

Implementing Cisco IP Routing

1. Refer to the partial configurations in the exhibit.

A. the configured router-id address

B. an arbitrarily generated internal address

C. the sequential 1/1 address

D. the sequential 2/0 address

Answer(s): A

2. When an EIGRP topology change is detected, what is the correct order of events when there is a FS?

A. The neighbor adjacency is deleted. The feasible route is used. DUAL is notified. Remove all topology entries learned from that neighbor.

B. DUAL is notified. Remove all topology entries learned from that neighbor. The neighbor adjacency is deleted. Routes enter the Active state and the feasible route is used.

C. The neighbor adjacency is deleted. Routes enter the Active state and the feasible route is used. DUAL is notified. Remove all topology entries learned from that neighbor.

D. DUAL is notified. The neighbor adjacency is deleted. Remove all topology entries learned from that neighbor. The feasible route is used.

Answer(s): D

3. An IPv6 overlay tunnel is required to communicate with isolated IPv6 networks across an IPv4 infrastructure. There are currently five IPv6 overlay tunnel types. Which three IPv6 overlay tunnel statements are true? (Choose three.)

A. Overlay tunnels can only be configured between border routers capable of supporting IPv4 and IPv6.

B. Overlay tunnels can be configured between border routers or between a border router and a host capable of supporting IPv4 and IPv6.

C. Cisco IOS supports manual, generic, routing encapsulation (GRE), IPv6-compatible, 4to6, and multiprotocol Label Switching (MPLS) Overlay tunneling mechanism.

D. Cisco IOS supports manual, generic routing encapsulation (GRE), IPv4-compatible, 6to4, and Intra-Site Automatic Tunnel Addressing Protocol (ISATAP) overlay tunneling mechanisms.

E. A manual overlay tunnel supports point-to-multipoint tunnels capable of carrying IPv6 and Connectionless Network Service (CLNS) packets.

F. Overlay tunneling encapsulates IPv6 packets in IPv4 packets for delivery across an IPv4 infrastructure.

Answer(s): B,D,F

4. Which of the below mentioned conditions form a neighbor relation in EIGRP? (Choose Three)

A. Hello or ACK received

B. AS number match

C. Hello timer match

D. Identical metric(k values)

E. Dead Timer Match

F. Network Time Match

Answer(s): A,B,D

5. Router R1, a branch router, connects to the Internet using DSL. Some traffic flows through a GRE and IPsec tunnel, over the DSL connection, and into the core of an Enterprise network. The branch also allows local hosts to communicate directly with public sites in the Internet over this

same DSL connection. Which of the following answers defines how the branch NAT config avoids performing NAT for the Enterprise directed traffic but does perform NAT for the Internet-directed traffic?

- A. By not enabling NAT on the IPsec tunnel interface
- B. By not enabling NAT on the GRE tunnel interface
- C. By configuring the NAT-referenced ACL to not permit the Enterprise traffic
- D. By asking the ISP to perform NAT in the cloud

Answer(s): C

6. What is the purpose of configuring the router as a PPPoE client?

- A. to provide VPN access over L2TP
- B. to enable PPP session from the router to the termination device at the headend for metro Ethernet connectivity
- C. for DSL connectivity and removing the need for the end-user PC to run the PPPoE client software
- D. for connecting the router to a cable modem, which bridges the Ethernet frames from the router to the cable modem termination system

Answer(s): C

7. Using the rules for IPv6 addressing, how can the address 2031:0000:240F:0000:0000:09C0:123A:121B be rewritten?

- A. 2031:0:240F::09C0:123A:121B
- B. 2031::240F::09C0:123A:121B
- C. 2031::240F:9C0::123A:121B

D. 2031::240F::09C0:123A:121B

Answer(s): A

8. When implementing a 6to4 tunnel, which IPv6 address is the correct translation of the IPv4 address 192.168.99.1?

A. c0a8:6301:2002::/48

B. 2002:c0a8:6301::/48

C. 2002:c0a8:6301::/8

D. 2002::/16

Answer(s): B

9. Which two statements are true about EIGRP manual summarization? (Choose two.)

A. Manual summarization is configured on a per interface basis.

B. Manual summaries can be configured with the classful mask only.

C. When manual summarization is configured, autosummarization is automatically disabled by default.

D. The summary address is assigned an administrative distance of 10 by default.

E. The summary address is entered into the routing table and is shown to be sourced from the Null0 interface.

Answer(s): A,E

10. Your Company trainee asks you, in the context of IPv6 and OSPF, what best describes a type 9 LSA? What should you tell her?

A. Link LSA

B. Interarea prefix LSA for ABRs

C. Router LSA

D. Switch LSA

E. Intra-area prefix LSA

F. None of the above

Answer(s): E

11. Refer to the exhibit. EIGRP has been configured on all routers in the network. The command metric weights 0 0 1 0 0 has been added to the EIGRP process so that only the delay metric is used in the path calculations. Which router will R1 select as the successor and feasible successor for Network A?

A. R4 becomes the successor for Network A and will be placed in the routing table. R2 becomes the feasible successor for Network A.

B. R4 becomes the successor for Network A and will be included in the routing table. No feasible successor will be selected as the advertised distance from R2 is higher than the feasible distance.

C. R2 becomes the successor and will be placed in the routing table. R4 becomes the feasible successor for Network A.

D. R2 becomes the successor and will be placed in the routing table. No feasible successor will be selected as the reported distance from R4 is lower than the feasible distance.

Answer(s): B

12. A network administrator is managing a hub-and-spoke network with EIGRP routing that has been enabled. The hub router is trying to query a remote router. However, delays are occurring that are caused by certain paths being stuck in active (SIA). How should the administrator configure EIGRP in order to limit the scope of the query range and prevent SIA from occurring?

A. Configure the hub router with a scope limit of 1.

B. Configure the remote router with a scope limit of 1.

C. Configure the hub to indicate that the remote router is a stub router.

D. Configure the hub and remote router as stub routers.

E. Configure the remote router as a stub router.

F. Disable the SIA feature of EIGRP on the remote router.

Answer(s): E

13. What are two Cisco IOS commands that can be used to view neighbor adjacencies? (Choose two.)

A. show ip ospf database

B. show ip ospf neighbors

C. show ip ospf protocols

D. show ip ospf interfaces

Answer(s): B,D

14. What is a key benefit of using a GRE tunnel to provide connectivity between branch offices and headquarters?

A. authentication, integrity checking, and confidentiality

B. less overhead

C. dynamic routing over the tunnel

D. granular QoS support

E. open standard

F. scalability

Answer(s): C

15. Which attribute must exist in the BGP update packet?

A. LOCAL_PREF

B. AGGREGATOR

C. AS_Path

D. Weight

Answer(s): C

16. Why should iBGP sessions be fully meshed within a Transit AS?

A. BGP requires redundant TCP sessions between iBGP peers.

B. A full mesh allows for optimal routing within the Transit AS.

C. Routes learned via iBGP are never propagated to other eBGP peers.

D. Routes learned via iBGP are never propagated to other iBGP peers.

E. Routes learned via eBGP are never propagated to other iBGP peers.

Answer(s): D

17. Which functionality is required within an IP router that is situated at the boundary of an IPv4 network and an IPv6 network to allow communication between IPv6-only and IPv4-only nodes?

A. Autoconfiguration

B. Automatic 6to4 Tunnel

C. Automatic 6to4 Relay

D. Network Address Translator-Protocol Translator (NAT-PT)

E. Intrasite Automatic Tunnel Address Protocol (ISATAP)

Answer(s): D

18. Study this exhibit below carefully.

A. R1 will permit only the 10.0.0.0/24 route in the R2 RIP updates

B. R1 will not filter any routes because there is no exact prefix match

C. R1 will filter the 10.1.0.0/24 and the 172.24.1.0/24 routes from the R2 RIP updates

D. R1 will filter only the 172.24.1.0/24 route from the R2 RIP updates

Answer(s): C

19. Which BGP attribute is used by BGP to prevent routing loops?

A. AS-path

B. next-hop

C. MED

D. weight

E. local preference

F. origin

Answer(s): A

20. EIGRP has been configured to operate over Frame Relay multipoint connections. What should the bandwidth command be set to?

A. the CIR rate of the lowest speed connection multiplied by the number of circuits

B. the CIR rate of the lowest speed connection

C. the CIR rate of the highest speed connection

D. the sum of all the CIRs divided by the number of connections

Answer(s): A
