



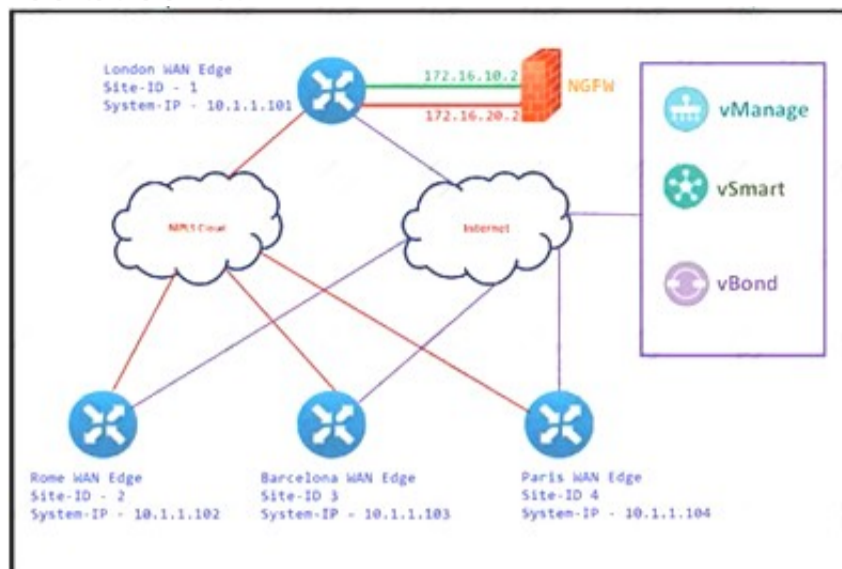
Cisco

Exam Questions 300-415

Implementing Cisco SD-WAN Solutions (ENSDWI)

NEW QUESTION 1

Refer to the exhibit.



The Cisco SD-WAN is deployed using the default topology. The engineer wants to configure a service insertion policy such that all data traffic between Rome to Paris is forwarded through the NGFW located in London. Which configuration fulfills this requirement, assuming that the Service VPN ID is 1?

A)

```

London WAN Edge
vpn 1
 service netvc1 address 172.16.10.2
 service netvc2 address 172.16.20.2

vSmart Policy
policy
lists
 site-list ROME
 site-id 2
 site-list PARIS
 site-id 4
control-policy NGFW-SI
 sequence 1
  match route
  site-id ROME
  action accept
  set service netvc1 vpn 1
 sequence 2
  match route
  site-id PARIS
  action accept
  set service netvc2 vpn 1
 default-action accept
!
apply-policy
 site-list ROME
 control-policy NGFW-SI out
!
 site-list PARIS
 control-policy NGFW-SI out

```

B)

```

London WAN Edge
vpn 1
 service netvc1 address 172.16.10.2
 service netvc2 address 172.16.20.2

vSmart Policy
policy
lists
 site-list ROME
 site-id 2
 site-list PARIS
 site-id 4
control-policy NGFW-SI
 sequence 1
  match route
  site-id ROME
  action accept
 sequence 2
  match route
  site-id PARIS
  action accept
 default-action accept
!
apply-policy
 site-list ROME control-policy NGFW-SI out

```

C)

```
○ ROME WAN Edge
service FW address 10.1.1.101

PARIS WAN Edge
service FW address 10.1.1.101

vSmart Policy
policy
lists
  site-list ROME
  site-id 2
  site-list PARIS
  site-id 4
control-policy NGFW-SI
sequence 1
  match route
  site-id ROME
  action accept
  set service netsvc1 vpn 1
sequence 2
  match route
  site-id PARIS
  action accept
  set service netsvc2 vpn 1
  default-action accept
!
apply-policy
site-list ROME
control-policy NGFW-SI out
!
site-list PARIS
control-policy NGFW-SI out
```

D)

```
○ ROME WAN Edge
service FW address 10.1.1.101

PARIS WAN Edge
service FW address 10.1.1.101

vSmart Policy
policy
lists
  site-list ROME
  site-id 2
  site-list PARIS
  site-id 4
control-policy NGFW-SI
sequence 1
  match route
  site-id ROME
  action accept
sequence 2
  match route
  site-id PARIS
  action accept
  default-action accept
!
apply-policy
site-list ROME control-policy NGFW-SI out
```

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

Answer: A

NEW QUESTION 2

An engineer is configuring a centralized policy to influence network route advertisement. Which controller delivers this policy to the fabric?

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

Answer: A

Explanation:

vSmart controllers are the centralized brain of the solution; they implement policies and connectivity between SD-WAN branches. The centralized policy engine in Cisco vSmart controllers provides policy constructs to manipulate routing information, access control, segmentation, extranets, and service chaining.

NEW QUESTION 3

Which component of the Cisco SD-WAN secure extensible network provides a single pane of glass approach to network monitoring and configuration?

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

Answer: C

Explanation:

Cisco vManage provides a single-pane-of-glass management to manage all controller components and both enterprise and extended enterprise WAN edge devices. The comprehensive vManage GUI has dashboard, monitor, configuration, tools, maintenance, administration, and analytics as the top-level menus.

NEW QUESTION 4

What is the role of the Session Traversal Utilities for NAT server provided by the vBond orchestrator?

- A. It facilitates SD-WAN toners and controllers to discover their own mapped or translated IP addresses and port numbers
- B. It prevents SD-WAN Edge routers from forming sessions with public transports among different service providers
- C. It facilitates SD-WAN Edge routers to stay behind a NAT-enabled firewall while the transport addresses of the SD-WAN controller are unNAT-ed
- D. It allows WAN Edge routers to form sessions among MPLS TLOCs using only public IP addresses

Answer: C

NEW QUESTION 5

An engineer is configuring a WAN Edge router for DIA based on matching QoS parameters. Which two actions accomplish this task? (Choose two.)

- A. Apply a QoS map policy.
- B. Configure a control policy.
- C. Configure a centralized data policy.
- D. Configure NAT on the transport interface.
- E. Apply a data policy on WAN interface.

Answer: CD

Explanation:

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

NEW QUESTION 6

Which hardware component is involved in the Cisco SD-WAN authentication process for ISR platforms?

- A. TPMD
- B. ZTP
- C. TPC
- D. SUDI

Answer: D

NEW QUESTION 7

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 8

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:

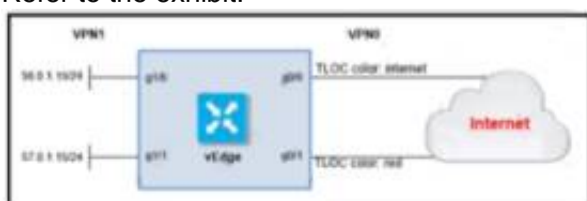
- Using Cisco vManage:

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 9

Refer to the exhibit.



The ge0/0 interface connects to a 30-MB link. A network administrator wants to always have 10 MB available for high priority traffic. When lower-priority traffic

busts exceed 20 MB. Traffic should be redirected to the second WAN interface ge0/1. Which set of configurations accomplishes this task?

A)

```
policy
  policer bursty-traffic
    rate 10000
    burst 20000
    exceed drop
  access-list policer-bursty-traffic
    sequence 10
      match
        source-ip 56.0.1.0/24
      action accept
      policer bursty-traffic
    default-action accept
```

B)

```
policy
  policer bursty-traffic
    rate 100000
    burst 20000
    exceed continue
  access-list policer-bursty-traffic
    sequence 10
      match
        source-ip 56.0.1.0/24
      action accept
      policer bursty-traffic
    default-action accept
```

C)

```
policy
  policer bursty-traffic
    rate 1000000
    burst 20000
    exceed remark
  access-list policer-bursty-traffic
    sequence 10
      match
        source-ip 56.0.1.0/24
      action accept
      policer bursty-traffic
    default-action accept
```

D)

```
policy
  policer bursty-traffic
    rate 10
    burst 20
    exceed remark
  access-list policer-bursty-traffic
    sequence 10
      match
        source-ip 56.0.1.0/24
      action accept
      policer bursty-traffic
    default-action accept
```

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

Answer: C

Explanation:

```
policy
  policer bursty-traffic
    rate 1000000
    burst 20000
    exceed remark
  access-list policer-bursty-traffic
    sequence 10
    match
      source-ip 56.0.1.0/24
    action accept
    policer bursty-traffic
  default-action accept
```

<https://www.cisco.com/c/dam/en/us/td/docs/routers/sdwan/configuration/config-18-4.pdf#page=546>

NEW QUESTION 10

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 10

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 13

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:

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

NEW QUESTION 15

Which policy configuration must be used to classify traffic as it enters the branch WAN Edge router to be put into the desired output queue?

A)

```
Policy
class-map
class p1 queue 2
```

B)

```
qos-map Q_Map
qos-scheduler p1
```

C)

```
Policy
qos-scheduler QOS
class p1
bandwidth-percent 20
buffer-percent 20
drops red-drop
```

D)

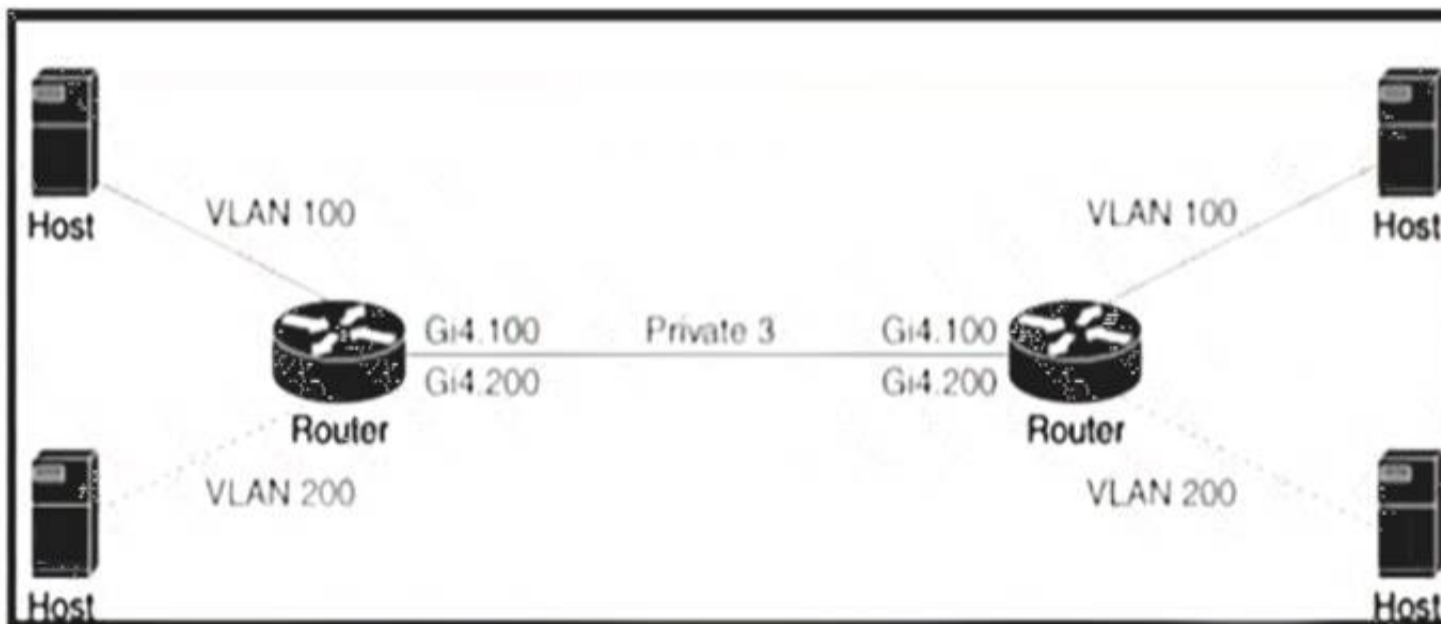
```
Policy
access-list QoS
sequence 1
match
destination-ip 10.0.0.0/8
!
action accept
class p1
```

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

Answer: D

NEW QUESTION 17

Refer to the exhibit



An engineer is configuring a QoS policy to shape traffic for VLAN 100 on a subinterface Which policy configuration accomplishes the task?

A)

```
policy-map shape_GigabitEthernet4.100
class class-default
service-policy xyz_QoS-model
shape average 100000000
!
interface GigabitEthernet4.100
encapsulation dot1Q 200
service-policy output shape_GigabitEthernet4.100
```

B)

```
policy-map shape_GigabitEthernet4.100
class class Queue0
service-policy xyz_QoS-model
shape average 100000000
!
interface GigabitEthernet4.100
encapsulation dot1Q 200
service-policy output shape_GigabitEthernet4.100
```

C)

```
policy-map shape_GigabitEthernet4.200
class class-default
service-policy xyz_QoS-model
shape average 100000000
!
interface GigabitEthernet4.100
encapsulation dot1Q 100
service-policy output shape_GigabitEthernet4.200
```

D)

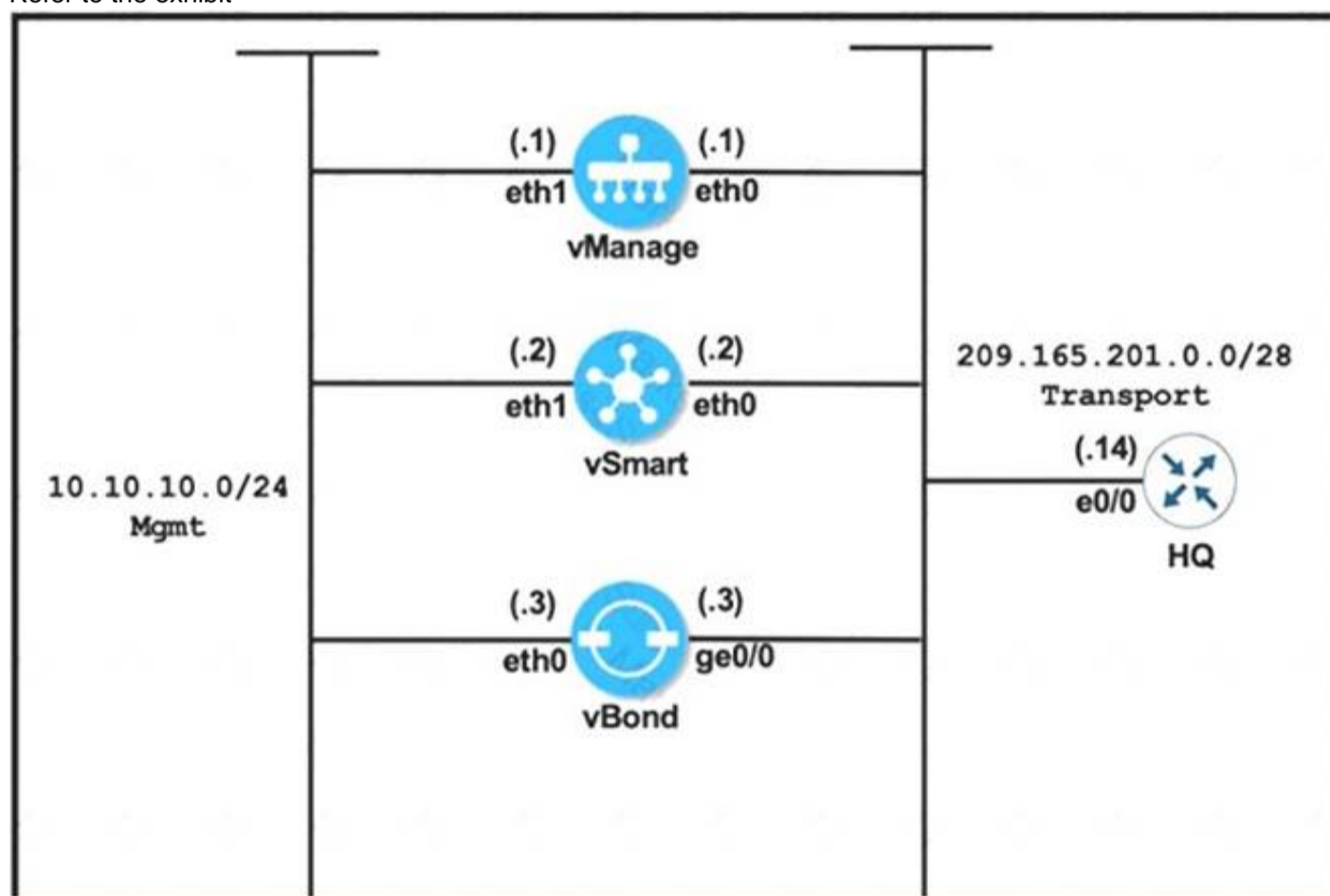
```
policy-map shape_GigabitEthernet4.200
class class Queue0
service-policy xyz_QoS-model
shape average 100000000
!
interface GigabitEthernet4.100
encapsulation dot1Q 100
service-policy output shape_GigabitEthernet4.100
```

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

Answer: C

NEW QUESTION 20

Refer to the exhibit



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

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 viptela.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 24

What are the two impacts of losing vManage connectivity to fabric in the Cisco SD-WAN network? (Choose two)

- A. Policy changes propagation stops
- B. Statistics collection stops
- C. BFD peering between WAN Edge devices are unestablished
- D. Creation of templates is impossible
- E. IPsec tunnels tear down for WAN Edge devices.

Answer: AB

NEW QUESTION 27

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 31

A network administrator is bringing up one WAN Edge for branch connectivity. Which types of tunnels form when the WAN edge router connects to the SD-WAN fabric?

- A. DTLS or TLS tunnel with vBond controller and IPsec tunnel with vManage controller.
- B. DTLS or TLS tunnel with vBond controller and IPsec tunnel with other WAN Edge routers.
- C. DTLS or TLS tunnel with vSmart controller and IPsec tunnel with other Edge routers.
- D. DTLS or TLS tunnel with vSmart controller and IPsec tunnel with vBond controller.

Answer: C

Explanation:

The WAN Edge routers form a permanent Datagram Transport Layer Security (DTLS) or Transport Layer Security (TLS) control connection to the vSmart controllers and connect to both of the vSmart controllers over each transport. The routers also form a permanent DTLS or TLS control connection to the vManage server, but over just one of the transports. The WAN Edge routers securely communicate to other WAN Edge routers using IPsec tunnels over each transport. The Bidirectional Forwarding Detection (BFD) protocol is enabled by default and runs

NEW QUESTION 33

Drag and drop the devices from the left into order on the right to upgrade the software from version 19 to version 20.

WAN Edge	1
vBond	2
vManage	3
vSmart	4

- A. Mastered
- B. Not Mastered

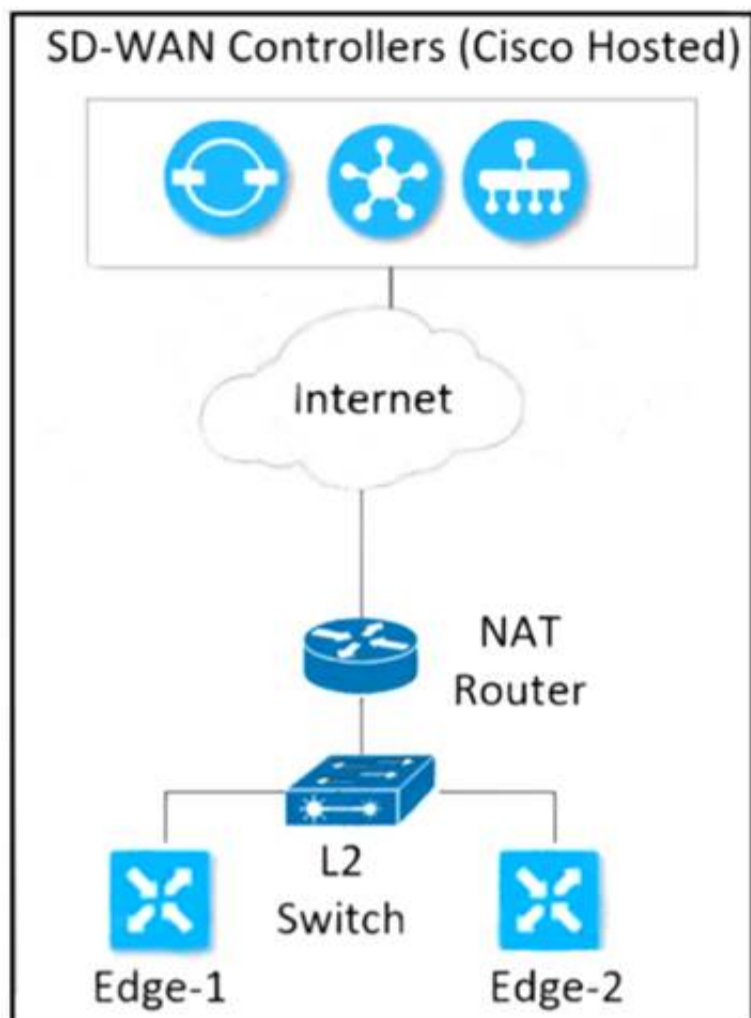
Answer: A

Explanation:

WAN Edge	vManage	1
vBond	vBond	2
vManage	vSmart	3
vSmart	WAN Edge	4

NEW QUESTION 34

Refer to the exhibit



Which configuration must the engineer use to form underlay connectivity for the Cisco SD-WAN network?

A)

```

R1
vpn 512
interface eth0
ip address 10.0.0.21/24
no shutdown
!
ip route 0.0.0.0/0 10.0.0.254
  
```

```

R2
vpn 512
interface eth0
ip address 10.0.0.2/24
no shutdown
!
ip route 0.0.0.0/0 10.0.0.254
  
```

B)

```

R1
vpn 10
interface ge0/2
ip address 10.10.10.9/29
no shutdown
!
ip route 0.0.0.0/0 10.10.10.11
  
```

```

R2
vpn 10
interface ge0/2
ip address 10.10.10.10/29
no shutdown
!
ip route 0.0.0.0/0 10.10.10.11
  
```

C)

```

R1
vpn 0
interface 10ge0/0
ip address 10.50.0.2/29
no shutdown
!
ip route 0.0.0.0/0 10.50.0.3
  
```

```

R2
vpn 0
interface 10ge0/0
ip address 10.50.0.1/29
no shutdown
!
ip route 0.0.0.0/0 10.50.0.3
  
```

D)

```
R1
vpn 0
interface ge0/0
ip address 10.50.0.2/30
tunnel-interface
!
ip route 0.0.0.0/0 10.50.0.4

R2
vpn 0
interface ge0/0
ip address 10.50.0.3/30
tunnel-interface
!
ip route 0.0.0.0/0 10.50.0.4
```

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

Answer: C

NEW QUESTION 39

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 42

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

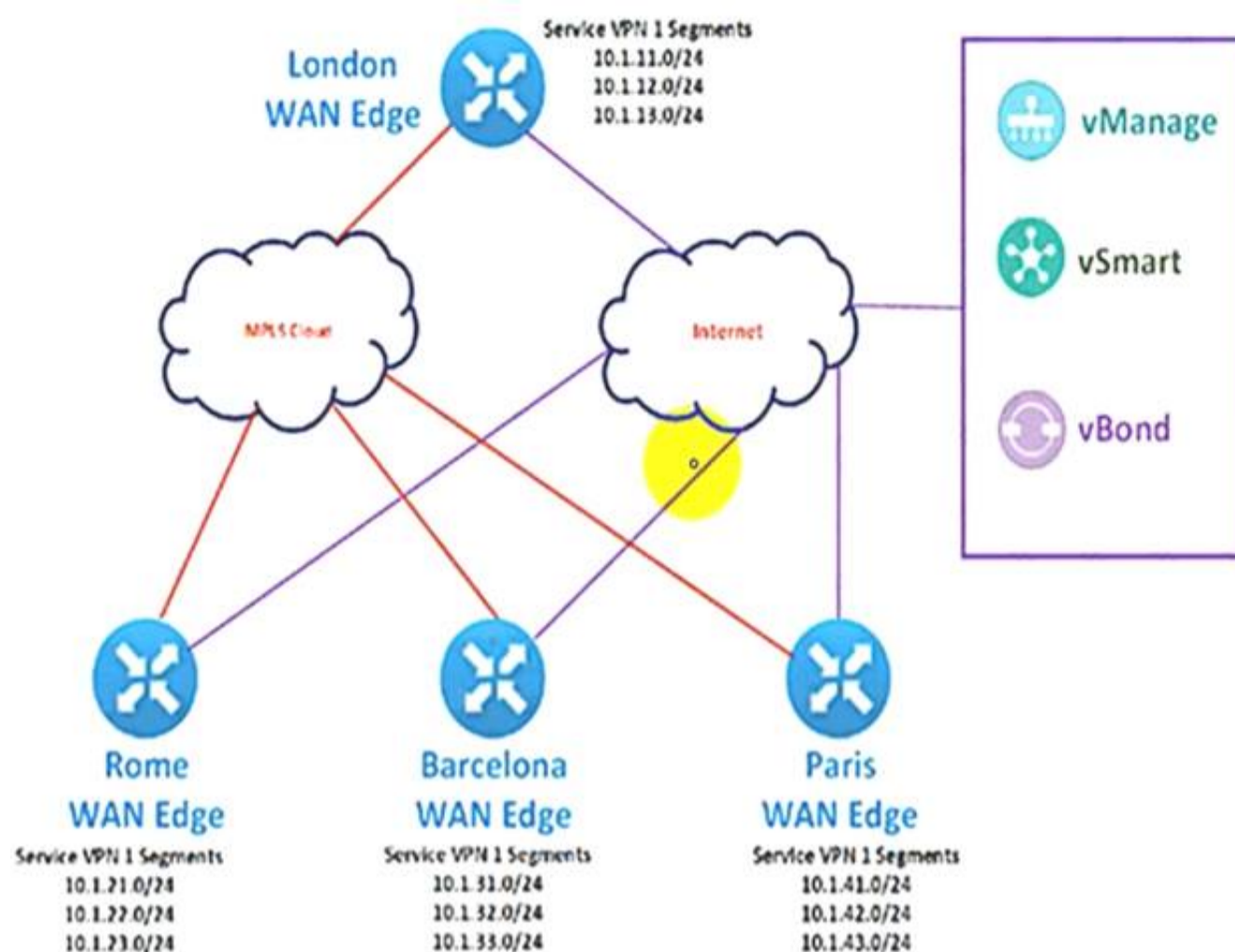
- ☒ vpn vpn-id
interface interface-name
shaping-rate 1000000
- ☐ vpn vpn-id
interface interface-name
shaping-rate 1000
- ☐ interface interface-name
vpn vpn-id
shaping-rate 1000000
- ☐ interface interface-name
vpn vpn-id
shaping-rate 1000

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

Answer: B

NEW QUESTION 47

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 50

A network engineer must configure all branches to communicate with each other through the Service Chain Firewall located at the headquarters site. Which configuration allows the engineer to accomplish this task?

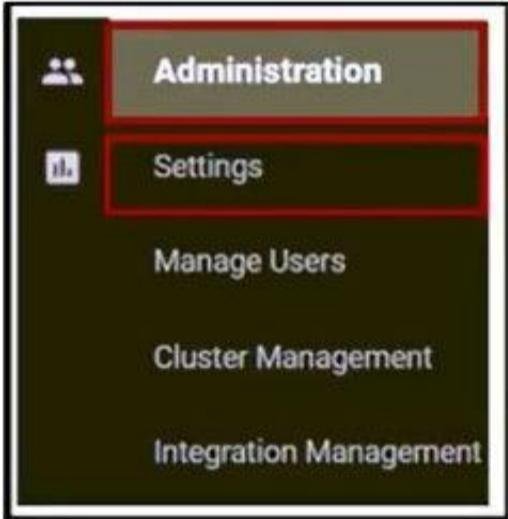
A)



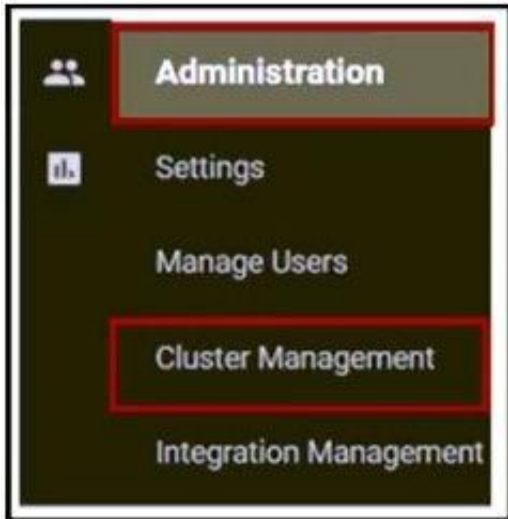
B)



C)



D)



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

D. Option D

Answer: B

NEW QUESTION 54

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 57

When the VPN membership policy is being controlled at the vSmart controller, which policy disallows VPN 1 at sites 20 and 30?

A)

```
apply-policy
site-list 20-30
vpn-membership disallow-vpn 1
!
!
policy
lists
site-list 20-30
site-id 20
site-id 30
!
vpn-list VPN 1
vpn 10
vpn 20
!
!
vpn-membership disallow-vpn 1
sequence 10
match
vpn-list VPN 1
!
action reject
!
!
default-action accept
```

B)

```
policy
lists
  site-list 20-30
  site-id 20
  site-id 30
!
prefix-list drop-list
ip-prefix 10.200.1.0/24
!
!
control-policy drop-unwanted-routes
sequence 10
match route
  prefix-list drop-list
!
action reject
!
!
default-action accept
```

C)

```
apply-policy
  site-list 20-30
  vpn-membership disallow-vpn1
!
!
policy
lists
  site-list 20-30
  site-id 20
  site-id 30
!
!
vpn-membership disallow-vpn1
sequence 10
match vpn-id 1
action reject
!
!
default-action accept
```

D)

```
policy
lists
  site-list BP-Sites
    site-id 10
    site-id 20
  vpn-list All-BPs
    vpn 100
    vpn 101
  vpn-list Enterprise-BP
    vpn 200
control-policy import-BPs-to-Enterprise
sequence 10
match route
  vpn-list All-BPs
!
action accept
  export-to vpn-list Enterprise-BP
!
!
!
default-action accept
```

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

Answer: C

NEW QUESTION 58

Which port is used for vBond under controller certificates if no alternate port is configured?

- A. 12345
- B. 12347
- C. 12346
- D. 12344

Answer: C

Explanation:

vSmart and vManage are normally installed behind NAT device, so port hopping is not needed. vBond always uses to other Viptela devices using port 12346 and they never use port hopping.

NEW QUESTION 59

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 64

Which protocol detects path status (up/down), measures loss/latency/jitter, and measures the quality of the IPsec tunnel MTU?

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

Answer: C

NEW QUESTION 66

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 69

A company deploys a Cisco SD-WAN solution but has an unstable Internet connection. When the link to vSmart comes back up, the WAN Edge router routing table is not refreshed, and some traffic to the destination network is dropped. The headquarters is the hub site, and it continuously adds new sites to the SD-WAN network. An engineer must configure route refresh between WAN Edge and vSmart within 2 minutes. Which configuration meets this requirement?

- ☐

omp

no shutdown

graceful-restart

timers

eor-timer 120
- ☐

omp

no shutdown

no graceful-restart
- ☐

omp

no shutdown

graceful-restart

timers

holdtime 120
- ☐

omp

no shutdown

graceful-restart

timers

advertisement-interval 120

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

Answer: A

NEW QUESTION 71

Two sites have one WAN Edge each WAN Edge has two public TLOCs with no restriction configured. There is full reachability between the TLOCs. How many data tunnels are formed on each Edge router?

- A. 2
- B. 8
- C. 6
- D. 4

Answer: D

NEW QUESTION 73

Refer to the exhibit.

PEER											CONTROLLER		GROUP
PEER	PEER	PEER		SITE	DOMAIN	PEER	PEER	PEER	PUBLIC		LOCAL	COLOR	STATE
TYPE	PROTOCOL	SYSTEM	IP	ID	ID	PRIVATE	PRIVATE	PUBLIC	PORT	IP	PORT		
UPTIME	ID												
vbond	dtls	-	0	0	1.3.25.25	12346	1.3.25.25	12346	gold	connect			0
vbond	dtls	-	0	0	1.3.25.25	12346	1.3.25.25	12346	silver	connect			0

An engineer is troubleshooting a control connection Issue. What does "connect" mean in this how control connections output?

- A. Control connection is down
- B. Control connection is connected
- C. Control connection attempt is in progress
- D. Control connection is up

Answer: C

NEW QUESTION 78

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 82

Refer to the exhibit

```
vManage#show control local-properties
personality                vmanage
sp-organization-name       Cisco
organization-name          Cisco
system-ip                  10.1.1.10
root-ca-chain-status       Installed
certificate-status          Installed
```

A vBond controller was added to the controller list with the same Enterprise Root CA certificate as vManage. The two controllers can reach each other via VPNO and share the same organization name, but the control connection is not initiated- Which action resolves the issue?

- A. Synchronize the WAN Edge list on vManage with controllers.
- B. Configure NTP on both controllers to establish a connection.
- C. Configure a valid system IP on the vBond controller.
- D. Configure a valid vBond IP on vManage.

Answer: D

NEW QUESTION 87

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 90

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 OM
- E. 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 93


Refer to the exhibit

MONITOR | AUDIT LOG

Filter ▾ Module: vManage Root CA

1h 3h 6h 12h 24h 7days Custom ▾



 Search Options ▾ Total Rows: 10

Timestamp	User	User IP	Message	Module	Feature	Device	Task ID	
18 Dec 2020 ...	system	10.1.1.1	Uploaded root ca uaid list file on vBond-d3aa12f...	vmanage-roo...	vmanage-root-ca	10.3.3.3	d3aa12fd-b024-4246-899a-...	...
18 Dec 2020 ...	system	10.1.1.1	Transferred root ca uaid list file to vBond-d3aa12...	vmanage-roo...	vmanage-root-ca	10.3.3.3	d3aa12fd-b024-4246-899a-...	...
18 Dec 2020 ...	system	10.1.1.1	Installed root cert chain on vBond-d3aa12fd-b02...	vmanage-roo...	vmanage-root-ca	10.3.3.3	d3aa12fd-b024-4246-899a-...	...
18 Dec 2020 ...	system	10.1.1.1	Transferred root cert chain file to vBond-d3aa12f...	vmanage-roo...	vmanage-root-ca	10.3.3.3	d3aa12fd-b024-4246-899a-...	...
18 Dec 2020 ...	system	10.1.1.1	Installed root cert chain on vSmart-5478ad3f-04...	vmanage-roo...	vmanage-root-ca	10.2.2.2	5478ad3f-04e0-4d0f-b654-...	...
18 Dec 2020 ...	system	10.1.1.1	Transferred root cert chain file to vSmart-5478ad...	vmanage-roo...	vmanage-root-ca	10.2.2.2	5478ad3f-04e0-4d0f-b654-...	...
18 Dec 2020 ...	system	10.1.1.1	Uploaded root ca uaid list file on vBond-d3aa12f...	vmanage-roo...	vmanage-root-ca	10.3.3.3	d3aa12fd-b024-4246-899a-...	...
18 Dec 2020 ...	system	10.1.1.1	Installed root cert chain on vManage-6842d5cf...	vmanage-roo...	vmanage-root-ca	10.1.1.1	6842d5cf-ce74-41a0-9ff5-...	...
18 Dec 2020 ...	system	10.1.1.1	Transferred root ca uaid list file to vBond-d3aa12...	vmanage-roo...	vmanage-root-ca	10.3.3.3	d3aa12fd-b024-4246-899a-...	...
18 Dec 2020 ...	system	10.1.1.1	Transferred root cert chain file to vManage-6842...	vmanage-roo...	vmanage-root-ca	10.1.1.1	6842d5cf-ce74-41a0-9ff5-...	...

vManage# show certificate installed

Server certificate

Certificate:

Data:

Version: 1 (0x0)

Serial Number:

d0:d1:f0:e0:63:52:c9:3a

Signature Algorithm: sha256WithRSAEncryption

Issuer: C=UK, ST=ENG, L=London, O=ABC, CN=SDWAN.lab

Validity

Not Before: Jul 30 19:42:30 2020 GMT

Not After : Jul 30 19:42:30 2021 GMT

Subject: C=US, ST=California, L=San Jose, OU=ABC,
O=vIPtela Inc, CN=vmanage-6842d5cf-ce74-41a0-9ff5-
10e810f9ddab-0.vm

Subject Public Key Info:

Public Key Algorithm: rsaEncryption

Public-Key: (2048 bit)

A small company was acquired by a large organization. As a result, the new organization decided to update information on their Enterprise RootCA and generated a new certificate using openssl. Which configuration updates the new certificate and issues an alert in vManage Monitor | Events Dashboard?

A)

Step1: Generate the RootCA Certificate

```
openssl x509 -req -in vmanage_csr \
  -CA ROOTCA.pem -CAkey ROOTCA.key -CAcreateserial \
  -out vmanage.crt -days 365 -sha256
```

Step2: Install the RootCA Certificate

vManage > Administration > Settings > Controller Certificate Authorization >
Enterprise Root Certificate

B)

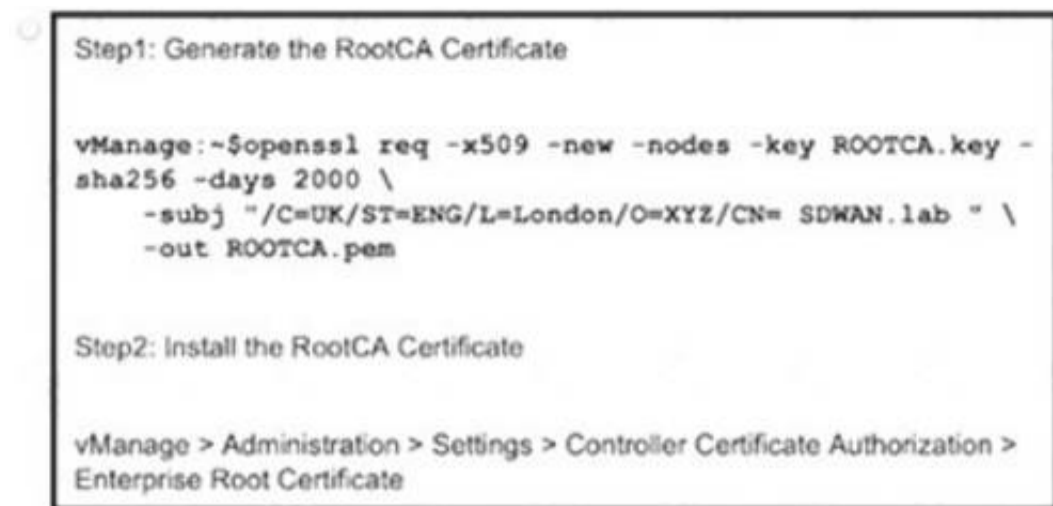
Step1: Generate the RootCA Certificate

```
openssl x509 -req -in vmanage_csr \
  -CA ROOTCA.pem -CAkey ROOTCA.key -CAcreateserial \
  -out vmanage.crt -days 365 -sha256
```

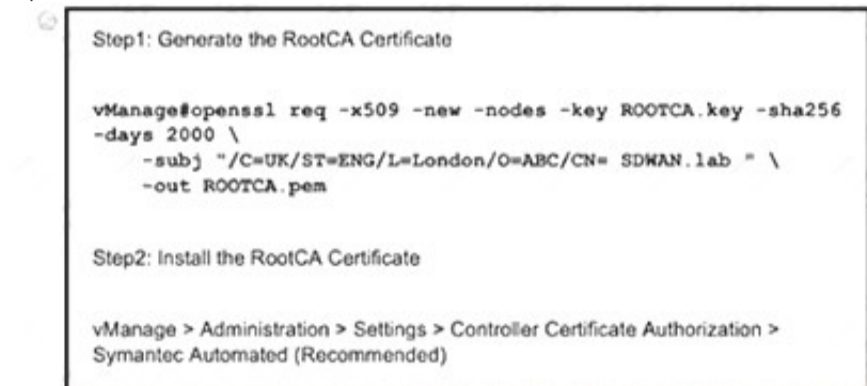
Step2: Install the RootCA Certificate

vManage > Administration > Settings > Controller Certificate Authorization >
Symantec Automated (Recommended)

C)



D)



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

Answer: C

Explanation:

7. Generate Root CA certificate named **rootca.pem** and sign it with **rootca.key** that was generated on the previous step.

```
vmanage:~/web$ openssl req -x509 -new -nodes -key rootca.key -sha256 -days 4000 -out rootca.pem
```

NEW QUESTION 96

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 98

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 99

Refer to the exhibit.

							PEER	PEER	
LOCAL	PEER REMOTE	PEER REPEAT	PEER SYSTEM IP	SITE ID	DOMAIN ID	PEER PRIVATE IP	PRIVATE	PEER PUBLIC IP	PUBLIC
INSTANCE TYPE	REMOTE COLOR	PROTOCOL STATE	SYSTEM IP ERROR	ID ERROR	ID COUNT	PRIVATE IP DOWNTIME	PORT	PUBLIC IP	PORT

0	vsmart	tlc	1.1.1.3	100	1	100.1.1.3	23456	100.1.1.3	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 102

Which protocol is used between redundant vSmart controllers to establish a permanent communication channel?

- A. IPsec
- B. HTTPs
- C. DTLS
- D. SSL

Answer: C

NEW QUESTION 105

Which storage format is used when vManage is deployed as a virtual machine on a KVM hypervisor?

- A. .iso
- B. .qcow2
- C. .ova
- D. .tgz

Answer: B

NEW QUESTION 110

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 114

Refer to the exhibit.

```

policy
lists
!
tloc-list dc-preference-east
tloc 100.100.100.100 color mpls
encap ipsec preference 200
tloc 101.101.101.101 color mpls
encap ipsec preference 400
!
site-list sites-region-west
site-id 1-20
!
site-list sites-region-east
site-id 21-40
!
site-list dc-sites
site-id 100-101

control-policy adv-dc-preference-west
sequence 10
match route
site-list dc-sites
!
action accept
set
tloc-list dc-preference-east
!

!
!
default-action accept
!
!
control-policy adv-dc-preference-east
sequence 10
match route
site-list dc-sites
!
action accept
set
tloc-list dc-preference-east
!
!
!
!
default-action accept
!
!
apply-policy
site-list sites-region-west
control-policy adv-dc-preference-west
out
!
site-list sites-region-east
control-policy adv-dc-preference-east
out
!
!
!
!

```

A customer wants to implement primary and secondary Cisco SD-WAN overlay routing for prefixes that are advertised for both data centers. The east data center (TLOC 101.101.101.101) is primary for east sites, and the west data center (TLOC 100.100.100.100) is primary for west sites. Which configuration change achieves this objective?

A.

```

lists
tloc-list dc-preference-west
tloc 100.100.100.100 color mpls encap ipsec preference 400
tloc 101.101.101.101 color mpls encap ipsec preference 200

control-policy adv-dc-preference-west
sequence 10
match route
site-list dc-sites
!
action accept
set
tloc-list dc-preference-west
!
!
default-action accept

```

B.

```

lists
tloc-list dc-preference-west
tloc 100.100.100.100 color mpls encap ipsec preference 200
tloc 101.101.101.101 color mpls encap ipsec preference 400

control-policy adv-dc-preference-west
sequence 10
match route
site-list dc-sites
!
action accept
set
tloc-list dc-preference-west
!
!
default-action accept

```

C.

```

tloc-list dc-preference-east
tloc 100.100.100.100 color mpls encap ipsec preference 400
tloc 101.101.101.101 color mpls encap ipsec preference 200

```

D.

```

control-policy adv-dc-preference-west
sequence 10
match route
site-list dc-sites
!
action accept
set
tloc-list dc-preference-west
!
!
default-action accept

```

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

Answer: A

NEW QUESTION 116

Which controller is excluded from the process of checking against the authorized, allowed list?

- A. vBond
- B. PnP
- C. vSmart
- D. vManage

Answer: A

NEW QUESTION 121

What is the threshold to generate a warning alert about CPU or memory usage on a WAN Edge router?

- A. 70 to 85 percent
- B. 70 to 90 percent
- C. 75 to 85 percent
- D. 75 to 90 percent

Answer: C

NEW QUESTION 123

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 125

How is an event monitored and reported for an individual device in the overlay network at site ID:S4300T6E43F36?

- A. The device sends event notifications to vManage.
- B. The device sends notifications to vSmart that sends them to vManage.
- C. The device sends a critical alarm of events to vManage.
- D. The device sends a critical alarm to vSmart that sends it to vManage.

Answer: A

NEW QUESTION 130

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 132

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_

NEW QUESTION 133

An engineer must apply the configuration for certificate installation to vBond Orchestrator and vSmart Controller. Which configuration accomplishes this task?

- A.

```
vpn 0
interface eth1
ip address 199.1.1.1/28
tunnel-interface
allow-service sshd
allow-service netconf
no shutdown
```
- B.

```
vpn 512
interface eth1
ip address 199.1.1.1/28
tunnel-interface
allow-service sshd
allow-service netconf
```
- C.

```
vpn 0
interface eth1
ip address 199.1.1.1/28
tunnel-interface
allow-service sshd
allow-service ntp
```
- D.

```
vpn 512
interface eth1
ip address 199.1.1.1/28
tunnel-interface
allow-service netconf
no allow-service ntp
no allow-service stun
```

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

Answer: A

NEW QUESTION 138

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)

CONFIGURATION CERTIFICATES						
WAN Edge List Controllers						
<div>Send to Controllers</div> <div>Click Send to Controllers to sync the WAN Edge list on all controllers</div>						
<div>Search Options</div> <div>Total Rows: 20</div>						
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

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 Model4	Chassis Number	Serial No./Token	Hostname	System IP	Site ID	Mode
	vEdge Cloud	9a0cfea0-a463-7dec-c586-85f9d29cd56a	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-b111-8dd5-535fa9c968a2	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

C)

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 Model4	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

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 Model4	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 139

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	<input type="radio"/> On <input checked="" type="radio"/> Off
Overlay AS Number	<input type="text" value="2"/>
Graceful Restart Timer (seconds)	<input type="text" value="300"/>
Number of Paths Advertised per Prefix	<input type="text" value="2"/>
ECMP Limit	<input type="text" value="2"/>
Shutdown	<input type="radio"/> Yes <input checked="" type="radio"/> No

B)

Feature Template Add Template - OMP

Basic Configuration Timers Advertise

Graceful Restart for OMP	<input type="radio"/> On <input checked="" type="radio"/> Off
Overlay AS Number	<input type="text" value="1"/>
Graceful Restart Timer (seconds)	<input type="text" value="33200"/>
Number of Paths Advertised per Prefix	<input type="text" value="2"/>
ECMP Limit	<input type="text" value="2"/>
Shutdown	<input type="radio"/> Yes <input checked="" type="radio"/> No

C)

CONFIGURATION | TEMPLATES

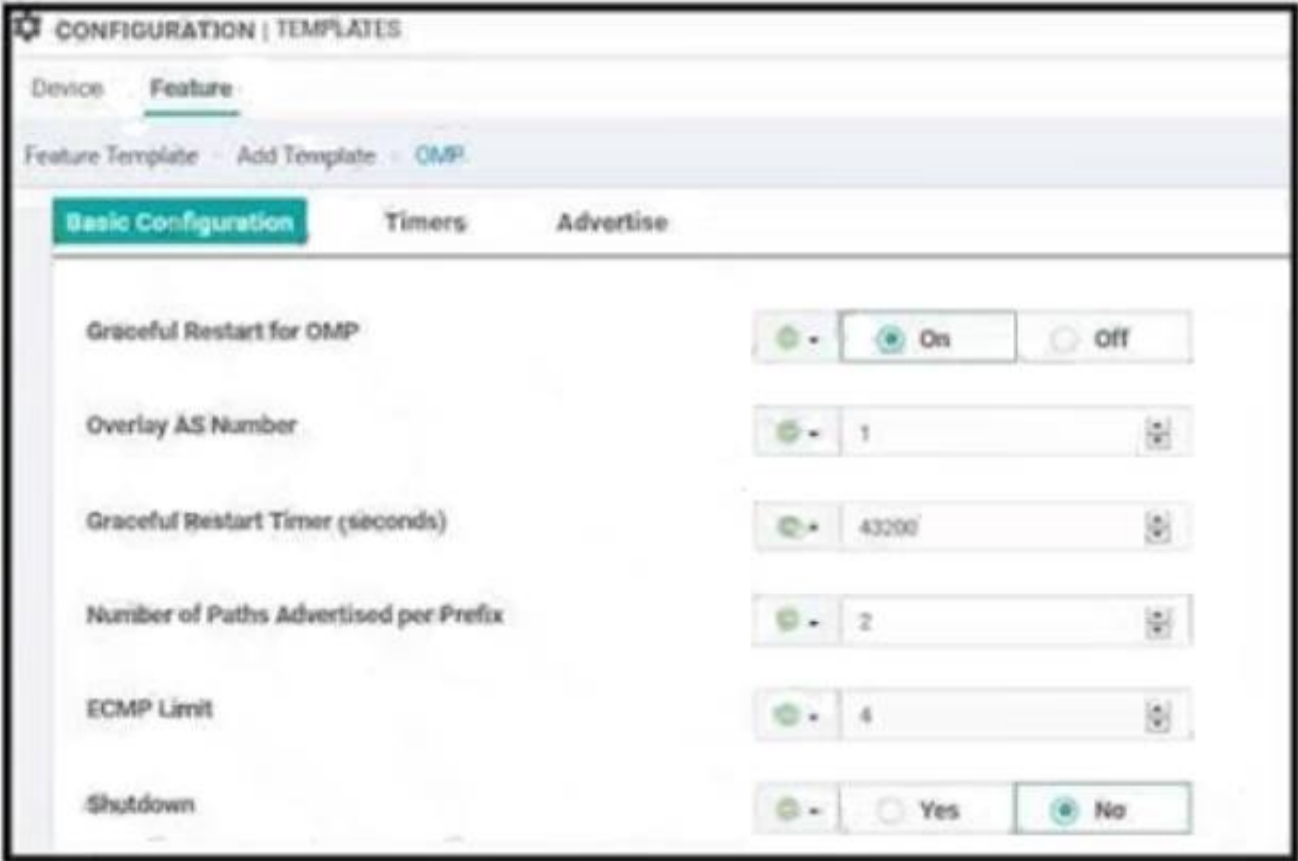
Device Feature

Feature Template Add Template - OMP

Basic Configuration Timers Advertise

Graceful Restart for OMP	<input checked="" type="radio"/> On <input type="radio"/> Off
Overlay AS Number	<input type="text" value="1"/>
Graceful Restart Timer (seconds)	<input type="text" value="43200"/>
Number of Paths Advertised per Prefix	<input type="text" value="2"/>
ECMP Limit	<input type="text" value="2"/>
Shutdown	<input checked="" type="radio"/> Yes <input type="radio"/> No

D)

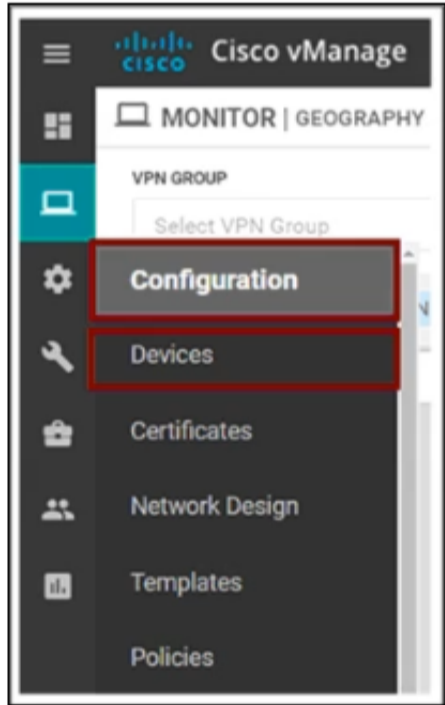


- A. Option A
- B. Option B
- C. Option C
- D. Option D

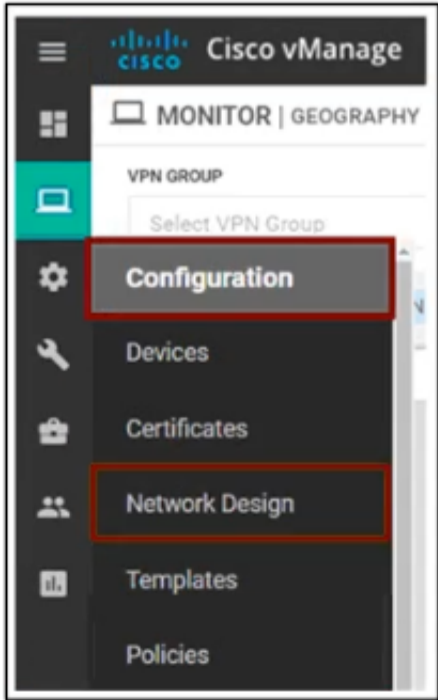
Answer: D

NEW QUESTION 143

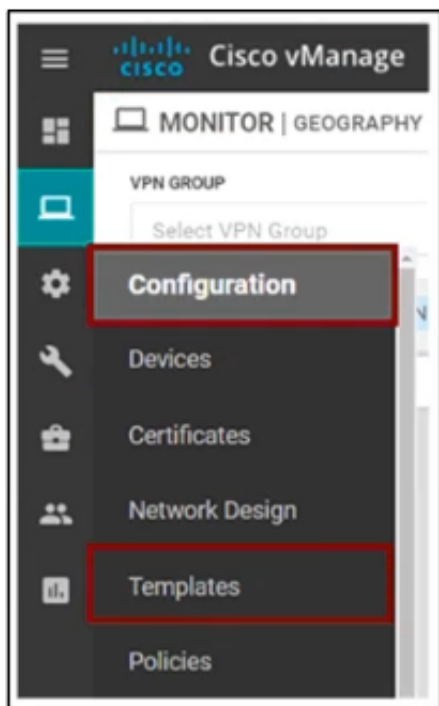
The Cisco SD-WAN engineer is configuring service chaining for a next-generation firewall located at the headquarters. Which configuration creates the service?
A)



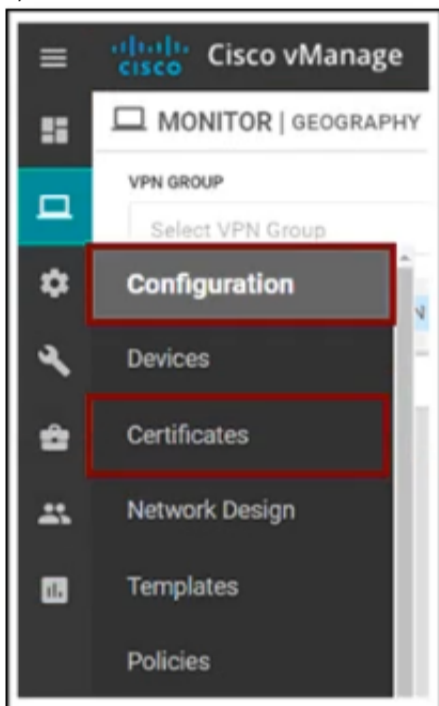
B)



C)



D)



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

Answer: C

NEW QUESTION 148

An engineer is troubleshooting a vEdge router and identifies a “DCONFFAIL – 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 153

An engineer must automate certificate signing through Cisco. Which vManage configuration achieves this task?

A)

```
vpn 0
  dns 208.67.222.222 primary
  allow-service dns
  allow-service sshd
  allow-service netconf
```

B)

```
vpn 0
  allow-service dns
  allow-service sshd
  allow-service netconf
```

C)

vpn 512
 dns 208.67.222.222 primary
 allow-service dns
 allow-service sshd
 allow-service netconf

D)

vpn 512
 allow-service dns
 allow-service sshd
 allow-service netconf

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

Answer: A

NEW QUESTION 154

Where on vManage does an engineer find the details of control node failure?

- A. Alarms
- B. Events
- C. Audit log
- D. Network

Answer: A

Explanation:

https://www.cisco.com/c/en/us/td/docs/routers/sdwan/vManage_How-Tos/vmanage-howto-book/m-troubleshoot

NEW QUESTION 159

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 164

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"> SHA-1 message digest SHA-256 message digest <p>Note 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>Note 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 167

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 170

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

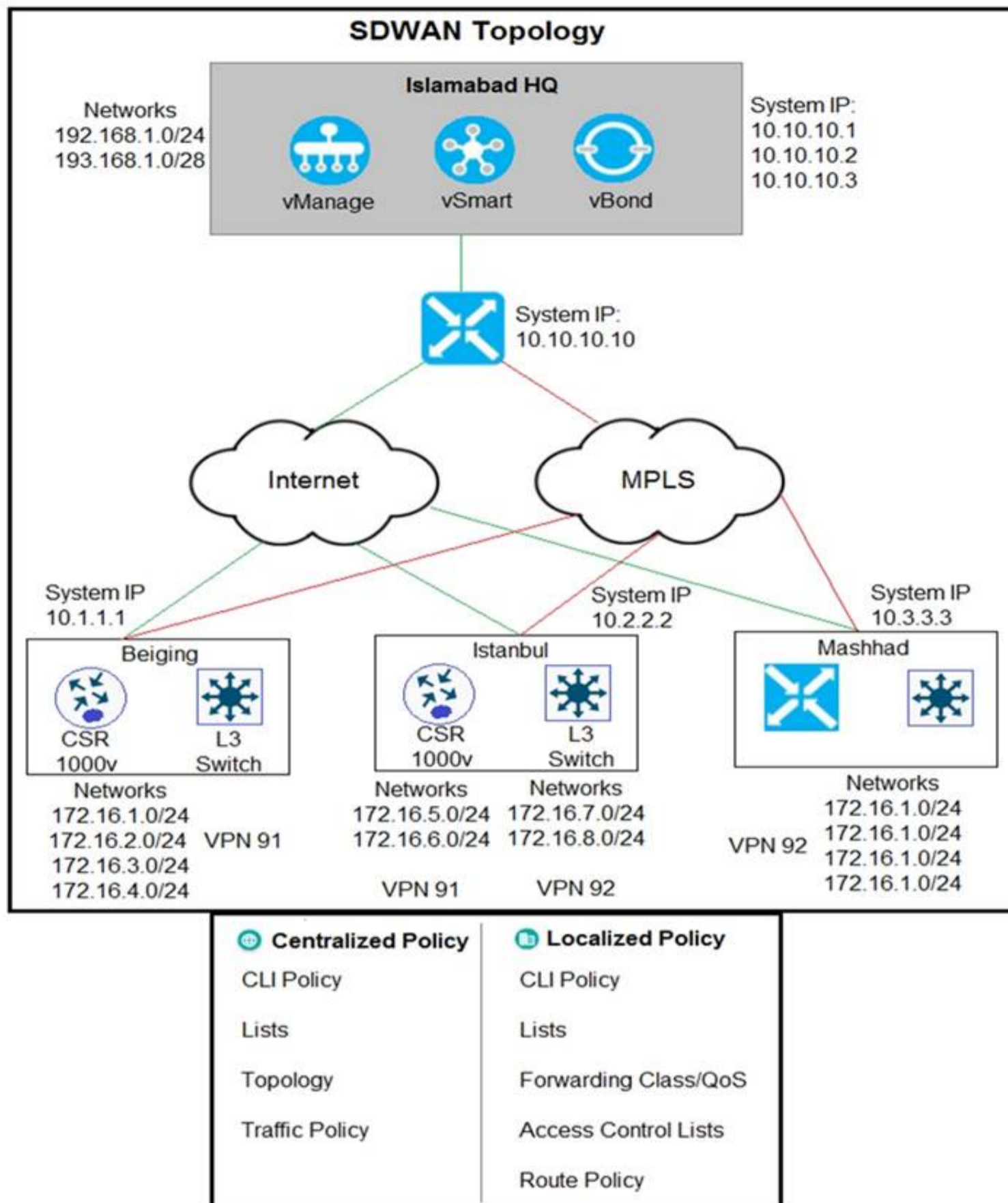
Answer: D

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 175

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 176

How should the IP addresses be assigned for all members of a Cisco vManage cluster located in the same data center?

- A. in the same subnet
- B. in overlapping IPs
- C. in each controller with a /32 subnet
- D. in different subnets

Answer: A

NEW QUESTION 181

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

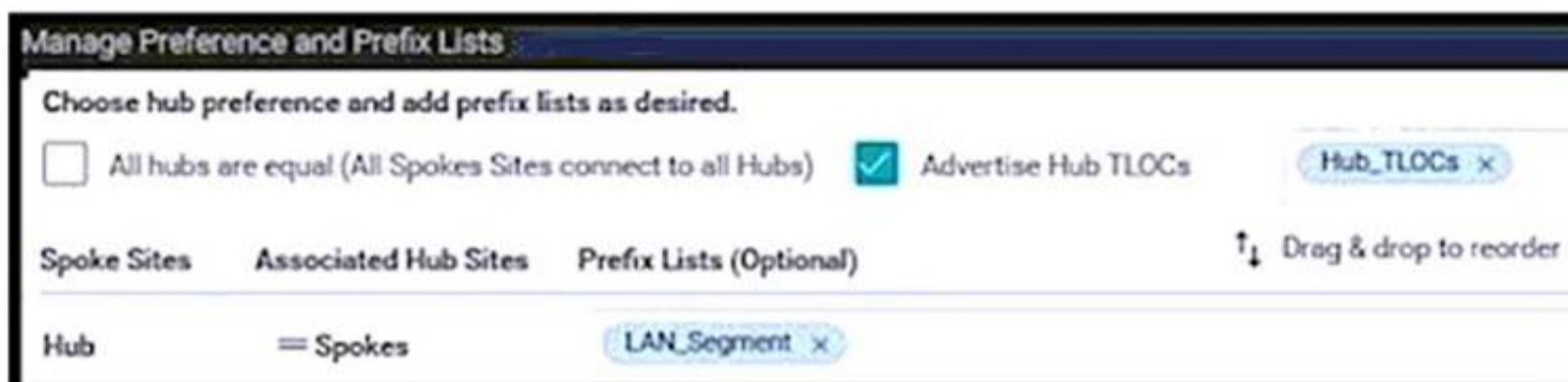
Explanation:

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 183

After deploying Cisco SD-WAN the company realized that by default, all sites built direct IPsec VPN tunnels to each other. In their previous topology all spoke sites used the head office as their next hop for the LAN segment that belongs to network 40.0.0.0/16. The company wants to deploy its previous policy, which allows the 40.0.0.0/16 network that originates at the hub to advertise to the spokes. Which configuration meets the requirement?

A)



Manage Preference and Prefix Lists

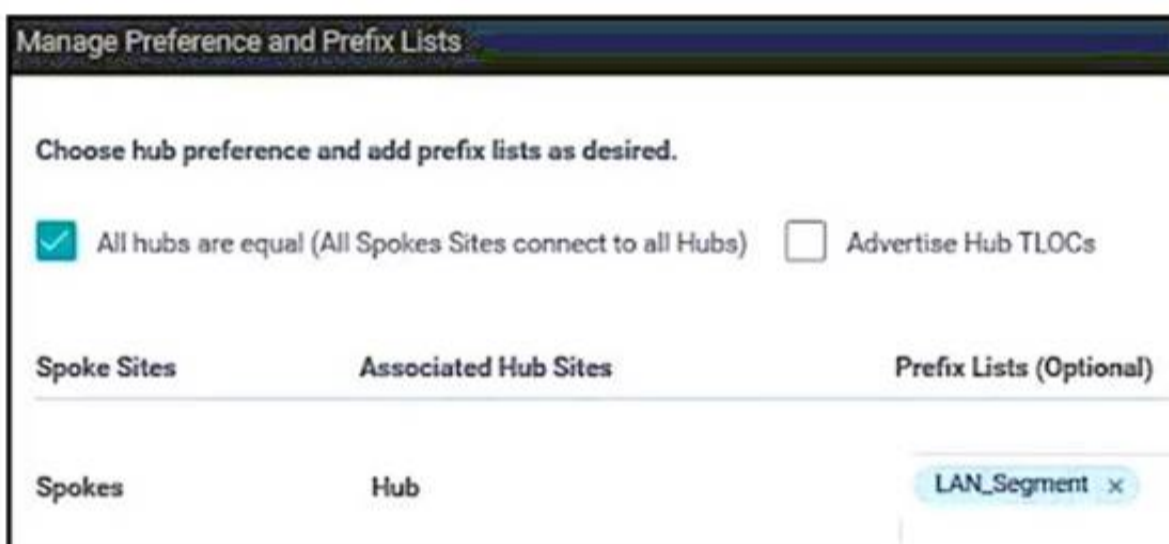
Choose hub preference and add prefix lists as desired.

☐ All hubs are equal (All Spokes Sites connect to all Hubs) ☒ Advertise Hub TLOCs Hub_TLOCs x

Spoke Sites	Associated Hub Sites	Prefix Lists (Optional)
Hub	= Spokes	LAN_Segment x

↑↓ Drag & drop to reorder

B)



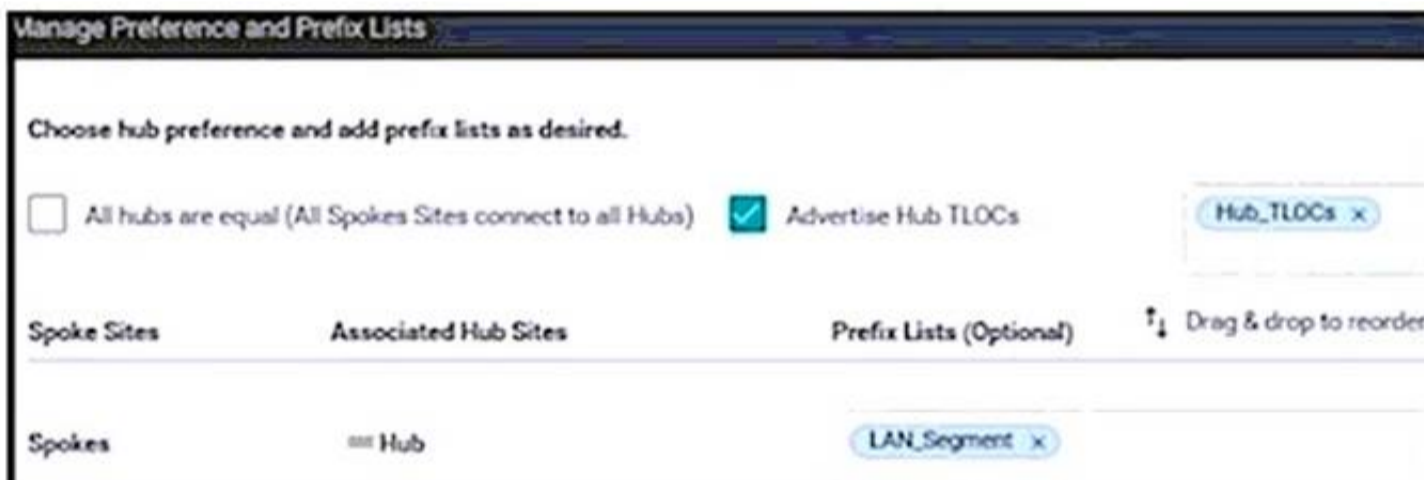
Manage Preference and Prefix Lists

Choose hub preference and add prefix lists as desired.

☒ All hubs are equal (All Spokes Sites connect to all Hubs) ☐ Advertise Hub TLOCs

Spoke Sites	Associated Hub Sites	Prefix Lists (Optional)
Spokes	Hub	LAN_Segment x

C)



Manage Preference and Prefix Lists

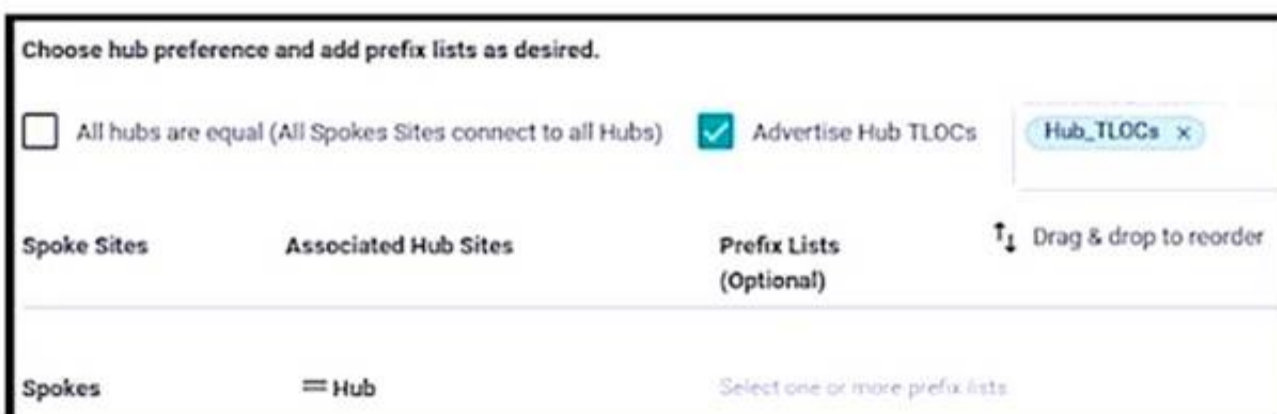
Choose hub preference and add prefix lists as desired.

☐ All hubs are equal (All Spokes Sites connect to all Hubs) ☒ Advertise Hub TLOCs Hub_TLOCs x

Spoke Sites	Associated Hub Sites	Prefix Lists (Optional)
Spokes	= Hub	LAN_Segment x

↑↓ Drag & drop to reorder

D)



Manage Preference and Prefix Lists

Choose hub preference and add prefix lists as desired.

☐ All hubs are equal (All Spokes Sites connect to all Hubs) ☒ Advertise Hub TLOCs Hub_TLOCs x

Spoke Sites	Associated Hub Sites	Prefix Lists (Optional)
Spokes	= Hub	Select one or more prefix lists

↑↓ Drag & drop to reorder

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

Answer: D

NEW QUESTION 185

Which encryption algorithm is used for encrypting SD-WAN data plane traffic?

- A. Triple DES
- B. IPsec
- C. AES-128
- D. AES-256 GCM

Answer: D

NEW QUESTION 190

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

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

Answer: D

NEW QUESTION 195

Which command on a WAN Edge device displays the information about the colors present in the fabric that are learned from vSmart via OMP?

- A. show omp tlocs
- B. show omp sessions
- C. show omp peers
- D. show omp route

Answer: A

NEW QUESTION 200

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

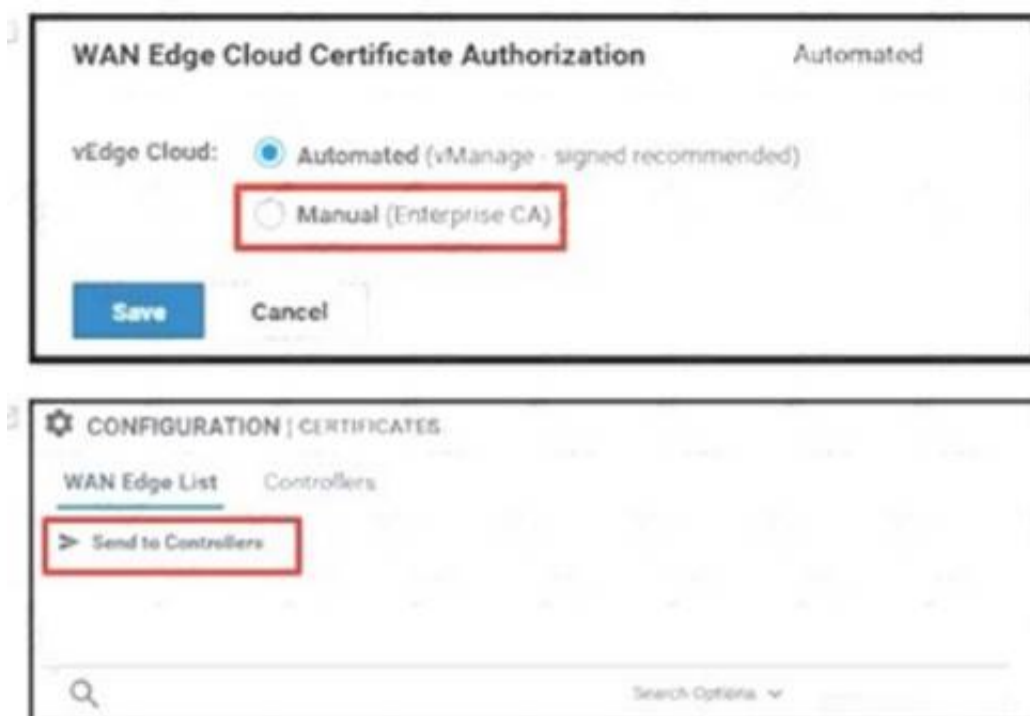
Explanation:

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

NEW QUESTION 203

An administrator must deploy the controllers using the On-Prem method while vManage can access the PnP portal from inside How are the two WAN Edge authorized allowed lists to be made available to vManage? (Choose two)





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

Answer: AB

Explanation:

https://sdwan-docs.cisco.com/Product_Documentation/vManage_Help/Release_18.4/Configuration/Devices

NEW QUESTION 207

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 212

What is the main purpose of using TLOC extensions in WAN Edge router configuration?

- A. creates hardware-level transport redundancy at the local site
- B. creates an IPsec tunnel from WAN Edge to vBond Orchestrator
- C. transports control traffic to a redundant vSmart Controller
- D. transports control traffic w remote-site WAN Edge routers

Answer: D

NEW QUESTION 217

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 222

An enterprise has several sites with multiple VPNs that are isolated from each other A new requirement came where users in VPN 73 must be able to talk to users in VPN 50 Which configuration meets this requirement?

- ☐ policy
control-policy Route_Leaking
sequence 1
match route
vpn-list VPN_73
prefix-list _AnyIpv4PrefixList
action accept
export-to vpn-list VPN_50
sequence 11
match route
vpn-list VPN_50
prefix-list _AnyIpv4PrefixList
action accept
export-to vpn-list VPN_73
default-action accept
- ☐ policy
control-policy Route_Leaking
sequence 1
match route
VPN_73
prefix-list _AnyIpv4PrefixList
export-to VPN_50
sequence 11
match route
VPN_50
prefix-list _AnyIpv4PrefixList
export-to VPN_73
default-action accept
- ☐ policy
control-policy Route_Leaking
sequence 1
match route
VPN_ALL
prefix-list _AnyIpv4PrefixList
action accept
export-to VPN_ALL
- ☐ policy
control-policy Route_Leaking
sequence 1
match route
VPN_50 VPN_73
prefix-list _AnyIpv4PrefixList
action accept
export-to VPN_73 VPN_50

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

Answer: A

NEW QUESTION 226

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 227

An enterprise deployed a Cisco SD-WAN solution with hub-and-spoke topology using MPLS as the preferred network over the Internet. A network engineer must implement an application-aware routing policy to allow ICMP traffic to be load-balanced over both the available links. Which configuration meets the requirement?

A)

```
app-route-policy _VPN_10_AAR
vpn-list VPN_50
sequence 21
match
app-list ICMP
source-ip 0.0.0.0/0
!
action
sla-class ICMP_SLA preferred-color public-internet
sla-class ICMP_SLA preferred-color mpls
```

B)

```
app-route-policy _VPN_10_AAR
vpn-list VPN_50
sequence 21
match
app-list ICMP
source-ip 0.0.0.0/0
!
action
sla-class ICMP_SLA
```

C)

```
app-route-policy _VPN_10_AAR
vpn-list VPN_50
sequence 21
match
app-list ICMP
source-ip 0.0.0.0/0
!
action
sla-class ICMP_SLA preferred-color mpls
backup-sla-preferred-color public-internet
```

D)

```
app-route-policy _VPN_10_AAR
vpn-list VPN_50
sequence 21
match
app-list ICMP
source-ip 0.0.0.0/0
!
action
sla-class ICMP_SLA preferred-color mpls public-internet
```

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

Answer: C

NEW QUESTION 229

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 233

Which protocol is used to propagate multicast join requests over the Cisco SD-WAN fabric?

- A. ARP
- B. Auto-RP
- C. OMP
- D. IGMP

Answer: D

NEW QUESTION 234

Which component of the Cisco SD-WAN control plane architecture facilitates the storage of certificates and configurations for network components?

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

Answer: D

NEW QUESTION 239

Which queue must an engineer configure for control and BFD traffic for convergence on a WAN Edge router?

- A. queue 0
- B. queue 1
- C. queue 2
- D. queue 7

Answer: C

NEW QUESTION 242

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"

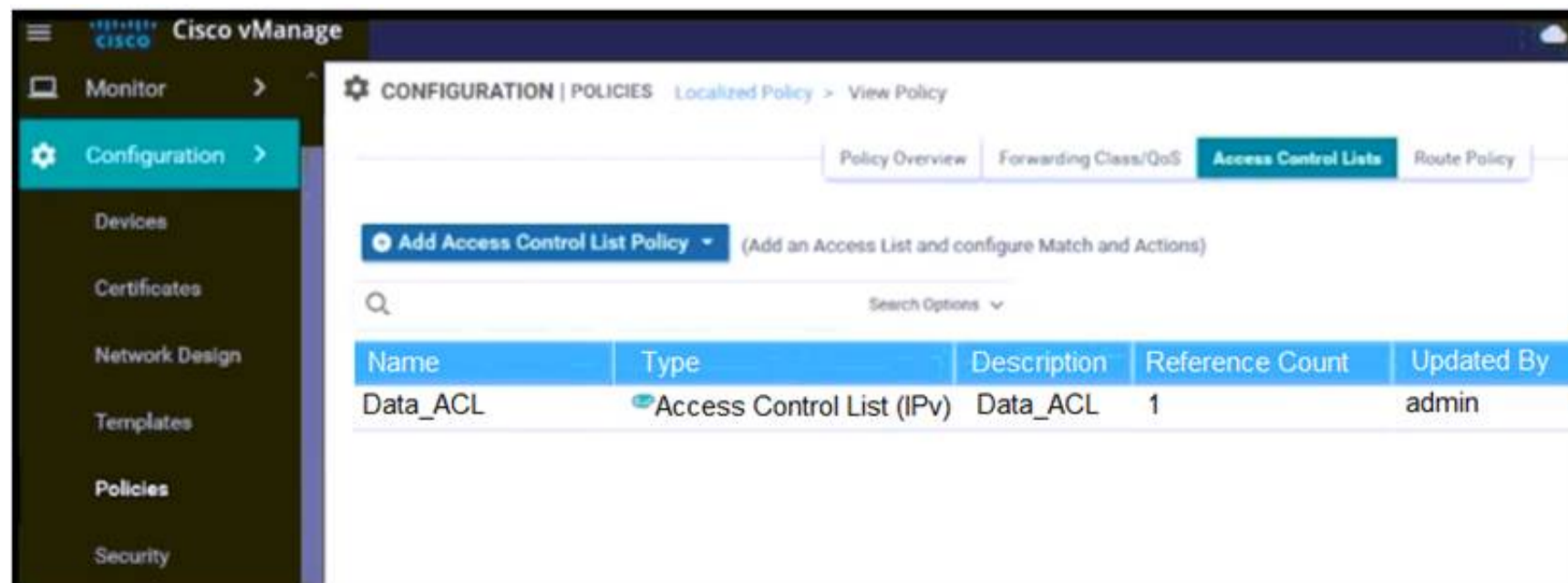
Answer: B

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 246

Refer to the exhibit.



An engineer must block FTP traffic coming in from a particular Service VPN on a WAN Edge device Which set of steps achieves this goal?

- A. Create a localized policy and add it to (he interface feature template
- B. Create a localized policy add it to the device template and add an ACL to the interface feature template
- C. Create a prefix tat, add it to the localized policy and add it to the interface feature template
- D. Create a localized policy add it to VPN template and add an ACL to the interface feature template

Answer: C

NEW QUESTION 249

Which two REST API functions are performed for Cisco devices in an overlay network? (Choose two)

- A. distributing a Snort image among devices
- B. attaching a device configuration template
- C. managing connections for smart licensing
- D. monitoring device certificates
- E. querying a device and aggregating statistics

Answer: BD

NEW QUESTION 252

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

Explanation:

NEW QUESTION 257

Which two performance data details are provided by Cisco SO-WAN vAnalytics? (Choose two)

- A. jitter loss and latency for data tunnels
- B. application quality of experience score from zero to ten
- C. detail on total cost of ownership for the fabric
- D. certificate authority status (health and expiration dates) for all controllers
- E. view devices connected to a vManage NMS

Answer: AB

NEW QUESTION 262

Which Cisco SD-WAN WAN Edge platform supports LTE and Wi-Fi?

- A. vEdge2000
- B. ASR1001
- C. CSR 1000v
- D. ISR 1101

Answer: D

NEW QUESTION 263

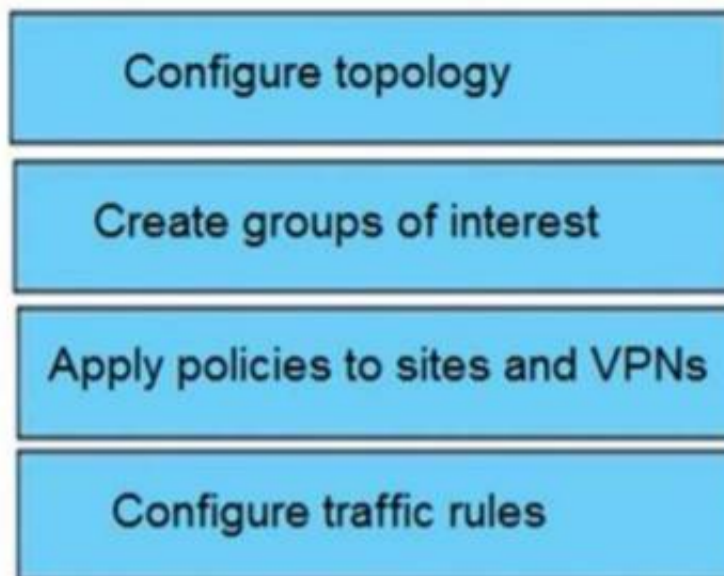
Drag and drop the vManage policy configuration procedures from the left onto the correct definitions on the right.

Create groups of interest	Create the network structure to which the policy applies
Configure traffic rules	Create lists that group together related items that an engineer can call in the match or action components of a policy
Configure topology	Associate a policy with sites and VPNs in the overlay network
Apply policies to sites and VPNs	Create the match and action conditions of a policy

- A. Mastered
- B. Not Mastered

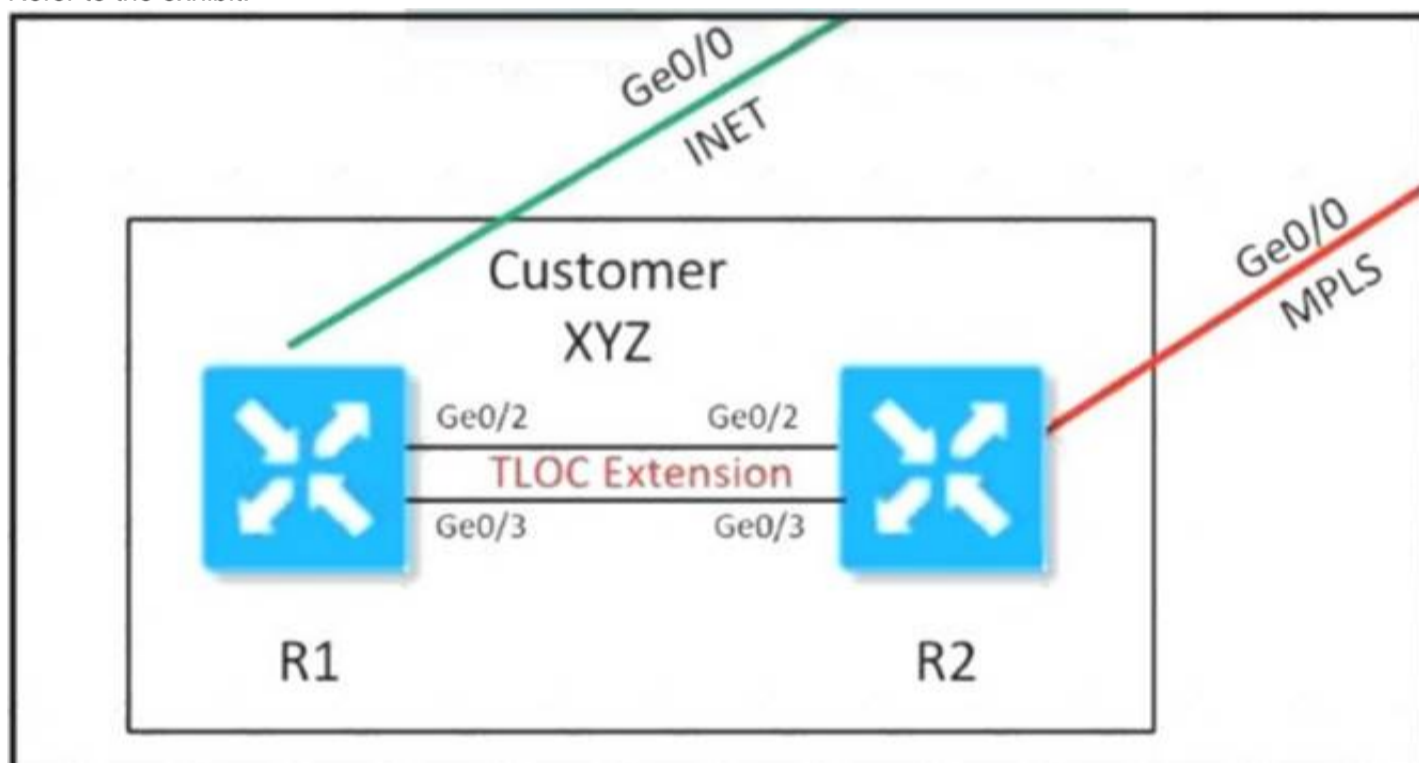
Answer: A

Explanation:



NEW QUESTION 268

Refer to the exhibit.



Customer XYZ cannot provision dual connectivity on both of its routers due to budget constraints but wants to use both R1 and R2 interlaces for users behind them for load balancing toward the hub site. Which configuration achieves this objective?

- A.
- ```

R1
interface ge0/2
ip address 43.43.43.2/30
tloc-extension ge0/0

interface ge0/3
ip address 34.34.34.1/30
tunnel-interface
color mpls

R2
interface ge0/2
ip address 43.43.43.1/30
tunnel-interface
color public-internet

interface ge0/3
ip address 34.34.34.2/30
tloc-extension ge0/0

```
- B.
- ```

R1
interface ge0/2
ip address 43.43.43.2/30
tloc-extension ge0/0

interface ge0/3
ip address 34.34.34.2/30
tloc-extension ge0/0

R2
interface ge0/2
ip address 43.43.43.1/30
tunnel-interface
color public-internet

interface ge0/3
ip address 34.34.34.1/30
    
```

- A.** R1
interface ge0/2
ip address 43.43.43.2/30
tloc-extension ge0/0
- C.** interface ge0/3
ip address 34.34.34.2/30
tloc-extension ge0/0
- R2**
interface ge0/2
ip address 43.43.43.1/30
- interface ge0/3
ip address 34.34.34.1/30
- R1**
interface ge0/2
ip address 43.43.43.2/30
tloc-extension ge0/0
- interface ge0/3
ip address 34.34.34.1/30
tunnel-interface
color mpls
- D.** **R2**
interface ge0/2
ip address 43.43.43.1/30
tunnel-interface
color public-internet
- interface ge0/3
ip address 34.34.34.2/30
tloc-extension ge0/2

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

Answer: A

NEW QUESTION 273

A customer must upgrade the cisco SD-WAN devices and controllers from version 19.2 to version 20.3. The devices include WAN Edge cloud, vManage, vSmart, and vBond. Which types of image types of image files are needed for this upgrade?

- A. one file for vManage and one file for all other devices with extension tar.gz
B. one file for vManage, one for vSmart and one for vBond + WAN Edge Cloud with extension .bin
C. one file for vManaga, one for vSmart and one for vBond + WAN Edge Cloud with extension tar.gz
D. one file for vManaga and one file for all other devices with extension .bin

Answer: C

Explanation:

<https://software.cisco.com/download/home/286320995/type/286321394/release/20.3.3.1>

NEW QUESTION 278

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 283

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 AML 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

NEW QUESTION 286

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 289

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 292

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 297

Which protocol is used by the REST API to communicate with network services in the Cisco SD-WAN network?

- A. SSL
- B. HTTP
- C. IPsec
- D. SSM

Answer: B

NEW QUESTION 302

How is the software managed in Cisco SD-WAN?

- A. Software images must be uploaded to vManage through HTTP or FTP
- B. Software downgrades are unsupported for vManage
- C. Software images must be transferred through VPN 512 or VPN 0 of vManage
- D. Software upgrade operation in the group must include vManag
- E. vBond, and vSmart.

Answer: A

NEW QUESTION 303

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 307

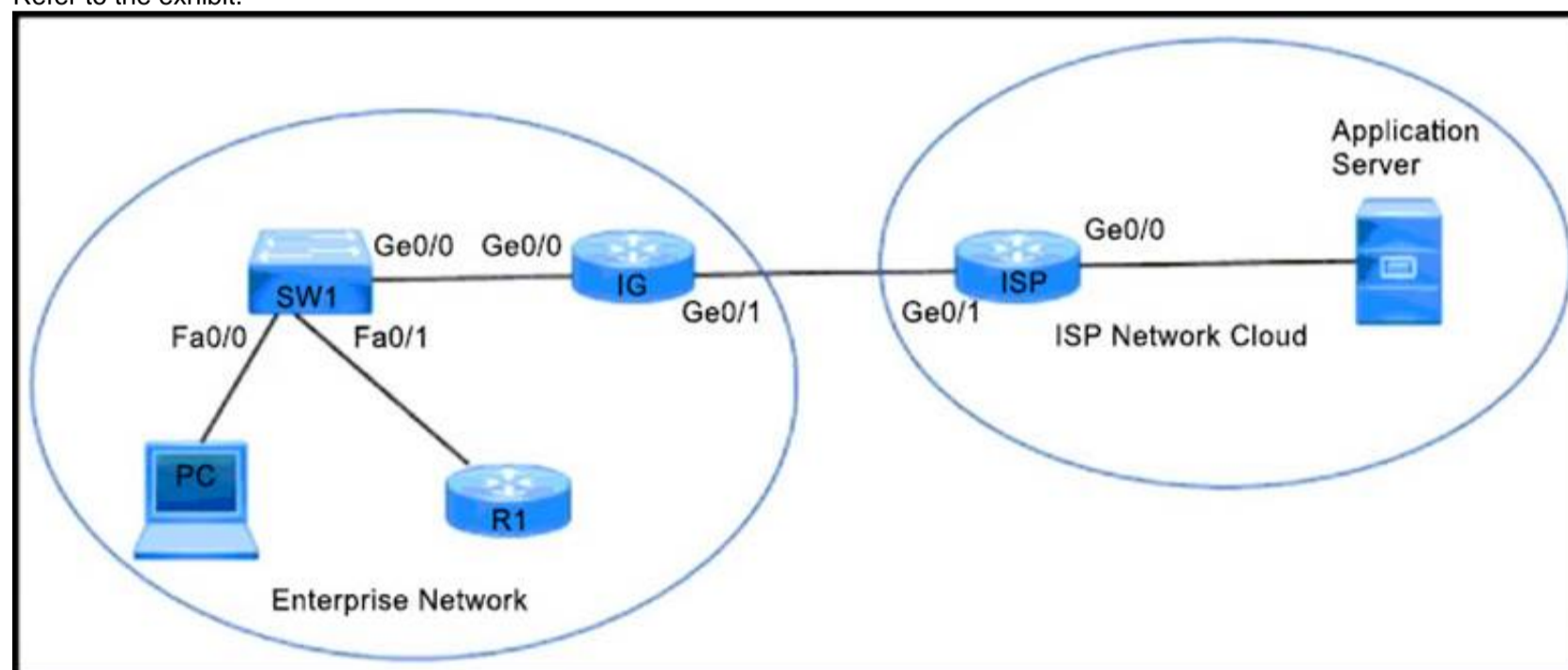
Which secure tunnel type should be used to connect one WAN Edge router to other WAN Edge routers?

- A. TLS
- B. DTLS
- C. SSL VPN
- D. IPsec

Answer: D

NEW QUESTION 308

Refer to the exhibit.



An enterprise network is connected with an ISP network on an 80 Mbps bandwidth link. The network operation team observes 100 Mbps traffic on the 1Gig-ISP link during peak hours. Which configuration provides bandwidth control to avoid traffic congestion during peak hours?

A)

```

policy-map CUS_PMAP
class CUS_CMAP
police 80000000 300000
!
interface gigabitethernet 0/0
description --- TO SW ---
ip address 10.0.10.5 255.255.255.0
service-policy input CUS_PMAPd
    
```

B)

```
policy-map SHAPE_MAP
class class-default
shape average 80000000
!
interface gigabitethernet 0/1
description *** TO ISP ***
ip address 10.0.20.5 255.255.255.0
service-policy output SHAPE_MAP
```

C)

```
policy-map CUS_PMAP
class CUS_CMAP
police 80000000 300000
!
interface gigabitethernet 0/0
description *** TO ISP ***
ip address 10.0.20.1 255.255.255.0
service-policy input CUS_PMAP
```

D)

```
policy-map SHAPE_MAP
class class-default
shape average 8000000
!
interface gigabitethernet 0/1
description *** TO IG rack B455:A882:G718 ***
ip address 10.0.20.5 255.255.255.0
```

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

Answer: B

NEW QUESTION 313

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

NEW QUESTION 315

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 320

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

- A. In vManage NMS select (he configure policies screen, select the centralized policy tab and click add policy
- B. In vBood orchestrato
- C. select the configure > policies screen select the localized policy ta
- D. and click add policy
- E. In vManage NM
- F. select the configure policies scree
- G. select the localized policy tab- and click add policy
- H. In vSmart controller select tie configure policies screen, select the localized policy tab, and click add policy

Answer: C

NEW QUESTION 325

Refer to the exhibit.

Variable List (Hover over each field for more information)	
System IP	10.4.4.4
Hostname	ST1_VE01
Prefix(vEdge_Default_Gateway)	0.0.0.0/0
Prefix(Mpls_Default_Gateway)	0.0.0.0/0
Address(vEdge_Next_Hop_IP)	10.50.0.102
Address(MPLS_Next_hop_ip)	10.20.0.102
Hostname(Device_host_name)	vEdge-Cloud
Location(Device_location)	US
Latitude(Device_latitude)	40.7128
Longitude(Device_longitude)	74.0060
System IP(Device_system_ip)	10.4.4.4
Site ID(Device_site_id)	1

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?

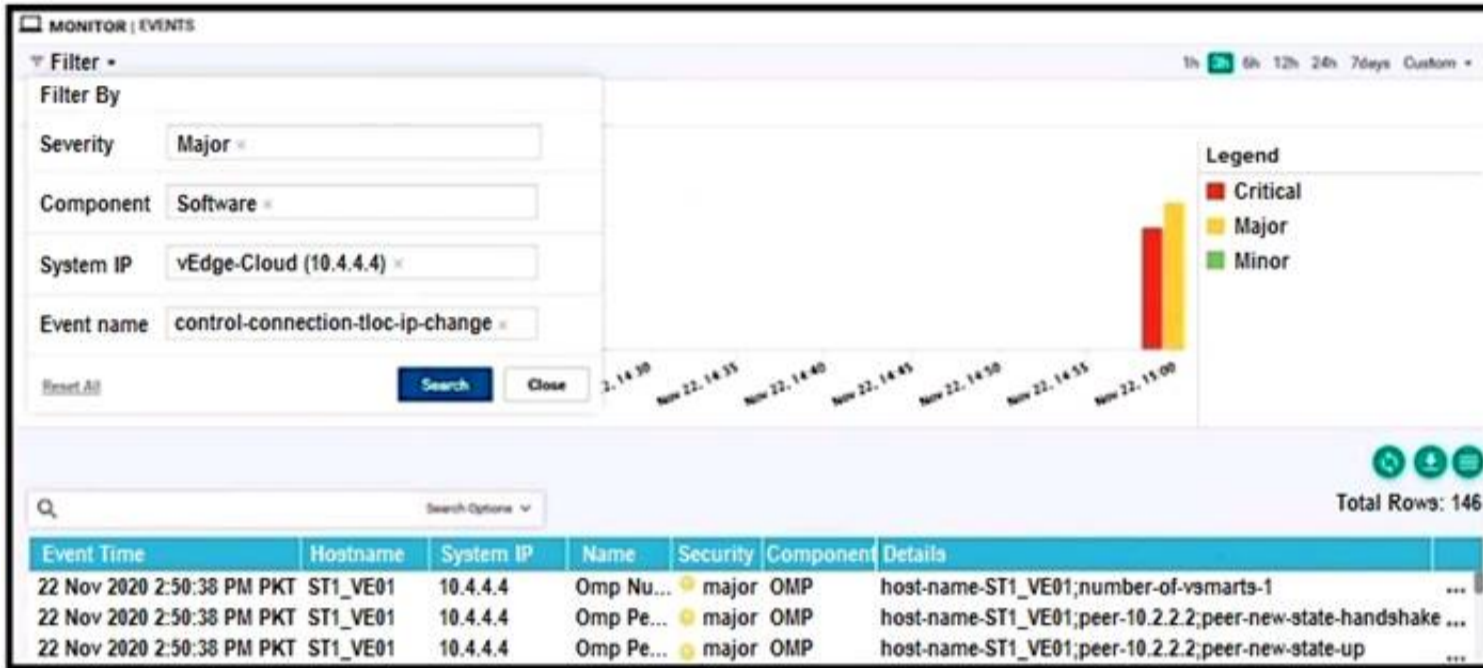
A)



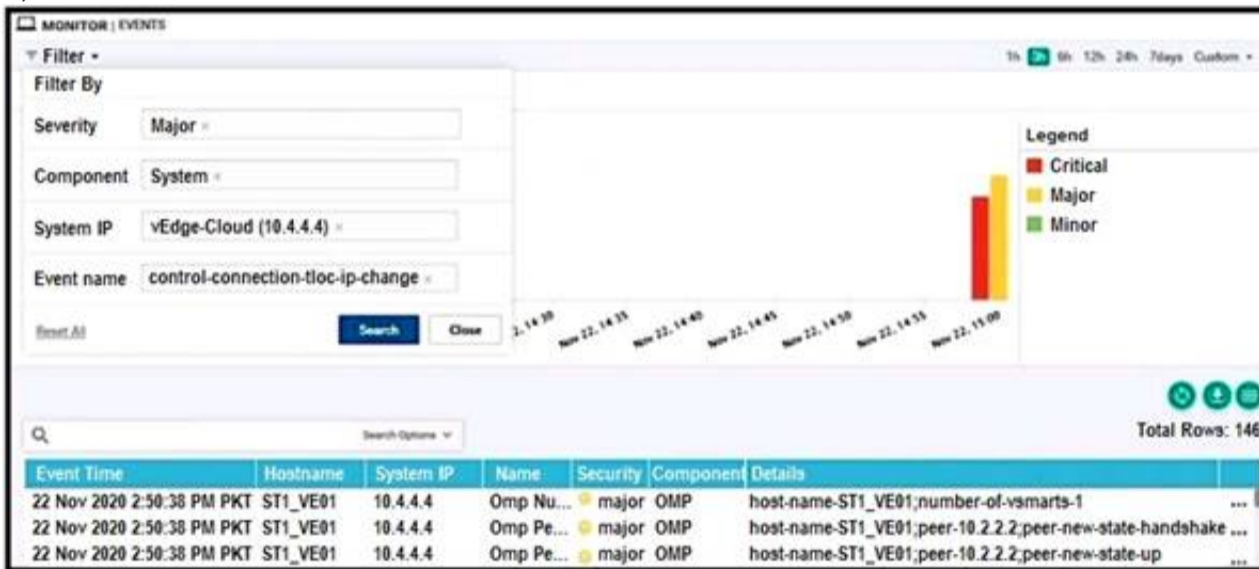
B)



C)



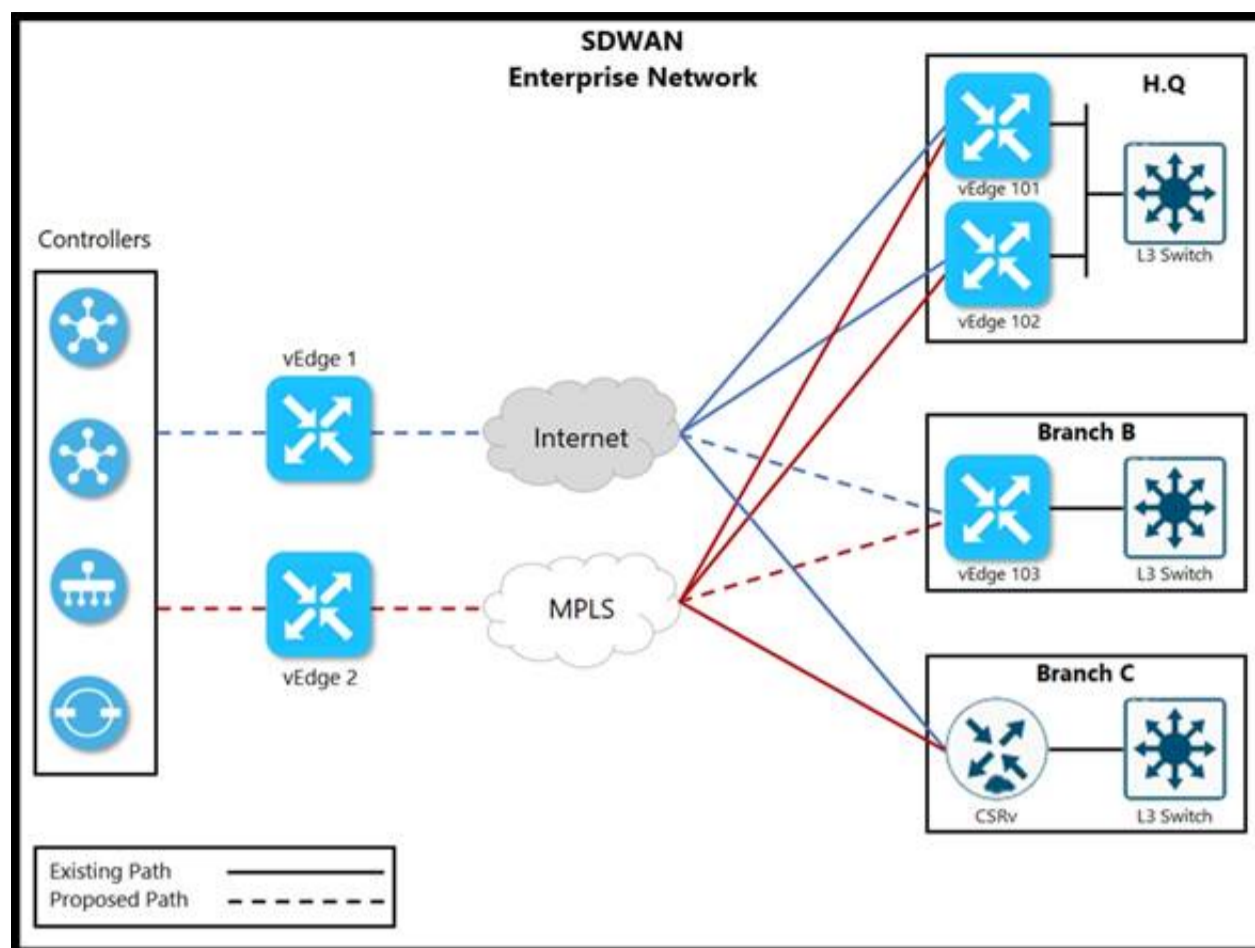
D)



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

Answer: D

NEW QUESTION 326
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 ts configured with:

```
viptela-system:system
device-model vedge-cloud
host-nam 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 329

Refer to the exhibit.

PEER TYPE	PEER PROTOCOL	PEER SYSTEM IP	SITE ID	DOMAIN ID	PEER PRIVATE IP	PEER PRIVATE PORT
vsmart	dtls	10.1.1.8	1	0	1.1.1.1	12447
vmanage	dtls	10.1.1.7	1	1	2.2.2.2	12647
vmanage	dtls	10.1.1.7	1	1	2.2.2.2	12867
LOCAL						
LOCAL COLOR	STATE	ERROR	ERROR	UNIT		
gold	up	LISFD	NOERR	45		
gold	up	LISFD	NOERR	70		
gold	up	LISFD	NOERR	69		

An engineer is troubleshooting a control connection issue on a WAN Edge device that shows socket errors. The packet capture shows some ICMP packets dropped between the two devices. Which action resolves the issue?

- A. Recover the vManage controller that is down m a high availability cluster
- B. Change the system IP or restart the VWN Edge 4 the system IP is changed
- C. Remove IP duplication in the network and configure a unique IP address
- D. Recover vBond or wart for the controller to reload which could be caused by a reset

Answer: C

NEW QUESTION 331

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 332

How is the software managed in Cisco SD-WAN?

- A. Software upgrade operation in the group must include vManag
- B. vBon
- C. and vSmart.
- D. Software downgrades are unsupported for vManage
- E. Software images must be uploaded to vManage through HTTP or FTP.
- F. Software images must be transferred through VPN 512 or VPN 0 of vManage.

Answer: A

NEW QUESTION 337

An administrator needs to configure SD-WAN to divert traffic from the company's private network to an ISP network. What action should be taken to accomplish this goal?

- A. configure the control policy
- B. configure the data policy
- C. configure the data security policy
- D. configure the application aware policy

Answer: B

Explanation:

Data policy influences the flow of data traffic traversing the network

NEW QUESTION 340

Which issue triggers the Cisco Umbrella resolver to forward DNS requests to the intelligent proxy? Which issue triggers the Cisco Umbrella resolver to forward 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 343

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

NEW QUESTION 347

Which routes are similar to the IP route advertisements when the routing information of WAN Edge routers is learned from the local site and local routing protocols?

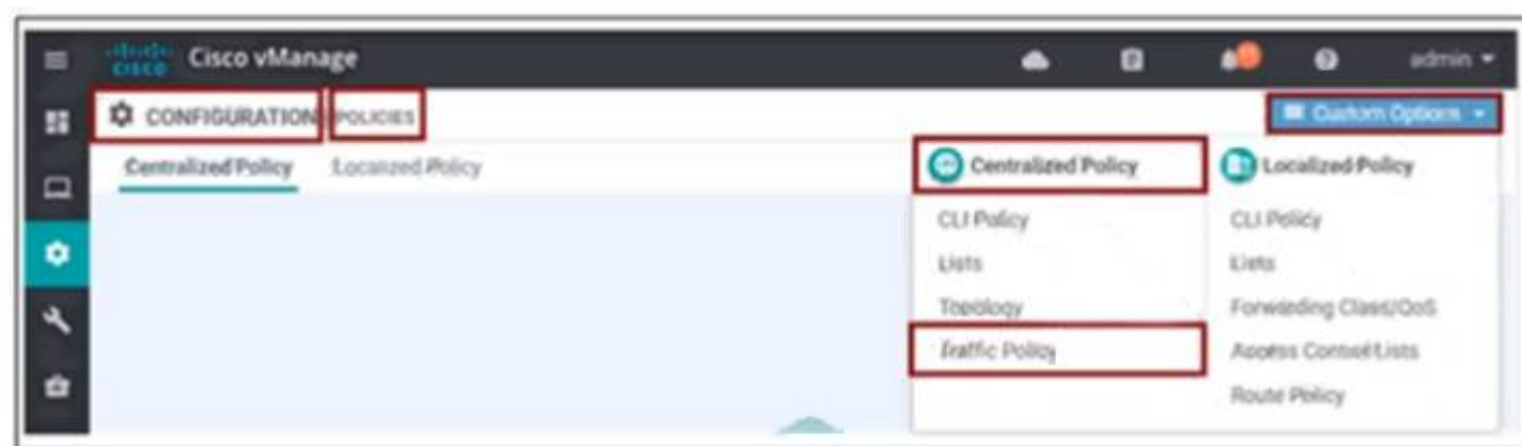
- A. service
- B. BGP
- C. TLOC
- D. OMP

Answer: D

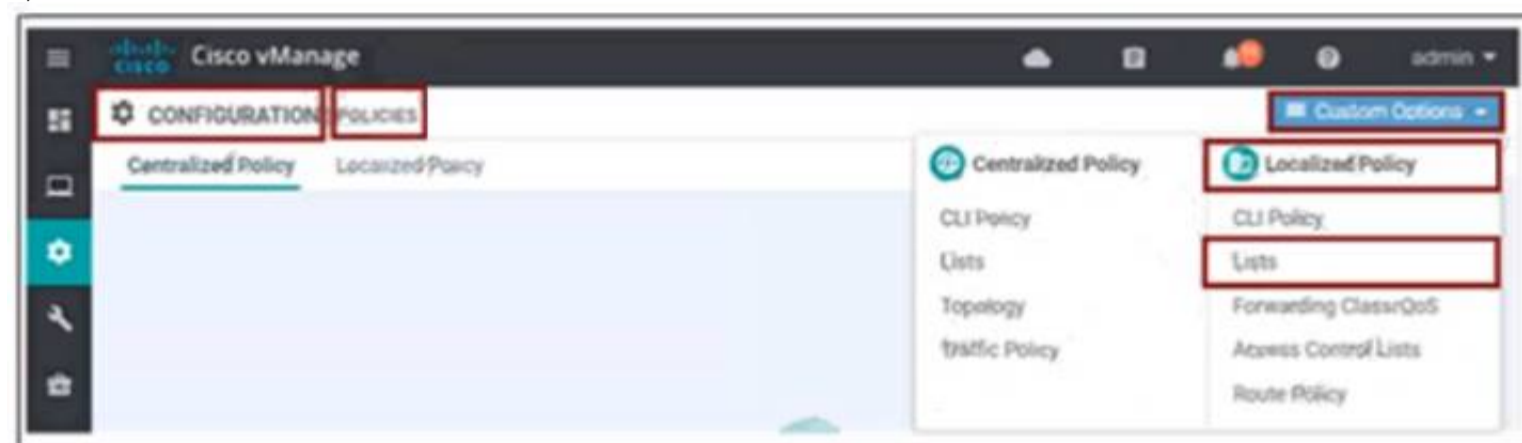
NEW QUESTION 350

An engineer must create a QoS policy by creating a class map and assigning it to the LLQ queue on a WAN Edge router Which configuration accomplishes the task?

A)



B)



C)



D)



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

Answer: D

NEW QUESTION 351

Which two mechanisms are used by vManage to ensure that the certificate serial number of the WAN Edge router that is needed to authenticate is listed in the WAN Edge Authorized Serial Number Hst' (Choose two)

- A. Synchronize to the PnP
- B. Manually upload it to vManage
- C. The devices register to vManage directly as the devices come online
- D. The vManage is shipped with the list
- E. Synchronize to the Smart Account

Answer: BE

NEW QUESTION 356

Which protocol is used to measure jitter, loss, and latency on SD-WAN overlay tunnels?

- A. QoE

- B. OMP
- C. BGP
- D. BFD

Answer: D

NEW QUESTION 357

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 361

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 366

Which action is performed during the onboarding process when a WAN Edge router is connected to ZTP server ztp.viptela.com?

- A. The router is connected to WAN Edge Cloud Center
- B. The router is synced with vSmart Controller via an IPsec tunnel
- C. The router receives its vBond Orchestrator information
- D. The router is connected to vSmart Controller via a DTLS tunnel

Answer: C

NEW QUESTION 371

A WAN Edge device has several service VPNs with no routing protocol configured in the service VPNs. The device must be configured so that all connected routes are visible in OMP for VPN 10. Which configuration meets the requirement?

A)

```
vpn 10
 name "Service VPN 10"
 omp
  redistribute connected
```

B)

```
omp
 no shutdown
 graceful-restart
 advertise connected
```

C)

```
omp
 no shutdown
 graceful-restart
 redistribute connected
```

D)

```
vpn 10
 name "Service VPN 10"
 omp
  advertise connected
```

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

Answer: D

NEW QUESTION 376

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 378

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 379

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 384

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 385

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 386

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
- 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 391

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 395

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 399

Which device should be configured with the service chain IP address to route intersite traffic through a firewall?

- A. vSmart
- B. firewall
- C. spoke WAN Edge
- D. hub WAREdge

Answer: A

NEW QUESTION 403

A customer wants to use AWS for Cisco SD-WAN IaaS services by deploying virtual SD-WAN routers in a transit AWS VPC. The transit VPC then connects via site-to-site IPsec tunnels to an AWS transit gateway. Which transit VPC connects via site-to-site IPsec tunnels to an AWS transit gateway?

- A. Cisco Cloud onRamp for Multicloud
- B. Cisco Cloud onRamp for SaaS
- C. Cisco Cloud onRamp for Colocation
- D. Cisco Cloud onRamp for IaaS

Answer: D

NEW QUESTION 408

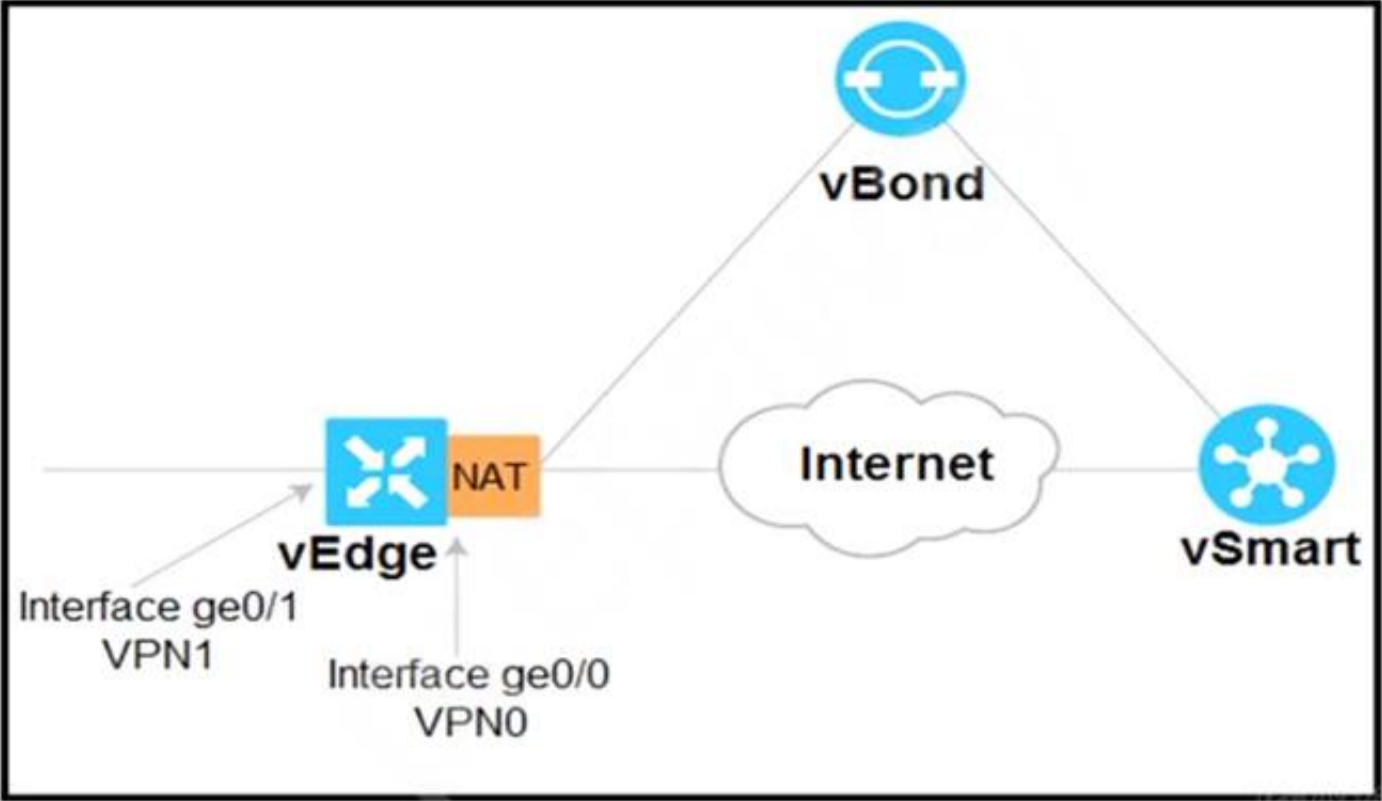
Which SD-WAN component is configured to enforce a policy to redirect branch-to-branch traffic toward a network service such as a firewall or IPS?

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

Answer: C

NEW QUESTION 412

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 415

.....

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