

Vendor:Cisco

**Exam Code:**100-101

**Exam Name:**CCNA Interconnecting Cisco Networking Devices 1 (ICND1)

Version: Demo

## **QUESTION 1**

What does administrative distance refer to?

- A. the cost of a link between two neighboring routers
- B. the advertised cost to reach a network
- C. the cost to reach a network that is administratively set
- D. a measure of the trustworthiness of a routing information source

Correct Answer: D

http://www.cisco.com/en/US/tech/tk365/technologies tech note09186a0080094195.shtml

Administrative distance is the feature that routers use in order to select the best path when there are two or more different routes to the same destination from two different routing protocols. Administrative distance defines the reliability of a routing protocol. Each routing protocol is prioritized in order of most to least reliable (believable) with the help of an administrative distance value. Administrative distance is the first criterion that a router uses to determine which routing protocol to use if two protocols provide route information for the same destination. Administrative distance is a measure of the trustworthiness of the source of the routing information. The smaller the administrative distance value, the more reliable the protocol.

## **QUESTION 2**

Some routers have been configured with default routes. What are some of the advantages of using default routes? (Choose two)

- A. They establish routes that will never go down.
- B. They keep routing tables small.
- C. They require a great deal of CPU power.
- D. They allow connectivity to remote networks that are not in the routing table
- E. They direct traffic from the internet into corporate networks.

Correct Answer: BD

Cisco administration 101: What you need to know about default routes Reference: http://www.techrepublic.com/article/cisco-administration-101-what-you-need-to-know-about- default-routes/

## **QUESTION 3**

Which command is used to display the collection of OSPF link states?

A. show ip ospf link-state

B. show ip ospf Isa database
C. show ip ospf neighbors
D. show ip ospf database
Correct Answer: D
The "show ip ospf database" command displays the link states. Here is an example:
Here is the Isa database on R2.
R2#show ip ospf database
OSPF Router with ID (2.2.2.2) (Process ID 1)
Router Link States (Area 0)
Link ID ADV Router Age Seq# Checksum Link count
2.2.2.2 2.2.2.2 793 0x80000003 0x004F85 2
10.4.4.4 10.4.4.4 776 0x80000004 0x005643 1
111.111.111.111.111.111.111.111.755 0x80000005 0x0059CA 2 133.133.133.133.133.133.133.133.775 0x80000005 0x00B5B1 2 Net Link States (Area 0) Link ID ADV Router Age Seq# Checksum
10.1.1.1 111.111.111 794 0x80000001 0x001E8B
10.2.2.3 133.133.133.133 812 0x80000001 0x004BA9
10.4.4.1 111.111.111 755 0x80000001 0x007F16
10.4.4.3 133.133.133.133 775 0x80000001 0x00C31F
QUESTION 4
A workstation has just resolved a browser URL to the IP address of a server. What protocol will the workstation now use to determine the destination MAC address to be placed into frames directed toward the server?
A. HTTP
B. DNS
C. DHCP
D. RARP
E. ARP
Correct Answer: E

The RARP protocol is used to translate hardware interface addresses to protocol addresses. The RARP message

format is very similar to the ARP format. When the booting computer sends the broadcast ARP request, it places its own hardware address in both the sending and receiving fields in the encapsulated ARP data packet. The RARP server will fill in the correct sending and receiving IP addresses in its response to the message. This way the booting computer will know its IP address when it gets the message from the RARP server

#### **QUESTION 5**

Which command can you use to manually assign a static IPV6 address to a router interface?

A. ipv6 address PREFIX\_1::1/64

B. ipv6 autoconfig 2001:db8:2222:7272::72/64

C. ipv6 autoconfig

D. ipv6 address 2001:db8:2222:7272::72/64

Correct Answer: D

## **QUESTION 6**

Which IOS command is used to initiate a login into a VTY port on a remote router?

A. router# login

B. router# telnet

C. router# trace

D. router# ping

E. router(config)# line vty 0 5

F. router(config-line)# login

Correct Answer: B

VTY ports are telnet ports hence command B will initiate login to the telnet port.

## **QUESTION 7**

To allow or prevent load balancing to network 172.16.3.0/24, which of the following commands could be used in R2? (Choose two.)

#### Instructions



This item contains several questions that you must answer. You can view these questions by clicking on the corresponding button to the left. Changing questions can be accomplished by clicking the numbers to the left of each question. In order to complete the questions, you will need to refer to the topology.

To gain access to the topology, click on the topology button at the bottom of the screen. When you have finished viewing the topology, you can return to your questions by clicking on the Questions button to the left.

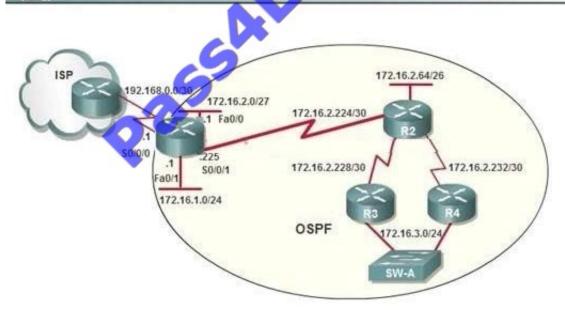
Each of the windows can be minimized by clicking on the [-]. You can also reposition a window by dragging it by the title bar.

#### Scenario



Refer to the topology. Using the information shown, answer the four questions shown on the Questions tab.

#### Topology



- A. R2(config-if)#clock rate
- B. R2(config-if)#bandwidth
- C. R2(config-if)#ip ospf cost
- D. R2(config-if)#ip ospf priority
- E. R2(config-router)#distance ospf

Correct Answer: BC

http://www.cisco.com/en/US/tech/tk365/technologies\_white\_paper09186a0080094e9e.shtml#t6

The cost (also called metric) of an interface in OSPF is an indication of the overhead required to send packets across a certain interface. The cost of an interface is inversely proportional to the bandwidth of that interface. A higher bandwidth

indicates a lower cost. There is more overhead (higher cost) and time delays involved in crossing a 56k serial line than crossing a 10M Ethernet line. The formula used to calculate the cost is:

Cost = 10000 0000/bandwidth in bps

For example, it will cost 10 EXP8/10 EXP7 = 10 to cross a 10M Ethernet line and will cost 10 EXP8/1544000 =64 to cross a T1 line.

By default, the cost of an interface is calculated based on the bandwidth; you can force the cost of an interface with the ip ospf cost interface subconfiguration mode command.

#### **QUESTION 8**

What information can be used by a router running a link-state protocol to build and maintain its topological database? (Choose two.)

- A. hello packets
- B. SAP messages sent by other routers
- C. LSAs from other routers
- D. beacons received on point-to-point links
- E. routing tables received from other link-state routers
- F. TTL packets from designated routers

Correct Answer: AC

## Reference 1:

http://www.ciscopress.com/articles/article.asp?p=24090andseqNum=4

Link state protocols, sometimes called shortest path first or distributed database protocols, are built around a well-known algorithm from graph theory, E. W. Dijkstra\\'a shortest path algorithm.

Examples of link state routing protocols are:

Open Shortest Path First (OSPF) for IP

The ISO\\'s Intermediate System to Intermediate System (IS-IS) for CLNS and IP DEC\\'s DNA Phase V Novell\\'s NetWare Link Services Protocol (NLSP)

Although link state protocols are rightly considered more complex than distance vector protocols, the basic functionality is not complex at all:

1.

Each router establishes a relationship--an adjacency--with each of its neighbors.

2.

Each router sends link state advertisements (LSAs), some

3.

Each router stores a copy of all the LSAs it has seen in a database. If all works well, the databases in all routers should be identical.

4.

The completed topological database, also called the link state database, describes a graph of the internetwork. Using the Dijkstra algorithm, each router calculates the shortest path to each network and enters this information into the route table. OSPF Tutorial http://www.9tut.com/ospf-routing-protocol-tutorial

#### **QUESTION 9**

What does the "Inside Global" address represent in the configuration of NAT?

A. the summarized address for all of the internal subnetted addresses

B. the MAC address of the router used by inside hosts to connect to the Internet

C. a globally unique, private IP address assigned to a host on the inside network

D. a registered address that represents an inside host to an outside network

Correct Answer: D

NAT: Local and Global Definitions

http://www.cisco.com/en/US/tech/tk648/tk361/technologies\_tech\_note09186a0080094837.shtml

Cisco defines these terms as: Inside local address--The IP address assigned to a host on the inside network. This is the address configured as a parameter of the computer OS or received via dynamic address allocation protocols such as DHCP. The address is likely not a legitimate IP address assigned by the Network Information Center (NIC) or service provider. Inside global address--A legitimate IP address assigned by the NIC or service provider that represents one or more inside local IP addresses to the outside world. Outside local address--The IP address of an outside host as it appears to the inside network. Not necessarily a legitimate address, it is allocated from an address space routable on the inside. Outside global address-- The IP address assigned to a host on the outside network by the host owner. The address is allocated from a globally routable address or network space. These definitions still leave a lot to be interpreted. For this example, this document redefines these terms by first defining local address and global address. Keep in mind that the terms inside and outside are NAT definitions. Interfaces on a NAT router are defined as inside or outside with the NAT configuration commands, ip nat inside destination and ip nat outside source. Networks to which these interfaces connect can then be thought of as inside networks or outside networks, respectively. Local address--A local address that appears on the inside portion of the network. Global address--A global address is any address that appears on the network.

### **QUESTION 10**

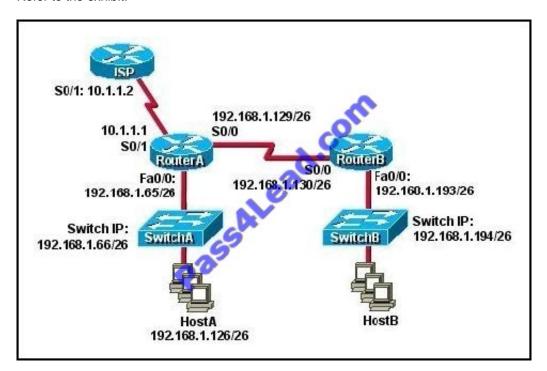
How many simultaneous Telnet sessions does a Cisco router support by default?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5
- F. 6

Correct Answer: E

## **QUESTION 11**

Refer to the exhibit.



Which default gateway address should be assigned to HostA?

- A. 192.168.1.1
- B. 192.168.1.65
- C. 192.168.1.66
- D. 192.168.1.129
- E. 10.1.1.1

## F. 10.1.1.2

Correct Answer: B

It should be one less than the switch IP to which it is connected so it will be B.

## **QUESTION 12**

Why do large OSPF networks use a hierarchical design? (Choose three.)

A. to decrease latency by increasing bandwidth

B. to reduce routing overhead

C. to speed up convergence

D. to confine network instability to single areas of the network

E. to reduce the complexity of router configuration

F. to lower costs by replacing routers with distribution layer switches

Correct Answer: BCD

OSPF implements a two-tier hierarchical routing model that uses a core or backbone tier known as area zero (0). Attached to that backbone via area border routers (ABRs) are a number of secondary tier areas.

The hierarchical approach is used to achieve the following:

Rapid convergence because of link and/or switch failures

Deterministic traffic recovery

Scalable and manageable routing hierarchy, reduced routing overhead.

To Read the Whole Q&As, please purchase the Complete Version from Our website.

# Try our product!

100% Guaranteed Success

100% Money Back Guarantee

365 Days Free Update

**Instant Download After Purchase** 

24x7 Customer Support

Average 99.9% Success Rate

More than 800,000 Satisfied Customers Worldwide

Multi-Platform capabilities - Windows, Mac, Android, iPhone, iPod, iPad, Kindle

## **Need Help**

Please provide as much detail as possible so we can best assist you. To update a previously submitted ticket:





Any charges made through this site will appear as Global Simulators Limited.

All trademarks are the property of their respective owners.