19
- D. 1-18

**Answer: C**

**NEW QUESTION 226**

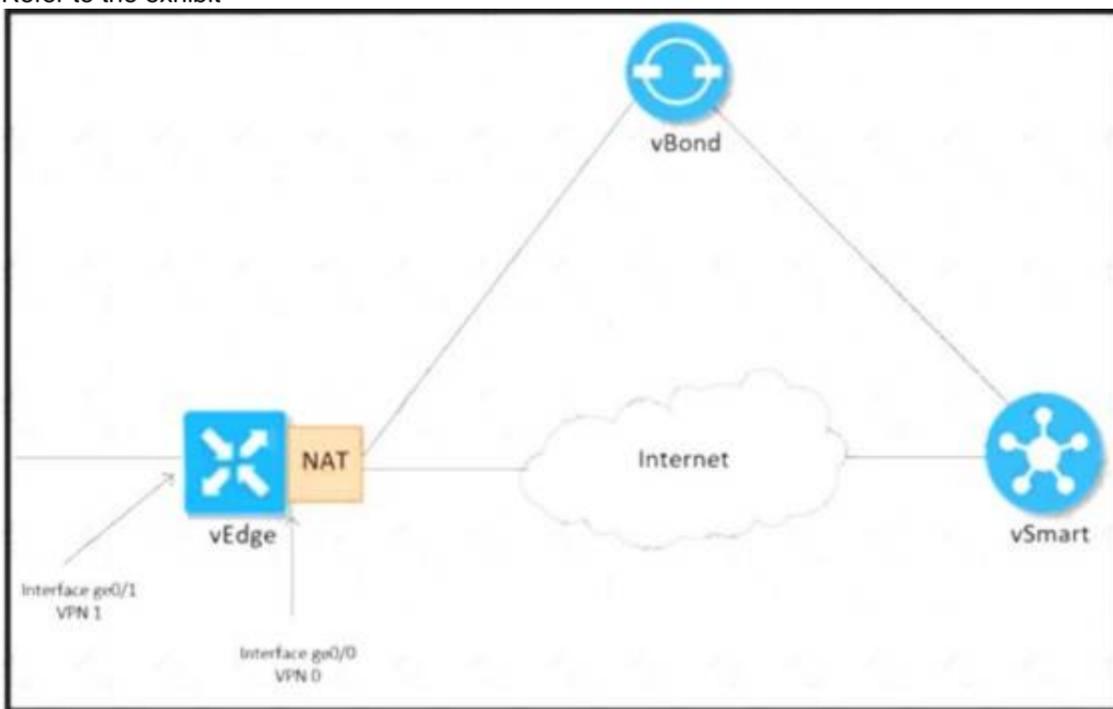
On which device is a service FW address configured to Insert firewall service at the hub?

- A. vEdge at the branch
- B. vSmart at the hub
- C. vEdge at the hub
- D. vSmart at the branch

**Answer: C**

**NEW QUESTION 228**

Refer to the exhibit



Which configuration sets up direct Internet access for VPN 1?

- vpn 1
 

```

      ...
      interface ge0/1
      ...
      nat
      !
      no shutdown
      ...
      vpn 0
      ...
      ip route 0.0.0.0/0 vpn 1
      
```
- vpn 1
 

```

      ...
      interface ge0/0
      nat
      !
      no shutdown
      ...
      vpn 0
      ...
      ip route 0.0.0.0 vpn 1
      
```

```

vpn 0
...
interface ge0/1
...
ip nat
!
no shutdown
...
vpn 1
...
ip route 0.0.0.0/0 vpn 0

```

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

**Answer: C**

**NEW QUESTION 230**

Refer to the exhibit.

```

vEdge-Cloud#
vEdge-Cloud#
vEdge-Cloud# vshell
vEdge-Cloud:~$ cd /var/log/
vEdge-Cloud:/var/log$
vEdge-Cloud:/var/log$ ls -l
total 28992
-rw-r--r-- 1 root root 1441700 Nov 22 15:13 auth.log
-rw-r--r-- 1 basic adm 0 Aug 7 15:29 cloud-init.log
drwxr-xr-x 2 root root 4096 Nov 22 14:49 confd
-rw-r--r-- 1 root root 1896486 Nov 22 14:57 kern.log
-rw-r--r-- 1 root root 292292 Aug 9 22:31 lastlog
-rw-r--r-- 1 root root 6197843 Nov 22 15:14 messages
-rw-r--r-- 1 root root 10512141 Aug 30 21:00 messages.1
drwxr-xr-x 2 root root 4096 Nov 22 14:48 pdb
drwxr-xr-x 2 quagga quagga 4096 Aug 7 15:29 quagga
-rw-r--r-- 1 root root 437 Nov 22 14:48 sw_script_active.log
-rw-r--r-- 1 root root 382 Nov 22 14:48 sw_script_previous.log
-rw-r--r-- 1 root root 2004 Nov 22 14:49 sw_script_synccdb.log
-rw----- 1 root root 64064 Nov 22 15:07 tallylog
drwxr-xr-x 2 root root 60 Nov 22 14:48 tmplog
-rw-r--r-- 1 root root 6841506 Nov 22 15:14 vconfd
-rw-r--r-- 1 root root 184602 Aug 7 15:29 vdebug
-rw-r--r-- 1 root root 2479511 Nov 22 15:14 vsyslog
-rwxr-xr-x 1 root utmp 49536 Nov 22 15:07 wtmp
vEdge-Cloud:/var/log$
vEdge-Cloud:/var/log$

```

Which configuration stops Netconf CLI logging on WAN Edge devices during migration?

- logs  
audit-disable  
netconf-disable
- logs  
netconf-disable
- logging  
disk netconf-disable
- logging  
disk  
audit-disable  
netconf-disable

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

**Answer: B**

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/command/sdwan-cr-book/config-cmd.html#wp386725031>

Syslog messages related to AAA authentication and Netconf CLI access and usage are placed in the auth.log and messages files. Each time Cisco vManage logs in to a Cisco vEdge device to retrieve statistics and status information and to push files to the router, the router generates AAA and Netconf log messages. So, over time, these messages can fill the log files. To prevent these messages from filling the log files, you can disable the logging of AAA and Netconf syslog messages:

```

Device(config)# system aaa logsViptela(config-logs)# audit-disableViptela(config-logs)# netconf-disable

```

**NEW QUESTION 232**

An engineer must use data prefixes to configure centralized data policies using the vManage policy configuration wizard. What is the first step to accomplish this task?

- A. Create groups of interest

- B. Configure network topology.
- C. Configure traffic rules.
- D. Apply policies to sites and VPNs.

Answer: A

**NEW QUESTION 237**

Refer to the exhibit,

```

Site 1:
vpn 10
  service FW address 1.1.1.1

On vSmart
policy
lists
  site-list firewall-sites
  site-id 1

apply-policy
  site-list firewall-sites control-policy firewall-service out
  
```

Which configuration routes Site 2 through the firewall in Site 1?

- control-policy firewall-service
  - sequence 10
  - match route
  - site-id 2
  - action accept
  - set service local
  - default-action accept
- On vSmart
  - control-policy firewall-service
  - sequence 10
  - match route
  - site-id 2
  - action accept
  - set
    - service FW vpn 10
  - default-action accept
- On vSmart
  - control-policy firewall-service
  - sequence 10
  - match route
  - site-id 2
  - action accept
  - set
    - service FW vpn 10
    - service local
  - default-action accept
- On vSmart
  - control-policy firewall-service
  - sequence 10
  - match route
  - site-id 2
  - action accept
  - set service FW vpn 10
  - default-action accept

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

Answer: D

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/policies/vedge-20-x/policies-book/service-c>

Here is the configuration procedure:

1. On the hub router, provision the firewall service, specifying the IP address of the firewall device. With this configuration, OMP on the hub router advertises one service route to the Cisco vSmart Controller. The service route contains a number of properties that identify the location of the firewall, including the TLOC of the hub router and a service label of svc-id-1, which identifies the service type as a firewall. (As mentioned above, before advertising the route, the device ensures that the firewall's IP address can be resolved locally.)

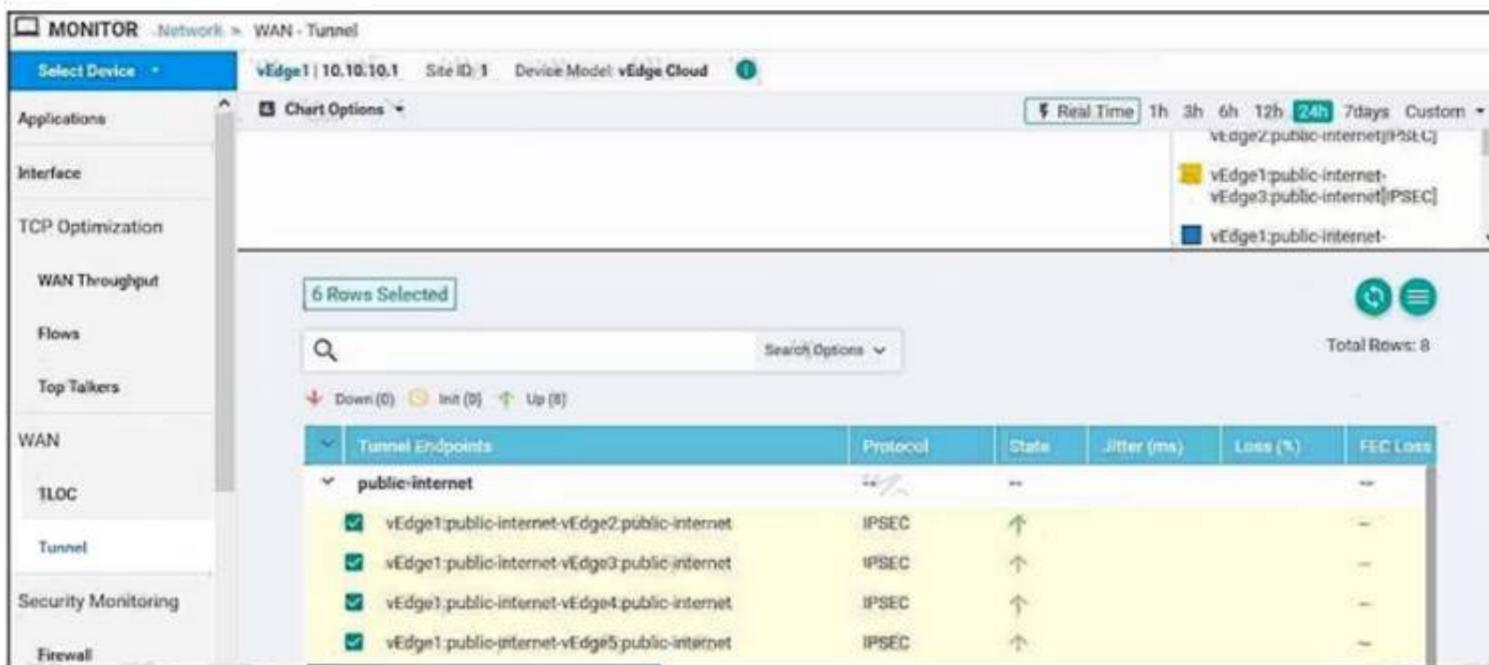
```
vpn 10
  service FW address 1.1.1.1
```

2. On the Cisco vSmart Controller, configure a control policy that redirects data traffic traveling from Site 1 to Site 2 through the firewall. Then, also on the Cisco vSmart Controller, apply this policy to Site 1.

```
policy
  lists
    site-list firewall-sites
      site-id 1
  control-policy firewall-service
    sequence 10
    match route
      site-id 2
    action accept
    set service FW vpn 10
  default-action accept
apply-policy
  site-list firewall-sites control-policy firewall-service out
```

**NEW QUESTION 239**

Refer to the exhibit.



Which command-line configuration on a WAN Edge device achieves these results?

- A)
 

```
vpn 0
interface ge0/0
 ip address 10.50.0.101/30
 tunnel-interface
  encapsulation gre
  color public-internet
  allow-service ntp

ip route 0.0.0.0/0 10.50.0.102
```
- B)
 

```
vpn 0
interface ge0/0
 ip address 10.50.0.101/30
 tunnel-interface
  encapsulation ipsec
  color public-internet restrict
  allow-service all
  allow-service netconf

ip route 0.0.0.0/0 10.50.0.102
```
- C)
 

```
vpn 0
interface ge0/0
 ip address 10.50.0.101/30
 tunnel-interface
  encapsulation ipsec
  allow-service none

ip route 0.0.0.0/0 10.50.0.102
```
- D)

```
vpn 1
interface ge0/0
ip address 10.50.0.101/30
tunnel-interface
encapsulation ipsec
color public-internet restrict
allow-service all
allow-service netconf

ip route 0.0.0.0/0 10.50.0.102
```

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

Answer: B

**NEW QUESTION 242**

What is a default protocol for control plane connection?

- A. IPsec
- B. HTTPS
- C. TLS
- D. DTLS

Answer: D

**NEW QUESTION 245**

Which OSPF command makes the WAN Edge router a less preferred exit from a site with a dual WAN Edge design?

A)

```
vpn vpn-id
router
ospf
area number
range prefix/length
```

B)

```
vpn vpn-id
router
ospf
max-metric
```

C)

```
vpn vpn-id
router
ospf
area number
no-summary
```

D)

```
vpn vpn-id
router
ospf
area number
nssa
no-summary
```

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

Answer: B

**NEW QUESTION 246**

In a customer retail network with multiple data centers, what does the network administrator use to create a regional hub topology?

- A. control policy on vManage
- B. control policy on vSmart
- C. data policy on vSmart
- D. app route policy on vSmart

Answer: A

**NEW QUESTION 250**

A company must avoid downtime at the remote sites and data plane to continue forwarding traffic between WAN Edge devices if the branch router loses

connectivity to its OMP peers Which configuration meets the requirement?

A)

CONFIGURATION | TEMPLATES

Device Feature

Feature Template Add Template - OMP

Basic Configuration Timers Advertise

Graceful Restart for OMP  On  Off

Overlay AS Number

Graceful Restart Timer (seconds)

Number of Paths Advertised per Prefix

ECMP Limit

Shutdown  Yes  No

B)

Feature Template Add Template - OMP

Basic Configuration Timers Advertise

Graceful Restart for OMP  On  Off

Overlay AS Number

Graceful Restart Timer (seconds)

Number of Paths Advertised per Prefix

ECMP Limit

Shutdown  Yes  No

C)

CONFIGURATION | TEMPLATES

Device Feature

Feature Template Add Template - OMP

Basic Configuration Timers Advertise

Graceful Restart for OMP  On  Off

Overlay AS Number

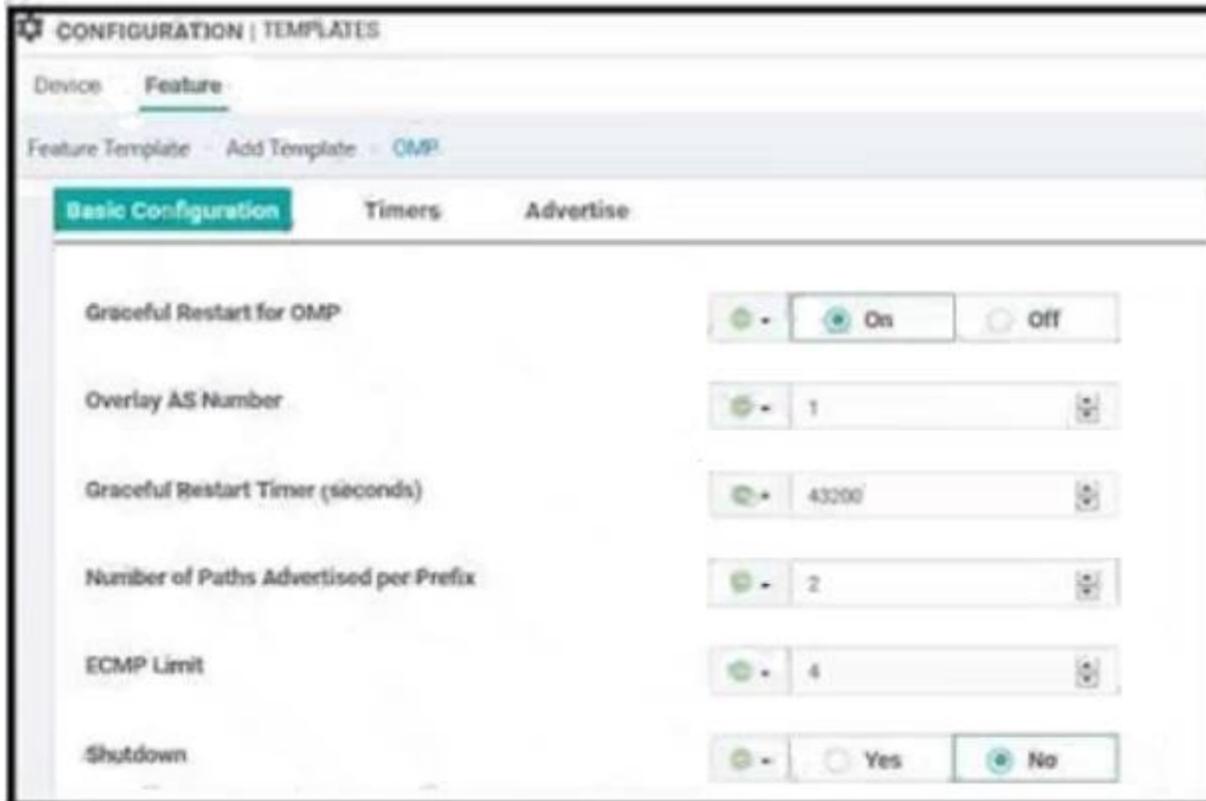
Graceful Restart Timer (seconds)

Number of Paths Advertised per Prefix

ECMP Limit

Shutdown  Yes  No

D)

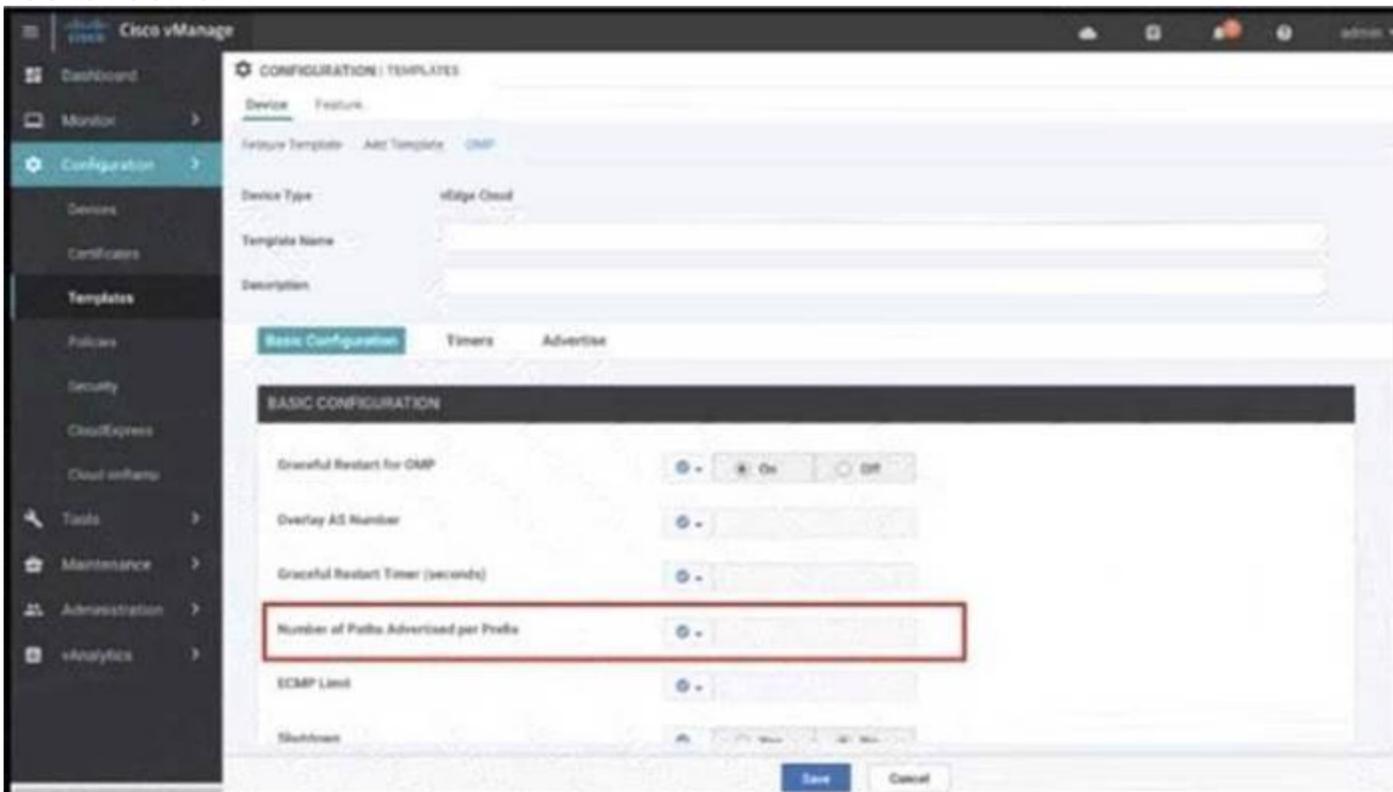


- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: D**

**NEW QUESTION 253**

Refer to the exhibit.



A network administrator is configuring OMP in vManage to advertise all the paths for the same prefix from a site that has two WAN Edge devices. Each WAN Edge device is connected to three ISPs and two private MPLS transports. What is the minimum value for 'Number of Paths advertised per Prefix' that should be configured?

- A. 2
- B. 3
- C. 5
- D. 10

**Answer: D**

**NEW QUESTION 257**

An engineer wants to track tunnel characteristics within an SLA-based policy for convergence. Which policy configuration will achieve this goal?

- A. App-route policy
- B. VPN membership policy
- C. Control policy
- D. Data policy

**Answer: A**

**Explanation:**

An application-aware routing policy matches applications with an SLA, that is, with the data plane tunnel performance characteristics that are necessary to transmit the applications' data traffic. The primary purpose of application-aware routing policy is to optimize the path for data traffic being transmitted by Cisco SD-WAN devices.

**NEW QUESTION 261**

An engineer is troubleshooting a vEdge router and identifies a "DCONFAIL – DTLS connection failure" message. What is the problem?

- A. certificate mismatch
- B. organization mismatch
- C. memory issue
- D. connectivity issue

**Answer: D**

**Explanation:**

<https://community.cisco.com/t5/networking-documents/sd-wan-routers-troubleshoot-control-connections/ta-p/38>

**NEW QUESTION 265**

Refer to the exhibit.

| vManage                                                                                                                                                                                                                                                                                                                | vSmart                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre> system system-ip 10.11.11.1 host-name vManage site-id 1 clock timezone Europe/London vbond 11.1.1.3 organization-name Cisco.com Vpn 0 Interface eth1 Ip address 11.1.1.1/24 No shut Tunnel-interface Allow-service all Ip route 0.0.0.0/0 11.1.1.254                     </pre>                                  | <pre> system system-ip 10.11.11.1 host-name vSmart site-id 1 clock timezone Europe/Rome vbond 11.1.1.3 organization-name Cisco.com Vpn 0 Interface eth1 Ip address 11.1.1.2/24 No shut Tunnel-interface Allow-service all Ip route 0.0.0.0/0 11.1.1.254                     </pre> |
| <pre> vBond system system-ip 10.11.11.3 host-name vManage site-id 1 clock timezone Europe/London vbond 11.1.1.1 local organization-name Cisco.com Vpn 0 Interface ge0/0 Ip address 11.1.1.3/28 No shut Tunnel-interface Encapsulation ipsec Allow-service all Ip route 0.0.0.0/0 11.1.1.254                     </pre> |                                                                                                                                                                                                                                                                                    |

vManage and vSmart have an issue establishing a connection to vBond. Which configuration resolves the issue?

- A. Configure the tunnel interface on all three controllers with a color of transport.
- B. Change the timezone on the vSmart to Europe/London.
- C. Configure the (11.1.1.X/24) IP addresses on the elhO interfaces on vManage and vSmart.
- D. Reconfigure the system-ip parameter on vSmart to 11.1.1.2.

**Answer: B**

**NEW QUESTION 266**

.....

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