



**Cisco**

## **Exam Questions 300-415**

Implementing Cisco SD-WAN Solutions (ENSDWI)

### NEW QUESTION 1

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 2

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

```

```

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

```

```

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
 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 3**

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	up
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
Invalid	vEdge Cloud	9a0cfea0-a463-7dec-c5...	vEdge1	10.10.10.1	BC42AE30	Invalid   Staging   Valid
Invalid	vEdge Cloud	cc5daa8e-9bb1-7c9d-f5...	vEdge2	10.10.10.2	E1F0754E	Invalid   Staging   Valid
Invalid	vEdge Cloud	d7b14bb6-f718-b111-8...	vEdge3	10.10.10.3	F5DA0A8D	Invalid   Staging   Valid
Invalid	vEdge Cloud	92b4f92b-daff-7ce2-c3...	vEdge4	10.10.10.4	BD992059	Invalid   Staging   Valid
Invalid	vEdge Cloud	0183a420-e93e-41f7-6f...	vEdge5	10.10.10.5	FA460EE6	Invalid   Staging   Valid

B)

State	Device Model	Chassis Number	Serial No./Token	Hostname	System IP	Site ID	Mode
Invalid	vEdge Cloud	9a0cfea0-a463-7dec-c586-85f9d29cd5e...	BC42AE30	vEdge1	10.10.10.1	1	vManage
Invalid	vEdge Cloud	cc5daa8e-9bb1-7c9d-f545-1a9657a000...	E1F0754E	vEdge2	10.10.10.2	2	vManage
Invalid	vEdge Cloud	d7b14bb6-f718-b111-8dd8-505fa9c968a2	F5DA0A8D	vEdge3	10.10.10.3	3	vManage
Invalid	vEdge Cloud	92b4f92b-daff-7ce2-c3da-622673be0329	BD992059	vEdge4	10.10.10.4	4	vManage
Invalid	vEdge Cloud	0183a420-e93e-41f7-6fc6-f74bb8754881	FA460EE6	vEdge5	10.10.10.5	4	vManage

C)

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

D)

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	Validdate
	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 4**

Which policy blocks TLOCs from remotes and allows TLOCs from the data center to form hub-and-spoke peering?

- A. localized control policy
- B. localized data policy
- C. centralized data policy
- D. centralized control policy

Answer: C

Explanation:

**Centralized Policy**

Centralized policy refers to policy provisioned on Cisco vSmart Controllers, which are the centralized controllers in the Cisco SD-WAN overlay network. Centralized policy comprises two components:

- Control policy, which affects the overlay network-wide routing of traffic
- Data policy, which affects the data traffic flow throughout the VPN segments in the network

**NEW QUESTION 5**

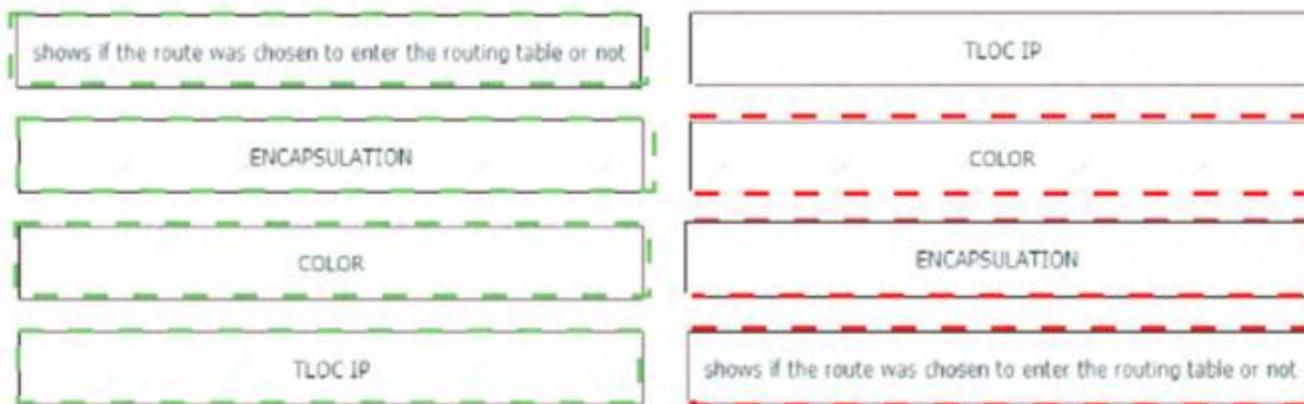
Drag and drop the route verification output from show omp tlocs from the left onto the correct explanations on the right.

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 6**

Which platforms are managed by a single vManage dashboard?

- A. ISR4351, ASR1002HX, vEdge2000, vEdge Cloud
- B. ISR4321, ASR1001, Nexus, ENCS
- C. ISR4321, ASR1001, ENCS, ISRv
- D. ISR4351, ASR1009, vEdge2000, CSR1000v

**Answer: C**

**NEW QUESTION 7**

A network administrator is creating an OMP feature template from the vManage GUI to be applied to WAN edge routers. Which configuration attribute will avoid the redistribution of the routes back into the OMP from the LAN side?

- A. configure "Number of Paths Advertised per Prefix"
- B. configure "Overlay AS Number"
- C. configure "Send Backup Paths"
- D. configure "ECMP limit"

**Answer: B**

**Explanation:**

If you configure the same **overlay AS number** on multiple vEdge routers in the overlay network, all these routers are considered to be part of the same AS, and as a result, they do not forward any routes that contain the overlay AS number. This mechanism is an additional technique for **preventing BGP routing loops** in the network.

**NEW QUESTION 8**

An engineer is configuring a data policy for packets that must be captured through the policy. Which command accomplishes this task?

- A. policy > data-policy > vpn-list > sequence > default-action > drop
- B. policy > data-policy > vpn-list > sequence > action
- C. policy > data-policy > vpn-list > sequence > default-action > accept
- D. policy > data-policy > vpn-list > sequence > match

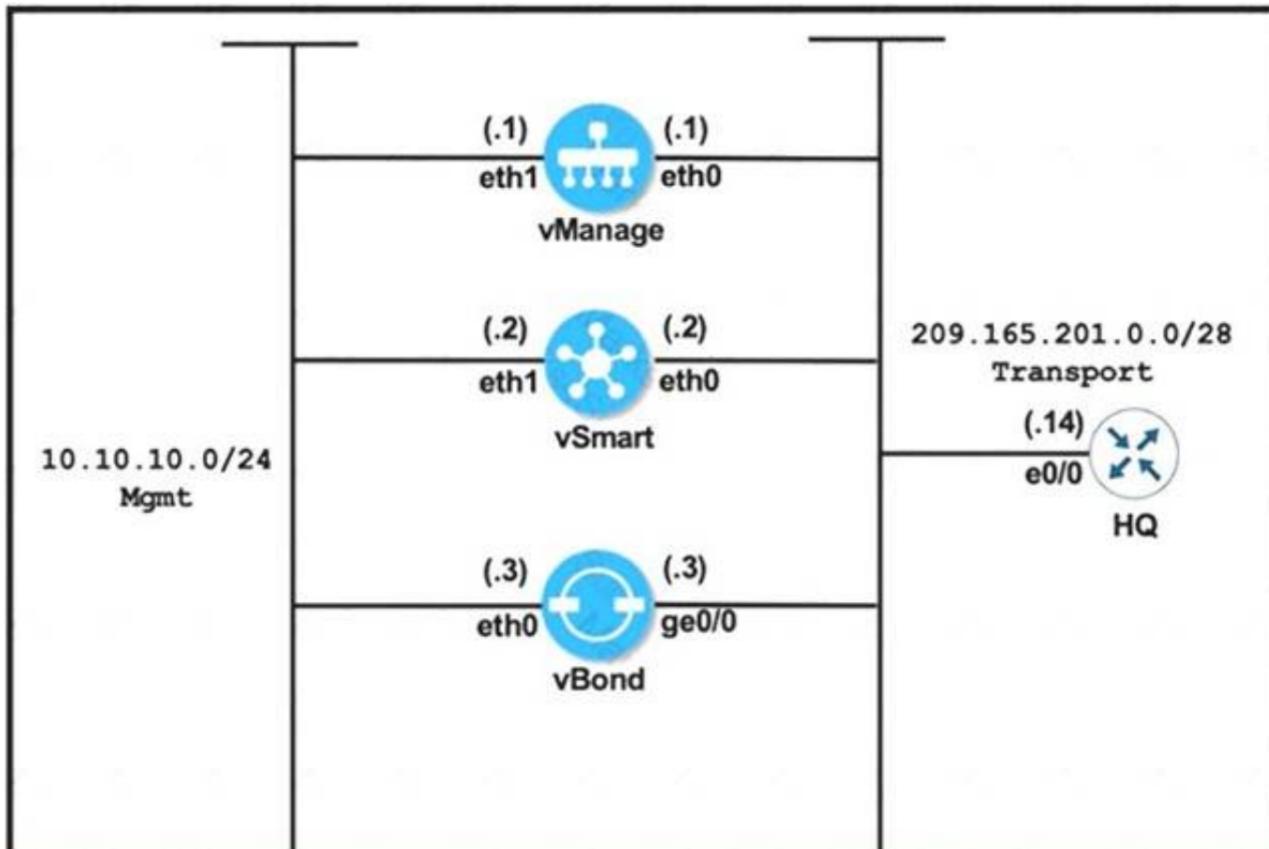
**Answer: B**

**Explanation:**

<https://www.cisco.com/c/dam/en/us/td/docs/routers/sdwan/configuration/config-18-4.pdf#page=357>

**NEW QUESTION 9**

Refer to the exhibit



```

vManage                                vBond
system                                  system
system-ip 10.10.10.101                  system-ip 10.10.10.103
host-name vManage                       host-name vBond
site-id 1                                site-id 1
clock timezone Europe/London             clock timezone Europe/London
vbond 209.165.201.3                      vbond 209.165.201.3 local
organization-name Cisco.com              organization-name viptela.com
!                                         !
vpn 0                                     vpn 0
interface eth0                           interface ge0/0
ip address 209.165.201.1/28              ip address 209.165.201.3/28
no shut                                   no shut
tunnel-interface                         tunnel-interface
allow-service all                        encapsulation ipsec
ip route 0.0.0.0/0 209.165.201.14       allow-service all
!                                         ip route 0.0.0.0/0 209.165.201.14
commit                                    !
!                                         commit

```

vManage and vBond have an issue establishing a connection with each other Which action resolves the issue?

- A. Reconfigure the system IPs to belong to the same subnet
- B. Change the organization name on both controllers to match vipteta.com.
- C. Remove the encapsulation ipsec command under the tunnel interface of vBond
- D. Configure the encapsulation ipsec command under the tunnel interface on vManage

**Answer: B**

**Explanation:**

<https://community.cisco.com/t5/sd-wan-and-cloud-networking/encapsulation-ipsec-on-vbond/td-p/4451149> "encapsulation" command under vBond tunnel-interface has no meaning and effect.

**NEW QUESTION 10**

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 10**

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 15**

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 18**

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 22**

Which SD-WAN component is configured to enforce a policy to redirect branch-to-branch traffic toward a network service such as a firewall or IPS?

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

**Answer:** C

**NEW QUESTION 27**

Which Cisco SD-WAN component the initial communication between WAN Edge devices to join the fabric?

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

**Answer:** D

**Explanation:**

The Cisco vBond Orchestrator orchestrates the initial control connection between Cisco vSmart Controllers and vEdge routers. It creates DTLS tunnels to the Cisco vSmart Controllers and vEdge routers to authenticate each node that is requesting control plane connectivity. This authentication

**NEW QUESTION 31**

Which device information is required on PNP/ZTP to support the zero-touch onboarding process?

- A. serial and chassis numbers
- B. interface IP address
- C. public DNS entry

D. system IP address

**Answer:** A

**Explanation:**

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

**NEW QUESTION 34**

What is a description of vManage NMS?

- A. It is accessible only from VPN 512 (the management VPN).
- B. A cluster requires device templates to be created on and attached to the same server
- C. It is a software process on a dedicated WAN Edge router in the network.
- D. A cluster consists of a minimum of two vManage NMSs

**Answer:** B

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/optimization-ha/vedge/network-optimizatio>

**NEW QUESTION 38**

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 40**

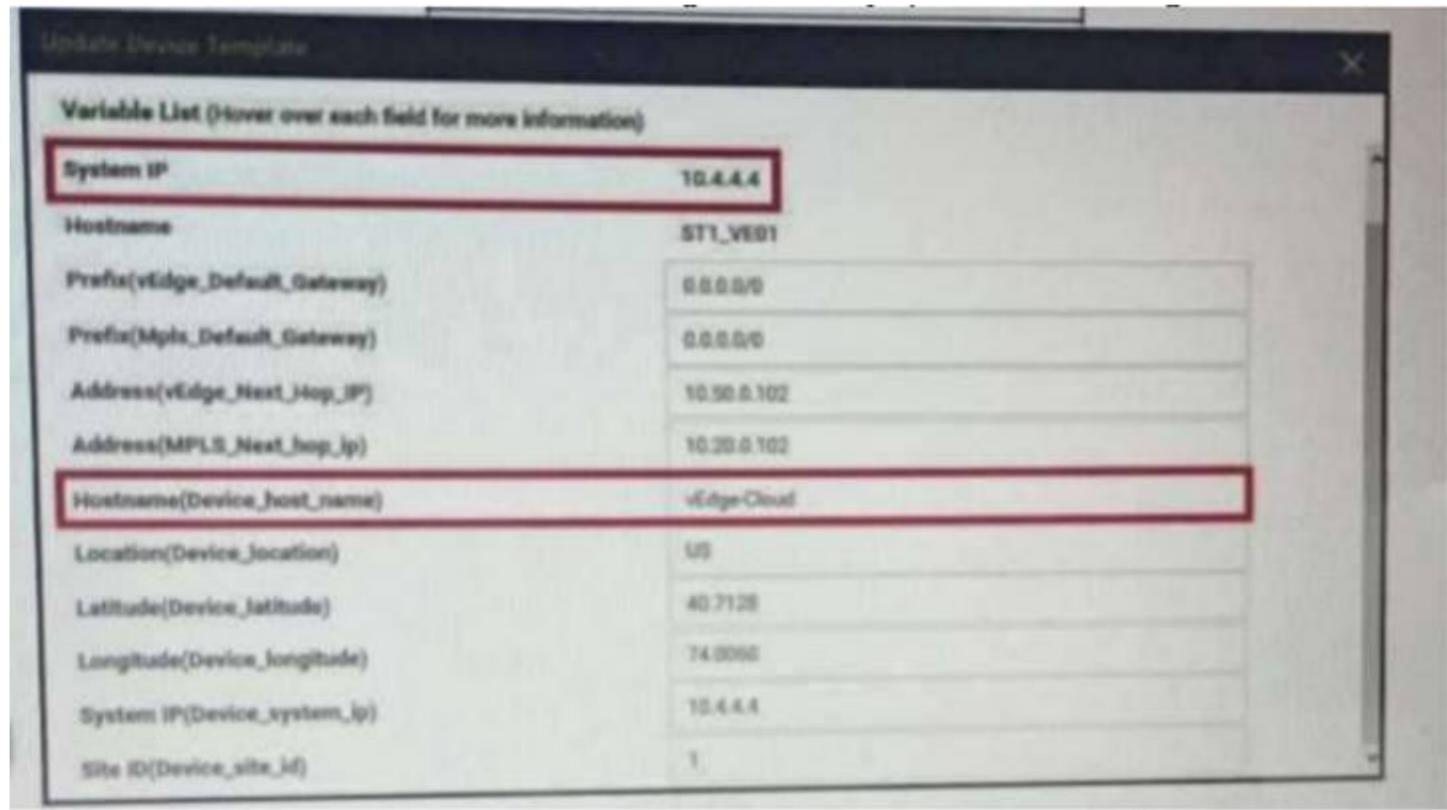
Which table is used by the vSmart controller to maintain service routes of the WAN Edge routers in the hub and local branches?

- A. RIB
- B. FIB
- C. OMP
- D. TLOC

**Answer:** C

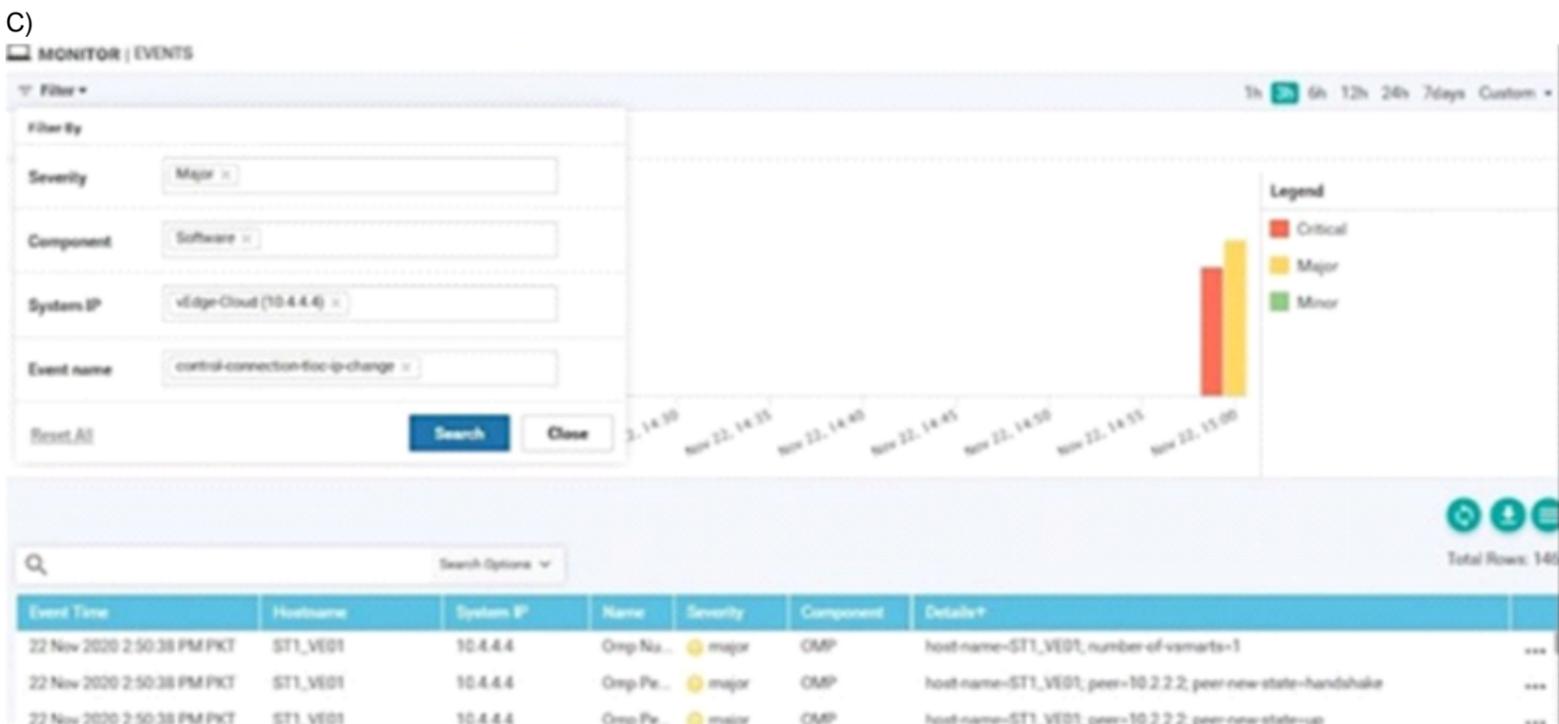
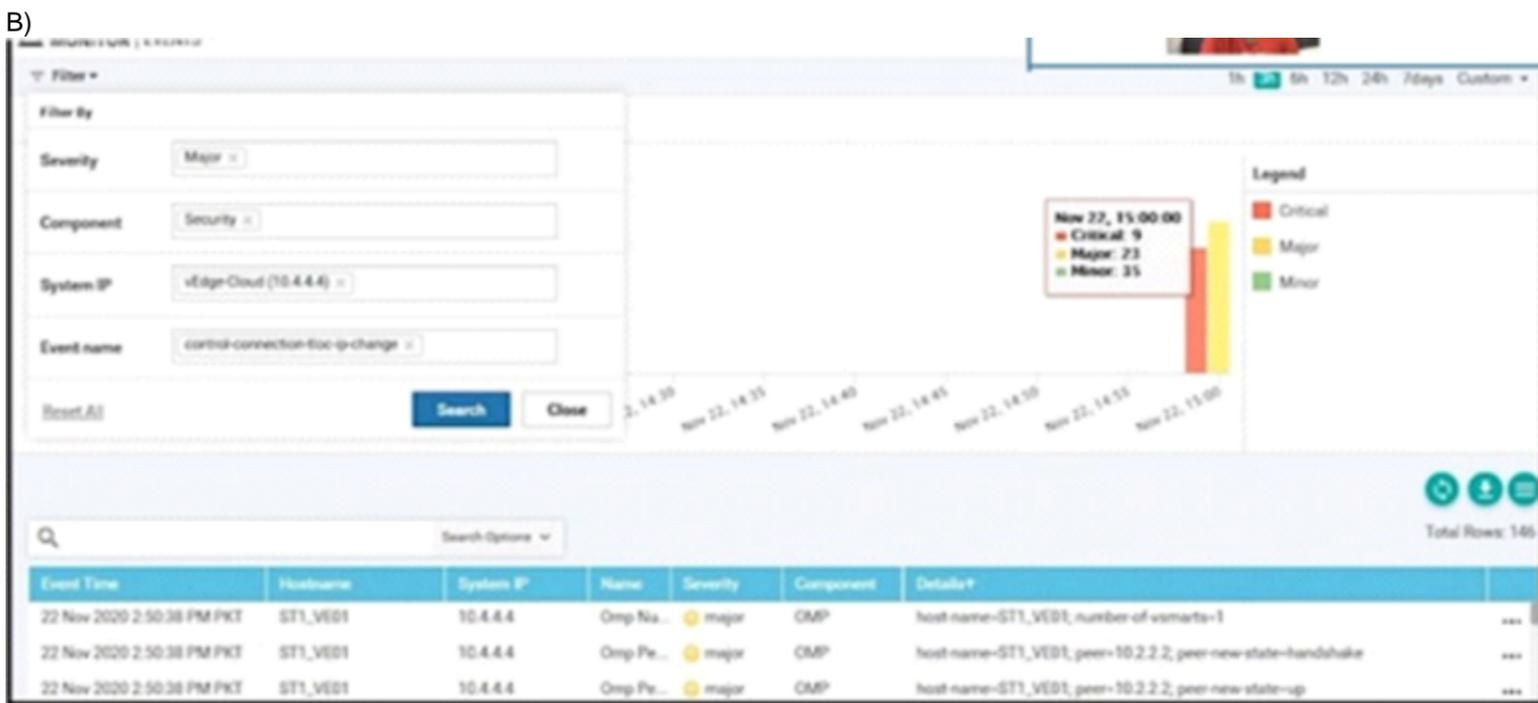
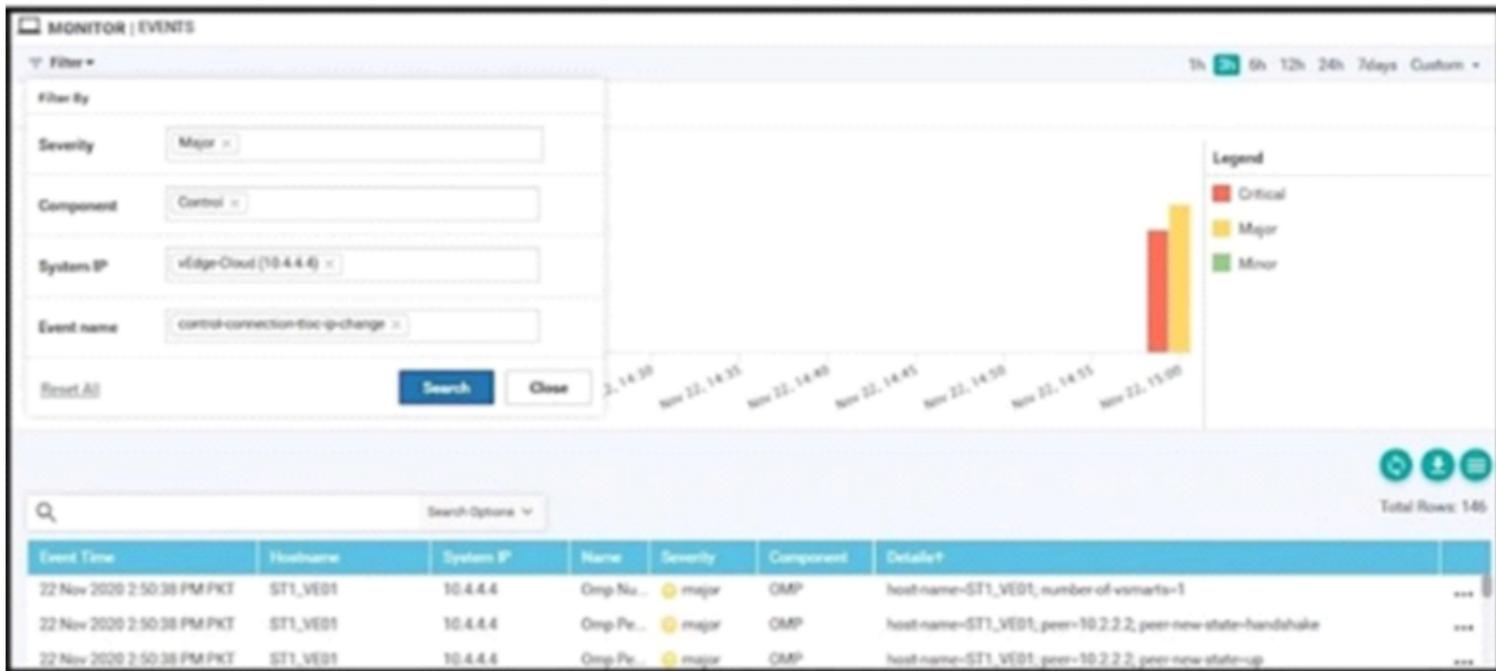
**NEW QUESTION 41**

Refer to the exhibit.



vManage logs are available for the past few months. A device name change deployed mistakenly at a critical site. How is the device name change tracked by operation and design teams?

A)



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

Answer: B

**NEW QUESTION 44**

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 46**

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 51**

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 56

Which on-the-box security feature supported by the Cisco ISR 4451 SD-WAN device and not on vEdge?

- A. Cloud Express service
- B. Enterprise Firewall with Application Awareness
- C. reverse proxy
- D. IPsec/GRE cloud proxy

**Answer:** B

#### Explanation:

<https://www.cisco.com/c/en/us/products/collateral/software/one-wan-subscription/guide-c07-740642.html#Step2>

#### NEW QUESTION 60

How is the scalability of the vManage increased in Cisco SD-WAN Fabric?

- A. Increase licensing on the vManage
- B. Deploy multiple vManage controllers in a cluster
- C. Deploy more than one vManage controllers on different physical server.
- D. Increase the bandwidth of the WAN link connected to the vManage

**Answer:** B

#### NEW QUESTION 65

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 67

Which combination of platforms are managed by vManage?

- A. ISR4321, ASR1001, ENCS, ISRv
- B. ISR4351, ASR1002HX, vEdge2000, vEdge Cloud
- C. ISR4321, ASR1001, Nexus, ENCS
- D. ISR4351, ASR1009, vEdge2000, CSR1000v

**Answer:** A

#### NEW QUESTION 68

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 71**

Refer to the exhibit.

Hostname	State	System IP	Reachability	Site ID	Device Model	BFD	Control
BR1-VEEDGE1	✓	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 79**

Drag and drop the actions from the left into the correct sequence on the right to create a data policy to direct traffic to the Internet exit.

Apply data policy	Step 1
Enable NAT functionality	Step 2
Create centralized data policy	Step 3
Identify VPN and match criteria	Step 4

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Apply data policy	Enable NAT functionality
Enable NAT functionality	Create centralized data policy
Create centralized data policy	Identify VPN and match criteria
Identify VPN and match criteria	Apply data policy

**NEW QUESTION 83**

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 87**

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 89**

An engineer is troubleshooting a certificate issue on vEdge. Which command is used to verify the validity of the certificates?

- A. show control local-properties
- B. show control summary
- C. show certificate installed
- D. show certificate status

**Answer:** A

**NEW QUESTION 93**

An engineer must configure a centralized policy on a site in which all HTTP traffic should use the Public Internet circuit if the loss on this circuit is below 10%. otherwise MPLS should be used Which configuration wizard fulfils this requirement?

- A. Create Applications or Groups of Interest > Configure Traffic Rules > Apply Policies to Sites and VPNs
- B. Configure VPN Membership > Apply Policies to Sites and VPNs
- C. Create Applications or Groups of interest > Configure Traffic Data > Apply Policies to Sites and VPNs
- D. Configure Topology > Apply Policies to Sites and VPNs

**Answer:** A

**NEW QUESTION 96**

In an AWS cloud, which feature provision WAN Edge routers automatically in Cisco SD-WAN?

- A. Cloud app
- B. Cloud OnRamp
- C. vAnalytics
- D. Network Designer

**Answer:** B

**Explanation:**

Cisco SD-WAN Cloud OnRamp for IaaS, "Cloud OnRamp" for short, is a Cisco SD-WAN feature that automates provisioning of a Cisco SD-WAN virtual appliance routers (either vEdge Cloud or CSR (Cloud Services Router)) in the AWS cloud, after providing

**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 101**

Refer to the exhibit.

```
policy
  policer ccnp
    rate 1000000
    burst 15000
    exceed drop
  !
access-list acl-guest
  sequence 1
  match
    source-ip 172.16.10.0/24
    destination-ip 172.16.20.0/24
    destination-port 20
    protocol 6
  !
  action accept
    policer ccnp
  !
  !
  default-action drop
```

Which QoS treatment results from this configuration after the access list acl-guest is applied inbound on the vpn1 interface?

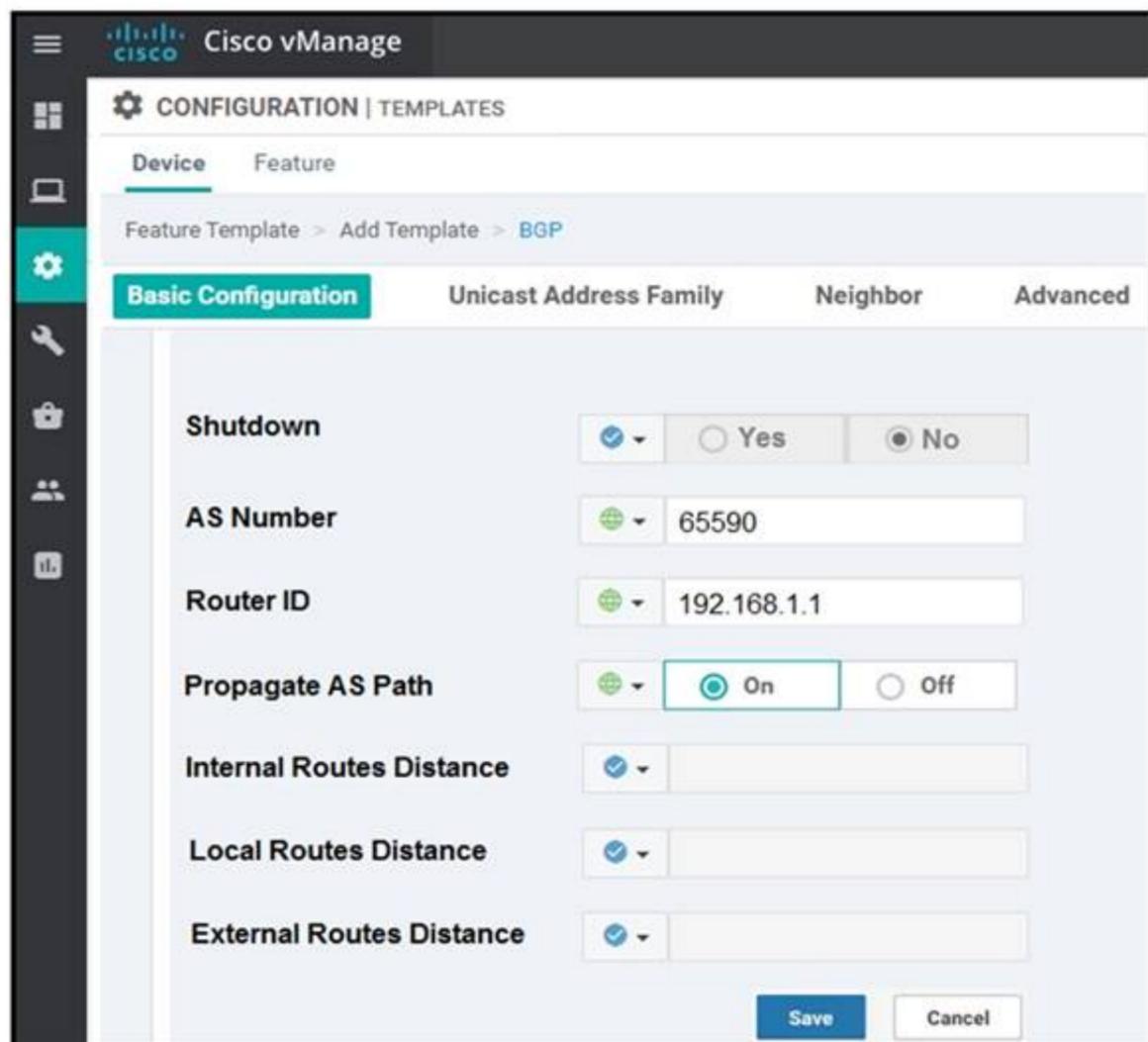
- A. A UDP packet sourcing from 172.16.20.1 and destined to 172.16.10.1 is accepted

- B. A TCP packet sourcing from 172.16.10.1 and destined to 172.16.20.1 is dropped
- C. A UDP packet sourcing from 172.16.10.1 and destined to 172.16.20.1 is dropped.
- D. A TCP packet sourcing from 172.16.20.1 and destined to 172.16.10.1 is accepted

Answer: C

**NEW QUESTION 106**

Refer to the exhibit.



Which configuration value is used to change the administrative distance of iBGP routes to 20?

- A. Configure internal Routes Distance to 20
- B. Configure Propagate AS Path to off
- C. Configure Local Distance to 20
- D. Configure External routes distance 20

Answer: C

**NEW QUESTION 107**

A policy is created to influence routing in the network using a group of prefixes. What policy application will achieve this goal when applied to a site list?

- A. Vpn-membership policy
- B. Control-policy
- C. cflowd-template
- D. App-route policy

Answer: B

**Explanation:**

Control policy, which is similar to standard routing policy, operates on routes and routing information in the control plane of the overlay network. Centralized control policy, which is provisioned on the Cisco vSmart Controller, is the Cisco SD-WAN technique for customizing network-wide routing decisions that determine or influence routing paths through the overlay network. Local control policy, which is provisioned on a Cisco vEdge device, allows customization of routing decisions

**NEW QUESTION 108**

Refer to the exhibit.

LOCAL	PEER REMOTE	PEER REPEAT	PEER SYSTEM IP	SITE	DOMAIN	PEER PRIVATE	PEER PUBLIC	PEER PUBLIC
INSTANCE TYPE	REMOTE COLOR	PROTOCOL STATE	ERROR	ID	ID	PRIVATE IP	PORT	PORT
REMOTE COLOR	STATE	ERROR	ERROR	COUNT	DOWNTIME			
0	vsmart	tlp	1.1.1.3	100	1	100.1.1.3	23456	23456
default	trying	DCONFAIL	NOERR	10001	2020-01-01T10:01:20+0000			

The control connection is failing. Which action resolves the issue?

- A. import vSmart in vManager
- B. Validate the certificates authenticity on vSmart
- C. Upload the WAN Edge list on vManage.
- D. Restore the reachability to the vSmart

Answer: D

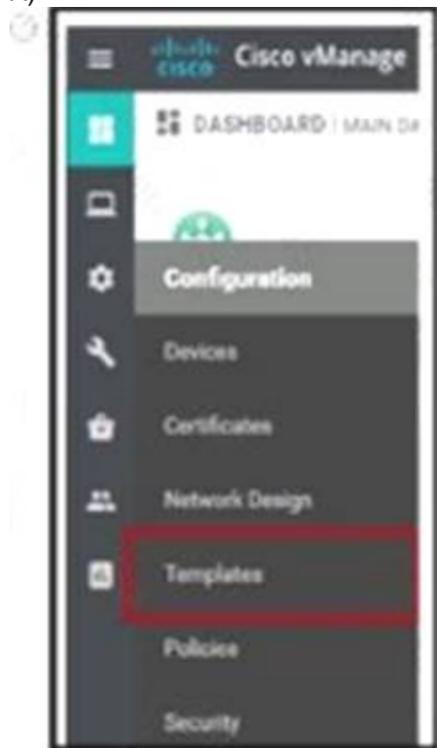
Explanation:

<https://www.cisco.com/c/en/us/support/docs/routers/sd-wan/214509-troubleshoot-control-connections.html>

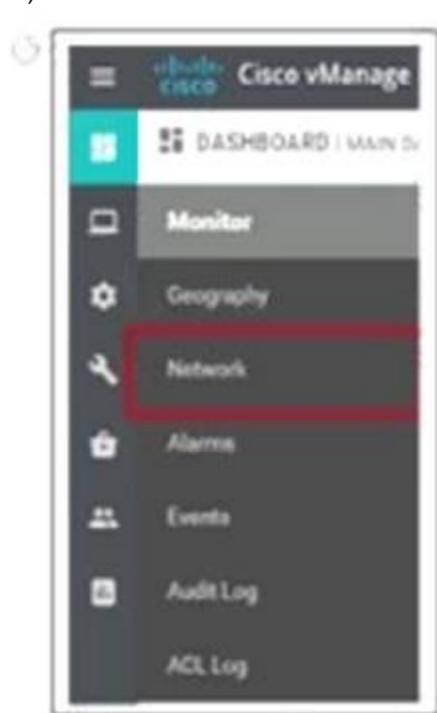
**NEW QUESTION 110**

Company ABC has decided to deploy the controllers using the On-Prem method. How does the administrator upload the WAN Edge list to the vManage?

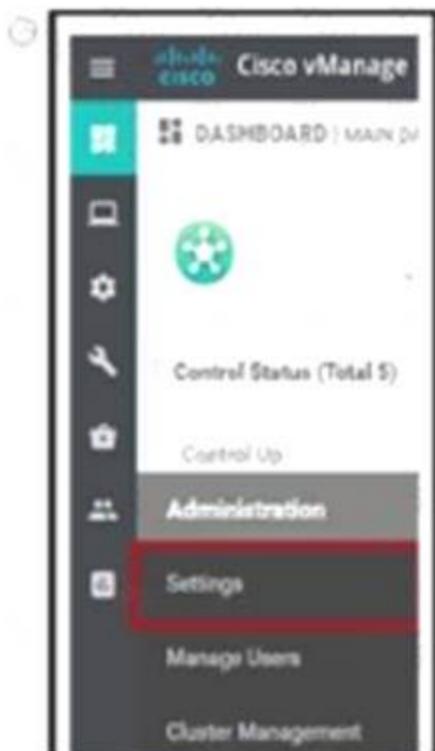
A)



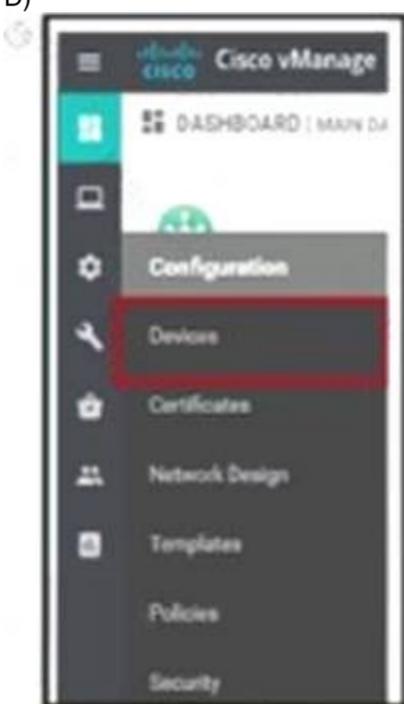
B)



C)



D)



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

**Answer:** D

**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 112**

A customer has MPLS and Internet as the TLOC colors An engineer must configure controllers with the Internet and not with MPLS Which configuration achieves this requirement on vManage?

- A)
 

```
vpn 0
interface eth1
ip address 10.50.0.1/24
tunnel-interface
color mpls
```
- B)
 

```
vpn 0
interface eth1
ip address 10.50.0.1/24
tunnel-interface
color public-internet
```
- C)
 

```
vpn 0
interface eth1
ip address 10.50.0.1/24
tunnel-interface
color biz-internet
```
- D)
 

```
vpn 0
interface eth1
ip address 10.50.0.1/24
tunnel-interface
color default
```

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

**Answer:** B

**NEW QUESTION 115**

In the Cisco SD-WAN solution, vSmart controller is responsible for which two actions? (Choose two.)

- A. Distribute crypto key information among vEdge routers
- B. Configure and monitor vEdge routers.
- C. Authenticate and authorize vEdge routers.
- D. Distribute the IP address from DHCP server to vEdge routers.
- E. Distribute route and policy information via OMP.

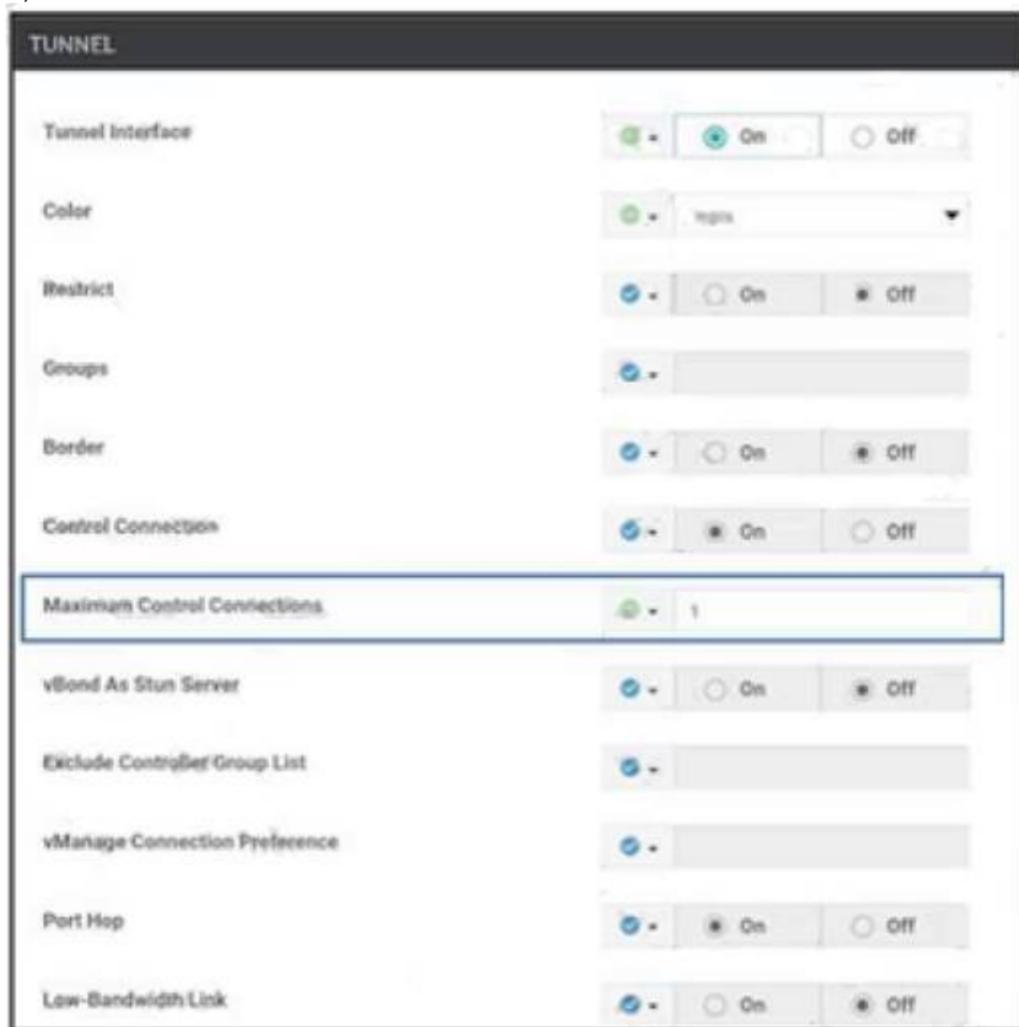
**Answer:** AE

**Explanation:**

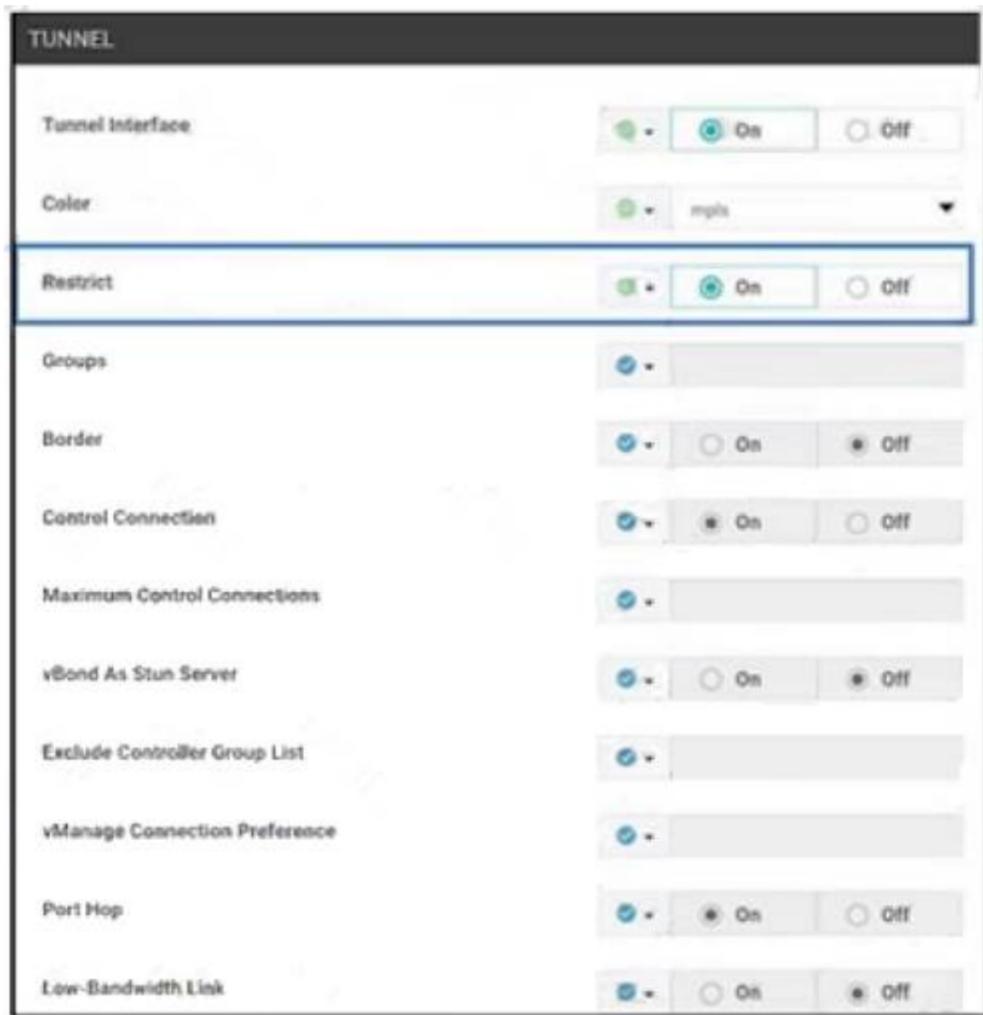
vSmart controller - This software-based component is responsible for the centralized control plane of the SD-WAN network. It maintains a secure connection to each WAN Edge router and distributes routes and policy information via the Overlay Management Protocol (OMP), acting as a route reflector. It also orchestrates the secure data plane connectivity between the WAN Edge routers by reflecting crypto key information originating from WAN Edge routers, allowing for a very scalable, IKE-less architecture.

**NEW QUESTION 117**

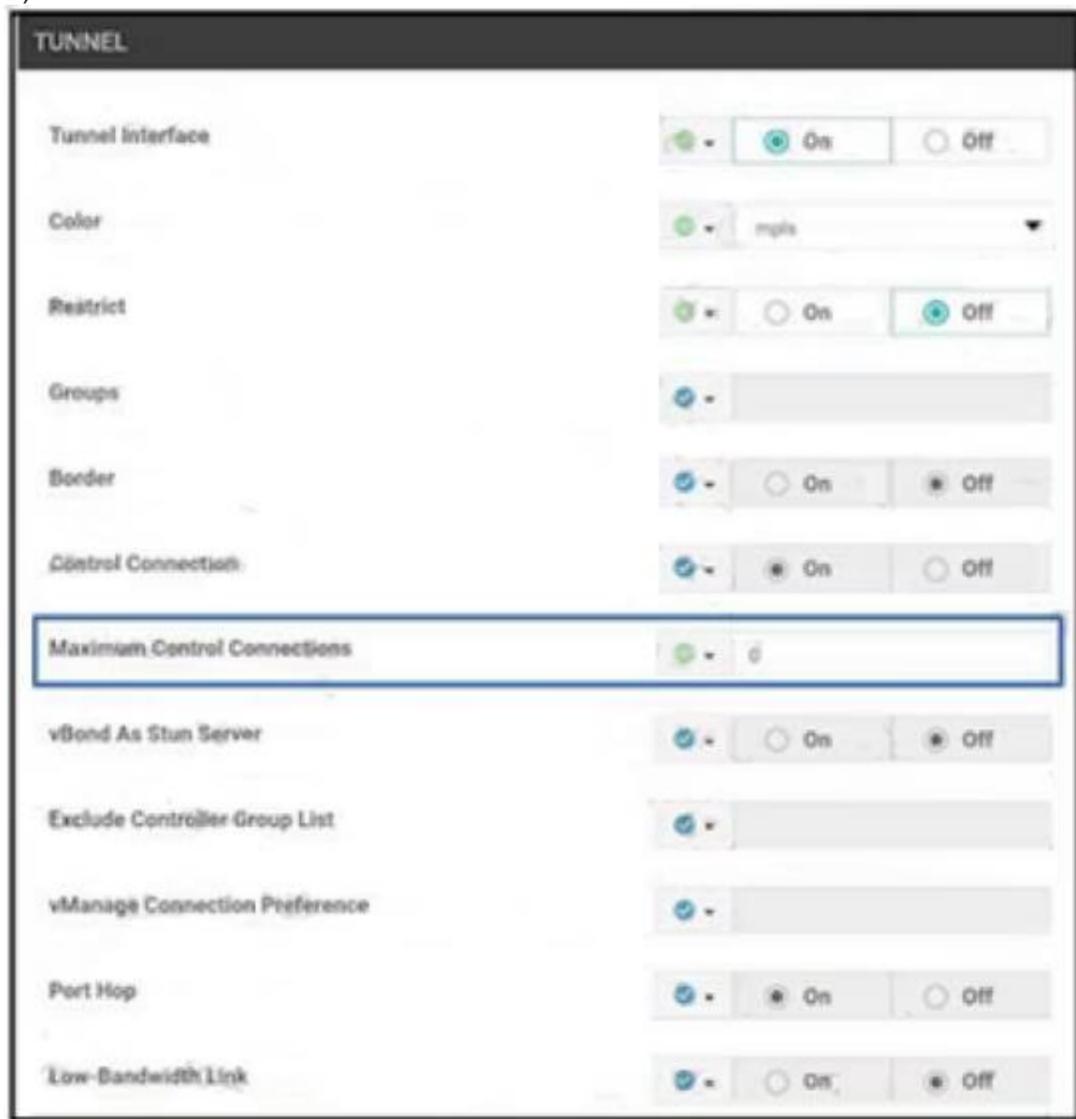
Company E wants to deploy Cisco SD-WAN with controllers in AWS The company's existing WAN is on private MPLS without Internet access to controllers m AWS An Internet circuit is added to a site in addition to the existing MPLS circuit. Which interface template establishes BFD neighbors over both transports?  
 A)



B)



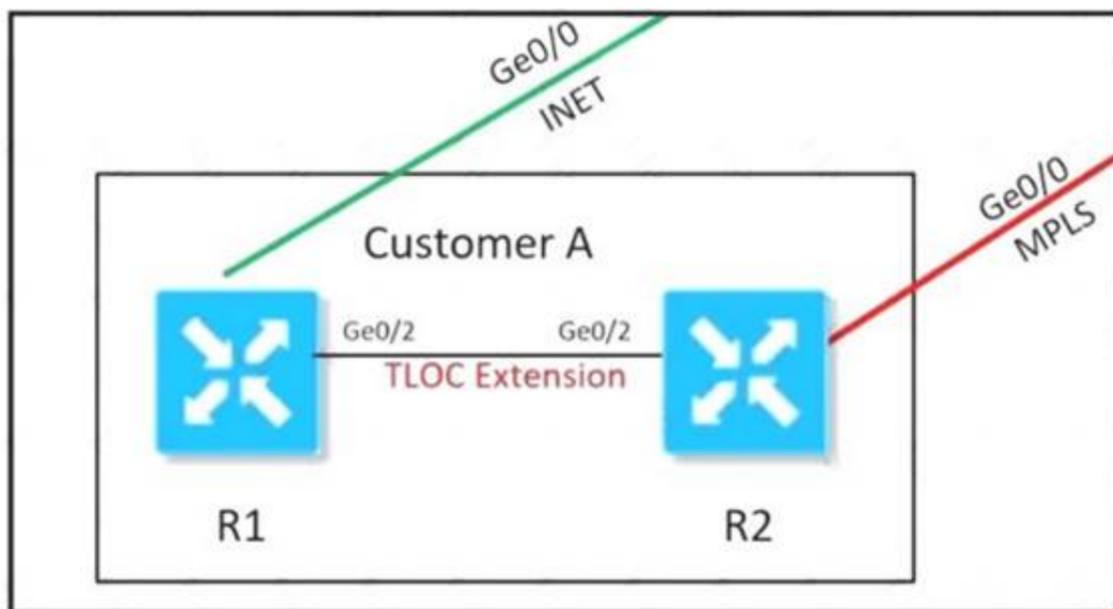
- C)
- Miss
- D)



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

Answer: A

NEW QUESTION 119  
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 121**

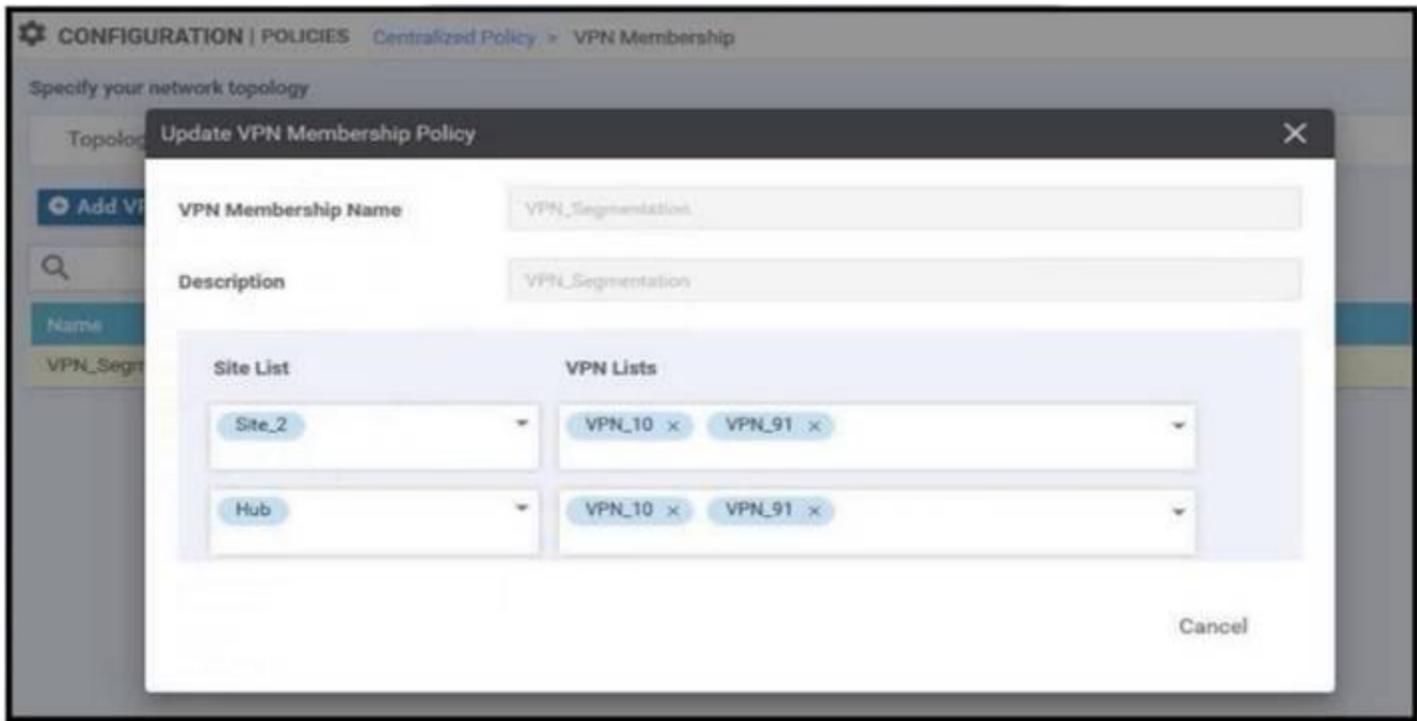
An engineer is configuring a data policy for IPv4 prefixes for a single WAN Edge device on a site with multiple WAN Edge devices How is this policy added using the policy configuration wizard?

- 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**

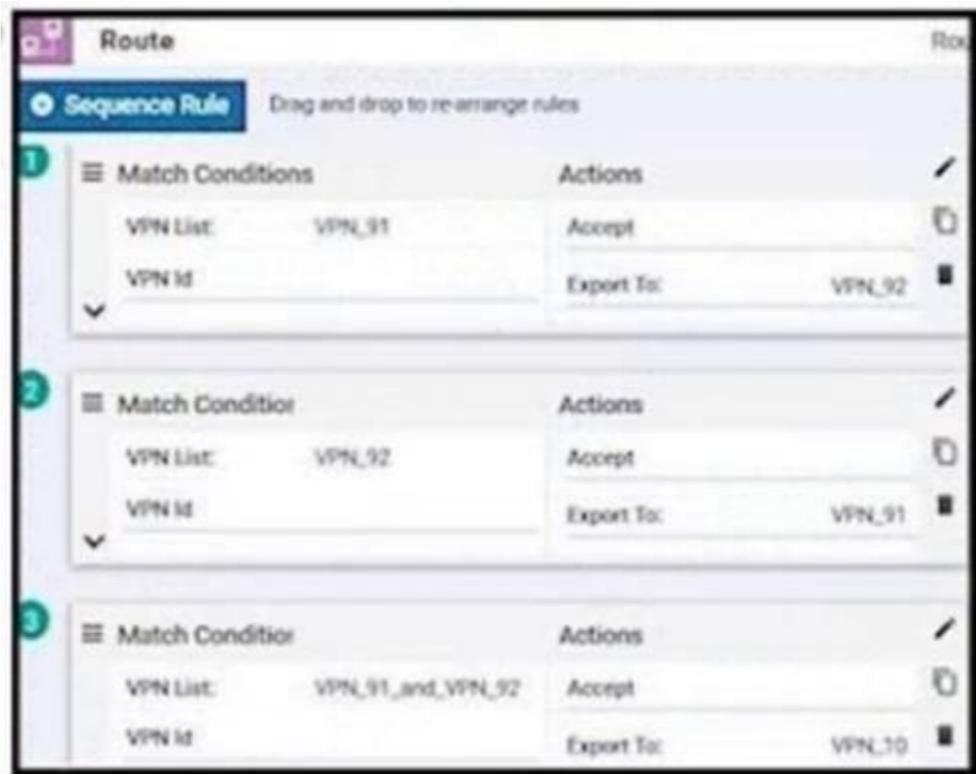
**NEW QUESTION 124**

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 128**

An engineer is tasked to improve throughput for connection-oriented traffic by decreasing round-trip latency. Which configuration will achieve this goal?

- A. turn on "Enable TCP Optimization"
- B. turn off "Enhance ECMP Keying"
- C. turn off "Enable TCP Optimization"
- D. turn on "Enhance ECMP Keying"

Answer: A

**Explanation:**

TCP optimization fine-tunes the processing of TCP data traffic to decrease round-trip latency and improve throughput.

<https://www.cisco.com/c/dam/en/us/td/docs/routers/sdwan/configuration/config-18-2.pdf#page=530>

**NEW QUESTION 131**

Which two products are used to deploy Cisco WAN Edge Router virtual platforms? (Choose two.)

- A. HP ProLiant DL360 Generatton10 running HP-UX
- B. Cisco ENCS 5000 Series
- C. Sun SPARC Node running AIX
- D. Cisco UCS
- E. Sun Enterprise M4000 Server running Sun Solans

Answer: BD

**Explanation:**

<https://www.cisco.com/c/en/us/products/collateral/routers/5400-enterprise-network-compute-system/datasheet-c>

**NEW QUESTION 132**

Which feature template configures OMP?

A)

Section	Parameter	Type	Variable/value
Authentication	Authentication Order	Drop-down	local
Local	User/admin/ Password	Device Specific	user_admin_passwd

B)

Section	Parameter	Type	Variable/value
Basic configuration	Number of paths advertised per prefix	Global	16
	Advertise		
	Radio	Global	Off
	Static	Global	Off

C)

Section	Parameter	Type	Variable/value
Server	Hostname/IP Address	Global	10.4.48.13
	VPN ID	Global	1
	Source interface	Global	loopback0

D)

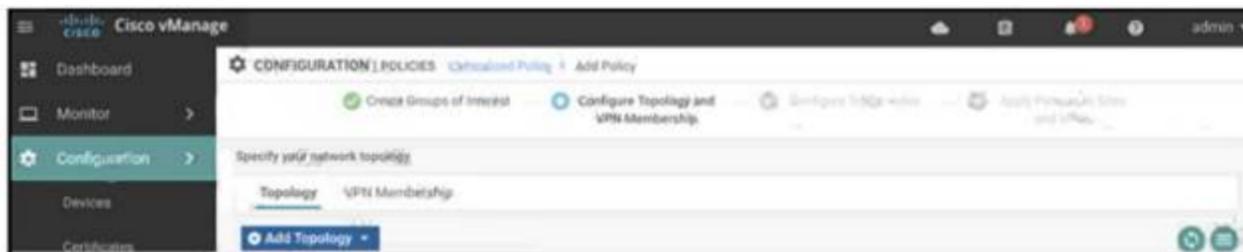
Section	Parameter	Type	Variable/value
Basic configuration	VPN	Global	512
	Name	Global	Management VPN
IPv4 Route	Prefix	Global	0.0.0.0/0
	Gateway	Radio button	Next Hop
	Next Hop	Device Specific	vpn512_mgt_next_hop_ip_addr

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

Answer: B

**NEW QUESTION 136**

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 141**

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 146**

What prohibits deleting a VNF image from the software repository?

- A. if the image is stored by vManage
- B. if the image is referenced by a service chain
- C. if the image is uploaded by a WAN Edge device
- D. if the image is included in a configured policy

**Answer:** D

**NEW QUESTION 150**

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 153**

Which attributes are configured to uniquely identify and represent a TLOC route?

- A. system IP address, link color, and encapsulation
- B. firewall, IPS, and application optimization
- C. site ID, tag, and VPN
- D. origin, originator, and preference

**Answer:** A

**Explanation:**

<https://www.cisco.com/c/dam/en/us/td/docs/solutions/CVD/SDWAN/CVD-SD-WAN-Design-2018OCT.pdf>

**NEW QUESTION 155**

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 156**

Refer to the exhibit.

```
vpn 0
interface ge0/0
ip address 10.1.15.15/24
tunnel-interface
color lte
allow-service dhcp
allow-service dns
allow-service icmp

no allow-service sshd
no allow-service ntp
no allow-service stun
!
no shutdown
shaping-rate
```

Which shaping-rate does the engineer use to shape traffic at 9 Mbps?

- A. 9
- B. 9000
- C. 90000
- D. 9000000

**Answer:** B

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/command/sdwan-cr-book/config-cmd.html#wp421715213>

**NEW QUESTION 159**

How many subnets are necessary in Azure VNet for a WAN Edge device to function in the cloud deployment?

- A. CSR is the WAN Edge device that is supported in the Microsoft cloud
- B. The Microsoft underlay cloud fabric performs the management function.
- C. There must be three subnets in VNet: management, public, and services.
- D. One public subnet is required in VNet
- E. The Microsoft underlay cloud fabric performs all of the routing functions for WAN Edge.
- F. Public and services subnets are required in VNet
- G. The Microsoft underlay cloud fabric performs the management function.

**Answer: D**

**NEW QUESTION 161**

Refer to the exhibit.

The screenshot shows the configuration for a route policy in Azure. The settings are as follows:

- Address Family:** IPv4 (selected), with a toggle set to **On**.
- Address Family:** ipv4-unicast (selected).
- Maximum Number of Prefixes:** Unlimited (selected).
- Route Policy In:** Off (selected).
- Route Policy Out:** On (selected).
- Policy Name:** eBGP\_Community\_Policy (selected).

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 165**

Drag and drop the security terminologies from the left onto the PCI-compliant network features and devices on the right.

transport security	IPS
perimeter security	zone-based firewall and VPNs
segmentation	IPsec VPN
attack prevention	firewall

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Graphical user interface, application Description automatically generated

**NEW QUESTION 168**

What is the behaviour of vBond orchestrator?

- A. It maintains vSmart and WAN Edge routers secure connectivity state
- B. it builds permanent connections with vSmart controllers
- C. it updates vSmart of WAN Edge routers behind NAT devices using OMP.
- D. It builds permanent connections with WAN Edge routers

**Answer:** A

**NEW QUESTION 172**

An administrator is configuring the severity level on the vManage NMS for events that indicate that an action must be taken immediately. Which severity level must be configured?

- A. warning
- B. error
- C. critical
- D. alert

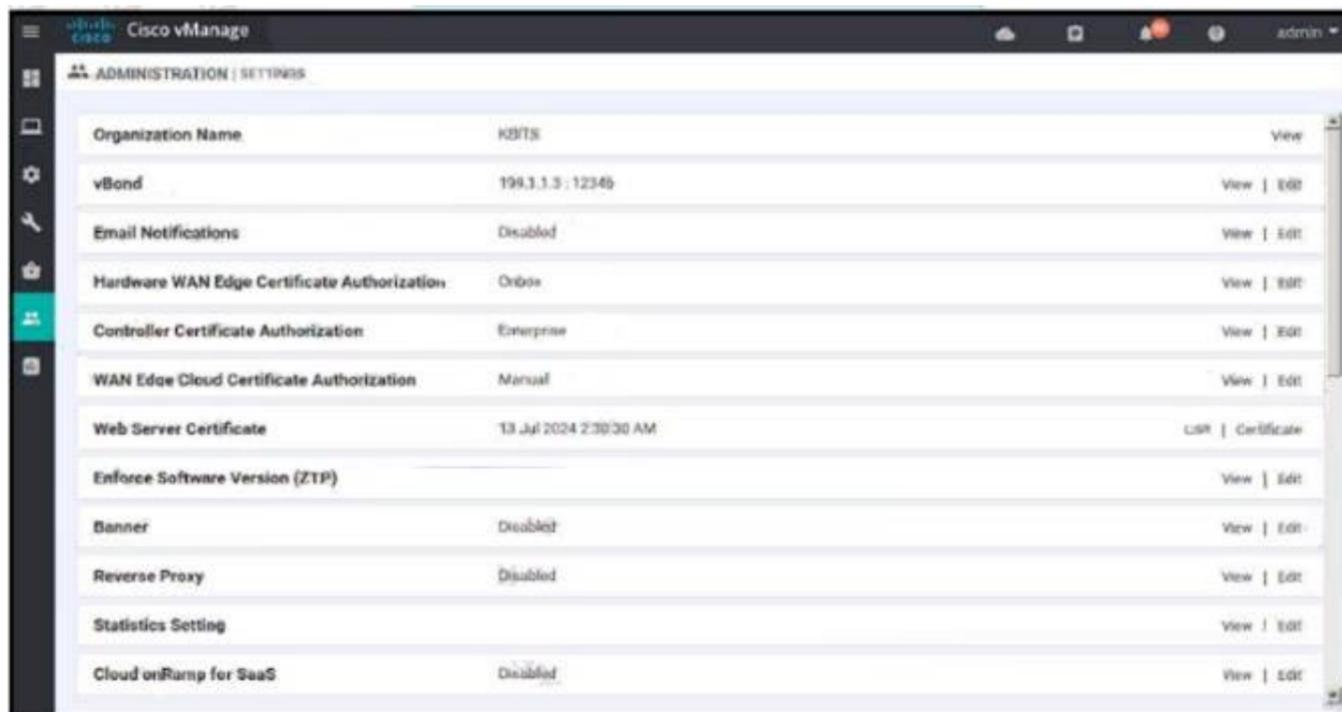
**Answer:** D

**Explanation:**

- **Alert**— Action must be taken immediately (corresponds to syslog severity 1).

**NEW QUESTION 177**

Refer to the exhibit.



Which two configurations are needed to get the WAN Edges registered with the controllers when certificates are used? (Choose two)

- A. Generate a CSR manually within vManage server
- B. Generate a CSR manually on the WAN Edge
- C. Request a certificate manually from the Enterprise CA server
- D. Install the certificate received from the CA server manually on the WAN Edge
- E. Install the certificate received from the CA server manually on the vManage

**Answer:** AE

**Explanation:**

<https://www.cisco.com/c/dam/en/us/td/docs/solutions/CVD/SDWAN/cisco-sd-wan-certificates-deploy-2020aug>.

**NEW QUESTION 178**

A network administrator is configuring an application-aware firewall between inside zones to an outside zone on a WAN edge router using vManage GUI. What kind of Inspection is performed when the "inspect" action is used?

- A. stateful inspection for TCP and UDP
- B. stateful inspection for TCP and stateless inspection of UDP
- C. IPS inspection for TCP and-Layer 4 inspection for UDP
- D. Layer 7 inspection for TCP and Layer 4 inspection for UDP

**Answer:** A

**Explanation:**

Cisco's Enterprise Firewall with Application Awareness uses a flexible and easily understood zone-based model for traffic inspection, compared to the older interface-based model.

A firewall policy is a type of localized security policy that allows **stateful inspection** of TCP, UDP, and ICMP data traffic flows.

**NEW QUESTION 179**

Which configuration step is taken on vManage after WAN Edge list is uploaded?

- A. Send the list to controllers
- B. Enable the ZTP process
- C. Verify the device certificate
- D. Set the device as valid

**Answer:** D

**Explanation:**

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

device state must be moved from staging to valid. In vManage under **Configuration > Certificates > WAN Edge List**, select the WAN Edge device(s) and change the state to **valid** under the **Validity** column and click **Send to Controllers**.

**NEW QUESTION 182**

Which two prerequisites must be met before the Cloud onRamp for IaaS is initiated on vManage to expand to the AWS cloud? (Choose two)

- A. Attach the \*AmazonCreateVPC\* and "Amazon Provision EC2" permission policy to the IAM account
- B. Subscribe to the SD-WAN Edge router AMI in the AWS account
- C. Attach an OSPF feature template to the AWS cloud Edge router template

- D. Attach a device template to the cloud WAN Edge router to be deployed in the AWS
- E. Preprovision the transit VPC in the AWS region

**Answer:** BD

**Explanation:**

The pre-requisites include verifying you meet the AWS prerequisites, including the necessary AWS credentials and subscriptions to the Amazon Machine Image (AMI) instances for Cisco SD-WAN Edge routers (Cisco CSR 1000v virtual routers or Cisco vEdge Cloud); verifying you have available tokens/licenses for at least two additional Cisco SD-WAN Edge Routers within Cisco vManage; and configuring and deploying device templates for the Cisco SD-WAN Edge routers that will be used within the transit VPCs.

Note that the creation of the customer host VPCs, shown in the figure above, is outside the scope of this document. It is assumed that one or more customer host VPCs have already been created.

[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 185**

Refer to the exhibit

PEER TYPE	PEER PROTOCOL	PEER SYSTEM	SITE IP	DOMAIN ID	PEER ID	PRIVATE PRIVATE IP	PRIVATE PORT	PUBLIC PUBLIC IP	PUBLIC PORT	LOCAL LOCAL COLOR	REMOTE STATE	REPEAT LOCAL ERROR	REPEAT 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 187**

Which command disables the logging of syslog messages to the local disk?

- A. no system logging disk enable
- B. no system logging disk local
- C. system logging disk disable
- D. system logging server remote

**Answer:** A

**NEW QUESTION 188**

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 189**

Which two services are critical for zero touch provisioning on-boarding? (Choose two)

- A. SNMP
- B. DNS
- C. DHCP
- D. AAA
- E. EMAIL

**Answer:** BC

**NEW QUESTION 194**

For data plane resiliency, what does the Cisco SD-WAN software implement?

- A. BFD
- B. establishing affinity between vSmart controllers and WAN Edge routers
- C. multiple vBond orchestrators
- D. OMP

**Answer:** A

**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 199**

A network administrator is configuring a centralized control policy based on match action pairs for multiple conditions, which order must be configured to prefer Prefix List over TLOC and TLOC over Origin?

- A. highest to lowest sequence number
- B. nonsequential order
- C. deterministic order
- D. lowest to highest sequence number

**Answer:** D

**Explanation:**

A centralized control policy consists of a series of numbered (ordered) sequences of match-action pairs that are evaluated in order, from lowest sequence number to highest sequence number. When a route or TLOC matches the match conditions, the associated action or actions are taken and policy evaluation on that packets stops. Keep this process in mind as you design your policies to ensure that the desired actions are taken on the items subject to policy.

If a route or TLOC matches no parameters in any of the sequences in the policy configure, it is, by default, rejected and discarded.

**NEW QUESTION 203**

Which configuration changes the packet loss priority from low to highly?

A)

```
policy
  policer cnp-traffic
  rate 1000000
  burst 20000
  plp high
```

B)

```
policy
  policer cnp-traffic
  rate 1000000
  burst 20000
  exceed remark
```

C)

```
policy
 policer ccnp-traffic
  rate 1000000
  burst 20000
  exceed drop
```

D)

```
policy
 policer ccnp-traffic
  rate 1000000
  burst 20000
  exceed high
```

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

**Answer:** B

**Explanation:**

we change the PLP from low to high (configured by the policer exceed remark command).

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/qos/vEdge-20-x/qos-book/forwarding-qos.h>

**NEW QUESTION 205**

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 209**

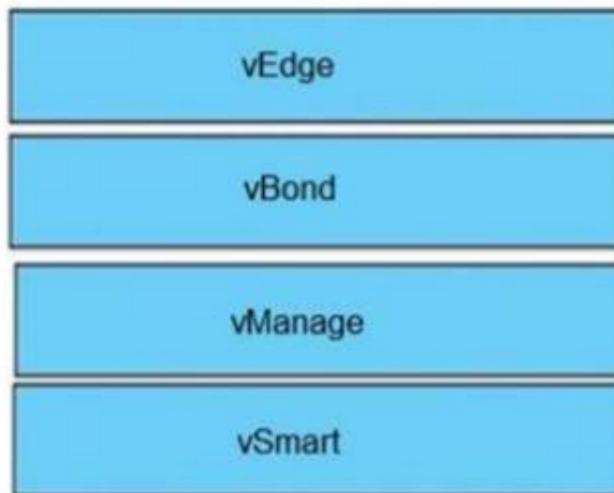
Drag and drop the devices from the left onto the correct functions on the right.

vSmart	establishes a secured data plane
vManage	first point of authentication
vEdge	single pane of glass
vBond	enforces control policies

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**



**NEW QUESTION 210**

In a Cisco SD-WAN network, which component is responsible for distributing route and policy information via the OMP?

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

**Answer: B**

**Explanation:**

The Cisco vSmart Controller maintains a centralized route table that stores the route information, called OMP routes, that it learns from the vEdge routers and from any other Cisco vSmart Controllers in the Cisco SD-WAN overlay network. Based on the configured policy, the Cisco vSmart Controller shares this route information with the Cisco vEdge network devices in the network so that they can communicate with each other.

**NEW QUESTION 212**

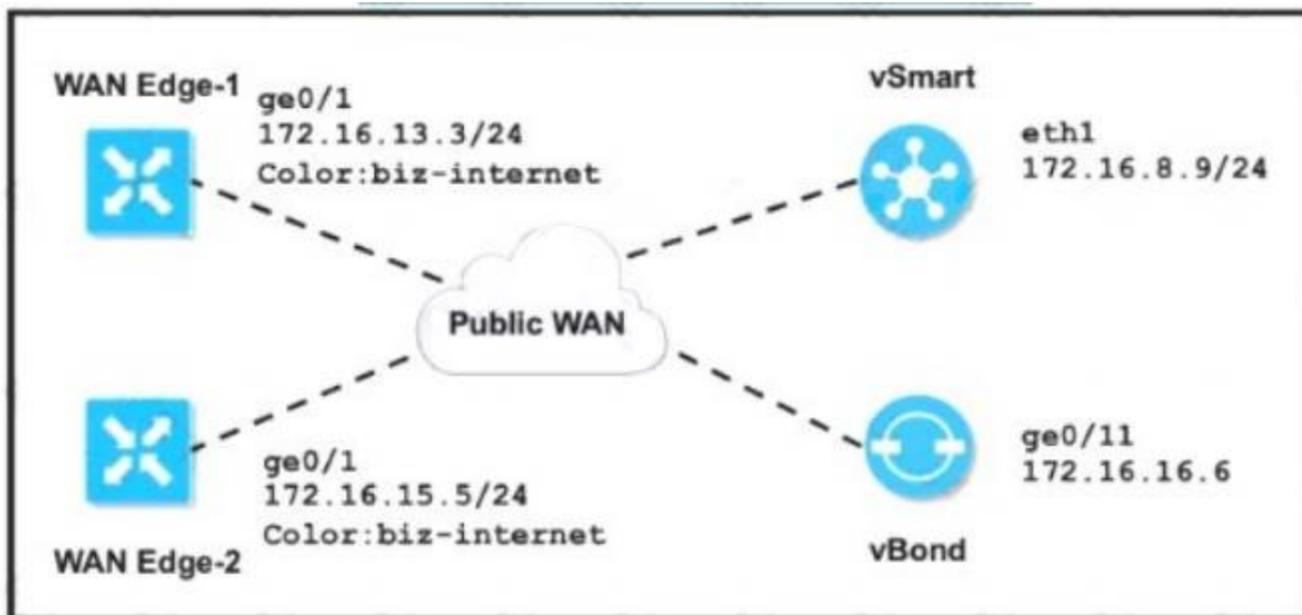
What is the procedure to upgrade all Cisco SD-WAN devices to a recent version?

- 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
- F. then on vSmart
- G. and finally on the Cisco WAN Edge devices.

**Answer: C**

**NEW QUESTION 216**

Refer to the exhibit.



The tunnel interface configuration on both WAN Edge routers is:

```
vpn 0
interface ge0/1
tunnel-interface
encapsulation ipsec
color biz-internet
allow-service dhcp
allow-service dns
allow-service icmp
no allow-service sshd
no allow-service ntp
no allow-service stun
!
no shutdown
```

Which configuration for WAN Edge routers will connect to the Internet?

- vpn 0  
 interface ge0/1  
 ip address 172.16.15.5/24  
 !  
 ip route 0.0.0.0/0 172.16.13.1
- vpn 0  
 interface ge0/1  
 ip address 172.16.13.3/24  
 !  
 ip route 0.0.0.0/0 172.16.13.1
- vpn 0  
 interface ge0/1  
 ip address 172.16.13.3/24  
 !  
 ip route 0.0.0.0/0 172.16.8.1
- vpn 0  
 interface ge0/1  
 ip address 172.16.15.5/24  
 !  
 ip route 0.0.0.0/0 172.16.8.1

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

Answer: B

Explanation:

[https://sdwan-docs.cisco.com/Product\\_Documentation/Software\\_Features/SD-WAN\\_Release\\_16.3/02System\\_a](https://sdwan-docs.cisco.com/Product_Documentation/Software_Features/SD-WAN_Release_16.3/02System_a)

**NEW QUESTION 220**

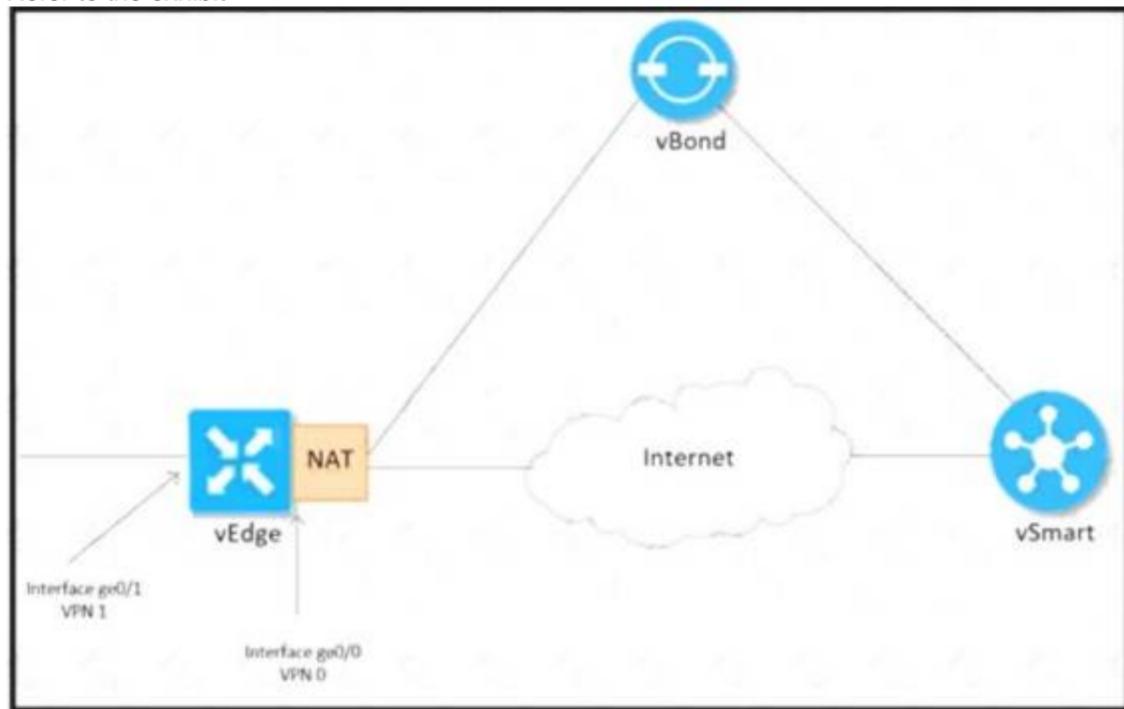
WAN Edge routers are configured manually to use UDP port offset to use nondefault offset values when IPsec tunnels are created. What is the offset range?

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

Answer: C

**NEW QUESTION 223**

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 228**

Drag and drop the steps from the left into the order on the right to upload software on vManage repository that is accessible from maintenance > Software Repository.

Click the repository	Step 1
select vManage to store the software	Step 2
Click Add net software	Step 3
Choose the file and click upload	Step 4

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

**Add an Image to the Software Repository**

To add a software image to the software repository:

1. In Cisco vManage, click **Maintenance > Software Repository**.
2. Click **Add New Software** and select **vManage** from the drop-down menu.
3. In the **Upload Software to vManage** dialog box:
  - a. Click **Browse** and browse to the desired software image.
  - b. Click **Upload**.

<https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/Monitor-And-Maintain/monitor-maintain-bo>

**NEW QUESTION 229**

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 230**

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 235**

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

- A. System Status
- B. Troubleshooting
- C. Real Time
- D. Events

Answer: B

**NEW QUESTION 239**

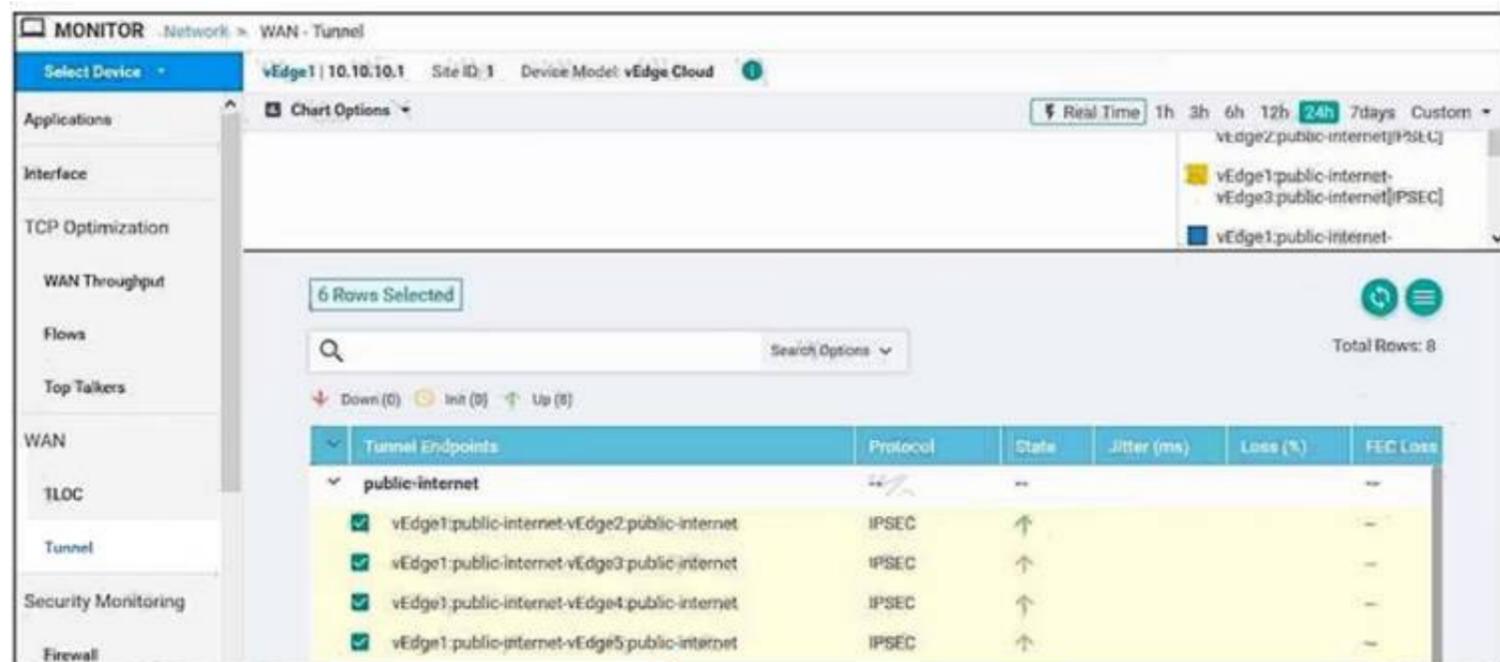
The network administrator is configuring a QoS scheduling policy on traffic received from transport side tunnels on WAN Edge 5000 routers at location 406141498. Which command must be configured on these devices?

- A. cloud-qos
- B. service qos
- C. cloud-mis qos
- D. mis qos

Answer: A

**NEW QUESTION 241**

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 245**

Which issue triggers the Cisco Umbrella resolver to toward DNS requests to the intelligent proxy? Which issue triggers the Cisco Umbrella resolver to toward DNS requests to the intelligent proxy?

- A. A domain is nonexistent.
- B. A domain is block-listed.
- C. A domain is locally reachable.
- D. A domain is grey-listed.

**Answer: D**

**NEW QUESTION 247**

An engineer configures policing with a rate of 125 Bps and a burst rate of 8000 bits, as shown here:

```

policy
  policer p1
  rate
  burst
  exceed drop
!
access-list acl1
  sequence 1
  match
  source-ip 2.2.0.0/16
  destination-ip 10.1.1.0/24 100.1.1.0/24
  destination-port 20 30
  protocol 6 17 23
!
action accept
  policer p1
!
default-action drop
!
vpn 1
  interface ge0/4
  description Policy ID: B413:A88D:76G7::4
  ip address 10.20.24.15/24
  no shutdown
  access-list acl1 out
!
  
```

Which configuration completes this task?

- A. Configure 125 for rate and 1000 for burst.
- B. Configure 1000 for rate and 64000 for burst
- C. Configure 125 for rate and 8000 for burst
- D. Configure 1000 for rate and 1000 for burst

**Answer: D**

**NEW QUESTION 250**

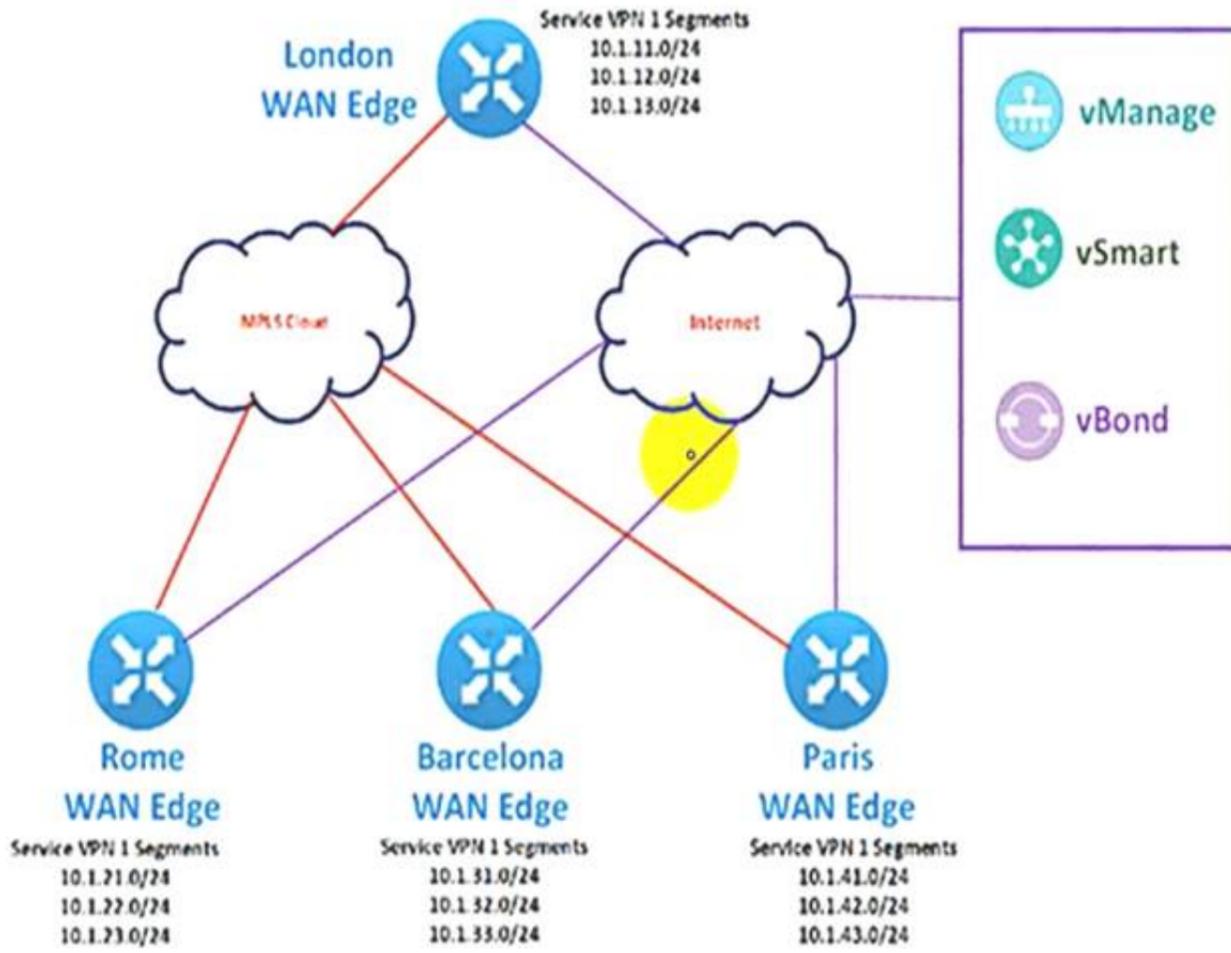
Which two sets of identifiers does OMP carry when it advertises TLOC routes between WAN Edge routers? (Choose two.)

- A. TLOC public and private address, carrier, and preference
- B. source and destination IP address, MAC, and site ID
- C. system IP address, link color, and encapsulation
- D. VPN ID, local site network, and BGP next-hop IP address
- E. TLOC public and private address, tunnel ID, and performance

**Answer: AC**

**NEW QUESTION 254**

Refer to the exhibit.



The Cisco SD-WAN network is configured with a default full-mesh topology. An engineer wants Paris WAN Edge to use the Internet HOC as the preferred TLOC for MSN Messenger and AOL Messenger traffic. Which policy achieves this goal?

A)

B)

C)

D)



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

Answer: A

**NEW QUESTION 258**

An engineering team must prepare a traffic engineering policy where an MPLS circuit is preferred for traffic coming from the Admin VLAN Internet should be used as a backup only. Which configuration fulfill this requirement?

A)

```

policy
data-policy _TE
vpn-list VPN_10
sequence 1
match
source-data-prefix-list Source_Prefix
destination-data-prefix-list Dest_Prefix
action accept
set
vpn 10
tloc-list Hub_TLOCs
default-action reject
!
tloc-list Hub_TLOCs
tloc 10.4.4.4 color mpls encap ipsec preference 300
tloc 10.4.4.4 color public-internet encap ipsec preference 600
    
```

B)

```

policy
data-policy _TE
vpn-list VPN_10
sequence 1
match
source-data-prefix-list Source_Prefix
destination-data-prefix-list Dest_Prefix
action accept
nat use-vpn 0
nat fallback
default-action reject
!
tloc-list Hub_TLOCs
tloc 10.4.4.4 color mpls encap ipsec preference 300
tloc 10.4.4.4 color public-internet encap ipsec preference 600
    
```

C)

```

policy
data-policy _TE
vpn-list VPN_10
sequence 1
match
source-data-prefix-list Source_Prefix
destination-data-prefix-list Dest_Prefix
action accept
set
vpn 10
tloc-list Hub_TLOCs
default-action accept
!
tloc-list Hub_TLOCs
tloc 10.4.4.4 color mpls encap ipsec preference 600
tloc 10.4.4.4 color public-internet encap ipsec preference 300
    
```

D)

```

policy
data-policy _TE
vpn-list VPN_10
sequence 1
match
source-data-prefix-list Source_Prefix
destination-data-prefix-list Dest_Prefix
action accept
set
vpn 512
tloc-list Hub_TLOCs
default-action accept
!
tloc-list Hub_TLOCs
tloc 10.4.4.4 color mpls encaps ipsec preference 600
tloc 10.4.4.4 color public-internet encaps ipsec preference 300
    
```

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

**Answer: C**

**NEW QUESTION 261**

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 265**

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 266**

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 270**

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 eth0 interfaces on vManage and vSmart.
- D. Reconfigure the system-ip parameter on vSmart to 11.1.1.2.

**Answer: B**

**NEW QUESTION 273**

What is an attribute of TLOC'?

- A. encryption
- B. local preference
- C. tag
- D. service

**Answer: C**

**NEW QUESTION 278**

Refer to exhibit.

PEER	PEER	PEER	SITE	DOMAIN	LOCAL	REMOTE	REPEAT	REMOTE			
INSTANCE	TYPE	PRIVATE	SYSTEM	PUBLIC	PORT	PUBLIC	PORT	REMOTE			
COLOR	STATE	PROTOCOL	IP	ID	PRIVATE IP	IP	PORT	REMOTE			
		ERROR	ERROR	ID	PRIVATE IP	PORT	PUBLIC IP	REMOTE			
				COUNT							
				DOWNTIME							
0	vBond	dtls	0.0.0.0	0	0	192.168.0.231	12345	192.168.0.231	12345	Default	top
	p_down	CTRLERR	NOERR	0	0	2019-04-01T19:24:32+0200					

An engineer is troubleshooting tear down of control connections even though a valid Certificate Serial Number is entered Which two actions resolve the Issue? (Choose two)

- A. Enter a valid serial number on the controllers for a given device
- B. Remove the duplicate IP in the network.
- C. Enter a valid product ID (model) on the PNP portal
- D. Match the serial number file between the controllers
- E. Restore network reachability for the controller

**Answer:** CD

**Explanation:**

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

**NEW QUESTION 281**

.....

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