

# Cisco

## Exam Questions 300-515

Implementing Cisco Service Provider VPN Services (SVPI)



**NEW QUESTION 1**

- (Exam Topic 1)

What is the primary function of a VRF on a router?

- A. It enables the router to support multiple separate routing tables, which allows the device to handle overlapping IP addresses.
- B. It enables a router to run BGP and a distance vector routing protocol at the same time, which allows it to serve as a VPN endpoint between remote sites.
- C. It enables a router to configure VLANs locally, which provides segregation between networks.
- D. It enables the router to provide faster switching through the network by using labels to identify the input and output interfaces for neighbor routers.

**Answer: A**

**NEW QUESTION 2**

- (Exam Topic 2)

While troubleshooting an AToM L2VPN service, a network consultant notices that the AC Layer 2 encapsulations are different. Which action should the consultant take in order to make the MPLS L2VPN work?

- A. tag-rewrite on the ingress and egress PE router
- B. interworking IP configuration on the last PE router before label disposition
- C. nonrouted interworking setup to properly translate only the Layer 2 information from the AC
- D. interworking IP configuration on both the AC terminations on the PEs

**Answer: D**

**Explanation:**

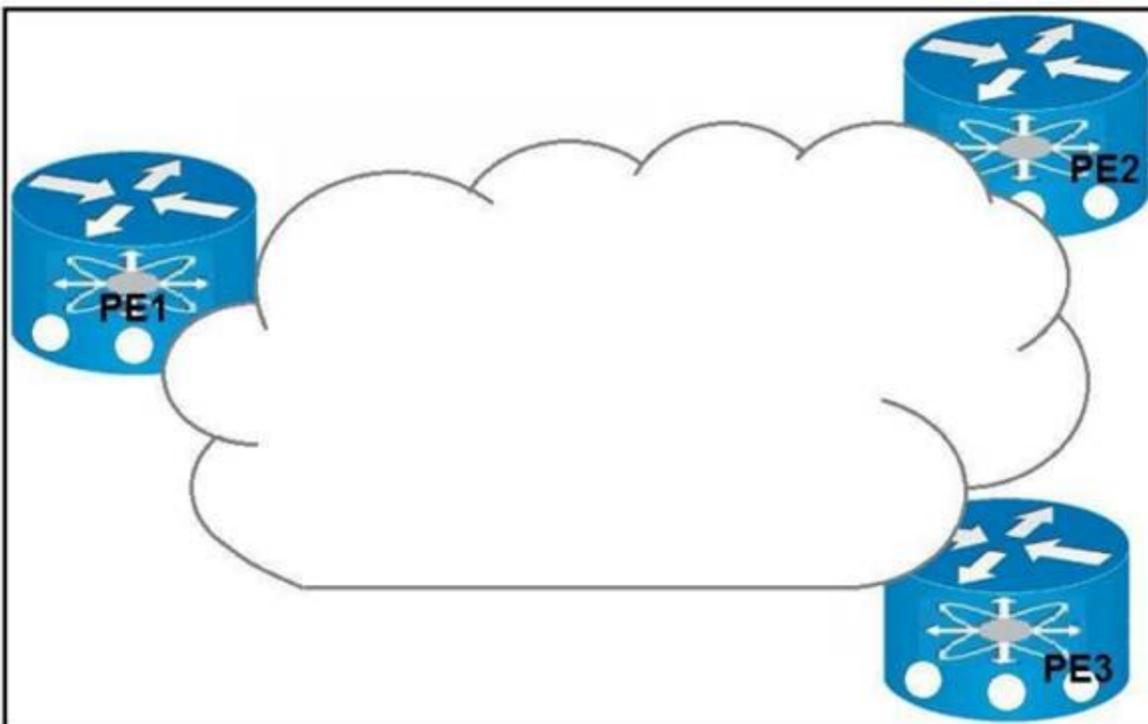
Reference:

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp\\_l2\\_vpns/configuration/xr-16-11/mp-l2-vpns-xr-16-11-book/l2vpn-interworking.html](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_l2_vpns/configuration/xr-16-11/mp-l2-vpns-xr-16-11-book/l2vpn-interworking.html)

**NEW QUESTION 3**

- (Exam Topic 2)

Refer to the exhibit.



Which result occurs when PE1 learns a new MAC address and all three PEs are enabled with EVPN native?

- A. A system notification is sent to the network administrator that triggers the manual configuration of the new MAC address on PE2 and PE3.
- B. The new MAC address is sent by BGP to PE2 and PE3 as a Type 2 BGP route.
- C. The MAC address is entered into the CAM table and is classified for use on the native VLAN
- D. The MAC address is entered into the CAM table only if it is learned on the native VLAN.

**Answer: B**

**Explanation:**

Reference: [https://www.cisco.com/c/en/us/td/docs/routers/asr9000/software/asr9k-r6-4/lxvpn/configuration/guide/b-l2vpn-cg-asr9000-64x/b-l2vpn-cg-asr9000-64x\\_chapter\\_01011.html](https://www.cisco.com/c/en/us/td/docs/routers/asr9000/software/asr9k-r6-4/lxvpn/configuration/guide/b-l2vpn-cg-asr9000-64x/b-l2vpn-cg-asr9000-64x_chapter_01011.html)

**NEW QUESTION 4**

- (Exam Topic 2)

What do EVPN single-active and all-active have in common?

- A. They are default gateway redundancy options.
- B. They are multihoming mechanisms used for CE devices.
- C. They are used to provide single connection from a CE device to a service provider.
- D. They are both roles that a designated router can take when MPLS is used with EVPN.

**Answer: D**

**Explanation:**

Reference: [https://www.cisco.com/c/en/us/td/docs/routers/asr9000/software/asr9k-r6-2/lxvpn/configuration/guide/b-l2vpn-cg-asr9000-62x/b-l2vpn-cg-asr9000-62x\\_chapter\\_01011.html](https://www.cisco.com/c/en/us/td/docs/routers/asr9000/software/asr9k-r6-2/lxvpn/configuration/guide/b-l2vpn-cg-asr9000-62x/b-l2vpn-cg-asr9000-62x_chapter_01011.html)

**NEW QUESTION 5**

- (Exam Topic 2)

Which mechanism reduces the network flooding caused by host ARP learning behavior?

- A. ARP suppression
- B. storm control
- C. root guard
- D. BPDU guard

**Answer:** A

**Explanation:**

Reference: <https://www.cisco.com/c/en/us/products/collateral/switches/nexus-7000-series-switches/white-paper-c11-735015.html>

**NEW QUESTION 6**

- (Exam Topic 3)

Refer to the exhibit.

```
mdt default mpls mldp 2.2.2.2
```

Which statement about this command is true?

- A. It must be configured on each PE router to enable the PE routers to receive multicast traffic for this particular MVRP.
- B. It is used to set the designated router on a link using PIM-SM.
- C. It must be configured on the PE and CE router to enable MP-BGP to send labels for CSC.
- D. It is used to set the router that will server as the root bridge for STP.

**Answer:** A

**Explanation:**

Reference: <https://www.cisco.com/c/en/us/td/docs/routers/asr1000/configuration/guide/chassis/asrswcfg/lsmldp.html>

**NEW QUESTION 7**

- (Exam Topic 3)

A network engineer is implementing Layer 3 MPLS VPNs on Cisco IOS/IOS XE PE routers. Which PE-to-CE routing protocol requires a separate routing process to be created for each VRF?

- A. RIPv2
- B. OSPF
- C. BGP
- D. EIGRP

**Answer:** B

**NEW QUESTION 8**

- (Exam Topic 3)

While implementing Layer 3 MPLS VPN, which feature should an engineer use at the PEs to transform the customer IPv4 prefixes into a unique 96-bit prefix

- A. RT
- B. VC ID
- C. RD
- D. PW ID

**Answer:** C

**NEW QUESTION 9**

- (Exam Topic 3)

Refer to the exhibit.

<b>PE1</b> ip vrf CE1 rd 111:1 route-target export 100:1 route-target import 200:2	<b>PE2</b> ip vrf CE2 rd 112 :2 route-target export 200:2 route-target import 100:1 route-target import 300:3
<b>PE3</b> ip vrf Internet rd 333:3 route-target export 300:3 route-target import 100:1 route-target import 200:2	

PE1 and PE2 are exchanging VPNv4 routes for CE1 and CE2, and PE3 contains the default route to the internet. If the three devices are operating normally, which

two conclusions describe this configuration? (Choose two.)

- A. The CE1 and CE2 VRFs can exchange routes only between their respective VRFs on PE1 and PE2.
- B. All three routers must be running a distance-vector routing protocol.
- C. All three routers must be running MP-BGP.
- D. The CE1 and CE2 VRFs can access the default route provided by the Internet VRF.
- E. Only the CE2 VRF can access the default route provided by the Internet VRF.

**Answer:** AC

**NEW QUESTION 10**

- (Exam Topic 4)

How do PE routers exchange CE routes between remote sites?

- A. by converting CE routes into VPNv4 routes and exchanging them using MP-BGP
- B. by establishing BGP neighbor relationships between all connected CEs to exchange routing information
- C. by learning IPv4 routes from connected CEs and redistributing them into the global IGP
- D. by converting CE routes into VPNv4 routes and exchanging them using the global IGP

**Answer:** A

**NEW QUESTION 10**

- (Exam Topic 4)

What is a requirement to share VRF reachability information to all members of a VPN when using IPv6?

- A. PE and CE routers must be running BGP as the PE-CE routing protocol
- B. PE routers must have MPLS disabled and be running MP-BGP between all P and PE routers.
- C. PE routers must be running MP-BGP and bgp default ipv4-unicast must be disabled
- D. All PEs must have the same VRFs configured.

**Answer:** D

**NEW QUESTION 11**

- (Exam Topic 4)

Refer to the exhibit.

```

Router 1:

router bgp 65515
no bgp default ipv4-unicast
bgp router-id 192.168.0.1
neighbor 191.168.0.2 remote-as 65515

address-family ipv4
neighbor 191.168.0.2 route-reflector-client

address-family vpnv4
neighbor 191.168.0.2 activate
neighbor 100.1.3.3 send-community extended
    
```

Router 1 is a route reflector client within a service provider core PE1 cannot see VPNv4 routes received from the ASBR PE1 only has an iBGP relationship with Router 1. Which action resolves this issue?

- A. Activate PE1 as a neighbor under the IPv4 address family.
- B. Configure Router 1 as a route reflector for PE1 under the VPNv4 address family.
- C. Configure PE1 to have an eBGP relationship with Router 1.
- D. Enable BGP default ipv4-unicast

**Answer:** B

**NEW QUESTION 14**

- (Exam Topic 4)

How does Layer 3 VPN traffic traverse an ISP network?

- A. Devices on the network use MPLS labels to share VPN routes between P routers in the network.
- B. Devices on the network use LSAs to share routes between P routers in the network.
- C. Devices on the network use MPLS labels to move VPN traffic through the network.
- D. Devices on the network use GRE tunnels to move traffic between VRFs.

**Answer:** C

**NEW QUESTION 18**

- (Exam Topic 4)

Which optional information can be included with an IPv6 ping to support the troubleshooting process?

- A. IPv4 IP address
- B. source MAC address
- C. destination MAC address
- D. IPv6 hostname

**Answer:** D

**Explanation:**

Reference: <https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipv6/configuration/xr-3s/ipv6-xr-36s-book/ip6-mng-apps.html>

**NEW QUESTION 22**

.....

## **Thank You for Trying Our Product**

### **We offer two products:**

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

### **300-515 Practice Exam Features:**

- \* 300-515 Questions and Answers Updated Frequently
- \* 300-515 Practice Questions Verified by Expert Senior Certified Staff
- \* 300-515 Most Realistic Questions that Guarantee you a Pass on Your First Try
- \* 300-515 Practice Test Questions in Multiple Choice Formats and Updates for 1 Year

**100% Actual & Verified — Instant Download, Please Click**  
**[Order The 300-515 Practice Test Here](#)**