

Cisco

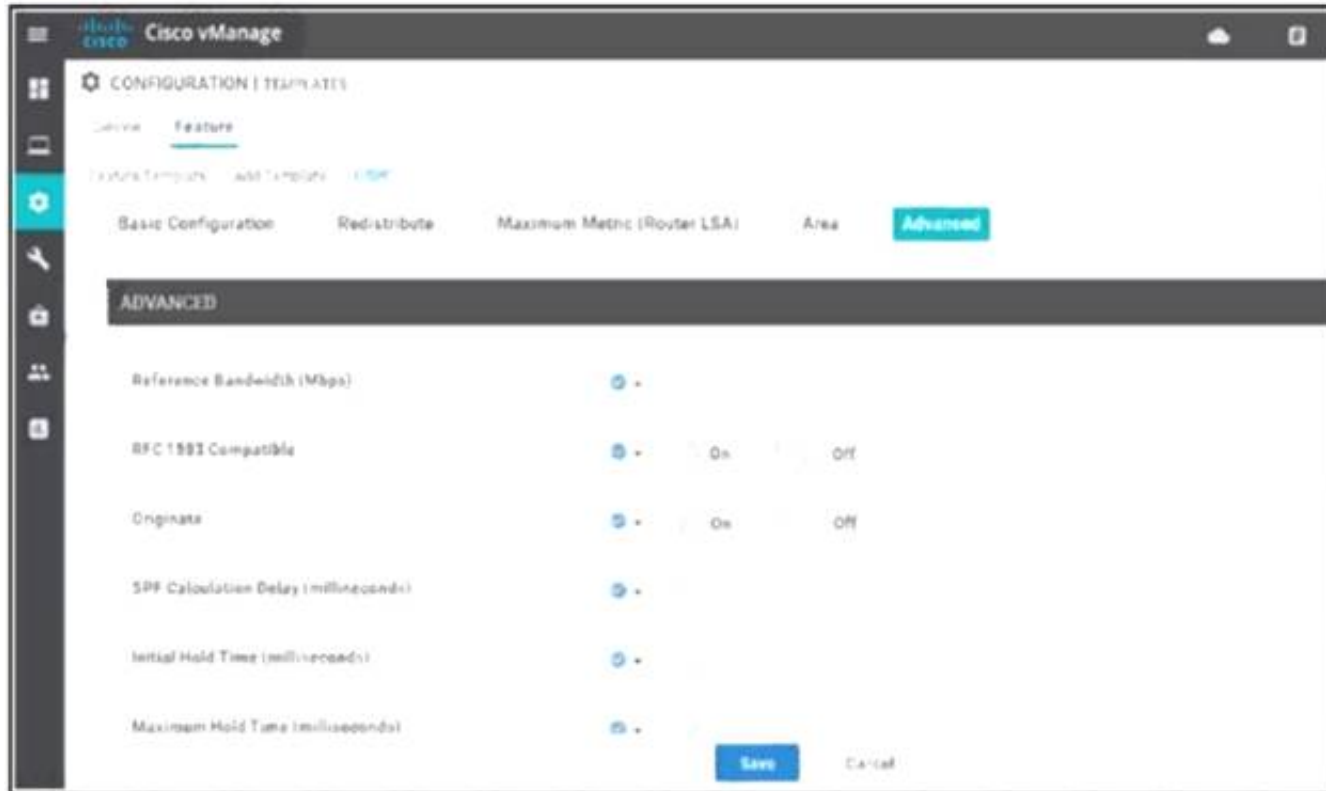
Exam Questions 300-415

Implementing Cisco SD-WAN Solutions (ENSDWI)



NEW QUESTION 1

Refer to the exhibit.



A network administrator is configuring OSPF advanced configuration parameters from a template using the vManager GUI for a branch WAN Edge router to calculate the cost of summary routes to an ASBR. Which action achieves this configuration?

- A. Disable RFC 1583 Compatible
- B. Enable Originate
- C. Enable RFC 1M3 Compatible
- D. Disable Original

Answer: C

NEW QUESTION 2

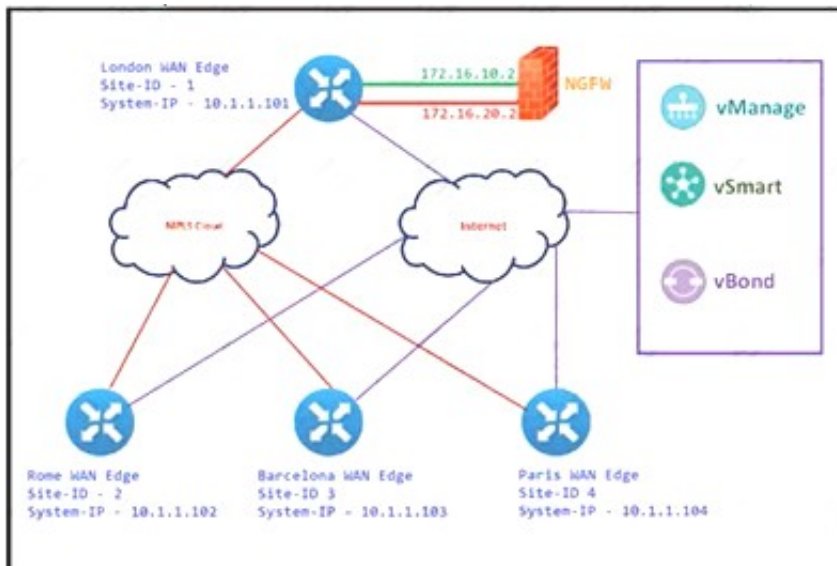
Which two image formats are supported for controller codes? (Choose two.)

- A. .nxos
- B. .qcow2
- C. .ova
- D. .bin
- E. Tgz

Answer: BC

NEW QUESTION 3

Refer to the exhibit.



The Cisco SD-VYAN 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 netsvc1 address 172.16.10.2
service netsvc2 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 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

B)

☐ London WAN Edge
vpn 1
service netsvc1 address 172.16.10.2
service netsvc2 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

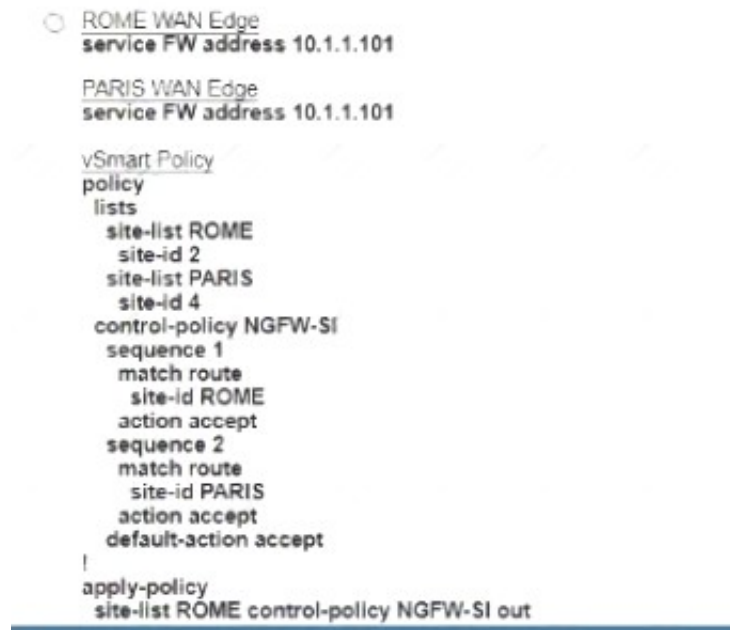
C)

☐ 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)



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

Answer: A

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 two hardware platforms support Cisco IOS XE SD-WAN images" (Choose two)

- A. ASR1000 series
- B. ISR9300 series
- C. vEdge-1000 series
- D. ASR9000 series
- E. ISR4000 series

Answer: AE

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:

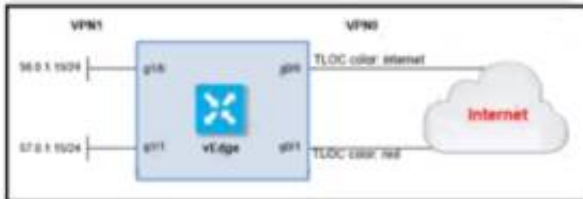
- Using Cisco vManage:

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 bursts 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 is the default value (in milliseconds) set for the poll interval in the BFD basic configuration?

- A. 300,000
- B. 600,000
- C. 900,000
- D. 1,200,000

Answer: B

Explanation:

https://sdwan-docs.cisco.com/Product_Documentation/vManage_Help/Release_18.2/Configuration/Templates/B

NEW QUESTION 10

Which set of platforms must be in separate VMS as of release 16.1?

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

Answer: D

NEW QUESTION 15

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

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

Answer: A

NEW QUESTION 18

Which two different states of a WAN Edge certificate are shown on vManage? (Choose two.)

- A. inactive
- B. active
- C. staging
- D. invalid
- E. provisioned

Answer: BE

NEW QUESTION 22

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 26

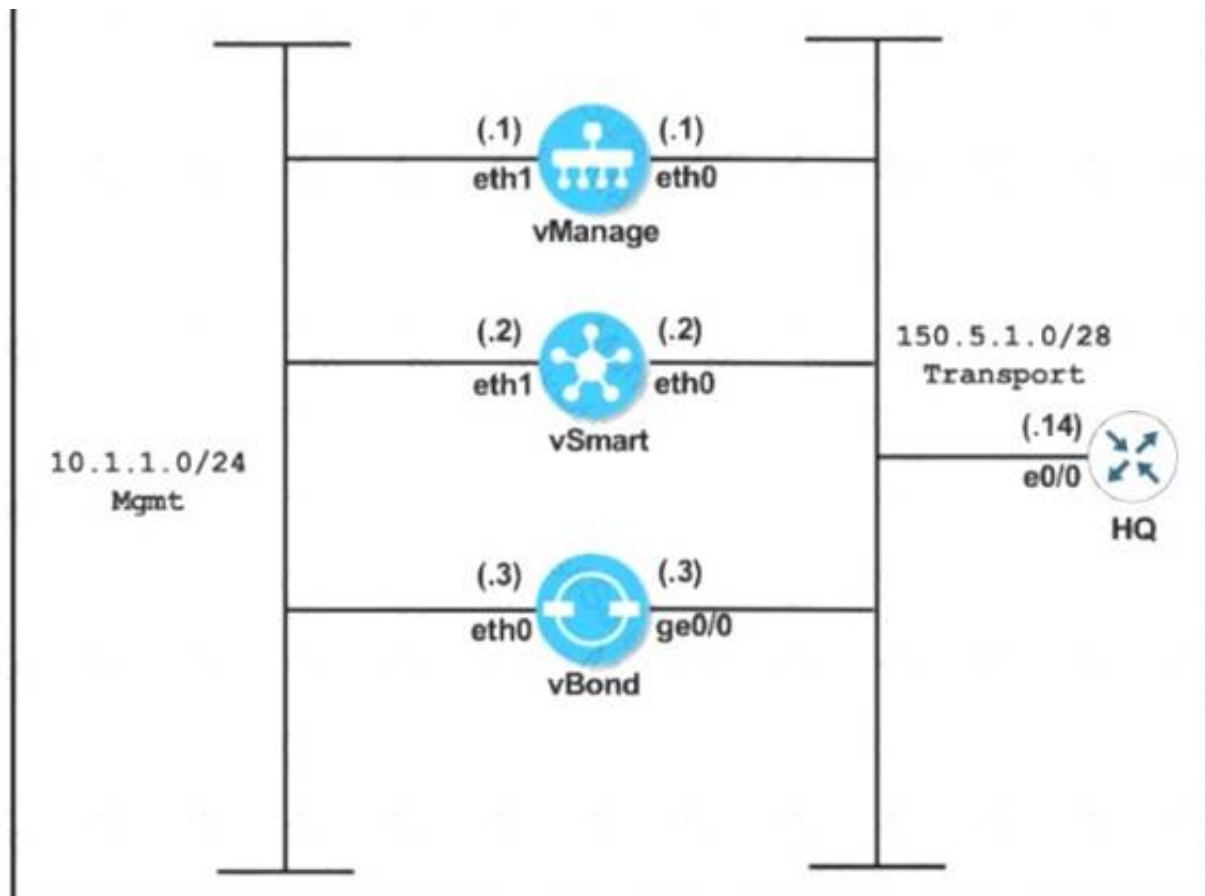
What are two benefits of installing Cisco SD-WAN controllers on cloud-hosted services? (Choose two.)

- A. utilizes well-known cloud services such as Azure
- B. AWS
- C. and GCP
- D. accelerates Cisco SD-WAN deployment
- E. allows integration of the WAN Edge devices in the cloud
- F. installs the controllers in two cloud regions in a primary and backup setup
- G. automatically implements zone-based firewalling on the controllers

Answer: BD

NEW QUESTION 30

Refer to the exhibit.



```

vManage
system
system-ip 10.10.10.101
host-name vManage
site-id 1
clock timezone Europe/London
vbond 150.5.1.3
organization-name Cisco.com
!
vpn 0
interface eth0
ip address 150.5.1.1/28
no shut
tunnel-interface
allow-service all
ip route 0.0.0.0/0 150.5.1.14
!
commit

vSmart
system
system-ip 10.10.10.102
host-name vSmart
site-id 1
clock timezone Europe/London
vbond 150.5.1.3
organization-name Cisco.com
!
vpn 0
interface eth0
ip address 150.5.1.2/28
no shut
tunnel-interface
allow-service all
ip route 0.0.0.0/0 150.5.1.14
!
commit

vBond
system
system-ip 10.10.10.103
host-name vBond
site-id 1
clock timezone Europe/London
vbond 150.5.1.3
organization-name Cisco.com
!
vpn 0
interface ge0/0
ip address 150.5.1.3/28
no shut
tunnel-interface
encapsulation ipsec
allow-service all
ip route 0.0.0.0/0 150.5.1.14
!
commit

```

An engineer is troubleshooting an issue where vManage and vSmart have a problem establishing a connection to vBond. Which action fixes the issue?

- A. Reconfigure the vBond command on the vBond as vBond 150.5.1.3 local
- B. Configure the tunnel interface on all three controllers with a color of transport
- C. Remove the encapsulation IPsec command under the tunnel interface of vBond.
- D. Configure encapsulation as IPsec under the tunnel interface of vManage and vSmart

Answer: A

Explanation:

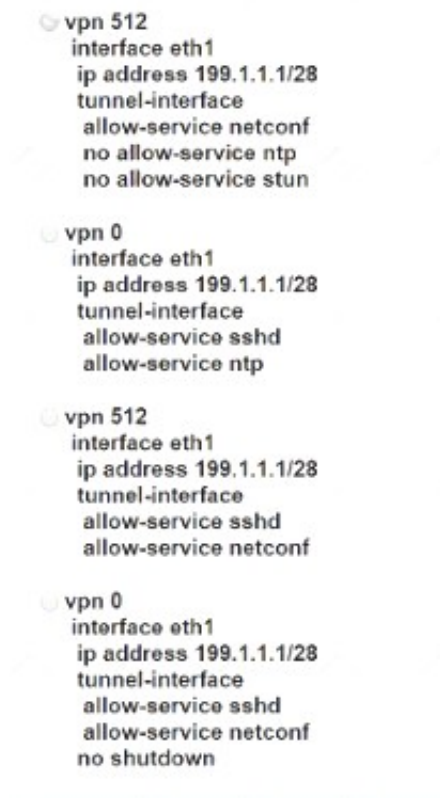
Configure the IP address of Cisco vBond Orchestrator. Cisco vBond Orchestrator's IP address must be a public IP address, to allow all Cisco vEdge devices in the overlay network to reach Cisco vBond Orchestrator:

vBond(config-system) #**vbond ip-address local**

In Releases 16.3 and later, the address can be an IPv4 or an IPv6 address. In earlier releases, it must be an IPv4 address. A vBond orchestrator is effectively a vEdge router that performs only the orchestrator functions. **The local option designates the device to be Cisco vBond Orchestrator, not a vEdge router.** Cisco vBond Orchestrator must run on a standalone virtual machine (VM) or hardware router; it cannot coexist in the same device as a software or hardware vEdge router.

NEW QUESTION 33

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



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

Answer: D

NEW QUESTION 38

Which two virtualized environments are available for a company to install the controllers using the on-premises model? (Choose two)

- A. VMware vSphere ESXi
- B. VMware Workstation
- C. kernel-based virtual machine
- D. OpenStack
- E. Microsoft Hyper-V

Answer: AD

NEW QUESTION 43

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 46

Which component is used for stateful inspection of TCP, UDP. and ICMP flows in Cisco SD-WAN firewall policies?

- A. zones
- B. sites
- C. subnets
- D. interfaces

Answer: A

NEW QUESTION 50

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.

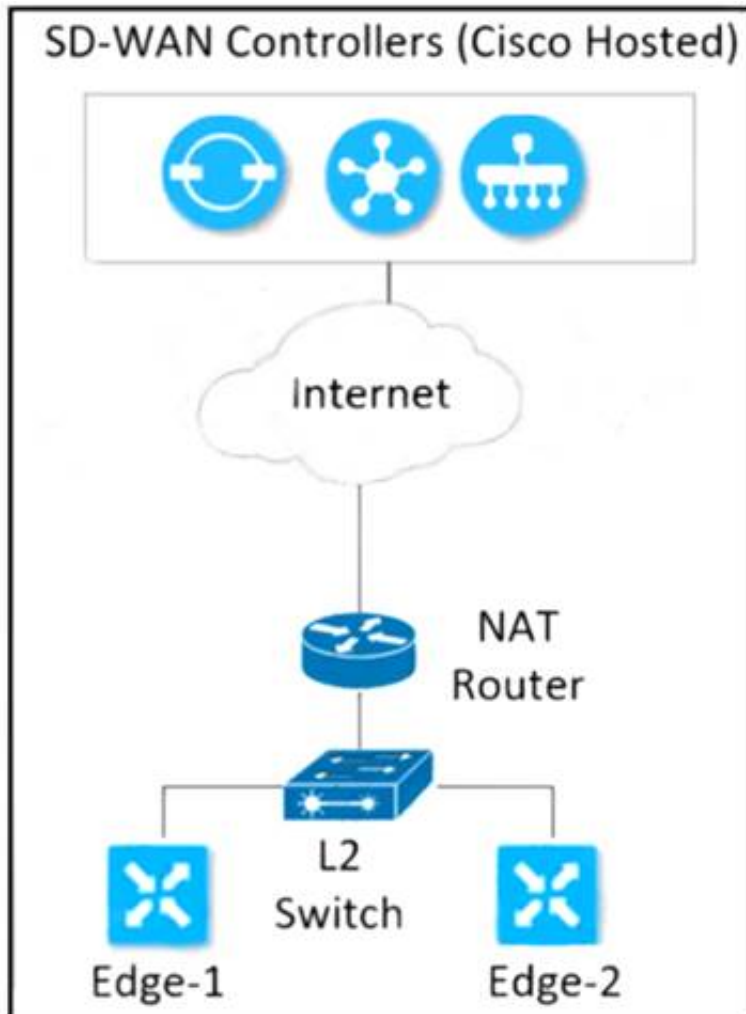
Answer: C

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 52

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 56

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 58

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

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

Answer: D

NEW QUESTION 63

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 65

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

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

Answer: B

Explanation:


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

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

NEW QUESTION 69

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 73

What is the default value for the number of paths advertised per prefix in the OMP feature template?

- A. 4
- B. 8
- C. 12
- D. 16

Answer: C

NEW QUESTION 77

Which feature delivers traffic to the Cisco Umbrella SIG cloud from a Cisco SD-WAN domain?

- A. L2TPv3 tunnel
- B. IPsec tunnel
- C. local umbrella agent
- D. source NAT

Answer: B

NEW QUESTION 79

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 84

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 85

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

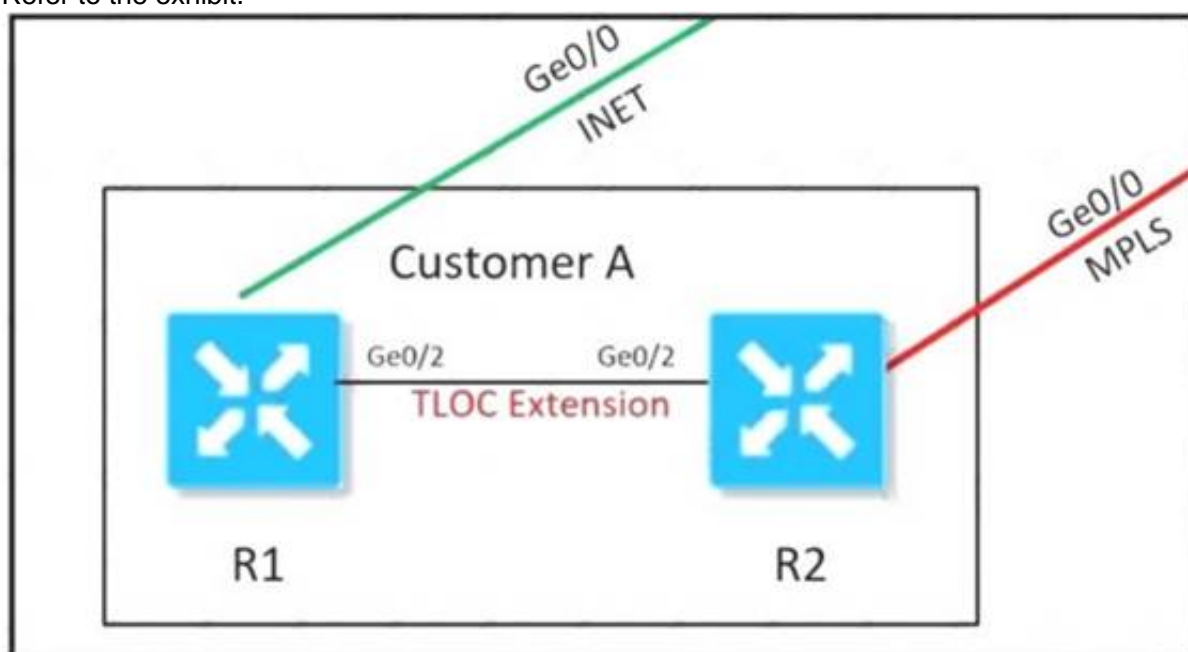
Explanation:

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 88

Refer to the exhibit.



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

A)

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

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

B)

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

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

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

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

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

Answer: D

NEW QUESTION 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 uuid 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 uuid 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 uuid 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 uuid 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)

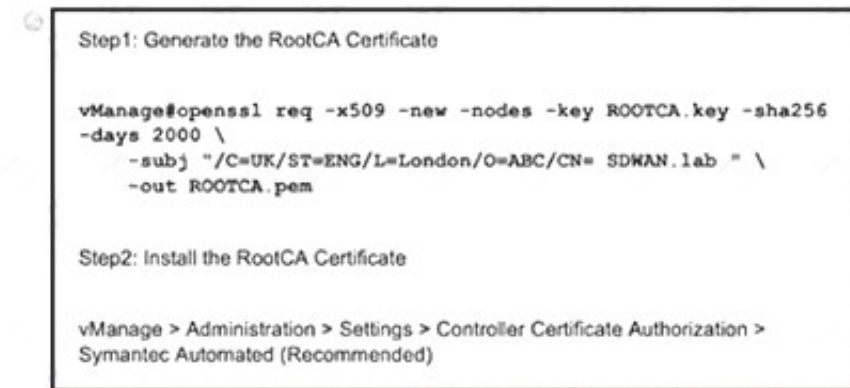
```
Step1: Generate the RootCA Certificate

vManage:~$openssl req -x509 -new -nodes -key ROOTCA.key -
sha256 -days 2000 \
  -subj "/C=UK/ST=ENG/L=London/O=XYZ/CN= SDWAN.lab " \
  -out ROOTCA.pem

Step2: Install the RootCA Certificate

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

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 97

Refer to the exhibit

Controller Type	Hostname	System IP	Expiration Date	uuid	Operation Status	Site ID	Certificate Serial
vBond	vBond	10.1.1.103	14 Jun 2021 3:49:50 PM +04	f1d00	Installed	1	615D8F69000000000005
vSmart	-	-	-	12aa1	CSR Generated	-	No certificate installed
vManage	vManage1	10.1.1.101	14 Jun 2021 2:17:34 PM +04	ca64f9	vBond Updated	1	61699683000000000002

vManage and vBond have an issue establishing a connection to vSmart Which two actions does the administrator take to fix the issue? (Choose two)
 Install the certificate received from the certificate server.

- A. Manually resync vManage and vBond
- B. Reconfigure the vSmart from CLI with the proper Hostname & System IP
- C. Delete and re-add vSmart Click Generate and validate CSR
- D. Request a certificate from the certificate server based on the CSR for the vSmart

Answer: CD

NEW QUESTION 98

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

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

Answer: AC

NEW QUESTION 103

How must the application-aware enterprise firewall policies be applied within the same WAN Edge router?

- A. within and between zones
- B. between two VPN tunnels
- C. within zone pair
- D. between two VRFs

Answer: C

NEW QUESTION 107

A network administrator is configuring an application-aware firewall between inside zones to an outside zone on a WAN edge router using vManage GUI. What

kind of Inspection is performed when the “inspect” action is used?

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

Answer: A

Explanation:

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

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

NEW QUESTION 109

What is the maximum number of IPsec that are temporarily created and converged on a new set if IPsec Sas in the pairwise keys process during a simultaneous rekey?

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

Answer: B

NEW QUESTION 112

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		up

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									
Send to Controllers Click Send to Controllers to sync the WAN Edge list on all controllers									
Total Rows: 20									
State	Device Model	Chassis Number	Hostname	IP Address	Serial No./Token	Validate			
Invalid	vEdge Cloud	9a0cfea0-a463-7dec-c5...	vEdge1	10.10.10.1	BC42AE30	Invalid	Staging	Valid	
Invalid	vEdge Cloud	cc5daa8e-9bb1-7c9d-f5...	vEdge2	10.10.10.2	E1F0754E	Invalid	Staging	Valid	
Invalid	vEdge Cloud	d7b14bb6-f718-b111-8...	vEdge3	10.10.10.3	F5DA0A8D	Invalid	Staging	Valid	
Invalid	vEdge Cloud	92b4f92b-daff-7ce2-c3...	vEdge4	10.10.10.4	BD992059	Invalid	Staging	Valid	
Invalid	vEdge Cloud	0183a420-e93e-41f7-6f...	vEdge5	10.10.10.5	FA460EE6	Invalid	Staging	Valid	

B)

CONFIGURATION DEVICES									
WAN Edge List									
Change Mode Upload WAN Edge List Export Bootstrap Configuration Sync Smart Account									
Total Rows: 20									
State	Device Model	Chassis Number	Serial No./Token	Hostname	System IP	Site ID	Mode		
Invalid	vEdge Cloud	9a0cfea0-a463-7dec-c586-85f9d29cd56a	BC42AE30	vEdge1	10.10.10.1	1	vManage	...	
Invalid	vEdge Cloud	cc5daa8e-9bb1-7c9d-f545-1a9657a0b0...	E1F0754E	vEdge2	10.10.10.2	2	vManage	...	
Invalid	vEdge Cloud	d7b14bb6-f718-b111-8dd5-535fa9c96ba2	F5DA0A8D	vEdge3	10.10.10.3	3	vManage	...	
Invalid	vEdge Cloud	92b4f92b-daff-7ce2-c3da-622b73be0329	BD992059	vEdge4	10.10.10.4	4	vManage	...	
Invalid	vEdge Cloud	0183a420-e93e-41f7-6fc6-f74bb8754881	FA460EE6	vEdge5	10.10.10.5	4	vManage	...	

C)

CONFIGURATION | CERTIFICATES

WAN Edge List Controllers

[Send to Controllers](#) Click **Send to Controllers** to sync the WAN Edge list on all controllers

Search Options

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

CONFIGURATION | CERTIFICATES

WAN Edge List Controllers

[Send to Controllers](#) Click **Send to Controllers** to sync the WAN Edge list on all controllers

Search Options

Total Rows: 20

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

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

Answer: A

NEW QUESTION 114

Which platforms are managed by a single vManage dashboard?

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

Answer: C

NEW QUESTION 119

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

- A)
- ```
vpn 0
interface eth1
ip address 10.50.0.1/24
tunnel-interface
color mpls
```
- B)
- ```
vpn 0
interface eth1
ip address 10.50.0.1/24
tunnel-interface
color public-internet
```
- C)
- ```
vpn 0
interface eth1
ip address 10.50.0.1/24
tunnel-interface
color biz-internet
```
- D)
- ```
vpn 0
interface eth1
ip address 10.50.0.1/24
tunnel-interface
color default
```

- A. Option A

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

Answer: B

NEW QUESTION 122

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	Select the authentication mechanism for the user: <ul style="list-style-type: none">SHA-1 message digestSHA-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 125

In which file format is a critical severity report downloaded from the MONITOR | ALARM tab in the vManage GUI?

- A. .txt
- B. .pdf
- C. .csv
- D. .xlsx

Answer: C

NEW QUESTION 129

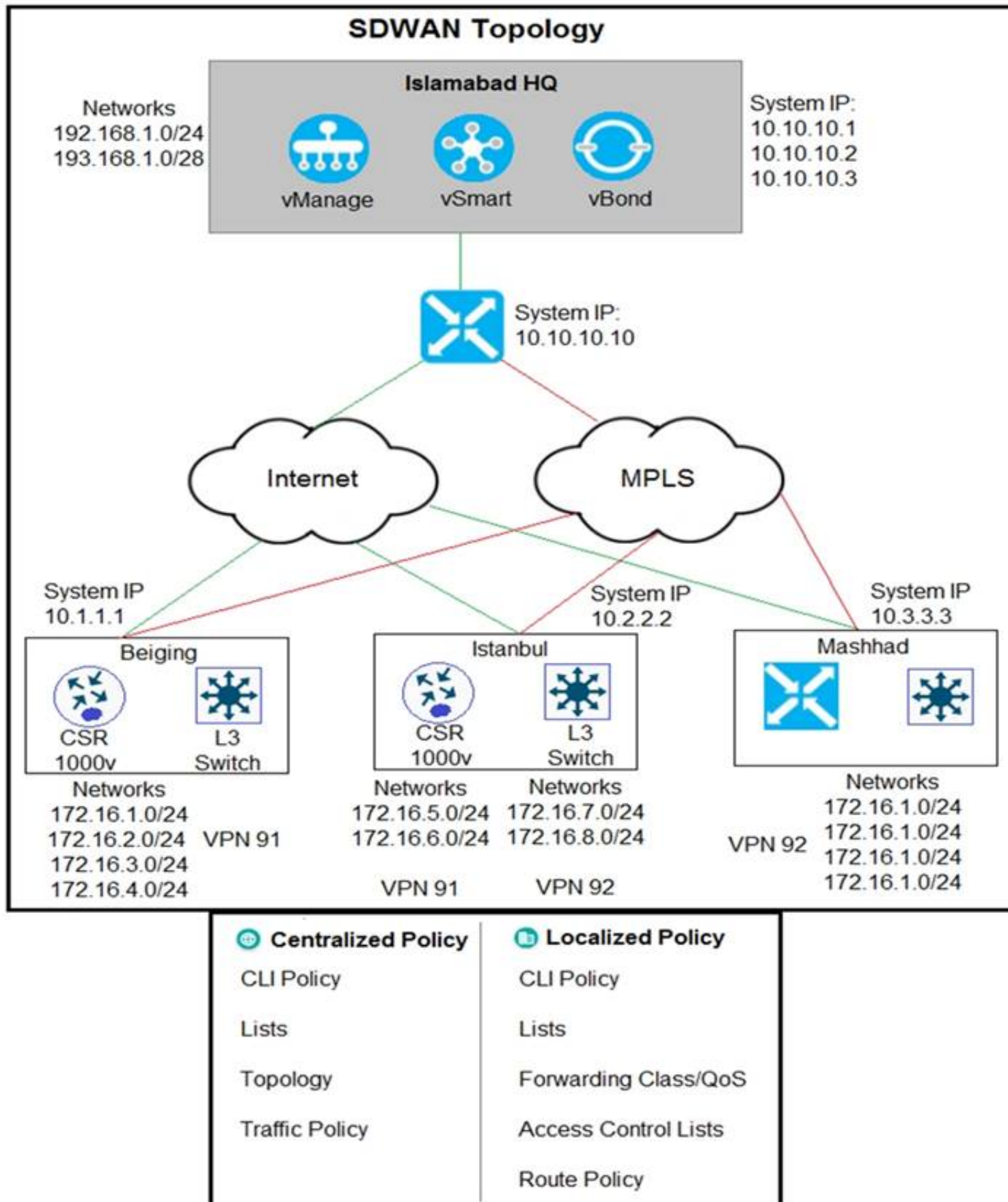
Which table is used by the vSmart controller to maintain service routes of the WAN Edge routers in the hub and local branches?

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

Answer: C

NEW QUESTION 133

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 136

Which alarm setting is configured to monitor serious events that affect but do not shut down, the operation of a network function?

- A. Minor
- B. Major
- C. Medium
- D. Critical

Answer: B

NEW QUESTION 139

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

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

Answer: A

Explanation:

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

NEW QUESTION 141

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 143

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

- A.

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

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

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

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

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

Answer: B

NEW QUESTION 146

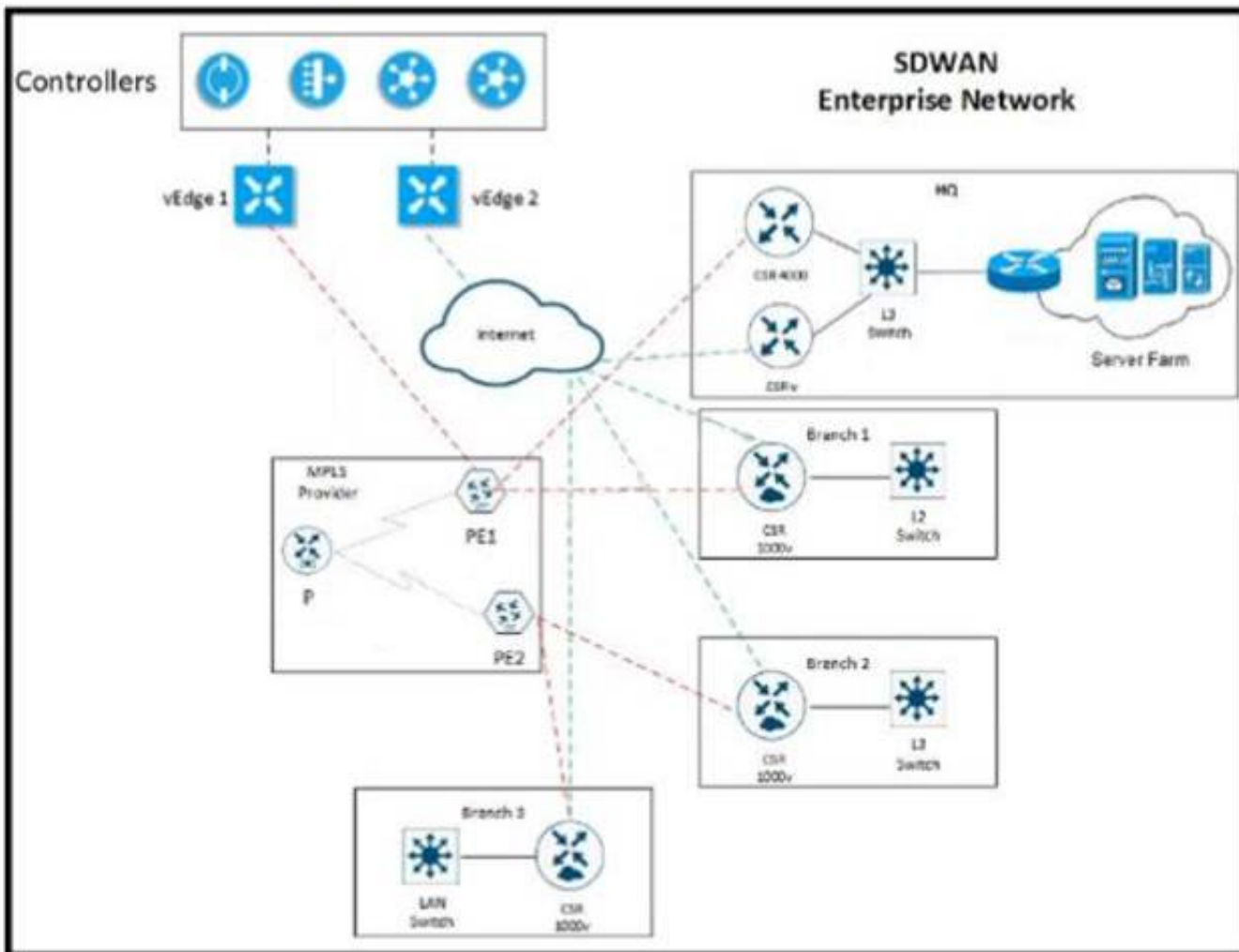
Which Cisco SD-WAN component facilitates the initial communication between WAN Edge devices to join the fabric?

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

Answer: D

NEW QUESTION 148

Refer to the exhibit



The network team must configure E1 GRP peering at HQ with devices in the service VPN connected to WAN Edge CSRv. CSRv is currently configured with

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

Which configuration on the WAN Edge meets the requirement?

A)

```
vpn 0
interface ge0/0
description "Internet Circuit"
ip address 209.165.200.229/30
tunnel-interface
encapsulation ipsec
color public-internet
allow-service all

router
eigrp
address-family ipv4-unicast
maximum-path paths 4
network 10.0.0.0/28
redistribute omp

vpn 512
interface eth0
shutdown
```

B)

```
vpn 0
interface ge0/0
description "Internet Circuit"
ip address 209.165.200.229/30
tunnel-interface
encapsulation ipsec
color public-internet
allow-service all

router
eigrp
address-family ipv4-unicast
maximum-path paths 4
network 10.0.0.0/28
redistribute omp

vpn 512
interface eth0
shutdown
```

C)

```
vpn 0
interface ge0/0
description "Internet Circuit"
ip address 209.165.200.229/30
tunnel-interface
encapsulation ipsec
color public-internet
allow-service all

vpn 1
router
eigrp
address-family ipv4-unicast
maximum-path paths 4
network 10.0.0.0/28
redistribute omp

interface ge0/1
ip address 10.0.0.1/28

vpn 512
interface eth0
shutdown
```

D)

```
vpn 0
vpn 1
interface ge0/0
description "Internet Circuit"
ip address 209.165.200.229/30
tunnel-interface
encapsulation ipsec
color public-internet
allow-service all

router
eigrp
address-family ipv4-unicast
maximum-path paths 4
network 10.0.0.0/28
redistribute omp

interface ge0/1
ip address 10.0.0.1/28

vpn 512
interface eth0
shutdown
```

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

Answer: C

NEW QUESTION 150

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 154

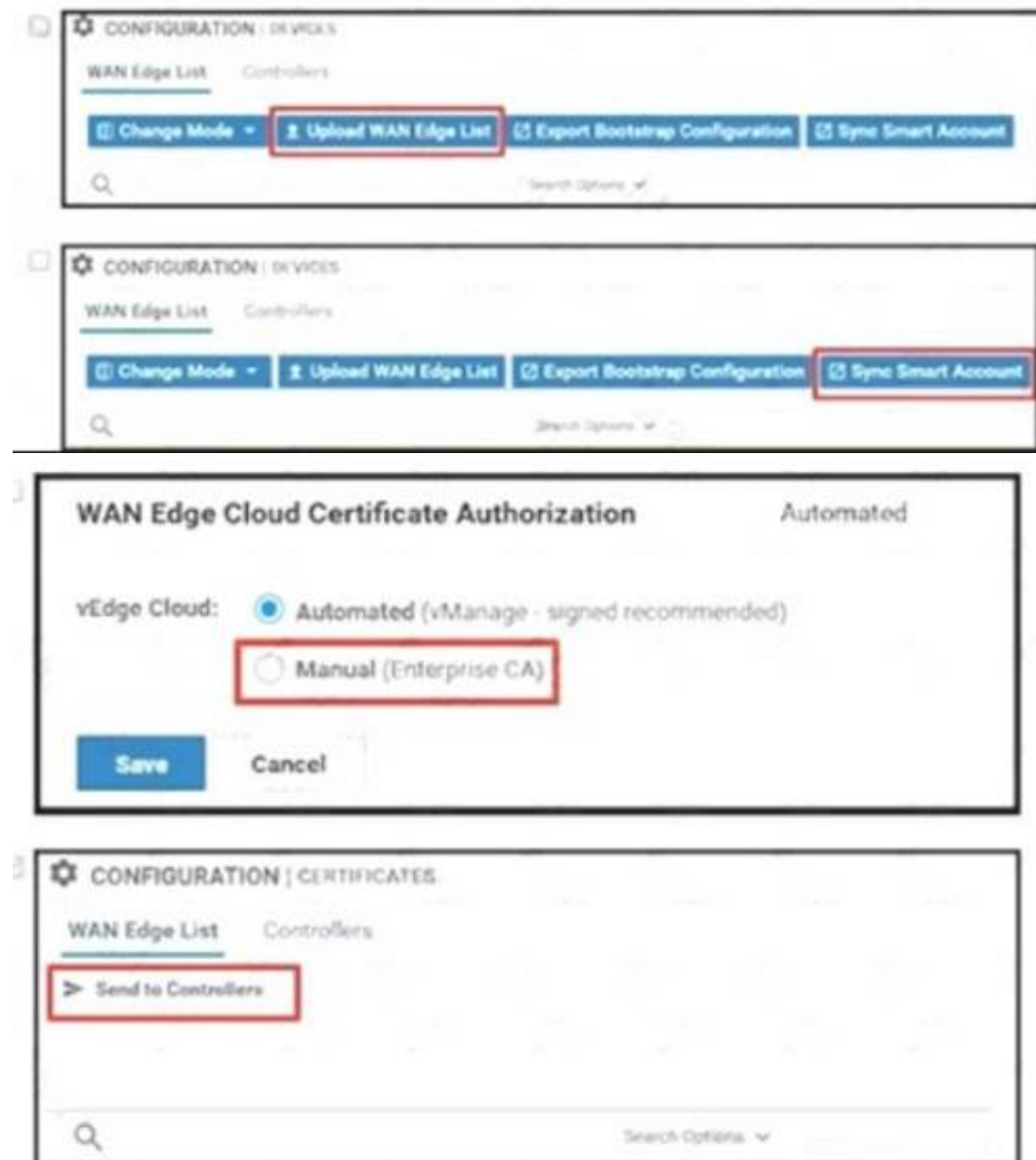
Which percentage for total memory or total CPU usage for a device is classified as normal in the WAN Edge Health pane?

- A. more than 80 percent usage
- B. less than 70 percent usage
- C. between 70 to 90 percent usage
- D. more than 90 percent usage

Answer: B

NEW QUESTION 157

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 162

An enterprise is continuously adding new sites to its Cisco SD-WAN network. It must configure any cached routes flushed when OMP peers have lost adjacency Which configuration allows the cached OMP routes to be flushed after every 24 hours from its routing table?

- A)

Basic Configuration Timers Advertise

Graceful Restart for OMP ☒ On ☐ Off

Overlay AS Number

Graceful Restart Timer (seconds)

Number of Paths Advertised per Prefix

ECMP Limit

Shutdown ☐ Yes ☒ No

B)

Basic Configuration Timers Advertise

Graceful Restart for OMP ☒ On ☐ Off

Overlay AS Number

Graceful Restart Timer (seconds)

Number of Paths Advertised per Prefix

ECMP Limit

Shutdown ☐ Yes ☒ No

C)

Basic Configuration Timers Advertise

Graceful Restart for OMP ☒ On ☐ Off

Overlay AS Number

Graceful Restart Timer (seconds)

Number of Paths Advertised per Prefix

ECMP Limit

Shutdown ☐ Yes ☒ No

D)

Basic Configuration Timers Advertise

Graceful Restart for OMP ☒ On ☐ Off

Overlay AS Number

Graceful Restart Timer (seconds)

Number of Paths Advertised per Prefix

ECMP Limit

Shutdown ☐ Yes ☒ No

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

Answer: B

NEW QUESTION 164

Refer to the exhibit.

```
vEdge-2(config-vpn-0)#interface ge0/2.101
vEdge-2(config-interface)#ip address 10.1.100.0/24
vEdge-2(config-interface)#tloc-extension ge0/0
vEdge-2(config-interface)#mtu 1496
vEdge-2(config-interface)#no shutdown
```

What binding is created using the tloc-extension command?

- A. between ge 0/2.101 of port-type service and ge 0/0 of port-type service
- B. between ge 0/2.101 of port-type transport and ge 0/0 of port-type service
- C. between ge 0/2.101 of port-type service and ge 0/0 of port-type transport
- D. between ge 0/2.101 of port-type transport and ge 0/0 of port-type transport

Answer: D

Explanation:

tloc-extension

Bind this interface, which connects to another vEdge router at the same physical site, to the local router's WAN **transport interface** (on vEdge routers only).

NEW QUESTION 166

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)

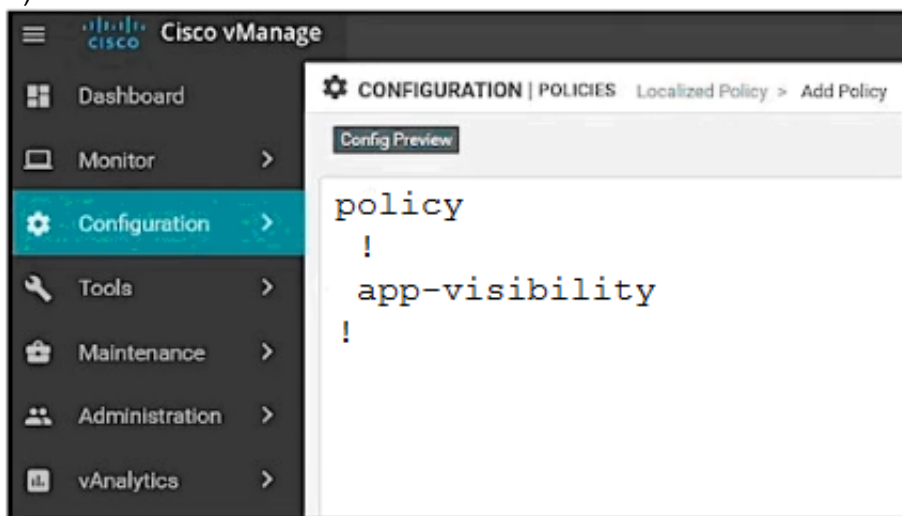

```
app-route-policy _VPN_10_AAR
vpn-list VPN_50
sequence 21
match
app-list ICMP
source-ip 0.0.0.0/0
!
action
sla-class ICMP_SLA preferred-color mpis public-internet
```

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

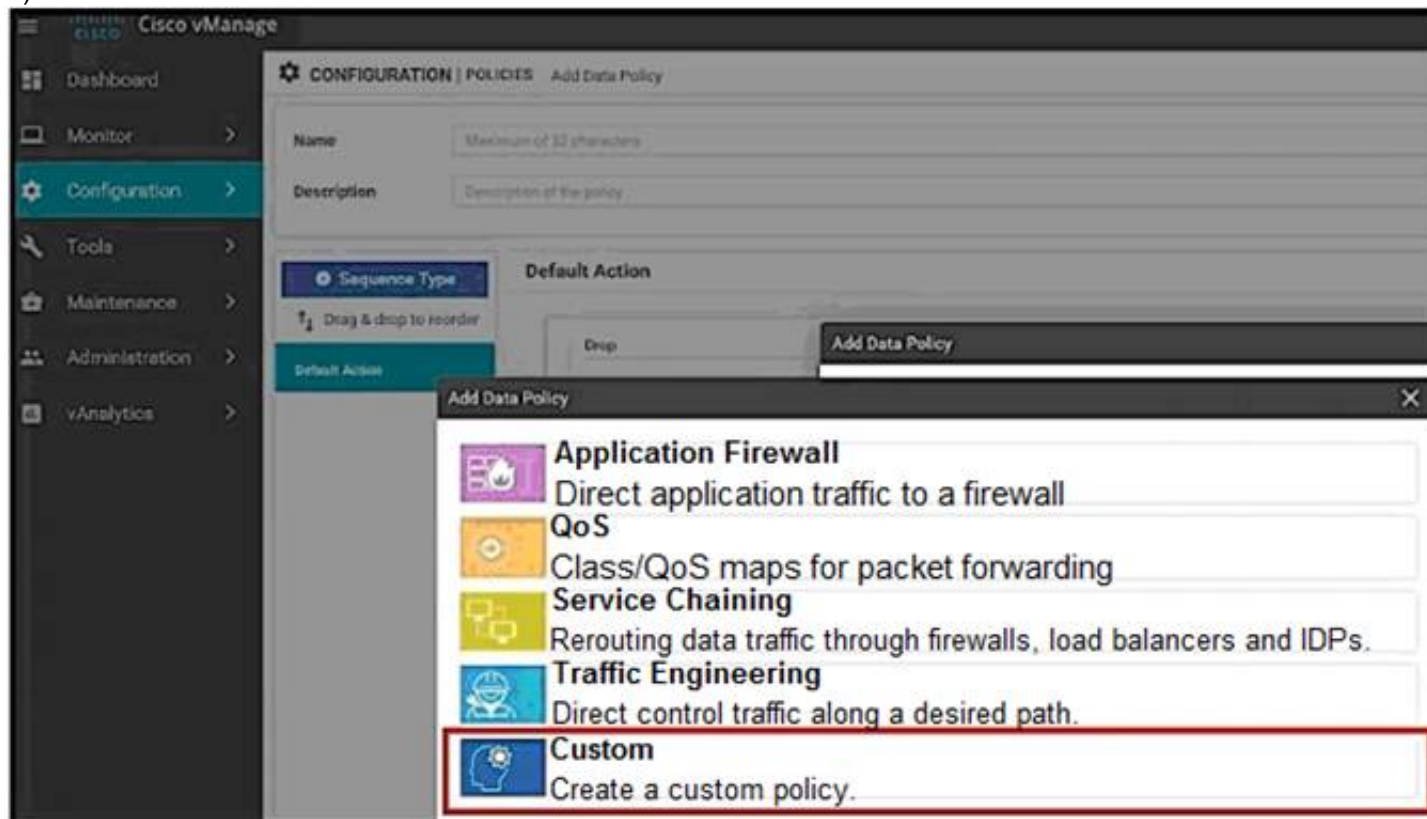
Answer: C

NEW QUESTION 169

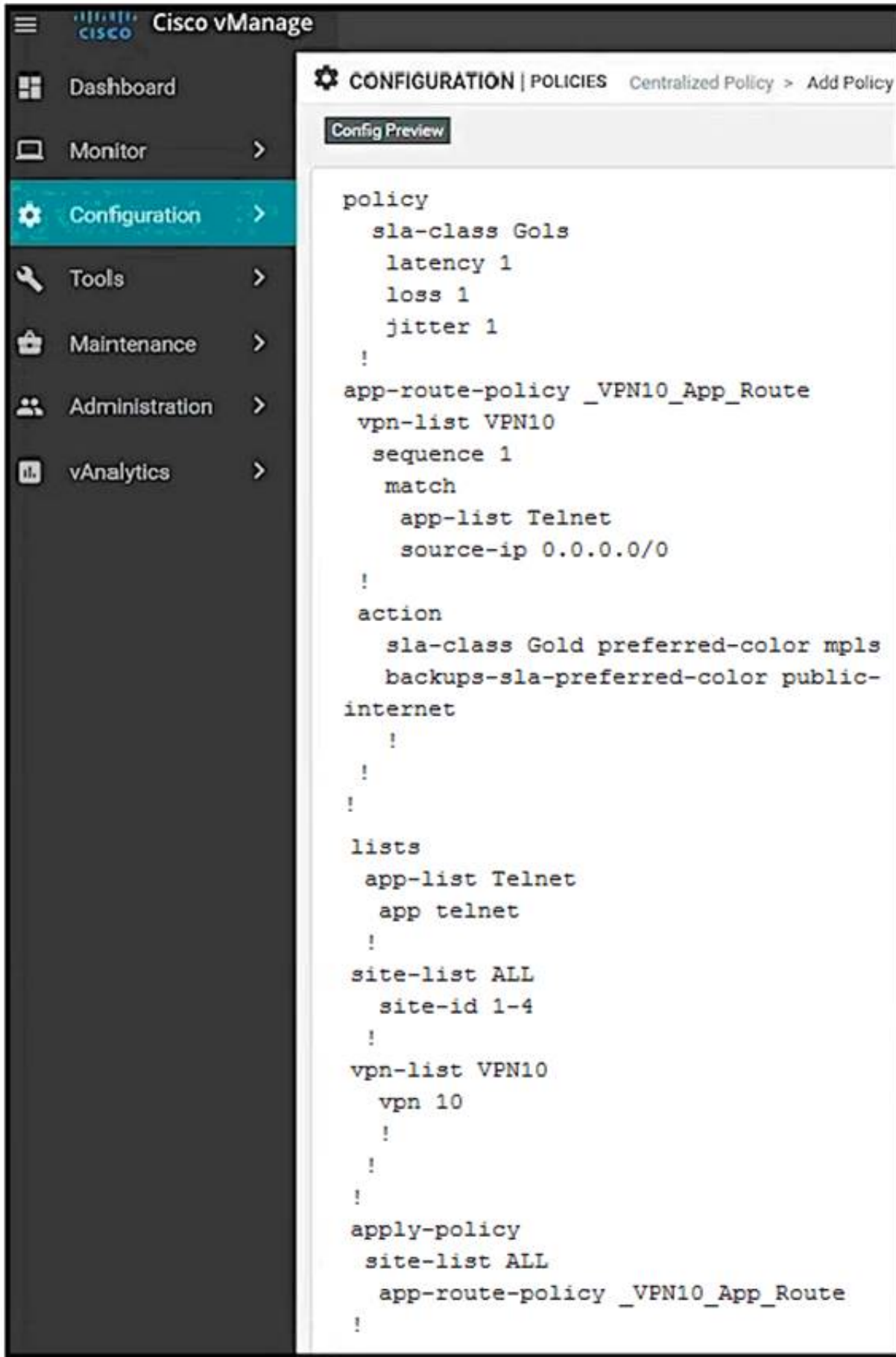
An organization wants to discover, monitor, and track the applications running on the WAN Edge device on the LAN Which configuration achieves this goal?
A)



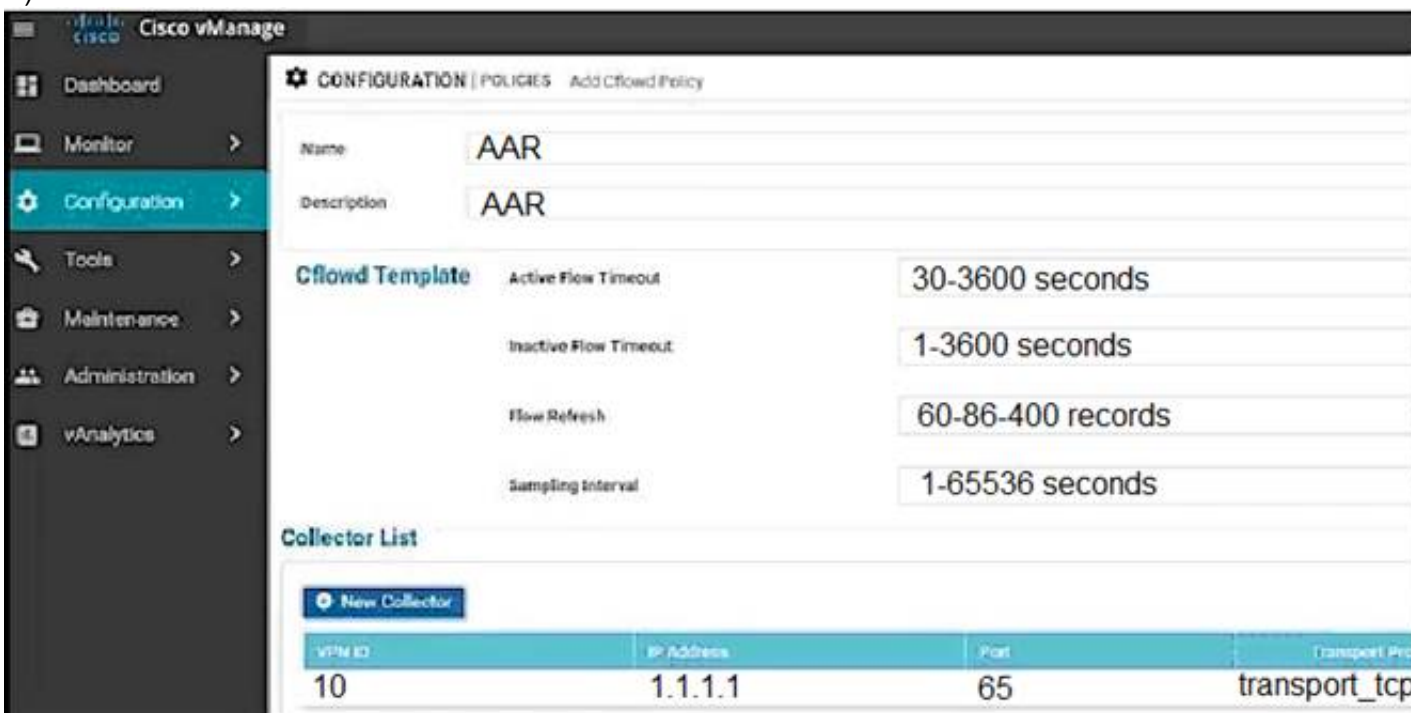
B)



C)



D)



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

Answer: D

NEW QUESTION 174

Which controller is used for provisioning and configuration in a Cisco SD-WAN solution?

- A. vBond
- B. Manage
- C. WAN Edge router
- D. vSmart

Answer: B

NEW QUESTION 179

Which type of connection is created between a host VNet and a transit VNet when configuring Cloud OnRamp for IaaS?

- A. Azure private endpoint
- B. GRE tunnel
- C. IPsec tunnel
- D. Azure peer link

Answer: C

NEW QUESTION 184

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 188

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 190

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

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

Answer: B

Explanation:

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

NEW QUESTION 195

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 200

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

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

Answer: C

NEW QUESTION 203

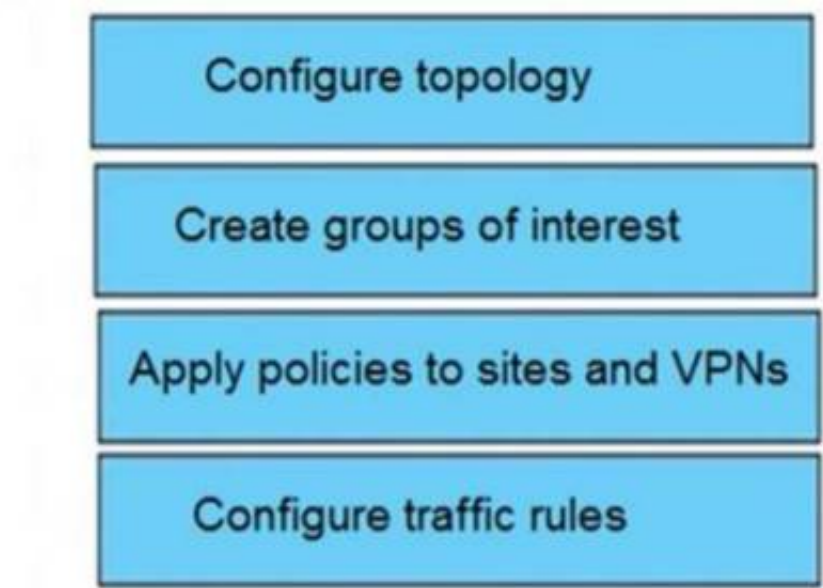
Drag and drop the vManage policy configuration procedures from the left onto the correct definitions on the right.

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 208

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 212

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 216

Which VPN must be present on at least one interface to install Cisco vManage and integrate it with WAN Edge devices in an overlay network site

ID:S4307T7E78F29?

- A. VPN 512
- B. any VPN number selected
- C. services VPN range 0-511
- D. VPNO

Answer: D

NEW QUESTION 220

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 221

How are custom application ports monitored in Cisco SD-WAN controllers?

- A. Customers add custom application ports in vAnalytics and vManage.
- B. Customers add custom application ports in vAnalytics and vSmart.
- C. Cisco adds custom application ports in vAnalytics and vManage.
- D. Cisco adds custom application ports in vAnalytics and vSmart.

Answer: A

NEW QUESTION 223

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 228

An engineer builds a three-node vManage cluster and then realizes that multiple nodes are unnecessary for the size of the company. How should the engineer revert the setup to a single vManage?

- A. Remove two nodes from the three-node vManage cluster
- B. Use the cluster conversion utility to convert to standalone vManage
- C. Restore vManage from the backup VM snapshot
- D. Leave the cluster as is and point to one vManage

Answer: B

NEW QUESTION 232

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 233

How does the replicator role function in Cisco SD-WAN?

- A. WAN Edge devices advertise the rendezvous point to all the receivers through the underlay network.
- B. vSmart Controllers advertise the rendezvous point to all the receivers through the overlay network.

- C. WAN Edge devices advertise the rendezvous point to all receivers through the overlay network.
 D. vSmart Controllers advertise the rendezvous point to all the receivers through the underlay network.

Answer: B

Explanation:

Replicators

For efficient use of WAN bandwidth, strategic Cisco SD-WAN routers can be deployed and configured as replicators throughout the overlay network. Replicators mitigate the requirement for a Cisco SD-WAN router with local sources or the PIM-RP to replicate a multicast stream once for each receiver. As discussed above, replicators advertise themselves, using OMP multicast-autodiscover routes, to the Cisco vSmart Controllers in the overlay network. The controllers then forward the replicator location information to the PIM-enabled Cisco IOS XE SD-WAN routers that are in the same VPN as the replicator.

NEW QUESTION 235

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

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

Answer: AC

Explanation:

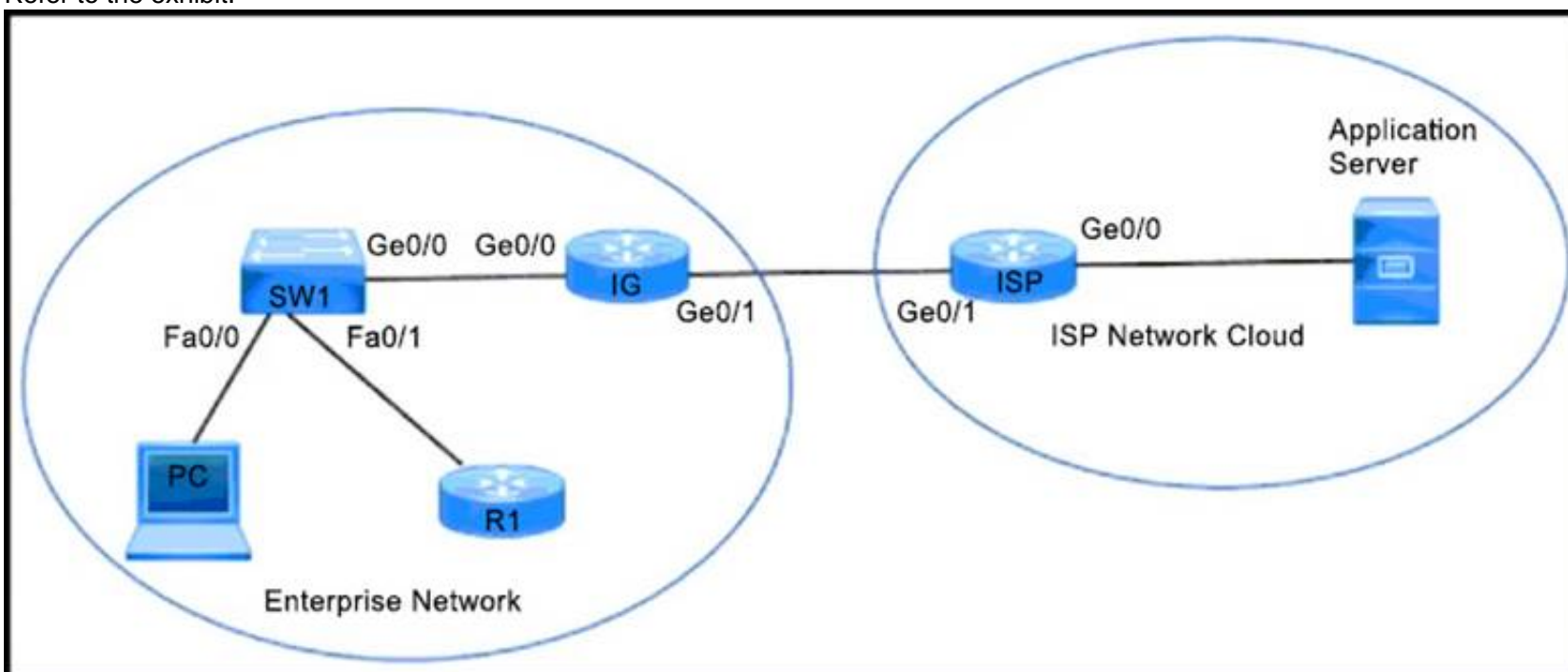
<https://www.cisco.com/c/en/us/solutions/collateral/enterprise-networks/sd-wan/nb-07-cloud-router-data-sheet-ct>

The following figure illustrates Cisco vEdge Cloud router solution elements.



NEW QUESTION 240

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 245

In which VPN is the NAT operation on an outgoing interface configured for direct Internet access?

- A. 1
- B. 10
- C. 512

Answer: D

NEW QUESTION 248

An engineer must deploy a QoS policy with these requirements:

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

Which configuration meets the requirements?

- A.

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

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

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

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

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

Answer: B

NEW QUESTION 251

Which type of certificate is installed on vManage for a user to access vManage via a web browser?

- A. SD-AVC Certificate
- B. WAN Edge Certificate
- C. Controller Certificate
- D. Web Server Certificate

Answer: D

NEW QUESTION 253

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

poll interval

color

hello interval

PMTU discovery

multiplier

BFD for Transport Tunnel

BFD for Application-Aware Routing

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

https://sdwandocs.cisco.com/Product_Documentation/vManage_Help/Release_18.2/Configuration/Templates/B

NEW QUESTION 254

Refer to the exhibit.

The screenshot shows the Cisco vManage configuration interface for BGP. The 'Basic Configuration' tab is selected. The configuration fields are as follows:

- Shutdown:** Radio buttons for Yes and No, with No selected.
- AS Number:** Text field containing 65590.
- Router ID:** Text field containing 192.168.1.1.
- Propagate AS Path:** Radio buttons for On and Off, with On selected.
- Internal Routes Distance:** Text field.
- Local Routes Distance:** Text field.
- External Routes Distance:** Text field.

At the bottom right, there are 'Save' and 'Cancel' buttons.

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

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

Answer: C

NEW QUESTION 257

An engineer creates this data policy for DIA for VPN 10:

```
data-policy DIA
vpn-list VPN-10
sequence 10
match
destination-data-prefix-list INTERNAL-NETWORKS
!
action accept
```

Which policy sequence enables DIA for external networks?

- ☐ sequence 5


```
match
source-ip 0.0.0.0/0
!
action accept
nat use-vpn 0
```
- ☐ sequence 5


```
match
destination-ip 0.0.0.0/0
!
action reject
!
default-action accept
```
- ☐ sequence 20


```
match
destination-ip 0.0.0.0/0
!
action accept
nat use-vpn 0
```
- ☐ sequence 20


```
match
source-ip 0.0.0.0/0
!
action reject
!
default-action accept
```

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

Answer: C

NEW QUESTION 262

How is a TLOC uniquely identified from a WAN Edge router to the SD-WAN transport network?

- A. system IP address
- B. VPN ID
- C. OMP
- D. SD-WAN site ID

Answer: A

NEW QUESTION 267

A network administrator is tasked to make sure that an OMP peer session is closed after missing three consecutive keepalive messages in 3 minutes. Additionally, route updates must be sent every minute. If a WAN Edge router becomes unavailable, the peer must use last known information to forward packets for 12 hours. Which set of configuration commands accomplishes this task?

- ☒ `omp
timers
 advertisement-interval 60
 holdtime 180
 graceful-restart-timer 43200`
- ☐ `omp
timers
 advertisement-interval 1
 holdtime 180
 graceful-restart-timer 43200`
- ☐ `omp
timers
 advertisement-interval 1
 holdtime 180
 graceful-restart-timer 720`
- ☐ `omp
timers
 advertisement-interval 60
 holdtime 60
 graceful-restart-timer 720`

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

Answer: A

Explanation:

https://sdwan-docs.cisco.com/Product_Documentation/vManage_Help/Release_17.2/Configuration/Templates/O

NEW QUESTION 269

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 273

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 278

Which component of the Cisco SD-WAN architecture oversees the control plane of overlay network to establish, adjust, and maintain the connections between the WAN Edge devices that form the Cisco SD-WAN fabric?

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

Answer: C

Explanation:

Cisco vSmart Controller

The Cisco vSmart Controller oversees the control plane of the Cisco SD-WAN overlay network, establishing, adjusting, and maintaining the connections that form the Cisco SD-WAN fabric.

NEW QUESTION 280

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

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

Answer: D

NEW QUESTION 284

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 286

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?

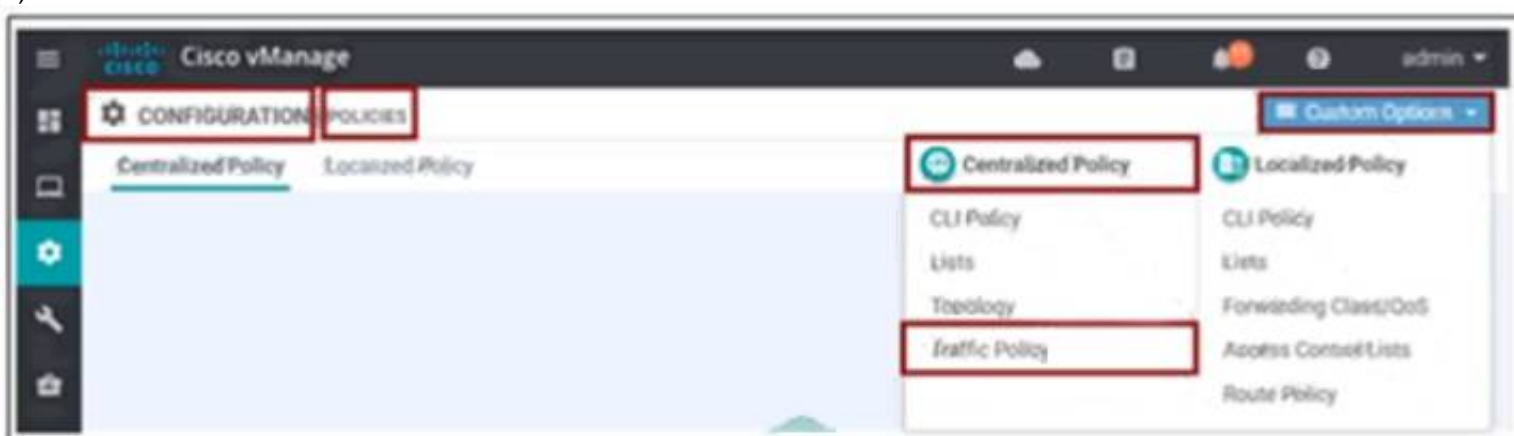
- A. service
- B. BGP
- C. TLOC
- D. OMP

Answer: D

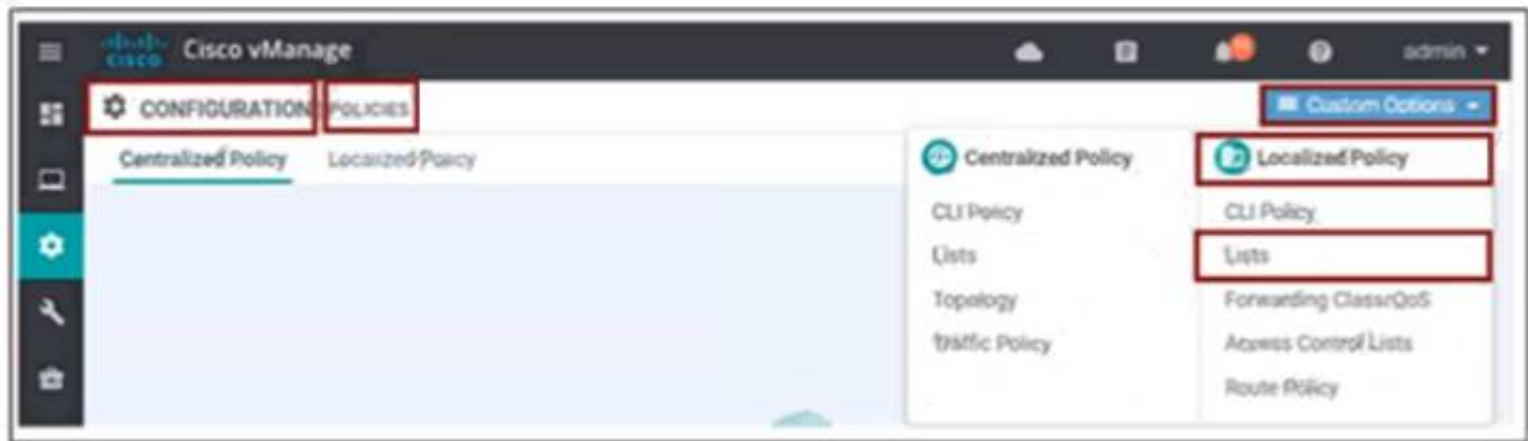
NEW QUESTION 289

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?

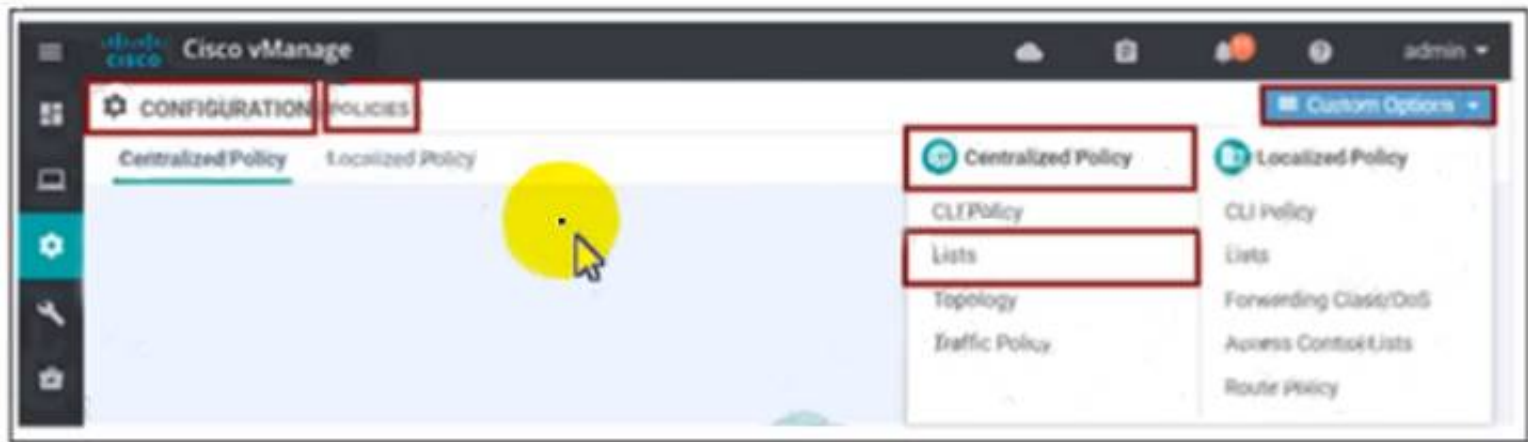
A)



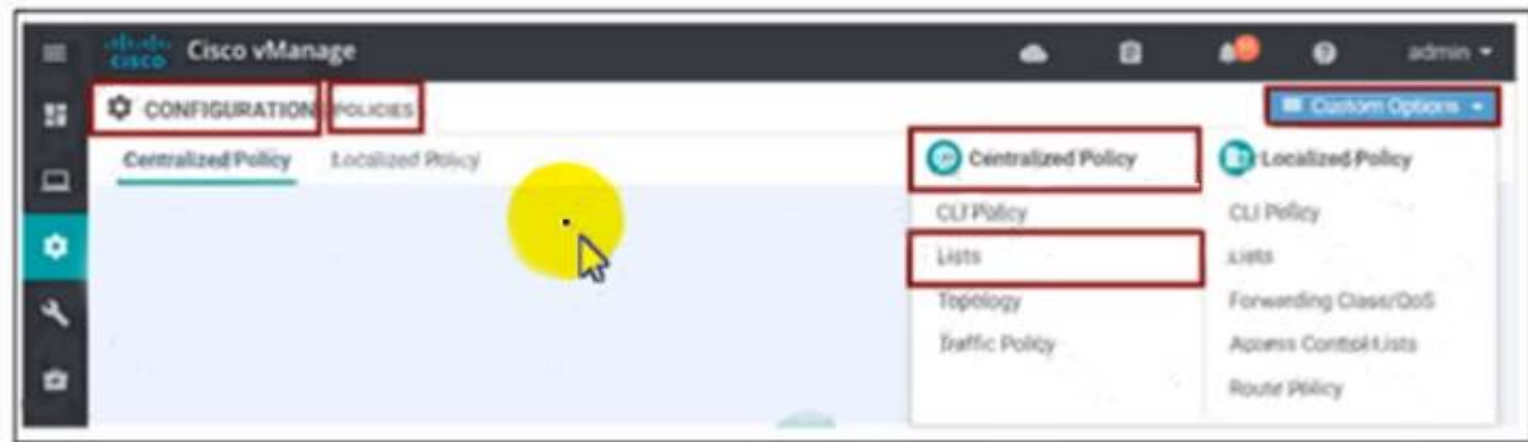
B)



C)



D)



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

Answer: D

NEW QUESTION 292

Which template configures the out-of-band management VPN?

A)

Section	Parameter	Type	Variable/value
Basic configuration	Shutdown	Global	No
	Interface Name	Global	loopback0
IPv4 configuration	IPv4 Address	Radio button	Static
	IPv4 Address	Device Specific	vpn1_lo0_int_ip_addr/maskbits

B)

Section	Parameter	Type	Variable/value
Basic configuration	Shutdown	Global	No
	Interface Name	Device Specific	vpn512_mgt_int_mgmt0_or_gex/x
	Description	Global	Management Interface
IPv4 configuration	IPv4 Address	Radio button	Static
	IPv4 Address	Device Specific	vpn512_mgt_int_ip_addr/maskbits

C)

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

D)

Section	Parameter	Type	Variable/value
Basic configuration	Shutdown	Device Specific	vpn1_lan_int2_shutdown
	Interface Name	Device Specific	vpn1_lan_int2_gex/x
IPv4 configuration	Description	Device Specific	vpn1_lan_int2_description
	IPv4 Address	Radio button	Static
	IPv4 Address	Device Specific	vpn1_lan_int2_ip_addr/maskbits

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

Answer: C

NEW QUESTION 293

Which SD-WAN component detects path performance information in the organization to report the issue to the service provider at site ID:S4288T5E44F04?

- A. vAnalytics
- B. vManage NMS
- C. vBond Orchestrator
- D. Cisco DNA

Answer: B

NEW QUESTION 296

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

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

Answer: B

Explanation:

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

NEW QUESTION 301

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 304

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)

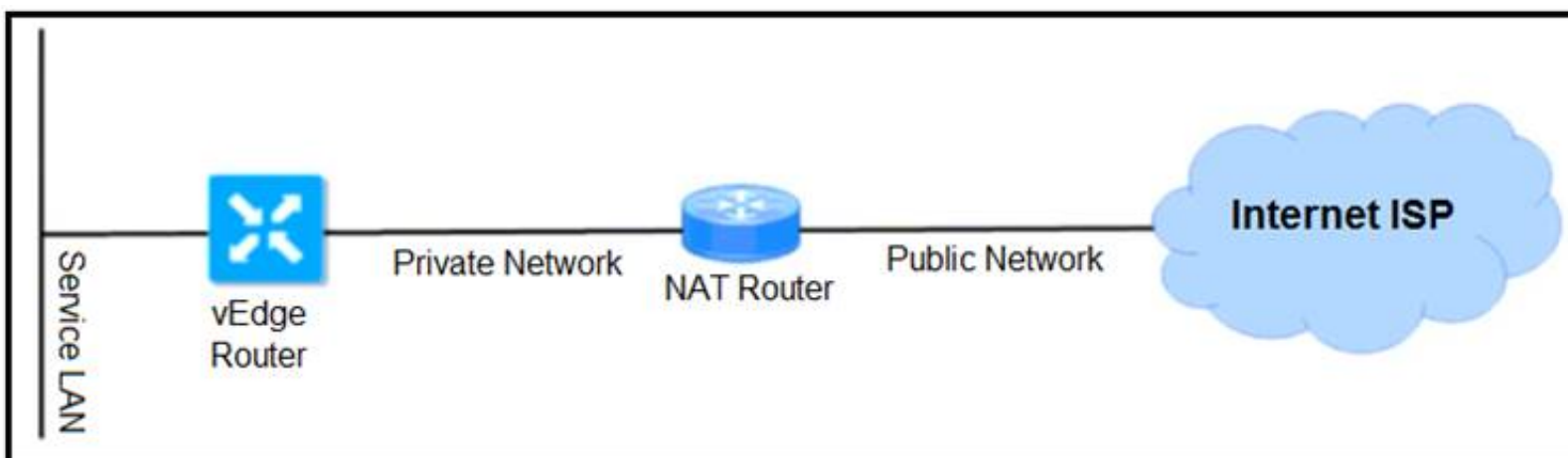
```
vpn 10
 name "Service VPN 10"
 omp
 advertise connected
```

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

Answer: D

NEW QUESTION 308

Refer to the exhibit



Which NAT types must the engineer configure for the vEdge router to bring up the data plane tunnels?

- A. Enable Full Cone NAT on the vEdge interface
- B. Use public color on the TLOC
- C. Use private color on the TLOC
- D. Enable Symmetric NAT on the vEdge interface

Answer: A

NEW QUESTION 310

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 313

Which routing protocol is used to exchange control plane information between vSmart controllers and WAN Edge routers in the Cisco SD-WAN secure extensible network?

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

Answer: D

NEW QUESTION 318

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

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

Answer: A

NEW QUESTION 322

Refer to the exhibit.

Address Family	<div><div></div><div><div><input checked="" type="radio"/> On</div><div><input type="radio"/> Off</div></div></div>
Address Family	<div><div></div><div>ipv4-unicast </div></div>
Maximum Number of Prefixes	<div><div></div><div></div></div>
Route Policy In	<div><div></div><div><div><input type="radio"/> On</div><div><input checked="" type="radio"/> Off</div></div></div>
Route Policy Out	<div><div></div><div><div><input checked="" type="radio"/> On</div><div><input type="radio"/> Off</div></div></div>
Policy Name	<div><div></div><div>eBGP_Community_Policy</div></div>

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

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

B)


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

C)

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

D)

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

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

Answer: D

NEW QUESTION 324

A network administrator is configuring a tunnel interface on a branch Cisco IOS XE router to run TLOC extensions. Which configuration will extend a TLOC over a GRE tunnel to another router in the branch?

- ☒ sdwan
interface g0/0
extended-interface
tloc-extension-gre-from 10.1.1.1
- ☐ sdwan
interface g0/0
gre-interface
tloc-extension-gre-to 10.1.1.1
- ☐ sdwan
interface g0/0
tunnel-interface
tloc-extension-gre-to 10.1.1.1
- ☒ sdwan
interface g0/0
tloc-interface
tloc-extension-gre-from 10.1.1.1

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

Answer: C

Explanation:

Configure a tunnel interface over which to run TLOC extensions (on IOS XE routers only). TLOC extensions allow you to extend a TLOC, over a GRE tunnel, to another router in the branch.

Command Hierarchy

```
sdwan
  interface interface-name
    tunnel-interface
      tloc-extension-gre-to extended-interface-ip-address
```

NEW QUESTION 326

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 329

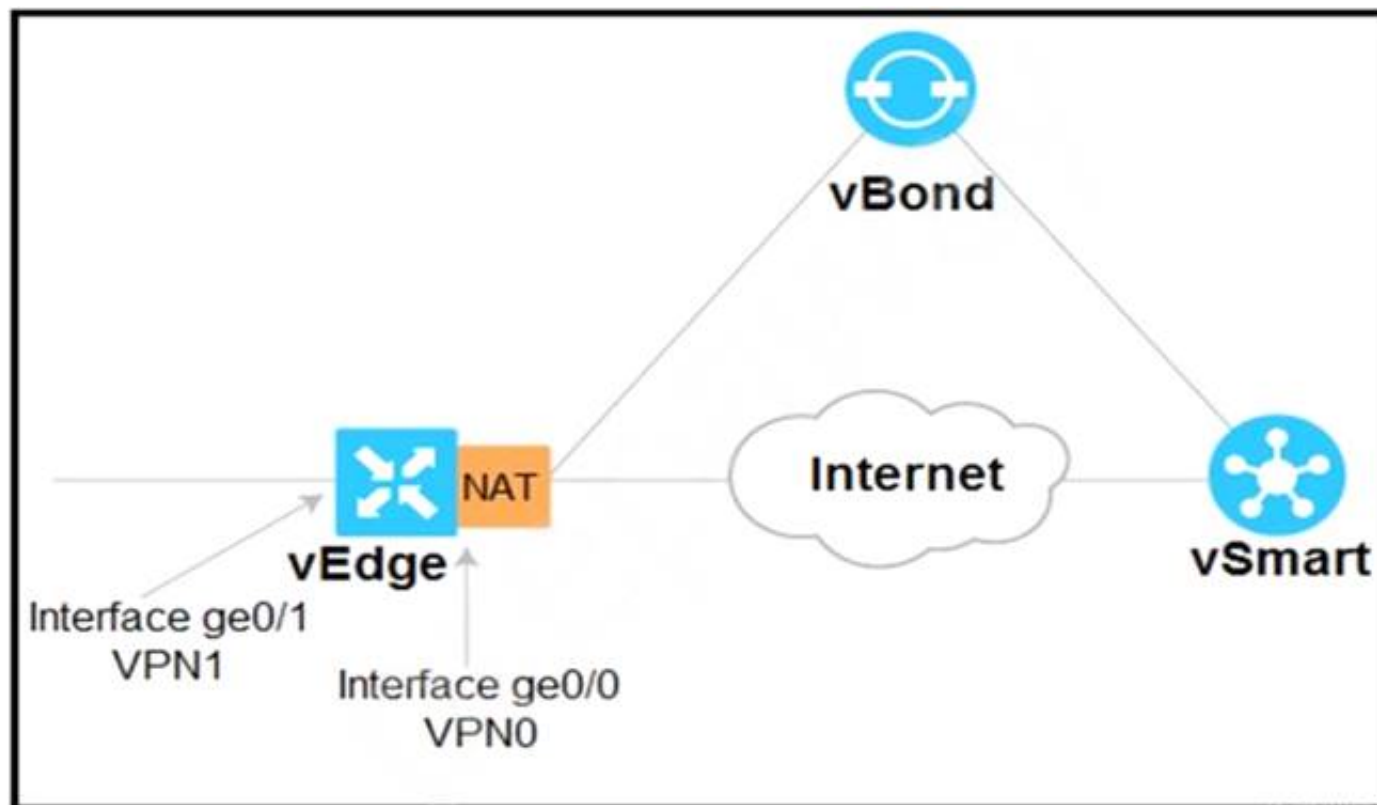
Which type of lists are used to group related items via an application-aware routing policy under the policy lists command hierarchy on vSmart controllers?

- A. data prefix, sh
- B. and VPN
- C. OSCP value, application, and VPN
- D. data prefix, application, and SLA class
- E. DSCP value, site, and VPN

Answer: C

NEW QUESTION 333

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 335

.....

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