

First-Year Companion Guide 2nd Edition

Chapter 12 (26)

Check Your Understanding

1. What kind of entries does a router initially refer to?
 - A. Entries about networks or subnets that are directly connected
 - B. Entries that it has learned about from the Cisco IOS software
 - C. Entries whose IP address and mask information are known
 - D. Entries that it has learned about from other routers
2. Which of the following best describes a static route?
 - A. A routing table entry that is used to direct frames for which a next hop is not explicitly listed in the routing table
 - B. A route that is explicitly configured and entered into the routing table and that takes precedence over routes chosen by dynamic routing protocols
 - C. A route that adjusts automatically to network topology or traffic changes
 - D. A route that adjusts involuntarily to direct frames within a network topology
3. Which of the following best describes a default route?
 - A. A routing table entry that is used to direct frames for which a next hop is not explicitly listed in the routing table
 - B. A route that is explicitly configured and entered into the routing table
 - C. A route that adjusts automatically to network topology or traffic changes
 - D. A route that adjusts involuntarily to direct frames within a network topology
4. What are exterior routing protocols used for?
 - A. To transmit between nodes on a network
 - B. To deliver information within a single autonomous system
 - C. To communicate between autonomous systems
 - D. To set up a compatibility infrastructure between networks
5. What are interior routing protocols used for?
 - A. They are used to set up a compatibility infrastructure between networks.
 - B. They are used to communicate between autonomous systems.
 - C. They are used to transmit between nodes on a network.
 - D. They are used within a single autonomous system.
6. Which of the following is a global task?
 - A. Addressing IP network numbers by specifying subnet values
 - B. Enabling a routing protocol-RIP or IGRP
 - C. Assigning network/subnet addresses and the appropriate subnet mask
 - D. Setting up a routing metric to find the best path to each network
7. What metric does RIP use to determine the best path for a message to travel on?
 - A. Bandwidth
 - B. Hop count
 - C. Varies with each message
 - D. Administrative distance
8. You suspect that one of the routers connected to your network is sending bad routing information. What command can you use to check?
 - A. router(config)# show ip route
 - B. router# show ip route
 - C. router# show ip protocol
 - D. router(configrouter)# show ip protocol

9. Why would you display the IP routing table?
- A. To set the router update schedule
 - B. To identify destination network addresses and next-hop pairs
 - C. To trace where datagrams are coming from
 - D. To set the parameters and filters for the router
10. If you want to learn which routing protocol a router was configured with, what command structure should you use?
- A. router> show router protocol
 - B. router(config)> show ip protocol
 - C. router(config)# show router protocol
 - D. router# show ip protocol
11. In the following command, what does the last number stand for?
- ```
router (config)# ip route 2.0.0.0 255.0.0.0 1.0.0.2 5
```
- A. The number of hops
  - B. The number of routes to the destination
  - C. The administrative distance
  - D. The destinations reference number in the routing table
12. An administrative distance of 15 indicates which of the following?
- A. The IP address is static.
  - B. The IP address is dynamic.
  - C. The routing information source is relatively trustworthy.
  - D. The routing information source is relatively untrustworthy.
13. If you just added a new LAN to your internetwork and you want to manually add the network to your routing table, what command structure would you use?
- A. router (config)> ip route 2.0.0.0 255.0.0.0 via 1.0.0.2
  - B. router (config)# ip route 2.0.0.0 255.0.0.0 1.0.0.2
  - C. router (config)# ip route 2.0.0.0 via 1.0.0.2
  - D. router (config)# ip route 2.0.0.0 1.0.0.2 using 255.0.0.0
14. In the IP RIP routing protocol, how often are routing updates sent?
- A. Every 30 seconds
  - B. Every 60 seconds
  - C. Every 90 seconds
  - D. Only when the admin directs the router to do so
15. If you want to identify destination network addresses and next-hop pairs, what line matches what you would type?
- A. router(config)# show ip protocol
  - B. router# show ip table
  - C. router> show ip route
  - D. router (config-router)# show ip table
16. Which of the following is a variable used by IGRP?
- A. Bandwidth
  - B. File size
  - C. Hop length
  - D. Time span
17. IGRP sends routing updates at what interval?
- A. 30 seconds
  - B. 60 seconds
  - C. 90 seconds
  - D. 120 seconds

18. When setting up dynamic IP routing, you must tell the process which interfaces will participate in the sending and receiving of routing updates. Which choice matches the command you would use to do this?
- A. router (config-if)> network <network -number>
  - B. router(config)# network <network -number>
  - C. router(config-router)# network <network-number>
  - D. router (config-router)# network <IP address> <subnet mask>
19. After using the router igrp command, why is it necessary to use the network subcommand?
- A. It displays the contents of the network routing table.
  - B. It allows each router to send its routing table in routing updates to all the networks.
  - C. It displays the status and global parameters associated with a network.
  - D. It specifies any directly connected networks to be included.
20. If you wanted to see RIP routing updates as they are sent and received, what command structure would you use?
- A. router# show ip rip
  - B. router# debug ip protocols
  - C. router# debug ip rip
  - D. router# show ip rip update

#### Answers

1. A    2. B    3. A    4. C    5. D    6. B    7. B    8. C    9. B    10. D    11. C  
12. C    13. B    14. A    15. C    16. A    17. C    18. C    19. D    20. C