



**EXAMWEAPONS Q&A Demo**

Cisco 642-901

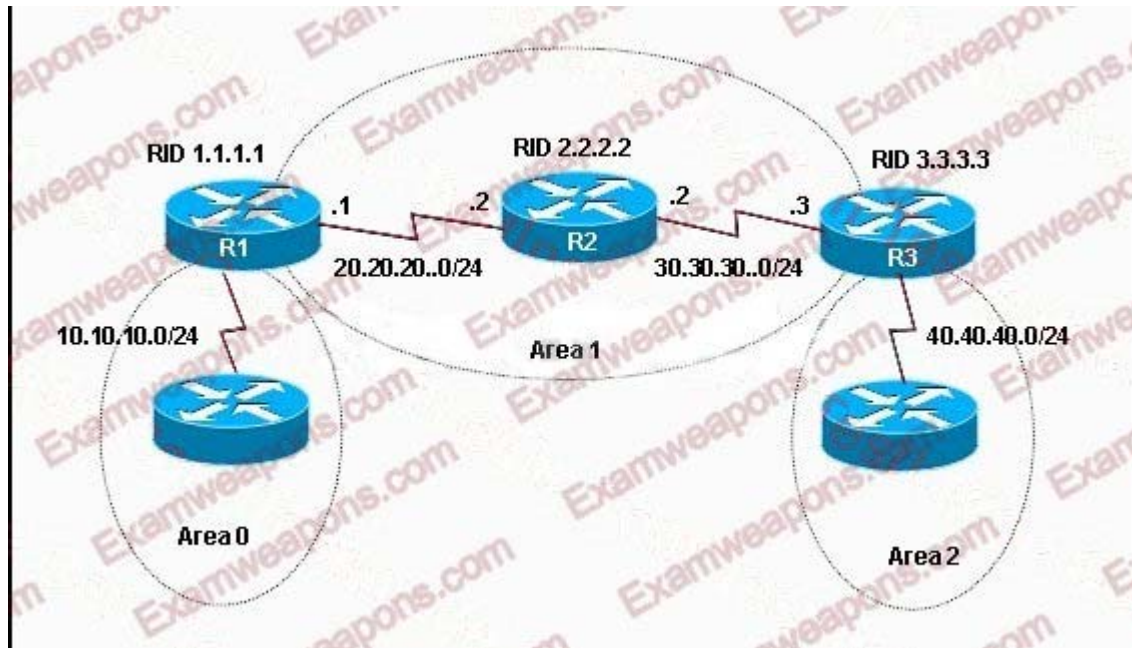
Building Scalable Cisco Internetworks

## EXAMWEAPONS 642-901 Demo

1. Refer to the exhibit. During the process of configuring a virtual link to connect area 2 with the backbone area, the network administrator received this console message on R3:

\*Mar 1 00:25:01.084: %OSPF-4-ERRRCV: Received invalid packet: mismatch area ID, from backbone area must be virtual link but not found from 20.20.20.1, Serial 0

How should the virtual link be configured on the OSPF routers to establish full connectivity between the areas?



- A. R1(config-router)# area 1 virtual-link 30.30.30.3  
R3(config-router)# area 1 virtual-link 20.20.20.1
- B. R1(config-router)# area 1 virtual-link 20.20.20.2  
R3(config-router)# area 1 virtual-link 30.30.30.2
- C. R1(config-router)# area 0 virtual-link 1.1.1.1  
R3(config-router)# area 2 virtual-link 3.3.3.3
- D. R1(config-router)# area 1 virtual-link 3.3.3.3  
R3(config-router)# area 1 virtual-link 1.1.1.1
- E. R1(config-router)# area 1 virtual-link 2.2.2.2  
R3(config-router)# area 1 virtual-link 2.2.2.2

Answer: D

2. Which IS-IS router is equivalent to an ABR in OSPF?

- A. Level 0
- B. Level 1
- C. Level 2
- D. Level 3

E. Level 1-2

F. Level 2-3

Answer: E

3. Which command displays the number of times that the OSPF Shortest Path First (SPF) algorithm has been executed?

A. show ip protocol

B. show ip ospf interface

C. show ip ospf

D. show ip ospf database

Answer: C

4. Given the above OSPF network, which command will RTB use to summarize routes for the 192.168.16.0/22 supernet before injecting them into Area 0?

A. area 10 range 192.168.16.0 255.255.252.0

B. summary-address 192.168.16.0 255.255.252.0

C. ip summary-address ospf 101 192.168.16.0 255.255.252.0

D. area 0 range 192.168.16.0 255.255.252.0

E. ip summary-address area 0 192.168.16.0 255.255.252.0

Answer: A

5. Which two statements about 6to4 tunneling are accurate? (Choose two.)

A. Prepending a reserved IPv6 code to the hexadecimal representation of 192.168.0.1 facilitates 6to4 tunneling.

B. Each 6to4 site receives a /48 prefix in a 6to4 tunnel.

C. 2002::/48 is the address range specifically assigned to 6to4.

D. Prepending 0x2002 with the IPv4 address creates an IPv6 address that is used in 6to4 tunneling.

E. 6to4 is a manual tunnel method.

Answer: BD

6. An administrator types in the command `router ospf 1` and receives the error message: "OSPF process 1 cannot start." (Output is omitted.) What should be done to correctly set up OSPF?

- A. Ensure that an interface has been configured with an IP address.
- B. Ensure that an interface has been configured with an IP address and is up.
- C. Ensure that IP classless is enabled.
- D. Ensure that the interfaces can ping their directly connected neighbors.

Answer: B

7. Which two reductions are the correct reductions of the IPv6 address `2001:0d02:0000:0000:0014:0000:0000:0095`? (Choose two.)

- A. `2001:d02::14::95`
- B. `2001:0d02:::0014:::0095`
- C. `2001:0d02:::0014:0:0:0095`
- D. `2001:d02::14:0:0:95`
- E. `2001:d02:0:0:14::95`
- F. `FF::0014:0:0:0095`

Answer: DE

8. Which three IP multicast related statements are true? (Choose three.)

- A. Multicast addresses 224.0.1.0 through 238.255.255.255 are called globally scoped addresses. They are used to multicast data between organizations and across the Internet.
- B. The multicast address 224.0.0.1 is a globally scoped address that has been reserved for the Network Time Protocol (NTP) by the IANA.
- C. Multicast addresses 239.0.0.0 through 239.255.255.255 are called limited scope addresses. They are constrained to a local group or organization.
- D. Multicast addresses 224.0.0.5 and 224.0.0.6 are limited scoped addresses that have been reserved for OSPF.
- E. Multicast addresses 224.0.0.0 through 224.0.0.255 are used for network protocols on local LAN segments. Because they are always transmitted with a Time to Live (TTL) of 1, they are never forwarded by a router.

Answer: ACE

9. Which three IP multicast address related statements are true? (Choose three.)

- A. Multicast addresses 224.0.0.0 through 224.0.0.255 are always forwarded because they are transmitted with Time to Live (TTL) greater than 1.
- B. Multicast addresses 224.0.0.5 and 224.0.0.6 are source multicast addresses for OSPF routers.
- C. Multicast addresses 224.0.0.13 and 224.0.0.22 are reserved link-local addresses used by PIMv2 and IGMPv3.
- D. Because they would map to overlapping IP multicast MAC addresses, multicast addresses 224.0.1.1 and 238.1.1.1 could not be used together.
- E. Multicast address 224.0.1.1 has been reserved for the Network Time Protocol (NTP) by the IANA.
- F. The administratively scoped multicast addresses 239.0.0.0 through 239.255.255.255 are similar in purpose to RFC 1918 private unicast addresses.

Answer: CEF

10. What are two rules for compacting IPv6 addresses? (Choose two.)

- A. The maximum number of times a double colon can replace a 16-bit segment that consists of all zeroes is two.
- B. The leading zeroes in any 16-bit segment do not have to be written.
- C. Every 16-bit segment segment that consists of all zeroes can be represented with a single colon.
- D. The trailing zeroes in any 16-bit segment do not have to be written.
- E. Any single, continuous string of one or more 16-bit segments that consists of all zeroes can be represented with a double colon.
- F. Two zeroes in the middle of any 16-bit segment do not have to be written.

Answer: BE

11. What is the difference between the IPv6 addresses `::/0` and `::/128`?

- A. `::/0` is the unspecified address, and `::/128` is the multicast address.
- B. `::/0` is the unicast address, and `::/128` is the anycast address.
- C. `::/0` is the unicast address, and `::/128` is the multicast address.
- D. `::/0` is the anycast address, and `::/128` is the multicast address.
- E. `::/0` is the default route, and `::/128` is the unspecified address.
- F. `::/0` is the anycast address, and `::/128` is the default address.

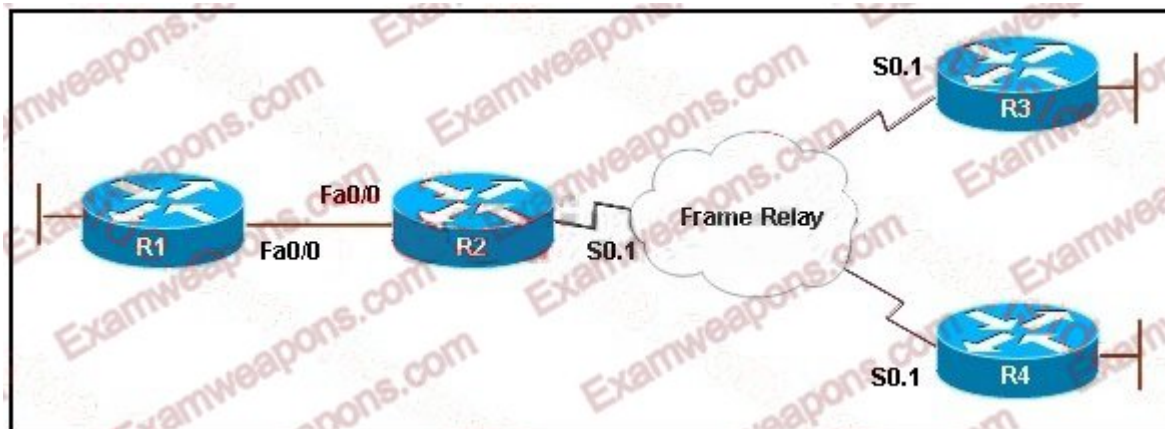
Answer: E

12. Which two statements about multicast addressing are true? (Choose two.)

- A. To calculate the Layer 2 multicast address, the host maps the last 24 bits of the IP address into the last 24 bits of the MAC address. The high-order bit is set to 0.
- B. To calculate the Layer 2 multicast address, the host maps the last 23 bits of the IP address into the last 24 bits of the MAC address. The high-order bit is set to 0.
- C. To calculate the Layer 2 multicast address, the host maps the last 23 bits of the IP address into the last 24 bits of the MAC address. The high-order bit is set to 1.
- D. The first 3 bytes (24 bits) of the multicast MAC address are 0x01-00-5E. This is a reserved value that indicates a multicast application.
- E. The last 3 bytes (24 bits) of the multicast MAC address are 0x01-00-5E. This is a reserved value that indicates a multicast application.
- F. The first 23 bits of the multicast MAC address are 0x01-00-5E. This is a reserved value that indicates a multicast application.

Answer: BD

13. Refer to the exhibit. EIGRP is enabled on all routers on the network. What additional configuration is required for the routers connected over the Frame Relay multipoint interfaces to compensate for a low-speed NBMA connection?



- A. Configure the EIGRP hello interval on all Frame Relay interfaces to 5 seconds.
- B. Configure the EIGRP hello interval on all Frame Relay interfaces to 60 seconds.
- C. Configure the EIGRP hold time on all Frame Relay interfaces to 15 seconds.
- D. Configure the EIGRP hold time on all Frame Relay interfaces to 180 seconds.
- E. Configure the bandwidth on all EIGRP Frame Relay interfaces to the committed information rate (CIR).
- F. Configure the bandwidth on all EIGRP Frame Relay interfaces to the lowest CIR multiplied by

the number of PVCs for the multipoint connection.

Answer: F

14. Which two statements are true about external BGP neighbor relationships? (Choose two.)

- A. Static routes or an interior gateway protocol is required between EBGP neighbors.
- B. EBGP neighbors must be in different autonomous systems.
- C. EBGP neighbors use TCP port 179 to exchange BGP routing tables.
- D. Loopback addresses should be used between EBGP neighbors.
- E. The BGP split-horizon rule specifies that routes learned via IBGP are never propagated to other EBGP peers.
- F. When an EBGP neighbor receives an update from another EBGP neighbor, it should not forward the update to other EBGP neighbors.

Answer: BC

15. What is the purpose of a rendezvous point (RP)?

- A. acts as a meeting place for sources and receivers of multicast traffic
- B. used in PIM dense mode to create a database of all multicast sources
- C. used in PIM dense and sparse mode to create a database of all multicast sources
- D. acts as the designated router for a broadcast segment when multicast routing is enabled

Answer: A

16. In order for two routers to become EIGRP neighbors, which two values must match? (Choose two.)

- A. hello time
- B. hold time
- C. autonomous system
- D. K values
- E. delay

Answer: CD

17. Which IS-IS NET represents a locally administered private address?

- A. 39.0040.0010.0c99.1112.00

- B. 45.0004.0000.0d35.4554.00
- C. 47.0010.0000.0a11.3564.00
- D. 49.0001.0000.0c12.3456.00

Answer: D

18. BGP contains two paths to a destination. Assuming both routes were originated locally and have an equal weight, what will be the next determining factor in choosing the best path?

- A. lowest MED
- B. highest local preference
- C. lowest neighbor IP address
- D. lowest origin code
- E. shortest AS-path

Answer: B

19. How is network layer addressing accomplished in the OSI protocol suite?

- A. Internet Protocol address
- B. Media Access Control address
- C. Packet Layer Protocol address
- D. Network Service Access Point address
- E. Authority and Format Identifier address

Answer: D

20. What are two routing protocols defined by the OSI protocol suite at the network layer?

(Choose two.)

- A. End System-to-End System
- B. Routing Information Protocol
- C. Interior Gateway Routing Protocol
- D. End System-to-Intermediate System
- E. Intermediate System-to-Intermediate System

Answer: DE

