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CCNA 2 V5.0 ROUTING AND SWITCHING

CCNA 2 Chapter 6 v5 Exam Answers 2016

admin November 20, 2013

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CCNA 2 Chapter 6 v5 Exam Answers 2016

1

What are two advantages of static routing over dynamic routing? (Choose two.)

Static routing is more secure because it does not advertise over the network.* Static routing is relatively easy to configure for large networks. Static routing requires very little knowledge of the network for correct implementation. Static routing uses fewer router resources than dynamic routing.* Static routing scales well with expanding networks.





Refer to the exhibit. Which is the best way for PC A and PC B to successfully communicate with sites on the Internet?

Configure a default route from R1 to ISP and a static route from ISP to R1.*

Configure a static route from R1 to ISP and a dynamic route from ISP to R1. Configure a routing protocol between R1 and ISP and advertise all the routes. Configure a dynamic route from R1 to ISP and a static route from ISP to R1.





Refer to the exhibit. The small company shown uses static routing. Users on the R2 LAN have reported a problem with connectivity. What is the issue?

R1 and R2 must use a dynamic routing protocol.

R1 needs a default route to R2.

R2 needs a static route to the Internet.

R2 needs a static route to the R1 LANs.

R1 needs a static route to the R2 LAN.*

4



Refer to the exhibit. The network engineer for the company that is shown wants to use the primary ISP connection for all external connectivity. The backup ISP connection is used only if the primary ISP connection fails. Which set of commands would accomplish this goal?

ip route 198.133.219.24 255.255.255.252 ip route 64.100.210.80 255.255.255.252 10

ip route 0.0.0.0 0.0.0.0 s0/0/0 ip route 0.0.0.0 0.0.0.0 s0/1/0

ip route 0.0.0.0 0.0.0.0 s0/0/0 ip route 0.0.0.0 0.0.0.0 s0/1/0 10 ******

5

What type of route allows a router to forward packets even though its routing table contains no specific route to the destination network?

generic route destination route dynamic route default route*

6



Refer to the graphic. Which command would be used on router A to configure a static route to direct traffic from LAN A that is destined for LAN C?

A(config)# ip route 192.168.3.2 255.255.255.0 192.168.4.0 A(config)# ip route 192.168.5.0 255.255.255.0 192.168.3.2 A(config)# ip route 192.168.3.0 255.255.255.0 192.168.3.1 A(config)# ip route 192.168.4.0 255.255.255.0 192.168.3.2* A(config)# ip route 192.168.4.0 255.255.255.0 192.168.5.2

7

The network administrator configures the router with the ip route 172.16.1.0 255.255.255.0 172.16.2.2 command. How will this route appear in the routing table?

S 172.16.1.0 is directly connected, Serial0/0 S 172.16.1.0 [1/0] via 172.16.2.2* C 172.16.1.0 [1/0] via 172.16.2.2 C 172.16.1.0 is directly connected, Serial0/0



Refer to the exhibit. The network administrator needs to configure a default route on the Border router. Which command would the administrator use to configure a default route that will require the least amount of router processing when forwarding packets?

Border(config)# ip route 0.0.0.0 0.0.0 s0/0/1* Border(config)# ip route 0.0.0.0 0.0.0.0 198.133.219.5

Border(config)# ip route 0.0.0.0 0.0.0.0 198.133.219.5 Border(config)# ip route 0.0.0.0 0.0.0.0 s0/0/0 Border(config)# ip route 0.0.0.0 0.0.0.0 198.133.219.6

9

Why would a floating static route be configured with an administrative distance that is higher than the administrative distance of a dynamic routing protocol that is running on the same router?

to be the priority route in the routing table to be used as a backup route* to act as a gateway of last resort to load-balance the traffic

10



Refer to the exhibit. What command would be used to configure a static route on R1 so that traffic from both LANs can reach the 2001:db8:1:4::/64 remote network?

ipv6 route 2001:db8:1::/65 2001:db8:1:3::1 **ipv6 route 2001:db8:1:4::/64 2001:db8:1:3::2*** ipv6 route 2001:db8:1:4::/64 2001:db8:1:3::1 ipv6 route ::/0 serial0/0/0



Refer to the exhibit. Which default static route command would allow R1 to potentially reach all unknown networks on the Internet?

R1(config)# ipv6 route 2001:db8:32::/64 G0/1 fe80::2 R1(config)# ipv6 route ::/0 G0/0 fe80::2

R1(config)# ipv6 route ::/0 G0/1 fe80::2*

R1(config)# ipv6 route 2001:db8:32::/64 G0/0

12

Which two statements describe classful IP addresses? (Choose two.)

All subnets in a network are the same size.*

Only Class A addresses can be represented by high-order bits 100. Three of the five classes of addresses are reserved for multicasts and experimental use. **The number of bits used to identify the hosts is fixed by the class of the network.*** Up to 24 bits can make up the host portion of a Class C address. It is possible to determine which class an address belongs to by reading the first bit.

13

A company has several networks with the following IP address requirements: IP phones – 50 PCs – 70 IP cameras – 10 wireless access points – 10 network printers – 10 network scanners – 2

Which block of addresses would be the minimum to accommodate all of these devices if each type of device was on its own network?

172.16.0.0/23 172.16.0.0/24* 172.16.0.0/22 172.16.0.0/25

14

What does VLSM allow a network administrator to do?

utilize one public IP address to translate multiple private addresses utilize multiple different subnet masks in the same IP address space* utilize one dynamic routing protocol throughout the entire network utilize multiple routing protocols within an autonomous system utilize one subnet mask throughout a hierarchical network What would be the best summary route for the following networks? 10.50.168.0/23 10.50.170.0/23 10.50.172.0/23 10.50.174.0/24

10.50.160.0/22

10.50.164.0/23

10.50.168.0/16

10.50.168.0/21*

10.50.168.0/22

10.50.168.0/23

16

What is a valid summary route for IPv6 networks 2001:0DB8:ACAD:4::/64, 2001:0DB8:ACAD:5::/64, 2001:0DB8:ACAD:6::/64, and 2001:0DB8:ACAD:7::/64?

2001:0DB8:ACAD:0000::/63 2001:0DB8:ACAD:0000::/64 2001:0DB8:ACAD:0004::/62* 2001:0DB8:ACAD:0004::/63

17

Which type of static route that is configured on a router uses only the exit interface?

directly connected static route*

fully specified static route default static route recursive static route

18

Which three IOS troubleshooting commands can help to isolate problems with a static route? (Choose three.)

show ip route* show ip interface brief* ping* tracert show arp show version

19



Refer to the exhibit. What two commands will change the next-hop address for the 10.0.0/8

network from 172.16.40.2 to 192.168.1.2? (Choose two.)

A(config)# ip route 10.0.0.255.0.0.0 192.168.1.2* A(config)# ip route 10.0.0.0 255.0.0.0 s0/0/0 A(config)# no ip address 10.0.0.1 255.0.0.0 172.16.40.2 A(config)# no network 10.0.0.0 255.0.0.0 172.16.40.2 A(config)# no ip route 10.0.0.0 255.0.0.0 172.16.40.2*

20

What happens to a static route entry in a routing table when the outgoing interface is not available?

The router polls neighbors for a replacement route.

The router redirects the static route to compensate for the loss of the next hop device.

The route is removed from the table.*

The route remains in the table because it was defined as static.

21



Launch PT Hide and Save PT

Open the PT activity. Perform the tasks in the activity instructions and then answer the question. What is the name of the web server that is displayed in the webpage?

Webserver10*

Main-Webserver WWW-Server MNSRV

22

🔻 PT Activity: 00:04:40 🛑 🔲 🗶	Cisco Packet Tracer - Assessment
Open the PT Activity. Perform the tasks in the activity instructions and then answer the question.	File Edit Options Map Image: State
1. Review the network topology and the IPv6 addressing scheme. Router R2, both switches, and both PCs are already properly configured.	Logical [Root] New Cluster Nove Object: Set Tiled Background Vewport
Test connectivity between PC1 and PC2 with a ping. The ping should fail because of the lack of a route on R1 to reach the remote network of PC2.	11 2001/db8:32:77::/46 ::2
What IPv6 static route can be configured on router R1 to make a fully converged network?	
Return to the assessment to answer the question.	2001:dbe:10:11::/64
Time Elapsed: 00:04:40 Top Check Results Reset Activity < 1/1	2001:db8:10:11::/64
Niconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconfigi Xiconf	10 E
Ri#ping 2001:db8:10:12::10 Type escape sequence to abort. Sending 5, 100-byte ICMP Kehes to 2001:db8:10:12::10, timeout is 2	
11111 Success rate is 100 percent (5/5), round-trip min/avg/max = 1/3/5 R1# Copy Paste	Time: 00:04:41 Power Cycle Devices Fast Forward Time Realtime Image: 00:04:41 Power Cycle Devices Fast Forward Time Realtime Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forward Time Image: 00:04:01 Image: 00:04:41 Power Cycle Devices Fast Forwar

Launch PT Hide and Save PT

Open the PT Activity. Perform the tasks in the activity instructions and then answer the question.

What IPv6 static route can be configured on router R1 to make a fully converged network?

ipv6 route 2001:db8:10:12::/64 S0/0/1*

ipv6 route 2001:db8:10:12::/64 2001:db8:32:77::1 ipv6 route 2001:db8:10:12::/64 S0/0/0 ipv6 route 2001:db8:10:12::/64 2001:db8:10:12::1

23. Consider the following command:

ip route 192.168.10.0 255.255.255.0 10.10.10.2 5

How would an administrator test this configuration?

Ping from the 192.168.10.0 network to the 10.10.10.2 address.

Ping any valid address on the 192.168.10.0/24 network.

Delete the default gateway route on the router.

Manually shut down the router interface used as a primary route.*

24. What would be the first step in calculating a summarized route for 5 networks?

Write all subnet masks in binary.

Write all network numbers in binary.*

Starting from the far right, determine the octet in which all the numbers are the same.

Determine the network with the lowest number.

25. What two pieces of information are needed in a fully specified static route to eliminate recursive lookups? (Choose two.)

the IP address of the exit interface

the interface ID exit interface*

the IP address of the next-hop neighbor*

the interface ID of the next-hop neighbor

the administrative distance for the destination network

26. Refer to the exhibit. What routing solution will allow both PC A and PC B to access the Internet with the minimum amount of router CPU and network bandwidth utilization?

Configure a static default route from R1 to Edge, a default route from Edge to the Internet, and a static route from Edge to R1.*

Configure a dynamic route from R1 to Edge and a static route from Edge to R1.

Configure a static route from R1 to Edge and a dynamic route from Edge to R1.

Configure a dynamic routing protocol between R1 and Edge and advertise all routes.

27. What is the correct syntax of a floating static route?

ip route 172.16.0.0 255.248.0.0 10.0.0.1

ip route 209.165.200.228 255.255.255.248 10.0.0.1 120*

ip route 209.165.200.228 255.255.255.248 serial 0/0/0

ip route 0.0.0.0 0.0.0.0 serial 0/0/0

28. What happens to a static route entry in a routing table when the outgoing interface associated with that route goes into the down state?

The router automatically redirects the static route to use another interface.

The static route is removed from the routing table.*

The static route remains in the table because it was defined as static.

The router polls neighbors for a replacement route.

29. Refer to the exhibit.



R1 receives a packet destined for the IP address 192.168.2.10. Out which interface will R1 forward

the packet? FastEthernet0/0

FastEthernet0/1

Serial0/0/0*

Serial0/0/1





About The Author



admin

14 Comments

•

zak

hello, Do you have the Chapter 6 Practice Skills Assessment answer? thanks March 11, 2014

CCNA5.NET Author	•
https://cisacad.com/ccna-2-rse-chapter-6-practice-skills-assessment-packet-tracer/1723/	. ,
March 16, 2014	
zakari81	•
Hello,	
Do anyone have solved the CCNA 2 ,Chapter 6 Practice Skills Assessment – PT	
Thanks for your works	
March 15, 2014	
CCNA5.NET Author	•
https://cisacad.com/ccna-2-rse-chapter-6-practice-skills-assessment-packet-tracer/1723/	
March 16, 2014	
cloudseth	4
this is RP Chapter 2 Exam – Routing Protocols (Version 5.0)	
April 7, 2014	
CCNA5.NET Author	~
All exams in this section are "Introduction to networks v5.0"	
April 7, 2014	
aziz cisco	~
Refer to the exhibit. Which default static route command would allow R1 to potentially reach all unknown networks on the Internet?	
the right answer is	
R1(config)# ipv6 route ::/0 G0/0 fe80::2	
not the G0/1 update that pls	
November 14, 2014	
ktg	1
"aziz cisco" is wrong. The answer listed by CCNA5 is the correct one, I just tested it. February 8, 2015	

marco

Tanks for answers!

September 10, 2015

constant	•
constant	
New question appeared in the RSE CCENT (ICND1 When creating an IPv6 static route, when must a n specified? Possible answers: -when CEF is enabled -when the next hop is a link-local address*****) Certification Exam: ext-hop IPv6 address and an exit interface both be
-when the static route is a default route -when the exit interface is a point-to-point interface	e
February 6, 2016	
Riddi	5
Question 29. Isn't the answer s0/0/0??? Thanks.	
July 20, 2016	
Skrillex	`
The last question is wrong, its Serial 0/0/0. July 28, 2016	
Otto	5
The picture for the following question is wrong?! R1 receives a packet destined for the IP address 1 packet?	92.168.2.10. Out which interface will R1 forward the
December 4, 2016	
geroy	`
as of 2017 this is CCNA 2 Chapter 2 Static Routing	1
January 31, 2017	
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Q

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IT essentials v4.0
CCNA Security v2.0
Introduction to Cybersecurity 2.1

Cybersecurity Essentials v1.1

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CCNA 3 v6.0 + v5.03 + v5.02 2018

CCNA 4 v6.0 + v5.03 + v5.0 2018

CCNA v6.0 2019

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