

Huawei

H12-261_V3.0 Exam

HCIE-Routing & Switching (Written) V3.0

**Questions & Answers
Demo**

Version: 4.0

Question: 1

Which of the following advanced features does BGP EVPN support?

- A. ARP broadcast suppression
- B. VRRP over VXLAN
- C. Multi-active gateway
- D. VXLAN QoS

Answer: A, B, C, D

Explanation:

Question: 2

Which of the following statements about VXLAN packets is correct?

- A. The outer destination IP address is VXLAN IP address of the remote VTEP of the N tunnel
- B. The source UDP port number is 4789
- C. Purpose UDP port number is 4789
- D. VNI has 24 bits for distinguishing VLAN segments

Answer: A, C, D

Explanation:

VXLAN (Virtual eXtensible Local Area Network, virtual extended local area network), is NVO3 (Network Virtualization) defined by IETF over Layer 3) One of the standard technologies, using L2 over L4 (MAC-in-UDP) packet encapsulation mode, which encapsulates Layer 2 packets Encapsulation with the Layer 3 protocol can realize the expansion of the Layer 2 network within the scope of the Layer 3, and at the same time meet the needs of the large Layer 2 virtual migration and multi-tenancy of the data center.

VTEP (VXLAN Tunnel Endpoints, VXLAN tunnel endpoints): VXLAN The edge device of the N network is the start and end point of the VXLAN tunnel, and the related processing of VXLAN packets is performed on this.

VNI (VXLAN Network Identifier, VXLAN network identifier):

VXLAN The N header and the original Ethernet frame are used as UDP data. In the UDP header, the destination port number (VXLAN Port) is fixed to 4789, the source port number (UDP Src. Port) is the value of the original ether frame calculated by the hash algorithm.

source IP address (Outer Src. IP) is the V to which the source VM belongs The IP address of the TE, the destination IP address (Outer Dst. IP) is the V to which the destination VM belongs IP address of the TE.

Source MAC address (Src. MAC Addr.) is the MAC address of the VTEP to which the source VM belongs, and the destination MAC address (Dst. MAC Addr.) is the MAC address of the next-hop device on the path to the destination VTEP.

Question: 3

BGP EVPN Which of the following types of packets are required to implement virtual machine migration in a distributed gateway scenario?

- A. Type5
- B. Type4
- C. Type1
- D. Type2
- E. Type3

Answer: D

Explanation:

To support EVPN, BGP EVPN Five new EVPNs have been added to the N address family NLRI (Network Layer Reachability Information, network layer reachability information), that is, EVPN routing:

Ethernet Auto-discovery Route (RT-1): used to advertise ES information in site multi-homing networking to achieve split horizon and Aliasing and active/standby backup.

MAC/IP Advertisement Route (RT-2): used to advertise MAC/IP address information.

Inclusive Multicast Ethernet Tag Route (RT-3): It is used to advertise VTEP and its VXLAN to realize automatic VTEP discovery, automatic establishment of VXLAN tunnel, automatic creation of VXLAN broadcast table, etc.

Ethernet Segment Route (RT-4): used to advertise ES and its connected VTEP information, so as to discover other members of the VTEP redundancy group connected to the same ES, and to elect a designated forwarder DF among the redundancy groups.

IP Prefix Advertisement Route (RT-5): IP prefix route, used to advertise imported external routes in the form of IP prefixes.

Question: 4

Which of the following statements about the BFD single-arm echo function is correct

- A. BFD The one-arm echo function must configure the local identifier and the terminal identifier
- B. BFD The default destination IP address of the protocol packet of the D one-arm echo is 224.0.0.184
- C. BFD After the FD one-arm echo function is enabled, the destination IP and source IP of BFD packets are the same
- D. BFD The one-arm echo function is suitable for scenarios where one device supports BD and the other device does not.

Answer: C, D

Explanation:

BFDThe one-arm echo function detects the connectivity of the forwarding link through the loopback operation of BFD packets.

Among two directly connected devices, one device supports the BFD function, and the other device does not support the BFD function and only supports basic network layer forwarding. To quickly detect the fault between the two devices, you can create a BFD session with the one-arm echo function on the device that supports the BFD function. A device that supports the BFD function actively initiates the echo request function, and a device that does not support the BFD function directly loops back the packet after receiving it, thereby implementing the connectivity detection function of the forwarding link.

One-arm detection Huawei equipment will send one to the opposite end every 3S or soUDP packet, the source IP and destination IP in the packet are the IP of their own interface

Question: 5

Which of the following statements about the VRRP protocol is correct?

- A. Both VRRPv2 and VRRPv3 support authentication
- B. VRRPv3 does not support the authentication function, while VRRPv2 supports the authentication function.
- C. VRRPv2 is only applicable to IPv4 networks, and VRRPv3 is only applicable to IPv6 networks.
- D. Masterr The owner of the IP address VThe RP priority is 255, so the configurable priority range is 0-254

Answer: B

Explanation:

VRRP forIPv4 supports VRRPv2 and VRRPv3, while VRRP for IPv6 only supports VRRPv3. Through packet construction, it can be found that v2 has an authentication field, but v3 does not.

VRRP报文结构:

0	4	7	15	23	31
Version	Type	Virtual Rtr ID		Priority	Count IP Addr
Auth Type		Adver Int		Checksum	
IP Address (1)					
...					
IP Address (n)					
Authentication Data (1)					
Authentication Data (2)					

图：VRRPv2报文结构

