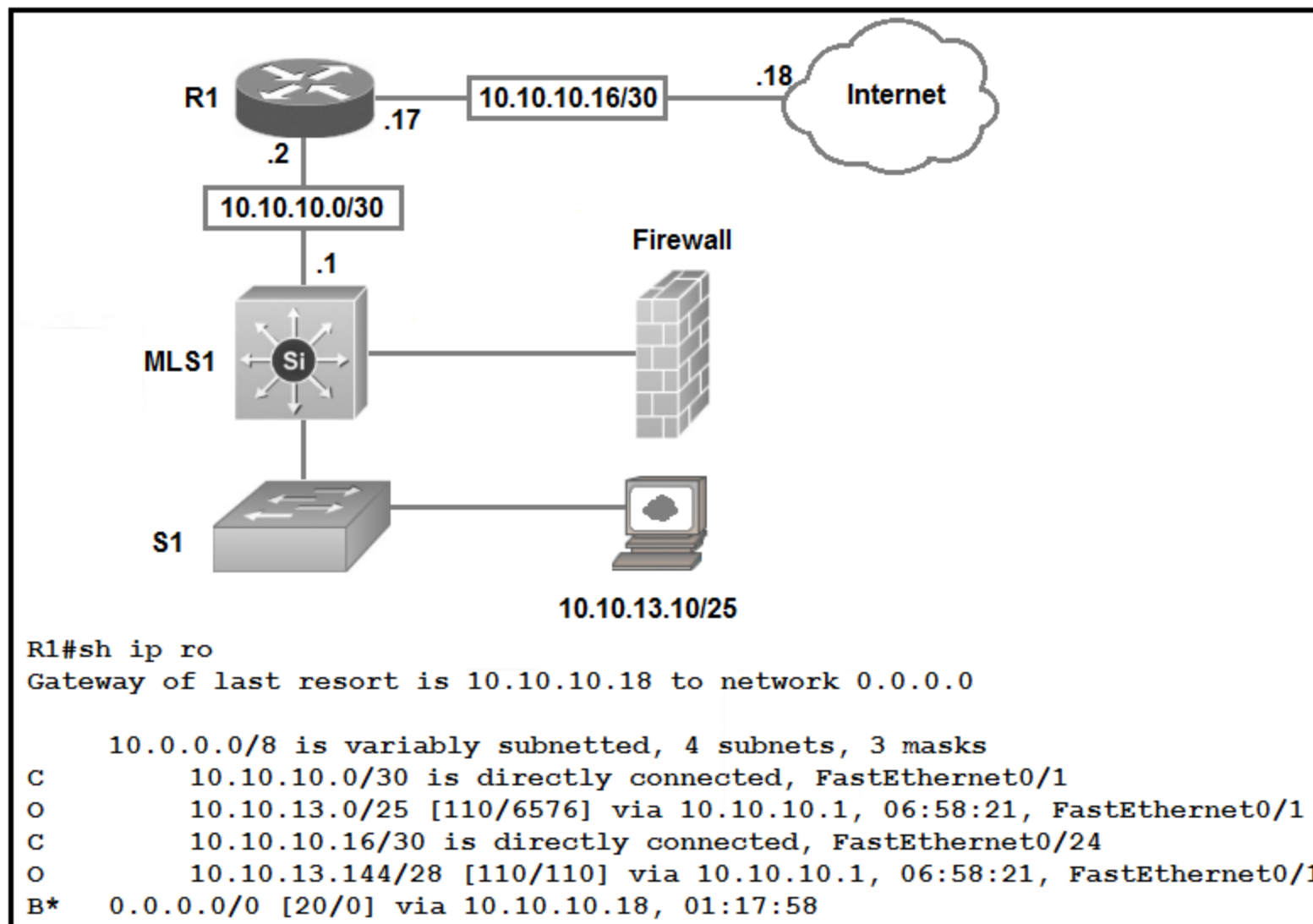


Actual exam question from Cisco's 200-301

Question #: 1

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which type of route does R1 use to reach host 10.10.13.10/32?

- A. default route
- B. network route
- C. host route
- D. floating static route

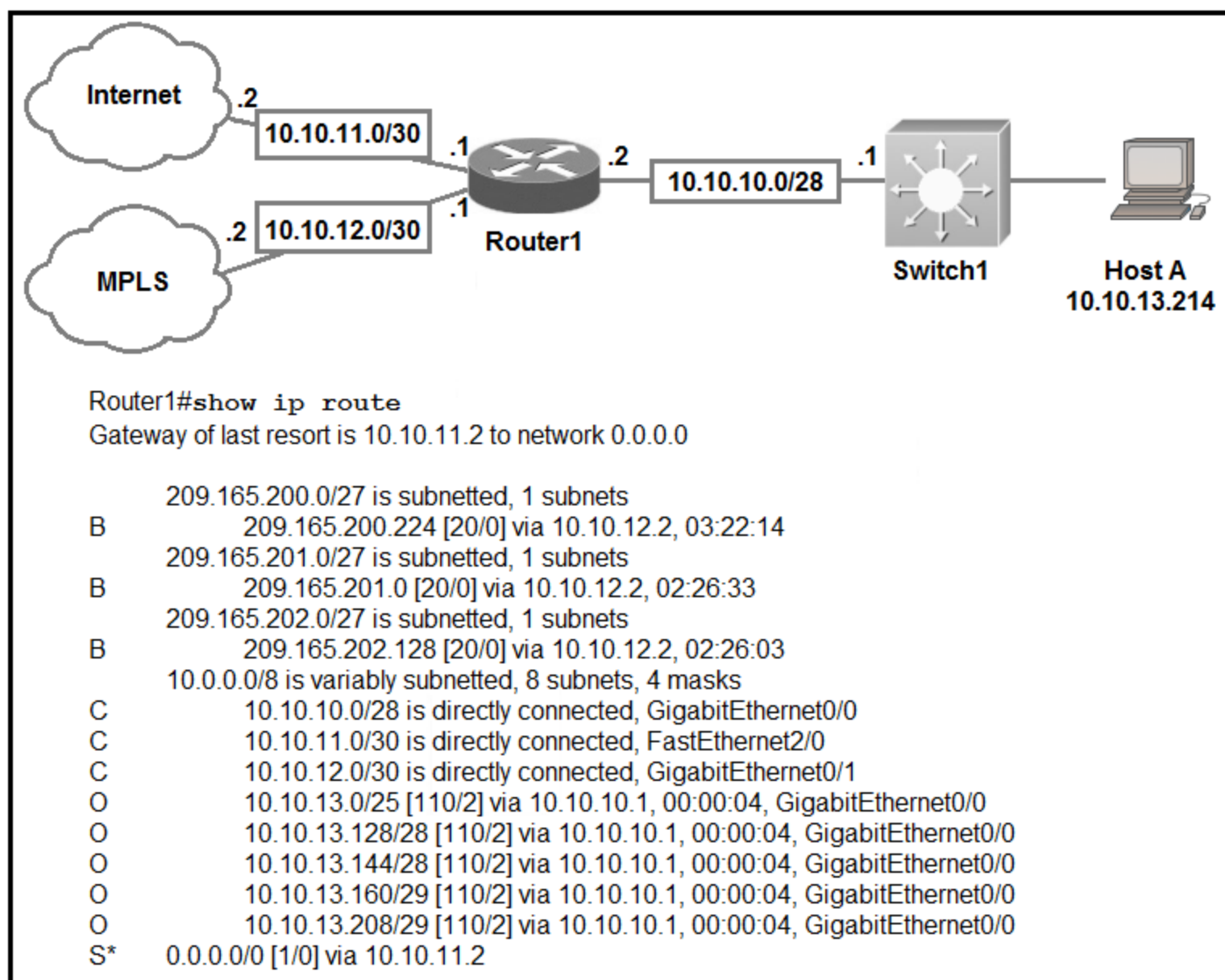
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 2

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which prefix does Router1 use for traffic to Host A?

- A. 10.10.10.0/28
- B. 10.10.13.0/25
- C. 10.10.13.144/28
- D. 10.10.13.208/29

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 3

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the descriptions of file-transfer protocols from the left onto the correct protocols on the right.

Select and Place:

### Answer Area

provides reliability when loading an IOS image upon boot up

does not require user authentication

uses port 69

uses ports 20 and 21

uses TCP

uses UDP

FTP

TFTP

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 4

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A frame that enters a switch fails the Frame Check Sequence. Which two interface counters are incremented? (Choose two.)

- A. input errors
- B. frame
- C. giants
- D. CRC
- E. runts

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 5

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv4 network subnets from the left onto the correct usable host ranges on the right.

Select and Place:

### Answer Area

172.28.228.144/18

172.28.228.144/21

172.28.228.144/23

172.28.228.144/25

172.28.228.144/29

172.28.228.1 - 172.28.229.254

172.28.224.1 - 172.28.231.254

172.28.228.129 - 172.28.228.254

172.28.228.145 - 172.28.228.150

172.28.192.1 - 172.28.255.254

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 6

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How do TCP and UDP differ in the way that they establish a connection between two endpoints?

- A. TCP uses the three-way handshake, and UDP does not guarantee message delivery.
- B. TCP uses synchronization packets, and UDP uses acknowledgment packets.
- C. UDP provides reliable message transfer, and TCP is a connectionless protocol.
- D. UDP uses SYN, SYN ACK, and FIN bits in the frame header while TCP uses SYN, SYN ACK, and ACK bits.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 7

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which 802.11 frame type is Association Response?

- A. management
- B. protected frame
- C. action
- D. control

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 8

Topic #: 1

[\[All 200-301 Questions\]](#)

---

In which way does a spine-and-leaf architecture allow for scalability in a network when additional access ports are required?

- A. A spine switch and a leaf switch can be added with redundant connections between them.
- B. A spine switch can be added with at least 40 GB uplinks.
- C. A leaf switch can be added with connections to every spine switch.
- D. A leaf switch can be added with a single connection to a core spine switch.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 9

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What identifies the functionality of virtual machines?

- A. The hypervisor communicates on Layer 3 without the need for additional resources.
- B. Each hypervisor supports a single virtual machine and a single software switch.
- C. The hypervisor virtualizes physical components including CPU, memory, and storage.
- D. Virtualized servers run efficiently when physically connected to a switch that is separate from the hypervisor.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 10

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command automatically generates an IPv6 address from a specified IPv6 prefix and MAC address of an interface?

- A. ipv6 address dhcp
- B. ipv6 address 2001:DB8:5:112::/64 eui-64
- C. ipv6 address autoconfig
- D. ipv6 address 2001:DB8:5:112::2/64 link-local

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 11

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When configuring IPv6 on an interface, which two IPv6 multicast groups are joined? (Choose two.)

- A. 2000::/3
- B. 2002::5
- C. FC00::/7
- D. FF02::1
- E. FF02::2

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 12

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

```
[root@HostTest ~]# ip route
default via 192.168.1.193 dev eth1 proto static
192.168.1.0/26 dev eth1 proto kernel scope link src 192.168.1.200 metric 1

[root@HostTest ~]# ip addr show eth1
eth1: mtu 1500 qdisc pfifo_fast qlen 1000
      link/ether 00:0c:22:83:79:a3 brd ff:ff:ff:ff:ff:ff
      inet 192.168.1.200/26 brd 192.168.1.255 scope global eth1
      inet6 fe80::20c:29ff:fe89:79b3/64 scope link
      valid_lft forever preferred_lft forever
```

Refer to the exhibit. Drag and drop the networking parameters from the left onto the correct values on the right.

Select and Place:

### Answer Area

default gateway

host IP address

NIC MAC address

NIC vendor OUI

subnet mask

00:0c:22

00:0c:22:83:79:a3

192.168.1.193

192.168.1.200

255.255.255.192

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 13

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the default behavior of a Layer 2 switch when a frame with an unknown destination MAC address is received?

- A. The Layer 2 switch forwards the packet and adds the destination MAC address to its MAC address table.
- B. The Layer 2 switch sends a copy of a packet to CPU for destination MAC address learning.
- C. The Layer 2 switch floods packets to all ports except the receiving port in the given VLAN.
- D. The Layer 2 switch drops the received frame.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 14

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer must configure a /30 subnet between two routes. Which usable IP address and subnet mask combination meets this criteria?

- A. interface e0/0 description to XX-AXXX:XXXXX ip address 10.2.1.3 255.255.255.252
- B. interface e0/0 description to XX-AXXX:XXXXX ip address 192.168.1.1 255.255.255.248
- C. interface e0/0 description to XX-AXXX:XXXXX ip address 172.16.1.4 255.255.255.248
- D. interface e0/0 description to XX-AXXX:XXXXX ip address 209.165.201.2 225.255.255.252

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 15

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which network allows devices to communicate without the need to access the Internet?

- A. 172.9.0.0/16
- B. 172.28.0.0/16
- C. 192.0.0.0/8
- D. 209.165.201.0/24

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 16

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Router(config)#interface GigabitEthernet 1/0/1
Router(config-if)#ip address 192.168.16.143 255.255.255.240
Bad mask /28 for address 192.168.16.143
```

Refer to the exhibit. Which statement explains the configuration error message that is received?

- A. It belongs to a private IP address range.
- B. The router does not support /28 mask.
- C. It is a network IP address.
- D. It is a broadcast IP address.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 17

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which IPv6 address type provides communication between subnets and cannot route on the Internet?

- A. link-local
- B. unique local
- C. multicast
- D. global unicast

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 18

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which IPv6 address block sends packets to a group address rather than a single address?

- A. 2000::/3
- B. FC00::/7
- C. FE80::/10
- D. FF00::/8

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 19

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two reasons that cause late collisions to increment on an Ethernet interface? (Choose two.)

- A. when Carrier Sense Multiple Access/Collision Detection is used
- B. when one side of the connection is configured for half-duplex
- C. when the sending device waits 15 seconds before sending the frame again
- D. when a collision occurs after the 32nd byte of a frame has been transmitted
- E. when the cable length limits are exceeded

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 20

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a benefit of using a Cisco Wireless LAN Controller?

- A. It eliminates the need to configure each access point individually.
- B. Central AP management requires more complex configurations.
- C. Unique SSIDs cannot use the same authentication method.
- D. It supports autonomous and lightweight APs.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 21

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which action is taken by switch port enabled for PoE power classification override?

- A. If a monitored port exceeds the maximum administrative value for power, the port is shutdown and err-disabled.
- B. When a powered device begins drawing power from a PoE switch port, a syslog message is generated.
- C. As power usage on a PoE switch port is checked, data flow to the connected device is temporarily paused.
- D. If a switch determines that a device is using less than the minimum configured power, it assumes the device has failed and disconnects it.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 22

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What occurs to frames during the process of frame flooding?

- A. Frames are sent to all ports, including those that are assigned to other VLANs.
- B. Frames are sent to every port on the switch that has a matching entry in MAC address table.
- C. Frames are sent to every port on the switch in the same VLAN except from the originating port.
- D. Frames are sent to every port on the switch in the same VLAN.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 23

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which function does the range of private IPv4 addresses perform?

- A. allows multiple companies to each use the same addresses without conflicts
- B. provides a direct connection for hosts from outside of the enterprise network
- C. ensures that NAT is not required to reach the Internet with private range addressing
- D. enables secure communications to the Internet for all external hosts

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 24

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which action must be taken to assign a global unicast IPv6 address on an interface that is derived from the MAC address of that interface?

- A. explicitly assign a link-local address
- B. disable the EUI-64 bit process
- C. enable SLAAC on an interface
- D. configure a stateful DHCPv6 server on the network

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 25

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Several new coverage cells are required to improve the Wi-Fi network of an organization. Which two standard designs are recommended? (Choose two.)

- A. 5GHz provides increased network capacity with up to 23 nonoverlapping channels.
- B. 5GHz channel selection requires an autonomous access point.
- C. Cells that overlap one another are configured to use nonoverlapping channels.
- D. Adjacent cells with overlapping channels use a repeater access point.
- E. For maximum throughput, the WLC is configured to dynamically set adjacent access points to the channel.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 26

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How do TCP and UDP differ in the way they provide reliability for delivery of packets?

- A. TCP does not guarantee delivery or error checking to ensure that there is no corruption of data, UDP provides message acknowledgement and retransmits data if lost.
- B. TCP provides flow control to avoid overwhelming a receiver by sending too many packets at once, UDP sends packets to the receiver in a continuous stream without checking.
- C. TCP is a connectionless protocol that does not provide reliable delivery of data; UDP is a connection-oriented protocol that uses sequencing to provide reliable delivery.
- D. TCP uses windowing to deliver packets reliably; UDP provides reliable message transfer between hosts by establishing a three-way handshake.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 27

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two differences between optical-fiber cabling and copper cabling? (Choose two.)

- A. A BNC connector is used for fiber connections
- B. The glass core component is encased in a cladding
- C. The data can pass through the cladding
- D. Light is transmitted through the core of the fiber
- E. Fiber connects to physical interfaces using RJ-45 connections

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 28

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does CAPWAP communicate between an access point in local mode and a WLC?

- A. The access point must not be connected to the wired network, as it would create a loop
- B. The access point must be connected to the same switch as the WLC
- C. The access point must directly connect to the WLC using a copper cable
- D. The access point has the ability to link to any switch in the network, assuming connectivity to the WLC

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 29

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which IPv6 address block forwards packets to a multicast address rather than a unicast address?

- A. 2000::/3
- B. FC00::/7
- C. FE80::/10
- D. FF00::/12

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 30

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the difference regarding reliability and communication type between TCP and UDP?

- A. TCP is reliable and is a connectionless protocol; UDP is not reliable and is a connection-oriented protocol.
- B. TCP is not reliable and is a connectionless protocol; UDP is reliable and is a connection-oriented protocol.
- C. TCP is not reliable and is a connection-oriented protocol; UDP is reliable and is a connectionless protocol.
- D. TCP is reliable and is a connection-oriented protocol; UDP is not reliable and is a connectionless protocol.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 31

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two descriptions of three-tier network topologies? (Choose two.)

- A. The distribution layer runs Layer 2 and Layer 3 technologies
- B. The network core is designed to maintain continuous connectivity when devices fail
- C. The access layer manages routing between devices in different domains
- D. The core layer maintains wired connections for each host
- E. The core and distribution layers perform the same functions

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 32

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of IPv6 address is publicly routable in the same way as IPv4 public addresses?

- A. multicast
- B. unique local
- C. link-local
- D. global unicast

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 33

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the expected outcome when an EUI-64 address is generated?

- A. The interface ID is configured as a random 64-bit value
- B. The characters FE80 are inserted at the beginning of the MAC address of the interface
- C. The seventh bit of the original MAC address of the interface is inverted
- D. The MAC address of the interface is used as the interface ID without modification

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 34

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A corporate office uses four floors in a building.

⇒ Floor 1 has 24 users.

⇒ Floor 2 has 29 users.

Floor 3 has 28 users.

▪

⇒ Floor 4 has 22 users.

Which subnet summarizes and gives the most efficient distribution of IP addresses for the router configuration?

- A. 192.168.0.0/24 as summary and 192.168.0.0/28 for each floor
- B. 192.168.0.0/23 as summary and 192.168.0.0/25 for each floor
- C. 192.168.0.0/25 as summary and 192.168.0.0/27 for each floor
- D. 192.168.0.0/26 as summary and 192.168.0.0/29 for each floor

Show Suggested Answer



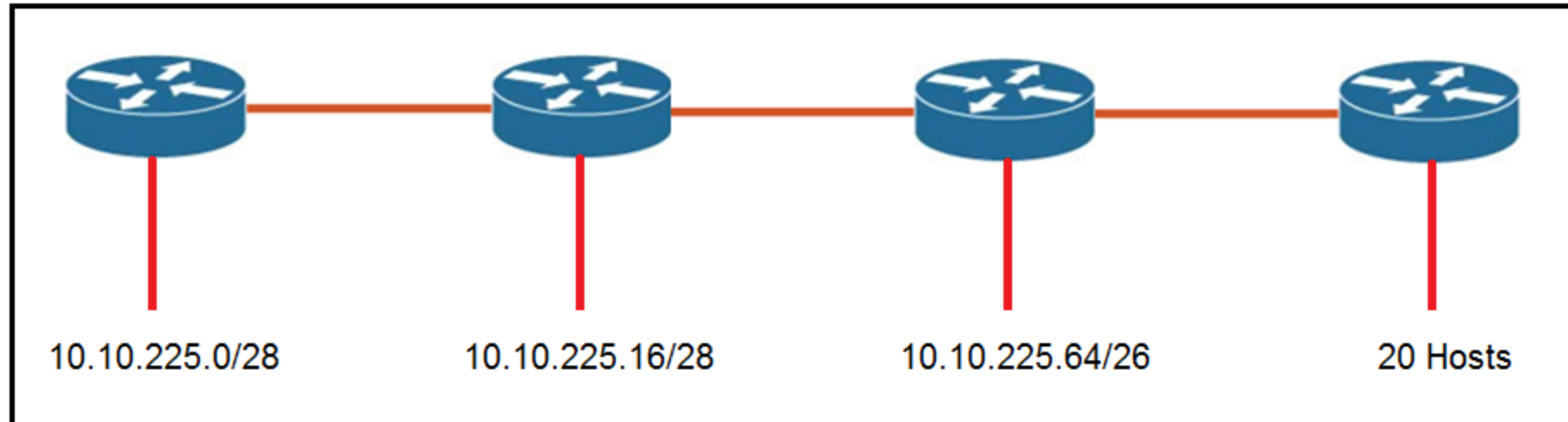


Actual exam question from Cisco's 200-301

Question #: 35

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer must add a subnet for a new office that will add 20 users to the network. Which IPv4 network and subnet mask combination does the engineer assign to minimize wasting addresses?

- A. 10.10.225.48 255.255.255.240
- B. 10.10.225.32 255.255.255.240
- C. 10.10.225.48 255.255.255.224
- D. 10.10.225.32 255.255.255.224

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 36

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a characteristic of spine-and-leaf architecture?

- A. Each link between leaf switches allows for higher bandwidth.
- B. It provides greater predictability on STP blocked ports.
- C. It provides variable latency.
- D. Each device is separated by the same number of hops.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 37

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An office has 8 floors with approximately 30-40 users per floor. One subnet must be used. Which command must be configured on the router Switched Virtual Interface to use address space efficiently?

- A. ip address 192.168.0.0 255.255.0.0
- B. ip address 192.168.0.0 255.255.254.0
- C. ip address 192.168.0.0 255.255.255.128
- D. ip address 192.168.0.0 255.255.255.224

[Show Suggested Answer](#)



Actual exam question from Cisco's 200-301

Question #: 38

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the descriptions of IP protocol transmissions from the left onto the IP traffic types on the right.

Select and Place:

- sends transmissions in sequence
- transmissions include an 8-byte header
- transmits packets as a stream
- transmits packets individually
- uses a higher transmission rate to support latency-sensitive applications
- uses a lower transmission rate to ensure reliability

TCP

UDP

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 39

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A device detects two stations transmitting frames at the same time. This condition occurs after the first 64 bytes of the frame is received. Which interface counter increments?

- A. runt
- B. collision
- C. late collision
- D. CRC

[Show Suggested Answer](#)

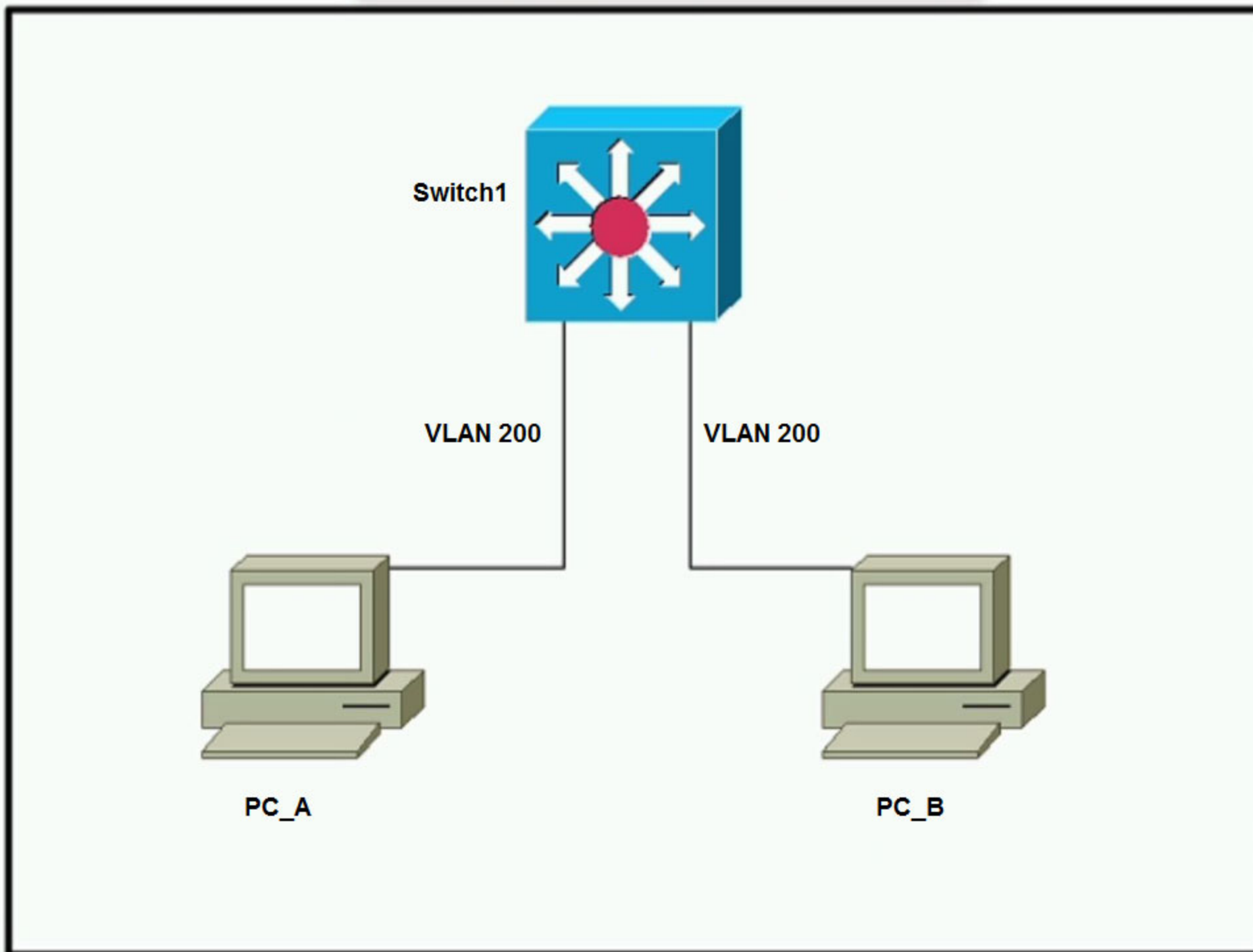


Actual exam question from Cisco's 200-301

Question #: 40

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which outcome is expected when PC\_A sends data to PC\_B after their initial communication?

- A. The source MAC address is changed.
- B. The destination MAC address is replaced with ffff.ffff.ffff.
- C. The source and destination MAC addresses remain the same.
- D. The switch rewrites the source and destination MAC addresses with its own.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 41

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Using direct sequence spread spectrum, which three 2.4-GHz channels are used to limit collisions?

- A. 5, 6, 7
- B. 1, 2, 3
- C. 1, 6, 11
- D. 1, 5, 10

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 42

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How do TCP and UDP differ in the way they guarantee packet delivery?

- A. TCP uses retransmissions, acknowledgment, and parity checks, and UDP uses cyclic redundancy checks only
- B. TCP uses two-dimensional parity checks, checksums, and cyclic redundancy checks, and UDP uses retransmissions only
- C. TCP uses checksum, acknowledgements, and retransmissions, and UDP uses checksums only
- D. TCP uses checksum, parity checks, and retransmissions, and UDP uses acknowledgements only

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 43

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A wireless administrator has configured a WLAN; however, the clients need access to a less congested 5-GHz network for their voice quality. Which action must be taken to meet the requirement?

- A. enable Band Select
- B. enable DTIM
- C. enable RX-SOP
- D. enable AAA override

[Show Suggested Answer](#)



Actual exam question from Cisco's 200-301

Question #: 44

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the application protocols from the left onto the transport protocols that it uses on the right.

Select and Place:

DHCP
FTP
SMTP
SSH
SNMP
TFTP

TCP

UDP

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 45

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the destination MAC address of a broadcast frame?

- A. 00:00:0c:07:ac:01
- B. ff:ff:ff:ff:ff:ff
- C. 43:2e:08:00:00:0c
- D. 00:00:0c:43:2e:08
- E. 00:00:0c:ff:ff:ff

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 46

Topic #: 1

[\[All 200-301 Questions\]](#)

---

For what two purposes does the Ethernet protocol use physical addresses?

- A. to uniquely identify devices at Layer 2
- B. to allow communication with devices on a different network
- C. to differentiate a Layer 2 frame from a Layer 3 packet
- D. to establish a priority system to determine which device gets to transmit first
- E. to allow communication between different devices on the same network
- F. to allow detection of a remote device when its physical address is unknown

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 47

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the networking parameters from the left on to the correct values on the right.

Select and Place:

- SMTP
- SNMP
- TFTP
- VoIP
- SSH
- FTP

**Connection Oriented**

**Connectionless**

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 48

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which component of an Ethernet frame is used to notify a host that traffic is coming?

- A. start of frame delimiter
- B. Type field
- C. preamble
- D. Data field

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 49

Topic #: 1

[\[All 200-301 Questions\]](#)

---

You are configuring your edge routers interface with a public IP address for Internet connectivity. The router needs to obtain the IP address from the service provider dynamically.

Which command is needed on interface FastEthernet 0/0 to accomplish this?

- A. ip default-gateway
- B. ip route
- C. ip default-network
- D. ip address dhcp
- E. ip address dynamic

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 50

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two statements about the purpose of the OSI model are accurate? (Choose two.)

- A. Defines the network functions that occur at each layer
- B. Facilitates an understanding of how information travels throughout a network
- C. Changes in one layer do not impact other layer
- D. Ensures reliable data delivery through its layered approach

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 51

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which three statements about MAC addresses are correct? (Choose three.)

- A. To communicate with other devices on a network, a network device must have a unique MAC address
- B. The MAC address is also referred to as the IP address
- C. The MAC address of a device must be configured in the Cisco IOS CLI by a user with administrative privileges
- D. A MAC address contains two main components, the first of which identifies the manufacturer of the hardware and the second of which uniquely identifies the hardware
- E. An example of a MAC address is 0A:26:B8:D6:65:90
- F. A MAC address contains two main components, the first of which identifies the network on which the host resides and the second of which uniquely identifies the host on the network

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 52

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which technique can you use to route IPv6 traffic over an IPv4 infrastructure?

- A. NAT
- B. 6 to 4 tunneling
- C. L2TPv3
- D. dual-stack

Show Suggested Answer



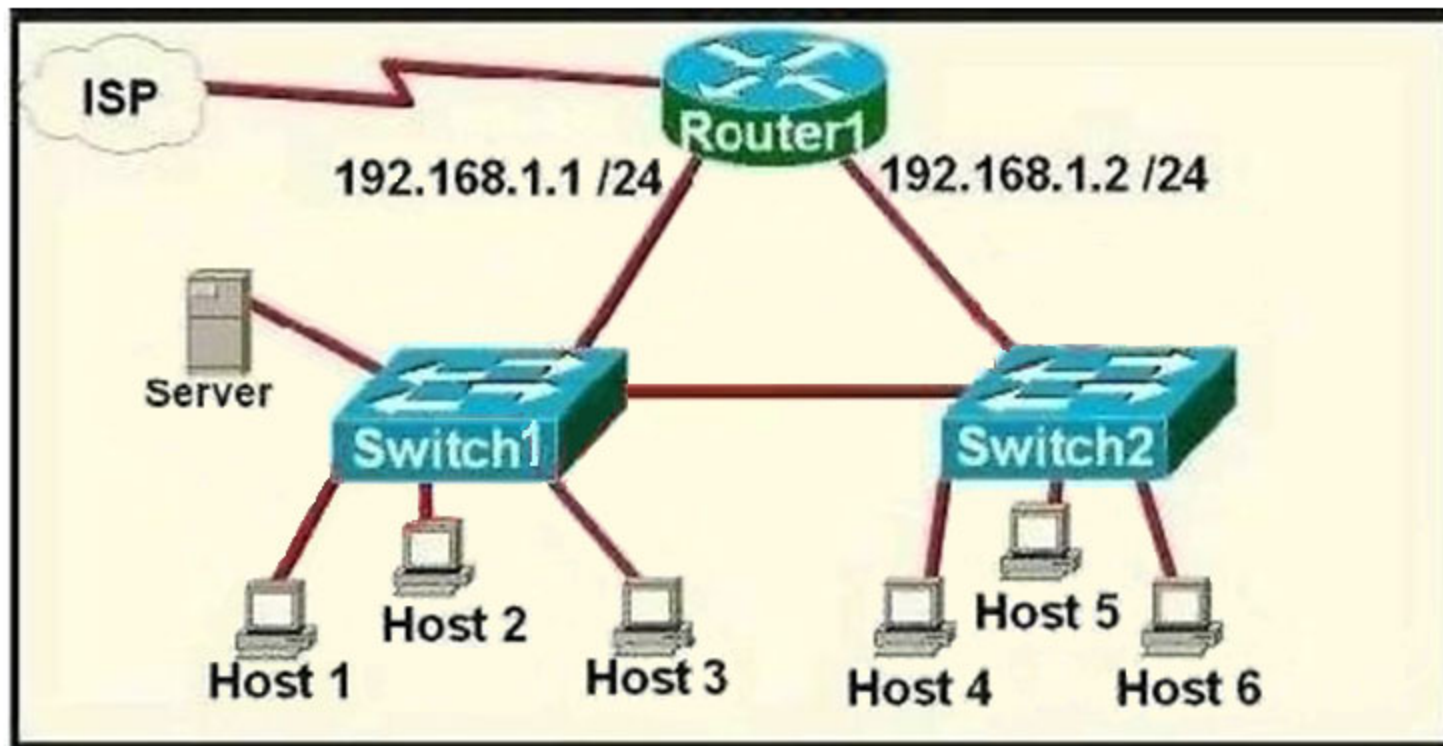
Actual exam question from Cisco's 200-301

Question #: 53

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. A network technician is asked to design a small network with redundancy. The exhibit represents this design, with all hosts configured in the same VLAN. What conclusions can be made about this design?



- A. This design will function as intended.
- B. Spanning-tree will need to be used.
- C. The router will not accept the addressing scheme.
- D. The connection between switches should be a trunk.
- E. The router interfaces must be encapsulated with the 802.1Q protocol.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 54

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two statements are true about the command `ip route 172.16.3.0 255.255.255.0 192.168.2.4`? (Choose two.)

- A. It establishes a static route to the 172.16.3.0 network.
- B. It establishes a static route to the 192.168.2.0 network.
- C. It configures the router to send any traffic for an unknown destination to the 172.16.3.0 network.
- D. It configures the router to send any traffic for an unknown destination out the interface with the address 192.168.2.4.
- E. It uses the default administrative distance.
- F. It is a route that would be used last if other routes to the same destination exist.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 55

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two benefits of private IPv4 IP addresses? (Choose two.)

- A. They are routed the same as public IP addresses.
- B. They are less costly than public IP addresses.
- C. They can be assigned to devices without Internet connections.
- D. They eliminate the necessity for NAT policies.
- E. They eliminate duplicate IP conflicts.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 56

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two benefits that the UDP protocol provide for application traffic? (Choose two.)

- A. UDP traffic has lower overhead than TCP traffic
- B. UDP provides a built-in recovery mechanism to retransmit lost packets
- C. The CTL field in the UDP packet header enables a three-way handshake to establish the connection
- D. UDP maintains the connection state to provide more stable connections than TCP
- E. The application can use checksums to verify the integrity of application data

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 57

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two goals reasons to implement private IPv4 addressing on your network? (Choose two.)

- A. Comply with PCI regulations
- B. Conserve IPv4 address
- C. Reduce the size of the forwarding table on network routers
- D. Reduce the risk of a network security breach
- E. Comply with local law

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 58

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which WAN access technology is preferred for a small office / home office architecture?

- A. broadband cable access
- B. frame-relay packet switching
- C. dedicated point-to-point leased line
- D. Integrated Services Digital Network switching

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 59

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two WAN architecture options help a business scalability and reliability for the network? (Choose two.)

- A. asynchronous routing
- B. single-homed branches
- C. dual-homed branches
- D. static routing
- E. dynamic routing

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 60

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the binary pattern of unique ipv6 unique local address?

- A. 00000000
- B. 11111100
- C. 11111111
- D. 11111101

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 61

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two options are the best reasons to use an IPV4 private IP space? (Choose two.)

- A. to enable intra-enterprise communication
- B. to implement NAT
- C. to connect applications
- D. to conserve global address space
- E. to manage routing overhead

Show Suggested Answer



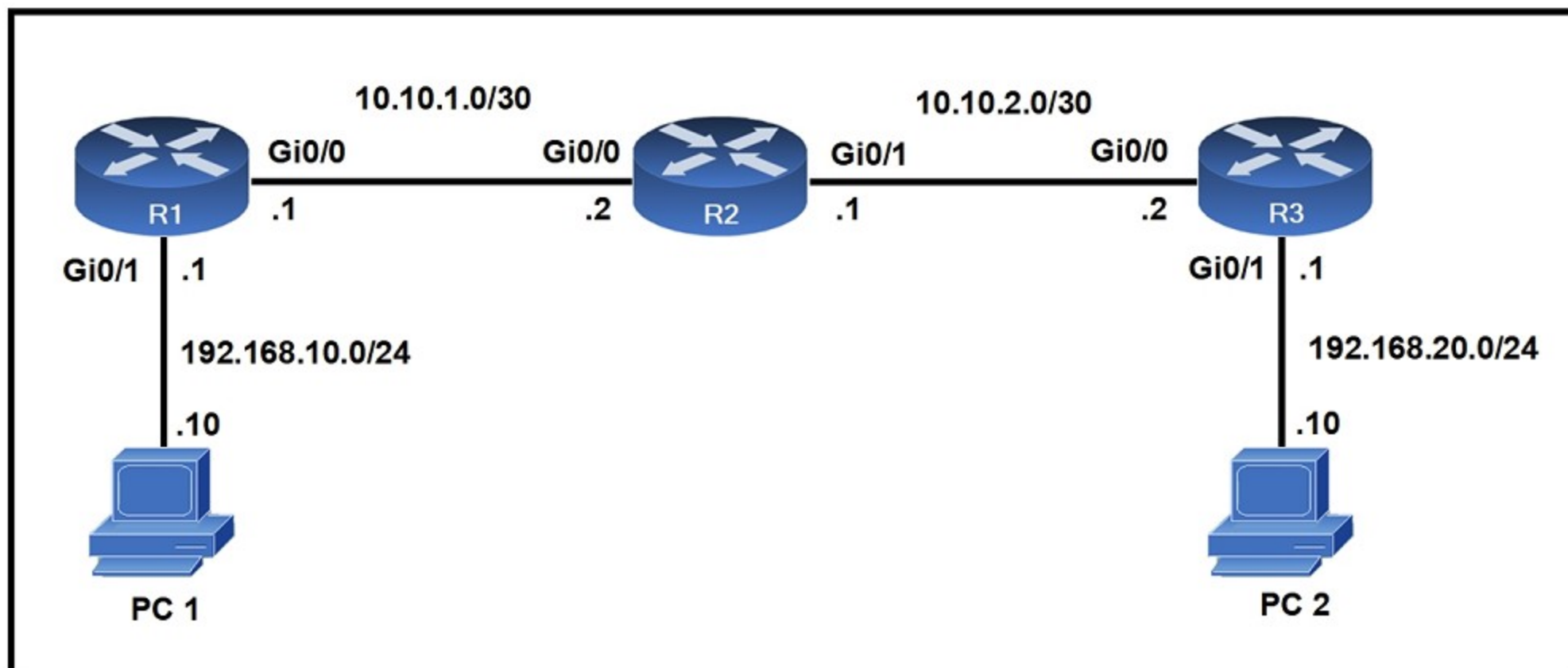
Actual exam question from Cisco's 200-301

Question #: 62

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. When PC1 sends a packet to PC2, the packet has which source and destination IP address when it arrives at interface Gi0/0 on router R2?



- A. source 192.168.10.10 and destination 10.10.2.2
- B. source 192.168.20.10 and destination 192.168.20.1
- C. source 192.168.10.10 and destination 192.168.20.10
- D. source 10.10.1.1 and destination 10.10.2.2

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 63

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the same for both copper and fiber interfaces when using SFP modules?

- A. They support an inline optical attenuator to enhance signal strength
- B. They accommodate single-mode and multi-mode in a single module
- C. They provide minimal interruption to services by being hot-swappable
- D. They offer reliable bandwidth up to 100 Mbps in half duplex mode

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 64

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two functions of a server on a network? (Choose two.)

- A. handles requests from multiple workstations at the same time
- B. achieves redundancy by exclusively using virtual server clustering
- C. housed solely in a data center that is dedicated to a single client achieves redundancy by exclusively using virtual server clustering
- D. runs the same operating system in order to communicate with other servers
- E. runs applications that send and retrieve data for workstations that make requests

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 65

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which function is performed by the collapsed core layer in a two-tier architecture?

- A. enforcing routing policies
- B. marking interesting traffic for data policies
- C. applying security policies
- D. attaching users to the edge of the network

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 66

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the primary function of a Layer 3 device?

- A. to transmit wireless traffic between hosts
- B. to analyze traffic and drop unauthorized traffic from the Internet
- C. to forward traffic within the same broadcast domain
- D. to pass traffic between different networks

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 67

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two functions are performed by the core layer in a three-tier architecture? (Choose two.)

- A. Provide uninterrupted forwarding service
- B. Inspect packets for malicious activity
- C. Ensure timely data transfer between layers
- D. Provide direct connectivity for end user devices
- E. Police traffic that is sent to the edge of the network

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 68

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a recommended approach to avoid co-channel congestion while installing access points that use the 2.4 GHz frequency?

- A. different nonoverlapping channels
- B. one overlapping channel
- C. one nonoverlapping channel
- D. different overlapping channels

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 69

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A manager asks a network engineer to advise which cloud service models are used so employees do not have to waste their time installing, managing, and updating software that is only used occasionally. Which cloud service model does the engineer recommend?

- A. infrastructure-as-a-service
- B. platform-as-a-service
- C. business process as service to support different types of service
- D. software-as-a-service

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 70

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two functions of a Layer 2 switch? (Choose two.)

- A. acts as a central point for association and authentication servers
- B. selects the best route between networks on a WAN
- C. moves packets within a VLAN
- D. moves packets between different VLANs
- E. makes forwarding decisions based on the MAC address of a packet

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 71

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the TCP/IP protocols from the left onto their primary transmission protocols on the right.

Select and Place:

- DNS
- HTTP
- RTP
- SMTP
- SNMP
- Telnet

TCP

UDP

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 72

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer observes high usage on the 2.4GHz channels and lower usage on the 5GHz channels. What must be configured to allow clients to preferentially use 5GHz access points?

- A. Client Band Select
- B. Re-Anchor Roamed Clients
- C. OEAP Spilt Tunnel
- D. 11ac MU-MIMO

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 73

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which networking function occurs on the data plane?

- A. processing inbound SSH management traffic
- B. sending and receiving OSPF Hello packets
- C. facilitates spanning-tree elections
- D. forwarding remote client/server traffic

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 74

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Under which condition is TCP preferred over UDP?

- A. UDP is used when low latency is optimal, and TCP is used when latency is tolerable.
- B. TCP is used when dropped data is more acceptable, and UDP is used when data is accepted out-of-order.
- C. TCP is used when data reliability is critical, and UDP is used when missing packets are acceptable.
- D. UDP is used when data is highly interactive, and TCP is used when data is time-sensitive.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 75

Topic #: 1

[\[All 200-301 Questions\]](#)

```
SiteA#show interface TenGigabitEthernet0/1/0
TenGigabitEthernet0/1/0 is up, line protocol is up
  Hardware is BUILT-IN-EPA-8x10G, address is 780c.f02a.db91 (bia 780a.f02b.db91)
  Description: Connection to SiteB
  Internet address is 10.10.10.1/30
  MTU 8146 bytes, BW 10000000 Kbit/sec, DLY 10 usec,
    reliability 166/255, txload 1/255, rxload 1/255
  Full Duplex, 10000Mbps, link type is force-up, media type is SFP-LR
  5 minute input rate 264797000 bits/sec, 26672 packets/sec
  5 minute output rate 122464000 bits/sec, 15724 packets/sec

SiteB#show interface TenGigabitEthernet0/1/0
TenGigabitEthernet0/1/0 is up, line protocol is up
  Hardware is BUILT-IN-EPA-8x10G, address is 780c.f02c.db26 (bia 780c.f02c.db26)
  Description: Connection to SiteA
  Internet address is 10.10.10.2/30
  MTU 8146 bytes, BW 10000000 Kbit/sec, DLY 10 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Full Duplex, 10000Mbps, link type is force-up, media type is SFP-LR
  5 minute input rate 122464000 bits/sec, 15724 packets/sec
  5 minute output rate 264797000 bits/sec, 26672 packets/sec
```

Refer to the exhibit. Shortly after SiteA was connected to SiteB over a new single-mode fiber path, users at SiteA report intermittent connectivity issues with applications hosted at SiteB. What is the cause of the intermittent connectivity issue?

- A. Interface errors are incrementing.
- B. High usage is causing high latency.
- C. An incorrect SFP media type was used at SiteA.
- D. The sites were connected with the wrong cable type.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 76

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer must configure the router R1 GigabitEthernet1/1 interface to connect to the router R2 GigabitEthernet1/1 interface. For the configuration to be applied, the engineer must compress the address 2001:0db8:0000:0000:0500:000a:400F:583B. Which command must be issued on the interface?

- A. ipv6 address 2001::db8:0000::500:a:400F:583B
- B. ipv6 address 2001:db8:0::500:a:4F:583B
- C. ipv6 address 2001:db8::500:a:400F:583B
- D. ipv6 address 2001:0db8::5:a:4F:583B

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 77

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a network appliance that checks the state of a packet to determine whether the packet is legitimate?

- A. Layer 2 switch
- B. LAN controller
- C. load balancer
- D. firewall

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 78

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a role of access points in an enterprise network?

- A. integrate with SNMP in preventing DDoS attacks
- B. serve as a first line of defense in an enterprise network
- C. connect wireless devices to a wired network
- D. support secure user logins to devices on the network

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 79

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An implementer is preparing hardware for virtualization to create virtual machines on a host. What is needed to provide communication between hardware and virtual machines?

- A. router
- B. hypervisor
- C. switch
- D. straight cable

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 80

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does a Cisco Unified Wireless Network respond to Wi-Fi channel overlap?

- A. It allows the administrator to assign the channels on a per-device or per-interface basis.
- B. It segregates devices from different manufactures onto different channels.
- C. It analyzes client load and background noise and dynamically assigns a channel.
- D. It alternates automatically between 2.4 GHz and 5 GHz on adjacent access points.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 81

Topic #: 1

[\[All 200-301 Questions\]](#)

---

In which situation is private IPv4 addressing appropriate for a new subnet on the network of an organization?

- A. The network has multiple endpoint listeners, and it is desired to limit the number of broadcasts.
- B. The ISP requires the new subnet to be advertised to the Internet for web services.
- C. There is limited unique address space, and traffic on the new subnet will stay local within the organization.
- D. Traffic on the subnet must traverse a site-to-site VPN to an outside organization.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 82

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the characteristics of network architectures from the left onto the type of architecture on the right.

Select and Place:

single device handles the core and the distribution layer

enhances network availability

more cost-effective than other options

most appropriate for small network designs

separate devices handle the core and the distribution layer

Collapsed Core

Three-Tier

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 83

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which 802.11 frame type is indicated by a probe response after a client sends a probe request?

- A. data
- B. management
- C. control
- D. action

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 84

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the difference in data transmission delivery and reliability between TCP and UDP?

- A. TCP transmits data at a higher rate and ensures packet delivery. UDP retransmits lost data to ensure applications receive the data on the remote end.
- B. TCP requires the connection to be established before transmitting data. UDP transmits data at a higher rate without ensuring packet delivery.
- C. UDP sets up a connection between both devices before transmitting data. TCP uses the three-way handshake to transmit data with a reliable connection.
- D. UDP is used for multicast and broadcast communication. TCP is used for unicast communication and transmits data at a higher rate with error checking.

Show Suggested Answer

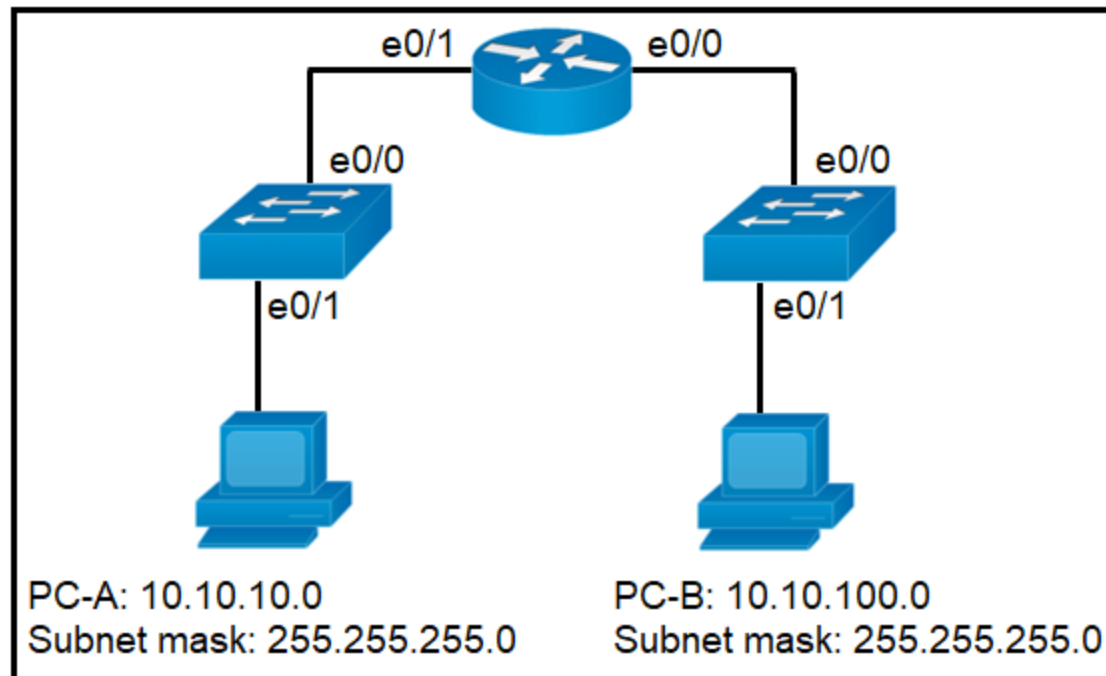


Actual exam question from Cisco's 200-301

Question #: 85

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. When PC-A sends traffic to PC-B, which network component is in charge of receiving the packet from PC-A, verifying the IP addresses, and forwarding the packet to PC-B?

- A. router
- B. Layer 2 switch
- C. load balancer
- D. firewall

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 86

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the maximum bandwidth of a T1 point-to-point connection?

- A. 1.544 Mbps
- B. 2.048 Mbps
- C. 34.368 Mbps
- D. 43.7 Mbps

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 87

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two similarities between UTP Cat 5e and Cat 6a cabling? (Choose two.)

- A. Both support speeds up to 10 Gigabit.
- B. Both support speeds of at least 1 Gigabit.
- C. Both support runs of up to 55 meters.
- D. Both support runs of up to 100 meters.
- E. Both operate at a frequency of 500 MHz.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 88

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a characteristic of cloud-based network topology?

- A. onsite network services are provided with physical Layer 2 and Layer 3 components
- B. wireless connections provide the sole access method to services
- C. physical workstations are configured to share resources
- D. services are provided by a public, private, or hybrid deployment

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 89

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which network action occurs within the data plane?

- A. reply to an incoming ICMP echo request
- B. make a configuration change from an incoming NETCONF RPC
- C. run routing protocols (OSPF, EIGRP, RIP, BGP)
- D. compare the destination IP address to the IP routing table

Show Suggested Answer

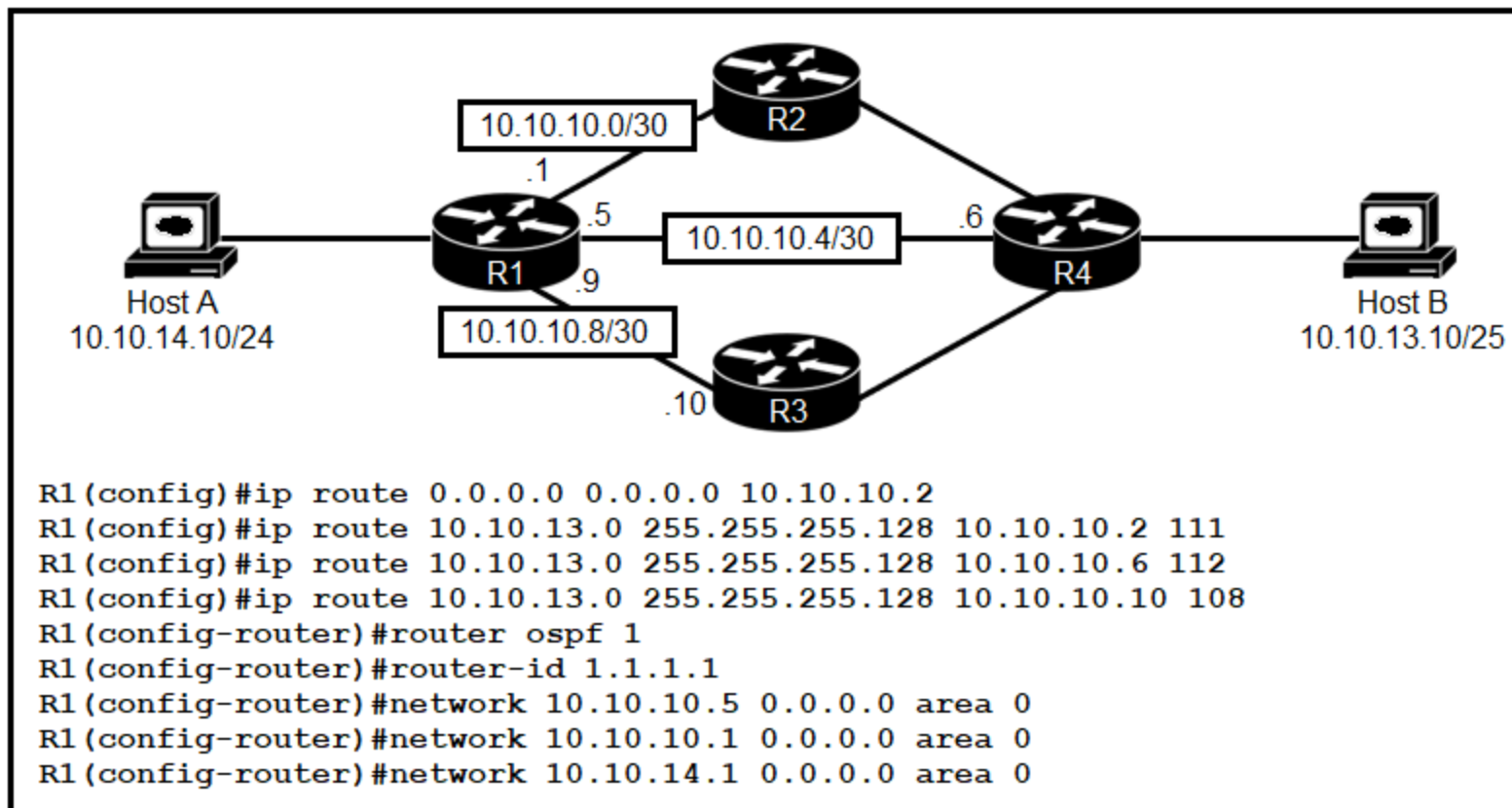


Actual exam question from Cisco's 200-301

Question #: 90

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. R1 has just received a packet from host A that is destined to host B. Which route in the routing table is used by R1 to reach host B?

- A. 10.10.13.0/25 [1/0] via 10.10.10.2
- B. 10.10.13.0/25 [108/0] via 10.10.10.10
- C. 10.10.13.0/25 [110/2] via 10.10.10.6
- D. 10.10.13.0/25 [110/2] via 10.10.10.2

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 91

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two network actions occur within the data plane? (Choose two.)

- A. Run routing protocols.
- B. Make a configuration change from an incoming NETCONF RPC.
- C. Add or remove an 802.1Q trunking header.
- D. Match the destination MAC address to the MAC address table.
- E. Reply to an incoming ICMP echo request.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 92

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are network endpoints?

- A. support inter-VLAN connectivity
- B. a threat to the network if they are compromised
- C. act as routers to connect a user to the service provider network
- D. enforce policies for campus-wide traffic going to the Internet

Show Suggested Answer

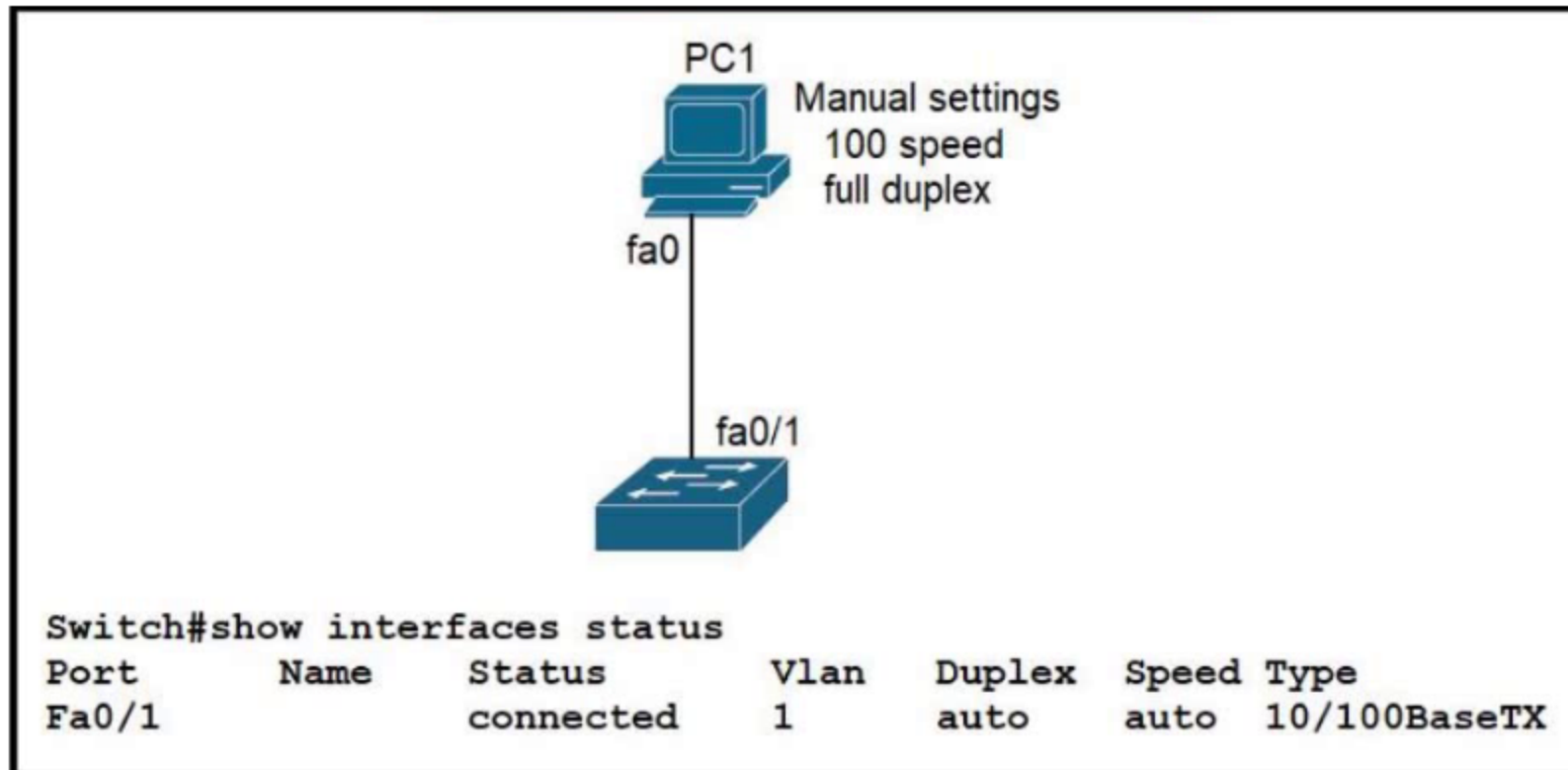


Actual exam question from Cisco's 200-301

Question #: 93

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The link between PC1 and the switch is up, but it is performing poorly. Which interface condition is causing the performance problem?

- A. There is an issue with the fiber on the switch interface.
- B. There is a duplex mismatch on the interface.
- C. There is an interface type mismatch.
- D. There is a speed mismatch on the interface.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 94

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Why was the RFC 1918 address space defined?

- A. conserve public IPv4 addressing
- B. support the NAT protocol
- C. preserve public IPv6 address space
- D. reduce instances of overlapping IP addresses

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 95

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the TCP or UDP details from the left onto their corresponding protocols on the right.

Select and Place:

### Answer Area

transmitted based on data contained in the packet  
without the need for a data channel

requires the client and the server to establish a  
connection before sending the packet

provides best-effort service

supports reliable data transmission

TCP

UDP

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 96

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 addresses from the left onto the corresponding address types on the right.

Select and Place:

### Answer Area

2001:db8:600d:cafe::123

fcba:926a:e8e:7a25:b1:c6d2:1a76:8fdc

fd6d:c83b:5cef:b6b2::1

3ffe:e54d:620:a87a::f00d

Global Unicast

Unique Local

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 97

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of organization should use a collapsed-core architecture?

- A. small and needs to reduce networking costs
- B. large and must minimize downtime when hardware fails
- C. large and requires a flexible, scalable network design
- D. currently small but is expected to grow dramatically in the near future

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 98

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network administrator is setting up a new IPv6 network using the 64-bit address 2001:0EB8:00C1:2200:0001:0000:0000:0331/64. To simplify the configuration, the administrator has decided to compress the address. Which IP address must the administrator configure?

- A. ipv6 address 2001:EB8:C1:22:1::331/64
- B. ipv6 address 21:EB8:C1:2200:1::331/64
- C. ipv6 address 2001:EB8:C1:2200:1:0000:331/64
- D. ipv6 address 2001:EB8:C1:2200:1::331/64

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 99

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 addresses from the left onto the corresponding address types on the right.

Select and Place:

fe80::a00:27ff:feeb:89aa

3ffe:e54d:620:a87a::f00d

ff05::1:3

2001:db8:600d:cafe::123

Global Unicast

Link-Local Unicast

Multicast

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 100

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is an appropriate use for private IPv4 addressing?

- A. to allow hosts inside to communicate in both directions with hosts outside the organization
- B. on internal hosts that stream data solely to external resources
- C. on the public-facing interface of a firewall
- D. on hosts that communicate only with other internal hosts

Show Suggested Answer

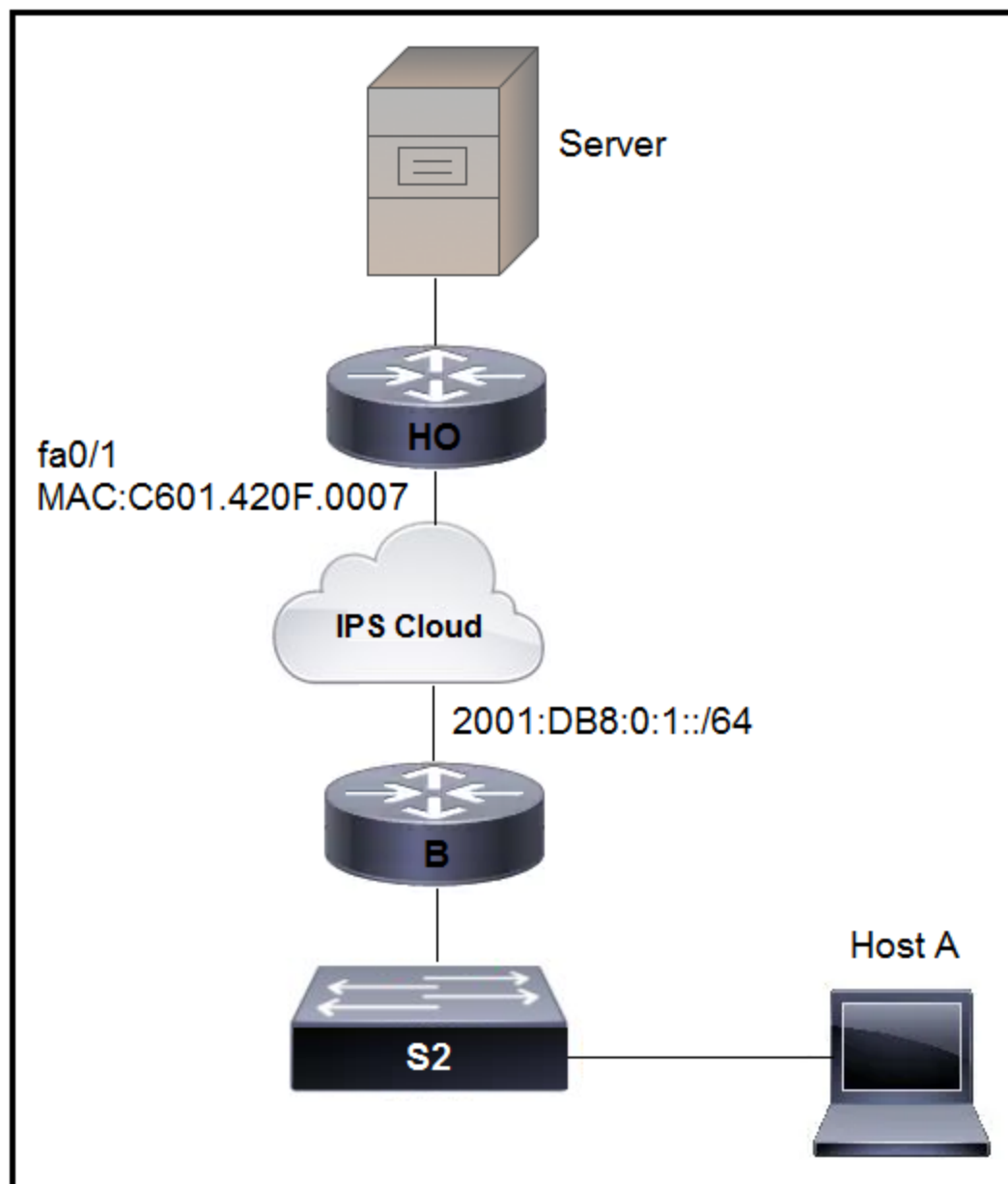


Actual exam question from Cisco's 200-301

Question #: 101

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer is configuring the H0 router. Which IPv6 address configuration must be applied to the router fa0/1 interface for the router to assign a unique 64-bit IPv6 address to itself?

- A. ipv6 address 2001:DB8:0:1:FFFF:C601:420F:7/64
- B. ipv6 address 2001:DB8:0:1:FE80:C601:420F:7/64
- C. ipv6 address 2001:DB8:0:1:C601:42FF:FE0F:7/64
- D. ipv6 address 2001:DB8:0:1:C601:42FF:800F:7/64

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 102

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a similarity between 1000BASE-LX and 1000BASE-T standards?

- A. Both use the same data-link header and trailer formats.
- B. Both cable types support RJ-45 connectors.
- C. Both support up to 550 meters between nodes.
- D. Both cable types support LR connectors.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 103

Topic #: 1

[\[All 200-301 Questions\]](#)

```
C:\Users\ciscoadmin>ipconfig /all

Windows IP Configuration
   Host Name.....: DESKTOP-480J88T
   Primary Dns Suffix.....:
   Node Type.....: Hybrid
   IP Routing Enabled.....: No
   WINS Proxy Enabled.....: No
   DNS Suffix Search List.....: arcep.se

Ethernet adapter Ethernet:
   Media State.....: Media disconnected
   Connection-specific DNS Suffix :
   Description.....: Realtek PCIe GBE Family
Controller
   Physical Address.....: 3C-52-82-33-F3-BF
   DHCP Enabled.....: Yes
   Autoconfiguration Enabled.....: Yes

Wireless LAN adapter Wi-Fi
   Connection-specific DNS Suffix : arcep.se
   Description.....: Intel (R) Dual Band
Wireless-AC 7265
   Physical Address.....: C8-21-58-B4-F3-EF
   DHCP Enabled.....: Yes
   Autoconfiguration Enabled.....: Yes
   Link-local IPv6 Address.....: fe80::45a1:b3fa:2f37:bf37%2 (Preferred)
   IPv4 Address.....: 192.168.1.226 (Preferred)
   Subnet Mask.....: 255.255.255.0
   Lease Obtained.....: October 3, 2019 12:28:08 PM
   Lease Expires.....: October 3, 2019 7:18:37 PM
   Default Gateway.....: 192.168.1.100
   DHCP Server.....: 192.168.1.254
   DHCPv6 IAID.....: 46670168
   DHCPv6 Client DUID.....: 00-01-00-01-20-FF-05-55-3C-52-82-33-D3-84
   DNS Servers.....: 192.168.1.253
   NetBIOS over Tcpip.....: Enabled
   Connection-specific DNS Suffix Search List :
                                   arcep.se
```

Refer to the exhibit. The given Windows PC is requesting the IP address of the host at [www.cisco.com](http://www.cisco.com). To which IP address is the request sent?

- A. 192.168.1.253
- B. 192.168.1.100
- C. 192.168.1.226
- D. 192.168.1.254

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 104

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which function forwards frames to ports that have a matching destination MAC address?

- A. frame flooding
- B. frame filtering
- C. frame pushing
- D. frame switching

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 105

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of IPv6 address is similar to a unicast address but is assigned to multiple devices on the same network at the same time?

- A. global unicast address
- B. link-local address
- C. anycast address
- D. multicast address

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 106

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a characteristic of private IPv4 addressing?

- A. composed of up to 65,536 available addresses
- B. issued by IANA in conjunction with an autonomous system number
- C. used without tracking or registration
- D. traverse the Internet when an outbound ACL is applied

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 107

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of an endpoint on a network?

- A. provides wireless services to users in a building
- B. connects server and client device to a network
- C. allows users to record data and transmit to a file server
- D. forwards traffic between VLANs on a network

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 108

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the function of a controller in controller-based networking?

- A. It serves as the centralized management point of an SDN architecture
- B. It is a pair of core routers that maintain all routing decisions for a campus
- C. It centralizes the data plane for the network
- D. It is the card on a core router that maintains all routing decisions for a campus.

Show Suggested Answer

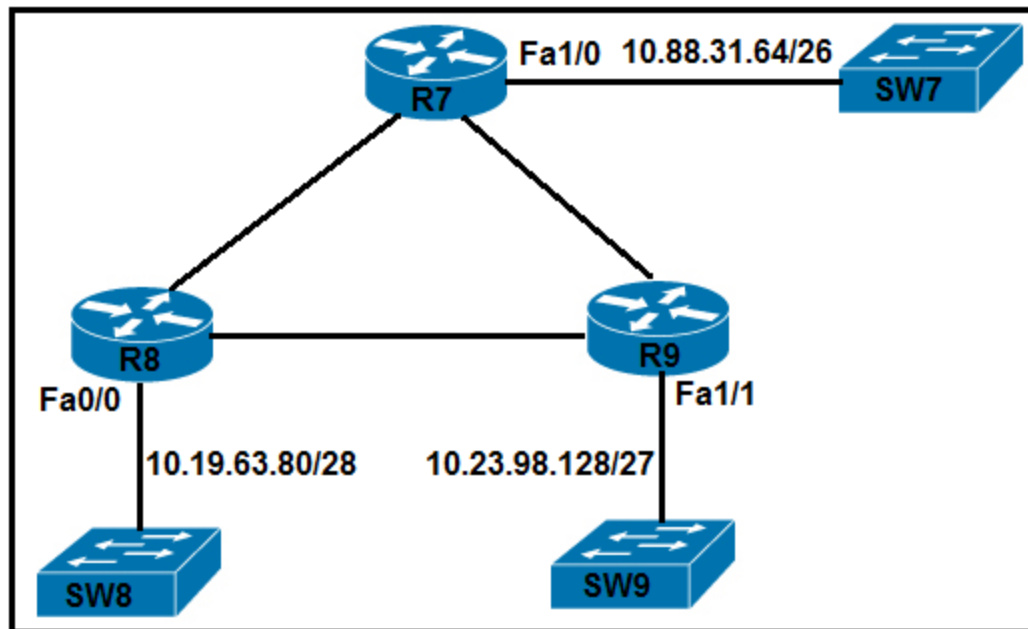


Actual exam question from Cisco's 200-301

Question #: 109

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Each router must be configured with the last usable IP address in the subnet. Which configuration fulfills this requirement?

- A. R7# interface FastEthernet1/0 ip address 10.88.31.127 255.255.255.192 R8# interface FastEthernet0/0 ip address 10.19.63.95 255.255.255.240 R9# interface FastEthernet1/1 ip address 10.23.98.159 255.255.255.224
- B. R7# interface FastEthernet1/0 ip address 10.88.31.126 255.255.255.240 R8# interface FastEthernet0/0 ip address 10.19.63.94 255.255.255.192 R9# interface FastEthernet1/1 ip address 10.23.98.158 255.255.255.248
- C. R7# interface FastEthernet1/0 ip address 10.88.31.127 255.255.255.240 R8# interface FastEthernet0/0 ip address 10.19.63.95 255.255.255.192 R9# interface FastEthernet1/1 ip address 10.23.98.159 255.255.255.248
- D. R7# interface FastEthernet1/0 ip address 10.88.31.126 255.255.255.192 R8# interface FastEthernet0/0 ip address 10.19.63.94 255.255.255.240 R9# interface FastEthernet1/1 ip address 10.23.98.158 255.255.255.224

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 110

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How do TCP and UDP fit into a query-responsible model?

- A. TCP avoids using sequencing and UDP avoids using acknowledgments
- B. TCP establishes a connection prior to sending data, and UDP sends immediately
- C. TCP encourages out-of-order packet delivery, and UDP prevents re-ordering
- D. TCP uses error detection for packets, and UDP uses error recovery.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 111

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What provides centralized control of authentication and roaming in an enterprise network?

- A. a lightweight access point
- B. a wireless LAN controller
- C. a firewall
- D. a LAN switch

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 112

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which set of 2.4 GHz nonoverlapping wireless channels is standard in the United States?

- A. channels 1, 6, 11, and 14
- B. channels 2, 7, 9, and 11
- C. channels 2, 7, and 11
- D. channels 1, 6, and 11

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 113

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer is installing an IPv6-only capable device. The client has requested that the device IP address be reachable only from the internal network. Which type of IPv6 address must the engineer assign?

- A. IPv4-compatible IPv6 address
- B. unique local address
- C. link-local address
- D. aggregatable global address

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 114

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a requirement for nonoverlapping Wi-Fi channels?

- A. different security settings
- B. discontinuous frequency ranges
- C. unique SSIDs
- D. different transmission speeds

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 115

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer must implement an IPv6 configuration on the vlan 2000 interface to create a routable locally-unique unicast address that is blocked from being advertised to the internet. Which configuration must the engineer apply?

- A. interface vlan 2000 ipv6 address ff00:0000:aaaa::1234:2343/64
- B. interface vlan 2000 ipv6 address fd00::1234:2343/64
- C. interface vlan 2000 ipv6 address fe80:0000:aaaa::1234:2343/64
- D. interface vlan 2000 ipv6 address fc00:0000:aaaa::a15d:1234:2343:8aca/64

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 116

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two characteristics of an SSID? (Choose two.)

- A. It uniquely identifies a client in a WLAN.
- B. It is at most 32 characters long
- C. It uniquely identifies an access point in a WLAN
- D. It provides secured access to a WLAN.
- E. It can be hidden or broadcast in a WLAN.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 117

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When a switch receives a frame for a known destination MAC address, how is the frame handled?

- A. flooded to all ports except the one from which it originated
- B. forwarded to the first available port
- C. sent to the port identified for the known MAC address
- D. broadcast to all ports

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 118

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 address details from the left onto the corresponding types on the right.

Select and Place:

includes link-local and loopback addresses

used exclusively by a non-host device

identifies an interface on an IPv6 device

assigned to more than one interface

derived from the FF00::/8 address range

provides one-to-many communications

Anycast

Multicast

Unicast

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 119

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the collapsed layer in collapsed core architectures?

- A. Core and distribution
- B. access and WAN
- C. distribution and access
- D. core and WAN

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 120

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a characteristic of a SOHO network?

- A. includes at least three tiers of devices to provide load balancing and redundancy
- B. connects each switch to every other switch in the network
- C. enables multiple users to share a single broadband connection
- D. provides high throughput access for 1000 or more users

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 121

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the role of disaggregation in controller-based networking?

- A. It divides the control-plane and data-plane functions.
- B. It streamlines traffic handling by assigning individual devices to perform either Layer 2 or Layer 3 functions
- C. It summarizes the routes between the core and distribution layers of the network topology
- D. It enables a network topology to quickly adjust from a ring network to a star network

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 122

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function performed by a web server?

- A. send and retrieve email from client devices
- B. securely store files for FTP access
- C. authenticate and authorize a user's identity
- D. provide an application that is transmitted over HTTP

Show Suggested Answer



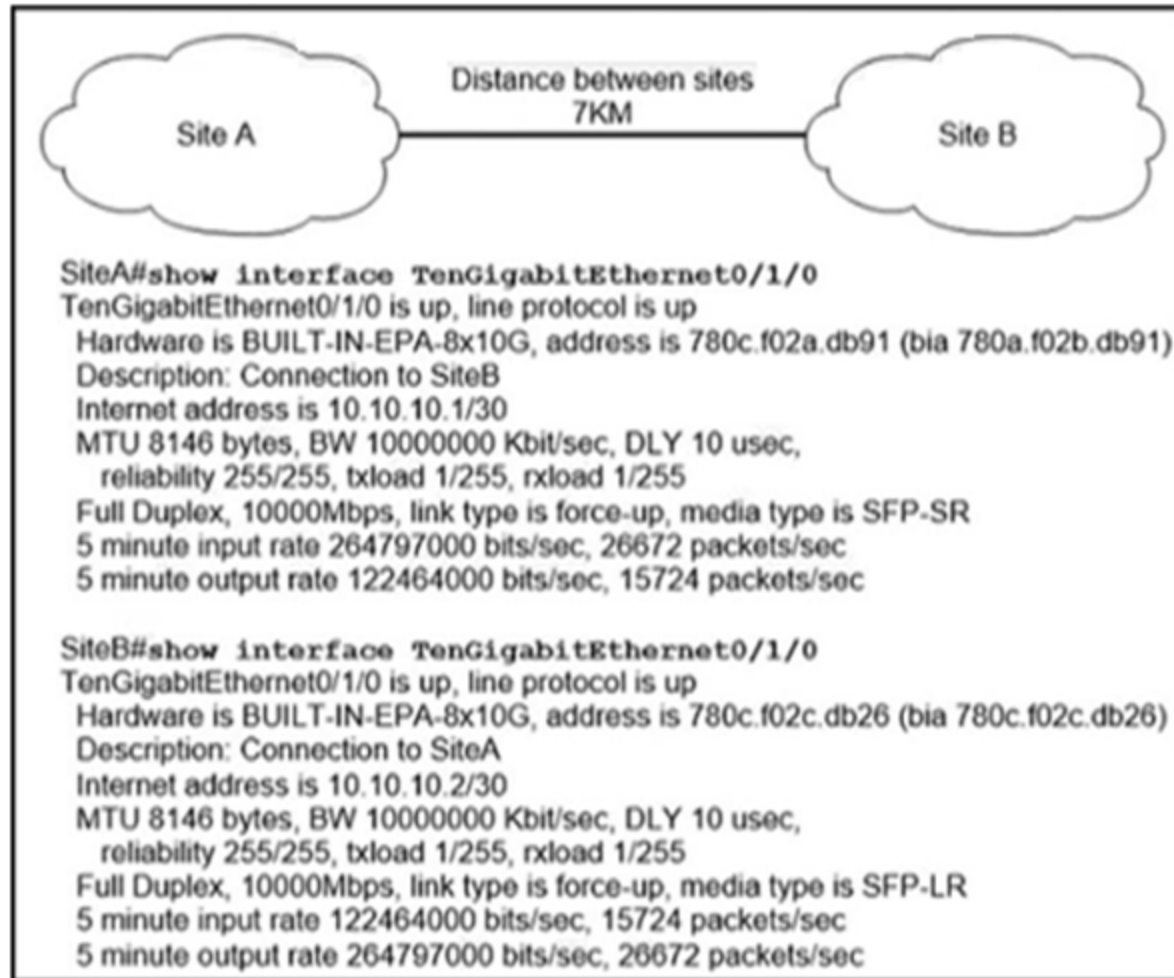


Actual exam question from Cisco's 200-301

Question #: 123

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Site A was recently connected to site B over a new single-mode fiber path. Users at site A report intermittent connectivity issues with applications hosted at site B. What is the reason for the problem?

- A. Physical network errors are being transmitted between the two sites.
- B. Heavy usage is causing high latency.
- C. The wrong cable type was used to make the connection.
- D. An incorrect type of transceiver has been inserted into a device on the link

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 124

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which protocol uses the SSL?

- A. SSH
- B. HTTPS
- C. HTTP
- D. Telnet

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 125

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Why is UDP more suitable than TCP for applications that require low latency such as VoIP?

- A. UDP reliably guarantees delivery of all packets: TCP drops packets under heavy load
- B. UDP uses sequencing data for packets to arrive in order TCP offers the capability to receive packets in random order
- C. TCP uses congestion control for efficient packet delivery: UDP uses flow control mechanisms for the delivery of packets
- D. TCP sends an acknowledgement for every packet received: UDP operates without acknowledgments

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 126

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are the two functions of SSIDs? (Choose two.)

- A. uses the maximum of 32 alphanumeric characters
- B. controls the speed of the Wi-Fi network
- C. used exclusively with controller-based Wi-Fi networks
- D. supports a single access point
- E. broadcasts by default

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 127

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two characteristics describe the access layer in a three-tier network architecture? (Choose two.)

- A. serves as the network aggregation point
- B. physical connection point for a LAN printer
- C. designed to meet continuous redundant uptime requirements
- D. layer at which a wireless access point connects to the wired network
- E. provides a boundary between Layer 2 and Layer 3 communications

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 128

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which PoE mode enables powered-devices detection and guarantees power when the device detected?

- A. auto
- B. static
- C. dynamic
- D. active

Show Suggested Answer

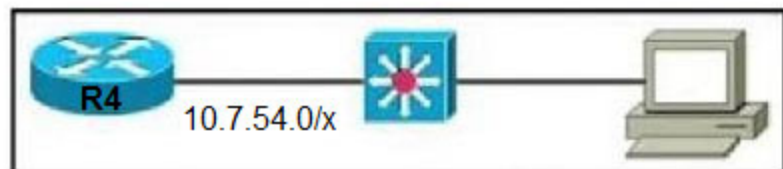


Actual exam question from Cisco's 200-301

Question #: 129

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The router has been configured with a super net to accommodate the requirements for 380 users on a Subnet. The requirement already considers 30% future growth. Which configuration verifies the IP subnet on router R4?

- A. Subnet: 10.7.54.0 Subnet mask: 255.255.128.0 Broadcast address: 10.5.55.255 Usable IP address range: 10.7.54.1 10.7.55.254 "€λ
- B. Subnet: 10.7.54.0 Subnet mask: 255.255.255.0 Broadcast address: 10.7.54.255 Usable IP address range: 10.7.54.1 10.7.55.254 "€λ
- C. Subnet: 10.7.54.0 Subnet mask: 255.255.254.0 Broadcast address: 10.7.54.255 Usable IP address range: 10.7.54.1 10.7.55.254 "€λ
- D. Subnet: 10.7.54.0 Subnet mask: 255.255.254.0 Broadcast address: 10.7.55.255 Usable IP address range: 10.7.54.1 10.7.55.254 "€λ

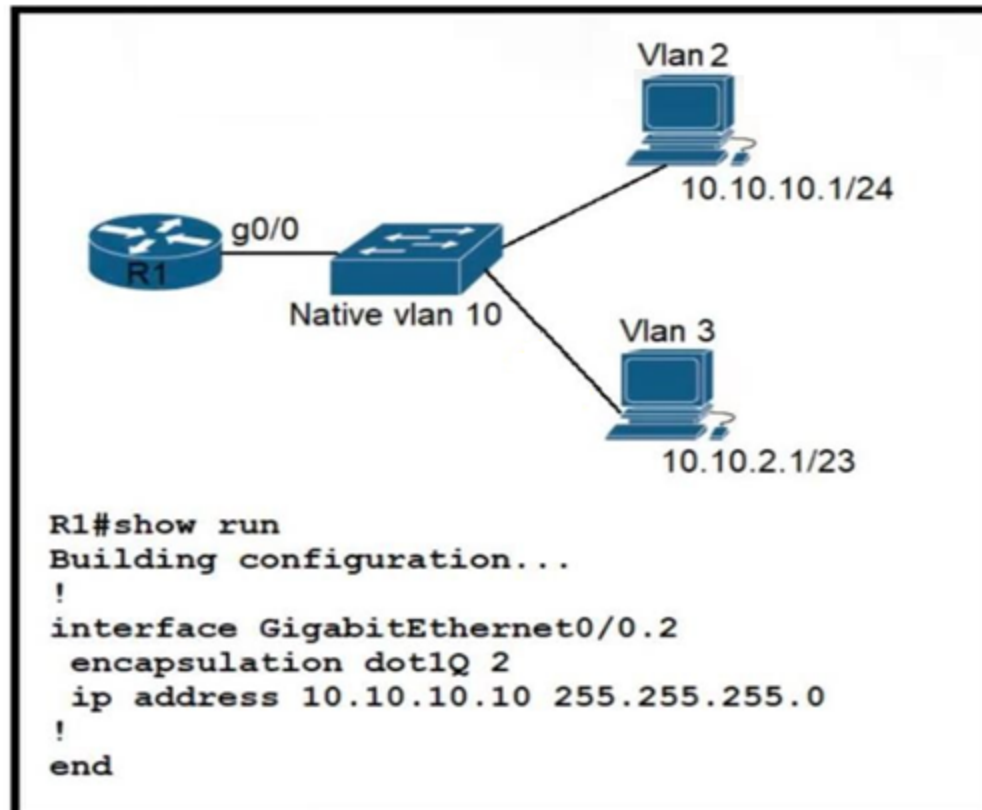
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 130

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Configurations for the switch and PCs are complete. Which configuration must be applied so that VLANs 2 and 3 communicate back and forth?

- A. interface GigabitEthernet0/0 ip address 10.10.2.10 255.255.252.0
- B. interface GigabitEthernet0/0.10 encapsulation dot1Q 3 ip address 10.10.2.10 255.255.254.0
- C. interface GigabitEthernet0/0.3 encapsulation dot1Q 3 native ip address 10.10.2.10 255.255.252.0
- D. interface GigabitEthernet0/0.3 encapsulation dot1Q 10 ip address 10.10.2.10 255.255.255.252

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 131

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 address type characteristics from the left to the right.

Select and Place:

configured only once per interface

equivalent to public IPv4 addresses

attached to a single subnet

routable and reachable via the Internet

Global Unicast Address

Link-Local Address

Show Suggested Answer

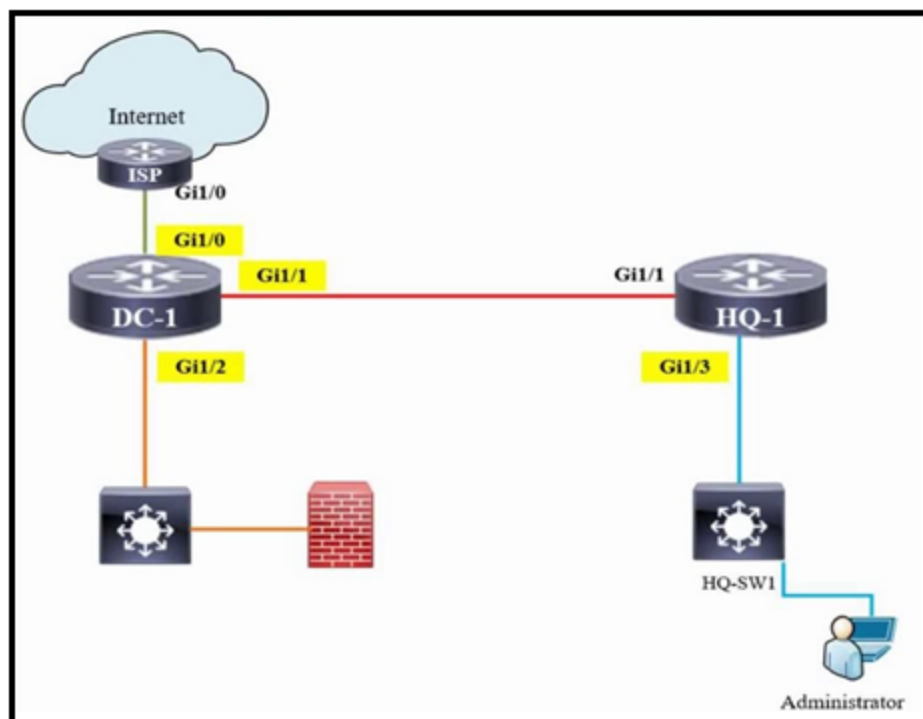
Actual exam question from Cisco's 200-301

Question #: 132

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -



Refer to the exhibit. The IP address configurations must be completed on the DC-1 and HQ-1 routers based on these requirements:

- ⇒ DC-1 Gi1/0 must be the last usable address on a /30
- ⇒ DC-1 Gi1/1 must be the first usable address on a /29
- ⇒ DC-1 Gi1/2 must be the last usable address on a /28
- ⇒ HQ-1 Gi1/3 must be the last usable address on a /29

Drag and drop the commands from the left onto the destination interfaces on the right. Not all commands are used.

Select and Place:

- ip address 192.168.4.9 255.255.255.248
- ip address 192.168.3.14 255.255.255.240
- ip address 209.165.202.129 255.255.255.252
- ip address 192.168.4.13 255.255.255.240
- ip address 209.165.202.130 255.255.255.252
- ip address 209.165.202.131 255.255.255.252
- ip address 192.168.3.14 255.255.255.248

DC-1	
	Gi1/0
	Gi1/1
	Gi1/2

HQ-1	
	Gi1/3

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 133

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How is RFC 1918 addressing used in a network?

- A. They are used to access the Internet from the internal network without conversion.
- B. They are used in place of public addresses for increased security.
- C. They are used with NAT to preserve public IPv4 addresses.
- D. They are used by Internet Service Providers to route over the Internet.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 134

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 address types from the left onto their descriptions on the right.

Select and Place:

2001:DB8::bced:1234:456d  
:aacc

multicast address used  
only locally within the site

FD00:0000:0000:1a2d:a  
153:3992:a19d:ccca

address that is automatically  
created on a link when IPv6  
is enabled on an interface

FE80::abcd:ffff:12de:3992

address that is prohibited  
from routing to the Internet

FF05::23:becf:22:1111

address that is unique and  
reserved for documentation  
purposes

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 135

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Router# show interface gi0/0/0
GigabitEthernet0/0/0 is up, line protocol is up
  Hardware is ISR4331-3xlGE, address is 5486.bc25.1f70 (bia 5486.bc25.1f70)
  Description: << WAN Link >>
  Internet address is 192.0.2.2/30
  MTU 1500 bytes, BW 1000000 Kbit/sec, DLY 10 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive not supported
  Full Duplex, 1000Mbps, link type is auto, media type is RJ45
  output flow-control is off, input flow-control is off
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:00, output 00:00:11, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/375/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 7000 bits/sec, 4 packets/sec
  5 minute output rate 4000 bits/sec, 4 packets/sec
    22579370 packets input, 8825545968 bytes, 0 no buffer
    Received 67 broadcasts (0 IP multicasts)
    0 runts, 0 giants, 0 throttles
    3612699 input errors, 3612699 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 10747057 multicast, 0 pause input
    12072167 packets output, 1697953637 bytes, 0 underruns
    0 output errors, 0 collisions, 1 interface resets
    6 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    5 lost carrier, 0 no carrier, 0 pause output
    0 output buffer failures, 0 output buffers swapped out
```

Refer to the exhibit. What is a reason for poor performance on the network interface?

- A. The interface is receiving excessive broadcast traffic.
- B. The bandwidth setting of the interface is misconfigured.
- C. The cable connection between the two devices is faulty.
- D. The interface is operating at a different speed than the connected device.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 136

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 address descriptions from the left onto the IPv6 address types on the right. Not all options are used.

Select and Place:

IPv6 addresses in the format FF02::5

IPv6 addresses that begin with FD

may be used by multiple organizations at the same time

private IPv6 addresses

serve as next-hop addresses

unable to serve as destination addresses

Unique Local Addresses

Link-Local Addresses

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 137

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 addresses from the left onto the corresponding address types on the right.

Select and Place:

2001:db8:600d:cafe::123

fcba:926a:e8e:7a25:b1:c6d2:1a76:8fdc

fe80::a00:27ff:feeb:89aa

ff05:1:3

Global Unicast

Link-Local Unicast

Multicast

Unique Local

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 138

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which WAN topology has the highest degree of reliability?

- A. point-to-point
- B. router-on-a-stick
- C. full mesh
- D. hub-and-spoke

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 139

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 address type characteristics from the left to the right.

Select and Place:

configured only once per interface

addressing for exclusive use internally  
without Internet routing

addresses with prefix FC00::/7

attached to a single subnet

Link-Local Address

Unique Local Address

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 140

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What causes a port to be placed in the err-disabled state?

- A. nothing plugged into the port
- B. link flapping
- C. latency
- D. shutdown command issued on the port

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 141

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the characteristics of transport layer protocols from the left onto the corresponding protocols on the right.

Select and Place:

requires less computer resources

offers minimal overhead within a packet

provides support for retransmission of lost packets

guarantees packet delivery

uses a 32-bit sequence number

ideal for voice traffic

TCP


UDP


Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 142

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer must configure an interface with IP address 10.10.10.145 and a subnet mask equivalent to 11111111.11111111.11111111.11111000. Which subnet mask must the engineer use?

- A. /29
- B. /30
- C. /27
- D. /28

Show Suggested Answer

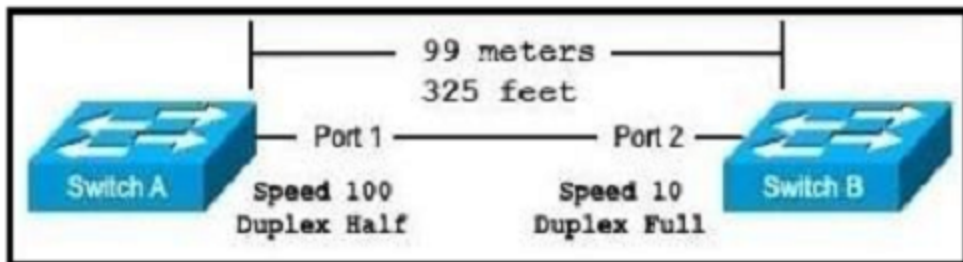


Actual exam question from Cisco's 200-301

Question #: 143

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The switches are connected via a Cat5 Ethernet cable that is tested successfully. The interfaces are configured as access ports and are both in a down status. What is the cause of the issue?

- A. The speed settings on the switches are mismatched
- B. The distance between the two switches is not supported by Cat5
- C. The switches are configured with incompatible duplex settings
- D. The portfast command is missing from the configuration

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 144

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two IP addressing schemes provide internet access to users on the network while preserving the public IPv4 address space? (Choose two.)

- A. IPv6 addressing
- B. PAT with private internal addressing
- C. single public Class A network
- D. private networks only
- E. custom addresses from ARIN

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 145

Topic #: 1

[\[All 200-301 Questions\]](#)

---

The address block 192.168.32.0/24 must be subnetted into smaller networks. The engineer must meet these requirements:

- ⇒ Create 8 new subnets.
- ⇒ Each subnet must accommodate 30 hosts.
- ⇒ Interface VLAN 10 must use the last usable IP in the first new subnet.
- ⇒ A Layer 3 interface is used.

Which configuration must be applied to the interface?

- A. no switchport mode trunk ip address 192.168.32.97 255.255.255.224
- B. switchport ip address 192.168.32.65 255.255.255.240
- C. no switchport ip address 192.168.32.30 255.255.255.224
- D. no switchport mode access ip address 192.168.32.62 255.255.255.240

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 146

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the TCP or UDP details from the left onto their corresponding protocols on the right.

Select and Place:

### Answer Area

used to reliably share files between devices

appropriate for streaming operations with minimal latency

provides best-effort service

supports reliable data transmission

TCP

UDP

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 147

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two reasons to deploy private addressing on a network? (Choose two.)

- A. to subnet addresses in an organized hierarchy
- B. to reduce network maintenance costs
- C. to segment local IP addresses from the global routing table
- D. to hide sensitive data from access users within an enterprise
- E. to route protected data securely via an Internet service provider

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 148

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 DNS record types from the left onto the description on the right.

Select and Place:

AAAA	aliases one name to another
CNAME	associates the domain serial number with its owner
NS	correlates a domain with its authoritative name servers
PTR	correlates a host name with an IP address
SOA	supports reverse name lookups

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 149

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which property is shared by 10GBase-SR and 10GBase-LR interfaces?

- A. Both use the single-mode fiber type.
- B. Both require UTP cable media for transmission.
- C. Both require fiber cable media for transmission.
- D. Both use the multimode fiber type.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 150

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the IPv6 addresses from the left onto the corresponding address types on the right.

Select and Place:

3ffe:e54d:620:a87a::f00d

fe80::a00:27ff:feeb:89aa

ff05::1:3

fd6d:c83b:5cef:b6b2::1

Global Unicast

Link-Local Unicast

Multicast

Unique Local

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 151

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which device permits or denies network traffic based on a set of rules?

- A. switch
- B. firewall
- C. wireless controller
- D. access point

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 152

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the role of a firewall in an enterprise network?

- A. determines which packets are allowed to cross from unsecured to secured networks
- B. processes unauthorized packets and allows passage to less secure segments of the network
- C. forwards packets based on stateless packet inspection
- D. explicitly denies all packets from entering an administrative domain

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 153

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Refer to the exhibit.

```
C:\ipconfig/all
```

#### Windows IP Configuration

```
Host Name . . . . . : Inspiron15
Primary DNS Suffix . . . . . :
Node Type . . . . . : Mixed
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
```

#### Wireless LAN adapter Local Area Connection\* 12:

```
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Description . . . . . : Microsoft Wi-Fi Direct Virtual Adapter
Physical Address. . . . . : 1A-76-3F-7C-57-DF
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
```

#### Wireless LAN adapter Wi-Fi:

```
Connection-specific DNS Suffix . :
Description . . . . . : Dell Wireless 1703 802.11b/g/n <2.4GHz>
Physical Address. . . . . : B8-76-3F-7C-57-DF
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
Link-Local IPv6 Address . . . . . : fe80::e09f:9839:6e86:f755x12<Preferred>
. . . . . : 192.168.1.20<Preferred>
. . . . . : 255.255.255.0
. . . . . : 192.168.1.1
DHCPv6 IAID . . . . . : 263747135
DHCPv6 Client DUID. . . . . : 00-01-00-01-18-E6-32-43-B8-76-3F-7C-57-DF
. . . . . : 192.168.1.15
. . . . . : 192.168.1.16
NetBIOS over Tcpip. . . . . : Enabled
```

An engineer is tasked with verifying network configuration parameters on a client workstation to report back to the team lead. Drag and drop the node identifiers from the left onto the network parameters on the right.

Select and Place:

192.168.1.1	broadcast address
192.168.1.20	default gateway
192.168.1.254	host IP address
192.168.1.255	last assignable IP address in the subnet
B8-76-3F-7C-57-DF	MAC address

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 154

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the DNS lookup components from the left onto the functions on the right.

Select and Place:

domain

service that maps hostname to IP addresses

cache

local database of address mappings that improves name resolution performance

name resolver

in response to client requests, queries a name server for IP address information

DNS

component of a URL that indicates the location or organization type

no ip domain-lookup

disables DNS services on a Cisco device

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 155

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the TCP or UDP details from the left onto their corresponding protocols on the right.

Select and Place:

transmitted based on data contained in the packet without the need for a data channel

requires the client and the server to establish a connect on before sending the packet

used to reliably share files between devices

appropriate for streaming operations with minimal latency

TCP

UDP

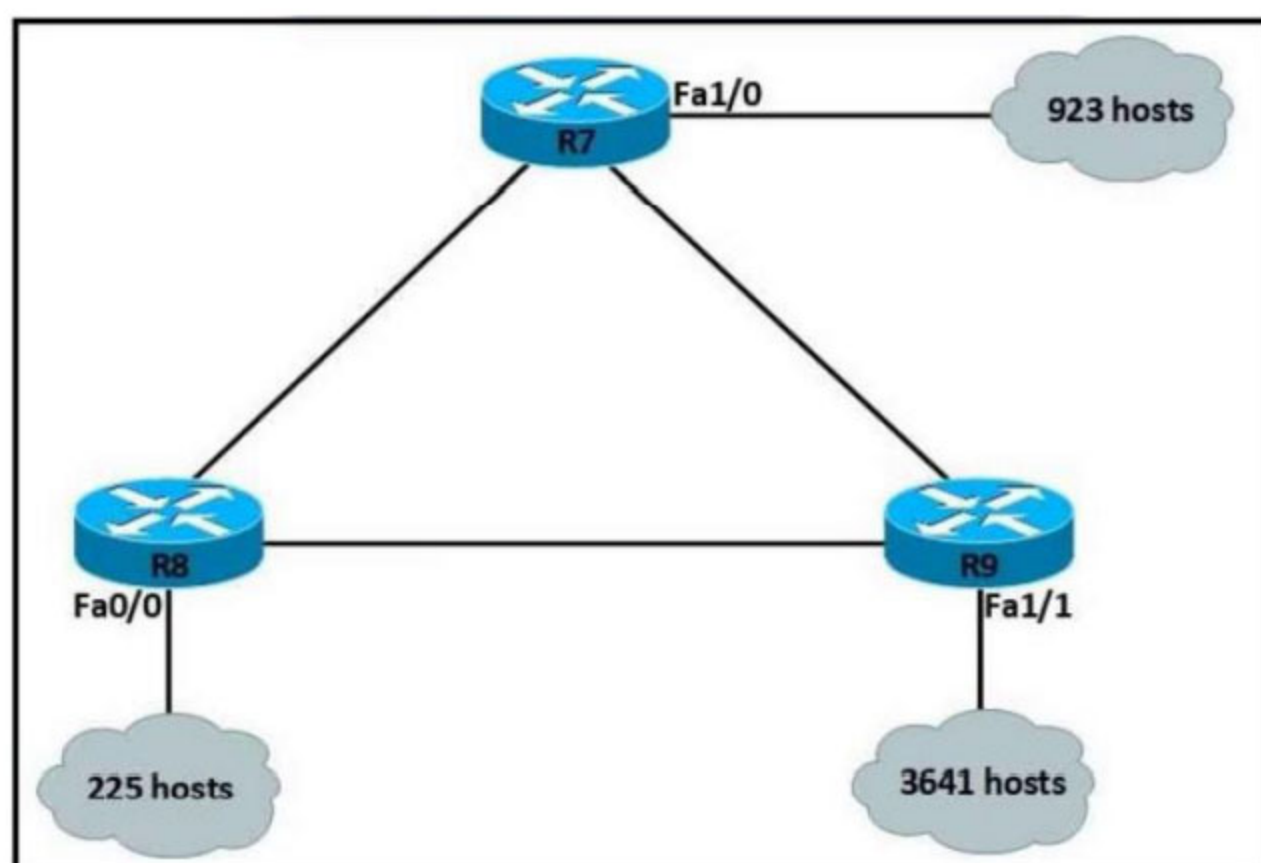
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 156

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An IP subnet must be configured on each router that provides enough addresses for the number of assigned hosts and anticipates no more than 10% growth for new hosts. Which configuration script must be used?

A.

```

R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.192.0
no shutdown
R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.224.0
no shutdown
R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.128.0
no shutdown
  
```

B.

```

R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.240.0
no shutdown
R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.224.0
no shutdown
R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.192.0
no shutdown
  
```

C.

```

R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.252.0
no shutdown
R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.255.0
no shutdown
R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.240.0
no shutdown
  
```

D.

```

R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.192.0
no shutdown
R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.224.0
no shutdown
R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.128.0
no shutdown
  
```

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 157

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which action is taken by a switch port enabled for PoE power classification override?

- A. As power usage on a PoE switch port is checked data flow to the connected device is temporarily paused
- B. When a powered device begins drawing power from a PoE switch port, a syslog message is generated
- C. If a switch determines that a device is using less than the minimum configured power, it assumes the device has failed and disconnects it
- D. Should a monitored port exceed the maximum administrative value for power, the port is shut down and err-disabled

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 158

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function spine-and-leaf architecture?

- A. Offers predictable latency of the traffic path between end devices.
- B. Exclusively sends multicast traffic between servers that are directly connected to the spine.
- C. Mitigates oversubscription by adding a layer of leaf switches.
- D. Limits payload size of traffic within the leaf layer.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 159

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which action is taken by the data plane within a network device?

- A. Constructs a routing table based on a routing protocol.
- B. Forwards traffic to the next hop.
- C. Looks up an egress interface in the forwarding information base.
- D. Provides CLI access to the network device.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 160

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the function of the control plane?

- A. It exchanges routing table information.
- B. It provides CLI access to the network device.
- C. It looks up an egress interface in the forwarding information base.
- D. It forwards traffic to the next hop.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 161

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two cable types must be used to connect an access point to the WLC when 2.5-Gbps and 5-Gbps upload speeds are required? (Choose two.)

- A. 10GBASE-T
- B. 1000BASE-LX/LH
- C. Cat 5e
- D. Cat 5
- E. Cat 3

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 162

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a benefit for external users who consume public cloud resources?

- A. Implemented over a dedicated WAN
- B. All hosted on physical servers
- C. Accessed over the Internet
- D. Located in the same data center as the users

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 163

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer must update the configuration on two PCs in two different subnets to communicate locally with each other. One PC is configured with IP address 192.168.25.128/25 and the other with 192.168.25.100/25. Which network mask must the engineer configure on both PCs to enable the communication?

- A. 255.255.255.248
- B. 255.255.255.224
- C. 255.255.255.0
- D. 255.255.255.252

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 164

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which key function is provided by the data plane?

- A. Originating packets
- B. Exchanging routing table data
- C. Making routing decisions
- D. Forwarding traffic to the next hop

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 165

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When should an engineer implement a collapsed-core architecture?

- A. Only when using VSS technology
- B. For small networks with minimal need for growth
- C. For large networks that are connected to multiple remote sites
- D. The access and distribution layers must be on the same device

[Show Suggested Answer](#)

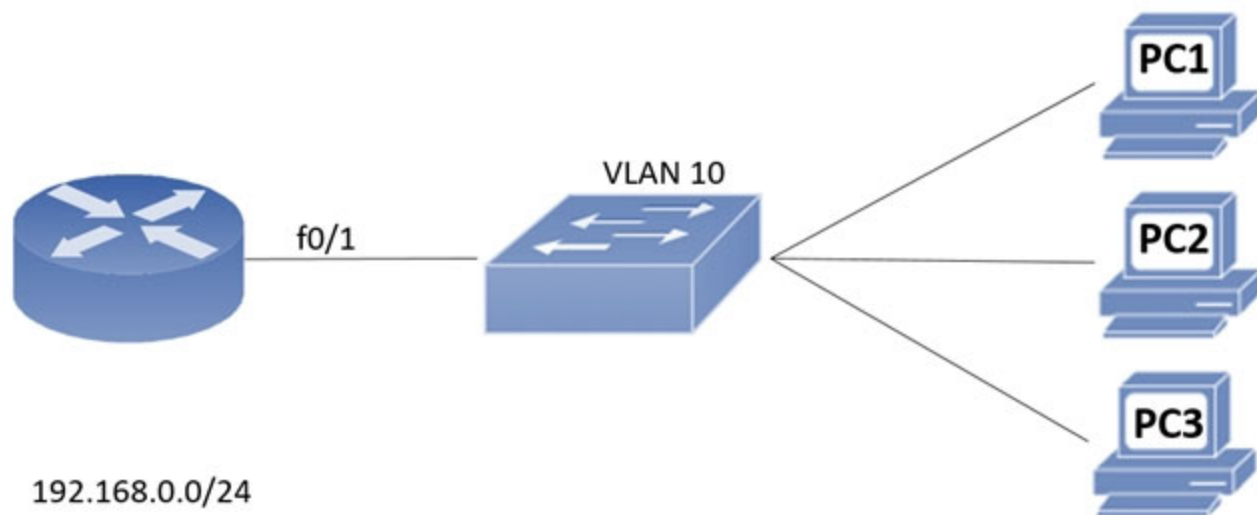


Actual exam question from Cisco's 200-301

Question #: 166

Topic #: 1

[\[All 200-301 Questions\]](#)



192.168.0.0/24

Refer to the exhibit. An engineer assigns IP addressing to the current VLAN with three PCs. The configuration must also account for the expansion of 30 additional VLANs using the same Class C subnet for subnetting and host count. Which command set fulfills the request while reserving address space for the expected growth?

- A. Switch(config)#interface vlan 10 Switch(config-if)#ip address 192.168.0.1 255 255.255.252
- B. Switch(config)#interface vlan 10 Switch(config-if)#ip address 192.168.0.1 255 255.255.248
- C. Switch(config)#interface vlan 10 Switch(config-if)#ip address 192.168.0.1 255 255.255.0
- D. Switch(config)#interface vlan 10 Switch(config-if)#ip address 192.168.0.1 255.255.255.128

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 167

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A client experiences slow throughput from a server that is directly connected to the core switch in a data center. A network engineer finds minimal latency on connections to the server, but data transfers are unreliable, and the output of the show interfaces counters errors command shows a high FCS-Err count on the interface that is connected to the server. What is the cause of the throughput issue?

- A. a physical cable fault
- B. a speed mismatch
- C. high bandwidth usage
- D. a cable that is too long

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 168

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the difference between 1000BASE-LX/LH and 1000BASE-ZX interfaces?

- A. 1000BASE-LX/LH interoperates with multimode and single-mode fiber, and 1000BASE-ZX needs a conditioning patch cable with multimode.
- B. 1000BASE-ZX interoperates with dual-rate 100M/1G 10Km SFP over multimode fiber, and 1000BASE-LX/LH supports only single-rate
- C. 1000BASE-ZX is supported on links up to 1000km, and 1000BASE-LX/LH operates over links up to 70 km
- D. 1000BASE- LX/LH is supported on links up to 10km, and 1000Base-ZX operates over links up to 70 km

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 169

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two reasons to implement IPv4 private addressing on a network? (Choose two.)

- A. To enable internal applications to treat the private IPv4 addresses as unique
- B. To facilitate renumbering when merging networks
- C. To expand the routing table on the router
- D. To provide protection from external denial-of-service attacks
- E. To conserve global unique IPv4 addresses

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 170

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which concern is addressed with the use of private IPv4 addressing?

- A. Lack of routing protocol support for CIDR and VLSM
- B. Lack of security protocols at the network perimeter
- C. Lack of available TCP/UDP ports per IPv5 address
- D. Lack of available publicly routable unique IPv4 address

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 171

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the path for traffic sent from one user workstation to another workstation on a separate switch in a three-tier architecture model?

- A. access  $\rightarrow$  core  $\rightarrow$  access
- B. access  $\rightarrow$  distribution  $\rightarrow$  distribution  $\rightarrow$  access
- C. access  $\rightarrow$  core  $\rightarrow$  distribution  $\rightarrow$  access
- D. access  $\rightarrow$  distribution  $\rightarrow$  core  $\rightarrow$  distribution  $\rightarrow$  access

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 172

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the difference between IPv6 unicast and anycast addressing?

- A. An individual IPv6 unicast address is supported on a single interface on one node, but an IPv6 anycast address is assigned to a group of interfaces on multiple nodes.
- B. IPv6 anycast nodes must be explicitly configured to recognize the anycast address, but IPv6 unicast nodes require no special configuration.
- C. IPv6 unicast nodes must be explicitly configured to recognize the unicast address, but IPv6 anycast nodes require no special configuration.
- D. Unlike an IPv6 anycast address, an IPv6 unicast address is assigned to a group of interfaces on multiple nodes.

Show Suggested Answer

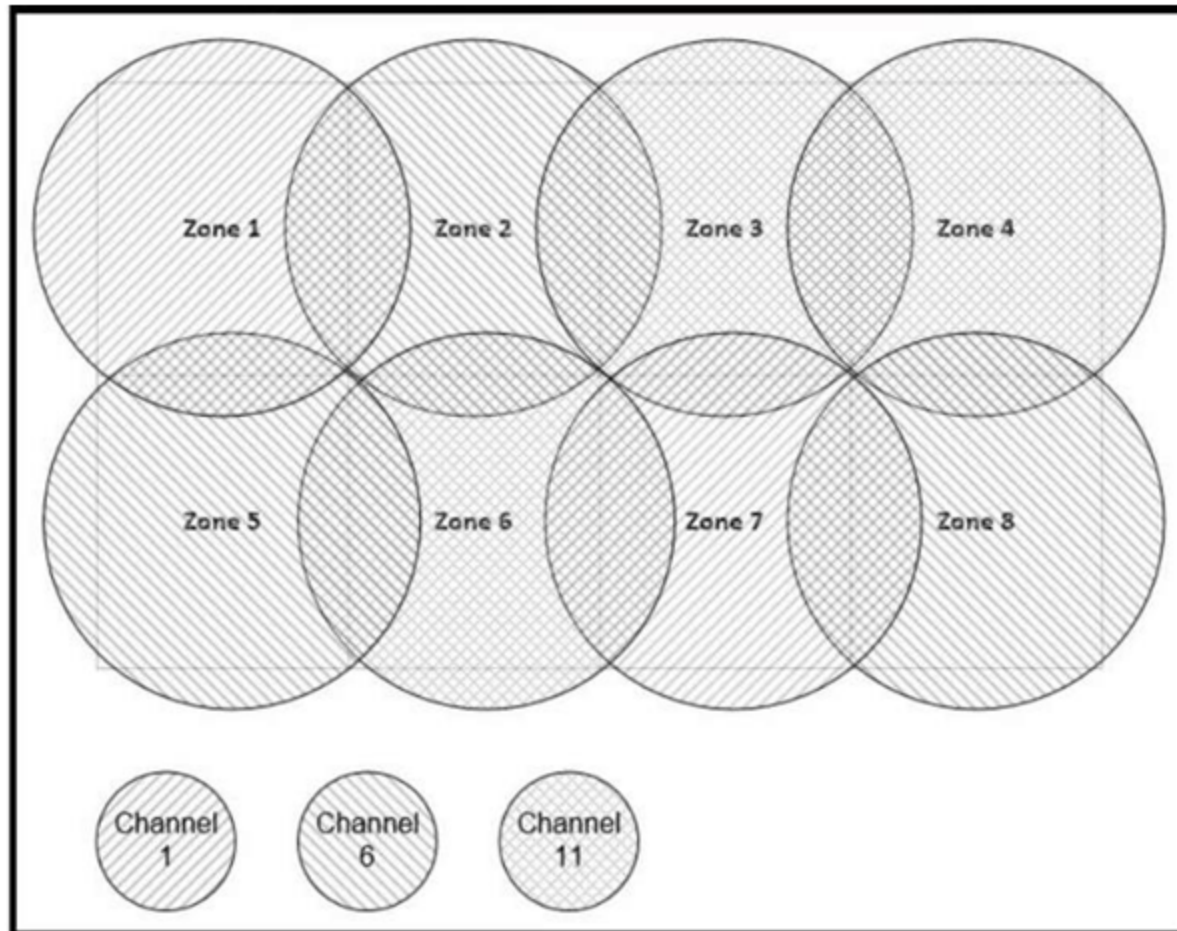


Actual exam question from Cisco's 200-301

Question #: 173

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Between which zones do wireless users expect to experience intermittent connectivity?

- A. between zones 1 and 2
- B. between zones 2 and 5
- C. between zones 3 and 4
- D. between zones 3 and 6

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 174

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which WAN topology provides a combination of simplicity, quality, and availability?

- A. partial mesh
- B. full mesh
- C. point-to-point
- D. hub-and-spoke

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 175

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the statements about wireless architectures from the left onto the architectures on the right.

Select and Place:

It encapsulates LWAPP traffic between the access point and the WLC in EtherType 0xBFFF.

It facilitates Layer 2 connectivity between the WLC's wired interface and the WLAN clients.

It forwards only IP EtherType frames.

It requires IP addresses on the access point and the WLC.

It supports LWAPP tunneling within Ethernet frames and UDP packets.

It uses UDP or UDP Lite for IPv6 deployments.

Layer 2 Tunnel

Layer 3 Tunnel

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 176

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the Wi-Fi terms from the left onto the descriptions on the right.

Select and Place:

distribution system	Wi-Fi option in which cells from different access points are linked together
extended service set	Wi-Fi option that enables two or more clients to communicate directly without a central access point
independent basic service set	Wi-Fi option based around one or more access points
infrastructure mode	alphanumeric text string that identifies a wireless network
SSID	entire wireless cell of an access point and the linkage to the wired network

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 177

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How are the switches in a spine-and-leaf topology interconnected?

- A. Each leaf switch is connected to one of the spine switches
- B. Each leaf switch is connected to each spine switch.
- C. Each leaf switch is connected to two spine switches, making a loop.
- D. Each leaf switch is connected to a central leaf switch, then uplinked to a core spine switch.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 178

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the primary effect of the spanning-tree portfast command?

- A. It immediately enables the port in the listening state.
- B. It immediately puts the port into the forwarding state when the switch is reloaded.
- C. It enables BPDU messages.
- D. It minimizes spanning-tree convergence time.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 179

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What occurs when PortFast is enabled on an interface that is connected to another switch?

- A. Root port choice and spanning-tree recalculation are accelerated when a switch link goes down.
- B. After spanning-tree converges, PortFast shuts down any port that receives BPDUs.
- C. VTP is allowed to propagate VLAN configuration information from switch to switch automatically.
- D. Spanning-tree fails to detect a switching loop increasing the likelihood of broadcast storms.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 180

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which QoS Profile is selected in the GUI when configuring a voice over WLAN deployment?

- A. Platinum
- B. Bronze
- C. Gold
- D. Silver

Show Suggested Answer

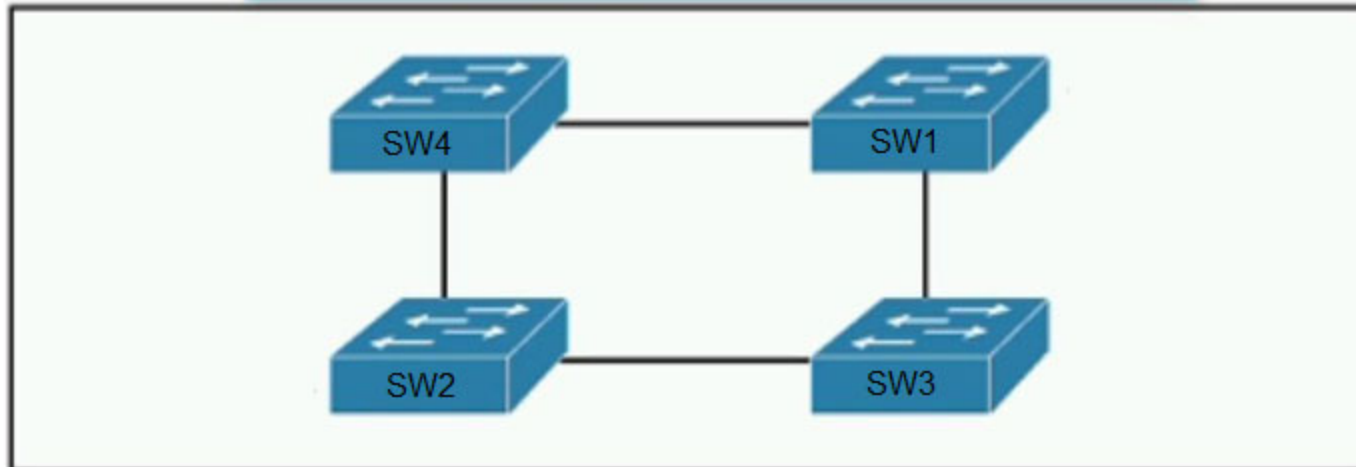


Actual exam question from Cisco's 200-301

Question #: 181

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which switch in this configuration will be elected as the root bridge?

SW1: 0C:E0:38:41:86:07 -

SW2: 0C:0E:15:22:05:97 -

SW3: 0C:0E:15:1A:3C:9D -

SW4: 0C:E0:18:A1:B3:19 -

- A. SW1
- B. SW2
- C. SW3
- D. SW4

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 182

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

```
C:\>ipconfig/all

Windows IP Configuration

Host Name . . . . . : Inspiron15
Primary Dns Suffix . . . . . :
Node Type . . . . . : Mixed
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No

Wireless LAN adapter Local Area Connection* 12:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Description . . . . . : Microsoft Wi-Fi Direct Virtual Adapter
Physical Address. . . . . : 1A-76-3F-7C-57-DF
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter Wi-Fi:

Connection-specific DNS Suffix . :
Description . . . . . : Dell Wireless 1703 802.11b/g/n <2.4GHz>
Physical Address. . . . . : B8-76-3F-7C-57-DF
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::e09f:9839:6e86:f755%12<Preferred>
. . . . . : 192.168.1.20<Preferred>
. . . . . : 255.255.255.0
. . . . . : 192.168.1.1
DHCPv6 IAID . . . . . : 263747135
DHCPv6 Client DUID. . . . . : 00-01-00-01-18-E6-32-43-B8-76-3F-7C-57-DF
. . . . . : 192.168.1.15
. . . . . : 192.168.1.16
NetBIOS over Tcpip. . . . . : Enabled
```

Refer to the exhibit. An engineer is required to verify that the network parameters are valid for the users' wireless LAN connectivity on a /24 subnet. Drag and drop the values from the left onto the network parameters on the right. Not all values are used.

Select and Place:

192.168.1.1	broadcast address
192.168.1.20	default gateway
192.168.1.254	host IP address
192.168.1.255	last assignable IP address in the subnet
B8-76-3F-7C-57-DF	MAC address
1A-76-3F-7C-57-DF	Network address
192.168.1.0	

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 183

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer needs to configure LLDP to send the port description type length value (TLV). Which command sequence must be implemented?

- A. switch(config-if)#lldp port-description
- B. switch#lldp port-description
- C. switch(config-line)#lldp port-description
- D. switch(config)#lldp port-description

Show Suggested Answer

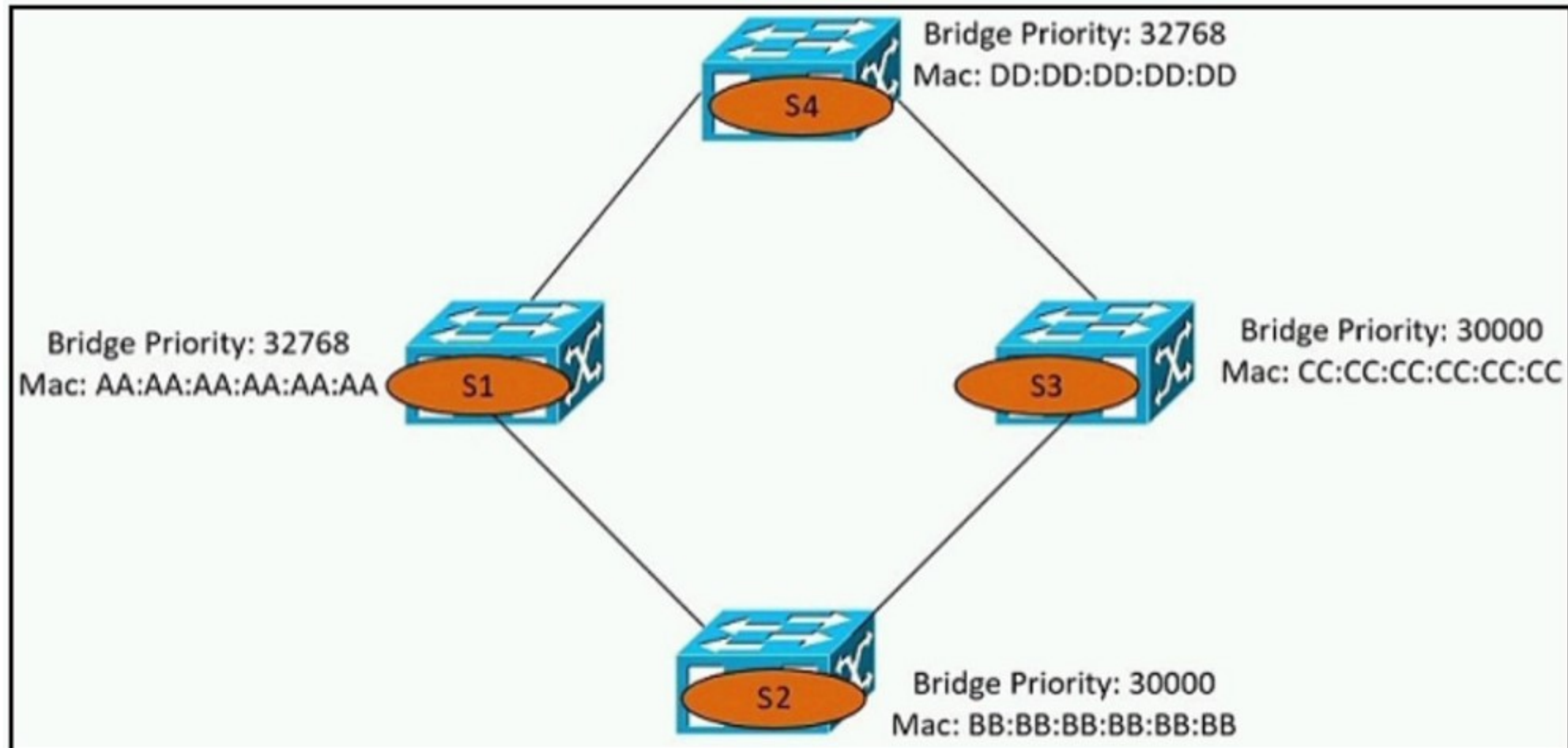


Actual exam question from Cisco's 200-301

Question #: 184

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which switch becomes the root bridge?

- A. S1
- B. S2
- C. S3
- D. S4

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 185

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which configuration ensures that the switch is always the root for VLAN 750?

- A. Switch(config)#spanning-tree vlan 750 priority 38418607
- B. Switch(config)#spanning-tree vlan 750 priority 0
- C. Switch(config)#spanning-tree vlan 750 root primary
- D. Switch(config)#spanning-tree vlan 750 priority 614440

Show Suggested Answer

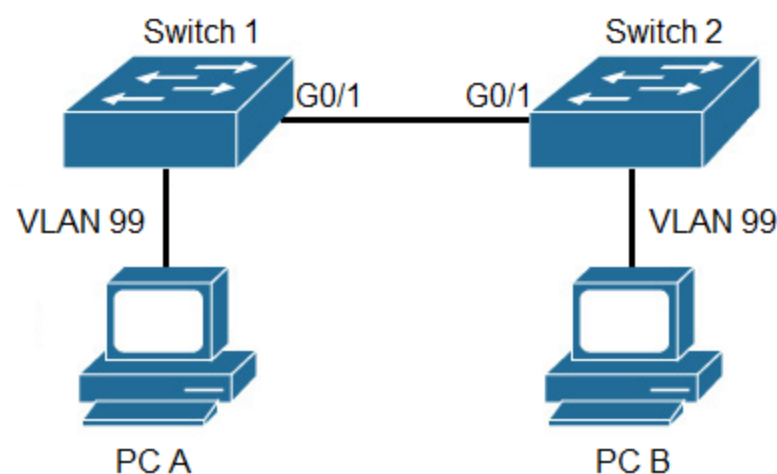


Actual exam question from Cisco's 200-301

Question #: 186

Topic #: 1

[\[All 200-301 Questions\]](#)



#### Switch 1:

```
Name: Gi0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Administrative Native VLAN tagging: enabled
Voice VLAN: none
[output omitted]
Trunking VLANs Enabled: 50-100
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
```

#### Switch 2:

```
Name: Gi0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 99 (VLAN0099)
Administrative Native VLAN tagging: enabled
Voice VLAN: none
[output omitted]
Trunking VLANs Enabled: 50-100
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
```

Refer to the exhibit. After the switch configuration, the ping test fails between PC A and PC B. Based on the output for switch 1, which error must be corrected?

- A. The PCs are in the incorrect VLAN.
- B. All VLANs are not enabled on the trunk.
- C. Access mode is configured on the switch ports.
- D. There is a native VLAN mismatch.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 187

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the WLAN components from the left onto the correct descriptions on the right.

Select and Place:

### Answer Area

access point

virtual interface

dynamic interface

service port

wireless LAN controller

device that manages access points

device that provides Wi-Fi devices with a connection to a wired network

used for out of band management of a WLC

used to support mobility management of the WLC

applied to the WLAN for wireless client communication

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 188

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which unified access point mode continues to serve wireless clients after losing connectivity to the Cisco Wireless LAN Controller?

- A. local
- B. mesh
- C. flexconnect
- D. sniffer

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 189

Topic #: 1

[\[All 200-301 Questions\]](#)

**Router#**

**Capability Codes: R - Router, T - Trans Bridge, B - Source Route Bridge  
S - Switch, H - Host, I - IGMP, r - Repeater, P - Phone,  
D - Remote, C - CVTA, M - Two-port Mac Relay**

Device ID	Local Interface	Holdtime	Capability	Platform	Port ID
10.1.1.2	Gig 37/3	176	RI	CPT 600	Gig 36/41
10.1.1.2	Gig 37/1	174	RI	CPT 600	Gig 36/43
10.1.1.2	Gig 36/41	134	RI	CPT 600	Gig 37/3
10.1.1.2	Gig 36/43	134	RI	CPT 600	Gig 37/1
10.1.1.2	Ten 3/2	132	RI	CPT 600	Ten 4/2
10.1.1.2	Ten 4/2	174	RI	CPT 600	Ten 3/2

Refer to the exhibit. Which command provides this output?

- A. show ip route
- B. show cdp neighbor
- C. show ip interface
- D. show interface

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 190

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which mode must be used to configure EtherChannel between two switches without using a negotiation protocol?

- A. active
- B. on
- C. auto
- D. desirable

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 191

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which mode allows access points to be managed by Cisco Wireless LAN Controllers?

- A. bridge
- B. lightweight
- C. mobility express
- D. autonomous

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 192

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two values or settings must be entered when configuring a new WLAN in the Cisco Wireless LAN Controller GUI? (Choose two.)

- A. QoS settings
- B. IP address of one or more access points
- C. SSID
- D. profile name
- E. management interface settings

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 193

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command is used to specify the delay time in seconds for LLDP to initialize on any interface?

- A. lldp timer
- B. lldp tlv-select
- C. lldp reinit
- D. lldp holdtime

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 194

Topic #: 1

[\[All 200-301 Questions\]](#)

**SW2**

```
vtp domain cisco
```

```
vtp mode transparent
```

```
vtp password ciscotest
```

```
interface fastethernet0/1
```

```
description connection to sw1
```

```
switchport mode trunk
```

```
switchport trunk encapsulation dot1q
```

Refer to the exhibit. How does SW2 interact with other switches in this VTP domain?

- A. It transmits and processes VTP updates from any VTP clients on the network on its trunk ports.
- B. It processes VTP updates from any VTP clients on the network on its access ports.
- C. It receives updates from all VTP servers and forwards all locally configured VLANs out all trunk ports.
- D. It forwards only the VTP advertisements that it receives on its trunk ports.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 195

Topic #: 1

[\[All 200-301 Questions\]](#)

```
SW1#sh lacp neighbor
Flags: S - Device is requesting Slow LACPDUs
      F - Device is requesting Fast LACPDUs
      A - Device is in Active mode      P - Device is in Passive mode

Channel group 35 neighbors

Partner's information:

Port      Flags  LACP port      Admin Oper  Port  Port
Et1/0    SP    32768          aabb.cc80.7000  8s  0x0  0x23  0x101  0x3C
Et1/1    SP    32768          aabb.cc80.7000  8s  0x0  0x23  0x102  0x3C
```

Refer to the exhibit. Based on the LACP neighbor status, in which mode is the SW1 port channel configured?

- A. mode on
- B. active
- C. passive
- D. auto

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 196

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Two switches are connected and using Cisco Dynamic Trunking Protocol. SW1 is set to Dynamic Auto and SW2 is set to Dynamic Desirable. What is the result of this configuration?

- A. The link becomes an access port.
- B. The link is in an error disabled state.
- C. The link is in a down state.
- D. The link becomes a trunk port.

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 197

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A Cisco IP phone receives untagged data traffic from an attached PC. Which action is taken by the phone?

- A. It drops the traffic.
- B. It allows the traffic to pass through unchanged.
- C. It tags the traffic with the native VLAN.
- D. It tags the traffic with the default VLAN.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 198

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which design element is a best practice when deploying an 802.11b wireless infrastructure?

- A. allocating nonoverlapping channels to access points that are in close physical proximity to one another
- B. disabling TCP so that access points can negotiate signal levels with their attached wireless devices
- C. configuring access points to provide clients with a maximum of 5 Mbps
- D. setting the maximum data rate to 54 Mbps on the Cisco Wireless LAN Controller

Show Suggested Answer



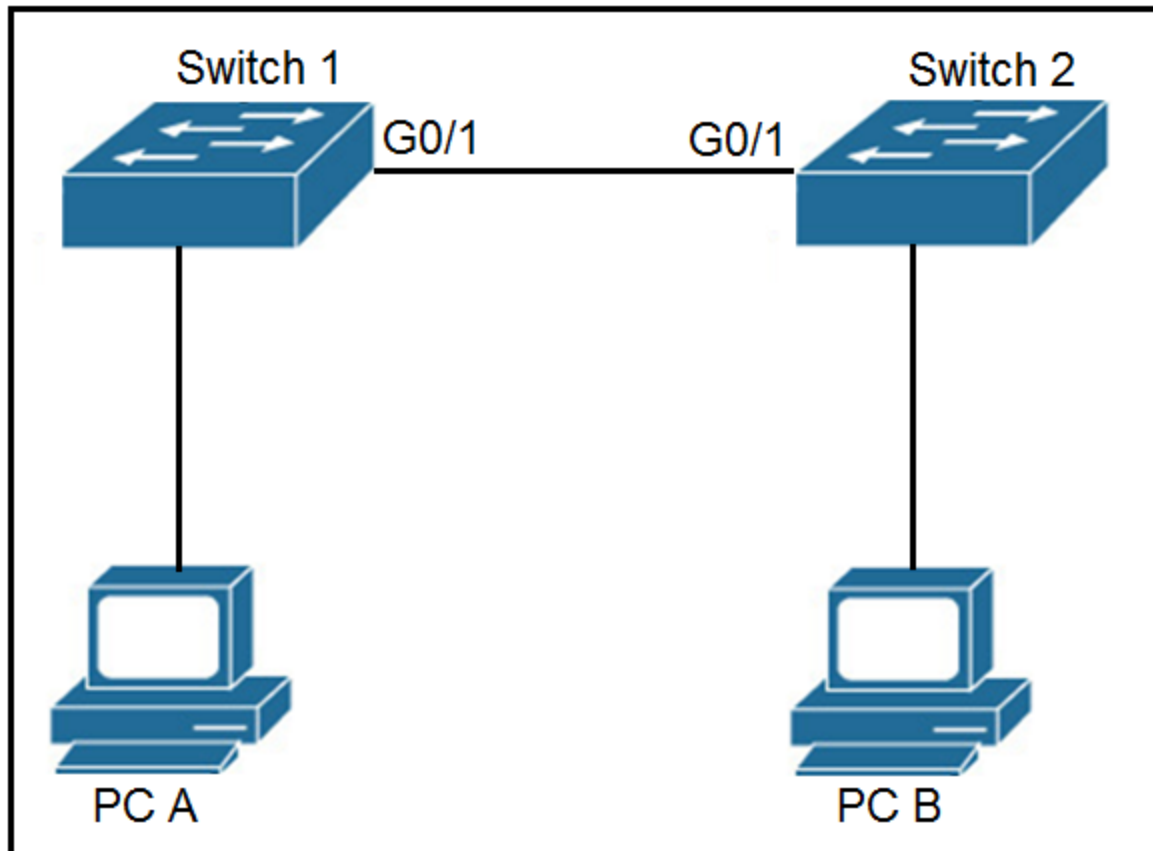
Actual exam question from Cisco's 200-301

Question #: 199

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. The network administrator wants VLAN 67 traffic to be untagged between Switch 1 and Switch 2, while all other VLANs are to remain tagged. Which command accomplishes this task?



- A. switchport access vlan 67
- B. switchport trunk allowed vlan 67
- C. switchport private-vlan association host 67
- D. switchport trunk native vlan 67

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 200

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two command sequences must be configured on a switch to establish a Layer 3 EtherChannel with an open-standard protocol? (Choose two.)

- A. interface GigabitEthernet0/0/1 channel-group 10 mode auto
- B. interface GigabitEthernet0/0/1 channel-group 10 mode on
- C. interface port-channel 10 no switchport ip address 172.16.0.1 255.255.255.0
- D. interface GigabitEthernet0/0/1 channel-group 10 mode active
- E. interface port-channel 10 switchport switchport mode trunk

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 201

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which two commands when used together create port channel 10? (Choose two.)

**Switch#show etherchannel summary**

[output omitted]

Group	Port-channel	Protocol	Ports	
10	Po10(SU)	LACP	Gi0/0(P)	Gi0/1(P)
20	Po20(SU)	LACP	Gi0/2(P)	Gi0/3(P)

- A. int range g0/0-1 channel-group 10 mode active
- B. int range g0/0-1 channel-group 10 mode desirable
- C. int range g0/0-1 channel-group 10 mode passive
- D. int range g0/0-1 channel-group 10 mode auto
- E. int range g0/0-1 channel-group 10 mode on

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 202

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Refer to the exhibit. An administrator is tasked with configuring a voice VLAN. What is the expected outcome when a Cisco phone is connected to the GigabitEthernet 3/1/4 port on a switch?

```
interface GigabitEthernet3/1/4
  switchport voice vlan 50
!
```

- A. The phone and a workstation that is connected to the phone do not have VLAN connectivity.
- B. The phone sends and receives data in VLAN 50, but a workstation connected to the phone sends and receives data in VLAN 1.
- C. The phone sends and receives data in VLAN 50, but a workstation connected to the phone has no VLAN connectivity.
- D. The phone and a workstation that is connected to the phone send and receive data in VLAN 50.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 203

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which action is expected from SW1 when the untagged frame is received on the GigabitEthernet0/1 interface?

```
SW1#show run int gig 0/1
interface GigabitEthernet0/1
  switchport access vlan 11
  switchport trunk allowed vlan 1-10
  switchport trunk encapsulation dot1q
  switchport trunk native vlan 5
  switchport mode trunk
  speed 1000
  duplex full
```

- A. The frame is processed in VLAN 1
- B. The frame is processed in VLAN 11
- C. The frame is processed in VLAN 5
- D. The frame is dropped

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 204

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command is used to enable LLDP globally on a Cisco IOS ISR?

- A. lldp run
- B. lldp enable
- C. lldp transmit
- D. cdp run
- E. cdp enable

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 205

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command should you enter to configure an LLDP delay time of 5 seconds?

- A. lldp timer 5000
- B. lldp holdtime 5
- C. lldp reinit 5000
- D. lldp reinit 5

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 206

Topic #: 1

[\[All 200-301 Questions\]](#)

---

In a CDP environment, what happens when the CDP interface on an adjacent device is configured without an IP address?

- A. CDP becomes inoperable on that neighbor
- B. CDP uses the IP address of another interface for that neighbor
- C. CDP operates normally, but it cannot provide IP address information for that neighbor
- D. CDP operates normally, but it cannot provide any information for that neighbor

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 207

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the benefits of a Cisco Wireless Lan Controller from the left onto the correct examples on the right.

Select and Place:

Dynamic RF Feature

Easy Deployment Process

Optimized user performance

Easy upgrade process

Controller provides centralized management of users and VLANs

Access points auto adjust signal strength

Controller image auto deployed to access Points

Controller uses loadbalancing to maximize throughput

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 208

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When configuring an EtherChannel bundle, which mode enables LACP only if a LACP device is detected?

- A. Passive
- B. Desirable
- C. On
- D. Auto
- E. Active

Show Suggested Answer



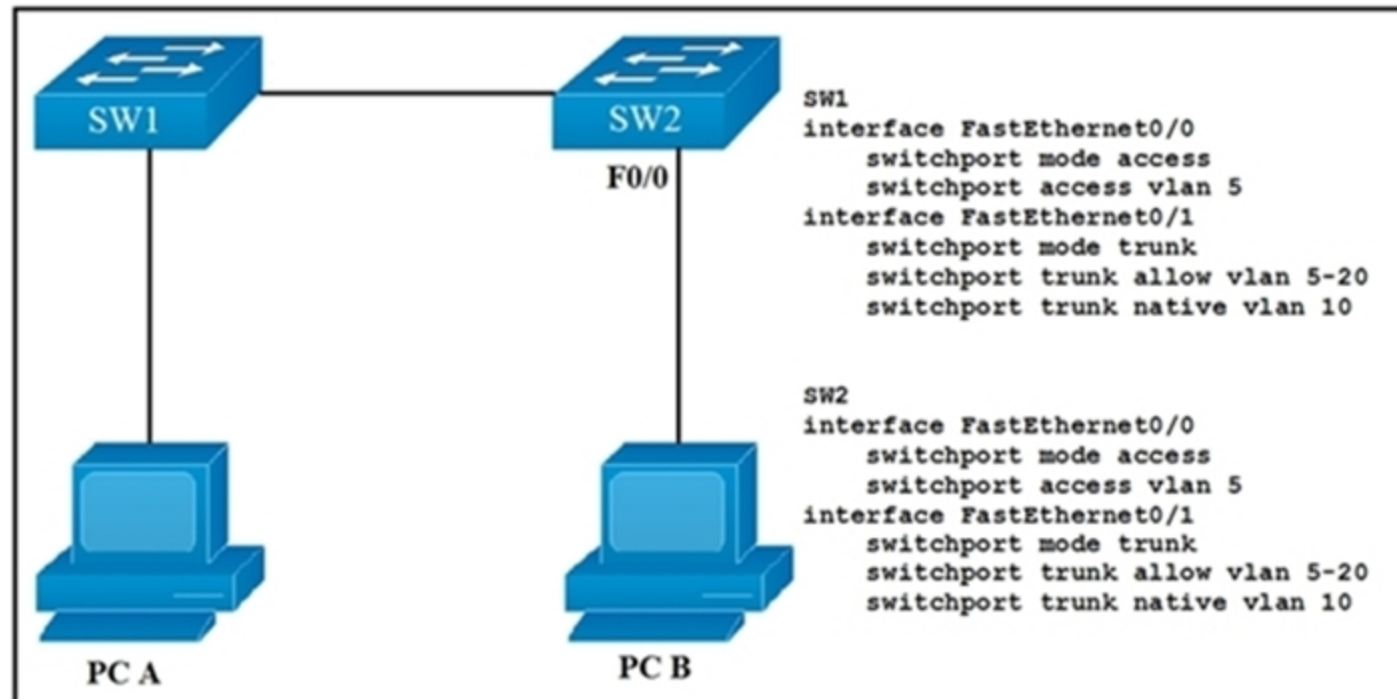
Actual exam question from Cisco's 200-301

Question #: 209

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which VLAN ID is associated with the default VLAN in the given environment?



- A. VLAN 1
- B. VLAN 5
- C. VLAN 10
- D. VLAN 20

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 210

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two VLAN IDs indicate a default VLAN? (Choose two.)

- A. 0
- B. 1
- C. 1005
- D. 1006
- E. 4096

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 211

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two pieces of information about a Cisco device can Cisco Discovery Protocol communicate? (Choose two.)

- A. the native VLAN
- B. the trunking protocol
- C. the VTP domain
- D. the spanning-tree priority
- E. the spanning-tree protocol

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 212

Topic #: 1

[\[All 200-301 Questions\]](#)

---

After you deploy a new WLAN controller on your network, which two additional tasks should you consider? (Choose two.)

- A. deploy load balancers
- B. configure additional vlans
- C. configure multiple VRRP groups
- D. deploy POE switches
- E. configure additional security policies

Show Suggested Answer



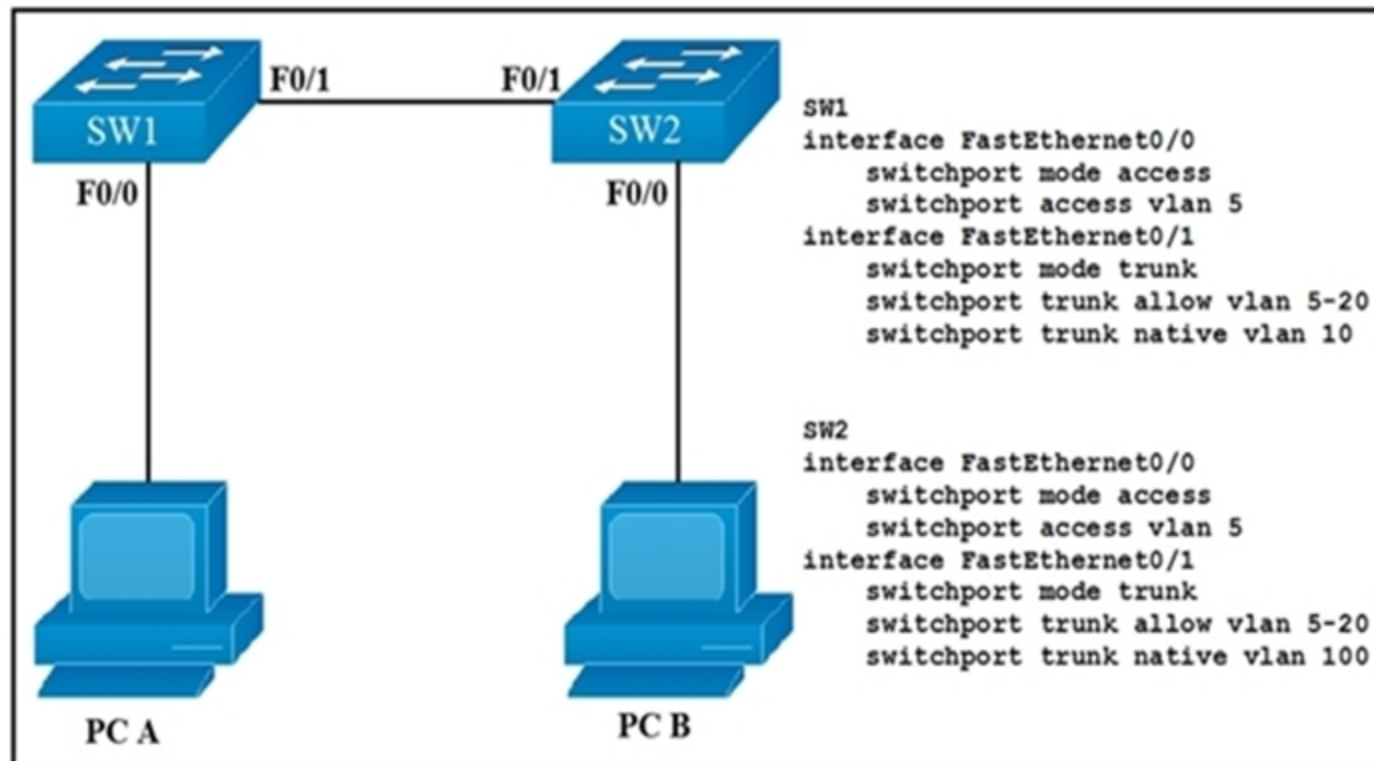
Actual exam question from Cisco's 200-301

Question #: 213

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. How will switch SW2 handle traffic from VLAN 10 on SW1?



- A. It sends the traffic to VLAN 10.
- B. It sends the traffic to VLAN 100.
- C. It drops the traffic.
- D. It sends the traffic to VLAN 1.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 214

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two commands can you use to configure an actively negotiate EtherChannel? (Choose two.)

- A. channel-group 10 mode on
- B. channel-group 10 mode auto
- C. channel-group 10 mode passive
- D. channel-group 10 mode desirable
- E. channel-group 10 mode active

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 215

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does STP prevent forwarding loops at OSI Layer 2?

- A. TTL
- B. MAC address forwarding
- C. Collision avoidance
- D. Port blocking

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 216

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two statements about VTP are true? (Choose two.)

- A. All switches must be configured with the same VTP domain name
- B. All switches must be configured to perform trunk negotiation
- C. All switches must be configured with a unique VTP domain name
- D. The VTP server must have the highest revision number in the domain
- E. All switches must use the same VTP version

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 217

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type does a port become when it receives the best BPDU on a bridge?

- A. The designated port
- B. The backup port
- C. The alternate port
- D. The root port

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 218

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which value can you modify to configure a specific interface as the preferred forwarding interface?

- A. The interface number
- B. The port priority
- C. The VLAN priority
- D. The hello time

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 219

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which statement about Cisco Discovery Protocol is true?

- A. It is a Cisco-proprietary protocol.
- B. It runs on the network layer.
- C. It can discover information from routers, firewalls, and switches.
- D. It runs on the physical layer and the data link layer.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 220

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two reasons a network administrator would use CDP? (Choose two.)

- A. to verify the type of cable interconnecting two devices
- B. to determine the status of network services on a remote device
- C. to obtain VLAN information from directly connected switches
- D. to verify Layer 2 connectivity between two devices when Layer 3 fails
- E. to obtain the IP address of a connected device in order to telnet to the device
- F. to determine the status of the routing protocols between directly connected routers

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 221

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two benefits of using VTP in a switching environment? (Choose two.)

- A. It allows switches to read frame tags.
- B. It allows ports to be assigned to VLANs automatically.
- C. It maintains VLAN consistency across a switched network.
- D. It allows frames from multiple VLANs to use a single interface.
- E. It allows VLAN information to be automatically propagated throughout the switching environment.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 222

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which three statements are typical characteristics of VLAN arrangements? (Choose three.)

- A. A new switch has no VLANs configured.
- B. Connectivity between VLANs requires a Layer 3 device.
- C. VLANs typically decrease the number of collision domains.
- D. Each VLAN uses a separate address space.
- E. A switch maintains a separate bridging table for each VLAN.
- F. VLANs cannot span multiple switches.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 223

Topic #: 1

[\[All 200-301 Questions\]](#)

---

On a corporate network, hosts on the same VLAN can communicate with each other, but they are unable to communicate with hosts on different VLANs. What is needed to allow communication between the VLANs?

- A. a router with subinterfaces configured on the physical interface that is connected to the switch
- B. a router with an IP address on the physical interface connected to the switch
- C. a switch with an access link that is configured between the switches
- D. a switch with a trunk link that is configured between the switches

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 224

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which statement about LLDP is true?

- A. It is a Cisco proprietary protocol.
- B. It is configured in global configuration mode.
- C. The LLDP update frequency is a fixed value.
- D. It runs over the transport layer.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 225

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of Wireless LAN Controller?

- A. register with a single access point that controls traffic between wired and wireless endpoints
- B. use SSIDs to distinguish between wireless clients
- C. send LWAPP packets to access points
- D. monitor activity on wireless and wired LANs

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 226

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which technology is used to improve web traffic performance by proxy caching?

- A. WSA
- B. Firepower
- C. ASA
- D. FireSIGHT

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 227

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What criteria is used first during the root port selection process?

- A. local port ID
- B. lowest path cost to the root bridge
- C. lowest neighbor's bridge ID
- D. lowest neighbor's port ID

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 228

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which statement about VLAN configuration is true?

- A. The switch must be in VTP server or transparent mode before you can configure a VLAN
- B. The switch must be in config-vlan mode before you configure an extended VLAN
- C. Dynamic inter-VLAN routing is supported on VLAN2 through VLAN 4064
- D. A switch in VTP transparent mode save the VLAN databases to the running configuration only

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 229

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. What two conclusions should be made about this configuration? (Choose two.)

```
SW1#show spanning-tree vlan 30
```

```
VLAN0030
```

```
Spanning tree enabled protocol rstp
```

Root ID	Priority	32798
	Address	0025.63e9.c800
	Cost	19
	Port	1 (FastEthernet 2/1)
	Hello Time	2 sec
	Max Age	30 sec
	Forward Delay	20 sec

```
[Output suppressed]
```

- A. The root port is FastEthernet 2/1
- B. The designated port is FastEthernet 2/1
- C. The spanning-tree mode is PVST+
- D. This is a root bridge
- E. The spanning-tree mode is Rapid PVST+

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 230

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer must create a diagram of a multivendor network. Which command must be configured on the Cisco devices so that the topology of the network is allowed to be mapped?

- A. Device(config)#lldp run
- B. Device(config)#cdp run
- C. Device(config-if)#cdp enable
- D. Device(config)#flow-sampler-map topology

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 231

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How do AAA operations compare regarding user identification, user services, and access control?

- A. Authorization provides access control, and authentication tracks user services
- B. Authentication identifies users, and accounting tracks user services
- C. Accounting tracks user services, and authentication provides access control
- D. Authorization identifies users, and authentication provides access control

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 232

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the difference between RADIUS and TACACS+?

- A. RADIUS logs all commands that are entered by the administrator, but TACACS+ logs only start, stop, and interim commands.
- B. TACACS+ separates authentication and authorization, and RADIUS merges them.
- C. TACACS+ encrypts only password information, and RADIUS encrypts the entire payload.
- D. RADIUS is most appropriate for dial authentication, but TACACS+ can be used for multiple types of authentication.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 233

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a difference between local AP mode and FlexConnect AP mode?

- A. Local AP mode creates two CAPWAP tunnels per AP to the WLC
- B. Local AP mode causes the AP to behave as if it were an autonomous AP
- C. FlexConnect AP mode fails to function if the AP loses connectivity with the WLC
- D. FlexConnect AP mode bridges the traffic from the AP to the WLC when local switching is configured

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 234

Topic #: 1

[\[All 200-301 Questions\]](#)

---

The SW1 interface g0/1 is in the down/down state. What are two reasons for the interface condition? (Choose two.)

- A. There is a protocol mismatch
- B. There is a duplex mismatch
- C. The interface is shut down
- D. The interface is error-disabled
- E. There is a speed mismatch

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 235

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How will Link Aggregation be implemented on a Cisco Wireless LAN Controller?

- A. The EtherChannel must be configured in `mode active`.
- B. When enabled, the WLC bandwidth drops to 500 Mbps.
- C. To pass client traffic, two or more ports must be configured.
- D. One functional physical port is needed to pass client traffic.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 236

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two conditions must be met before SSH operates normally on a Cisco IOS switch? (Choose two.)

- A. IP routing must be enabled on the switch.
- B. A console password must be configured on the switch.
- C. Telnet must be disabled on the switch.
- D. The switch must be running a k9 (crypto) IOS image.
- E. The ip domain-name command must be configured on the switch.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 237

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Atlanta#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Atlanta(config)#aaa new-model
Atlanta(config)#aaa authentication login default local
Atlanta(config)#line vty 0 4
Atlanta(config-line)#login authentication default
Atlanta(config-line)#exit
Atlanta(config)#username ciscoadmin password adminadmin123
Atlanta(config)#username ciscoadmin privilege 15
Atlanta(config)#enable password cisco123
Atlanta(config)#enable secret testing1234
Atlanta(config)#end
```

Refer to the exhibit. Which password must an engineer use to enter the enable mode?

- A. adminadmin123
- B. cisco123
- C. default
- D. testing1234

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 238

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which state does the switch port move to when PortFast is enabled?

- A. blocking
- B. listening
- C. learning
- D. forwarding

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 239

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which protocol prompts the Wireless LAN Controller to generate its own local web administration SSL certificate for GUI access?

- A. RADIUS
- B. HTTPS
- C. TACACS+
- D. HTTP

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 240

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer must configure interswitch VLAN communication between a Cisco switch and a third-party switch. Which action should be taken?

- A. configure DSCP
- B. configure IEEE 802.1q
- C. configure ISL
- D. configure IEEE 802.1p

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 241

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer requires a switch interface to actively attempt to establish a trunk link with a neighbor switch. What command must be configured?

- A. switchport mode trunk
- B. switchport mode dynamic desirable
- C. switchport nonegotiate
- D. switchport mode dynamic auto

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 242

Topic #: 1

[\[All 200-301 Questions\]](#)

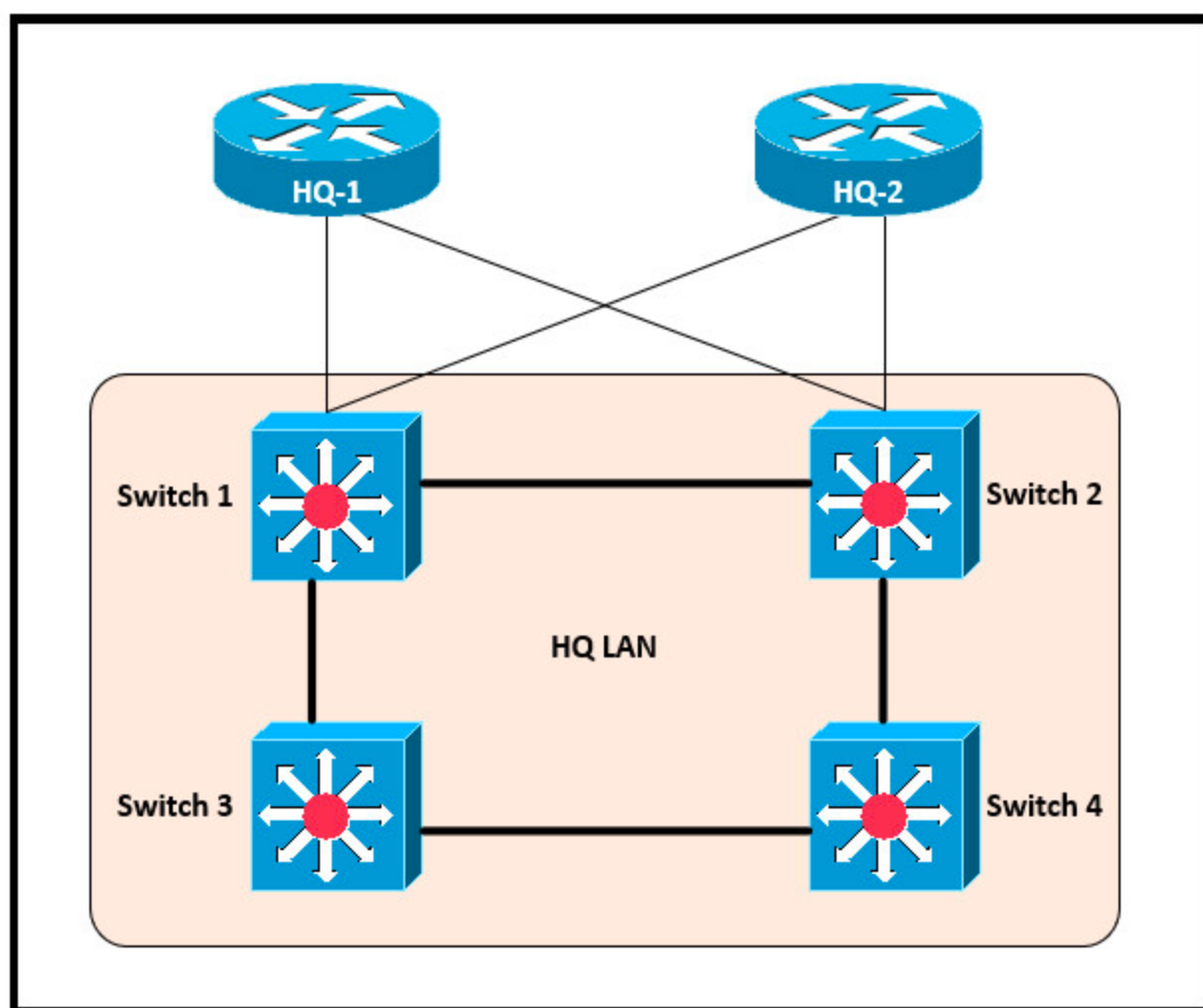
Refer to the exhibit. After the election process, what is the root bridge in the HQ LAN?

Switch 1: 0C:E0:38:81:32:58 -

Switch 2: 0C:0E:15:22:1A:61 -

Switch 3: 0C:0E:15:1D:3C:9A -

Switch 4: 0C:E0:19:A1:4D:16 -



- A. Switch 1
- B. Switch 2
- C. Switch 3
- D. Switch 4

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 243

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer must establish a trunk link between two switches. The neighboring switch is set to trunk or desirable mode. What action should be taken?

- A. configure switchport nonegotiate
- B. configure switchport mode dynamic desirable
- C. configure switchport mode dynamic auto
- D. configure switchport trunk dynamic desirable

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 244

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which spanning-tree enhancement avoids the learning and listening states and immediately places ports in the forwarding state?

- A. BPDUfilter
- B. PortFast
- C. Backbonefast
- D. BPDUguard

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 245

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does the dynamically-learned MAC address feature function?

- A. The CAM table is empty until ingress traffic arrives at each port
- B. Switches dynamically learn MAC addresses of each connecting CAM table.
- C. The ports are restricted and learn up to a maximum of 10 dynamically-learned addresses
- D. It requires a minimum number of secure MAC addresses to be filled dynamically

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 246

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When using Rapid PVST+, which command guarantees the switch is always the root bridge for VLAN 200?

- A. spanning-tree vlan 200 priority 614440
- B. spanning-tree vlan 200 priority 0
- C. spanning-tree vlan 200 root primary
- D. spanning-tree vlan 200 priority 38813258

Show Suggested Answer

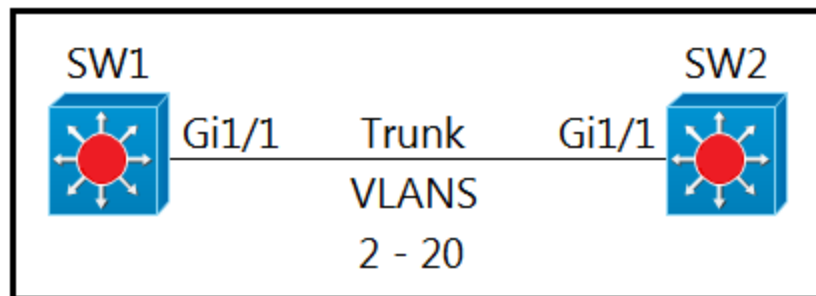


Actual exam question from Cisco's 200-301

Question #: 247

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which command must be executed for Gi1/1 on SW1 to passively become a trunk port if Gi1/1 on SW2 is configured in desirable or trunk mode?

- A. `switchport mode dynamic auto`
- B. `switchport mode dot1-tunnel`
- C. `switchport mode dynamic desirable`
- D. `switchport mode trunk`

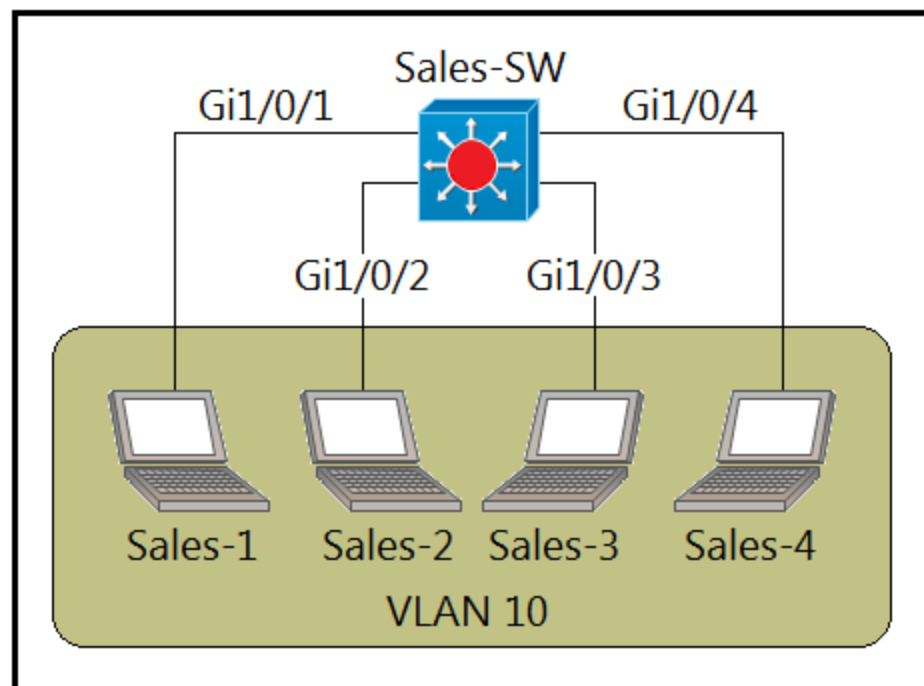
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 248

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The entire contents of the MAC address table are shown. Sales-4 sends a data frame to Sales-1.

Sales-SW#show mac-address-table

Mac Address Table

VLAN	MAC Address	Type	Ports
10	000c.8590.bb7d	DYNAMIC	Gi1/0/1
10	3939.1170.1bb7	DYNAMIC	Gi1/0/2
10	00d0.d3b6.957c	DYNAMIC	Gi1/0/3

Sales-SW#

What does the switch do as it receives the frame from Sales-4?

- A. Map the Layer 2 MAC address to the Layer 3 IP address and forward the frame.
- B. Insert the source MAC address and port into the forwarding table and forward the frame to Sales-1.
- C. Perform a lookup in the MAC address table and discard the frame due to a missing entry.
- D. Flood the frame out of all ports except on the port where Sales-1 is connected.

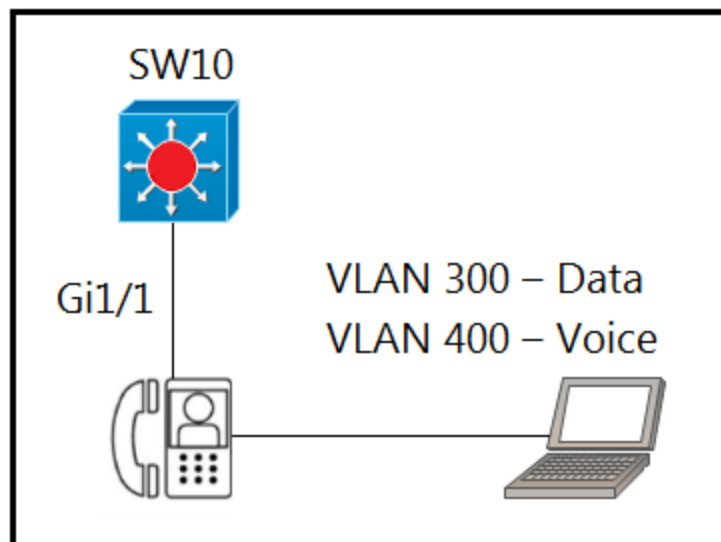
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 249

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer must configure GigabitEthernet1/1 to accommodate voice and data traffic. Which configuration accomplishes this task?

- A. interface gigabitethernet1/1 switchport mode access switchport access vlan 300 switchport voice vlan 400
- B. interface gigabitethernet1/1 switchport mode trunk switchport trunk vlan 300 switchport trunk vlan 400
- C. interface gigabitethernet1/1 switchport mode access switchport voice vlan 300 switchport access vlan 400
- D. interface gigabitethernet1/1 switchport mode trunk switchport trunk vlan 300 switchport voice vlan 400

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 250

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer needs to add an old switch back into a network. To prevent the switch from corrupting the VLAN database, with action must be taken?

- A. Add the switch in the VTP domain with a lower revision number.
- B. Add the switch in the VTP domain with a higher revision number.
- C. Add the switch with DTP set to dynamic desirable.
- D. Add the switch with DTP set to desirable.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 251

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which technology prevents client devices from arbitrarily connecting to the network without state remediation?

- A. 802.11n
- B. 802.1x
- C. MAC Authentication Bypass
- D. IP Source Guard

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 252

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which protocol does an access point use to draw power from a connected switch?

- A. Internet Group Management Protocol
- B. Cisco Discovery Protocol
- C. Adaptive Wireless Path Protocol
- D. Neighbor Discovery Protocol

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 253

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An administrator must secure the WLC from receiving spoofed association requests. Which steps must be taken to configure the WLC to restrict the requests and force the user to wait 10 ms to retry an association request?

- A. Enable MAC filtering and set the SA Query timeout to 10.
- B. Enable 802.1x Layer 2 security and set the Comeback timer to 10.
- C. Enable Security Association Teardown Protection and set the SA Query timeout to 10.
- D. Enable the Protected Management Frame service and set the Comeback timer to 10.

[Show Suggested Answer](#)

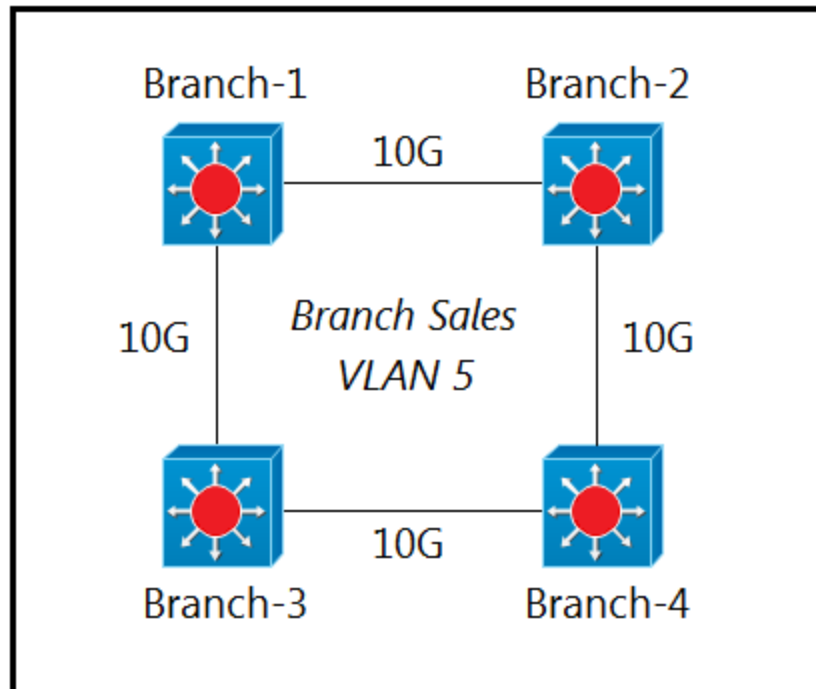


Actual exam question from Cisco's 200-301

Question #: 254

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Only four switches are participating in the VLAN spanning-tree process.

Branch-1: priority 614440 -

Branch-2: priority 39391170 -

Branch-3: priority 0 -

Branch-4: root primary -

Which switch becomes the permanent root bridge for VLAN 5?

- A. Branch-1
- B. Branch-2
- C. Branch-3
- D. Branch-4

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 255

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer must configure traffic for a VLAN that is untagged by the switch as it crosses a trunk link. Which command should be used?

- A. `switchport trunk encapsulation dot1q`
- B. `switchport trunk allowed vlan 10`
- C. `switchport mode trunk`
- D. `switchport trunk native vlan 10`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 256

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two benefits of using the PortFast feature? (Choose two.)

- A. Enabled interfaces are automatically placed in listening state.
- B. Enabled interfaces wait 50 seconds before they move to the forwarding state.
- C. Enabled interfaces never generate topology change notifications.
- D. Enabled interfaces come up and move to the forwarding state immediately.
- E. Enabled interfaces that move to the learning state generate switch topology change notifications.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 257

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the benefit of configuring PortFast on an interface?

- A. The frames entering the interface are marked with the higher priority and then processed faster by a switch.
- B. After the cable is connected, the interface is available faster to send and receive user data.
- C. Real-time voice and video frames entering the interface are processed faster.
- D. After the cable is connected, the interface uses the fastest speed setting available for that cable type.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 258

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the functions of AAA supporting protocols from the left onto the protocols on the right.

Select and Place:

encrypts only the password when it sends an access request

encrypts the entire body of the access-request packet

separates all three AAA operations

combines authentication and authorization

uses TCP

uses UDP

RADIUS

TACACS+

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 259

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Why does a switch flood a frame to all ports?

- A. The frame has zero destination MAC addresses.
- B. The destination MAC address of the frame is unknown.
- C. The source MAC address of the frame is unknown
- D. The source and destination MAC addresses of the frame are the same.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 260

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer configures interface Gi1/0 on the company PE router to connect to an ISP. Neighbor discovery is disabled.

```
interface Gi1/0
description HQ_DC3992-38488
duplex full
speed 100
negotiation auto
lldp transmit
lldp receive
```

Which action is necessary to complete the configuration if the ISP uses third-party network devices?

- A. Disable autonegotiation.
- B. Enable LLDP globally.
- C. Enable LLDP-MED on the ISP device.
- D. Disable Cisco Discovery Protocol on the interface.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 261

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the Rapid PVST+ forwarding state actions from the left to the right. Not all actions are used.

Select and Place:

BPDUs received are forwarded to the system module

action

BPDUs received from the system module are processed and transmitted

action

Frames received from the attached segment are discarded

action

Frames received from the attached segment are processed

action

Switched frames received from other ports are advanced

The port in the forwarding state responds to network management messages

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 262

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which access point mode relies on a centralized controller for management, roaming, and SSID configuration?

- A. lightweight mode
- B. autonomous mode
- C. bridge mode
- D. repeater mode

Show Suggested Answer

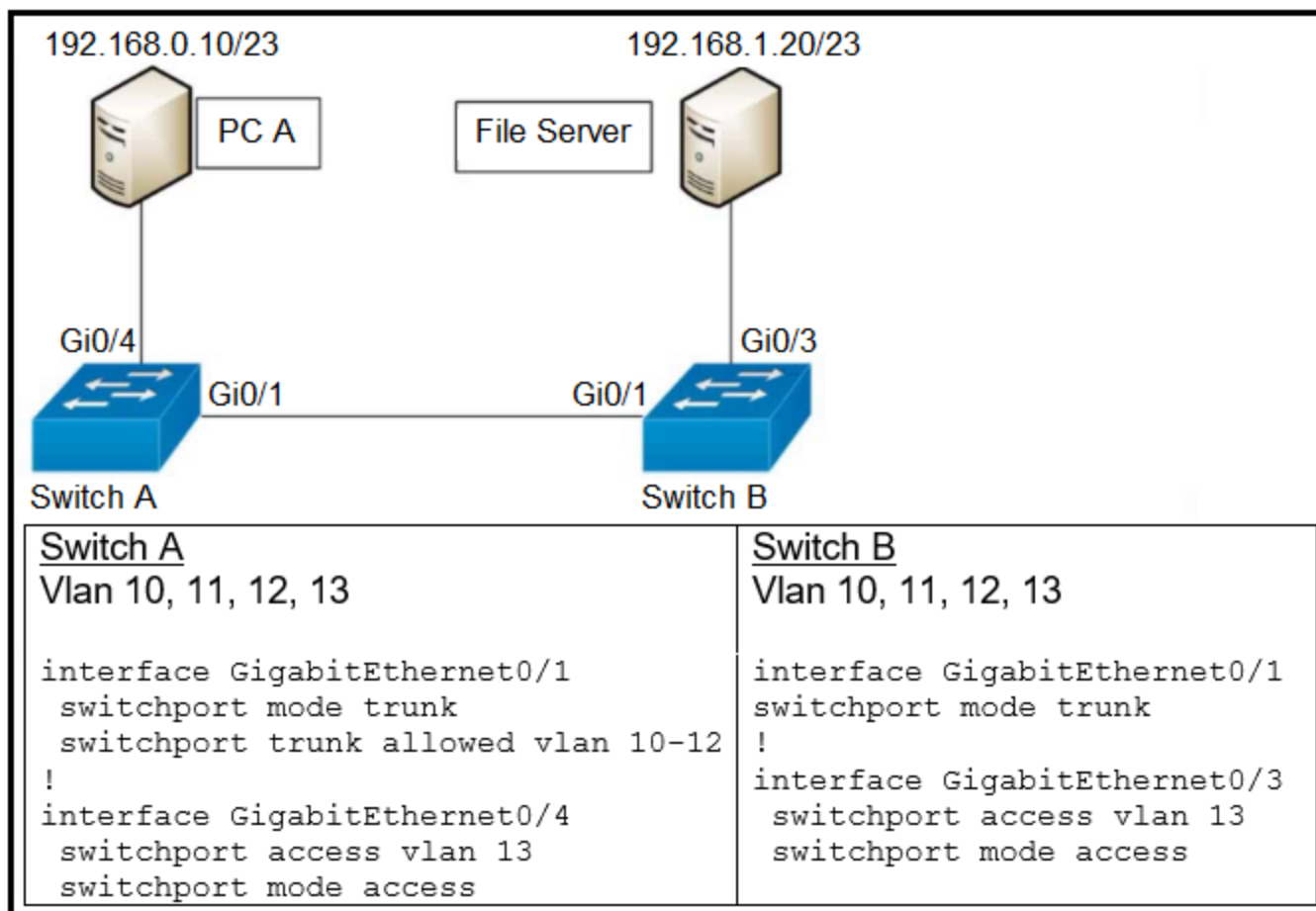


Actual exam question from Cisco's 200-301

Question #: 263

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A network engineer must configure communication between PC A and the File Server. To prevent interruption for any other communications, which command must be configured?

- A. switchport truck allowed vlan 12
- B. switchport truck allowed vlan none
- C. switchport truck allowed vlan add 13
- D. switchport truck allowed vlan remove 10-11

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 264

Topic #: 1

[\[All 200-301 Questions\]](#)

```
switch(config)#interface gigabitEthernet 1/11
switch(config-if)#switchport mode access
switch(config-if)#spanning-tree portfast
switch(config-if)#spanning-tree bpduguard enable
```

Refer to the exhibit. What is the result if Gig1/11 receives an STP BPDU?

- A. The port transitions to STP blocking.
- B. The port immediately transitions to STP forwarding.
- C. The port goes into error-disable state.
- D. The port transitions to the root port.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 265

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which access layer threat-mitigation technique provides security based on identity?

- A. Dynamic ARP Inspection
- B. DHCP snooping
- C. 802.1x
- D. using a non-default native VLAN

Show Suggested Answer

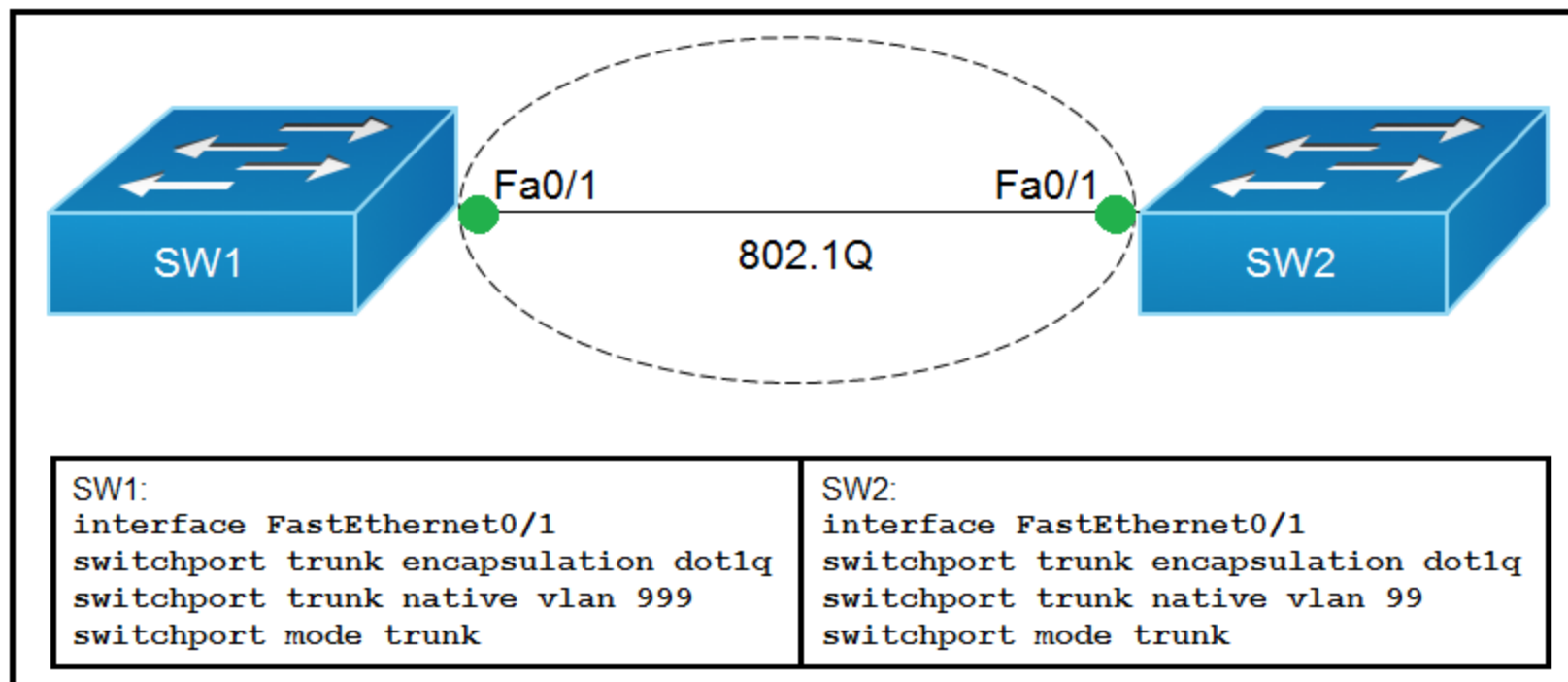


Actual exam question from Cisco's 200-301

Question #: 266

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which action do the switches take on the trunk link?

- A. The trunk does not form, and the ports go into an err-disabled status.
- B. The trunk forms, but the mismatched native VLANs are merged into a single broadcast domain.
- C. The trunk forms, but VLAN 99 and VLAN 999 are in a shutdown state.
- D. The trunk does not form, but VLAN 99 and VLAN 999 are allowed to traverse the link.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 267

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer must configure two new subnets using the address block 10.70.128.0/19 to meet these requirements:

- ⇒ The first subnet must support 24 hosts.
- ⇒ The second subnet must support 472 hosts.
- ⇒ Both subnets must use the longest subnet mask possible from the address block.

Which two configurations must be used to configure the new subnets and meet a requirement to use the first available address in each subnet for the router interfaces?  
(Choose two.)

- A. interface vlan 1148 ip address 10.70.148.1 255.255.254.0
- B. interface vlan 3002 ip address 10.70.147.17 255.255.255.224
- C. interface vlan 4722 ip address 10.70.133.17 255.255.255.192
- D. interface vlan 1234 ip address 10.70.159.1 255.255.254.0
- E. interface vlan 155 ip address 10.70.155.65 255.255.255.224

Show Suggested Answer

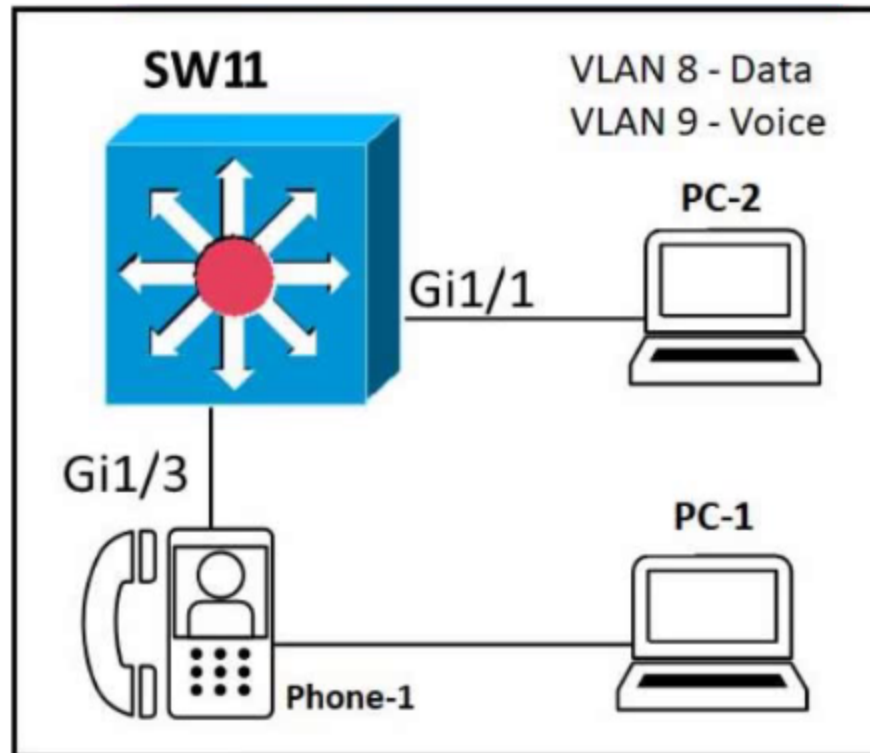


Actual exam question from Cisco's 200-301

Question #: 268

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An administrator must configure interfaces Gi1/1 and Gi1/3 on switch SW11. PC-1 and PC-2 must be placed in the Data VLAN, and Phone-1 must be placed in the Voice VLAN. Which configuration meets these requirements?

- A. `interface gigabitethernet1/1 switchport mode access switchport access vlan 8 ! interface gigabitethernet1/3 switchport mode access switchport access vlan 8 switchport voice vlan 9`
- B. `interface gigabitethernet1/1 switchport mode access switchport access vlan 8 ! interface gigabitethernet1/3 switchport mode trunk switchport trunk vlan 8 switchport voice vlan 9`
- C. `interface gigabitethernet1/1 switchport mode access switchport access vlan 9 ! interface gigabitethernet1/3 switchport mode trunk switchport trunk vlan 8 switchport trunk vlan 9`
- D. `interface gigabitethernet1/1 switchport mode access switchport access vlan 8 ! interface gigabitethernet1/3 switchport mode access switchport voice vlan 8 switchport access vlan 9`

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 269

Topic #: 1

[\[All 200-301 Questions\]](#)

**General** | **Security** | **QoS** | **Policy-Mapping** | **Advanced**

**Layer 2** | **Layer 3** | **AAA Servers**

**Fast Transition**

Fast Transition

**Protected Management Frame**

PMF

**WPA+WPA2 Parameters**

WPA Policy

WPA2 Policy

WPA2 Encryption  AES  TKIP  CCMP256  GCMP128  GCMP256

OSEN Policy

**Authentication Key Management <sup>19</sup>**

802.1X  Enable

CCKM  Enable

PSK  Enable

FT 802.1X  Enable

FT PSK  Enable

Refer to the exhibit. Users need to connect to the wireless network with IEEE 802.11r-compatible devices. The connection must be maintained as users travel between floors or to other areas in the building. What must be the configuration of the connection?

- A. Disable AES encryption.
- B. Enable Fast Transition and select the FT 802.1x option.
- C. Enable Fast Transition and select the FT PSK option.
- D. Select the WPA Policy option with the CCKM option.

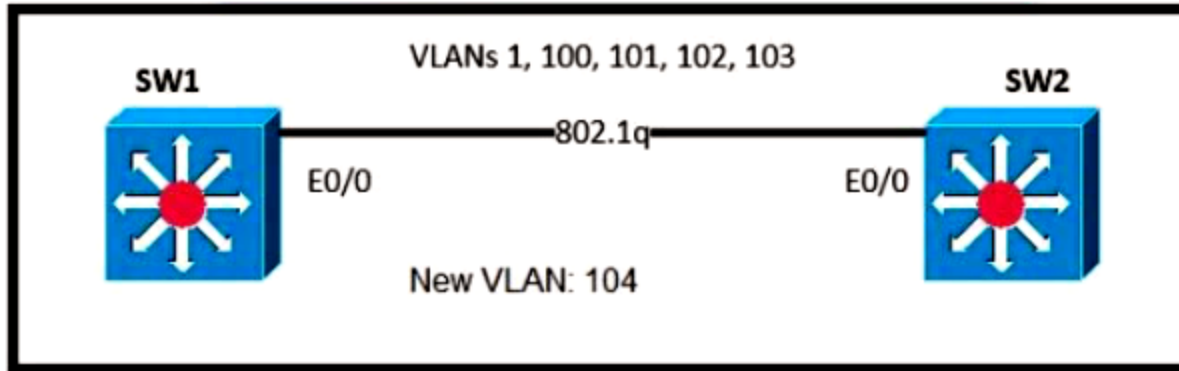
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 270

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer is asked to insert the new VLAN into the existing trunk without modifying anything previously configured. Which command accomplishes this task?

- A. switchport trunk allowed vlan 100-104
- B. switchport trunk allowed vlan 104
- C. switchport trunk allowed vlan all
- D. switchport trunk allowed vlan add 104

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 271

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Aside from discarding, which two states does the switch port transition through while using RSTP (802.1w)? (Choose two.)

- A. blocking
- B. speaking
- C. listening
- D. learning
- E. forwarding

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 272

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the facts about wireless architectures from the left onto the types of access point on the right. Not all options are used.

Select and Place:

### Answer Area

configured and managed by a WLC

managed from a web-based dashboard

accessible for management via Telnet,  
SSH, or a web GUI

requires a management IP address

supports automatic deployment

Autonomous Access Point

Cloud-Based Access Point

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 273

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which interface mode must be configured to connect the lightweight APs in a centralized architecture?

- A. WLAN dynamic
- B. trunk
- C. access
- D. management

Show Suggested Answer

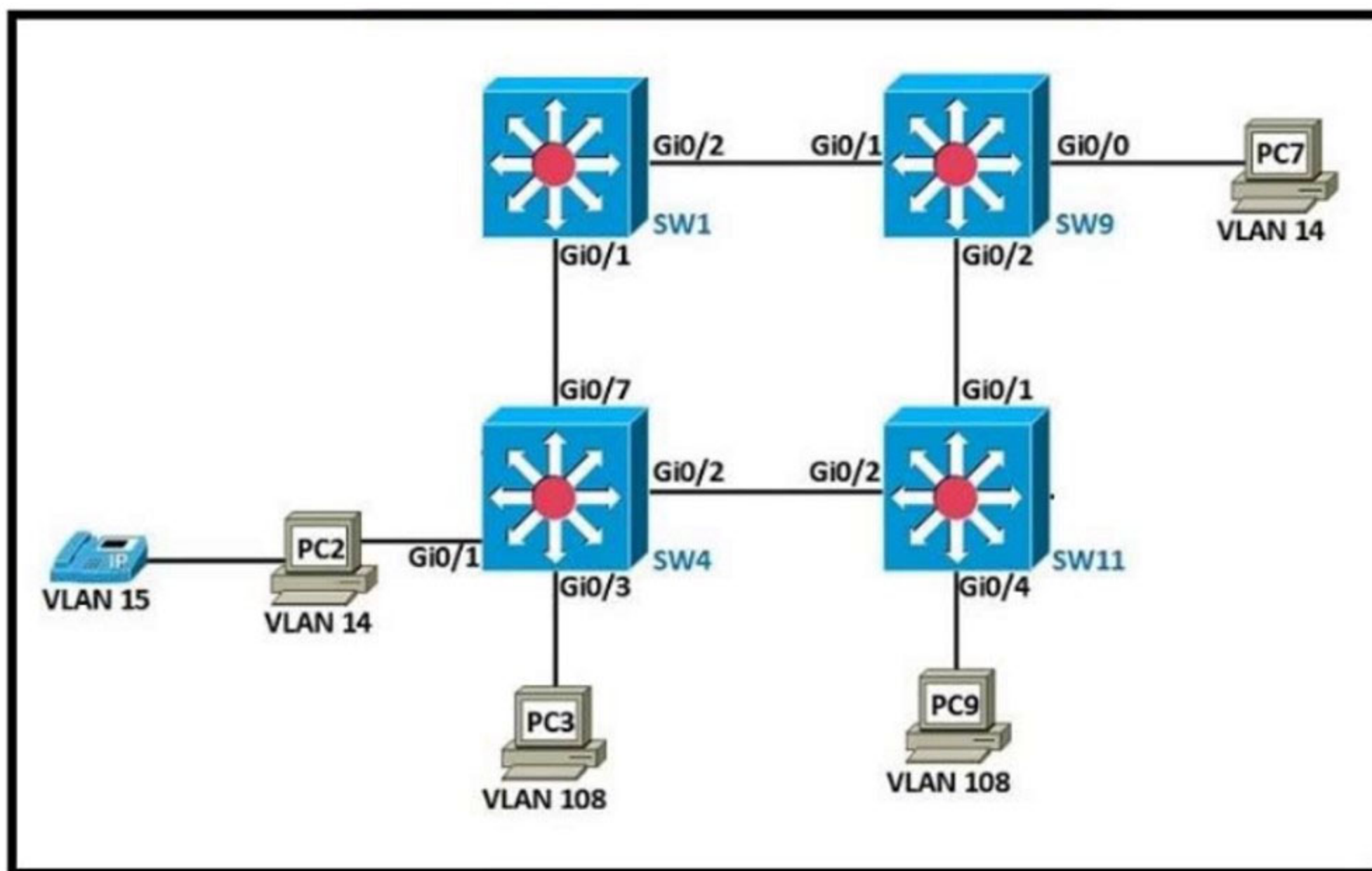


Actual exam question from Cisco's 200-301

Question #: 274

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The following must be considered:

- ⇒ SW1 is fully configured for all traffic.
- ⇒ The SW4 and SW9 links to SW1 have been configured.
- ⇒ The SW4 interface Gi0/1 and Gi0/0 on SW9 have been configured.
- ⇒ The remaining switches have had all VLANs added to their VLAN database.

Which configuration establishes a successful ping from PC2 to PC7 without interruption to traffic flow between other PCs?

- A. SW4 interface Gi0/7 switchport mode trunk switchport trunk allowed vlan 108 ! interface Gi0/2 switchport mode access switchport access vlan 14 SW11# interface Gi0/2 switchport mode trunk switchport trunk allowed vlan 14,108 ! interface Gi0/1 switchport mode trunk switchport trunk allowed vlan 14,108 SW9# interface Gi0/2 switchport mode access switchport access vlan 14
- B. SW4 interface Gi0/2 switchport mode trunk switchport trunk allowed vlan 14,108 SW11# interface Gi0/2 switchport mode trunk switchport trunk allowed vlan 14,108 !! interface Gi0/1 switchport mode trunk switchport trunk allowed vlan 14,108 SW9# interface Gi0/2 switchport mode trunk switchport trunk allowed vlan 14
- C. SW4 interface Gi0/2 switchport mode trunk switchport trunk allowed vlan 14 SW11# interface Gi0/1 switchport mode trunk switchport trunk allowed vlan 14 SW9# interface Gi0/2 switchport mode trunk switchport trunk allowed vlan 108
- D. SW4 interface Gi0/2 switchport mode access switchport access vlan 14 SW11# interface Gi0/2 switchport mode trunk switchport trunk allowed vlan 14 ! interface Gi0/0 switchport mode access switchport access vlan 14 ! interface Gi0/1 switchport mode trunk SW9# interface Gi0/2 switchport mode access switchport access vlan 14

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 275

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Cat9K-1# show lldp entry Cat9K-2

Local Intf: Gi1/0/21
Chassis id: 308b.b2b3.2880
Port id: Gi1/0/21
Port Description: GigabitEthernet1/0/21
System Name: Cat9K-2

Management Addresses:
  IP: 10.5.110.2
```

Refer to the exhibit. The network administrator must prevent the switch Cat9K-2 IP address from being visible in LLDP without disabling the protocol. Which action must be taken to complete the task?

- A. Configure the `no lldp mac-phy-cfg` command globally on Cat9K-2.
- B. Configure the `no lldp receive` command on interface G1/0/21 on Cat9K-1.
- C. Configure the `no lldp transmit` command on interface G1/0/21 on Cat9K-1.
- D. Configure the `no lldp tlv-select management-address` command globally on Cat9K-2.

Show Suggested Answer

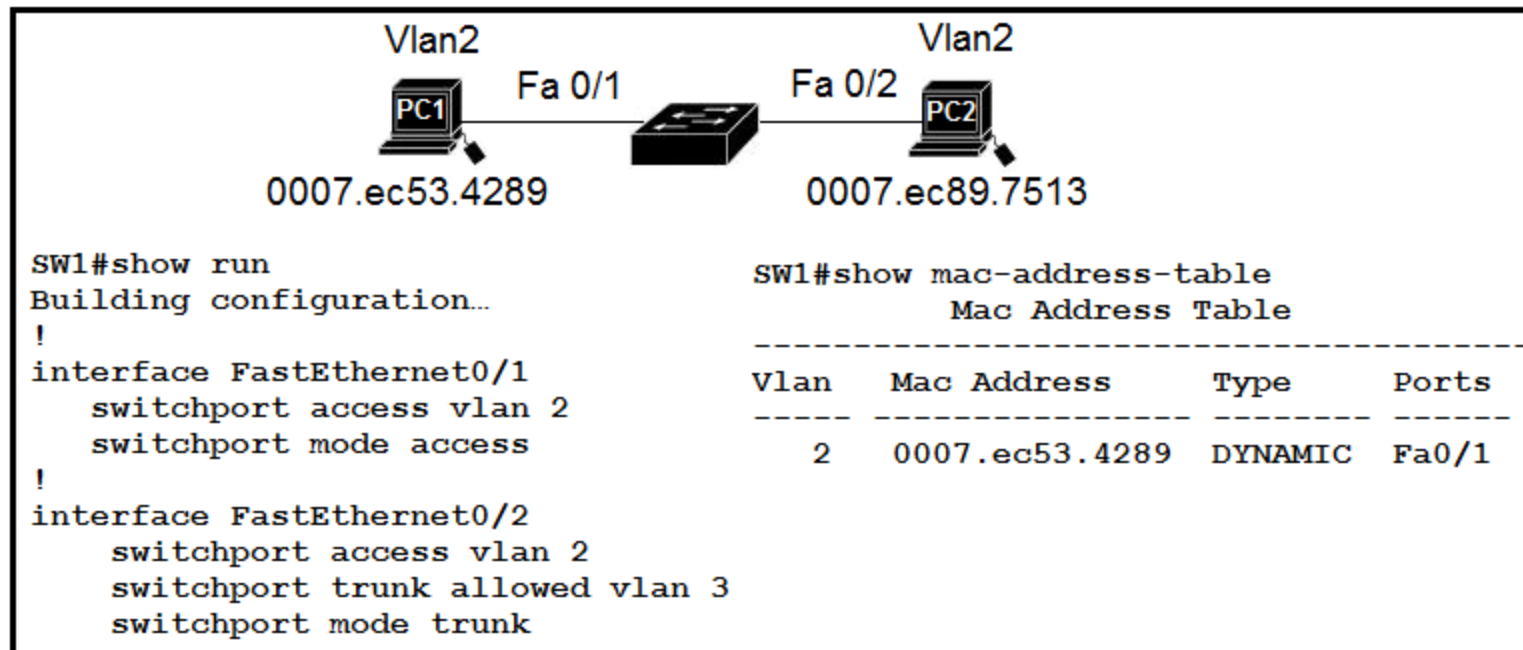


Actual exam question from Cisco's 200-301

Question #: 276

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer has started to configure replacement switch SW1. To verify part of the configuration, the engineer issued the commands as shown and noticed that the entry for PC2 is missing. Which change must be applied to SW1 so that PC1 and PC2 communicate normally?

- A. SW1(config)#interface fa0/2 SW1(config-if)#no switchport access vlan 2 SW1(config-if)#no switchport trunk allowed vlan 3 SW1(config-if)#switchport trunk allowed vlan 2
- B. SW1(config)#interface fa0/2 SW1(config-if)#no switchport access vlan 2 SW1(config-if)#switchport trunk native vlan 2 SW1(config-if)#switchport trunk allowed vlan 3
- C. SW1(config)#interface fa0/2 SW1(config-if)#no switchport mode trunk SW1(config-if)#no switchport trunk allowed vlan 3 SW1(config-if)#switchport mode access
- D. SW1(config)#interface fa0/1 SW1(config-if)#no switchport access vlan 2 SW1(config-if)#switchport access vlan 3 SW1(config-if)#switchport trunk allowed vlan 2

Show Suggested Answer

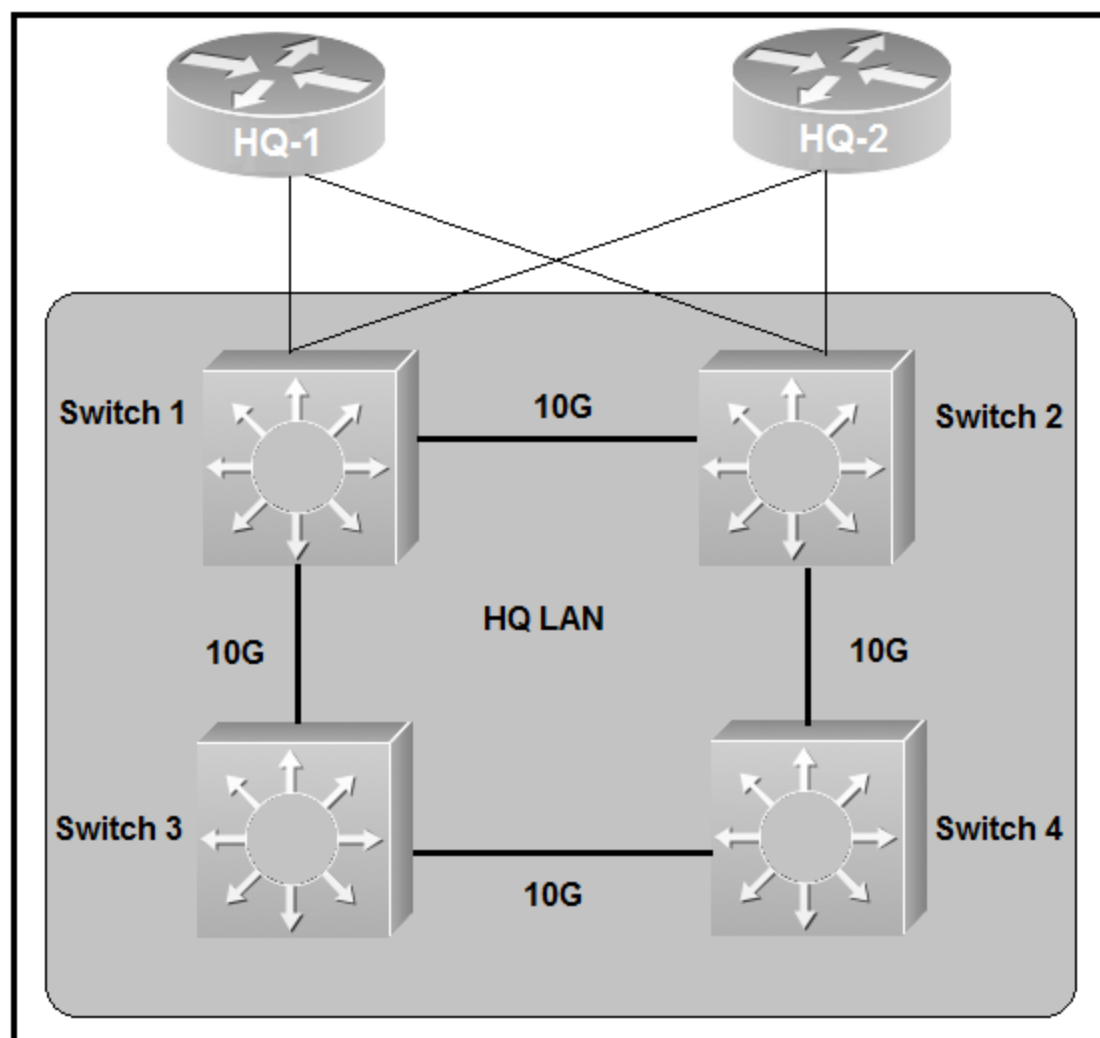
Actual exam question from Cisco's 200-301

Question #: 277

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which switch becomes the root of the spanning tree?



Switch 1 -

BID: 32778 0018.184e.3c00 -

Switch 2 -

BID: 24586 001a.e3ff.a680 -

Switch 3 -

BID: 28682 0022.55cf.cc00 -

Switch 4 -

BID: 64000 4e15.8403.08f -

- A. Switch 1
- B. Switch 2
- C. Switch 3
- D. Switch 4

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 278

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the facts about wireless architectures from the left onto the types of access point on the right. Not all options are used.

Select and Place:

configured and managed  
by a WLC

accessible for management  
via Telnet, SSH, or a Web GUI

supports different operational  
modes

requires a management  
IP address

supports  
automatic deployment

Autonomous Access Point

Lightweight Access Point

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 279

Topic #: 1

[\[All 200-301 Questions\]](#)

```
interface g2/0/0
  channel-group 1 mode active
interface g4/0/0
  channel-group 1 mode active
interface Port-channell
  ip address 203.0.113.65 255.255.255.252

%LINEPROTO-5-UPDOWN: Line protocol on Interface Port-channell,
changed state to down
```

Refer to the exhibit. An engineer is configuring a Layer 3 port-channel interface with LACP. The configuration on the first device is complete, and it is verified that both interfaces have registered the neighbor device in the CDP table. Which task on the neighbor device enables the new port channel to come up without negotiating the channel?

- A. Configure the IP address of the neighboring device.
- B. Bring up the neighboring interfaces using the no shutdown command.
- C. Change the EtherChannel mode on the neighboring interfaces to auto.
- D. Modify the static EtherChannel configuration of the device to passive mode.

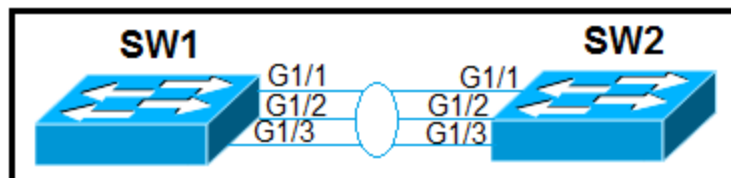
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 280

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which configuration establishes a Layer 2 LACP EtherChannel when applied to both switches?

- A. `Interface range G1/1 1/3 "€\ switchport mode trunk channel-group 1 mode active no shutdown`
- B. `Interface range G1/1 1/3 "€\ switchport mode access channel-group 1 mode passive no shutdown`
- C. `Interface range G1/1 1/3 "€\ switchport mode trunk channel-group 1 mode desirable no shutdown`
- D. `Interface range G1/1 1/3 "€\ switchport mode access channel-group 1 mode on no shutdown`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 281

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which switching concept is used to create separate broadcast domains?

- A. STP
- B. VTP
- C. VLAN
- D. CSMA/CD

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 282

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Cat9300# show cdp
Global CDP information:
  Sending CDP packets every 60 seconds
  Sending a holdtime value of 180 seconds
  Sending CDPv2 advertisements is enabled
```

Refer to the exhibit. Which action must be taken so that neighboring devices rapidly discover switch Cat9300?

- A. Enable portfast on the ports that connect to neighboring devices.
- B. Configure the cdp timer 10 command on switch Cat9300.
- C. Configure the cdp holdtime 10 command on switch Cat9300
- D. Configure the cdp timer 10 command on the neighbors of switch Cat9300

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 283

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a requirement when configuring or removing LAG on a WLC?

- A. The incoming and outgoing ports for traffic flow must be specified if LAG is enabled.
- B. The management interface must be reassigned if LAG is disabled
- C. The controller must be rebooted after enabling or reconfiguring LAG
- D. Multiple untagged interfaces on the same port must be supported

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 284

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the threat-mitigation techniques from the left onto the types of threat or attack they mitigate on the right.

Select and Place:

configure the BPDU  
guard feature

802.1q double tagging

configure the dynamic  
ARP inspection feature

ARP spoofing

configure the root guard  
feature

unwanted superior BPDUs

configure a VLAN access  
control list

unwanted BPDUs on Port-  
Fast enabled interfaces

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 285

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of port is used to connect the wired network when an autonomous AP maps two VLANs to its WLANs?

- A. access
- B. LAG
- C. trunk
- D. EtherChannel

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 286

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network administrator needs to aggregate 4 ports into a single logical link which must negotiate layer 2 connectivity to ports on another switch. What must be configured when using active mode on both sides of the connection?

- A. LLDP
- B. LACP
- C. Cisco vPC
- D. 802.1q trunks

[Show Suggested Answer](#)

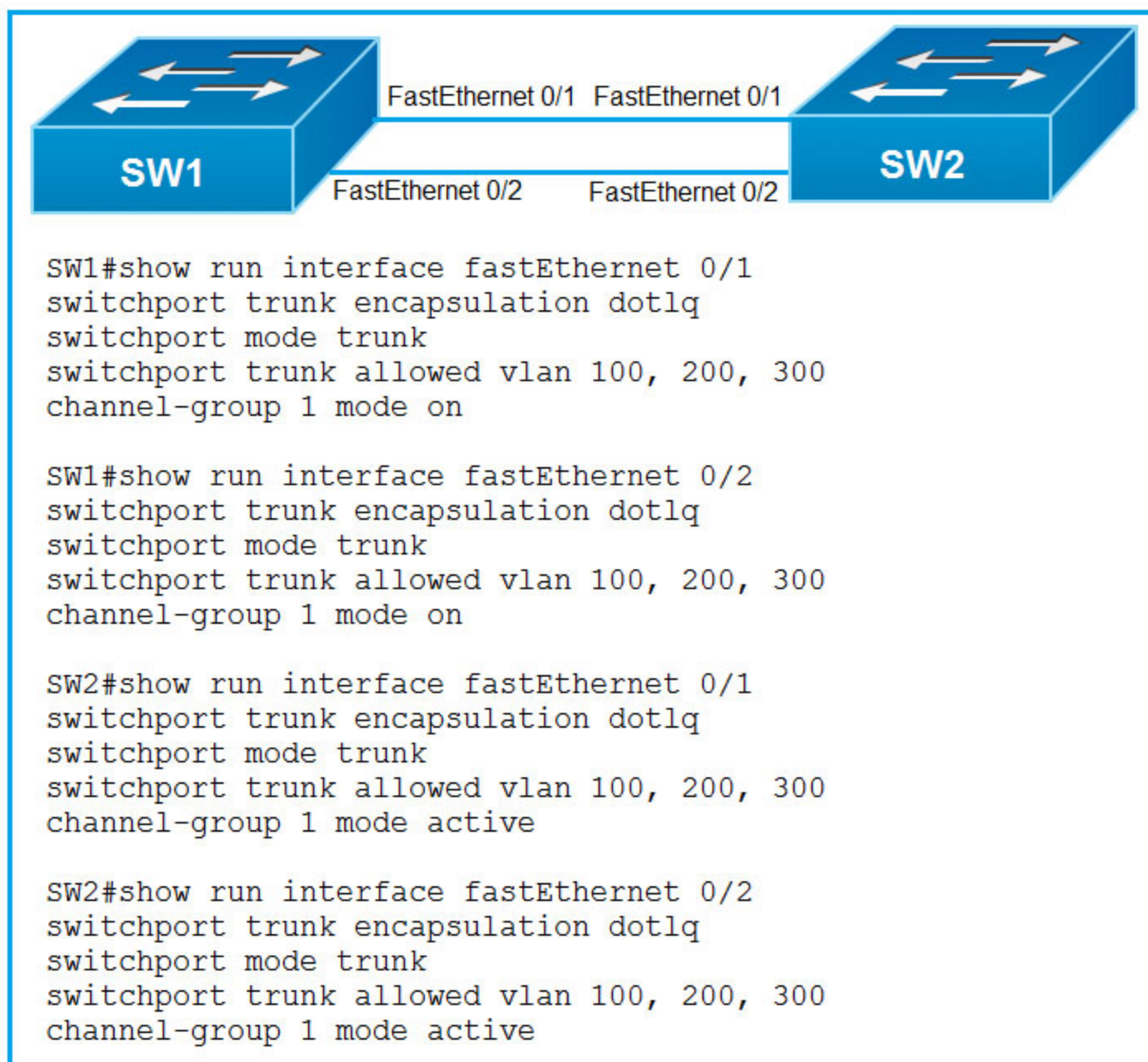


Actual exam question from Cisco's 200-301

Question #: 287

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer built a new L2 LACP EtherChannel between SW1 and SW2 and executed these show commands to verify the work establish an LACP port channel?

- A. Change the channel-group mode on SW1 to desirable
- B. Change the channel-group mode on SW1 to active or passive
- C. Change the channel-group mode on SW2 to auto
- D. Configure the interface port-channel 1 command on both switches

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 288

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. For security reasons, automatic neighbor discovery must be disabled on the R5 Gi0/1 interface. These tasks must be completed:

- ⇒ Disable all neighbor discovery methods on R5 interface Gi0/1
- ⇒ Permit neighbor discovery on R5 interface Gi0/2.
- ⇒ Verify there are no dynamically learned neighbors on R5 interface Gi0/1.
- ⇒ Display the IP address of R6's interface Gi0/2

Which configuration must be used?

- A. `R5(config)#int Gi0/1 R5(config-if)#no cdp enable R5(config-if)#exit R5(config)#lldp run R5(config)#no cdp run R5#sh cdp neighbor detail R5#sh lldp neighbor`
- B. `R5(config)#int Gi0/1 R5(config-if)#no cdp enable R5(config-if)#exit R5(config)#no lldp run R5(config)#cdp run R5#sh cdp neighbor R5#sh lldp neighbor`
- C. `R5(config)#int Gi0/1 R5(config-if)#no cdp run R5(config-if)#exit R5(config)#lldp run R5(config)#cdp enable R5#sh cdp neighbor R5#sh lldp neighbor`
- D. `R5(config)#int Gi0/1 R5(config-if)#no cdp enable R5(config-if)#exit R5(config)#no lldp run R5(config)#cdp run R5#sh cdp neighbor detail R5#sh lldp neighbor`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 289

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two spanning-tree states are bypassed on an interface running PortFast? (Choose two.)

- A. disabled
- B. listening
- C. learning
- D. blocking
- E. forwarding

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 290

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the management connection types from the left onto the definitions on the right.

Select and Place:

console

supports clear-text connections  
to the controller CLI

HTTPS

supports encrypted access to CLI  
and a secure channel for data transfer

SSH

supports physical connections over  
a serial cable

Telnet

supports secure web access  
for management of the device

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 291

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer is configuring data and voice services to pass through the same port. The designated switch interface fastethernet0/1 must transmit packets using the same priority for data when they are received from the access port of the IP phone. Which configuration must be used?

- A. interface fastethernet0/1 switchport voice vlan dot1p
- B. interface fastethernet0/1 switchport priority extend cos 7
- C. interface fastethernet0/1 switchport voice vlan untagged
- D. interface fastethernet0/1 switchport priority extend trust

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 292

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Switch1#show etherchannel summary
Flags:      D - down          P - in port-channel
            I - stand-alone  s - suspended
            H - Hot-standby (LACP only)
            R - Layer3       S - Layer2
            U - in use       f - failed to allocate aggregator
            u - unsuitable for bundling
            w - waiting to be aggregated
            d - default port
```

```
Number of channel-groups in use: 1
Number of aggregators:           1
Group Port-channel Protocol       Ports
-----+-----+-----+-----
1          Pol (SD)                LACP          Fa0/2 (I) Fa0/1 (I)
```

```
Switch1#show run
Building configuration...
interface Port-channel1
!
interface FastEthernet0/1
  channel-group 1 mode passive
!
interface FastEthernet0/2
  channel-group 1 mode passive
```

```
Switch2#show run
Building configuration...
interface Port-channel1
!
interface FastEthernet0/1
  channel-group 1 mode passive
!
interface FastEthernet0/2
  channel-group 1 mode passive
```

Refer to the exhibit. Which change to the configuration on Switch2 allows the two switches to establish an EtherChannel?

- A. Change the LACP mode to desirable
- B. Change the protocol to PAgP and use auto mode
- C. Change the LACP mode to active
- D. Change the protocol to EtherChannel mode on

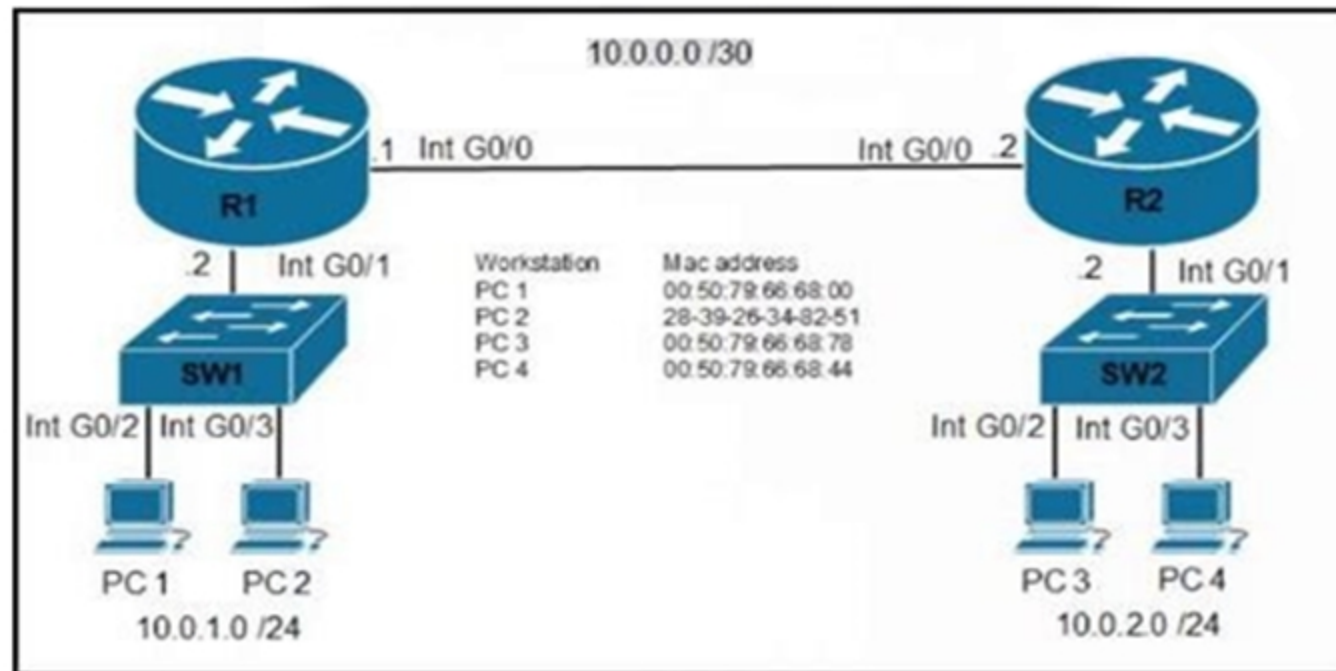
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 293

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer must configure the interface that connects to PC1 and secure it in a way that only PC1 is allowed to use the port. No VLAN tagging can be used except for a voice VLAN. Which command sequence must be entered to configure the switch?

- A. SW1(config-if)#switchport mode dynamic auto SW1(config-if)#switchport port-security SW1(config-if)#switchport port-security violation restrict
- B. SW1(config-if)#switchport mode nonegotiate SW1(config-if)#switchport port-security SW1(config-if)#switchport port-security maximum 1
- C. SW1(config-if)#switchport mode access SW1(config-if)#switchport port-security SW1(config-if)#switchport port-security mac-address 0050.7966.6800
- D. SW1(config-if)#switchport mode dynamic desirable SW1(config-if)#switchport port-security mac-address 0050.7966.6800 SW1(config-if)#switchport port-security mac-address sticky

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 294

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which protocol must be implemented to support separate authorization and authentication solutions for wireless APs?

- A. RADIUS
- B. TACACS+
- C. 802.1X
- D. Kerberos

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 295

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which port type supports the spanning-tree portfast command without additional configuration?

- A. trunk ports
- B. Layer 3 sub interfaces
- C. Layer 3 main interfaces
- D. access ports

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 296

Topic #: 1

[\[All 200-301 Questions\]](#)

```
SW1#show spanning-tree vlan 30

VLAN0030
Spanning tree enabled protocol rstp
Root ID    Priority          32798
           Address        0025.63e9.c800
           Cost          19
           Port        1 (FastEthernet 2/1)
           Hello Time   2 sec
           Max Age     30 sec
           Forward Delay 20 sec
```

[Output suppressed]

Refer to the exhibit. What are two conclusions about this configuration? (Choose two.)

- A. The spanning-tree mode is Rapid PVST+
- B. This is the root bridge
- C. The spanning-tree mode is PVST+
- D. The designated port is FastEthernet 2/1
- E. The root port is FastEthernet 2/1

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 297

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A Cisco engineer must configure a single switch interface to meet these requirements:

⇒ Accept untagged frames and place them in VLAN 20

Accept tagged frames in VLAN 30 when CDP detects a Cisco IP phone

▪

Which command set must the engineer apply?

- A. `switchport mode dynamic desirable switchport access vlan 20 switchport trunk allowed vlan 30 switchport voice vlan 30`
- B. `switchport mode access switchport access vlan 20 switchport voice vlan 30`
- C. `switchport mode dynamic auto switchport trunk native vlan 20 switchport trunk allowed vlan 30 switchport voice vlan 30`
- D. `switchport mode trunk switchport access vlan 20 switchport voice vlan 30`

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 298

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What does a switch use to build its MAC address table?

- A. VTP
- B. DTP
- C. ingress traffic
- D. egress traffic

Show Suggested Answer



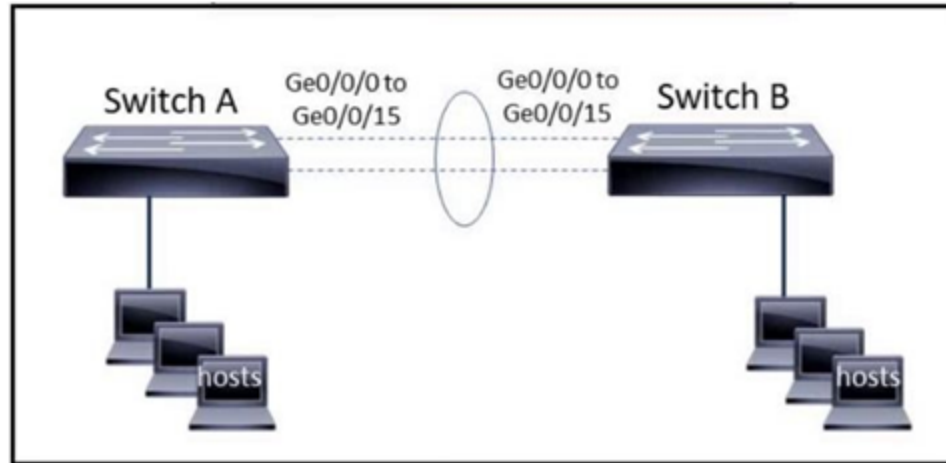


Actual exam question from Cisco's 200-301

Question #: 299

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The EtherChannel is configured with a speed of 1000 and duplex as full on both ends of channel group 1. What is the next step to configure the channel on switch A to respond to but not initiate LACP communication?

- A. interface range gigabitethernet0/0/0-15 channel-group 1 mode on
- B. interface range gigabitethernet0/0/0-15 channel-group 1 mode desirable
- C. interface port-channel 1 channel-group 1 mode auto
- D. interface port-channel 1 channel-group 1 mode passive

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 300

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command entered on a switch configured with Rapid PVST+ listens and learns for a specific time period?

- A. `switch(config)#spanning-tree vlan 1 priority 4096`
- B. `switch(config)#spanning-tree vlan 1 hello-time 10`
- C. `switch(config)#spanning-tree vlan 1 max-age 6`
- D. `switch(config)#spanning-tree vlan 1 forward-time 20`

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 301

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What must a network administrator consider when deciding whether to configure a new wireless network with APs in autonomous mode or APs running in cloud- based mode?

- A. Autonomous mode APs are less dependent on an underlay but more complex to maintain than APs in cloud-based mode.
- B. Cloud-based mode APs relay on underlays and are more complex to maintain than APs in autonomous mode.
- C. Cloud-based mode APs are easy to deploy but harder to automate than APs in autonomous mode.
- D. Autonomous mode APs are easy to deploy and automate than APs in cloud-based mode.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 302

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When a switch receives a frame for an unknown destination MAC address, how is the frame handled?

- A. flooded to all ports except the origination port
- B. forwarded to the first available port
- C. broadcast to all ports on the switch
- D. inspected and dropped by the switch

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 303

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which state is bypassed in Rapid PVST+ when PortFast is enabled on a port?

- A. blocking
- B. forwarding
- C. learning
- D. discarding

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 304

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What happens when a switch receives a frame with a destination MAC address that recently aged out?

- A. The switch floods the frame to all ports in all VLANs except the port that received the frame.
- B. The switch floods the frame to all ports in the VLAN except the port that received the frame.
- C. The switch references the MAC address aging table for historical addresses on the port that received the frame.
- D. The switch drops the frame and learns the destination MAC address again from the port that received the frame.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 305

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of store-and forward switching?

- A. It reduces latency by eliminating error checking within the frame
- B. It produces an effective level of error-free network traffic using CRCs.
- C. It buffers frames and forwards regardless of errors within the frames.
- D. It forwards a frame by checking only the destination MAC address

Show Suggested Answer

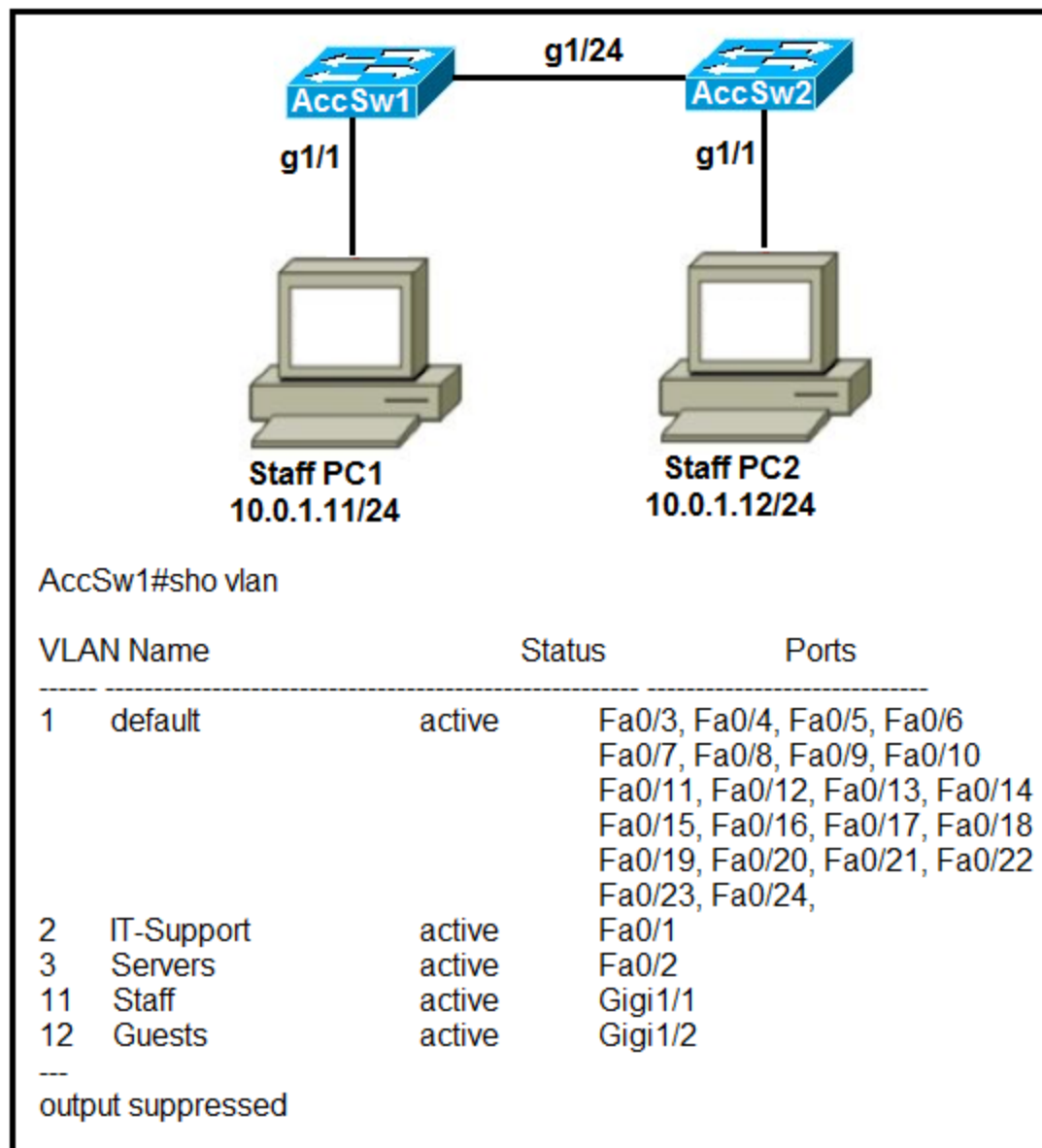


Actual exam question from Cisco's 200-301

Question #: 306

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Switch AccSw1 has just been added to the network along with PC2. All VLANs have been implemented on AccSw2. How must the ports on AccSw2 be configured to establish Layer 2 connectivity between PC1 and PC2?

- A. interface GigabitEthernet1/2 switchport mode access switchport access vlan 2 ! interface GigabitEthernet1/24 switchport mode trunk
- B. interface GigabitEthernet1/1 switchport mode access switchport access vlan 11 ! interface GigabitEthernet1/24 switchport mode trunk
- C. interface GigabitEthernet1/24 switchport mode trunk switchport trunk allowed vlan 11, 12 ! interface GigabitEthernet1/1 switchport access vlan 11
- D. interface GigabitEthernet1/2 switchport mode access switchport access vlan 12 ! interface GigabitEthernet1/24 switchport mode trunk switchport trunk allowed vlan 11, 12

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 307

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Switch2# show lldp
Global LLDP Information
  Status: ACTIVE
  LLDP advertisements are sent every 30 seconds
  LLDP hold time advertised is 120 seconds
  LLDP interface reinitialization delay is 2 seconds
```

Refer to the exhibit. A network engineer must update the configuration on Switch2 so that it sends LLDP packets every minute and the information sent via LLDP is refreshed every 3 minutes. Which configuration must the engineer apply?

- A. Switch2(config)#lldp timer 60 Switch2(config)#lldp tlv-select 180
- B. Switch2(config)#lldp timer 60 Switch2(config)#lldp holdtime 180
- C. Switch2(config)#lldp timer 1 Switch2(config)#lldp holdtime 3
- D. Switch2(config)#lldp timer 1 Switch2(config)#lldp tlv-select 3

Show Suggested Answer

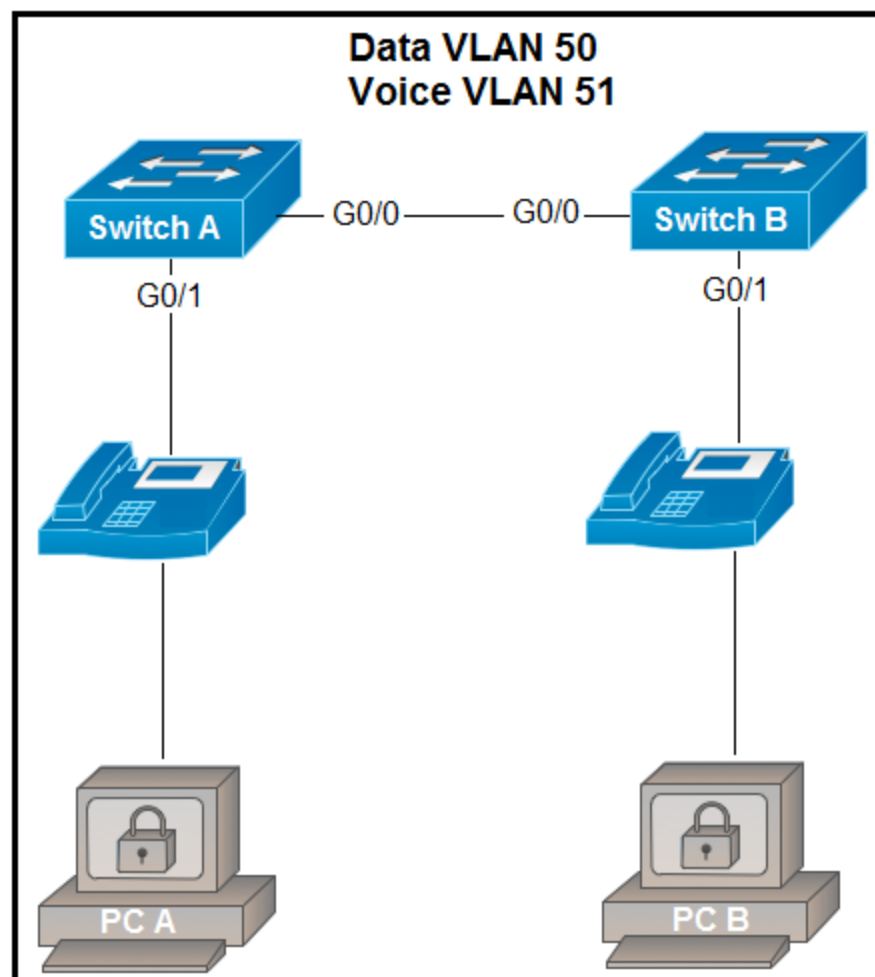


Actual exam question from Cisco's 200-301

Question #: 308

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Switch A is newly configured. All VLANs are present in the VLAN database. The IP phone and PC A on Gi0/1 must be configured for the appropriate VLANs to establish connectivity between the PCs. Which command set fulfills the requirement?

- A. `SwitchA(config-if)#switchport mode access` `SwitchA(config-if)#switchport access vlan 50` `SwitchA(config-if)#switchport voice vlan 51`
- B. `SwitchA(config-if)#switchport mode trunk` `SwitchA(config-if)#switchport trunk allowed vlan add 50, 51` `SwitchA(config-if)#switchport voice vlan dot1p`
- C. `SwitchA(config-if)#switchport mode trunk` `SwitchA(config-if)#switchport trunk allowed vlan 50, 51` `SwitchA(config-if)#mis qos trust cos`
- D. `SwitchA(config-if)#switchport mode access` `SwitchA(config-if)#switchport access vlan 50` `SwitchA(config-if)#switchport voice vlan untagged`

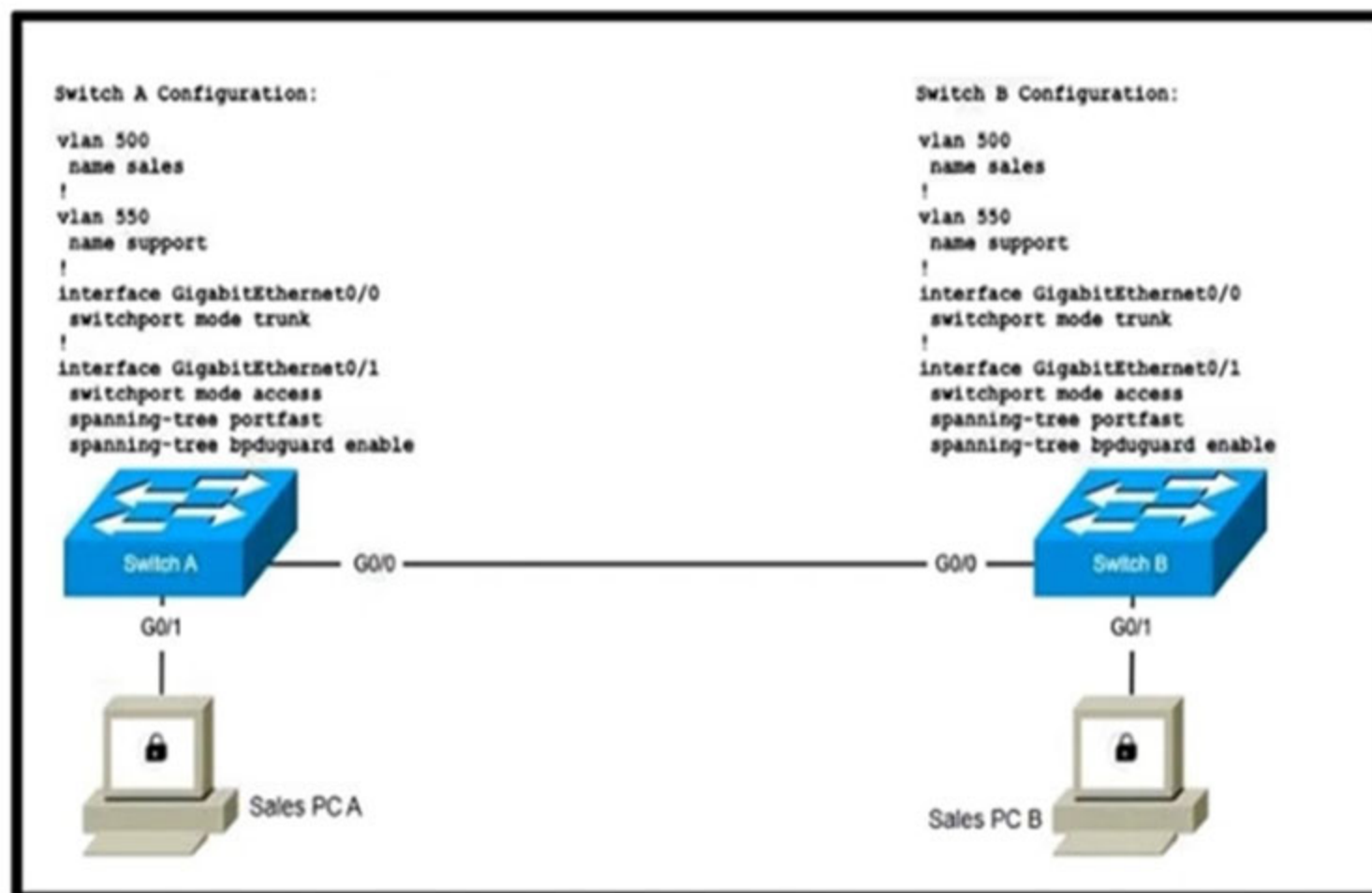
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 309

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Two new switches are being installed. The remote monitoring team uses the support network to monitor both switches. Which configuration is the next step to establish a Layer 2 connection between the two PCs?

- A. SwitchA(config)#interface GigabitEthernet0/1 SwitchA(config-if)#switchport access vlan 500 SwitchB(config)#interface GigabitEthernet0/1 SwitchB(config-if)#switchport access vlan 500
- B. SwitchA(config)#interface GigabitEthernet0/1 SwitchA(config-if)#switchport mode trunk SwitchB(config)#interface GigabitEthernet0/1 SwitchB(config-if)#switchport mode trunk
- C. SwitchA(config)#interface GigabitEthernet0/0 SwitchA(config-if)#switchport trunk allowed vlan 500, 550 SwitchB(config)#interface GigabitEthernet0/0 SwitchB(config-if)#switchport trunk allowed vlan 500, 550
- D. SwitchA(config)#interface GigabitEthernet0/0 SwitchA(config-if)#spanning-tree portfast SwitchA(config-if)#spanning-tree bpduguard enable SwitchB(config)#interface GigabitEthernet0/0 SwitchB(config-if)#spanning-tree portfast SwitchB(config-if)#spanning-tree bpduguard enable

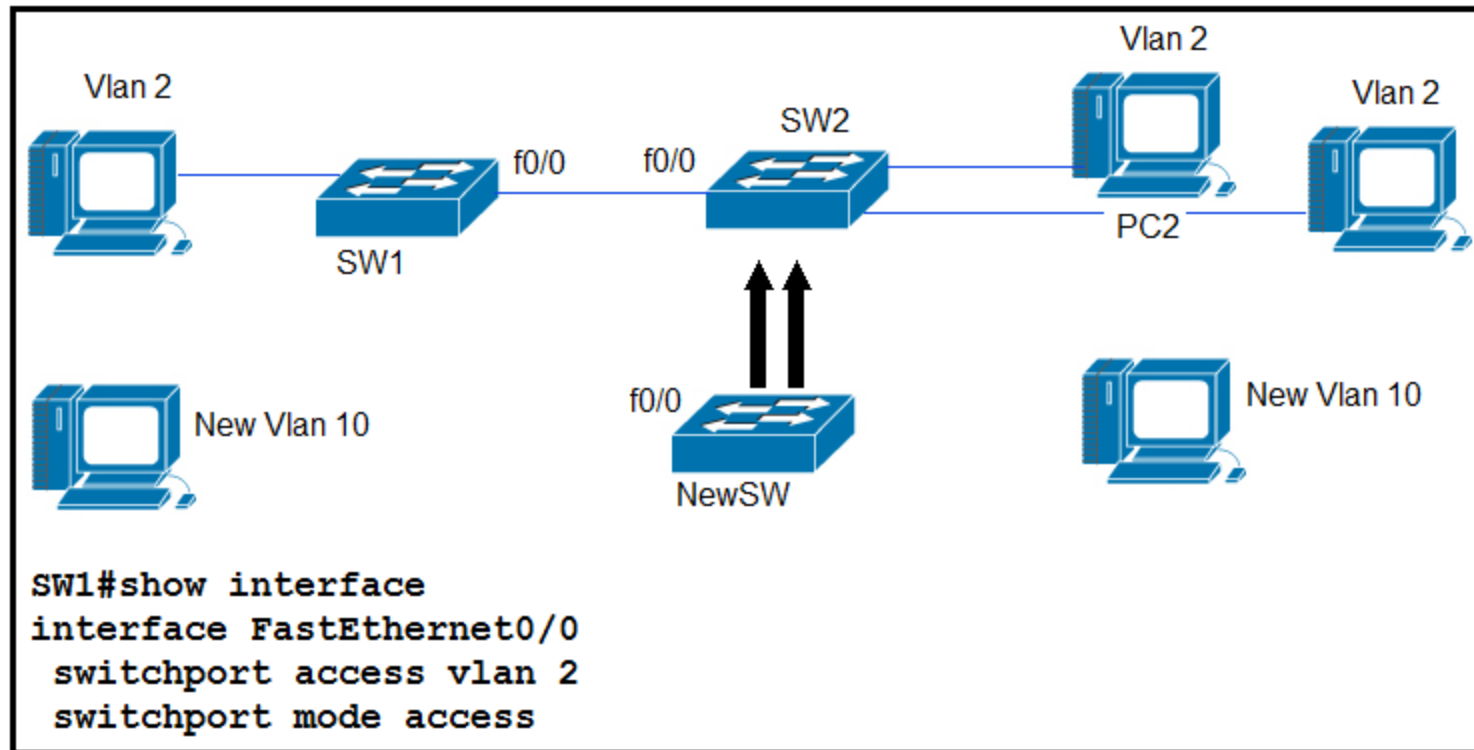
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 310

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer is configuring a new Cisco switch, NewSW, to replace SW2. The details have been provided:

- ⇒ Switches SW1 and SW2 are third-party devices without support for trunk ports.
- ⇒ The existing connections must be maintained between PC1, PC2, and PC3.
- ⇒ Allow the switch to pass traffic from future VLAN 10.

Which configuration must be applied?

- A. NewSW(config)#interface f0/0 NewSW(config-if)#switchport mode trunk NewSW(config-if)#switchport trunk native vlan 10 NewSW(config-if)#switchport trunk native vlan 10
- B. NewSW(config)#interface f0/0 NewSW(config-if)#switchport mode access NewSW(config-if)#switchport trunk allowed vlan 2, 10 NewSW(config-if)#switchport trunk native vlan 2
- C. NewSW(config)#interface f0/0 NewSW(config-if)#switchport mode access NewSW(config-if)#switchport trunk allowed vlan 2, 10 NewSW(config-if)#switchport trunk native vlan 10
- D. NewSW(config)#interface f0/0 NewSW(config-if)#switchport mode trunk NewSW(config-if)#switchport trunk allowed vlan 2, 10 NewSW(config-if)#switchport trunk native vlan 2

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 311

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which WLC interface provides out-of-band management in the Cisco Unified Wireless Network Architecture?

- A. AP-Manager
- B. service port
- C. dynamic
- D. virtual

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 312

Topic #: 1

[\[All 200-301 Questions\]](#)

The screenshot shows the configuration page for a WLAN, specifically the Security tab. The configuration is as follows:

- General** | **Security** | QoS | Policy-Mapping | Advanced
- Layer 2** | **Layer 3** | **AAA Servers**
- Layer 2 Security: WPA+WPA2 (dropdown)
- MAC Filtering:
- Fast Transition**
- Fast Transition:
- Protected Management Frame**
- PMF: Required (dropdown)
- WPA+WPA2 Parameters**
- WPA Policy:
- WPA2 Policy:
- WPA2 Encryption:  AES  TKIP
- OSEN Policy:
- Authentication Key Management**
- 802.1X:  Enable
- CCKM:  Enable
- PSK:  Enable
- FT 802.1X:  Enable
- FT PSK:  Enable
- PSK Format: ASCII (dropdown)
- WPA gtk-randomize State: Disable (dropdown)

Refer to the exhibit. The network engineer is configuring a new WLAN and is told to use a setup password for authentication instead of the RADIUS servers. Which additional set of tasks must the engineer perform to complete the configuration?

- A. Disable PMF Enable PSK Enable 802.1x
- B. Select WPA Policy Enable CCKM Enable PSK
- C. Select WPA Policy Select WPA2 Policy Enable FT PSK
- D. Select WPA2 Policy Disable PMF Enable PSK

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 313

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which mode must be set for Aps to communicate to a Wireless LAN Controller using the Control and Provisioning of Wireless Access Points (CAPWAP) protocol?

- A. route
- B. bridge
- C. lightweight
- D. autonomous

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 314

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which switch technology establishes a network connection immediately when it is plugged in?

- A. PortFast
- B. BPDU guard
- C. UplinkFast
- D. BackboneFast

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 315

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command on a port enters the forwarding state immediately when a PC is connected to it?

- A. `switch(config)#spanning-tree portfast default`
- B. `switch(config)#spanning-tree portfast bpduguard default`
- C. `switch(config-if)#spanning-tree portfast trunk`
- D. `switch(config-if)#no spanning-tree portfast`

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 316

Topic #: 1

[\[All 200-301 Questions\]](#)

---

If a switch port receives a new frame while it is actively transmitting a previous frame, how does it process the frames?

- A. The new frame is delivered first, the previous frame is dropped, and a retransmission request is sent
- B. The previous frame is delivered, the new frame is dropped, and a retransmission request is sent
- C. The new frame is placed in a queue for transmission after the previous frame
- D. The two frames are processed and delivered at the same time

Show Suggested Answer



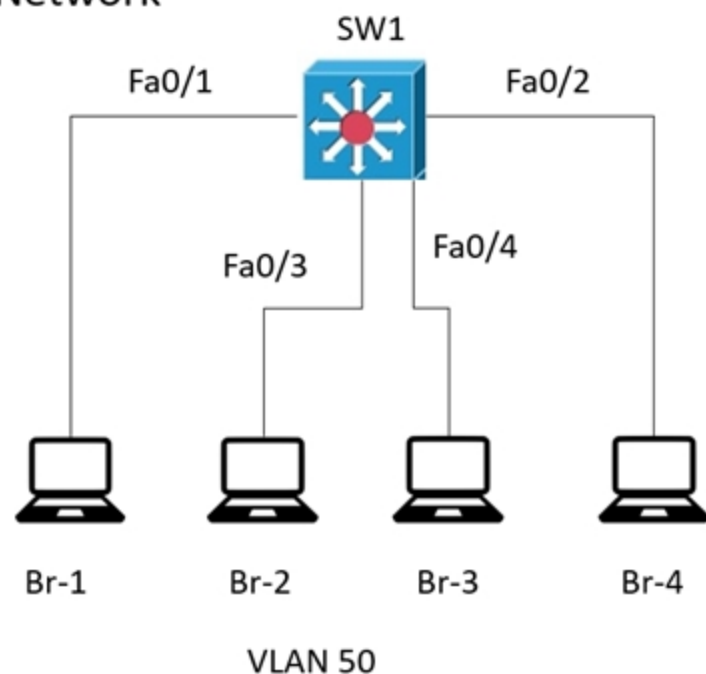
Actual exam question from Cisco's 200-301

Question #: 317

Topic #: 1

[\[All 200-301 Questions\]](#)

## Branch Network



Refer to the exhibit. The entire MAC address table for SW1 is shown here:

### SW1#show mac-address-table

#### Mac Address Table

```
-----
```

Vlan	Mac Address	Type	Ports
50	000c.8590.bb7d	DYNAMIC	Fa0/1
50	010a.7a17.45bc	DYNAMIC	Fa0/3
50	7aa7.4041.0525	DYNAMIC	Fa0/4

SW1#

What does SW1 do when Br-4 sends a frame for Br-2

- A. It performs a lookup in the MAC address table for Br-4 and discards the frame due to a missing entry.
- B. It floods the frame out on all ports except on the port where Br-2 is connected.
- C. It inserts the source MAC address and port into the forwarding table and forwards the frame to Br-2.
- D. It maps the Layer 2 MAC address for Fa0/3 to the Layer 3 IP address and forwards the frame.

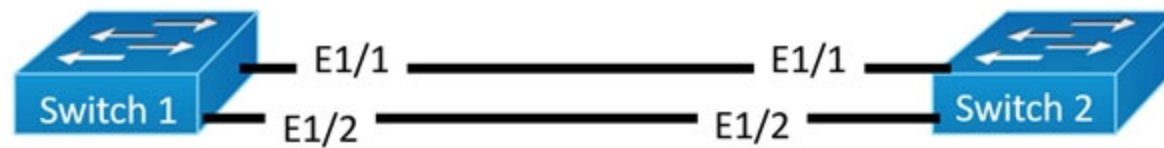
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 319

Topic #: 1

[\[All 200-301 Questions\]](#)



```
Interface Po1
switchport
switchport mode access
switchport access vlan 2
```

```
Interface E1/1 - 2
Switchport
Switchport mode access
Switchport access vlan 2
```

```
Interface Po1
switchport
switchport mode access
switchport access vlan 2
```

```
Interface E1/1 - 2
Switchport
Switchport mode access
Switchport access vlan 2
```

Refer to the exhibit. An engineer is configuring an EtherChannel using LACP between Switches 1 and 2.

Which configuration must be applied so that only Switch 1 sends LACP initiation packets?

A.

```
Switch1(config-if)#channel-group 1 mode on
```

```
Switch2(config-if)#channel-group 1 mode active
```

B.

```
Switch1(config-if)#channel-group 1 mode active
```

```
Switch2(config-if)#channel-group 1 mode passive
```

C.

```
Switch1(config-if)#channel-group 1 mode passive
```

```
Switch2(config-if)#channel-group 1 mode active
```

D.

```
Switch1(config-if)#channel-group 1 mode on
```

```
Switch2(config-if)#channel-group 1 mode passive
```

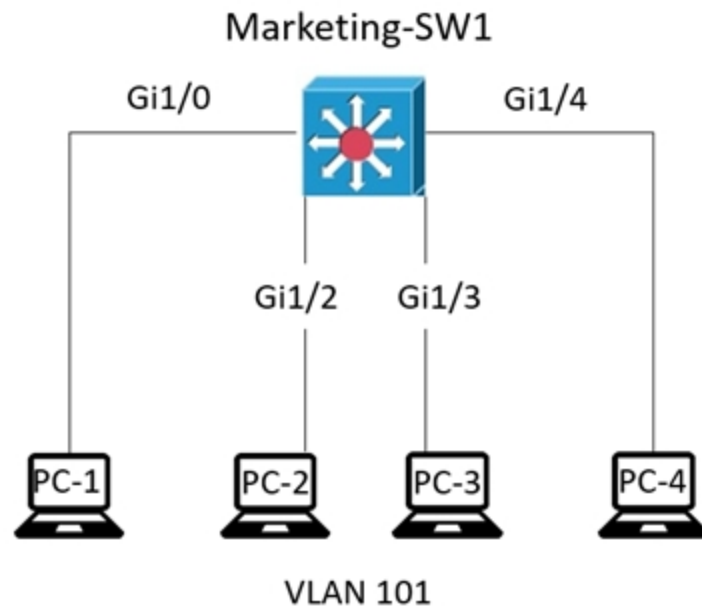
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 320

Topic #: 1

[\[All 200-301 Questions\]](#)



```
Marketing-SW1#show mac-address-table  
Mac Address Table
```

```
-----  
VLAN      MAC Address      Type      Ports  
101       000a.000a.000a   DYNAMIC   Gi1/0  
101       3986.3986.3986   DYNAMIC   Gi1/2  
101       00d0.00d0.00d0   DYNAMIC   Gi1/3
```

Refer to the exhibit. The entire Marketing-SW1 MAC address table is shown here:

What does the switch do when PC-4 sends a frame to PC-1?

- A. It performs a lookup in the MAC address table and discards the frame due to a missing entry.
- B. It maps the Layer 2 MAC address to the Layer 3 IP address and forwards the frame.
- C. It inserts the source MAC address and port into the table and forwards the frame to PC-1.
- D. It floods the frame out of all ports except on the port where PC-1 is connected.

Show Suggested Answer

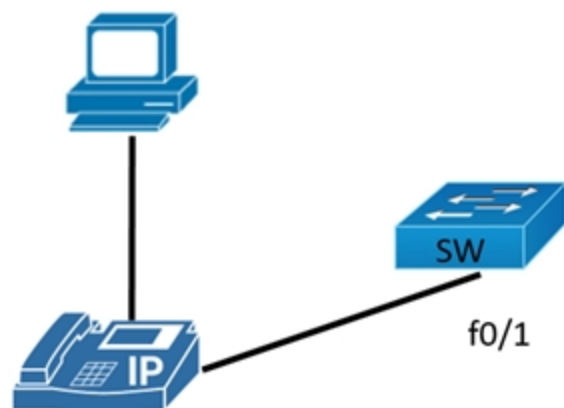
Actual exam question from Cisco's 200-301

Question #: 321

Topic #: 1

[\[All 200-301 Questions\]](#)

Data Vlan 15



Voice Vlan 10

```
SW#show run
Building configuration...
!
interface FastEthernet0/1
  switchport access vlan 15
!
end
```

Refer to the exhibit. All VLANs are present in the VLAN database. Which command sequence must be applied to complete the configuration?

A.

```
interface FastEthernet0/1
switchport mode access
switchport voice vlan 10
```

B.

```
interface FastEthernet0/1
switchport trunk native vlan 10
switchport trunk allowed vlan 10,15
```

C.

```
Interface FastEthernet0/1
switchport trunk allowed vlan add 10
vlan 10
private-vlan isolated
```

D.

```
interface FastEthernet0/1
switchport mode trunk
switchport trunk allowed vlan 10,15
```

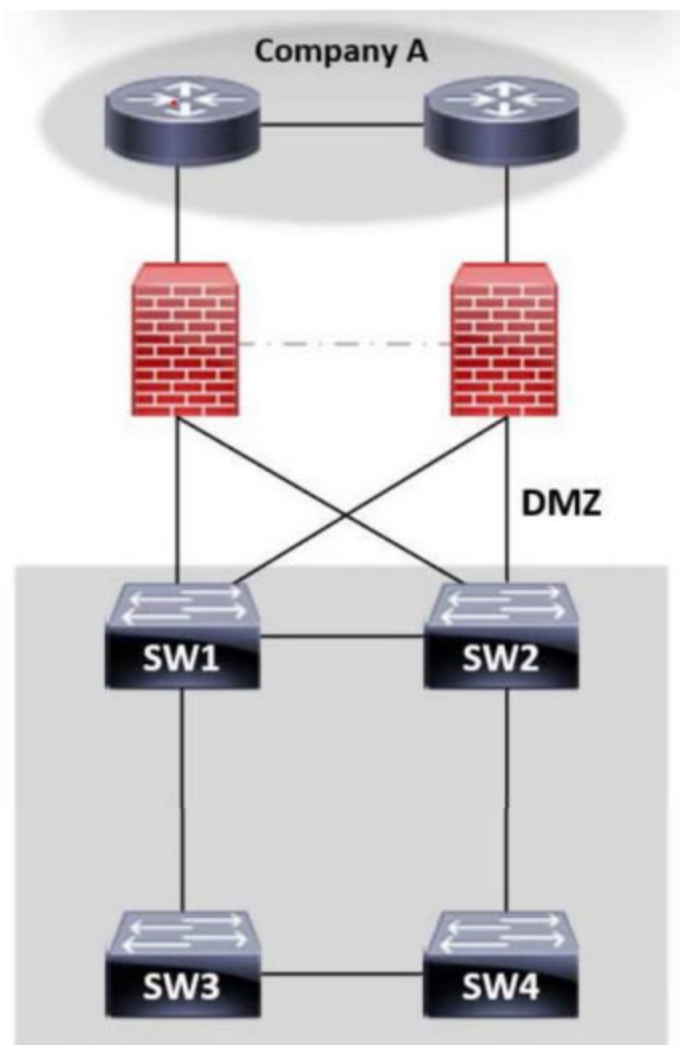
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 322

Topic #: 1

[\[All 200-301 Questions\]](#)



```
SW1: VLAN10 - 32778 0018.1843.3cb0
SW2: VLAN10 - 24586 004a.13e9.3912
SW3: VLAN10 - 28682 0022.55cf.cc00
SW4: VLAN10 - 64000 0022.66ed.a29f
```

Refer to the exhibit. Which switch becomes the root of a spanning tree for VLAN 10 if the primary switch fails and all links are of equal speed?

- A. SW1
- B. SW2
- C. SW3
- D. SW4

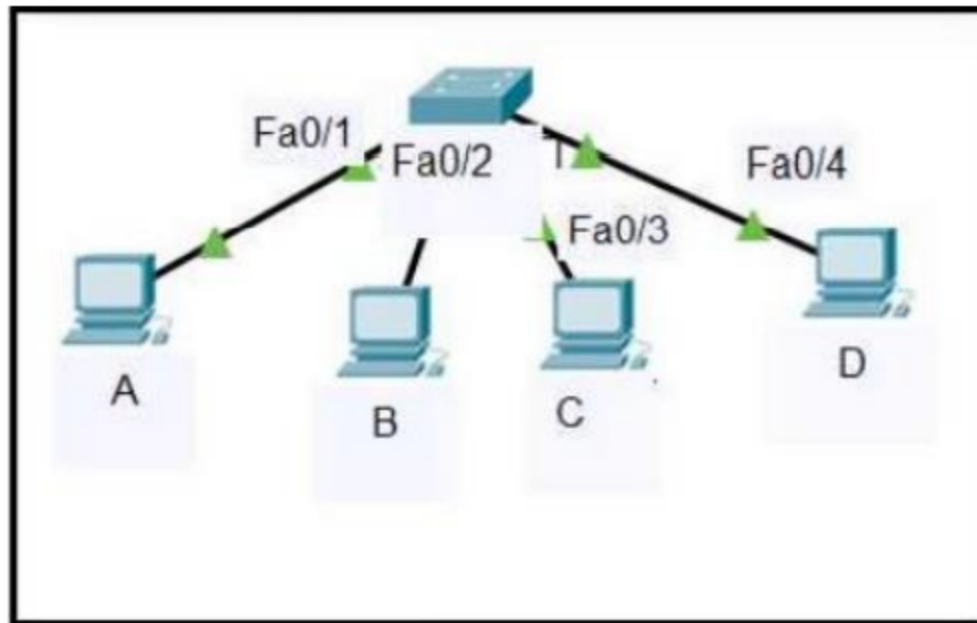
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 323

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Host A sent a data frame destined for host D.

```
SwitchA#show mac-address table Mac Address Table
Vlan Mac Address Type Ports
2 000c.859c.bb7b DYNAMIC Fa0/1
2 0010.11dc.3e91 DYNAMIC Fa0/2
2 0041.39d1.c469 DYNAMIC Fa0/3 Switch A#
```

What does the switch do when it receives the frame from host A?

- A. It floods the frame out of all ports except port Fa0/1
- B. It experiences a broadcast storm
- C. It shuts down the port Fa0/1 and places it in err-disable mode
- D. It drops the frame from the switch CAM table

Show Suggested Answer

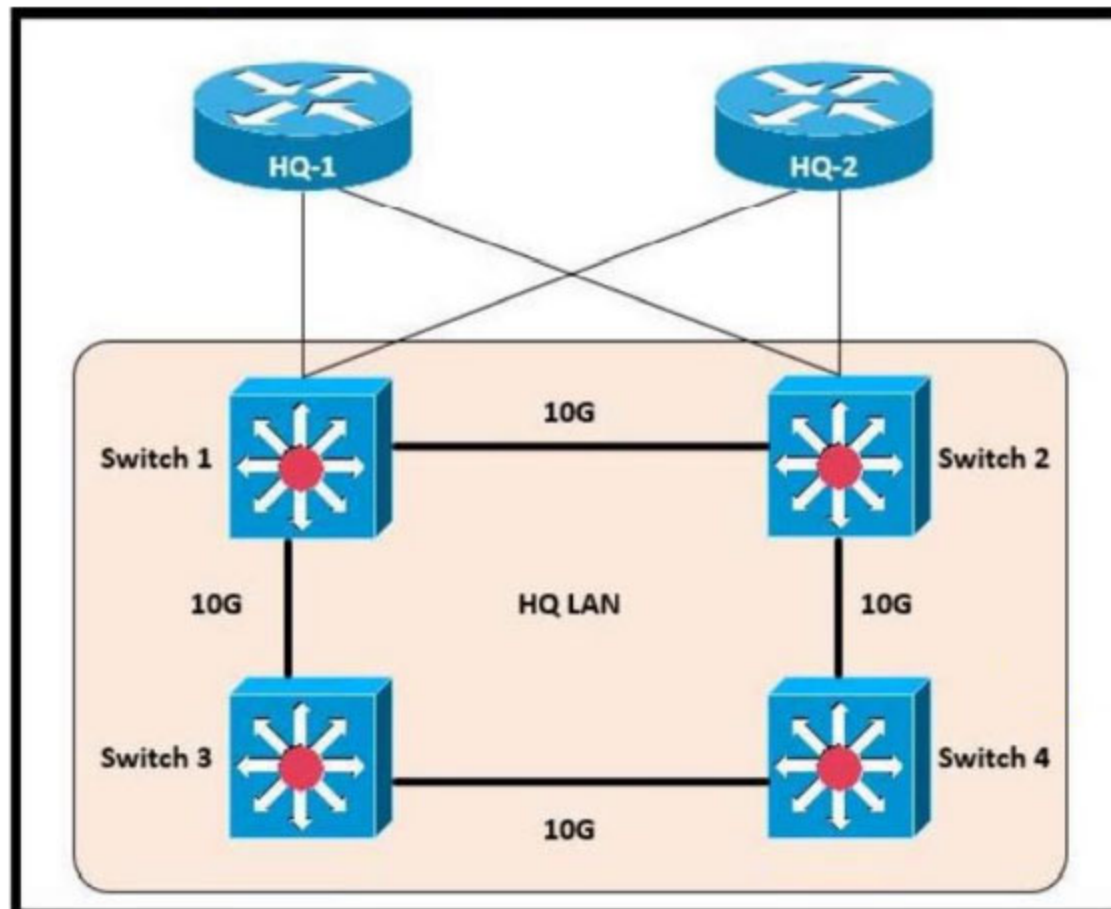


Actual exam question from Cisco's 200-301

Question #: 324

Topic #: 1

[\[All 200-301 Questions\]](#)



Switch 1

BID: 32778 0018.184e.3c00

Switch 2

BID: 24586 001a.e3ff.a680

Switch 3

BID: 28682 0022.55cf.cc00

Switch 4

BID: 64000 0e41.4503.004f

Refer to the exhibit. Which switch becomes the root of the spanning tree?

- A. Switch 1
- B. Switch 2
- C. Switch 3
- D. Switch 4

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 325

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which channel-group mode must be configured when multiple distribution interfaces connected to a WLC are bundled?

- A. Channel-group mode passive.
- B. Channel-group mode on.
- C. Channel-group mode desirable.
- D. Channel-group mode active.

Show Suggested Answer

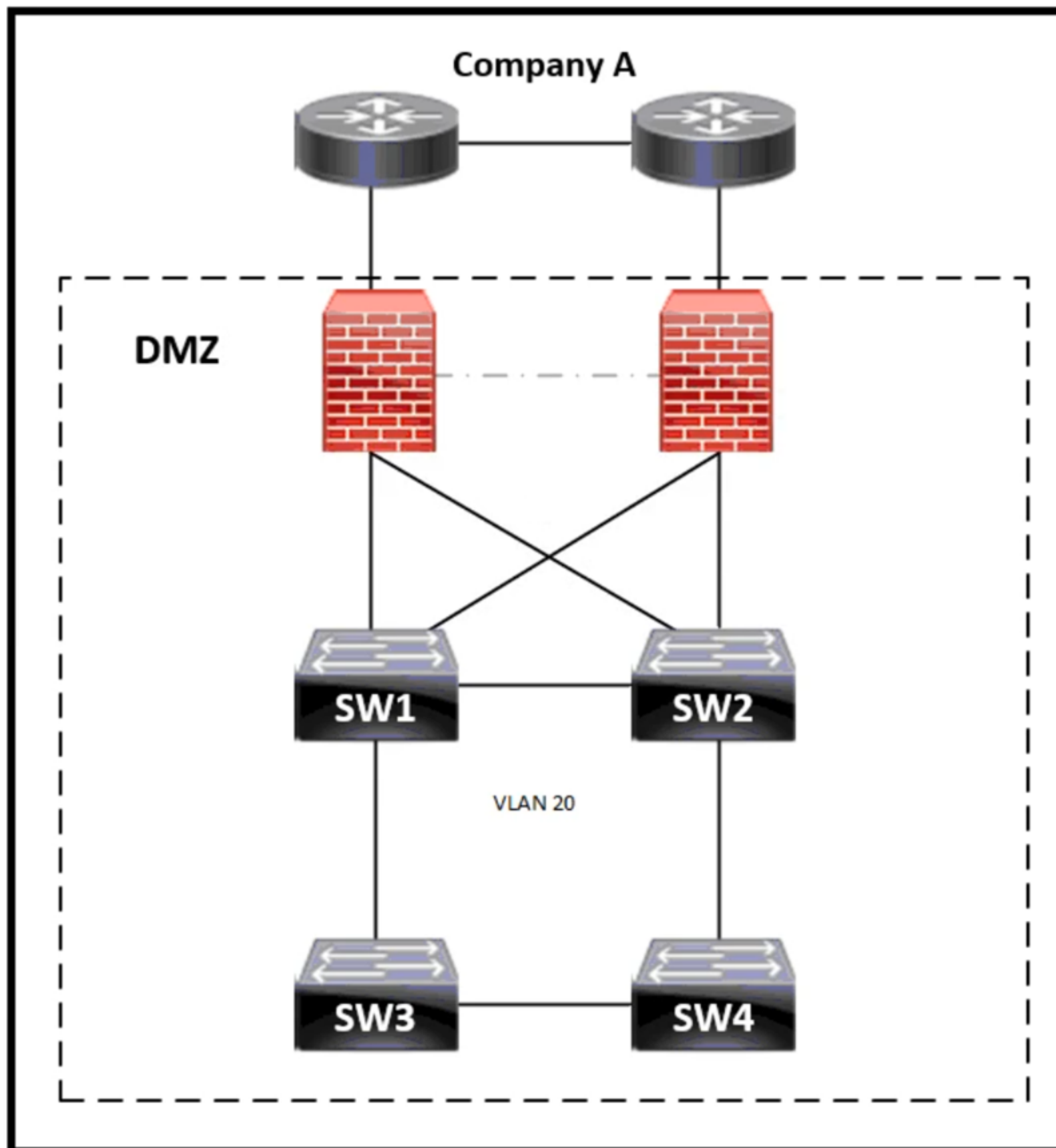


Actual exam question from Cisco's 200-301

Question #: 326

Topic #: 1

[\[All 200-301 Questions\]](#)



SW1 = 24596 0018.184e.3c00

SW2 = 28692 004a.13e9.6900

SW3 = 32788 0022.55cf.dd00

SW4 = 64000 0041.396d.690f

Refer to the exhibit. Which switch become the root of a spanning tree for VLAN 20 if all links are of equal speed?

- A. SW1
- B. SW2
- C. SW3
- D. SW4

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 327

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which Layer 2 switch function encapsulates packets for different VLANs so that the packets transverse the same port and maintain traffic separation between the VLANs?

- A. VLAN marking
- B. VLAN numbering
- C. VLAN DSCP
- D. VLAN tagging

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 328

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which value is the unique identifier that an access point uses to establish and maintain wireless connectivity to wireless network devices?

- A. VLAN ID
- B. SSID
- C. RFID
- D. WLAN ID

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 329

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer must configure neighbor discovery between the company router and an ISP.

```
interface gigabitethernet0/0
description Circuit-ATT4139-84320
duplex full
speed 1000
media-type gbic
negotiation auto
lldp transmit
lldp receive
```

What is the next step to complete the configuration if the ISP uses a third-party router?

- A. Enable LLDP globally.
- B. Disable CDP on gi0/0.
- C. Enable LLDP TLVs on the ISP router.
- D. Disable auto-negotiation.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 330

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the facts about wireless architectures from the left onto the types of access point on the right. Not all options are used.

Select and Place:

- configured and managed by a WLC
- managed from a Web-based dashboard
- accessible for management via Telnet, SSH, or a Web GUI
- supports different operational modes
- supports automatic deployment

### Cloud-Based Access Point

### Lightweight Access Point

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 331

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of MAC learning on a switch?

- A. MAC address learning is disabled by default on all VLANs.
- B. Frames received for a destination MAC address not listed in the address table are dropped.
- C. The MAC address table is used to populate the ARP table.
- D. A static MAC address is manually added to the MAC table.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 332

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What does a switch do when it receives a frame whose destination MAC address is missing from the MAC address table?

- A. It changes the checksum of the frame to a value that indicates an invalid frame.
- B. It updates the CAM table with the destination MAC address of the frame.
- C. It appends the table with a static entry for the MAC and shuts down the port.
- D. It floods the frame unchanged across all remaining ports in the incoming VLAN.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 333

Topic #: 1

[\[All 200-301 Questions\]](#)

---

By default, how long will the switch continue to know a workstation MAC address after the workstation stops sending traffic?

- A. 200 seconds
- B. 300 seconds
- C. 600 seconds
- D. 900 seconds

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 334

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A project objective is to minimize the association time to the different access points as mobile devices move around the office. The ideal solution must cover numerous devices and device types, including laptops, mobile phones, tablets and wireless printers. What must be configured?

- A. 802.11v BSS Max Idle Service
- B. 802.11v Disassociation Imminent
- C. 802.11ax BSS configure
- D. 802.11k neighbor List Dual Band

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 335

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two protocols are used by an administrator for authentication and configuration on access points? (Choose two.)

- A. 802.1Q
- B. RADIUS
- C. Kerberos
- D. TACACS+
- E. 802.1x

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 336

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the statements about access-point modes from the left onto the corresponding modes on the right.

Select and Place:

It supports real-time Wi-Fi client troubleshooting when network engineers are offsite.

It captures and forwards packets on a specific wireless channel.

It enables enhanced RFID-tag location tracking.

It provides air-quality data and interference detection across all enabled channels.

It supports analytics for wireless performance testing.

It supports software that analyzes wireless frames on a remote device.

Monitor

Sensor

Sniffer

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 337

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A WLC sends alarms about a rogue AP, and the network administrator verifies that the alarms are caused by a legitimate autonomous AP. How must the alarms be stopped for the MAC address of the AP?

- A. Remove the AP from WLC management
- B. Place the AP into manual containment.
- C. Manually remove the AP from Pending state.
- D. Set the AP Class Type to Friendly.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 338

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is one reason to implement LAG on a Cisco WLC?

- A. to increase security and encrypt management frames
- B. to enable connected switch ports to failover and use different VLANs
- C. to provide link redundancy and load balancing
- D. to allow for stateful and link-state failover

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 339

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When an access point is seeking to join wireless LAN controller, which message is sent to the AP-Manager interface?

- A. Discovery response
- B. DHCP request
- C. DHCP discover
- D. Discovery request

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 340

Topic #: 1

[\[All 200-301 Questions\]](#)

The screenshot shows the Cisco WLC configuration interface for a new RADIUS Authentication Server. The left sidebar shows the navigation menu with 'RADIUS' expanded. The main configuration area is titled 'RADIUS Authentication Servers > New' and contains the following fields and options:

Field	Value
Server Index (Priority)	1
Server IP Address(Ipv4/Ipv6)	192.168.25.2
Shared Secret Format	ASCII
Shared Secret	*****
Confirm Shared Secret	*****
Key Wrap	<input type="checkbox"/> (Designed for FIPS customers and requires a key wrap compliant RADIUS server)
Port Number	1812
Server Status	Enabled
Support for CoA	Disabled
Server Timeout	2 seconds
Network User	<input type="checkbox"/> Enable
Management	<input type="checkbox"/> Enable
Management Retransmit Timeout	2 seconds
Tunnel Proxy	<input type="checkbox"/> Enable
IPSec	<input type="checkbox"/> Enable

Refer to the exhibit. A network engineer configures the Cisco WLC to authenticate local wireless clients against a RADIUS server. Which task must be performed to complete the process?

- A. Change the Support for CoA to Enabled
- B. Select Enable next to Management
- C. Select Enable next to Network User
- D. Change the Server Status to Disabled

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 341

Topic #: 1

[\[All 200-301 Questions\]](#)

---

After installing a new Cisco ISE server which task must the engineer perform on the Cisco WLC to connect wireless clients on a specific VLAN based on their credentials?

- A. Disable the LAG Mode on Next Reboot.
- B. Enable the Event Driven RRM.
- C. Enable the Allow AAA Override.
- D. Enable the Authorize MIC APs against auth-list or AAA

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 342

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Router R1 is running three different routing protocols. Which route characteristic is used by the router to forward the packet that it receives for destination IP 172.16.32.1?

```
R1# show ip route
```

```
....
```

```
D    172.16.32.0/27    [90/2888597172] via 20.1.1.1  
O    172.16.32.0/19    [110/292094] via 20.1.1.10  
R    172.16.32.0/24    [120/2] via 20.1.1.3
```

- A. longest prefix
- B. administrative distance
- C. cost
- D. metric

Show Suggested Answer


Actual exam question from Cisco's 200-301

Question #: 343

Topic #: 1


[\[All 200-301 Questions\]](#)

Refer to the exhibit. Router R1 Fa0/0 cannot ping router R3 Fa0/1. Which action must be taken in router R1 to help resolve the configuration issue?




**R1**

Fa0/0  
10.10.10.1/24




**R2**

Fa0/0  
10.10.10.2/24



**R3**

Fa0/1  
20.20.20.1/24



**R3**

Fa0/1  
20.20.20.2/24

```
R1#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, 0 - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - DDR, P - periodic downloaded static route

Gateway of last resort is not set

10.0.0.0/24 is subnetted, 1 subnets
C      10.10.10.0 is directly connected, FastEthernet0/0
```

```
R2#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, 0 - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - DDR, P - periodic downloaded static route

Gateway of last resort is not set

20.0.0.0/24 is subnetted, 1 subnets
C      20.20.20.0 is directly connected, FastEthernet0/1
C      10.0.0.0/24 is subnetted, 1 subnets
C      10.10.10.0 is directly connected, FastEthernet0/0
```

```
R3#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, 0 - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - DDR, P - periodic downloaded static route

Gateway of last resort is not set

20.0.0.0/24 is subnetted, 1 subnets
C      20.20.20.0 is directly connected, FastEthernet0/1
      10.0.0.0/24 is subnetted, 1 subnets
S      10.10.10.0 (1/0) via 20.20.20.1
```

- A. set the default gateway as 20.20.20.2
- B. configure a static route with Fa0/1 as the egress interface to reach the 20.20.20.0/24 network
- C. configure a static route with 10.10.10.2 as the next hop to reach the 20.20.20.0/24 network
- D. set the default network as 20.20.20.0/24

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 344

Topic #: 1

[\[All 200-301 Questions\]](#)

---

By default, how does EIGRP determine the metric of a route for the routing table?

- A. It uses the bandwidth and delay values of the path to calculate the route metric.
- B. It uses a default metric of 10 for all routes that are learned by the router.
- C. It counts the number of hops between the receiving and destination routers and uses that value as the metric.
- D. It uses a reference bandwidth and the actual bandwidth of the connected link to calculate the route metric.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 345

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Router R1 must send all traffic without a matching routing-table entry to 192.168.1.1. Which configuration accomplishes this task?

- A. R1#config t R1(config)#ip routing R1(config)#ip route default-route 192.168.1.1
- B. R1#config t R1(config)#ip routing R1(config)#ip route 192.168.1.1 0.0.0.0 0.0.0.0
- C. R1#config t R1(config)#ip routing R1(config)#ip route 0.0.0.0 0.0.0.0 192.168.1.1
- D. R1#config t R1(config)#ip routing R1(config)#ip default-gateway 192.168.1.1

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 346

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A packet is destined for 10.10.1.22. Which static route does the router choose to forward the packet?

- A. ip route 10.10.1.0 255.255.255.240 10.10.255.1
- B. ip route 10.10.1.20 255.255.255.252 10.10.255.1
- C. ip route 10.10.1.16 255.255.255.252 10.10.255.1
- D. ip route 10.10.1.20 255.255.255.254 10.10.255.1

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 347

Topic #: 1

[\[All 200-301 Questions\]](#)

```
EIGRP: 192.168.12.0/24
RIP: 192.168.12.0/27
OSPF: 192.168.12.0/28
```

Refer to the exhibit. How does the router manage traffic to 192.168.12.16?

- A. It chooses the EIGRP route because it has the lowest administrative distance.
- B. It load-balances traffic between all three routes.
- C. It chooses the OSPF route because it has the longest prefix inclusive of the destination address.
- D. It selects the RIP route because it has the longest prefix inclusive of the destination address.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 348

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two reasons for an engineer to configure a floating static route? (Choose two.)

- A. to enable fallback static routing when the dynamic routing protocol fails
- B. to route traffic differently based on the source IP of the packet
- C. to automatically route traffic on a secondary path when the primary path goes down
- D. to support load balancing via static routing
- E. to control the return path of traffic that is sent from the router

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 349

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route
```

```
D    192.168.10.0/24    [90/2679326] via 192.168.1.1
R    192.168.10.0/27    [120/3] via 192.168.1.2
O    192.168.10.0/23    [110/2] via 192.168.1.3
i L1 192.168.10.0/13    [115/30] via 192.168.1.4
```

Refer to the exhibit. How does router R1 handle traffic to 192.168.10.16?

- A. It selects the IS-IS route because it has the shortest prefix inclusive of the destination address
- B. It selects the RIP route because it has the longest prefix inclusive of the destination address
- C. It selects the OSPF route because it has the lowest cost
- D. It selects the EIGRP route because it has the lowest administrative distance

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 350

Topic #: 1

[\[All 200-301 Questions\]](#)

IBGP route 10.0.0.0/30  
RIP route 10.0.0.0/30  
OSPF route 10.0.0.0/16  
OSPF route 10.0.0.0/30  
EIGRP route 10.0.0.1/32

Refer to the exhibit. A router received these five routes from different routing information sources. Which two routes does the router install in its routing table?  
(Choose two.)

- A. OSPF route 10.0.0.0/30
- B. IBGP route 10.0.0.0/30
- C. OSPF route 10.0.0.0/16
- D. EIGRP route 10.0.0.1/32
- E. RIP route 10.0.0.0/30

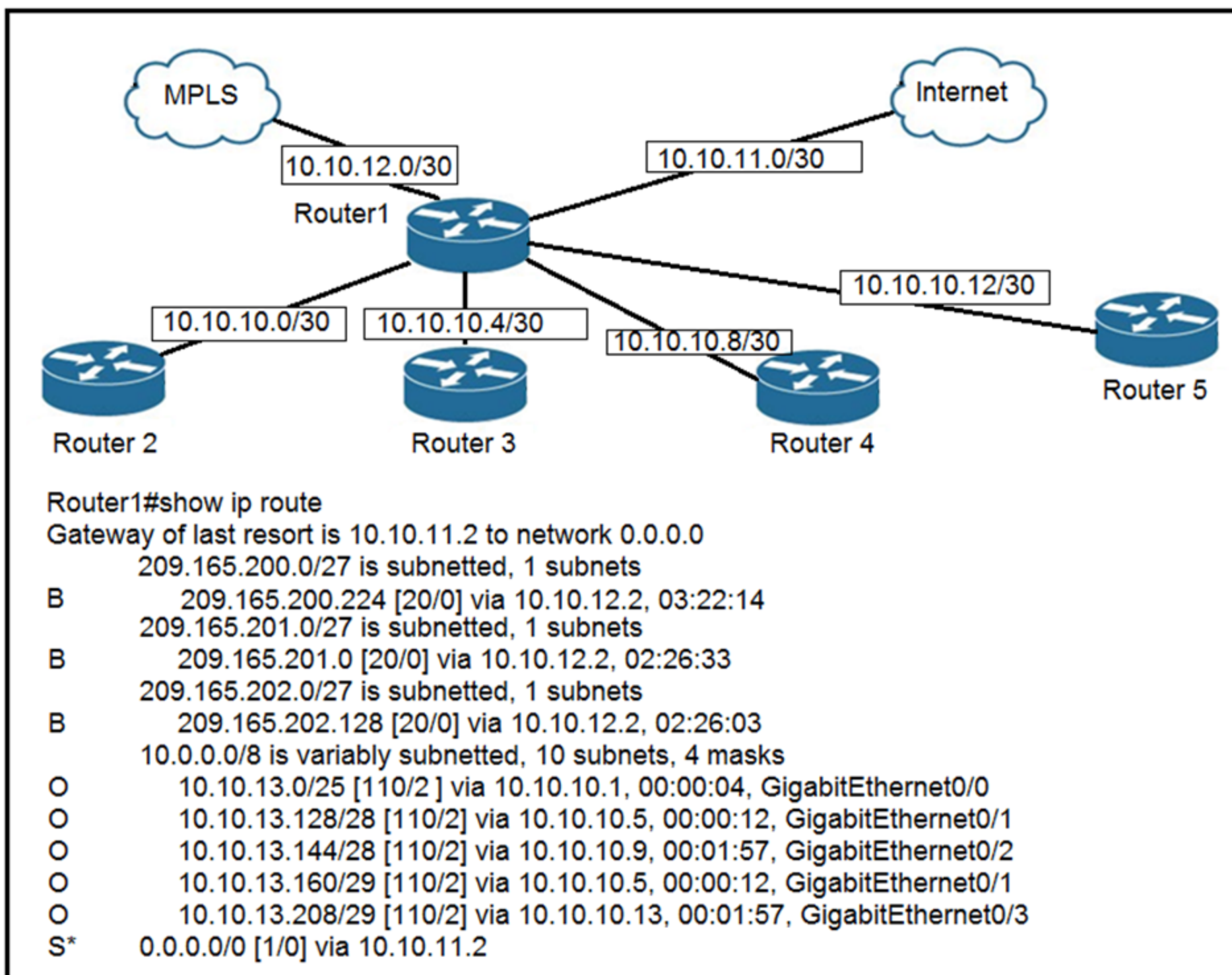
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 351

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. To which device does Router1 send packets that are destined to host 10.10.13.165?

- A. Router2
- B. Router3
- C. Router4
- D. Router5

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 352

Topic #: 1

[\[All 200-301 Questions\]](#)

---

R1 has learned route 10.10.10.0/24 via numerous routing protocols. Which route is installed?

- A. route with the next hop that has the highest IP
- B. route with the lowest cost
- C. route with the lowest administrative distance
- D. route with the shortest prefix length

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 353

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two minimum parameters must be configured on an active interface to enable OSPFV2 to operate? (Choose two.)

- A. OSPF process ID
- B. OSPF MD5 authentication key
- C. OSPF stub flag
- D. IPv6 address
- E. OSPF area

Show Suggested Answer



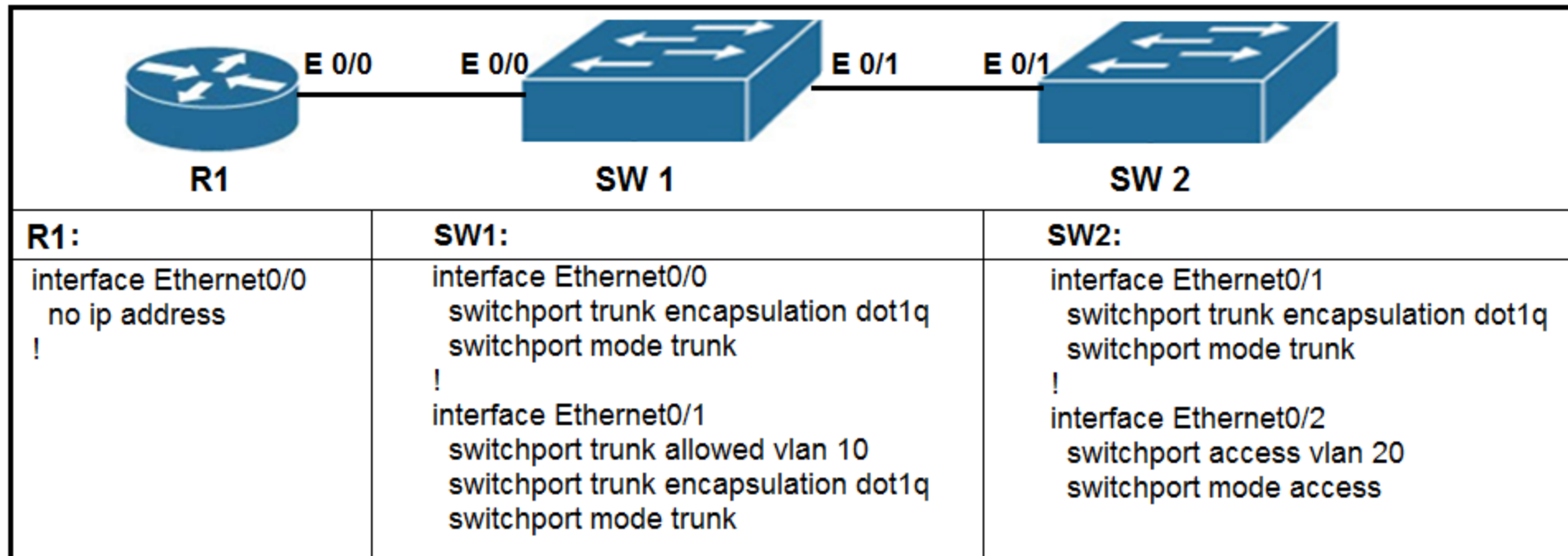
Actual exam question from Cisco's 200-301

Question #: 354

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. What commands are needed to add a sub-interface to Ethernet0/0 on R1 to allow for VLAN 20, with IP address 10.20.20.1/24?



- A. R1(config)#interface ethernet0/0 R1(config-if)#encapsulation dot1q 20 R1(config-if)#ip address 10.20.20.1 255.255.255.0
- B. R1(config)#interface ethernet0/0.20 R1(config-if)#encapsulation dot1q 20 R1(config-if)#ip address 10.20.20.1 255.255.255.0
- C. R1(config)#interface ethernet0/0.20 R1(config-if)#ip address 10.20.20.1 255.255.255.0
- D. R1(config)#interface ethernet0/0 R1(config-if)#ip address 10.20.20.1 255.255.255.0

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 355

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1#show ip interface brief
```

Interface	IP-Address	OK?	Method	Status	Protocol
FastEthernet0/0	unassigned	YES	NVRAM	administratively down	down
GigabitEthernet1/0	192.168.0.1	YES	NVRAM	up	up
GigabitEthernet2/0	10.10.1.10	YES	manual	up	up
GigabitEthernet3/0	10.10.10.20	YES	manual	up	up
GigabitEthernet4/0	unassigned	YES	NVRAM	administratively down	down
Loopback0	172.16.15.10	YES	manual		

Refer to the exhibit. What does router R1 use as its OSPF router-ID?

- A. 10.10.1.10
- B. 10.10.10.20
- C. 172.16.15.10
- D. 192.168.0.1

Show Suggested Answer

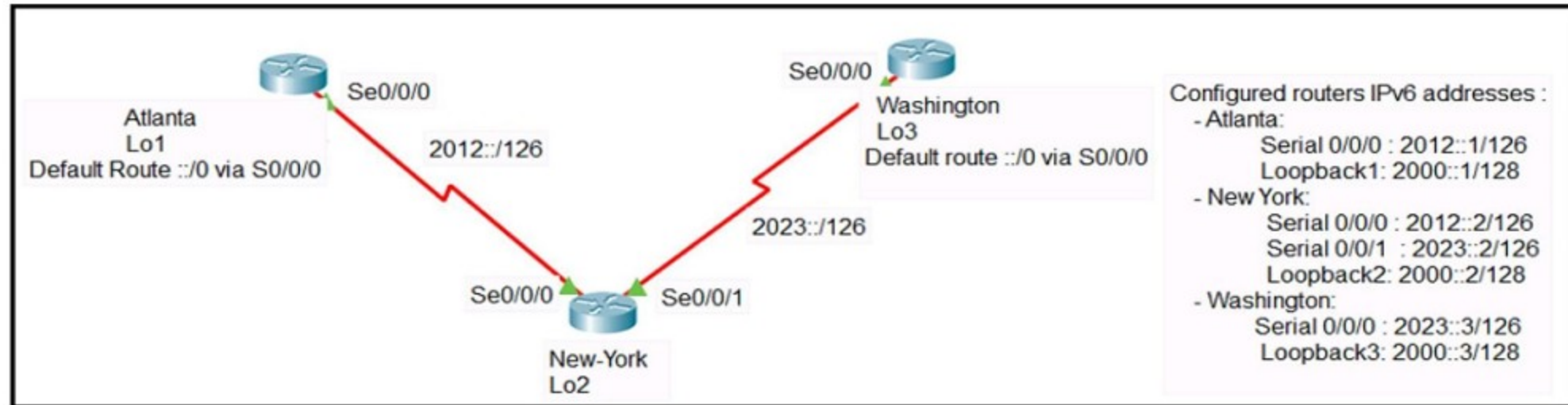


Actual exam question from Cisco's 200-301

Question #: 356

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The loopback1 interface of the Atlanta router must reach the loopback3 interface of the Washington router. Which two static host routes must be configured on the New York router? (Choose two.)

- A. ipv6 route 2000::3/128 s0/0/0
- B. ipv6 route 2000::1/128 s0/0/1
- C. ipv6 route 2000::1/128 2012::1
- D. ipv6 route 2000::1/128 2012::2
- E. ipv6 route 2000::3/128 2023::3

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 357

Topic #: 1

[\[All 200-301 Questions\]](#)



```
Router1(config)#interface GigabitEthernet1/1
Router1(config-if)#description ***Connection to Router2***
Router1(config-if)#ip address 10.10.10.1 255.255.255.252
Router1(config-if)#ip ospf hello-interval 5
Router1(config)#router ospf 1000
Router1(config-router)#router-id 1.1.1.1
Router1(config-router)#network 10.10.10.0 0.0.0.3 area 0

Router2(config)#interface GigabitEthernet1/1
Router2(config-if)#description ***Connection to Router1***
Router2(config-if)#ip address 10.10.10.2 255.255.255.252
Router2(config)#router ospf 1001
Router2(config-router)#router-id 2.2.2.2
Router2(config-router)#network 10.10.10.0 0.0.0.3 area 0
Router2(config-router)#passive-interface default
Router2(config-router)#no passive-interface GigabitEthernet1/1
```

Refer to the exhibit. After the configuration is applied, the two routers fail to establish an OSPF neighbor relationship. What is the reason for the problem?

- A. The OSPF process IDs are mismatched
- B. The network statement on Router1 is misconfigured
- C. Router2 is using the default hello timer
- D. The OSPF router IDs are mismatched

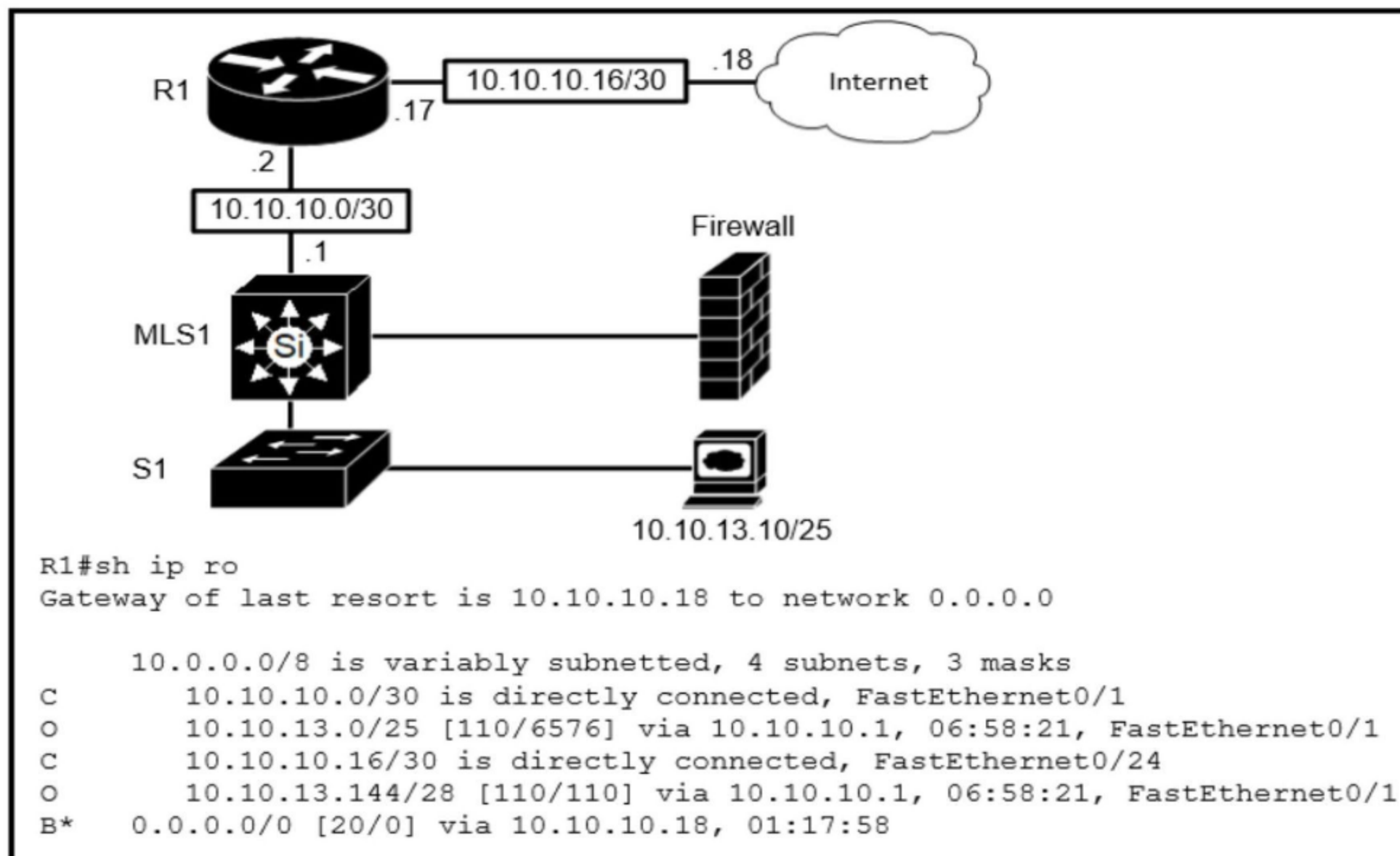
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 358

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which route type is configured to reach the Internet?

- A. floating static route
- B. host route
- C. network route
- D. default route

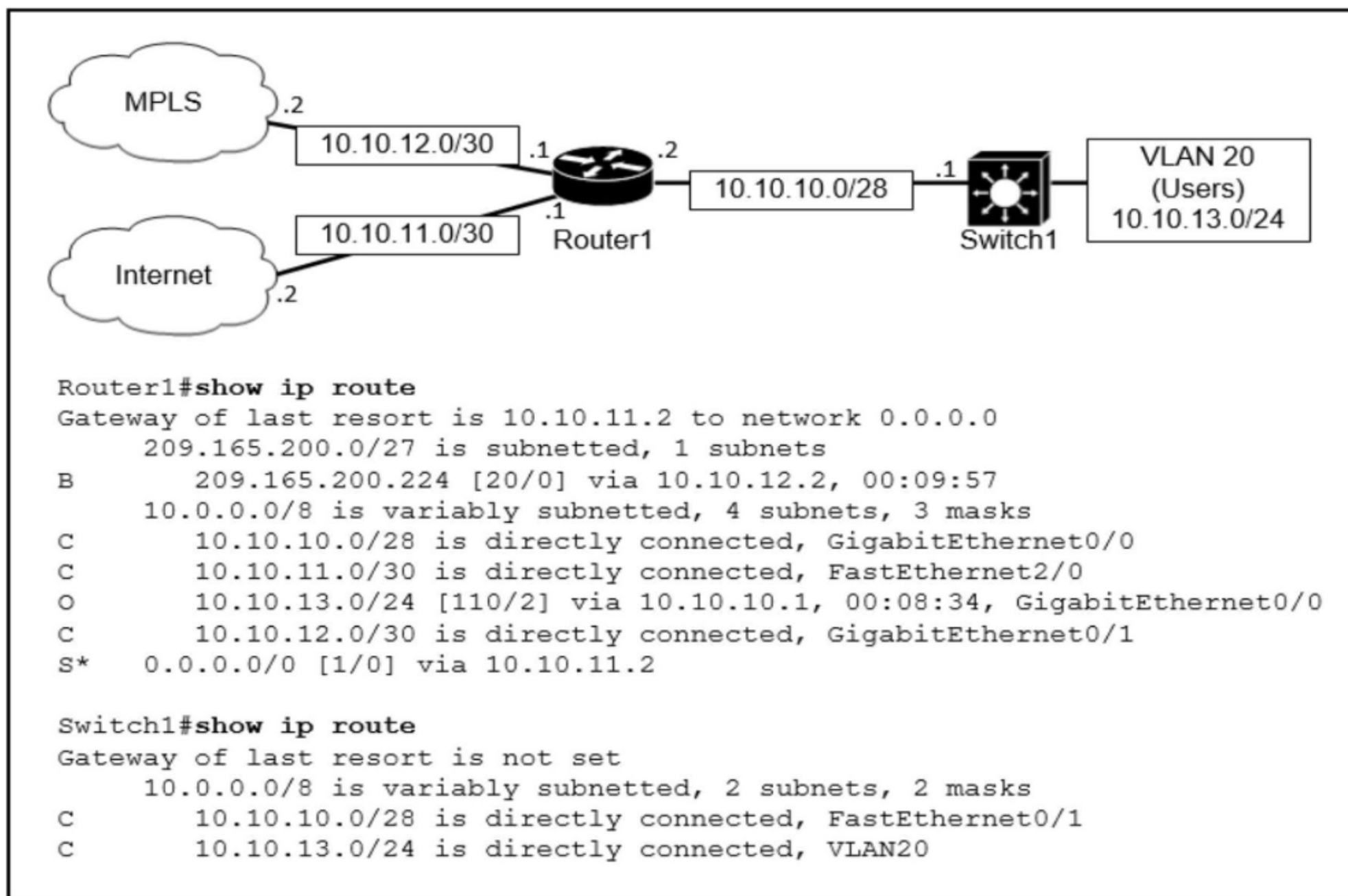
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 359

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which path is used by the router for Internet traffic?

- A. 209.165.200.0/27
- B. 0.0.0.0/0
- C. 10.10.13.0/24
- D. 10.10.10.0/28

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 360

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When OSPF learns multiple paths to a network, how does it select a route?

- A. For each existing interface, it adds the metric from the source router to the destination to calculate the route with the lowest bandwidth.
- B. It counts the number of hops between the source router and the destination to determine the route with the lowest metric.
- C. It divides a reference bandwidth of 100 Mbps by the actual bandwidth of the exiting interface to calculate the route with the lowest cost.
- D. It multiplies the active K values by 256 to calculate the route with the lowest metric.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 361

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When a floating static route is configured, which action ensures that the backup route is used when the primary route fails?

- A. The administrative distance must be higher on the primary route so that the backup route becomes secondary.
- B. The default-information originate command must be configured for the route to be installed into the routing table.
- C. The floating static route must have a lower administrative distance than the primary route so it is used as a backup.
- D. The floating static route must have a higher administrative distance than the primary route so it is used as a backup

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 362

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Designated Router (ID) 10.11.11.11, Interface address 10.10.10.1
Backup Designated router (ID) 10.3.3.3, Interface address 10.10.10.3
Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
oob-resync timeout 40
Hello due in 00:00:08
Supports Link-local Signaling (LLS)
Cisco NSF helper support enabled
IETF NSF helper support enabled
Index 1/1/1, flood queue length 0
Next 0x0(0)/0x0(0)/0x0(0)
Last flood scan length is 1, maximum is 6
Last flood scan time is 0 msec, maximum is 1 msec
Neighbor Count is 3, Adjacent neighbor count is 3
Adjacent with neighbor 10.1.1.4
Adjacent with neighbor 10.2.2.2
Adjacent with neighbor 10.3.3.3 (Backup Designated Router)
Suppress hello for 0 neighbor(s)
```

Refer to the exhibit. The show ip ospf interface command has been executed on R1. How is OSPF configured?

- A. A point-to-point network type is configured.
- B. The interface is not participating in OSPF.
- C. The default Hello and Dead timers are in use.
- D. There are six OSPF neighbors on this interface.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 363

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A user configured OSPF and advertised the Gigabit Ethernet interface in OSPF. By default, to which type of OSPF network does this interface belong?

- A. point-to-multipoint
- B. point-to-point
- C. broadcast
- D. nonbroadcast

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 364

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which attribute does a router use to select the best path when two or more different routes to the same destination exist from two different routing protocols?

- A. dual algorithm
- B. metric
- C. administrative distance
- D. hop count

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 365

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Router A learns the same route from two different neighbors; one of the neighbor routers is an OSPF neighbor, and the other is an EIGRP neighbor. What is the administrative distance of the route that will be installed in the routing table?

- A. 20
- B. 90
- C. 110
- D. 115

Show Suggested Answer

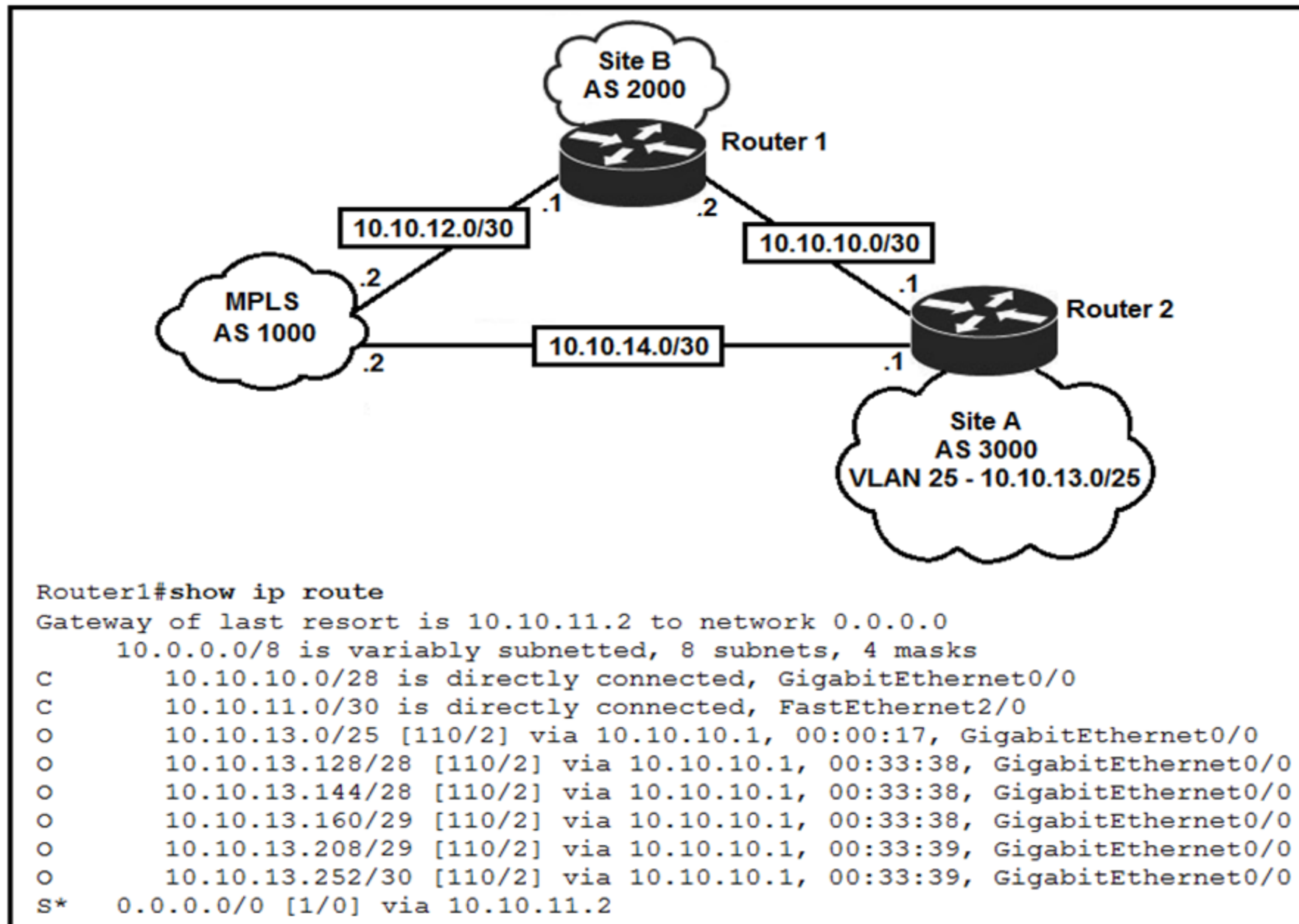


Actual exam question from Cisco's 200-301

Question #: 366

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer is bringing up a new circuit to the MPLS provider on the Gi0/1 interface of Router 1. The new circuit uses eBGP and learns the route to VLAN25 from the BGP path.

What is the expected behavior for the traffic flow for route 10.10.13.0/25?

- A. Traffic to 10.10.13.0/25 is load balanced out of multiple interfaces.
- B. Traffic to 10.10.13.0/25 is asymmetrical.
- C. Route 10.10.13.0/25 is updated in the routing table as being learned from interface Gi0/1.
- D. Route 10.10.13.0/25 learned via the Gi0/0 interface remains in the routing table.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 367

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two actions influence the EIGRP route selection process? (Choose two.)

- A. The advertised distance is calculated by a downstream neighbor to inform the local router of the bandwidth on the link.
- B. The router calculates the feasible distance of all paths to the destination route.
- C. The router must use the advertised distance as the metric for any given route.
- D. The router calculates the best backup path to the destination route and assigns it as the feasible successor.
- E. The router calculates the reported distance by multiplying the delay on the exiting interface by 256.

Show Suggested Answer

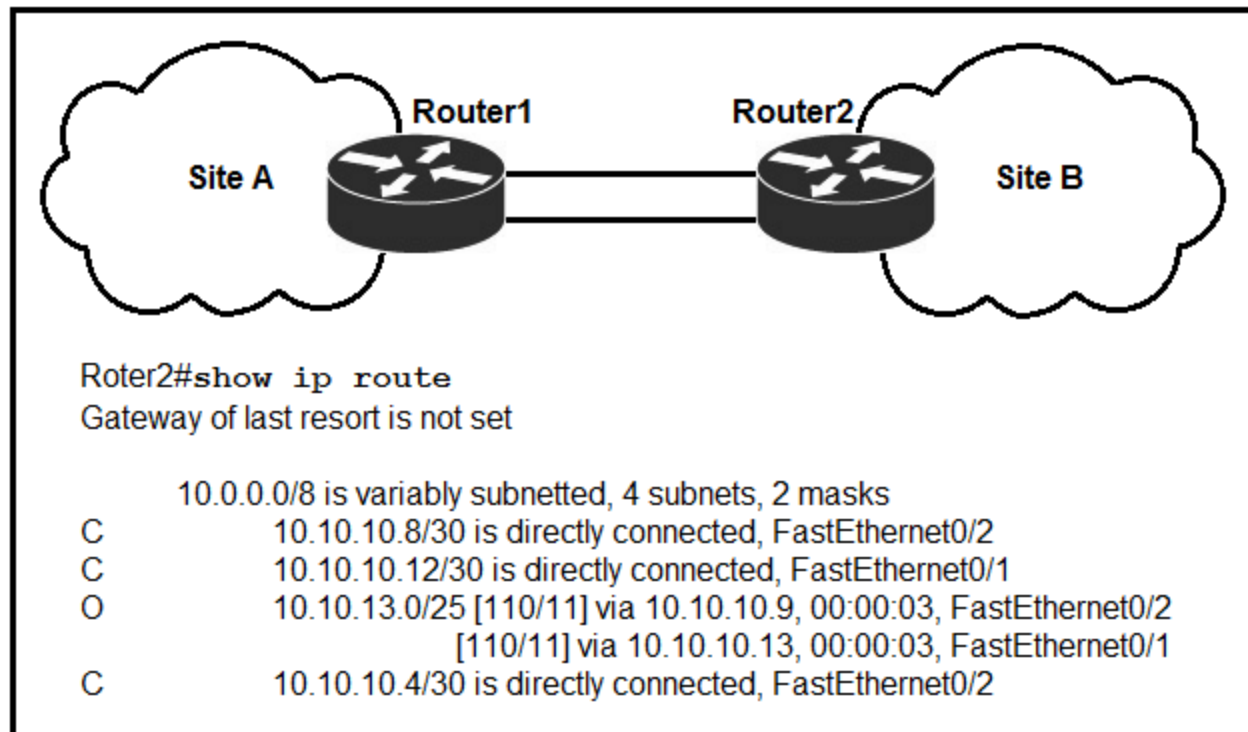


Actual exam question from Cisco's 200-301

Question #: 368

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. If OSPF is running on this network, how does Router2 handle traffic from Site B to 10.10.13.128/25 at Site A?

- A. It sends packets out of interface Fa0/1 only.
- B. It sends packets out of interface Fa0/2 only.
- C. It load-balances traffic out of Fa0/1 and Fa0/2.
- D. It cannot send packets to 10.10.13.128/25.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 369

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two outcomes are predictable behaviors for HSRP? (Choose two.)

- A. The two routers negotiate one router as the active router and the other as the standby router.
- B. The two routers share the same interface IP address, and default gateway traffic is load-balanced between them.
- C. The two routers synchronize configurations to provide consistent packet forwarding.
- D. Each router has a different IP address, both routers act as the default gateway on the LAN, and traffic is load-balanced between them.
- E. The two routers share a virtual IP address that is used as the default gateway for devices on the LAN.

Show Suggested Answer

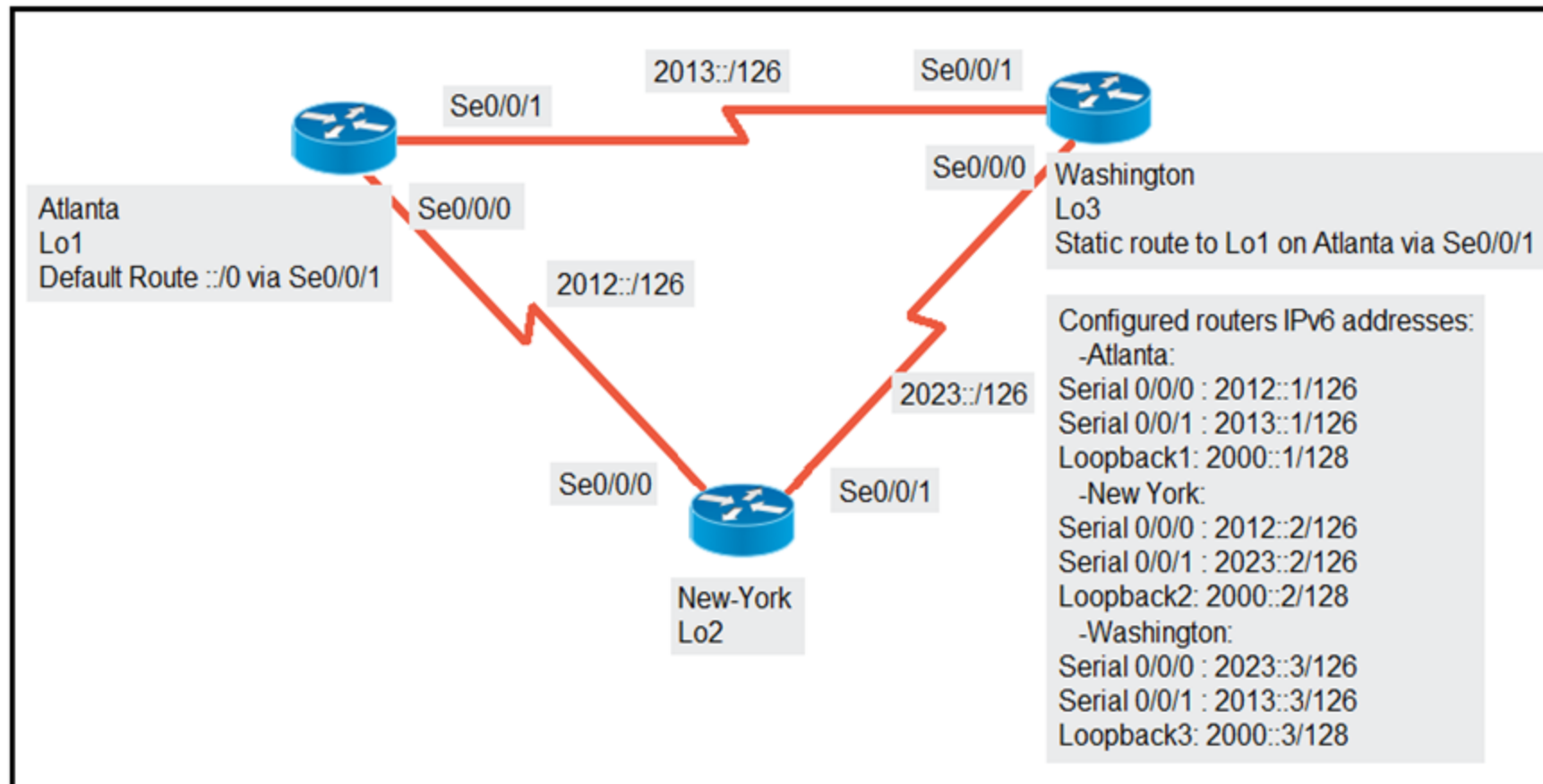


Actual exam question from Cisco's 200-301

Question #: 370

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer is configuring the New York router to reach the Lo1 interface of the Atlanta router using interface Se0/0/0 as the primary path. Which two commands must be configured on the New York router so that it reaches the Lo1 interface of the Atlanta router via Washington when the link between New York and Atlanta goes down? (Choose two.)

- A. ipv6 route 2000::1/128 2012::1
- B. ipv6 route 2000::1/128 2012::1 5
- C. ipv6 route 2000::1/128 2012::2
- D. ipv6 route 2000::1/128 2023::2 5
- E. ipv6 route 2000::1/128 2023::3 5

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 371

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does HSRP provide first hop redundancy?

- A. It load-balances Layer 2 traffic along the path by flooding traffic out all interfaces configured with the same VLAN.
- B. It uses a shared virtual MAC and a virtual IP address to a group of routers that serve as the default gateway for hosts on a LAN.
- C. It forwards multiple packets to the same destination over different routed links in the data path.
- D. It load-balances traffic by assigning the same metric value to more than one route to the same destination in the IP routing table.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 372

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which action establishes the OSPF neighbor relationship without forming an adjacency?

```
R1# sh ip ospf int gig0/0
Gig0/0 is up, line protocol is up
  Internet Address 10.201.24.8/28, Area 1, Attached via Network Statement
  Process ID 100, Router ID 192.168.1.1, Network Type BROADCAST, Cost: 1
  Topology-MTID      Cost      Disabled   Shutdown   Topology Name
             0          1         no         no         Base
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 192.168.1.1, Interface address 10.201.24.8
  No backup designated router on this network
  Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
    oob-resync timeout 40
    Hello due in 00:00:07

R2#sh ip ospf int gig0/0
gig0/0 is up, line protocol is up
  Internet Address 10.201.24.1/28, Area 1
  Process ID 100, Router ID 172.16.1.1, Network Type BROADCAST, Cost: 1
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 172.16.1.1, Interface address 10.201.24.1
  No backup designated router on this network
  Timer intervals configured, Hello 20, Dead 80, Wait 80, Retransmit 5
```

- A. modify hello interval
- B. modify process ID
- C. modify priority
- D. modify network type

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 373

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command must you enter to guarantee that an HSRP router with higher priority becomes the HSRP primary router after it is reloaded?

- A. standby 10 preempt
- B. standby 10 version 1
- C. standby 10 priority 150
- D. standby 10 version 2

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 374

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command should you enter to verify the priority of a router in an HSRP group?

- A. show hsrp
- B. show sessions
- C. show interfaces
- D. show standby

Show Suggested Answer



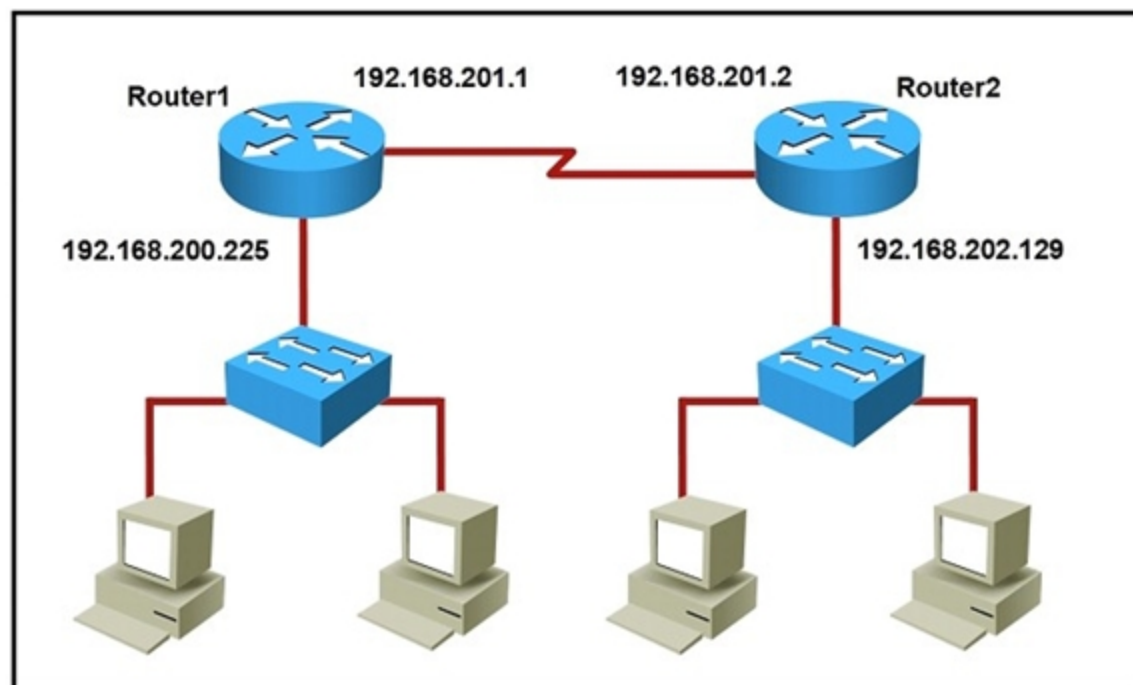
Actual exam question from Cisco's 200-301

Question #: 375

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which command would you use to configure a static route on Router1 to network 192.168.202.0/24 with a nondefault administrative distance?



- A. `router1(config)#ip route 192.168.202.0 255.255.255.0 192.168.201.2 1`
- B. `router1(config)#ip route 192.168.202.0 255.255.255.0 192.168.201.2 5`
- C. `router1(config)#ip route 1 192.168.201.1 255.255.255.0 192.168.201.2`
- D. `router1(config)#ip route 5 192.168.202.0 255.255.255.0 192.168.201.2`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 376

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which of the following dynamic routing protocols are Distance Vector routing protocols?

- A. IS-IS
- B. EIGRP
- C. OSPF
- D. BGP
- E. RIP

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 377

Topic #: 1

[\[All 200-301 Questions\]](#)

---

You have configured a router with an OSPF router ID, but its IP address still reflects the physical interface.

Which action can you take to correct the problem in the least disruptive way?

- A. Reload the OSPF process
- B. Specify a loopback address
- C. Reboot the router
- D. Save the router configuration

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 378

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command should you enter to view the error log in an EIGRP for IPv6 environment?

- A. show ipv6 eigrp neighbors
- B. show ipv6 eigrp topology
- C. show ipv6 eigrp traffic
- D. show ipv6 eigrp events

Show Suggested Answer



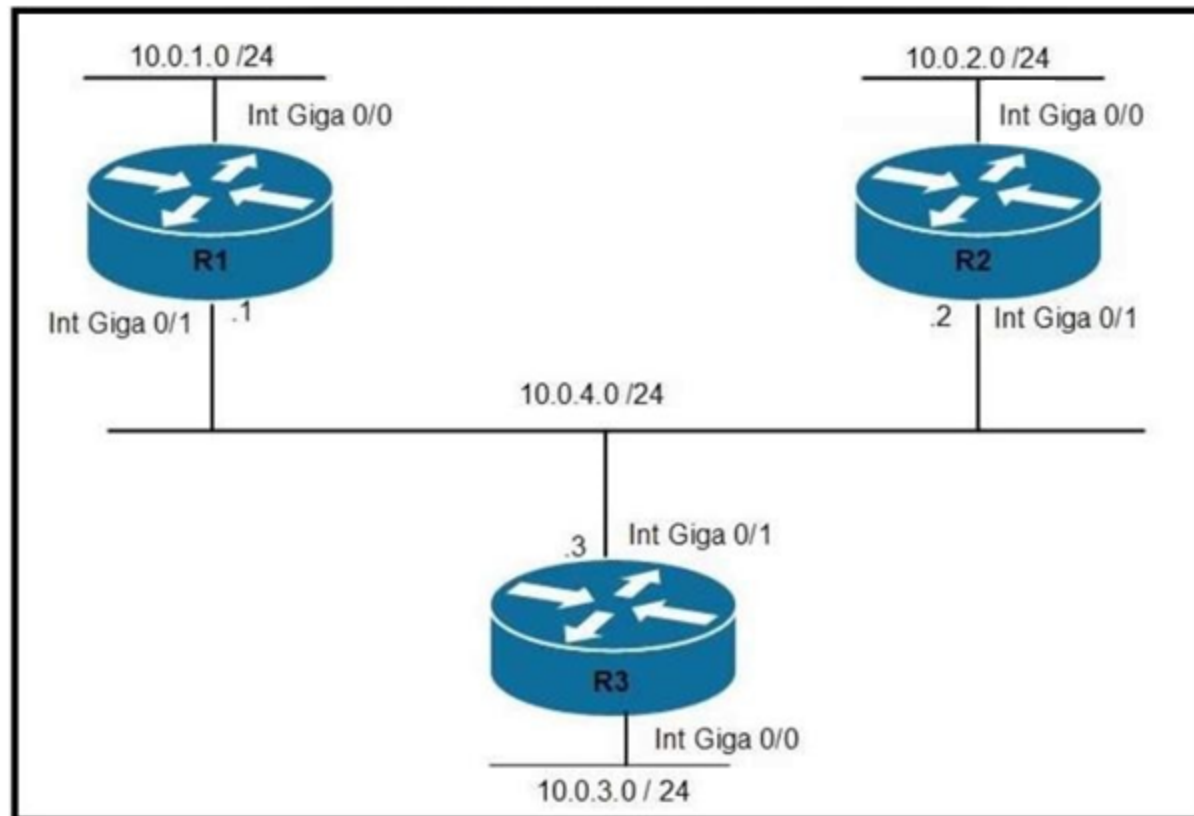
Actual exam question from Cisco's 200-301

Question #: 379

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which two statements about the network environment of router R1 must be true? (Choose two.)



Refer to the exhibit. Router R1 must be configured to reach the 10.0.3.0/24 network from the 10.0.1.0/24 segment. Which command must be used to configure the route?

- A. route add 10.0.3.0 0.255.255.255 10.0.4.2
- B. ip route 10.0.3.0 0.255.255.255 10.0.4.2
- C. route add 10.0.3.0 mask 255.255.255.0 10.0.4.3
- D. ip route 10.0.3.0 255.255.255.0 10.0.4.3

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 380

Topic #: 1

[\[All 200-301 Questions\]](#)

```

R1#show ip route
Gateway of last resort is 10.85.33.14 to network 0.0.0.0
D*EX 0.0.0.0/0
    [170/257024] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/257024] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
10.0.0.0/8 is variably subnetted, 6692 subnets, 20 masks
B 10.0.0.0/8 [20/0] via 10.48.144.14, 1w5d
D EX 10.0.1.0/24
    [170/51968] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/51968] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
D EX 10.0.2.0/23
    [170/51968] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/51968] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
D EX 10.0.4.0/22
    [170/51968] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/51968] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
D EX 10.0.8.0/21
    [170/51968] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/51968] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
D EX 10.0.16.0/20
    [170/51968] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/51968] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
D EX 10.0.32.0/19
    [170/51968] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/51968] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
B 10.1.96.0/23 [20/0] via 10.111.33.217, 2w3d
B 10.1.96.0/24 [20/0] via 10.111.33.217, 2w3d
B 10.1.97.0/24 [20/0] via 10.111.33.217, 4w5d
D EX 10.1.255.240/28
    [170/51968] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/51968] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
D EX 10.2.0.0/16
    [170/51968] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/51968] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
B 10.2.0.0/24 [20/0] via 10.111.33.217, 4w5d
B 10.2.96.0/23 [20/0] via 10.48.144.14, 4w5d
B 10.2.96.0/24 [20/0] via 10.48.144.14, 3w1d
B 10.2.97.0/24 [20/0] via 10.48.144.14, 4w5d
D EX 10.3.0.0/16
    [170/51968] via 10.85.33.14, 7w0d, TenGigabitEthernet0/2/0.100
    [170/51968] via 10.85.33.10, 7w0d, TenGigabitEthernet0/1/0.100
B 10.5.1.0/24 [20/0] via 10.111.33.217, 1w4d
B 10.5.5.0/24 [20/0] via 10.111.33.217, 4w3d
B 10.6.0.0/24 [20/0] via 10.111.33.217, 3w3d

```

- A. The EIGRP administrative distance was manually changed from 90 to 170.
- B. There are 20 different network masks within the 10.0.0.0/8 network.
- C. Ten routes are equally load-balanced between Te0/1/0.100 and Te0/2/0.100.
- D. The 10.0.0.0/8 network was learned via external EIGRP.
- E. A static default route to 10.85.33.14 was defined.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 381

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two statements about exterior routing protocols are true? (Choose two.)

- A. They determine the optimal within an autonomous system.
- B. They determine the optimal path between autonomous systems.
- C. BGP is the current standard exterior routing protocol.
- D. Most modern networking supports both EGP and BGP for external routing.
- E. Most modern network routers support both EGP and EIGRP for external routing.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 382

Topic #: 1

[\[All 200-301 Questions\]](#)

---

You have two paths for the 10.10.10.0 network - one that has a feasible distance of 3072 and the other of 6144.

What do you need to do to load balance your EIGRP routes?

- A. Change the maximum paths to 2
- B. Change the configuration so they both have the same feasible distance
- C. Change the variance for the path that has a feasible distance of 3072 to 2
- D. Change the IP addresses so both paths have the same source IP address

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 383

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag each route source from the left to the numbers on the right. Beginning with the lowest and ending with the highest administrative distance.

Select and Place:

**connected**

**EBGP**

**EIGRP**

**OSPF**

**RIP**

**static**

**1**

**2**

**3**

**4**

**5**

**6**

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 384

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two circumstances can prevent two routers from establishing an OSPF neighbor adjacency? (Choose two.)

- A. mismatched autonomous system numbers
- B. an ACL blocking traffic from multicast address 224.0.0.10
- C. mismatched process IDs
- D. mismatched hello timers and dead timers
- E. use of the same router ID on both devices

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 385

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which three describe the reasons large OSPF networks use a hierarchical design? (Choose three.)

- A. to speed up convergence
- B. to reduce routing overhead
- C. to lower costs by replacing routers with distribution layer switches
- D. to decrease latency by increasing bandwidth
- E. to confine network instability to single areas of the network
- F. to reduce the complexity of router configuration

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 386

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. If R1 receives a packet destined to 172.16.1.1, to which IP address does it send the packet?

```
R1#show ip route
#output suppressed
```

```
Gateway of last resort is 192.168.14.4 to network 0.0.0.0
```

```
C    172.16.1.128/25 is directly connected, GigabitEthernet1/1/0
C    192.168.12.0/24 is directly connected, FastEthernet0/0
C    192.168.13.0/24 is directly connected, FastEthernet0/1
C    192.168.14.0/24 is directly connected, FastEthernet1/0
C    172.16.16.1 is directly connected, Loopback1
    192.168.10.0/24 is variably subnetted, 3 subnets, 3 masks
0    192.168.10.0/24 [110/2] via 192.168.14.4, 00:02:01, FastEthernet1/0
0    192.168.10.32/27 [110/11] via 192.168.13.3, 00:00:52, FastEthernet0/1
0    192.168.0.0/16 [110/2] via 192.168.15.5, 00:05:01, FastEthernet1/1
D    192.168.10.1/32 [90/52778] via 192.168.12.2, 00:03:44, FastEthernet0/0
0*E2 0.0.0.0/0 [110/1] via 192.168.14.4, 00:00:10, FastEthernet1/0
```

- A. 192.168.14.4
- B. 192.168.12.2
- C. 192.168.13.3
- D. 192.168.15.5

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 387

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. On R1 which routing protocol is in use on the route to 192.168.10.1?

```
R1#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route

Gateway of last resort is 192.168.14.4 to network 0.0.0.0

C    192.168.12.0/24 is directly connected, FastEthernet0/0
C    192.168.13.0/24 is directly connected, FastEthernet0/1
C    192.168.14.0/24 is directly connected, FastEthernet1/0
     192.168.10.0/24 is variably subnetted, 3 subnets, 3 masks
O     192.168.10.0/24 [110/2] via 192.168.14.4, 00:02:01, FastEthernet1/0
O     192.168.10.32/27 [110/11] via 192.168.13.3, 00:00:52, FastEthernet0/1
O     192.168.0.0/16 [110/2] via 192.168.15.5, 00:05:01, FastEthernet1/1
D     192.168.10.1/32 [90/52778] via 192.168.12.2, 00:03:44, FastEthernet0/0
O*E2 0.0.0.0/0 [110/1] via 192.168.14.4, 00:00:10, FastEthernet1/0
```

- A. RIP
- B. OSPF
- C. IGRP
- D. EIGRP

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 388

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which Command do you enter so that R1 advertises the loopback0 interface to the BGP Peers?

```
R1
interface Loopback0
  ip address 172.16.1.33 255.255.255.224

interface FastEthernet0/0
  ip address 192.168.12.1 255.255.255.0

router bgp 100
neighbor 192.168.12.2 remote-as 100
```

- A. Network 172.16.1.32 mask 255.255.255.224
- B. Network 172.16.1.0 0.0.0.255
- C. Network 172.16.1.32 255.255.255.224
- D. Network 172.16.1.33 mask 255.255.255.224
- E. Network 172.16.1.32 mask 0.0.0.31
- F. Network 172.16.1.32 0.0.0.31

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 389

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to exhibit. What Administrative distance has route to 192.168.10.1?

```
R1@show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route

Gateway of last resort is 192.168.14.4 to network 0.0.0.0

C   192.168.12.0/24 is directly connected, FastEthernet0/0
C   192.168.13.0/24 is directly connected, FastEthernet0/1
C   192.168.14.0/24 is directly connected, FastEthernet1/0
    192.168.10.0/24 is variably subnetted, 3 subnets, 3 masks
O    192.168.10.0/24 [110/2] via 192.168.14.4, 00:02:01, FastEthernet1/0
O    192.168.10.32/27 [110/11] via 192.168.13.3, 00:00:52, FastEthernet0/1
O    192.168.0.0/16 [110/2] via 192.168.15.5, 00:05:01, FastEthernet1/1
D    192.168.10.1/32 [90/52778] via 192.168.12.2, 00:03:44, FastEthernet0/0
O*E2 0.0.0.0/0 [110/1] via 192.168.14.4, 00:00:10, FastEthernet1/0
```

- A. 1
- B. 90
- C. 110
- D. 120

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 390

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which value is used to determine the active router in an HSRP default configuration?

- A. Router loopback address
- B. Router IP address
- C. Router priority
- D. Router tracking number

[Show Suggested Answer](#)



Actual exam question from Cisco's 200-301

Question #: 391

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. If RTR01 is configured as shown, which three addresses will be received by other routers that are running EIGRP on the network? (Choose three.)

```
RTR01 (config) #router eigrp 103
RTR01 (config-router) #network 10.4.3.0
RTR01 (config-router) #network 172.16.4.0
RTR01 (config-router) #network 192.168.2.0
RTR01 (config-router) #auto-summary
```

- A. 192.168.2.0
- B. 10.4.3.0
- C. 10.0.0.0
- D. 172.16.0.0
- E. 172.16.4.0
- F. 192.168.0.0

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 392

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which configuration command can you apply to a HSRP router so that its local interface becomes active if all other routers in the group fail?

- A. no additional config is required
- B. standby 1 track ethernet
- C. standby 1 preempt
- D. standby 1 priority 250

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 393

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two statements about eBGP neighbor relationships are true? (Choose two.)

- A. The two devices must reside in different autonomous systems
- B. Neighbors must be specifically declared in the configuration of each device
- C. They can be created dynamically after the network statement is configured
- D. The two devices must reside in the same autonomous system
- E. The two devices must have matching timer settings

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 394

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. How will the router handle a packet destined for 192.0.2.156?

router#**show ip route**

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP, D - EIGRP  
EX - EIGRP external, O - OSPF, IA - OSPF inter area, N1 - OSPF NSSA external type 1,  
N2 - OSPF NSSA external type 2, E1 - OSPF external type 1, E2 - OSPF external type 2,  
E - EGP, i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, \* - candidate default, U - per-user  
static route, o - ODR

Gateway of last resort is 192.168.4.1 to network 0.0.0.0

10.0.0.0/24 is subnetted, 3 subnets

```
C       10.0.2.0 is directly connected, Ethernet1
D       10.0.3.0 [90/2195456] via 192.168.1.2, 00:03:01, Serial0
D       10.0.4.0 [90/2195456] via 192.168.3.1, 00:03:01, Serial1
C       192.168.1.0/24 is directly connected, Serial0
D       192.168.2.0/24 [90/2681856] via 192.168.1.2, 00:03:01, Serial0
        [90/2681856] via 192.168.3.1, 00:03:01, Serial1
C       192.168.3.0/24 is directly connected, Serial1
C       192.168.4.0/24 is directly connected, Serial2
```

- A. The router will forward the packet via either Serial0 or Serial1.
- B. The router will return the packet to its source.
- C. The router will forward the packet via Serial2.
- D. The router will drop the packet.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 395

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which statements describe the routing protocol OSPF? (Choose three.)

- A. It supports VLSM.
- B. It is used to route between autonomous systems.
- C. It confines network instability to one area of the network.
- D. It increases routing overhead on the network.
- E. It allows extensive control of routing updates.
- F. It is simpler to configure than RIP v2.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 396

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. After you apply the given configurations to R1 and R2 you notice that OSPFv3 fails to start.

```
R1
ipv6 unicast-routing

interface FastEthernet0/0
  no ip address
  ipv6 enable
  ipv6 address 3001:DBB:13::1/64
  ipv6 ospf 1 area 0
ipv6 router ospf 1
router-id 172.16.1.1

R2
ipv6 unicast-routing

interface FastEthernet0/0
  no ip address
  ipv6 enable
  ipv6 address 2001:DBB:12::12/64
  ipv6 ospf 1 area 3
ipv6 router ospf 1
router-id 172.16.3.3
```

- A. The area numbers on R1 and R2 are mismatched
- B. The IPv6 network addresses on R1 and R2 are mismatched
- C. The autonomous system numbers on R1 and R2 are mismatched
- D. The router ids on R1 and R2 are mismatched

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 397

Topic #: 1

[\[All 200-301 Questions\]](#)

---

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

- A. show ip ospf link-state
- B. show ip ospf lsa database
- C. show ip ospf neighbors
- D. show ip ospf database

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 398

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. A network associate has configured OSPF with the command:

```
City(config-router)# network 192.168.12.64 0.0.0.63 area 0
```

After completing the configuration, the associate discovers that not all the interfaces are participating in OSPF. Which three of the interfaces shown in the exhibit will participate in OSPF according to this configuration statement? (Choose three.)

**City#show ip interface brief**

<b>Interface</b>	<b>IP-Address</b>	<b>OK?</b>	<b>Method</b>	<b>Status</b>	<b>Protocol</b>
<b>FastEthernet0/0</b>	<b>192.168.12.48</b>	<b>Yes</b>	<b>manual</b>	<b>up</b>	<b>up</b>
<b>FastEthernet0/1</b>	<b>192.168.12.65</b>	<b>Yes</b>	<b>manual</b>	<b>up</b>	<b>up</b>
<b>Serial0/0</b>	<b>192.168.12.121</b>	<b>Yes</b>	<b>manual</b>	<b>up</b>	<b>up</b>
<b>Seriak0/1</b>	<b>unassigned</b>	<b>Yes</b>	<b>unset</b>	<b>up</b>	<b>up</b>
<b>Serial0/1.102</b>	<b>192.168.12.125</b>	<b>Yes</b>	<b>manual</b>	<b>up</b>	<b>up</b>
<b>Serial0/1.103</b>	<b>192.168.12.129</b>	<b>Yes</b>	<b>manual</b>	<b>up</b>	<b>up</b>
<b>Serial0/1.104</b>	<b>192.168.12.133</b>	<b>Yes</b>	<b>manual</b>	<b>up</b>	<b>up</b>

**City#**

- A. FastEthernet0 /0
- B. FastEthernet0 /1
- C. Serial0/0
- D. Serial0/1.102
- E. Serial0/1.103
- F. Serial0/1.104

Show Suggested Answer

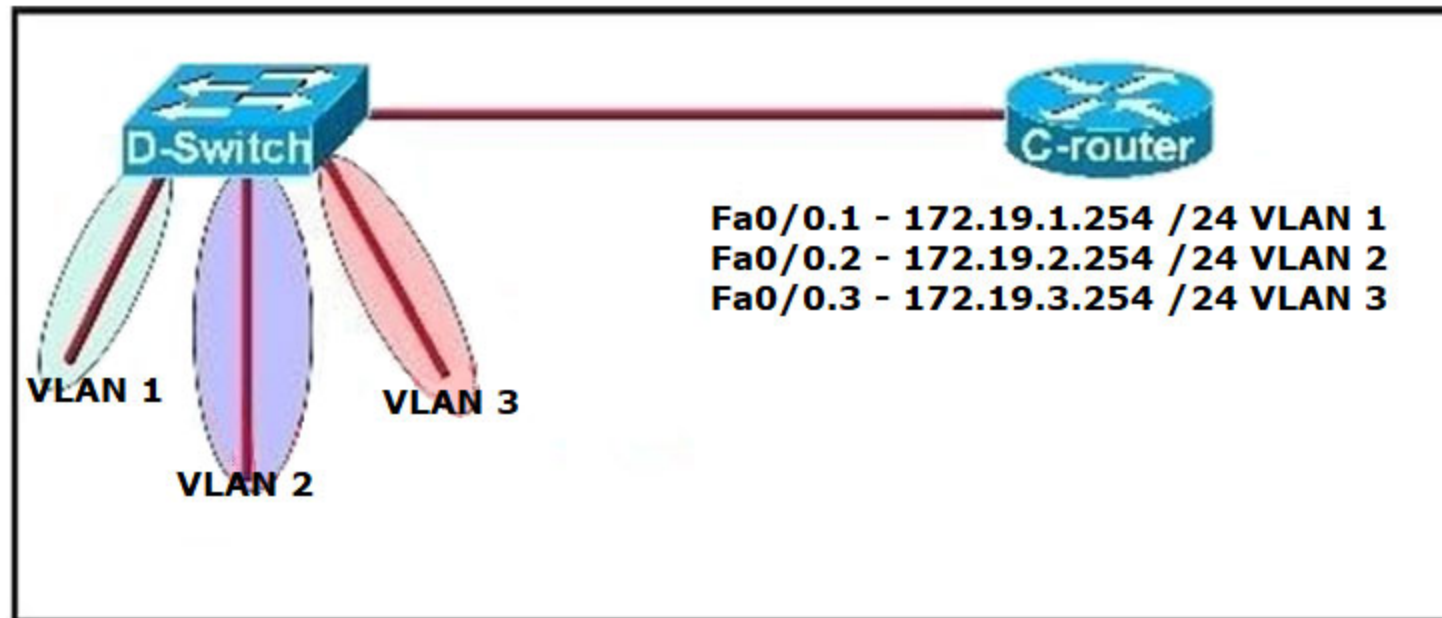
Actual exam question from Cisco's 200-301

Question #: 399

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. C-router is to be used as a "router-on-a-stick" to route between the VLANs. All the interfaces have been properly configured and IP routing is operational. The hosts in the VLANs have been configured with the appropriate default gateway. What is true about this configuration?



- A. These commands need to be added to the configuration: C-router(config)# router eigrp 123 C-router(config-router)# network 172.19.0.0
- B. These commands need to be added to the configuration: C-router(config)# router ospf 1 C-router(config-router)# network 172.19.0.0 0.0.3.255 area 0
- C. These commands need to be added to the configuration: C-router(config)# router rip C-router(config-router)# network 172.19.0.0
- D. No further routing configuration is required.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 400

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which address and mask combination represents a summary of the routes learned by EIGRP?

**Gateway of last resort is not set**

**192.168.25.0/30 is subnetted, 4 subnets**

- D 192.168.25.20 [90/2681856] via 192.168.15.5, 00:00:10, Serial0/1**
- D 192.168.25.16 [90/1823638] via 192.168.15.5, 00:00:50, Serial0/1**
- D 192.168.25.24 [90/3837233] via 192.168.15.5, 00:05:23, Serial0/1**
- D 192.168.25.28 [90/8127323] via 192.168.15.5, 00:06:45, Serial0/1**
- C 192.168.15.4/30 is directly connected, Serial0/1**
- C 192.168.2.0/24 is directly connected, FastEthernet0/0**

- A. 192.168.25.0 255.255.255.240
- B. 192.168.25.0 255.255.255.252
- C. 192.168.25.16 255.255.255.240
- D. 192.168.25.16 255.255.255.252
- E. 192.168.25.28 255.255.255.240
- F. 192.168.25.28 255.255.255.252

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 401

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Given the output for this command, if the router ID has not been manually set, what router ID will OSPF use for this router?

```
RouterD# show ip interface brief
Interface          IP-Address      OK?    Method    Status    Protocol
FastEthernet0/0    192.168.5.3     Yes    manual    up        up
FastEthernet0/1    10.1.1.2        Yes    manual    up        up
Loopback0          172.16.5.1     Yes    NVRAM     up        up
Loopback1          10.154.154.1   Yes    NVRAM     up        up
```

- A. 10.1.1.2
- B. 10.154.154.1
- C. 172.16.5.1
- D. 192.168.5.3

Show Suggested Answer



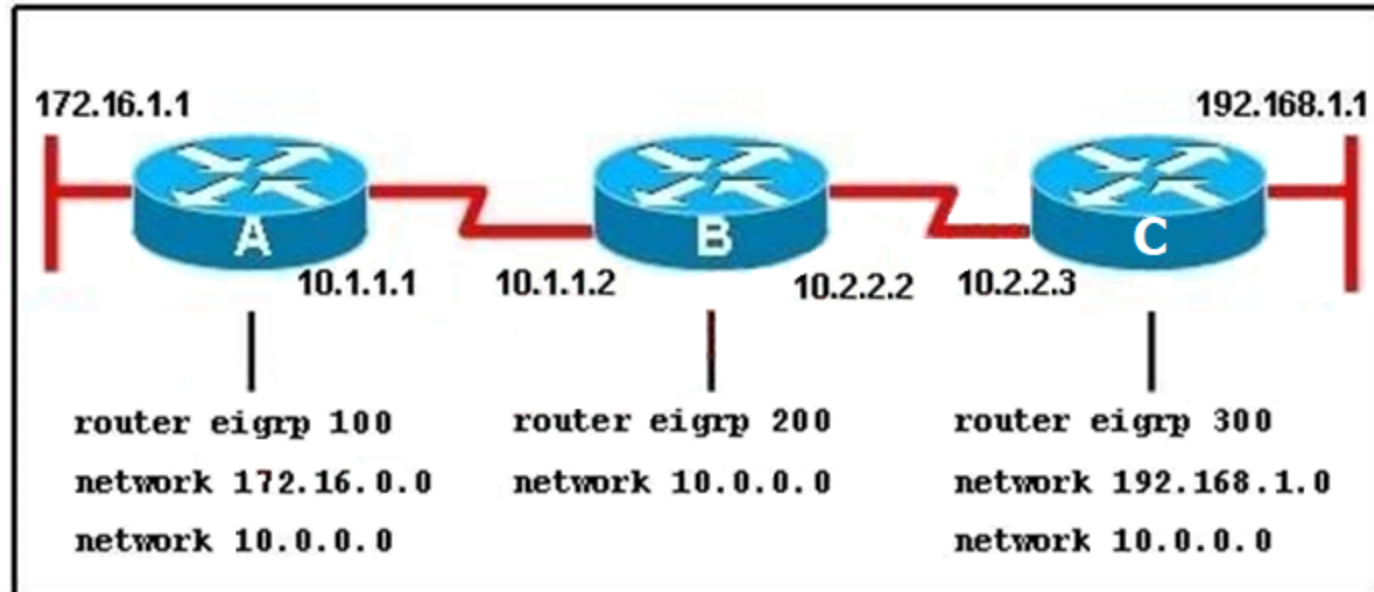
Actual exam question from Cisco's 200-301

Question #: 402

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. When running EIGRP, what is required for RouterA to exchange routing updates with RouterC?



- A. AS numbers must be changed to match on all the routers
- B. Loopback interfaces must be configured so a DR is elected
- C. The no auto-summary command is needed on Router A and Router C
- D. Router B needs to have two network statements, one for each connected network

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 403

Topic #: 1

[\[All 200-301 Questions\]](#)

A network administrator is troubleshooting the OSPF configuration of routers R1 and R2. The routers cannot establish an adjacency relationship on their common Ethernet link.

- R1:** Ethernet0 is up, line protocol is up  
Internet address 192.168.1.2/24, Area 0  
Process ID 1, Router ID 192.168.31.33, Network Type BROADCAST, Cost: 10  
Transmit Delay is 1 sec, State DR, Priority 1  
Designated Router (ID) 192.168.31.33, Interface address 192.168.1.2  
No backup designated router on this network  
Timer intervals configured, Hello 5, Dead 20, Wait 20, Retransmit 5
- R2:** Ethernet0 is up, line protocol is up  
Internet address 192.168.1.2/24, Area 0  
Process ID 2, Router ID 192.168.31.11, Network Type BROADCAST, Cost: 10  
Transmit Delay is 1 sec, State DR, Priority 1  
Designated Router (ID) 192.168.31.11, Interface address 192.168.1.1  
No backup designated router on this network  
Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5

The graphic shows the output of the show ip ospf interface e0 command for routers R1 and R2. Based on the information in the graphic, what is the cause of this problem?

- A. The OSPF area is not configured properly.
- B. The priority on R1 should be set higher.
- C. The cost on R1 should be set higher.
- D. The hello and dead timers are not configured properly.
- E. A backup designated router needs to be added to the network.
- F. The OSPF process ID numbers must match.

Show Suggested Answer



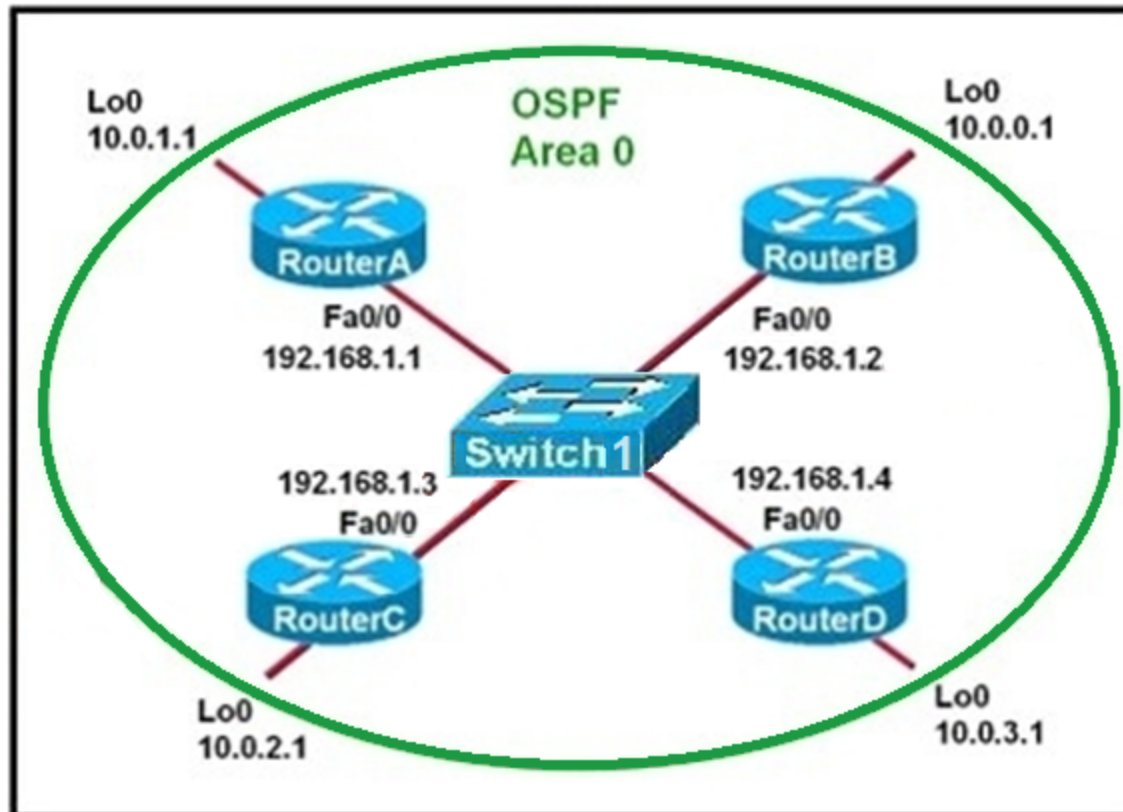
Actual exam question from Cisco's 200-301

Question #: 404

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which two statements are true about the loopback address that is configured on RouterB? (Choose two.)



- A. It ensures that data will be forwarded by RouterB.
- B. It provides stability for the OSPF process on RouterB.
- C. It specifies that the router ID for RouterB should be 10.0.0.1.
- D. It decreases the metric for routes that are advertised from RouterB.
- E. It indicates that RouterB should be elected the DR for the LAN.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 405

Topic #: 1

[\[All 200-301 Questions\]](#)

---

If all OSPF routers in a single area are configured with the same priority value, what value does a router use for the OSPF router ID in the absence of a loopback interface?

- A. the IP address of the first Fast Ethernet interface
- B. the IP address of the console management interface
- C. the highest IP address among its active interfaces
- D. the lowest IP address among its active interfaces
- E. the priority value until a loopback interface is configured

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 406

Topic #: 1

[\[All 200-301 Questions\]](#)

---

The OSPF Hello protocol performs which of the following tasks? (Choose two.)

- A. It provides dynamic neighbor discovery.
- B. It detects unreachable neighbors in 90 second intervals.
- C. It maintains neighbor relationships.
- D. It negotiates correctness parameters between neighboring interfaces.
- E. It uses timers to elect the router with the fastest links as the designated router.
- F. It broadcasts hello packets throughout the internetwork to discover all routers that are running OSPF.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 407

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two requirements for an HSRP group? (Choose two.)

- A. exactly one active router
- B. one or more standby routers
- C. one or more backup virtual routers
- D. exactly one standby active router
- E. exactly one backup virtual router

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 408

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two pieces of information can you learn by viewing the routing table? (Choose two.)

- A. whether an ACL was applied inbound or outbound to an interface
- B. the EIGRP or BGP autonomous system
- C. whether the administrative distance was manually or dynamically configured
- D. which neighbor adjacencies are established
- E. the length of time that a route has been known

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 409

Topic #: 1

[\[All 200-301 Questions\]](#)

- C 10.0.0.0/24 is subnetted, 1 subnets
- C 10.0.0.0 is directly connected, FastEthernet0/1
- C 172.160.0/16 is directly connected, FastEthernet0/0
- D 192.168.0.0/24 [90/30720] via 172.16.0.2, 00:00:03, FastEthernet0/0

Refer to the exhibit. Which route type does the routing protocol Code D represent in the output?

- A. statically assigned route
- B. route learned through EIGRP
- C. 724 route of a locally configured IP
- D. internal BGP route

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 410

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer must configure an OSPF neighbor relationship between router R1 and R3. The authentication configuration has been configured and the connecting interfaces are in the same 192.168.1.0/30 subnet. What are the next two steps to complete the configuration? (Choose two.)

- A. configure the interfaces as OSPF active on both sides
- B. configure both interfaces with the same area ID
- C. configure the hello and dead timers to match on both sides
- D. configure the same process ID for the router OSPF process
- E. configure the same router ID on both routing processes

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 411

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.246 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.246, Serial0/1/0
    is directly connected, Serial0/1/0
    172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
S   172.16.3.0/24 [1/0] via 209.165.200.250, Serial0/0/0
O   172.16.3.0/28 [110/1] via 209.165.200.254, 00:00:28, Serial0/0/1
    209.165.200.0/24 is variably subnetted, 6 subnets, 2 masks
C   209.165.200.244/30 is directly connected, Serial0/1/0
L   209.165.200.245/32 is directly connected, Serial0/1/0
C   209.165.200.248/30 is directly connected, Serial0/0/0
L   209.165.200.249/32 is directly connected, Serial0/0/0
C   209.165.200.252/30 is directly connected, Serial0/0/1
L   209.165.200.253/32 is directly connected, Serial0/0/1
```

Refer to the exhibit. A packet is being sent across router R1 to host 172.16.0.14. What is the destination route for the packet?

- A. 209.165.200.250 via Serial0/0/0
- B. 209.165.200.254 via Serial0/0/0
- C. 209.165.200.254 via Serial0/0/1
- D. 209.165.200.246 via Serial0/1/0

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 412

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.246 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.246, Serial0/1/0
    is directly connected, Serial0/1/0
    172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
S   172.16.3.0/24 [1/0] via 207.165.200.250, Serial0/0/0
O   172.16.3.0/28 [110/84437] via 207.165.200.254, 00:00:28, Serial0/0/1
    207.165.200.0/24 is variably subnetted, 6 subnets, 2 masks
C   207.165.200.244/30 is directly connected, Serial0/1/0
L   207.165.200.245/32 is directly connected, Serial0/1/0
C   207.165.200.248/30 is directly connected, Serial0/0/0
L   207.165.200.249/32 is directly connected, Serial0/0/0
C   207.165.200.252/30 is directly connected, Serial0/0/1
L   207.165.200.253/32 is directly connected, Serial0/0/1
```

Refer to the exhibit. A packet is being sent across router R1 to host 172.16.3.14. To which destination does the router send the packet?

- A. 207.165.200.246 via Serial0/1/0
- B. 207.165.200.254 via Serial0/0/0
- C. 207.165.200.250 via Serial0/0/0
- D. 207.165.200.254 via Serial0/0/1

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 413

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1#config t
R1(config)# interface gi1/1
R1(config-if)# ip address 192.168.0.1 255.255.255.0

R1(config)# router bgp 65000
R1(config-router)# neighbor 192.168.0.2 remote-as 65001
R1(config-router)# network 10.1.1.0 mask 255.255.255.0

R1(config)# router ospf 1
R1(config)# router-id 1.1.1.1
R1(config)# network 192.168.0.1 0.0.0.0 area 0
R1(config)# network 10.1.1.0 0.0.0.255 area 0

R1(config)# router eigrp 1
R1(config)# eigrp router-id 1.1.1.1
R1(config)# network 10.1.1.0 0.0.0.255
R1(config)# network 192.168.0.1 0.0.0.0

R2#config t
R2(config)# interface gi1/1
R2(config-if)# ip address 192.168.0.2 255.255.255.0

R2#config t
R2(config)# router bgp 65001
R2(config-router)# neighbor 192.168.0.1 remote-as 65000

R2(config)# router ospf 1
R2(config)# router-id 2.2.2.2
R2(config)# network 192.168.1.2 0.0.0.0 area 0

R2(config)# router eigrp 1
R2(config)# eigrp router-id 1.1.1.1
R2(config)# network 192.168.0.1 0.0.0.0

R2(config)# ip route 10.1.1.0 255.255.255.0 192.168.0.1
```

Refer to the exhibit. Router R2 is configured with multiple routes to reach network 10.1.1.0/24 from router R1. Which path is chosen by router R2 to reach the destination network 10.1.1.0/24?

- A. static
- B. EIGRP
- C. eBGP
- D. OSPF

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 414

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate default
       U - per-user static route, o - ODR
Gateway of last resort is not set
C       1.0.0.0/8 is directly connected, Loopback0
        10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
O       10.0.1.3/32 [110/100] via 10.0.1.3, 00:39:08, Serial0
C       10.0.1.0/24 is directly connected, Serial0
O       10.0.1.5/32 [110/5] via 10.0.1.50, 00:39:08, Serial0
O       10.0.1.4/32 [110/10] via 10.0.1.4, 00:39:08, Serial0
```

Refer to the exhibit. What is the next hop address for traffic that is destined to host 10.0.1.5?

- A. Loopback 0
- B. 10.0.1.4
- C. 10.0.1.3
- D. 10.0.1.50

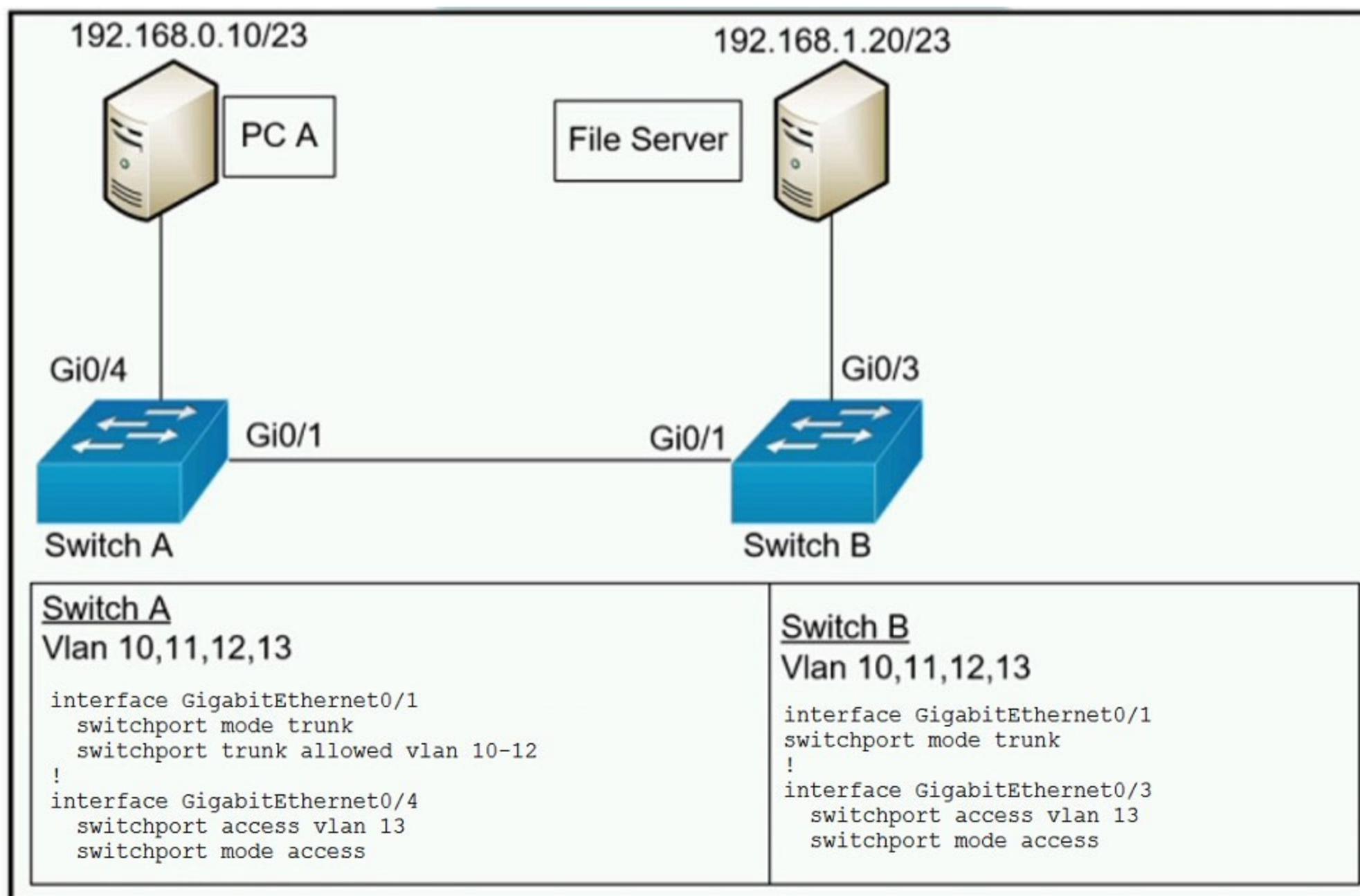
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 415

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A network administrator assumes a task to complete the connectivity between PC A and the File Server. Switch A and Switch B have been partially configured with VLANs 10, 11, 12, and 13. What is the next step in the configuration?

- A. Add PC A to VLAN 10 and the File Server to VLAN 11 for VLAN segmentation
- B. Add VLAN 13 to the trunk links on Switch A and Switch B for VLAN propagation
- C. Add a router on a stick between Switch A and Switch B allowing for Inter-VLAN routing
- D. Add PC A to the same subnet as the File Server allowing for intra-VLAN communication

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 416

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

A network engineer is configuring an OSPFv2 neighbor adjacency. Drag and drop the parameters from the left onto their required categories on the right. Not all parameters are used.

Select and Place:

### Answer Area

area ID
IP address
netmask
OSPF process ID
router ID
timers

must match
<input type="text"/>
<input type="text"/>
<input type="text"/>
must be unique
<input type="text"/>
<input type="text"/>

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 417

Topic #: 1

[\[All 200-301 Questions\]](#)

---

R1 has learned route 192.168.12.0/24 via IS-IS, OSPF, RIP, and Internal EIGRP. Under normal operating conditions, which routing protocol is installed in the routing table?

- A. IS-IS
- B. Internal EIGRP
- C. RIP
- D. OSPF

[Show Suggested Answer](#)

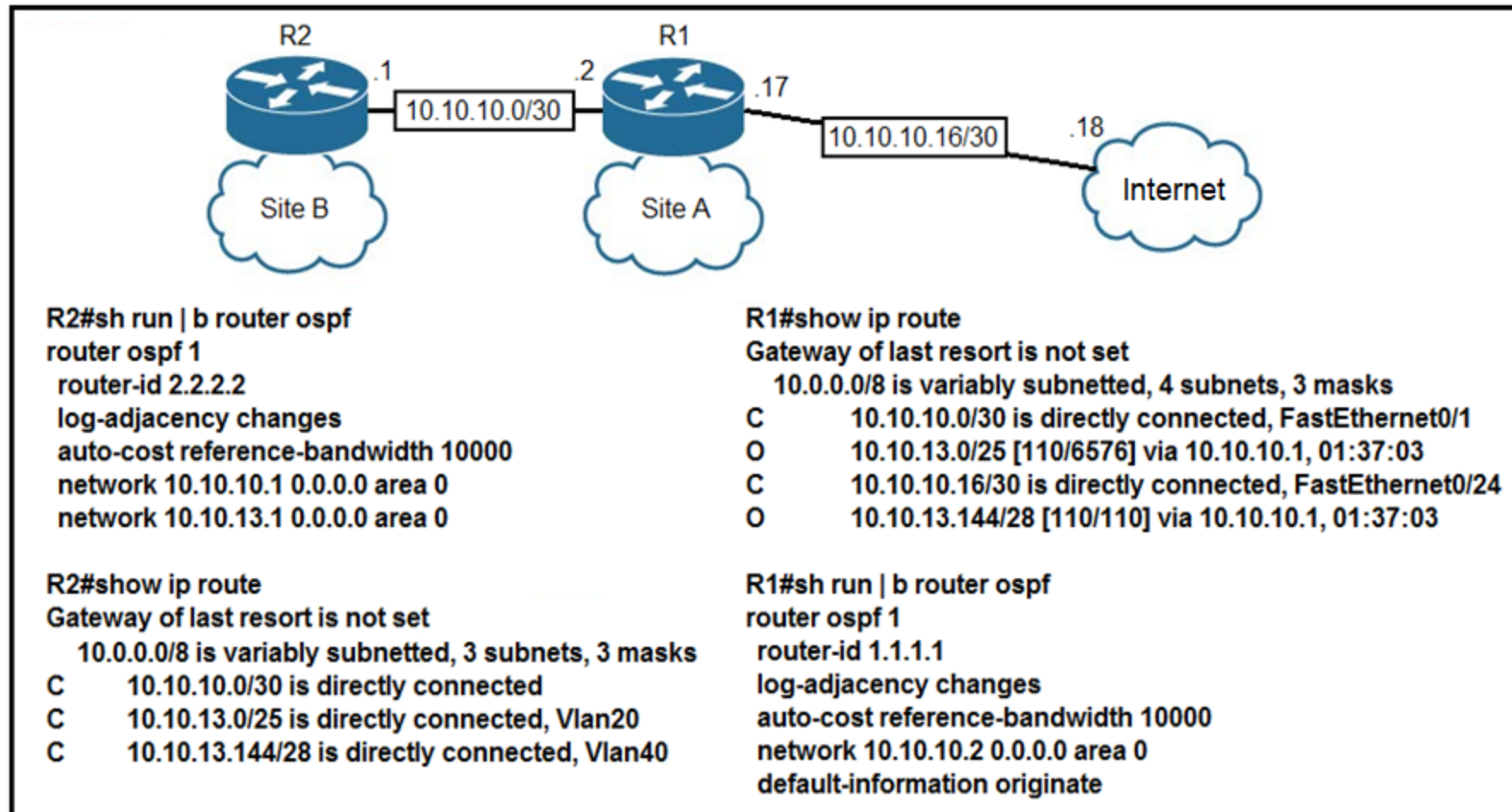


Actual exam question from Cisco's 200-301

Question #: 418

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The default-information originate command is configured under the R1 OSPF configuration. After testing, workstations on VLAN 20 at Site B cannot reach a DNS server on the Internet.

Which action corrects the configuration issue?

- A. Add the default-information originate command on R2.
- B. Add the always keyword to the default-information originate command on R1.
- C. Configure the ip route 0.0.0.0 0.0.0.0 10.10.10.18 command on R1.
- D. Configure the ip route 0.0.0.0 0.0.0.0 10.10.10.2 command on R2.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 419

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.246 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.246, Serial0/1/0
    is directly connected, Serial0/1/0
    172.16.0.0/16 is variably subnetted, 3 subnets, 3 masks
S   172.16.0.0/24 [1/0] via 207.165.200.250, Serial0/0/0
O   172.16.0.128/25 [110/38443] via 207.165.200.254, 00:00:23, Serial0/0/1
D   172.16.0.192/29 [90/3184439] via 207.165.200.254, 00:00:25, Serial0/0/1
    209.165.200.0/24 is variably subnetted, 4 subnets, 2 masks
C   209.165.200.248/30 is directly connected, Serial0/0/0
L   209.165.200.249/32 is directly connected, Serial0/0/0
C   209.165.200.252/30 is directly connected, Serial0/0/1
L   209.165.200.253/32 is directly connected, Serial0/0/1
```

Refer to the exhibit. With which metric was the route to host 172.16.0.202 learned?

- A. 0
- B. 110
- C. 38443
- D. 3184439

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 420

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A user configured OSPF in a single area between two routers. A serial interface connecting R1 and R2 is running encapsulation PPP. By default, which OSPF network type is seen on this interface when the user types show ip ospf interface on R1 or R2?

- A. nonbroadcast
- B. point-to-point
- C. point-to-multipoint
- D. broadcast

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 421

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which MAC address is recognized as a VRRP virtual address?

- A. 0000.5E00.010a
- B. 0005.3709.8968
- C. 0000.0C07.AC99
- D. 0007.C070.AB01

[Show Suggested Answer](#)

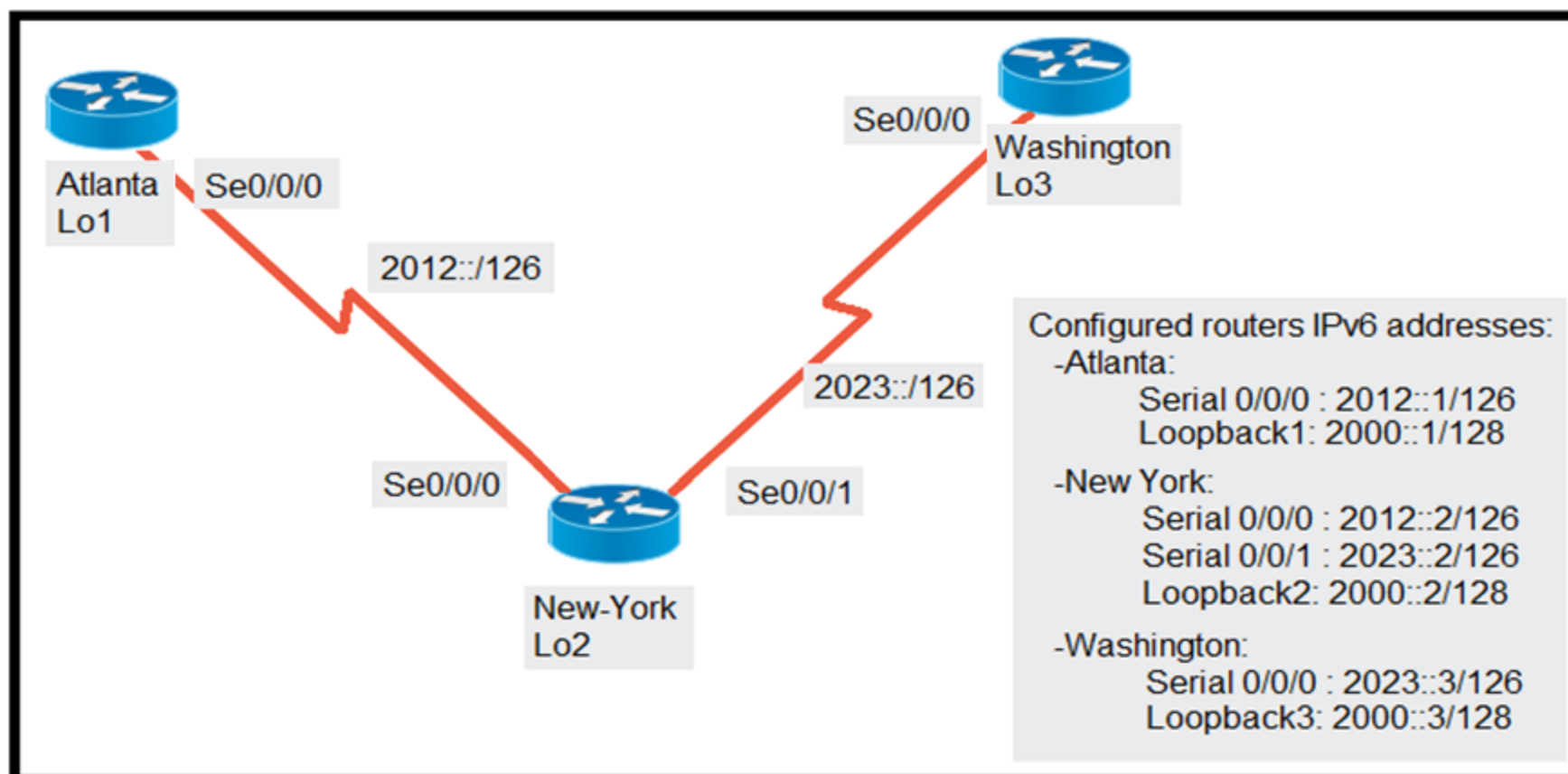


Actual exam question from Cisco's 200-301

Question #: 422

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The New York router is configured with static routes pointing to the Atlanta and Washington sites.

Which two tasks must be performed so that the Se0/0/0 interfaces on the Atlanta and Washington routers reach one another? (Choose two.)

- A. Configure the ipv6 route 2023::/126 2012::1 command on the Atlanta router.
- B. Configure the ipv6 route 2012::/126 2023::2 command on the Washington router.
- C. Configure the ipv6 route 2012::/126 2023::1 command on the Washington router.
- D. Configure the ipv6 route 2023::/126 2012::2 command on the Atlanta router.
- E. Configure the ipv6 route 2012::/126 s0/0/0 command on the Atlanta router.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 423

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A router running EIGRP has learned the same route from two different paths. Which parameter does the router use to select the best path?

- A. as-path
- B. administrative distance
- C. metric
- D. cost

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 424

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer configured an OSPF neighbor as a designated router. Which state verifies the designated router is in the proper mode?

- A. Init
- B. 2-way
- C. Exchange
- D. Full

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 425

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route

D    192.168.16.0/26 [90/2679326] via 192.168.1.1
R    192.168.16.0/24 [120/3] via 192.168.1.2
O    192.168.16.0/21 [110/2] via 192.168.1.3
i L1 192.168.16.0/27 [115/30] via 192.168.1.4
```

Refer to the exhibit. Which route does R1 select for traffic that is destined to 192.168.16.2?

- A. 192.168.16.0/21
- B. 192.168.16.0/24
- C. 192.168.16.0/26
- D. 192.168.16.0/27

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 426

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Gateway of last resort is 10.12.0.1 to network 0.0.0.0
```

```
O*E2 0.0.0.0/0 [110/1] via 10.12.0.1, 00:00:01, GigabitEthernet0/0
      10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C     10.0.0.0/24 is directly connected, GigabitEthernet0/0
L     10.0.0.2/32 is directly connected, GigabitEthernet0/0
C     10.13.0.0/24 is directly connected, GigabitEthernet0/1
L     10.13.0.2/32 is directly connected, GigabitEthernet0/1
```

Refer to the exhibit. If configuring a static default route on the router with the ip route 0.0.0.0 0.0.0.0 10.13.0.1 120 command, how does the router respond?

- A. It starts sending traffic without a specific matching entry in the routing table to GigabitEthernet0/1.
- B. It immediately replaces the existing OSPF route in the routing table with the newly configured static route.
- C. It starts load-balancing traffic between the two default routes.
- D. It ignores the new static route until the existing OSPF default route is removed.

Show Suggested Answer

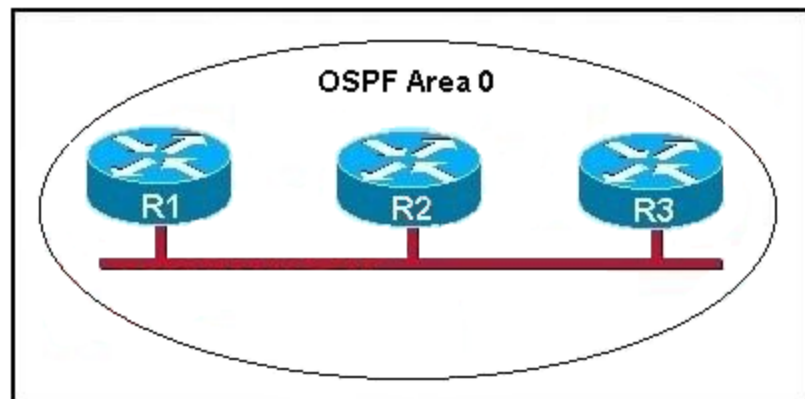
Actual exam question from Cisco's 200-301

Question #: 427

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the graphic. R1 is unable to establish an OSPF neighbor relationship with R3. What are possible reasons for this problem? (Choose two.)



- A. All of the routers need to be configured for backbone Area 1.
- B. R1 and R2 are the DR and BDR, so OSPF will not establish neighbor adjacency with R3.
- C. A static route has been configured from R1 to R3 and prevents the neighbor adjacency from being established.
- D. The hello and dead interval timers are not set to the same values on R1 and R3.
- E. EIGRP is also configured on these routers with a lower administrative distance.
- F. R1 and R3 are configured in different areas.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 428

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Router#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route

Gateway of last resort is 209.165.202.131 to network 0.0.0.0

S*    0.0.0.0/0 [1/0] via 209.165.202.131
      209.165.200.0/27 is subnetted, 1 subnets
S      209.165.200.224 [254/0] via 209.165.202.129
      209.165.201.0/27 is subnetted, 1 subnets
S      209.165.201.0 [1/0] via 209.165.202.130
```

Refer to the exhibit. Which command configures a floating static route to provide a backup to the primary link?

- A. ip route 209.165.200.224 255.255.255.224 209.165.202.129 254
- B. ip route 209.165.201.0 255.255.255.224 209.165.202.130
- C. ip route 0.0.0.0 0.0.0.0 209.165.200.224
- D. ip route 0.0.0.0 0.0.0.0 209.165.202.131

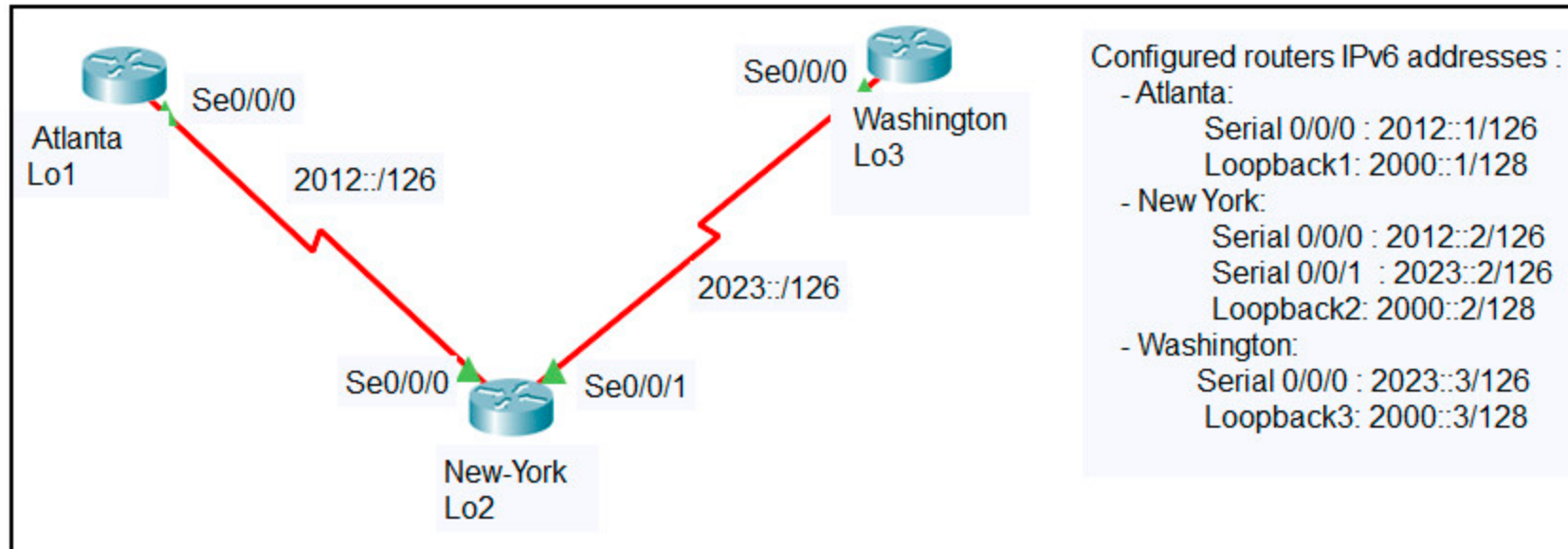
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 429

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer configured the New York router with static routes that point to the Atlanta and Washington sites. Which command must be configured on the Atlanta and Washington routers so that both sites are able to reach the loopback2 interface on the New York router?

- A. `ipv6 route::/0 Serial 0/0/0`
- B. `ipv6 route::/0 Serial 0/0/1`
- C. `ipv6 route:0/0 Serial 0/0/0`
- D. `ip route 0.0.0.0 0.0.0.0 Serial 0/0/0`
- E. `ipv6 route::/0 2000::2`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 430

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the effect when loopback interfaces and the configured router ID are absent during the OSPF Process configuration?

- A. The lowest IP address is incremented by 1 and selected as the router ID.
- B. The router ID 0.0.0.0 is selected and placed in the OSPF process.
- C. No router ID is set, and the OSPF protocol does not run.
- D. The highest up/up physical interface IP address is selected as the router ID.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 431

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route
Gateway of last resort is 192.168.30.10 to network 0.0.0.0
 192.168.30.0/29 is subnetted, 2 subnets
 C    192.168.30.0 is directly connected, FastEthernet0/0
 C    192.168.30.8 is directly connected, Serial0/0.1
 192.168.10.0/24 is variably subnetted, 2 subnets, 2 masks
 O IA  192.168.10.32/28 [110/193] via 192.168.30.10, 00:18:49, Serial0/0.1
 O IA  192.168.10.0/27 [110/192] via 192.168.30.10, 00:18:49, Serial0/0.1
 192.168.20.0/30 is subnetted, 1 subnets
 O IA  192.168.20.0 [110/128] via 192.168.30.10, 00:18:49, Serial0/0.1
 192.168.50.0/32 is subnetted, 1 subnets
 C    192.168.50.1 is directly connected, Loopback0
 O*IA 0.0.0.0/0 [110/84] via 192.168.30.10, 00:10:36, Serial0/0.1
```

Refer to the exhibit. What is the metric of the route to the 192.168.10.33/28 subnet?

- A. 84
- B. 110
- C. 128
- D. 192
- E. 193

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 432

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2 * - candidate
       default
       U - per-user static route, o - ODR
Gateway of last resort is not set
C 192.168.3.5 is directly connected, Loopback0
  10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
O   10.0.1.3/32 [110/100] via 192.168.0.40, 00:39:08, Serial0
C   10.0.1.0/24 is directly connected, Serial0
O   10.0.1.190/32 [110/5] via 192.168.0.35, 00:39:08, Serial0
O   10.0.1.0/24 [110/10] via 192.168.0.4, 00:39:08, Gigabit Ethernet 0/0
D   10.0.1.0/28 [90/10] via 192.168.0.7, 00:39:08, Gigabit Ethernet 0/0
```

Refer to the exhibit. Traffic sourced from the loopback0 interface is trying to connect via ssh to the host at 10.0.1.15. What is the next hop to the destination address?

- A. 192.168.0.7
- B. 192.168.0.4
- C. 192.168.0.40
- D. 192.168.3.5

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 433

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When the active router in a VRRP group fails, which router assumes the role and forwards packets?

- A. forwarding
- B. standby
- C. backup
- D. listening

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 434

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which action does the router take as it forwards a packet through the network?

- A. The router encapsulates the original packet and then includes a tag that identifies the source router MAC address and transmits it transparently to the destination.
- B. The router encapsulates the source and destination IP addresses with the sending router IP address as the source and the neighbor IP address as the destination.
- C. The router replaces the original source and destination MAC addresses with the sending router MAC address as the source and neighbor MAC address as the destination.
- D. The router replaces the source and destination labels with the sending router interface label as a source and the next hop router label as a destination.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 435

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R2#show ip route
C      192.168.1.0/26 is directly connected, FastEthernet0/1
```

Refer to the exhibit. Which two prefixes are included in this routing table entry? (Choose two.)

- A. 192.168.1.17
- B. 192.168.1.61
- C. 192.168.1.64
- D. 192.168.1.127
- E. 192.168.1.254

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 436

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which virtual MAC address is used by VRRP group 1?

- A. 0504.0367.4921
- B. 0007.c061.bc01
- C. 0050.0c05.ad81
- D. 0000.5E00.0101

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 437

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the purpose of using First Hop Redundancy Protocol on a specific subnet?

- A. forwards multicast hello messages between routers
- B. sends the default route to the hosts on a network
- C. ensures a loop-free physical topology
- D. filters traffic based on destination IP addressing

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 438

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which configuration issue is preventing the OSPF neighbor relationship from being established between the two routers?



```
R1#show running-config
Building configuration...
!
interface GigabitEthernet1/0
mtu 1600
ip address 192.168.0.1 255.255.255.252
negotiation auto
!
router ospf 1
router-id 1.1.1.1
passive-interface default
no passive-interface GigabitEthernet1/0
network 192.168.0.1 0.0.0.0 area 0
!
R2#show running-config
Building configuration...
!
interface GigabitEthernet2/0
ip address 192.168.0.2 255.255.255.252
negotiation auto
!
router ospf 1
router-id 2.2.2.2
passive-interface default
no passive-interface GigabitEthernet2/0
network 192.168.0.2 0.0.0.0 area 0
```

- A. R1 has an incorrect network command for interface Gi1/0.
- B. R2 should have its network command in area 1.
- C. R1 interface Gi1/0 has a larger MTU size.
- D. R2 is using the passive-interface default command.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 439

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
       + - replicated route, % - next hop override

Gateway of last resort is 10.56.0.1 to network 0.0.0.0

S*    0.0.0.0/0 [1/0] via 10.56.0.1
      10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C     10.56.0.0/17 is directly connected, Vlan56
L     10.56.0.19/32 is directly connected, Vlan56
C     10.56.128.0/18 is directly connected, Vlan57
L     10.56.128.19/32 is directly connected, Vlan57
```

Refer to the exhibit. When router R1 is sending traffic to IP address 10.56.192.1, which interface or next hop address does it use to route the packet?

- A. 10.56.0.1
- B. 0.0.0.0/0
- C. Vlan57
- D. 10.56.128.19

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 440

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate default
       U - per-user static route, o - ODR
Gateway of last resort is not set
C    172.16.0.0/16 is directly connected, Loopback0
     172.16.0/16 is variably subnetted, 4 subnets, 2 masks
O    172.16.1.3/3 [110/100] via 192.168.7.40, 00:39:08, Serial0
C    172.16.1.0/24 is directly connected, Serial0
O    172.16.1.184/29 [110/5] via 192.168.7.35, 00:39:08, Serial0
O    172.16.3.0/24 [110/10] via 192.168.7.4, 00:39:08, Gigabit Ethernet 0/0
D    172.16.1.0/28 [90/10] via 192.168.7.7, 00:39:08, Gigabit Ethernet 0/0
```

Refer to the exhibit. Load-balanced traffic is coming in from the WAN destined to a host at 172.16.1.190. Which next-hop is used by the router to forward the request?

- A. 192.168.7.4
- B. 192.168.7.7
- C. 192.168.7.35
- D. 192.168.7.40

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 441

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a benefit of VRRP?

- A. It provides the default gateway redundancy on a LAN using two or more routers.
- B. It provides traffic load balancing to destinations that are more than two hops from the source.
- C. It prevents loops in a Layer 2 LAN by forwarding all traffic to a root bridge, which then makes the final forwarding decision.
- D. It allows neighbors to share routing table information between each other.

Show Suggested Answer

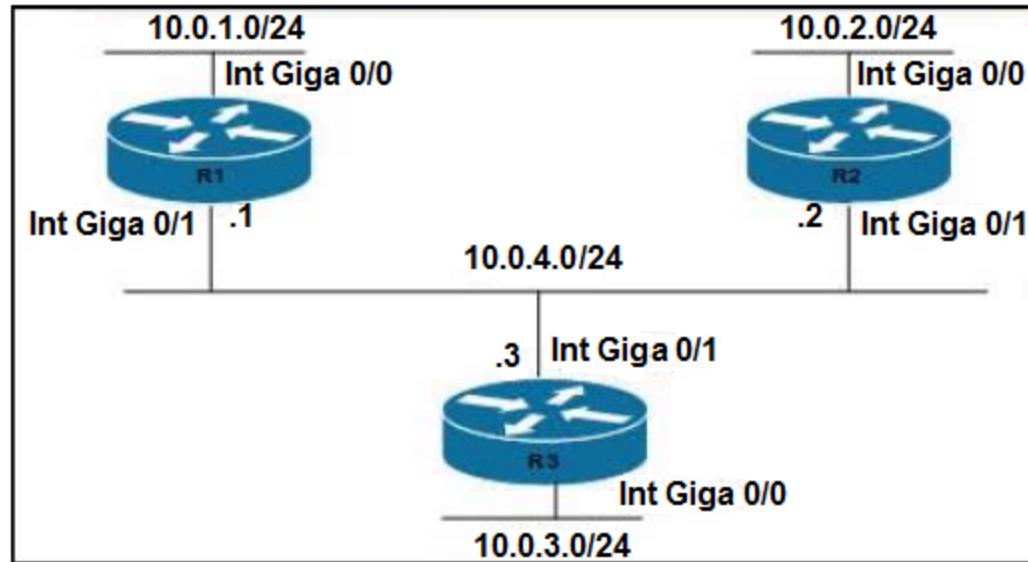


Actual exam question from Cisco's 200-301

Question #: 442

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Routers R1 and R3 have the default configuration. The router R2 priority is set to 99. Which commands on R3 configure it as the DR in the 10.0.4.0/24 network?

- A. R3(config)#interface Gig0/0 R3(config-if)#ip ospf priority 100
- B. R3(config)#interface Gig0/0 R3(config-if)#ip ospf priority 1
- C. R3(config)#interface Gig0/1 R3(config-if)#ip ospf priority 0
- D. R3(config)#interface Gig0/1 R3(config-if)#ip ospf priority 100

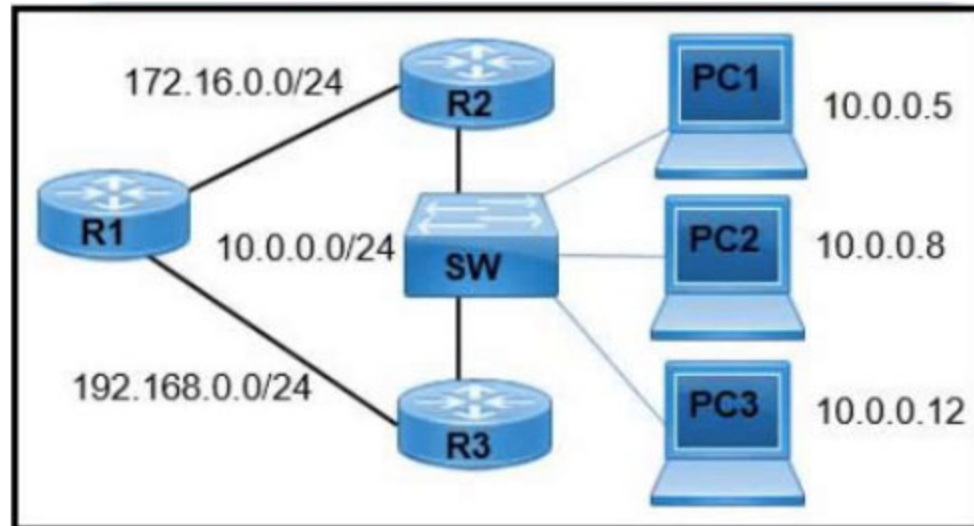
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 443

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A network engineer must configure R1 so that it sends all packets destined to the 10.0.0.0/24 network to R3, and all packets destined to PC1 to R2. Which configuration must the engineer implement?

- A. R1(config)#ip route 10.0.0.0 255.255.255.0 172.16.0.2 R1(config)#ip route 10.0.0.5 255.255.255.255 192.168.0.2
- B. R1(config)#ip route 10.0.0.0 255.255.0.0 172.16.0.2 R1(config)#ip route 10.0.0.5 255.255.255.255 192.168.0.2
- C. R1(config)#ip route 10.0.0.0 255.255.255.0 192.168.0.2 R1(config)#ip route 10.0.0.5 255.255.255.255 172.16.0.2
- D. R1(config)#ip route 10.0.0.0 255.255.0.0 192.168.0.2 R1(config)#ip route 10.0.0.5 255.255.255.0 172.16.0.2

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 444

Topic #: 1

[\[All 200-301 Questions\]](#)

```
CPE# show ip route
      192.168.1.0/24 is variably subnetted, 3 subnets, 3 masks
B     192.168.1.0/24 [20/1] via 192.168.12.2, 00:00:06
R     192.168.1.128/25 [120/5] via 192.168.13.3, 00:02:35, Ethernet0/1
O     192.168.1.192/26 [110/11] via 192.168.14.4, 00:02:23, Ethernet0/2
D     192.168.1.224/27 [90/1024640] via 192.168.15.5, 00:01:40, Ethernet0/3
```

Refer to the exhibit. All traffic enters the CPE router from interface Serial0/3 with an IP address of 192.168.50.1. Web traffic from the WAN is destined for a LAN network where servers are load-balanced. An IP packet with a destination address of the HTTP virtual IP of 192.168.1.250 must be forwarded. Which routing table entry does the router use?

- A. 192.168.1.0/24 via 192.168.12.2
- B. 192.168.1.128/25 via 192.168.13.3
- C. 192.168.1.192/26 via 192.168.14.4
- D. 192.168.1.224/27 via 192.168.15.5

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 445

Topic #: 1

[\[All 200-301 Questions\]](#)

```
A# show ip ospf neighbor
Neighbor ID  Pri  State           Dead Time  Address      Interface
172.1.1.1    1    EXCHANGE/ -    00:00:36   172.16.32.1  Serial0.1
```

Refer to the exhibit. An engineer assumes a configuration task from a peer. Router A must establish an OSPF neighbor relationship with neighbor 172.1.1.1. The output displays the status of the adjacency after 2 hours. What is the next step in the configuration process for the routers to establish an adjacency?

- A. Configure router A to use the same MTU size as router B.
- B. Configure a point-to-point link between router A and router B.
- C. Set the router B OSPF ID to the same value as its IP address.
- D. Set the router B OSPF ID to a nonhost address.

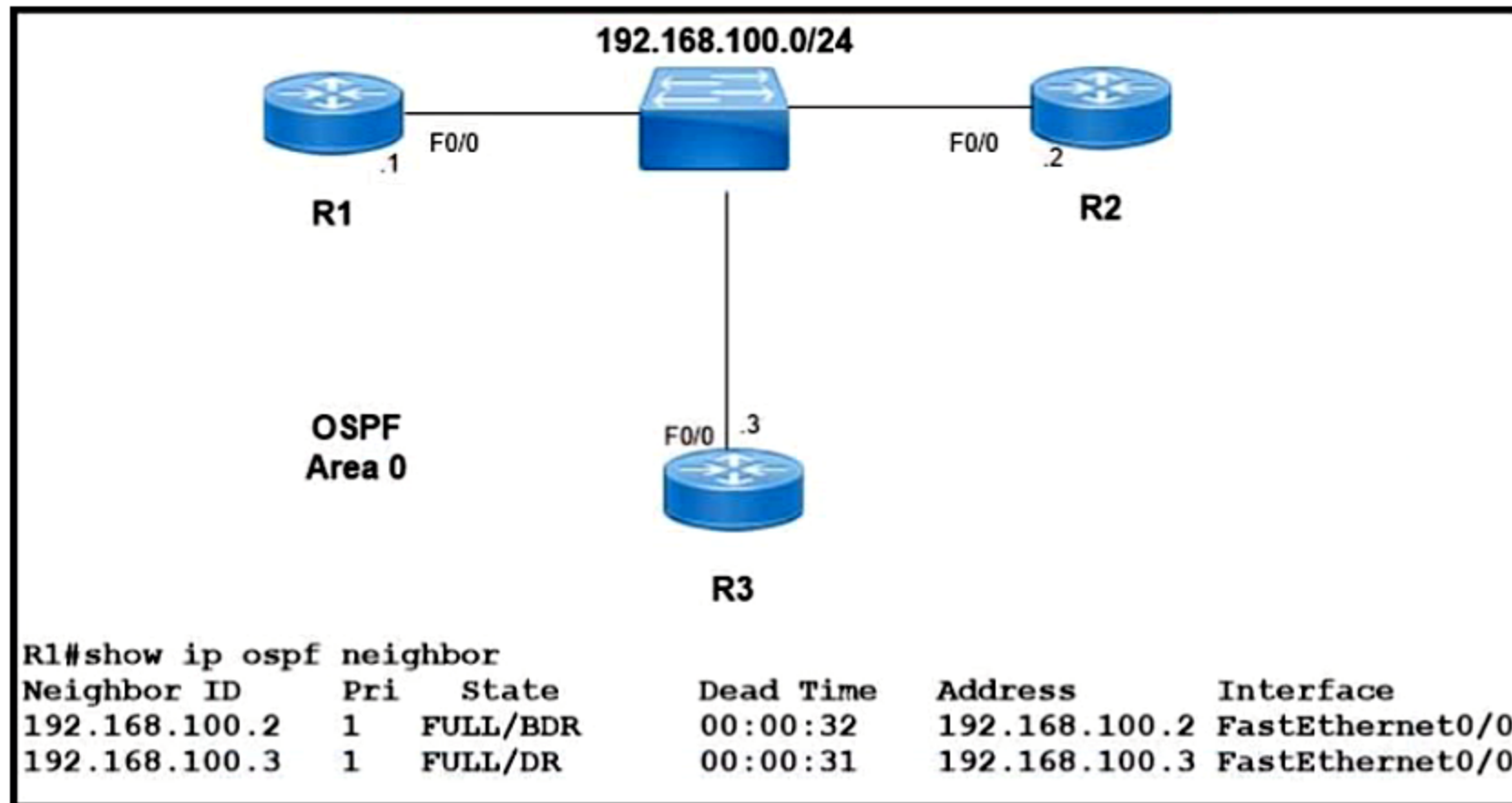
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 446

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which two configurations must the engineer apply on this network so that R1 becomes the DR? (Choose two.)

- A. R3(config)#interface fastethernet 0/0 R3(config-if)#ip ospf priority 0
- B. R1(config)#router ospf 1 R1(config-router)#router-id 192.168.100.1
- C. R1(config)#interface fastethernet 0/0 R1(config-if)#ip ospf priority 200
- D. R1(config)#interface fastethernet 0/0 R1(config-if)#ip ospf priority 0
- E. R3(config)#interface fastethernet 0/0 R3(config-if)#ip ospf priority 200

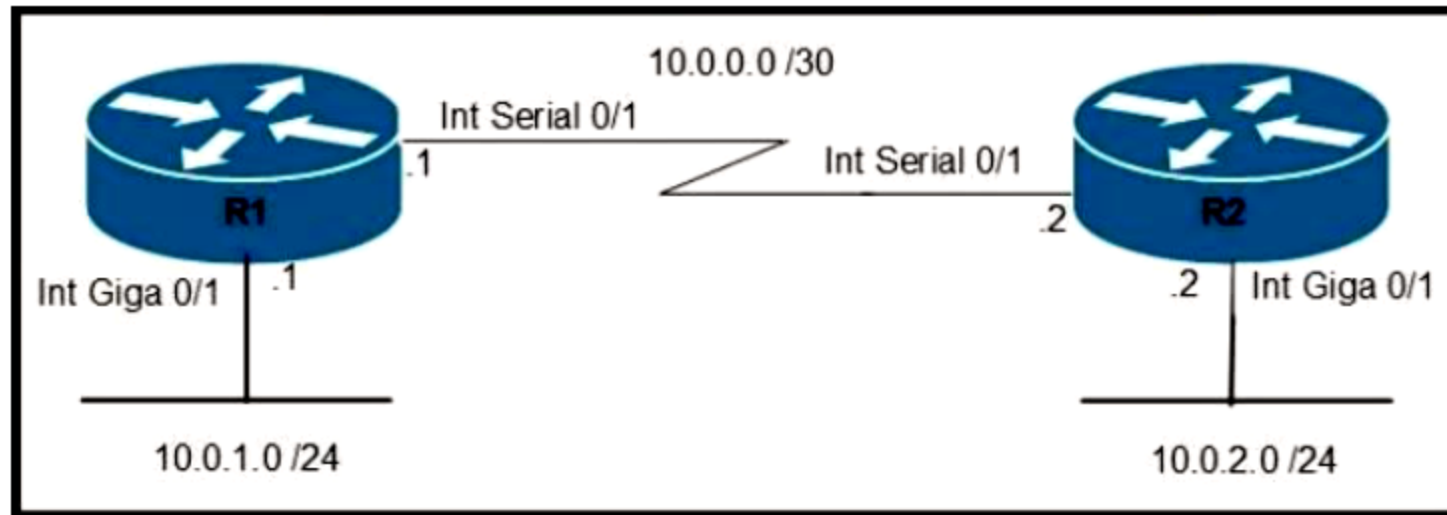
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 447

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which command configures OSPF on the point-to-point link between routers R1 and R2?

- A. router-id 10.0.0.15
- B. neighbor 10.1.2.0 cost 180
- C. network 10.0.0.0 0.0.0.255 area 0
- D. ip ospf priority 100

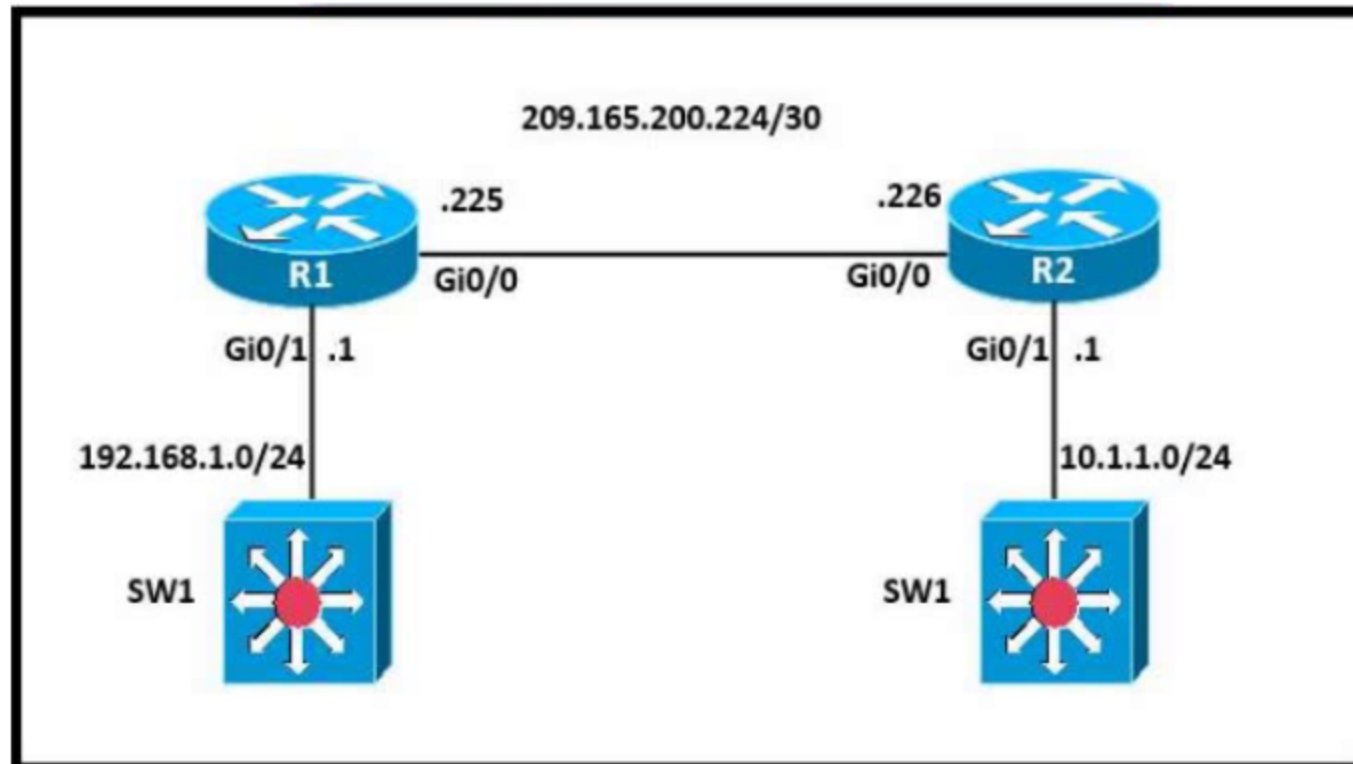
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Actual exam question from Cisco's 200-301

Question #: 448

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A network engineer is in the process of establishing IP connectivity between two sites. Routers R1 and R2 are partially configured with IP addressing. Both routers have the ability to access devices on their respective LANs. Which command set configures the IP connectivity between devices located on both LANs in each site?

- A. R1 ip route 192.168.1.1 255.255.255.0 GigabitEthernet0/1 R2 ip route 10.1.1.1 255.255.255.0 GigabitEthernet0/1
- B. R1 ip route 192.168.1.0 255.255.255.0 GigabitEthernet0/0 R2 ip route 10.1.1.1 255.255.255.0 GigabitEthernet0/0
- C. R1 ip route 0.0.0.0 0.0.0.0 209.165.200.225 R2 ip route 0.0.0.0 0.0.0.0 209.165.200.226
- D. R1 ip route 0.0.0.0 0.0.0.0 209.165.200.226 R2 ip route 0.0.0.0 0.0.0.0 209.165.200.225

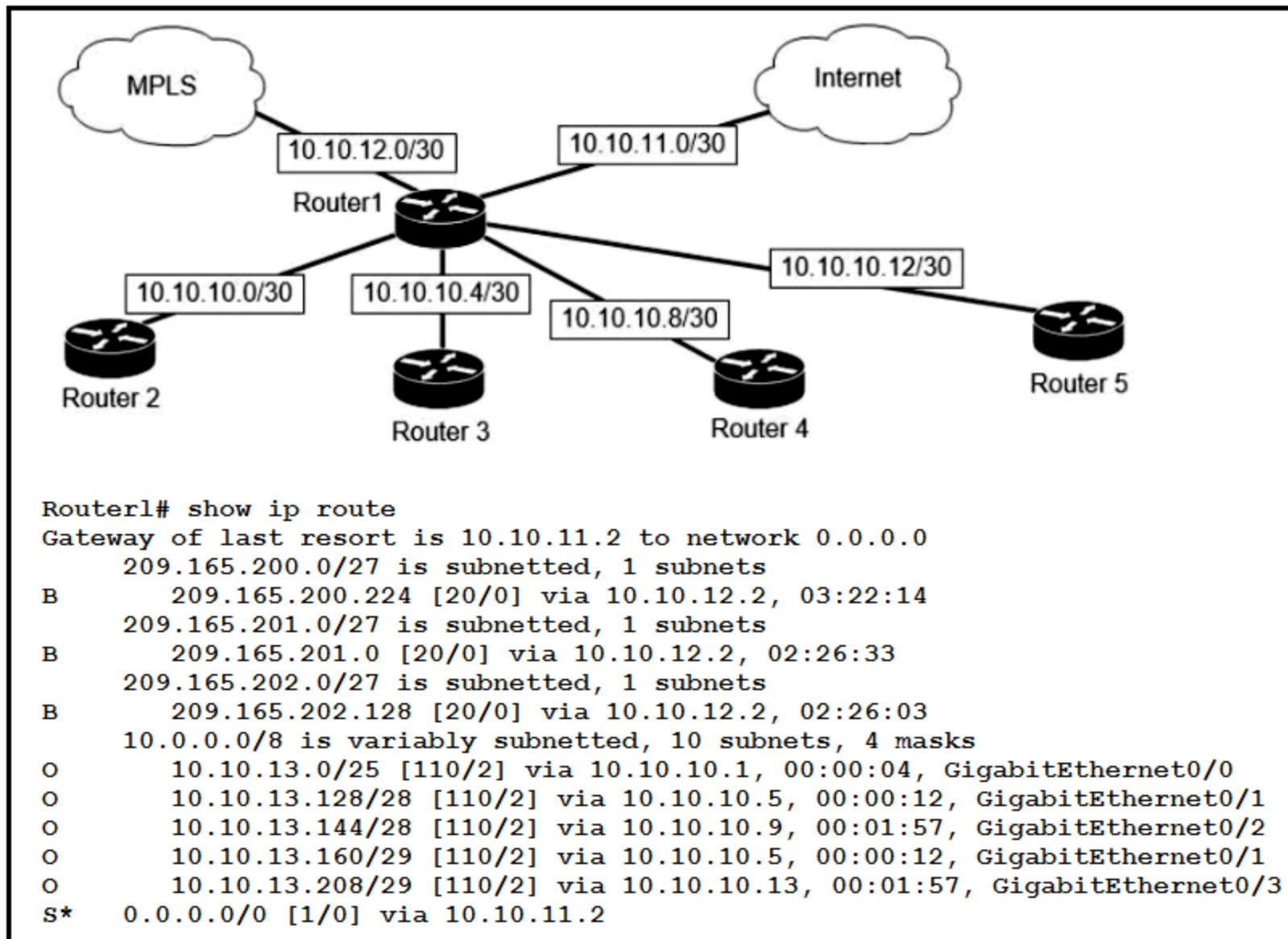
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Actual exam question from Cisco's 200-301

Question #: 449

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which next-hop IP address does Router1 use for packets destined to host 10.10.13.158?

- A. 10.10.10.9
- B. 10.10.10.5
- C. 10.10.11.2
- D. 10.10.12.2

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 450

Topic #: 1

[\[All 200-301 Questions\]](#)

RIP	10.1.1.16/28 [120/5]	via	F0/0
OSPF	10.1.1.0/24 [110/30]	via	F0/1
OSPF	10.1.1.0/24 [110/40]	via	F0/2
EIGRP	10.1.0.0/26 [90/20]	via	F0/3
EIGRP	10.0.0.0/8 [90/133]	via	F0/4

Refer to the exhibit. Packets received by the router from BGP enter via a serial interface at 209.165.201.1. Each route is present within the routing table. Which interface is used to forward traffic with a destination IP of 10.1.1.19?

- A. F0/0
- B. F0/1
- C. F0/4
- D. F0/3

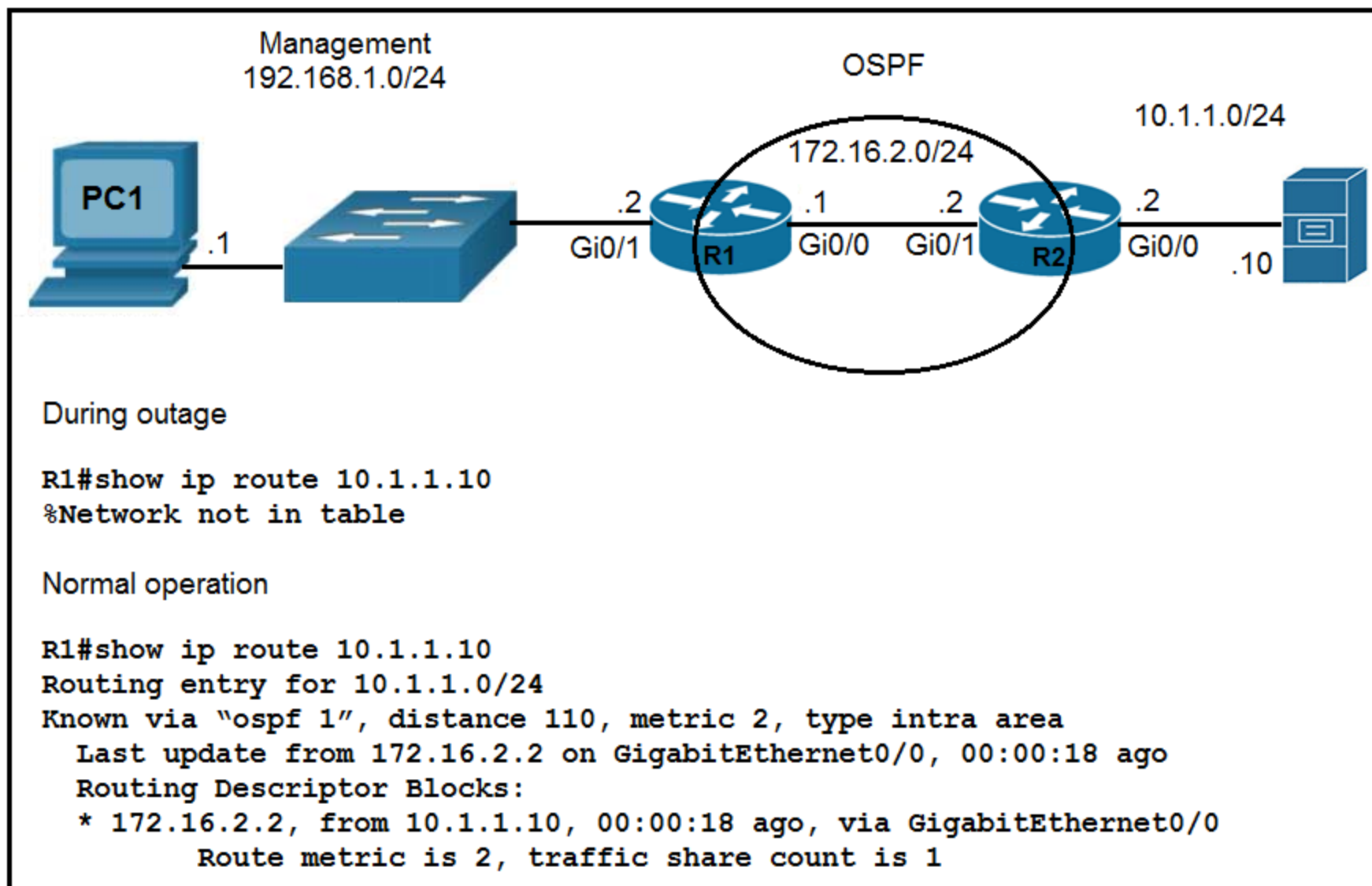
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 451

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which route must be configured on R1 so that OSPF routing is used when OSPF is up, but the server is still reachable when OSPF goes down?

- A. ip route 10.1.1.10 255.255.255.255 gi0/0 125
- B. ip route 10.1.1.0 255.255.255.0 172.16.2.2 100
- C. ip route 10.1.1.0 255.255.255.0 gi0/1 125
- D. ip route 10.1.1.10 255.255.255.255 172.16.2.2 100

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 452

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       p - periodic downloaded static route

Gateway of last resort is not set
 10.0.0.0/24 is subnetted, 5 subnets
D       10.1.2.0/24 [90/2170112] via 10.165.20.226, 00:01:30, Serial0/0
D       10.1.3.0/24 [90/2170112] via 10.165.20.226, 00:01:30, Serial0/0
D       10.1.2.0/25 [90/2170112] via 10.165.20.126, 00:01:30, Serial0/0
D       10.1.3.0/25 [90/2170112] via 10.165.20.146, 00:01:30, Serial0/0
D       10.1.4.0/24 [90/2170112] via 10.165.20.156, 00:01:30, Serial0/0
 192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.18.10.0/24 is directly connected, GigabitEthernet0/0
       192.168.21.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.18.11.0/24 is directly connected, GigabitEthernet0/1
 10.165.20.0/24 is variably subnetted, 2 subnets, 2 masks
C       10.165.20.224/24 is directly connected, Serail0/0
S       10.1.12.112/28 [1/0] via 10.165.20.166
```

Refer to the exhibit. What is the next hop for traffic entering R1 with a destination of 10.1.2.126?

- A. 10.165.20.126
- B. 10.165.20.146
- C. 10.165.20.166
- D. 10.165.20.226

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 453

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route | begin gateway
Gateway of last resort is not set
      172.16.0.0/16 is variably subnetted, 3 subnets, 2 masks
C       172.16.1.0/24 is directly connected, FastEthernet0/0
L       172.16.1.1/32 is directly connected, FastEthernet0/0
EX      172.16.2.0/24 [170/2] via 207.165.200.250, 00:00:25, Serial0/0/0
O       192.168.1.0/24 [110/84437] via 207.165.200.254, 00:00:17, Serial0/0/1
D       192.168.2.0/24 [90/184437] via 207.165.200.254, 00:00:15, Serial0/0/1
E1      192.168.3.0/24 [110/1851437] via 207.165.200.254, 00:00:19, Serial0/0/1
      207.165.200.0/24 is variably subnetted, 4 subnets, 2 masks
C       207.165.200.248/30 is directly connected, Serial0/0/0
L       207.165.200.249/32 is directly connected, Serial0/0/0
C       207.165.200.252/30 is directly connected, Serial0/0/1
L       207.165.200.253/32 is directly connected, Serial0/0/1
```

Refer to the exhibit. Which prefix did router R1 learn from internal EIGRP?

- A. 192.168.3.0/24
- B. 192.168.1.0/24
- C. 172.16.1.0/24
- D. 192.168.2.0/24

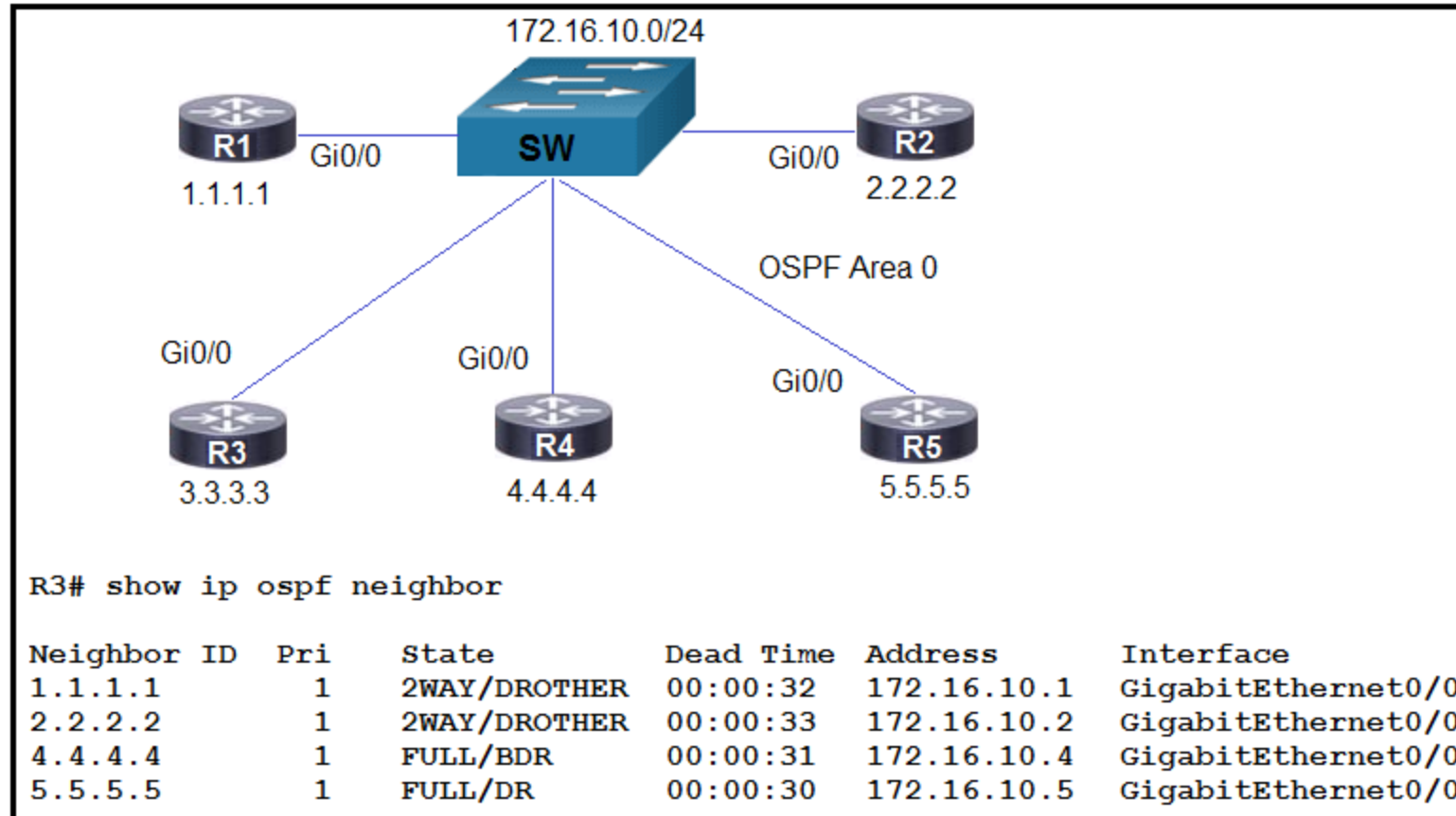
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Actual exam question from Cisco's 200-301

Question #: 454

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. R5 is the current DR on the network, and R4 is the BDR. Their interfaces are flapping, so a network engineer wants the OSPF network to elect a different DR and BDR. Which set of configurations must the engineer implement?

- A. R4(config)#interface gi0/0 R4(config-if)#ip ospf priority 20 R5(config)#interface gi0/0 R5(config-if)#ip ospf priority 10
- B. R5(config)#interface gi0/0 R5(config-if)#ip ospf priority 120 R4(config)#interface gi0/0 R4(config-if)#ip ospf priority 110
- C. R3(config)#interface gi0/0 R3(config-if)#ip ospf priority 255 R2(config)#interface gi0/0 R2(config-if)#ip ospf priority 240
- D. R2(config)#interface gi0/0 R2(config-if)#ip ospf priority 259 R3(config)#interface gi0/0 R3(config-if)#ip ospf priority 256

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 455

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route
Codes:
C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP, D -
EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area N1 - OSPF NSSA
external type 1, N2 - OSPF NSSA external type 2, E1 - OSPF external type
1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate default,
U - per-user static route, o - ODR
Gateway of last resort is not set
C    10.0.0.0/8 is directly connected, Loopback0
O    10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
O    10.0.1.3/32 [110/100] via 10.0.1.100, 00:39:08, Serial0
C    10.0.1.0/24 is directly connected, Serial0
O    10.0.1.5/32 [110/5] via 10.0.1.50, 00:39:08, Serial0
O    10.0.10.0/24 [110/10] via 10.0.1.4, 00:39:08, Gigabit Ethernet 0/0
D    10.0.10.0/24 [90/10] via 10.0.1.5, 00:39:08, Gigabit Ethernet 0/1
```

Refer to the exhibit. Web traffic is coming in from the WAN interface. Which route takes precedence when the router is processing traffic destined for the LAN network at 10.0.10.0/24?

- A. via next-hop 10.0.1.5
- B. via next-hop 10.0.1.4
- C. via next-hop 10.0.1.50
- D. via next-hop 10.0.1.100

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 456

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Gateway of last resort is 172.16.2.2 to network 0.0.0.0
```

```
10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
```

```
C 10.10.8.0/28 is directly connected, GigabitEthernet0/0/2
```

```
C 10.10.10.0/24 is directly connected, GigabitEthernet0/0/0
```

```
L 10.10.10.3.32 is directly connected, GigabitEthernet0/0/0
```

```
172.16.0.0/16 is variably subnetted, 3 subnets, 2 masks
```

```
S 172.16.1.33/32 is directly connected, GigabitEthernet0/0/1
```

```
C 172.16.2.0/23 is directly connected, GigabitEthernet0/0/1
```

```
L 172.16.2.1/32 is directly connected, GigabitEthernet0/0/1
```

```
S* 0.0.0.0/0 [1/0] via 172.16.2.2
```

Refer to the exhibit. A packet sourced from 10.10.10.1 is destined for 10.10.8.14. What is the subnet mask of the destination route?

- A. 255.255.254.0
- B. 255.255.255.240
- C. 255.255.255.248
- D. 255.255.255.252

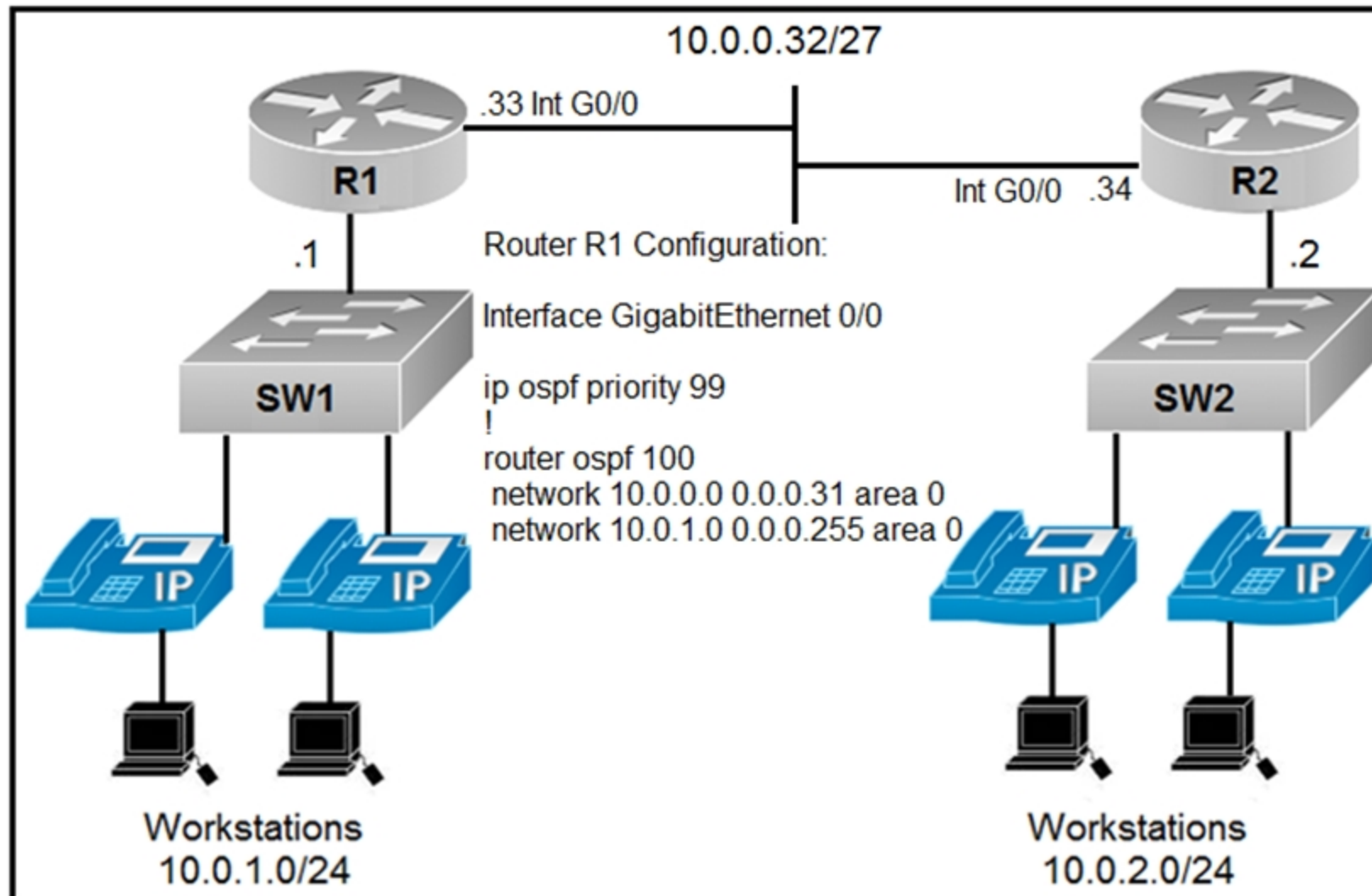
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 457

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer must configure router R2 so it is elected as the DR on the WAN subnet. Which command sequence must be configured?

- A. interface gigabitethernet0/0 ip address 10.0.0.34 255.255.255.248 ip ospf priority 0
- B. interface gigabitethernet0/0 ip address 10.0.0.34 255.255.255.224 ip ospf priority 100
- C. interface gigabitethernet0/0 ip address 10.0.1.1 255.255.255.0 ip ospf priority 255
- D. interface gigabitethernet0/0 ip address 10.0.1.1 255.255.255.224 ip ospf priority 98

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 458

Topic #: 1

[\[All 200-301 Questions\]](#)

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An engineer is configuring router R1 with an IPv6 static route for prefix 2019:C15C:0CAF:E001::/64. The next hop must be 2019:C15C:0CAF:E002::1. The route must be reachable via the R1 Gigabit 0/0 interface. Which command configures the designated route?

- A. R1(config-if)#ip route 2019:C15C:0CAF:E001::/64 GigabitEthernet 0/0
- B. R1(config)#ip route 2019:C15C:0CAF:E001::/64 GigabitEthernet 0/0
- C. R1(config-if)#ipv6 route 2019:C15C:0CAF:E001::/64 2019:C15C:0CAF:E002::1
- D. R1(config)#ipv6 route 2019:C15C:0CAF:E001::/64 2019:C15C:0CAF:E002::1

Show Suggested Answer

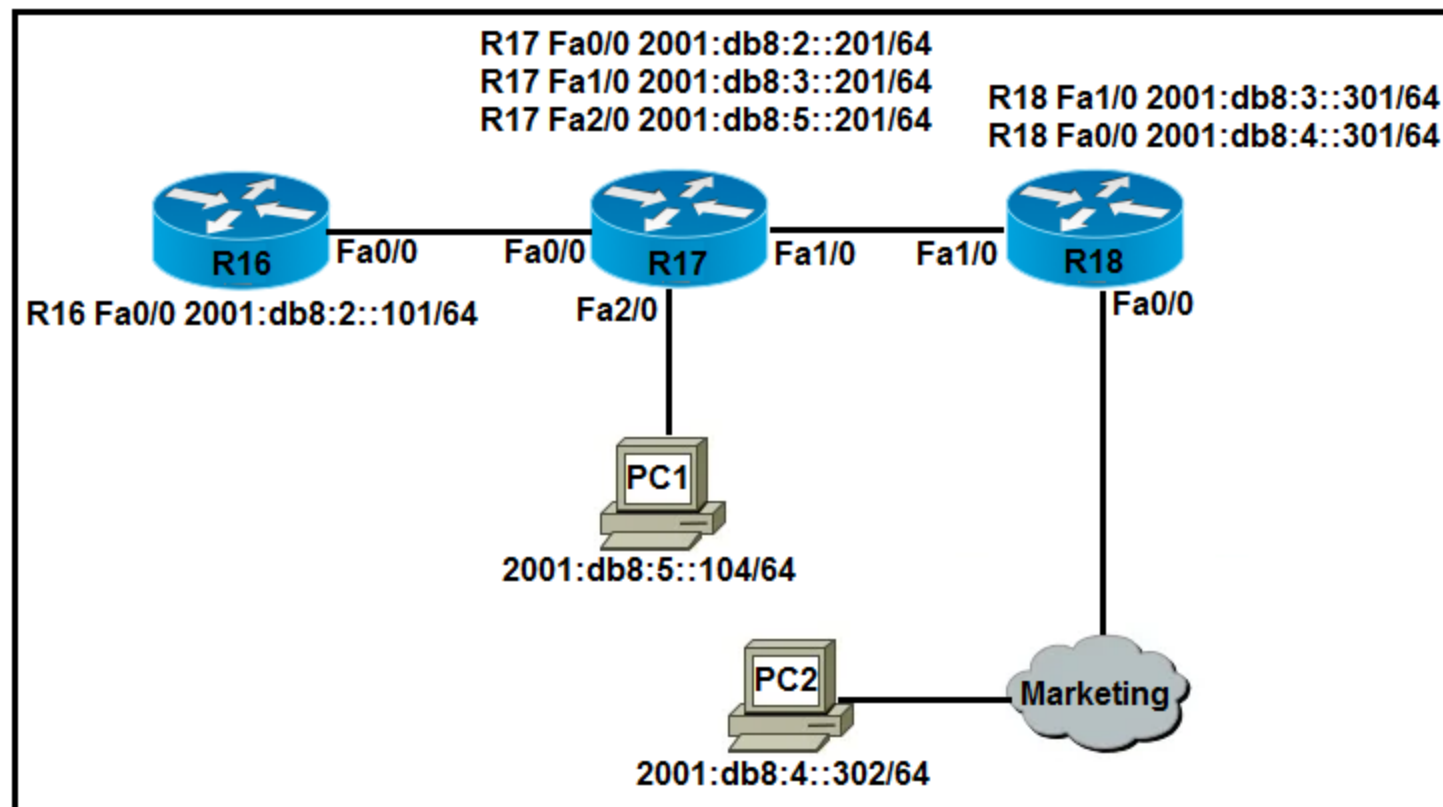


Actual exam question from Cisco's 200-301

Question #: 459

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which IPv6 configuration is required for R17 to successfully ping the WAN interface on R18?

- A. R17# ! no ip domain lookup ip cef ipv6 cef ! interface FastEthernet0/0 no ip address duplex auto speed auto ipv6 address 2001:DB8:2::201/64 ! Interface FastEthernet1/0 no ip address duplex auto speed auto ipv6 address 2001:DB8:3::201/64 ! no cdp log mismatch duplex ipv6 route 2001:DB8:4::/64 2001:DB8:4::302
- B. R17# ! no ip domain lookup ip cef ipv6 unicast-routing ! interface FastEthernet0/0 no ip address duplex auto speed auto ipv6 address 2001:DB8:2::201/64 ! Interface FastEthernet1/0 no ip address duplex auto speed auto ipv6 address 2001:DB8:3::201/64 ! no cdp log mismatch duplex ipv6 route 2001:DB8:4::/64 2001:DB8:3::301
- C. R17# ! no ip domain lookup ip cef ! interface FastEthernet0/0 no ip address duplex auto speed auto ipv6 address 2001:DB8:3::201/64 ! Interface FastEthernet1/0 no ip address duplex auto speed auto ipv6 address 2001:DB8:2::201/64 ! no cdp log mismatch duplex ipv6 route 2001:DB8:4::/64 2001:DB8:5::101
- D. R17# ! no ip domain lookup ip cef ipv6 unicast-routing ! interface FastEthernet0/0 no ip address duplex auto speed auto ipv6 address 2001:DB8:2::201/64 ! Interface FastEthernet1/0 no ip address duplex auto speed auto ipv6 address 2001:DB8:3::201/64 ! no cdp log mismatch duplex ipv6 route 2001:DB8:4::/64 2001:DB8:2::201

Show Suggested Answer

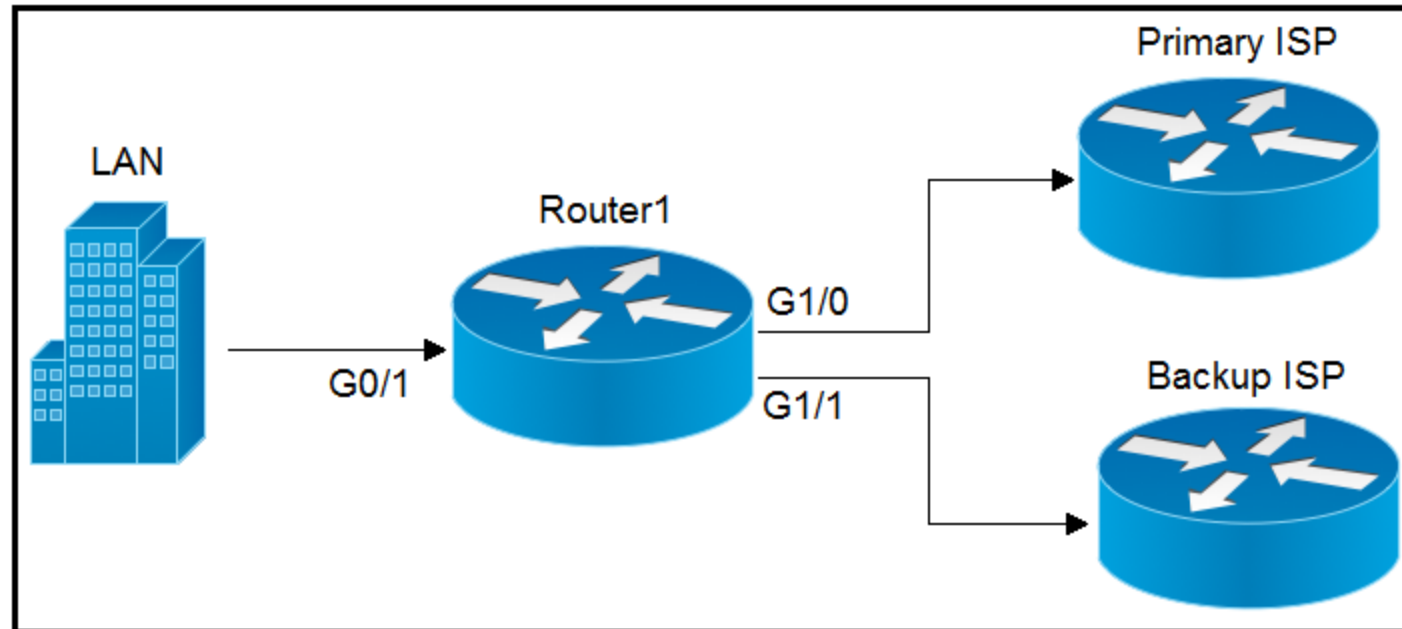


Actual exam question from Cisco's 200-301

Question #: 460

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A company is configuring a failover plan and must implement the default routes in such a way that a floating static route will assume traffic forwarding when the primary link goes down. Which primary route configuration must be used?

- A. `ip route 0.0.0.0 0.0.0.0 192.168.0.2`
- B. `ip route 0.0.0.0 0.0.0.0 192.168.0.2 GigabitEthernet1/0`
- C. `ip route 0.0.0.0 0.0.0.0 192.168.0.2 floating`
- D. `ip route 0.0.0.0 0.0.0.0 192.168.0.2 tracked`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 461

Topic #: 1

[\[All 200-301 Questions\]](#)

---

OSPF must be configured between routers R1 and R2. Which OSPF configuration must be applied to router R1 to avoid a DR/BDR election?

- A. `router ospf 1 network 192.168.1.1 0.0.0.0 area 0 interface e1/1 ip address 192.168.1.1 255.255.255.252 ip ospf cost 0`
- B. `router ospf 1 network 192.168.1.1 0.0.0.0 area 0 hello interval 15 interface e1/1 ip address 192.168.1.1 255.255.255.252`
- C. `router ospf 1 network 192.168.1.1 0.0.0.0 area 0 interface e1/1 ip address 192.168.1.1 255.255.255.252 ip ospf network broadcast`
- D. `router ospf 1 network 192.168.1.1 0.0.0.0 area 0 interface e1/1 ip address 192.168.1.1 255.255.255.252 ip ospf network point-to-point`

Show Suggested Answer

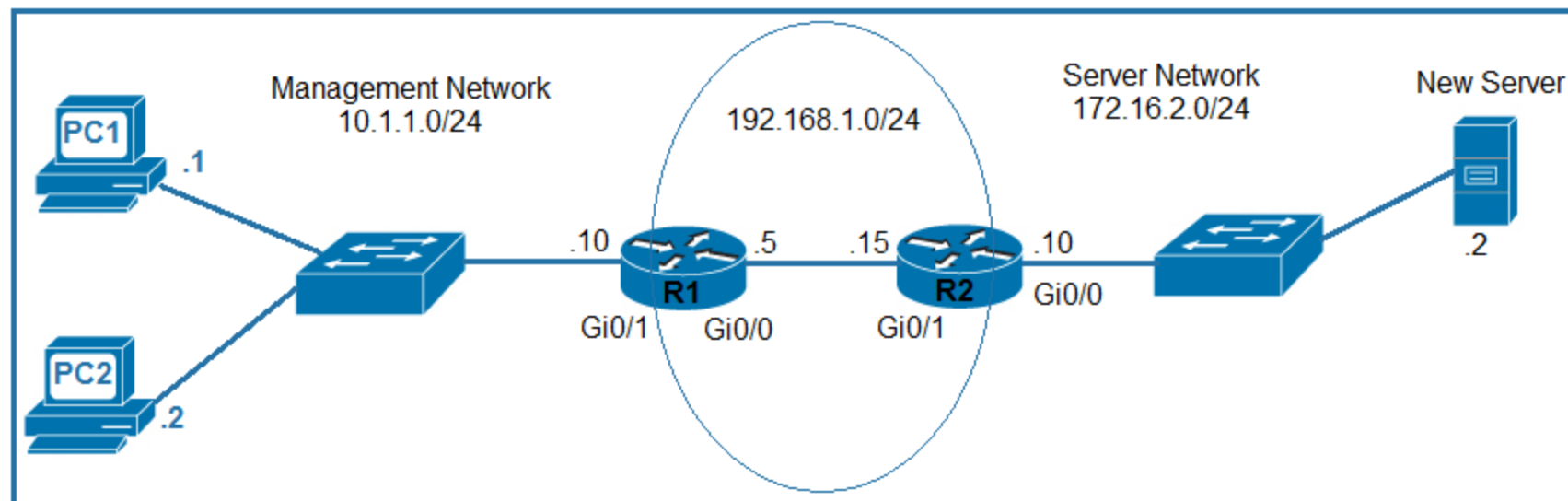


Actual exam question from Cisco's 200-301

Question #: 462

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer is updating the R1 configuration to connect a new server to the management network. The PCs on the management network must be blocked from pinging the default gateway of the new server. Which command must be configured on R1 to complete the task?

- A. R1(config)#ip route 172.16.2.0 255.255.255.0 192.168.1.15
- B. R1(config)#ip route 172.16.2.2 255.255.255.248 gi0/1
- C. R1(config)#ip route 172.16.2.2 255.255.255.255 gi0/0
- D. R1(config)#ip route 172.16.2.0 255.255.255.0 192.168.1.5

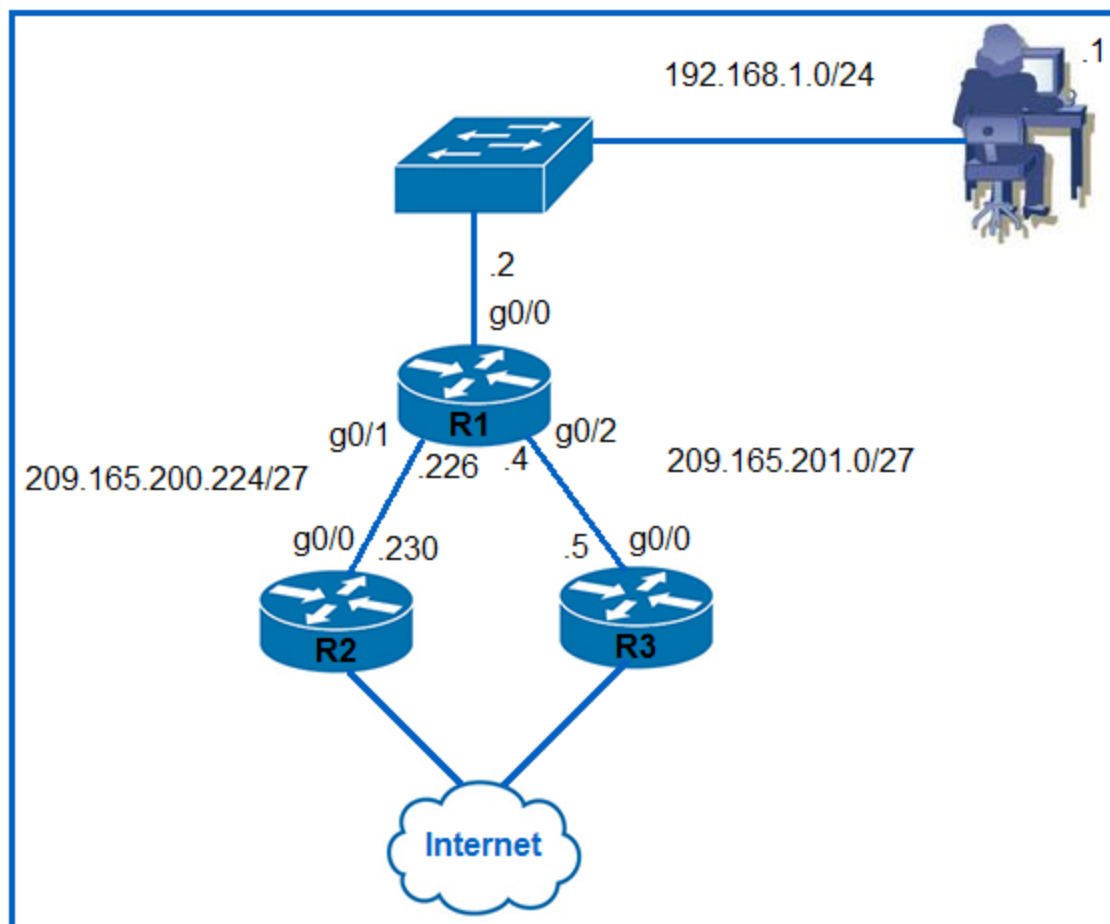
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Actual exam question from Cisco's 200-301

Question #: 463

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Router R1 currently is configured to use R3 as the primary route to the internet, and the route uses the default administrative distance settings. A network engineer must configure R1 so that it uses R2 as a backup, but only if R3 goes down. Which command must the engineer configure on R1 so that it correctly uses R2 as a backup route, without changing the administrative distance configuration on the link to R3?

- A. `ip route 0.0.0.0 0.0.0.0 209.165.201.5 10`
- B. `ip route 0.0.0.0 0.0.0.0 g0/1 1`
- C. `ip route 0.0.0.0 0.0.0.0 209.165.200.226 1`
- D. `ip route 0.0.0.0 0.0.0.0 g0/1 6`

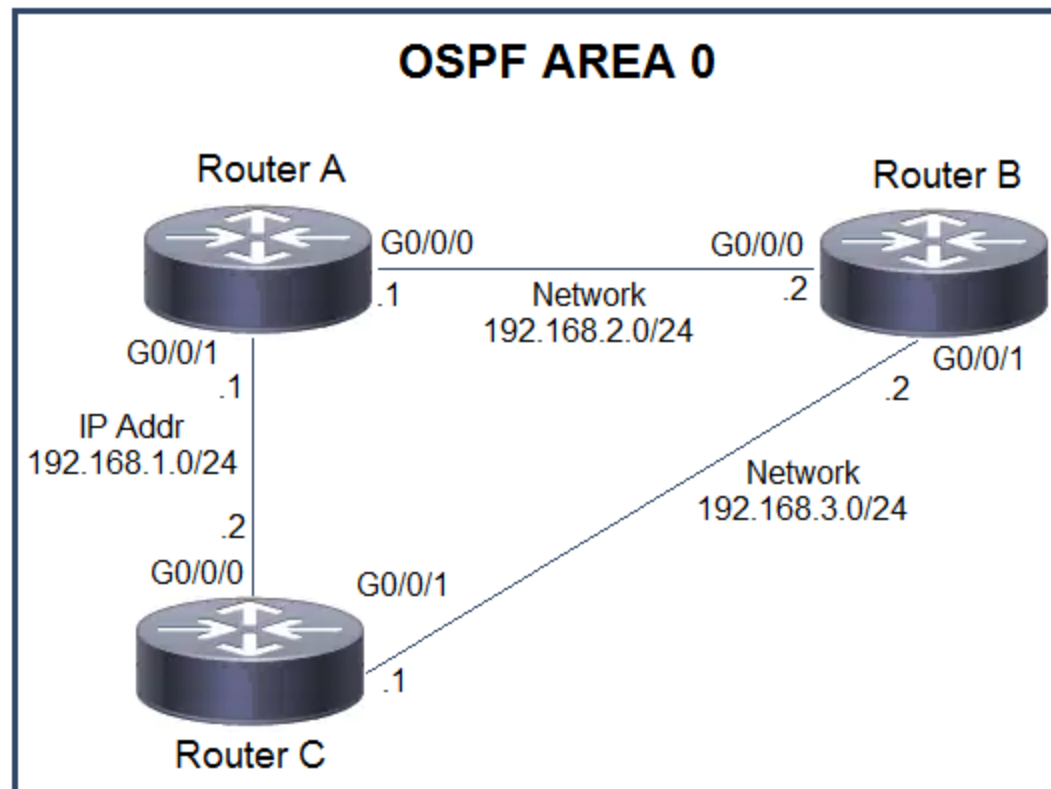
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 464

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which action must be taken to ensure that router A is elected as the DR for OSPF area 0?

- A. Configure the router A interfaces with the highest OSPF priority value within the area
- B. Configure router B and router C as OSPF neighbors of router A
- C. Configure the OSPF priority on router A with the lowest value between the three routers.
- D. Configure router A with a fixed OSPF router ID

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 465

Topic #: 1

[\[All 200-301 Questions\]](#)

```
EIGRP 10.10.10.0/24 [90/1441]    via F0/10
EIGRP 10.10.10.0/24 [90/144]    via F0/11
EIGRP 10.10.10.0/24 [90/1441]    via F0/12
OSPF 10.10.10.0/24 [110/20]     via F0/13
OSPF 10.10.10.0/24 [110/30]     via F0/14
```

Refer to the exhibit. Packets received by the router from BGP enter via a serial interface at 209.165.201.10. Each route is present within the routing table. Which interface is used to forward traffic with a destination IP of 10.10.10.24?

- A. F0/10
- B. F0/11
- C. F0/12
- D. F0/1

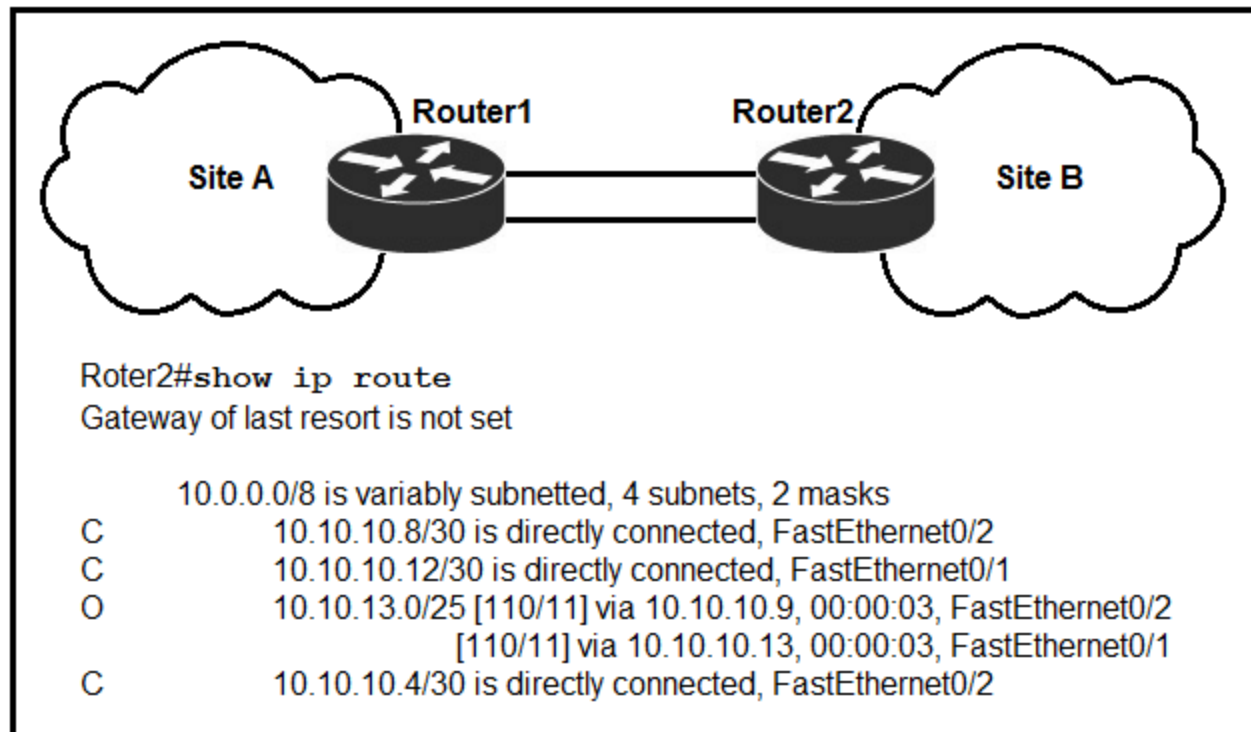
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 466

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. If OSPF is running on this network, how does Router2 handle traffic from Site B to 10.10.13.128/25 at Site A?

- A. It sends packets out of interface Fa0/1.
- B. It sends packets out of interface Fa0/2.
- C. It load-balances traffic out of Fa0/1 and Fa0/2.
- D. It is unreachable and discards the traffic.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 467

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1#show run
!
router ospf 1
 auto-cost reference-bandwidth 100000
!
interface GigabitEthernet0/0
 bandwidth 10000000
!
interface GigabitEthernet0/1
 bandwidth 100000000
!
interface GigabitEthernet0/2
 ip ospf cost 100
!
interface GigabitEthernet0/3
 ip ospf cost 1000
end
```

Refer to the exhibit. Router R1 resides in OSPF Area 0. After updating the R1 configuration to influence the paths that it will use to direct traffic, an engineer verified that each of the four Gigabit interfaces has the same route to 10.10.0.0/16.

Which interface will R1 choose to send traffic to reach the route?

- A. GigabitEthernet0/0
- B. GigabitEthernet0/1
- C. GigabitEthernet0/2
- D. GigabitEthernet0/3

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 468

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.254 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.254, Serial0/0/1
    is directly connected, Serial0/0/1
  172.16.0.0/16 is variably subnetted, 3 subnets, 2 masks
C   172.16.1.0/24 is directly connected, FastEthernet0/0
L   172.16.1.1/32 is directly connected, FastEthernet0/0
R   172.16.2.0/24 [120/2] via 297.165.200.250, 00:00:25, Serial0/0/0
O   192.168.1.0/24 [110/4437] via 207.165.200.254, 00:00:17, Serial0/0/1
D   192.168.2.0/24 [90/84437] via 207.165.200.254, 00:00:15, Serial0/0/1
    207.165.200.0/24 is variably subnetted, 5 subnets, 2 masks
S   207.165.200.244/30 [1/1] via 207.165.200.254, Serial0/0/1
C   207.165.200.248/30 is directly connected, Serial0/0/0
L   207.165.200.249/32 is directly connected, Serial0/0/0
C   207.165.200.252/30 is directly connected, Serial0/0/1
L   207.165.200.253/32 is directly connected, Serial0/0/1
```

Refer to the exhibit. Which network prefix was learned via EIGRP?

- A. 172.160.0/16
- B. 207.165.200.0/24
- C. 192.168.1.0/24
- D. 192.168.2.0/24

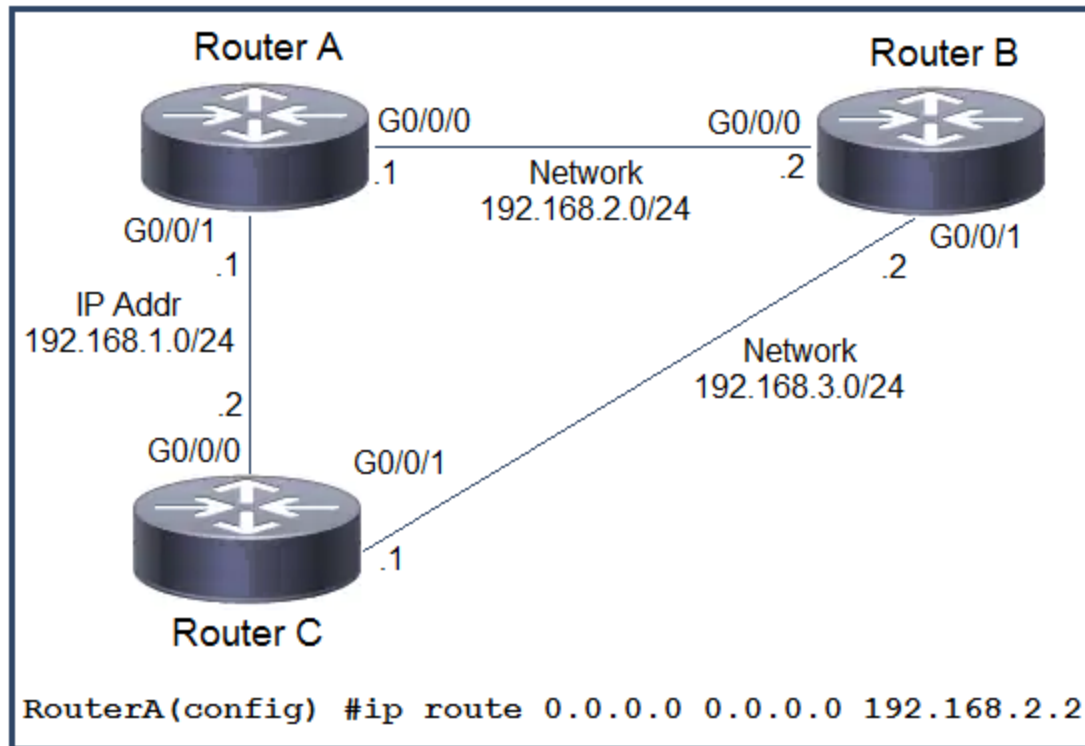
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 469

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which command must be issued to enable a floating static default route on router A?

- A. `ip route 0.0.0.0 0.0.0.0 192.168.1.2 10`
- B. `ip route 0.0.0.0 0.0.0.0 192.168.1.2`
- C. `ip default-gateway 192.168.2.1`
- D. `ip route 0.0.0.0 0.0.0.0 192.168.2.1 10`

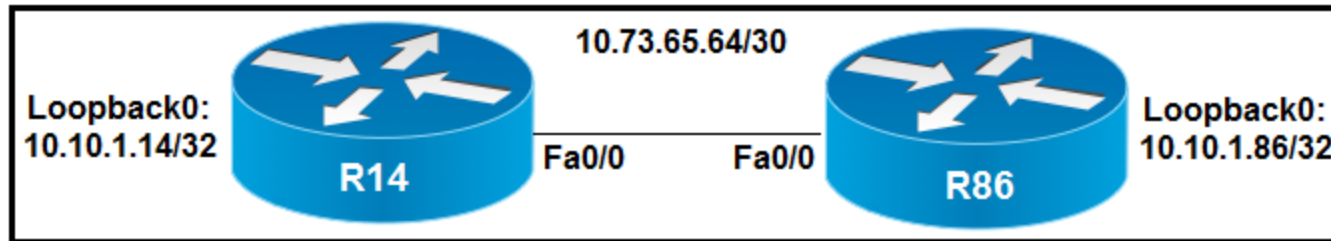
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 470

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which configuration allows routers R14 and R86 to form an OSPFv2 adjacency while acting as a central point for exchanging OSPF information between routers?

- A. R14# interface FastEthernet0/0 ip address 10.73.65.65 255.255.255.252 ip ospf network broadcast ip ospf priority 0 ip mtu 1400 router ospf 10 router-id 10.10.1.14 network 10.10.1.14 0.0.0.0 area0 network 10.73.65.64 0.0.0.3 area0 R86# interface Loopback0 ip address 10.10.1.86 255.255.255.255 interface FastEthernet0/0 ip address 10.73.65.66 255.255.255.252 ip ospf network broadcast ip mtu 1500 router ospf 10 router-id 10.10.1.86 network 10.10.1.86 0.0.0.0 area 0 network 10.73.65.64 0.0.0.3 area 0
- B. R14# interface Loopback0 ip ospf 10 area 0 interface FastEthernet0/0 ip address 10.73.65.65 255.255.255.252 ip ospf network broadcast ip ospf 10 area 0 ip mtu 1500 router ospf 10 ip ospf priority 255 router-id 10.10.1 14 R86# interface Loopback0 ip ospf 10 area 0 interface FastEthernet0/0 ip address 10.73.65.66 255.255.255.252 ip ospf network broadcast ip ospf 10 area 0 ip mtu 1500 router ospf 10 router-id 10.10.1.86
- C. R14# interface FastEthernet0/0 ip address 10.73.65.65 255.255.255.252 ip ospf network broadcast ip ospf priority 255 ip mtu 1500 router ospf 10 router-id 10.10.1.14 network 10.10.1.14 0.0.0.0 area0 network 10.73.65.64 0.0.0.3 area0 R86# interface FastEthernet0/0 ip address 10.73.65.66 255.255.255.252 ip ospf network broadcast ip mtu 1500 router ospf 10 router-id 10.10.1.86 network 10.10.1.86 0.0.0.0 area 0 network 10.73.65.64 0.0.0.3 area 0
- D. R14# interface FastEthernet0/0 ip address 10.73.65.65 255.255.255.252 ip ospf network broadcast ip ospf priority 255 ip mtu 1500 router ospf 10 router-id 10.10.1.14 network 10.10.1.14 0.0.0.0 area0 network 10.73.65.64 0.0.0.3 area0 R86# interface FastEthernet0/0 ip address 10.73.65.66 255.255.255.252 ip ospf network broadcast ip mtu 1400 router ospf 10 router-id 10.10.1.86 network 10.10.1.86 0.0.0.0 area 0 network 10.73.65.64 0.0.0.3 area 0

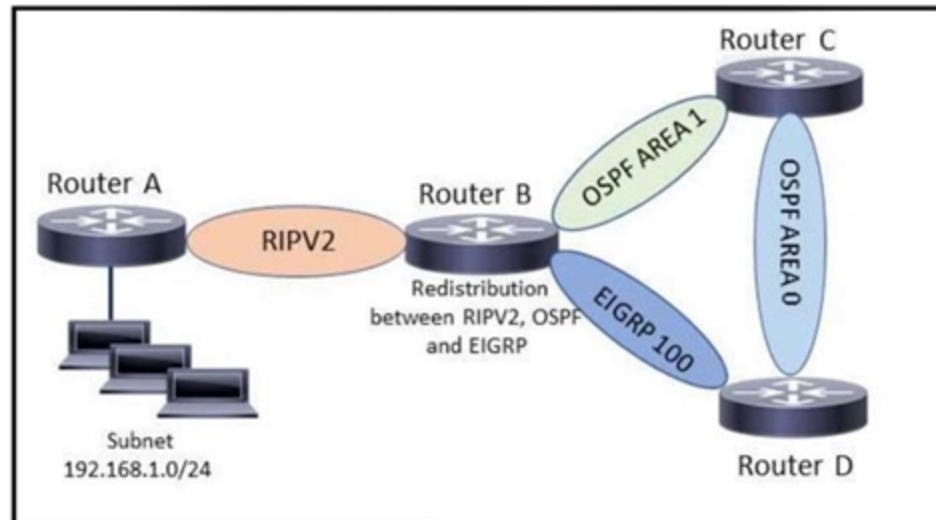
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 471

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. When an administrator executes the show ip route command on router D to view its routing table, which value is displayed for the administrative distance for the route to network 192.168 1.0?

- A. 110
- B. 120
- C. 170
- D. 90

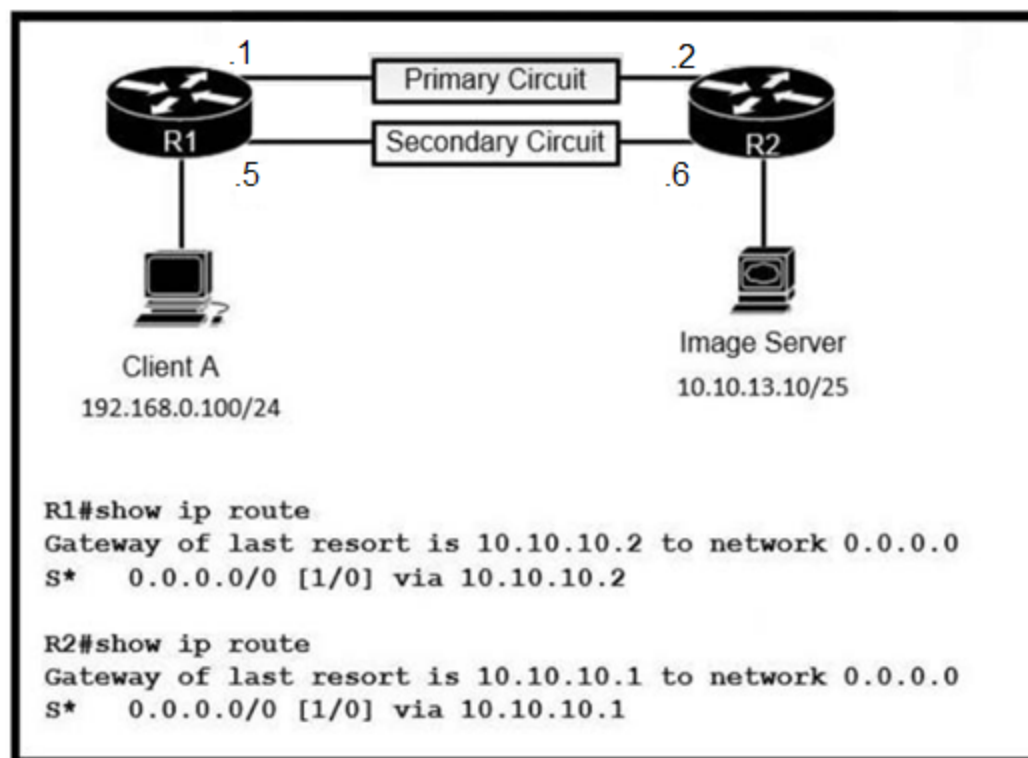
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 472

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit Routers R1 and R2 have been configured with their respective LAN interfaces. The two circuits are operational and reachable across WAN. Which command set establishes failover redundancy if the primary circuit goes down?

- A. R1(config)#ip route 0.0.0.0 0.0.0.0 10.10.10.6 R2(config)#ip route 0.0.0.0 0.0.0.0 10.10.10.5
- B. R1(config)#ip route 10.10.13.10 255.255.255.255 10.10.10.2 R2(config)#ip route 192.168.0.100 255.255.255.255 10.10.10.1
- C. R1(config)#ip route 10.10.13.10 255.255.255.255 10.10.10.6 R2(config)#ip route 192.168.0.100 255.255.255.255 10.10.10.5
- D. R1(config)#ip route 0.0.0.0 0.0.0.0 10.10.10.6 2 R2(config)#ip route 0.0.0.0 0.0.0.0 10.10.10.5 2

Show Suggested Answer

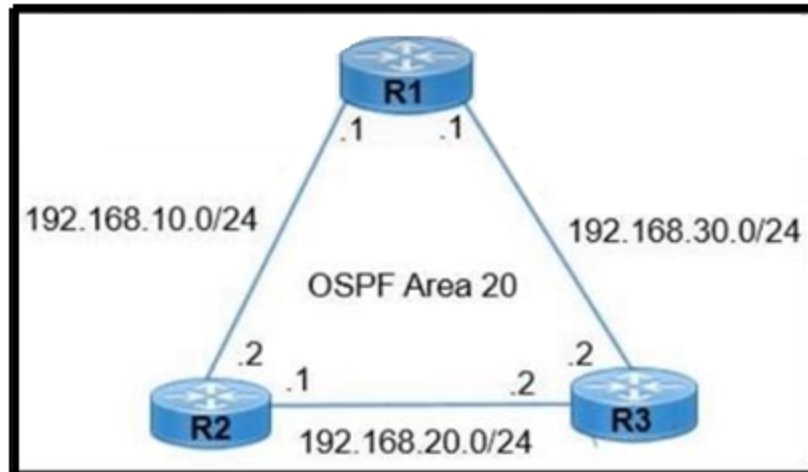


Actual exam question from Cisco's 200-301

Question #: 473

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. R1 learns all routes via OSPF. Which command configures a backup static route on R1 to reach the 192.168.20 0/24 network via R3?

- A. R1(config)#ip route 192.168.20.0 255.255.255.0 192.168.30.2 111
- B. R1(config)#ip route 192.168.20.0 255.255.255.0 192.168.30.2 90
- C. R1(config)#ip route 192.168.20.0 255.255.0.0 192.168.30.2
- D. R1(config)#ip route 192.168.20.0 255.255.255.0 192.168.30.2

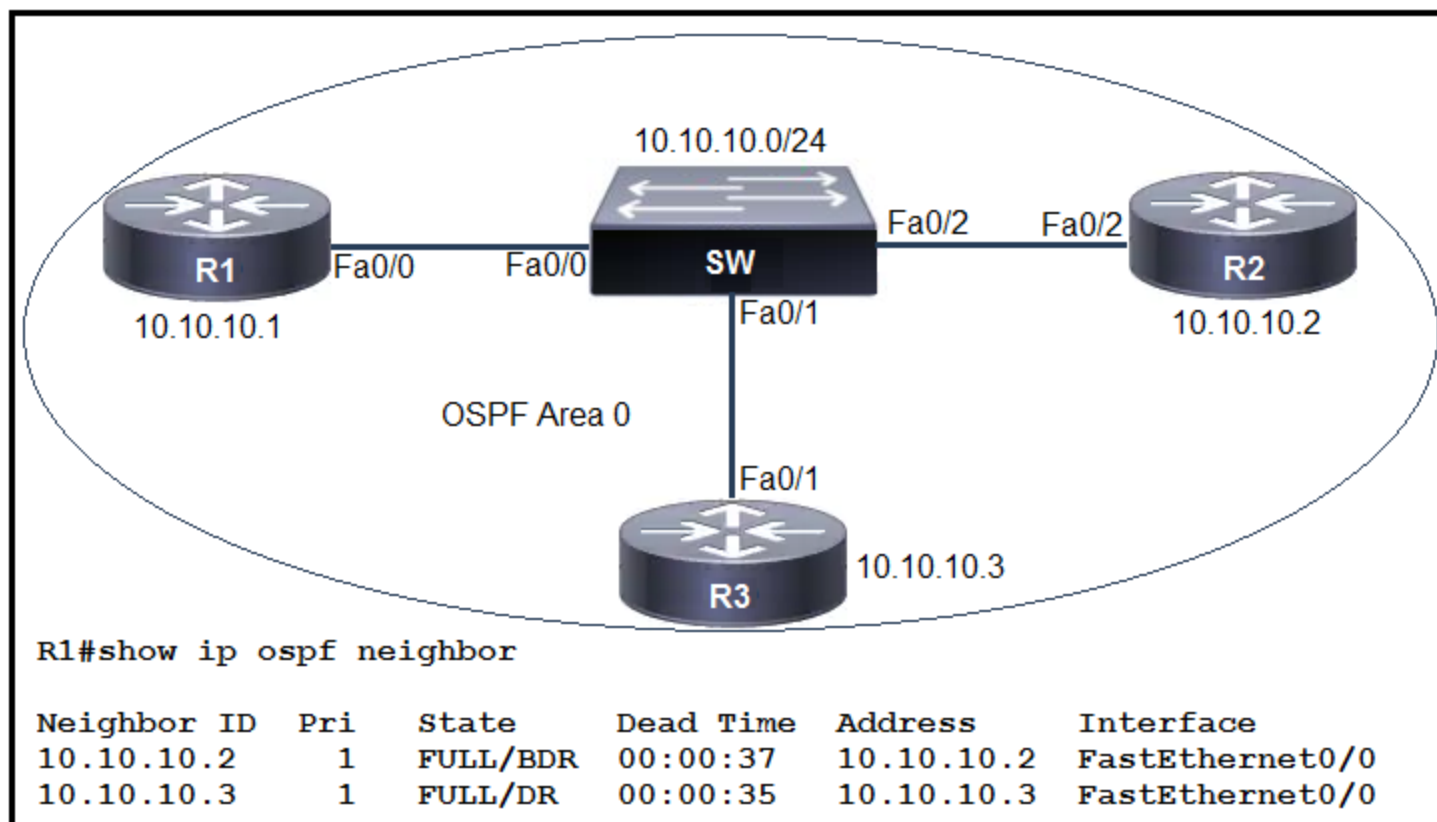
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 474

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. R1 has taken the DROTHER role in the OSPF DR/BDR election process. Which configuration must an engineer implement so that R1 is elected as the DR?

- A. R1(config)#interface FastEthernet 0/0 R1(config-if)#ip ospf priority 1 R1#clear ip ospf process
- B. R3(config)#interface FastEthernet 0/1 R3(config-if)#ip ospf priority 200 R3#clear ip ospf process
- C. R2(config)#interface FastEthernet 0/2 R2(config-if)#ip ospf priority 1 R2#clear ip ospf process
- D. R1(config)#interface FastEthernet 0/0 R1(config-if)#ip ospf priority 200 R1#clear ip ospf process

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 475

Topic #: 1

[\[All 200-301 Questions\]](#)

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Which SDN plane forwards user-generated traffic?

- A. Management plane
- B. Control plane
- C. Policy plane
- D. Data plane

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 476

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An application in the network is being scaled up from 300 servers to 600. Each server requires 3 network connections to support production, backup, and management traffic. Each connection resides on a different subnet. The router configuration for the production network must be configured first using a subnet in the 10.0.0.0/8 network. Which command must be configured on the interface of the router to accommodate the requirements and limit wasted IP address space?

- A. ip address 10.10.10.1 255.255.254.0
- B. ip address 10.10.10.1 255.255.252.0
- C. ip address 10.10.10.1 255.255.240.0
- D. ip address 10.10.10.1 255.255.255.240

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 477

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
a - application route
+ - replicated route, % - next hop override, p - overrides from PfR
Gateway of last resort is 0.0.0.0 to network 0.0.0.0
S* 0.0.0.0/0 is directly connected, Null0
    10.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
C    10.0.12.0/24 is directly connected, GigabitEthernet0/1
L    10.0.12.1/32 is directly connected, GigabitEthernet0/1
C    10.0.13.0/24 is directly connected, GigabitEthernet0/2
L    10.0.13.1/32 is directly connected, GigabitEthernet0/2
C    10.0.14.0/24 is directly connected, GigabitEthernet0/3
L    10.0.14.1/32 is directly connected, GigabitEthernet0/3
D    192.168.0.0/16 [90/130816] via 10.0.13.3, 00:10:09, GigabitEthernet0/2
O    192.168.0.0/23 [110/2] via 10.0.14.4, 00:00:46, GigabitEthernet0/3
S    192.168.0.0/24 [100/0] via 10.0.12.2
```

Refer to the exhibit. Which interface is chosen to forward traffic to the host at 192.168.0.55?

- A. GigabitEthernet0/3
- B. Null0
- C. GigabitEthernet0/1
- D. GigabitEthernet0/2

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 478

Topic #: 1

[\[All 200-301 Questions\]](#)

```
CPE# show ipv6 route
IPv6 Routing Table - default - 6 entries
Codes: C - Connected, L - Local, S - Static, U - Per-user Static route
       B - BGP, R - RIP, H - NHRP, I1 - ISIS L1
       I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary, D - EIGRP
       EX - EIGRP external, ND - ND Default, NDp - ND Prefix, DCE - Destination
       NDr - Redirect, O - OSPF Intra, OI - OSPF Inter, OE1 - OSPF ext 1
       OE2 - OSPF ext 2, ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
       la - LISP alt, lr - LISP site-registrations, ld - LISP dyn-eid
       lA - LISP away, le - LISP extranet-policy, lp - LISP publications
ND  ::/0 [2/0]
    via FE80::A8BB:CCFF:FE00:200, Ethernet0/0
NDp 2001:DB8:1234:1::/64 [2/0]
    via Ethernet0/0, directly connected
L   2001:DB8:1234:1:A8BB:CCFF:FE00:100/128 [0/0]
    via Ethernet0/0, receive
C   2001:DB8:1234:2::/64 [0/0]
    via Ethernet0/1, directly connected
L   2001:DB8:1234:2:A8BB:CCFF:FE00:110/128 [0/0]
    via Ethernet0/1, receive
L   FF00::/8 [0/0]
    via Null0, receive
```

Refer to the exhibit. The administrator must configure a floating static default route that points to 2001:db8:1234:2::1 and replaces the current default route only if it fails. Which command must the engineer configure on the CPE?

- A. ipv6 route ::/0 2001:db8:1234:2::1 3
- B. ipv6 route ::/128 2001:db8:1234:2::1 3
- C. ipv6 route ::/0 2001:db8:1234:2::1 1
- D. ipv6 route ::/0 2001:db8:1234:2::1 2

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 479

Topic #: 1

[\[All 200-301 Questions\]](#)

```
OldR#show ip ospf interface
GigabitEthernet0/0/0 is up, line protocol is up
 Internet address is 192.168.1.2/24, Area 0
 Process ID 1, Router ID 192.168.1.1, Network Type BROADCAST, Cost: 1
 Transmit Delay is 1 sec, State DROTHER, Priority 1
 Designated Router (ID) 192.168.1.1, Interface address 192.168.1.1
 Backup Designated Router (ID) 192.168.1.1, Interface address 192.168.1.1
 Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
  Hello due in 00:00:01
 Index 1/1, flood queue length 0
 Neighbor Count is 1, Adjacent neighbor count is 2

R2#show ip ospf interface
GigabitEthernet0/0/0 is up, line protocol is up
 Internet address is 192.168.1.1/24, Area 0
 Process ID 1, Router ID 192.168.1.1, Network Type BROADCAST, Cost: 1
 Transmit Delay is 1 sec, State DROTHER, Priority 1
 Designated Router (ID) 192.168.1.1, Interface address 192.168.1.2
 Backup Designated Router (ID) 192.168.1.1, Interface address 192.168.1.2
 Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
  Hello due in 00:00:02
 Index 2/2, flood queue length 0
 Neighbor Count is 1, Adjacent neighbor count is 2
```

Refer to the exhibit. Router OldR is replacing another router on the network with the intention of having OldR and R2 exchange routes. After the engineer applied the initial OSPF configuration, the routes were still missing on both devices. Which command sequence must be issued before the clear IP ospf process command is entered to enable the neighbor relationship?

- A. OldR(config)#interface g0/0/0 OldR(config-if)#ip ospf hello-interval 15
- B. OldR(config)#router ospf 1 OldR(config-router)#network 192.168.1.0 255.255.255.0 area 2
- C. OldR(config)#interface g0/0/0 OldR(config-if)#ip ospf dead-interval 15
- D. OldR(config)#router ospf 1 OldR(config-router)#no router-id 192.168.1.1

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 480

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

```

Router1#show ip route
Gateway of last resort is 10.10.11.2 to network 0.0.0.0

 209.165.200.0/27 is subnetted, 1 subnets
B   209.165.200.224 [20/0] via 10.10.12.2, 03:22:14
 209.165.201.0/27 is subnetted, 1 subnets
B   209.165.201.0 [20/0] via 10.10.12.2, 02:26:33
 209.165.202.0/27 is subnetted, 1 subnets
B   209.165.202.128 [20/0] via 10.10.12.2, 02:26:03
10.0.0.0/8 is variably subnetted, 8 subnets, 4 masks
C   10.10.10.0/28 is directly connected, GigabitEthernet0/0
C   10.10.11.0/30 is directly connected, FastEthernet2/0
C   10.10.12.0/30 is directly connected, GigabitEthernet0/1
O   10.10.13.0/25 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O   10.10.13.128/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O   10.10.13.144/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O   10.10.13.160/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O   10.10.13.208/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
S*  0.0.0.0/0 [1/0] via 10.10.11.2
  
```

Refer to the exhibit. Drag and drop the prefix lengths from the left onto the corresponding prefixes on the right. Not all prefixes are used.

Select and Place:

255.255.255.128

10.10.13.0

255.255.255.224

10.10.13.144

255.255.255.240

10.10.13.160

255.255.255.248

209.165.202.128

255.255.255.252

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 481

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route | begin Gateway
Gateway of last resort is 0.0.0.0 to network 0.0.0.0
S* 0.0.0.0/0 is directly connected, Serial0/0/1
    172.16.0.0/16 is variably subnetted, 4 subnets, 2 masks
C    172.16.2.0/24 is directly connected, GigabitEthernet0/0
L    172.16.2.2/32 is directly connected, GigabitEthernet0/0
C    172.16.4.0/21 is directly connected, Serial0/0/1
L    172.16.8.2/26 is directly connected, Serial0/0/1
```

Refer to the exhibit. What is the subnet mask for route 172.16.4.0?

- A. 255.255.255.192
- B. 255.255.254.0
- C. 255.255.248.0
- D. 255.255.240.0

Show Suggested Answer

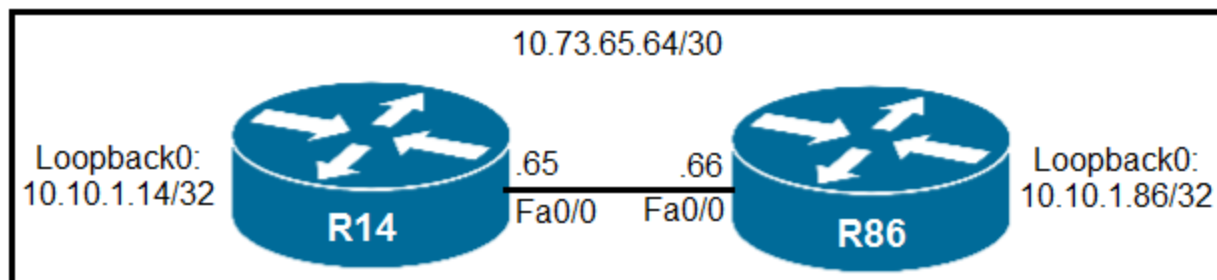


Actual exam question from Cisco's 200-301

Question #: 482

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A static route must be configured on R14 to forward traffic for the 172.21.34.0/25 network that resides on R86. Which command must be used to fulfill the request?

- A. `ip route 172.21.34.0 255.255.255.192 10.73.65.65`
- B. `ip route 172.21.34.0 255.255.255.128 10.73.65.66`
- C. `ip route 172.21.34.0 255.255.255.0 10.73.65.65`
- D. `ip route 172.21.34.0 255.255.128.0 10.73.65.64`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 483

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1#show ip ospf interface g0/0/0
GigabitEthernet0/0/0 is up, line protocol is up
  Internet address is 192.168.1.2/24, Area 0
  Process ID 1, Router ID 192.168.1.1, Network Type POINT-TO-POINT, Cost: 1
  Transmit Delay is 1 sec, State POINT-TO-POINT,
  Timer intervals configured, Hello 15, Dead 40, Wait 40, Retransmit 5
    Hello due in 00:00:08
  Index 1/1, flood queue length 0
  Next 0x0(0)/0x0(0)
  Last flood scan length is 1, maximum is 1
  Last flood scan time is 0 msec, maximum is 0 msec
  Suppress hello for 0 neighbor(s)

R2#show ip ospf interface g0/0/0
GigabitEthernet0/0/0 is up, line protocol is up
  Internet address is 192.168.1.1/24, Area 0
  Process ID 1, Router ID 10.1.1.1, Network Type POINT-TO-POINT, Cost: 1
  Transmit Delay is 1 sec, State POINT-TO-POINT,
  Timer intervals configured, Hello 15, Dead 45, Wait 15, Retransmit 5
    Hello due in 00:00:11
  Index 1/1, flood queue length 0
  Next 0x0(0)/0x0(0)
  Last flood scan length is 1, maximum is 1
  Last flood scan time is 0 msec, maximum is 0 msec
  Suppress hello for 0 neighbor(s)
```

Refer to the exhibit. The network engineer is configuring router R2 as a replacement router on the network. After the initial configuration is applied, it is determined that R2 failed to show R1 as a neighbor. Which configuration must be applied to R2 to complete the OSPF configuration and enable it to establish the neighbor relationship with R1?

- A. R2(config)#router ospf 1 R2(config-router)#network 192.168.1.0 255.255.255.0 area 2
- B. R2(config)#interface g0/0/0 R2(config-if)#ip ospf hello-interval 10
- C. R2(config)#interface g0/0/0 R2(config-if)#ip ospf dead-interval 40
- D. R2(config)#router ospf 1 R2(config-router)#router-id 192.168.1.2

Show Suggested Answer

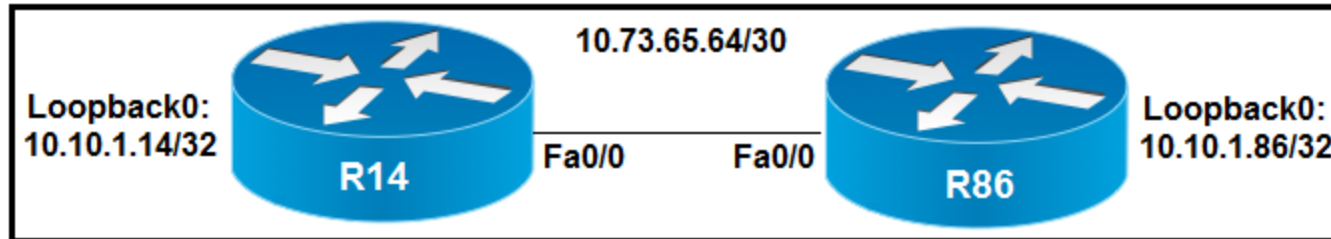


Actual exam question from Cisco's 200-301

Question #: 484

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. All interfaces are configured with duplex auto and ip ospf network broadcast. Which configuration allows routers R14 and R86 to form an OSPFv2 adjacency and act as a central point for exchanging OSPF information between routers?

- A. R14# interface FastEthernet0/0 ip address 10.73.65.65 255.255.255.252 ip ospf priority 255 ip mtu 1500 router ospf 10 router-id 10.10.1.14 network 10.10.1.14 0.0.0.0 area 0 network 10.73.65.64 0.0.0.3 area 0 R86# interface FastEthernet0/0 ip address 10.73.65.66 255.255.255.252 ip mtu 1400 router ospf 10 router-id 10.10.1.86 network 10.10.1.86 0.0.0.0 area 0 network 10.73.65.64 0.0.0.3 area 0
- B. R14# interface Loopback0 ip ospf 10 area 0 interface FastEthernet0/0 ip address 10.73.65.65 255.255.255.252 ip ospf 10 area 0 ip mtu 1500 router ospf 10 ip ospf priority 255 router-id 10.10.1.14 R86# interface Loopback0 ip ospf 10 area 0 interface FastEthernet0/0 ip address 10.73.65.66 255.255.255.252 ip ospf 10 area 0 ip mtu 1500 router ospf 10 router-id 10.10.1.86
- C. R14# interface FastEthernet0/0 ip address 10.73.65.65 255.255.255.252 ip ospf priority 0 ip mtu 1500 router ospf 10 router-id 10.10.1.14 network 10.10.1.14 0.0.0.0 area 0 network 10.73.65.64 0.0.0.3 area 0 R86# interface FastEthernet0/0 ip address 10.73.65.66 255.255.255.252 ip mtu 1500 router ospf 10 router-id 10.10.1.86 network 10.10.1.86 0.0.0.0 area 0 network 10.73.65.64 0.0.0.3 area 0
- D. R14# interface Loopback0 ip ospf 10 area 0 interface FastEthernet0/0 ip address 10.73.65.65 255.255.255.252 ip ospf priority 255 ip ospf 10 area 0 ip mtu 1500 router ospf 10 router-id 10.10.1.14 R86# interface Loopback0 ip ospf 10 area 0 interface FastEthernet0/0 ip address 10.73.65.66 255.255.255.252 ip ospf 10 area 0 ip mtu 1500 router ospf 10 router-id 10.10.1.86

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 485

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A packet from a company's branch office is destined to host 172.31.0.1 at headquarters. The sending router has three possible matches in its routing table for the packet: prefixes 172.31.0.0/16, 172.31.0.0/24, and 172.31.0.0/25. How does the router handle the packet?

- A. It sends the traffic via prefix 172.31.0.0/24.
- B. It sends the traffic via prefix 172.31.0.0/16.
- C. It sends the traffic via prefix 172.31.0.0/25.
- D. It sends the traffic via the default gateway 0.0.0.0/0.

Show Suggested Answer

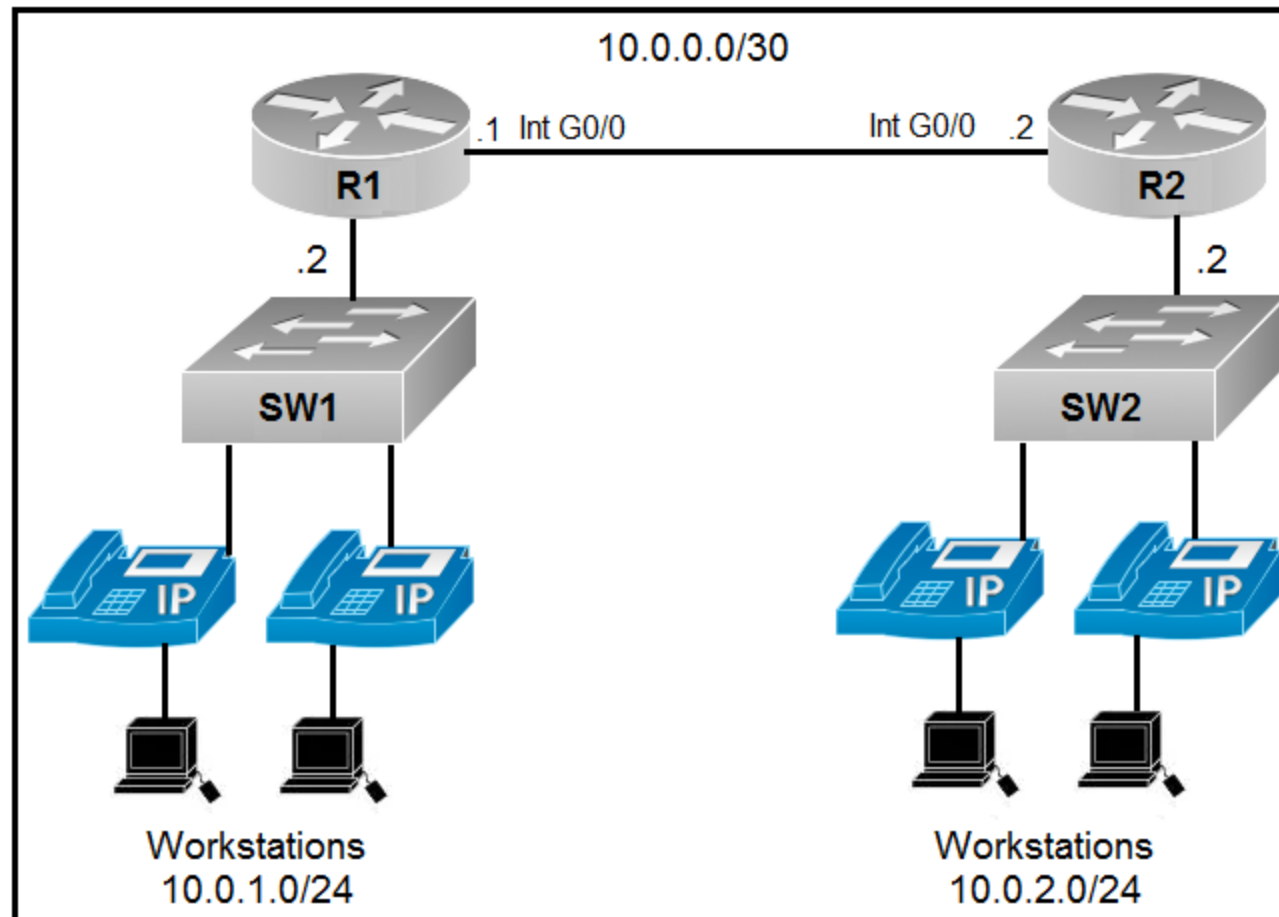


Actual exam question from Cisco's 200-301

Question #: 486

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer is asked to configure router R1 so that it forms an OSPF single-area neighbor relationship with R2. Which command sequence must be implemented to configure the router?

- A. `router ospf 100 network 10.0.0.0 0.0.0.252 area0 network 10.0.1.0 0.0.0.255 area0`
- B. `router ospf 100 network 10.0.0.0 0.0.0.3 area0 network 10.0.2.0 255.255.255.0 area0`
- C. `router ospf 10 network 10.0.0.0 0.0.0.3 area0 network 10.0.1.0 0.0.0.255 area0`
- D. `router ospf 10 network 10.0.0.0 0.0.0.3 area0 network 10.0.2.0 0.0.0.255 area0`

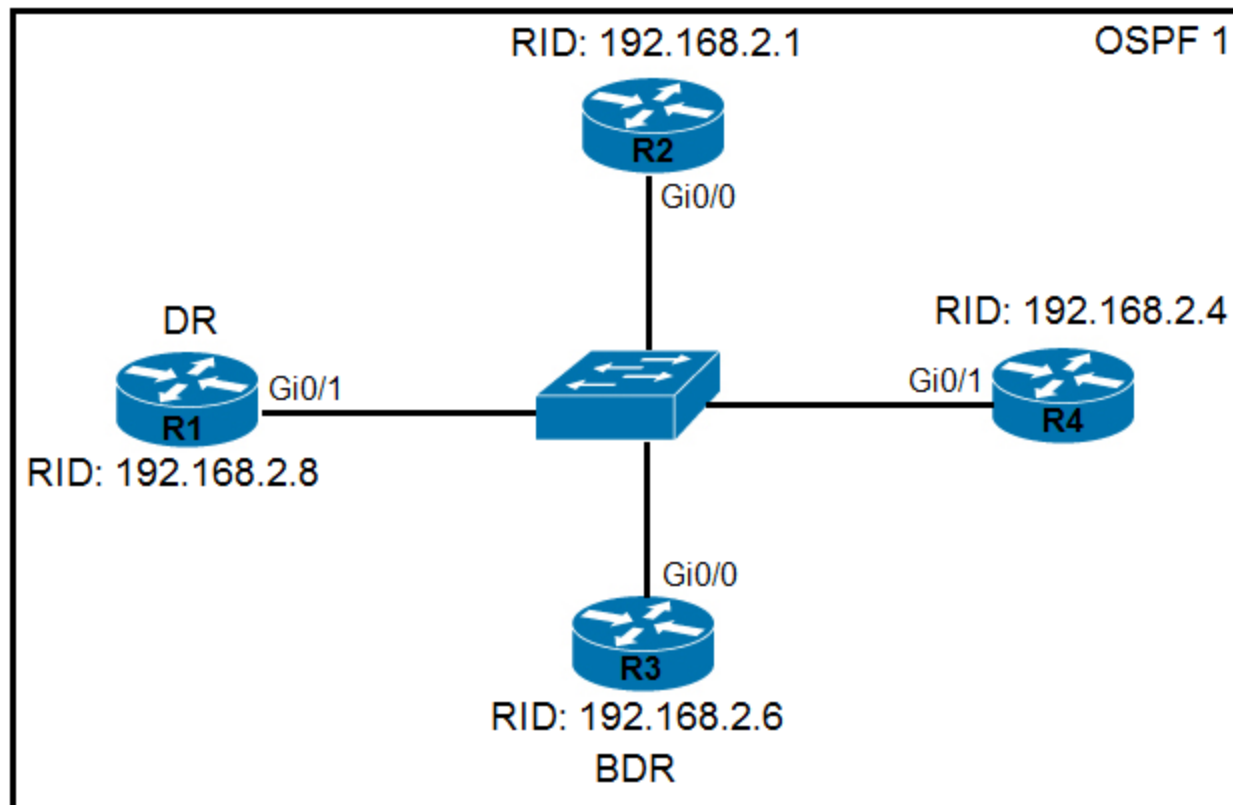
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Actual exam question from Cisco's 200-301

Question #: 487

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. All routers in the network are configured. R2 must be the DR. After the engineer connected the devices, R1 was elected as the DR. Which command sequence must be configured on R2 to be elected as the DR in the network?

- A. R2(config)#interface gi0/0 R2(config-if)#ip ospf priority 100
- B. R2(config)#router ospf 1 R2(config-router)#router-id 192.168.2.7
- C. R2(config)#router ospf 1 R2(config-router)#router-id 10.100.100.100
- D. R2(config)#interface gi0/0 R2(config-if)#ip ospf priority 1

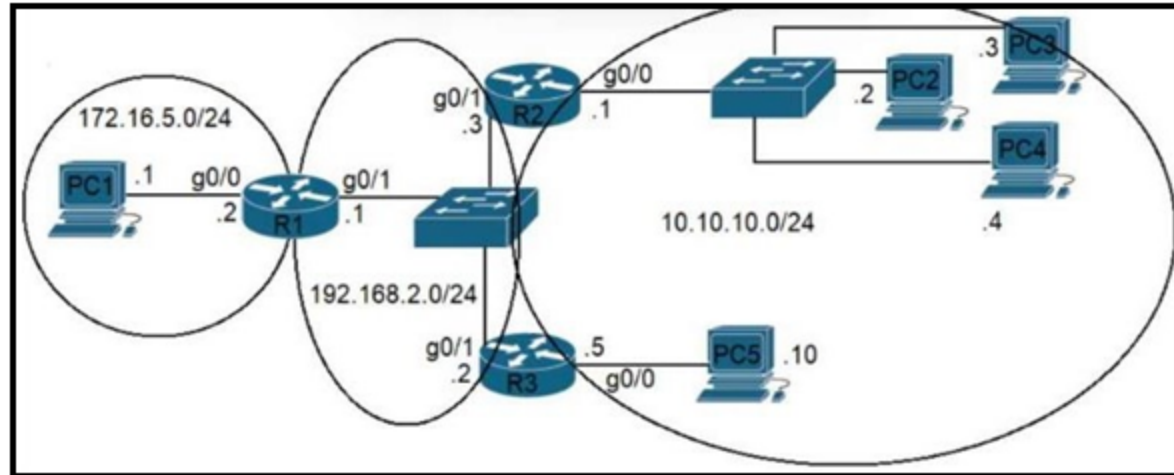
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 488

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The router R1 is in the process of being configured. Routers R2 and R3 are configured correctly for the new environment. Which two commands must be configured on R1 for PC1 to communicate to all PCs on the 10.10.10.0/24 network? (Choose two.)

- A. `ip route 10.10.10.0 255.255.255.0 192.168.2.3`
- B. `ip route 10.10.10.10 255.255.255.255 192.168.2.2`
- C. `ip route 10.10.10.10 255.255.255.255 g0/1`
- D. `ip route 10.10.10.8 255.255.255.248 g0/1`
- E. `ip route 10.10.10.0 255.255.255.248 192.168.2.2`

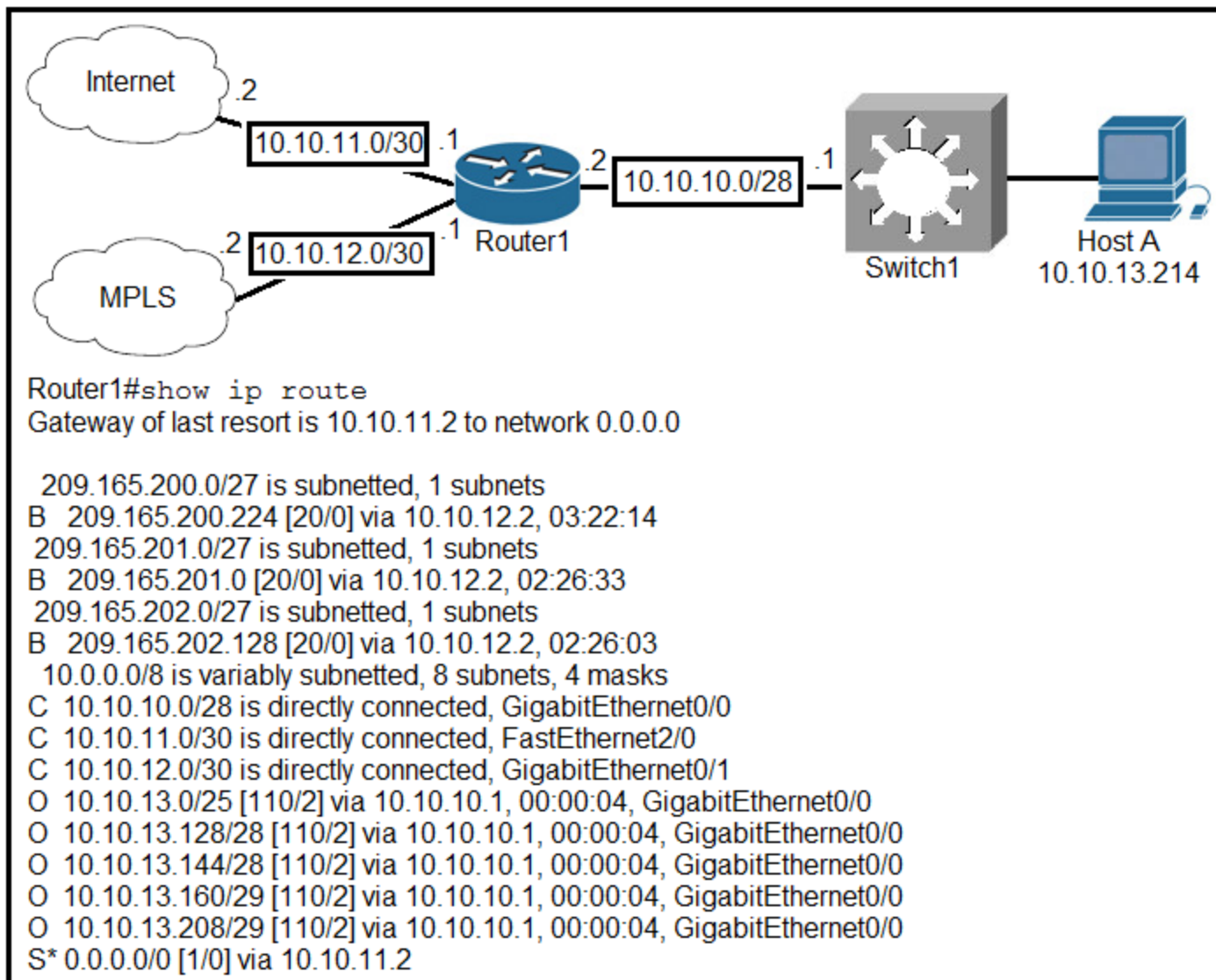
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 489

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. What is the subnet mask of the route to the 10.10.13.160 prefix?

- A. 255.255.255.240
- B. 255.255.255.128
- C. 255.255.248.0
- D. 255.255.255.248

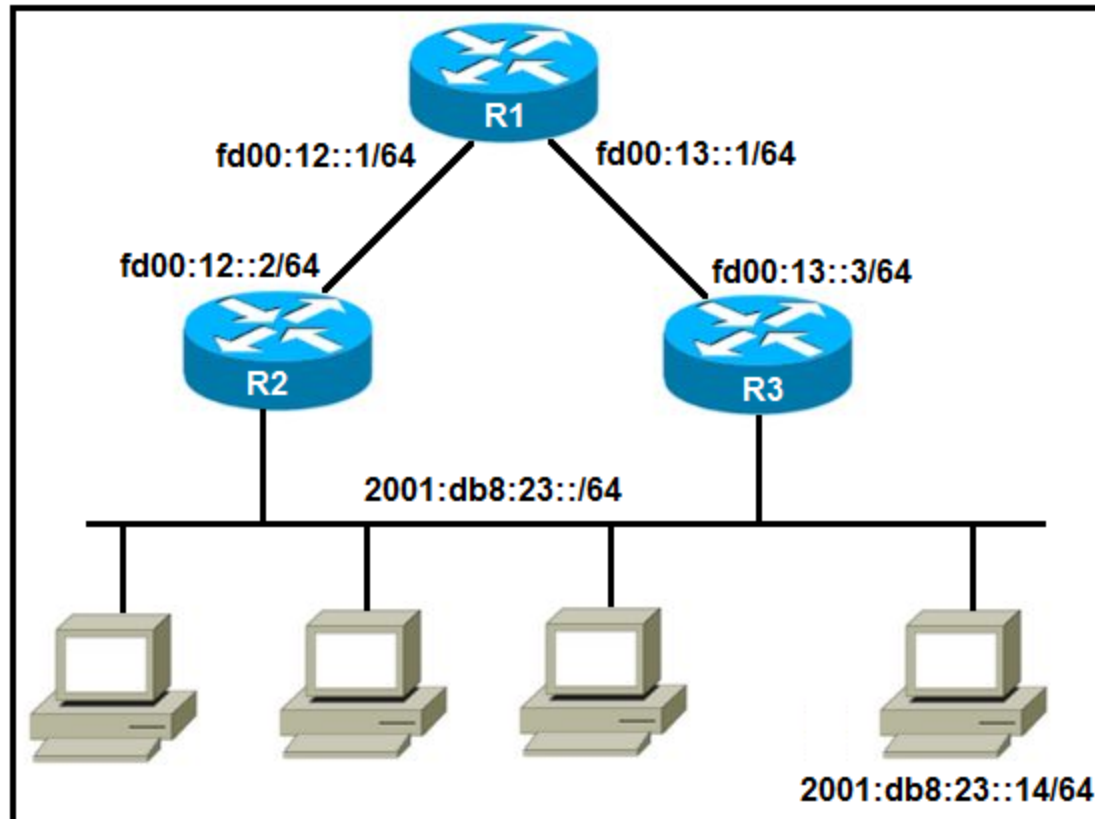
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 490

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which two commands, when configured on router R1, fulfill these requirements? (Choose two.)

⇒ Packets toward the entire network 2001:db8:23::/64 must be forwarded through router R2.

Packets toward host 2001:db8:23::14 preferably must be forwarded through R3.

- A. `ipv6 route 2001:db8:23::/128 fd00:12::2`
- B. `ipv6 route 2001:db8:23::14/128 fd00:13::3`
- C. `ipv6 route 2001:db8:23::/64 fd00:12::2`
- D. `ipv6 route 2001:db8:23::14/64 fd00:12::2 200`
- E. `ipv6 route 2001:db8:23::14/64 fd00:12::2`

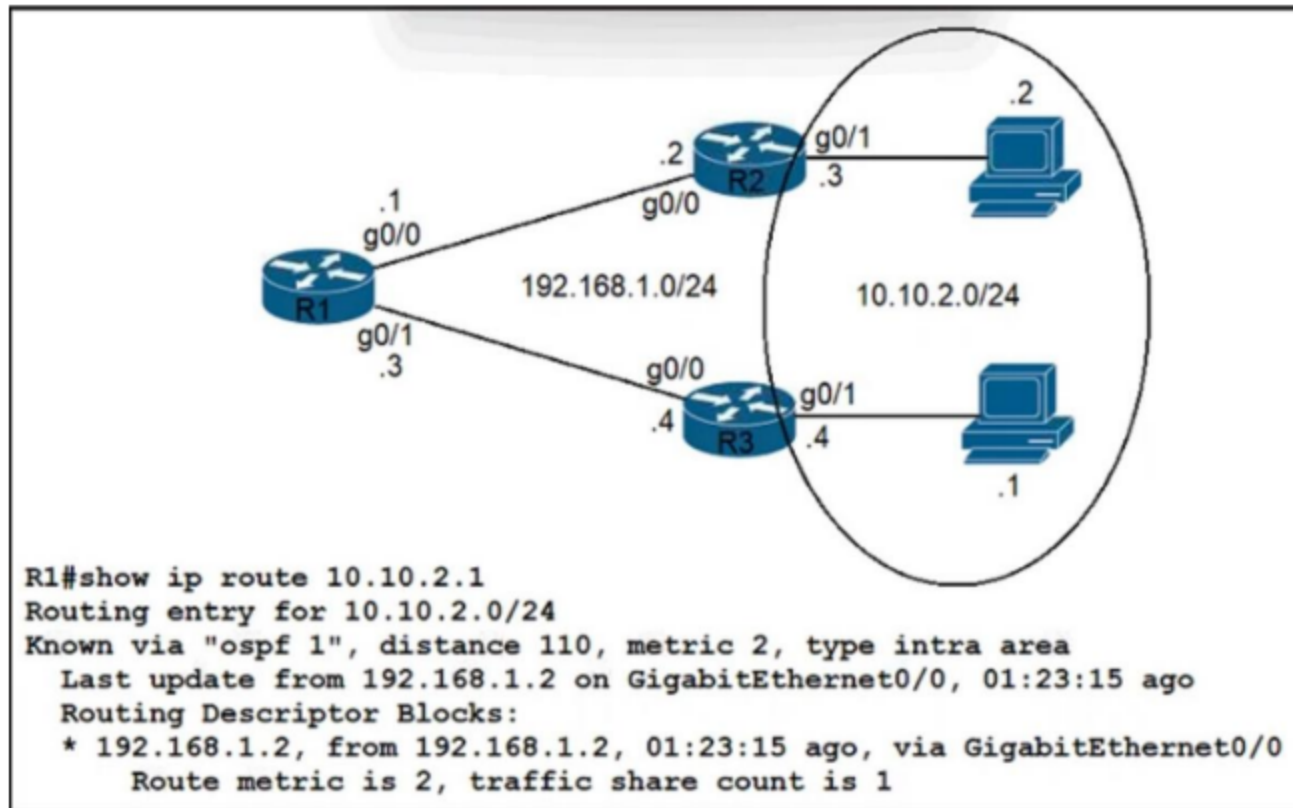
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 491

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Traffic from R1 to the 10.10.2.0/24 subnet uses 192.168.1.2 as its next hop. A network engineer wants to update the R1 configuration so that traffic with destination 10.10.2.1 passes through router R3, and all other traffic to the 10.10.2.0/24 subnet passes through R2. Which command must be used?

- A. ip route 10.10.2.1 255.255.255.255 192.168.1.4115
- B. ip route 10.10.2.0 255.255.255.0 192.168.1.4115
- C. ip route 10.10.2.0 255.255.255.0 192.168.1.4100
- D. ip route 10.10.2.1 255.255.255.255 192.168.1.4100

Show Suggested Answer

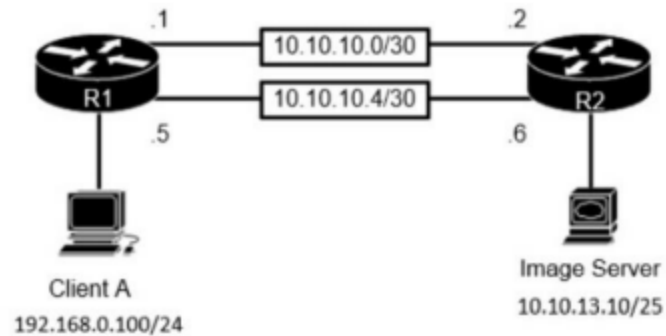


Actual exam question from Cisco's 200-301

Question #: 492

Topic #: 1

[\[All 200-301 Questions\]](#)



```
R1#show ip route
Gateway of last resort is 10.10.10.2 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 10.10.10.2
```

```
R2#show ip route
Gateway of last resort is 10.10.10.1 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 10.10.10.1
```

Refer to the exhibit. The image server and client A are running an application that transfers an extremely high volume of data between the two. An engineer is configuring a dedicated circuit between R1 and R2. Which set of commands must the engineer apply to the routers so that only traffic between the image server and client A is forced to use the new circuit?

- A. R1(config)#ip route 10.10.13.10 255.255.255.255 10.10.10.6 R2(config)#ip route 192.168.0.100 255.255.255.255 10.10.10.5
- B. R1(config)#ip route 10.10.13.10 255.255.255.128 10.10.10.6 R2(config)#ip route 192.168.0.100 255.255.255.0 10.10.10.5
- C. R1(config)#ip route 10.10.13.10 255.255.255.252 10.10.10.6 R2(config)#ip route 192.168.0.100 255.255.255.252 10.10.10.5
- D. R1(config)#ip route 10.10.13.10 255.255.255.255 10.10.10.2 R2(config)#ip route 192.168.0.100 255.255.255.255 10.10.10.1

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 493

Topic #: 1

[\[All 200-301 Questions\]](#)

---

```
Gateway of last resort is not set
```

```
    10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       10.1.1.0/30 is directly connected, GigabitEthernet0/0
L       10.1.1.2/32 is directly connected, GigabitEthernet0/0
S       192.168.0.0/20 [1/0] via 10.1.1.1
        192.168.1.0/30 is subnetted, 1 subnets
S       192.168.1.0/30 [1/0] via 10.1.1.1
        192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
S       192.168.2.0/28 [1/0] via 10.1.1.1
S       192.168.2.0/29 [1/0] via 10.1.1.1
```

Refer to the exhibit. An engineer is checking the routing table in the main router to identify the path to a server on the network. Which route does the router use to reach the server at 192.168.2.2?

- A. S 192.168.0.0/20 [1/0] via 10.1.1.1
- B. S 192.168.2.0/29 [1/0] via 10.1.1.1
- C. S 192.168.2.0/28 [1/0] via 10.1.1.1
- D. S 192.168.1.0/30 [1/0] via 10.1.1.1

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 494

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. An OSPF neighbor relationship must be configured using these guidelines:

- ⇒ R1 is only permitted to establish a neighbor with R2.
- ⇒ R1 will never participate in DR elections.
- ⇒ R1 will use a router-id of 10.1.1.1.

Which configuration must be used?

A.

```
interface FastEthernet0/0
  ip address 10.100.1.1 255.255.255.252
  ip ospf priority 0
  ip access-group 102 in

router ospf 10
  log-adjacency-changes
  network 10.1.1.1 0.0.0.0 area 0
  network 10.100.1.0 0.0.0.3 area 0
  router-id 10.1.1.1

access-list 102 permit 89 host 10.100.1.2 host 224.0.0.5
access-list 102 deny 89 any any
access-list 102 permit ip any any
```

B.

```
interface Loopback0
  ip address 10.1.1.1 255.255.255.255

interface FastEthernet0/0
  ip address 10.100.1.1 255.255.255.252
  ip ospf priority 100
  ip access-group 102 in

router ospf 10
  log-adjacency-changes
  network 10.1.1.1 0.0.0.0 area 0
  network 10.100.1.0 0.0.0.3 area 0
  ospf router-id 10.1.1.1

access-list 102 permit 88 host 10.100.1.2 host 224.0.0.5
access-list 102 deny 88 any any
access-list 102 permit ip any any
```

C.

```
interface FastEthernet0/0
  ip address 10.100.1.1 255.255.255.252
  ip ospf priority 100
  ip access-group 102 in

router ospf 10
  log-adjacency-changes
  network 10.1.1.1 0.0.0.0 area 0
  network 10.100.1.0 0.0.0.3 area 0
  ospf router-id 10.1.1.1

access-list 102 permit 89 host 10.100.1.2 host 224.0.0.5
access-list 102 deny 89 any any
access-list 102 permit ip any any
```

D.

```
interface Loopback0
  ip address 10.1.1.1 255.255.255.255

interface FastEthernet0/0
  ip address 10.100.1.1 255.255.255.252
  ip ospf priority 0
  ip access-group 102 in

router ospf 10
  log-adjacency-changes
  network 10.1.1.1 0.0.0.0 area 0
  network 10.100.1.0 0.0.0.3 area 0
  ospf router-id 10.1.1.1

access-list 102 permit 88 host 10.100.1.2 host 224.0.0.5
access-list 102 deny 88 any any
access-list 102 permit ip any any
```

Show Suggested Answer

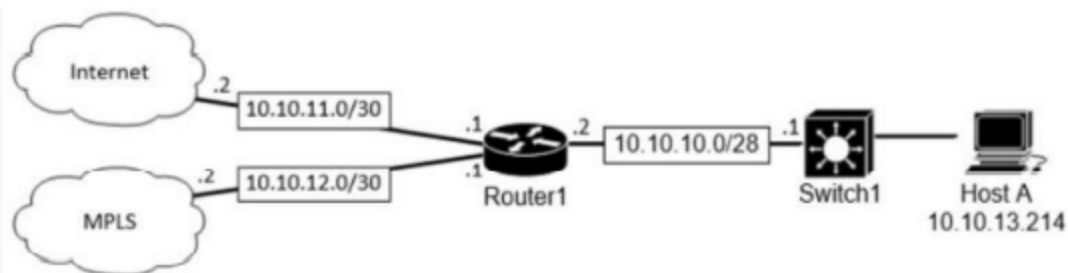


Actual exam question from Cisco's 200-301

Question #: 495

Topic #: 1

[\[All 200-301 Questions\]](#)



```
Router1#show ip route
Gateway of last resort is 10.10.11.2 to network 0.0.0.0

    209.165.200.0/27 is subnetted, 1 subnets
B       209.165.200.224 [20/0] via 10.10.12.2, 03:22:14
    209.165.201.0/27 is subnetted, 1 subnets
B       209.165.201.0 [20/0] via 10.10.12.2, 02:26:33
    209.165.202.0/27 is subnetted, 1 subnets
B       209.165.202.128 [20/0] via 10.10.12.2, 02:26:03
 10.0.0.0/8 is variably subnetted, 8 subnets, 4 masks
C       10.10.10.0/28 is directly connected, GigabitEthernet0/0
C       10.10.11.0/30 is directly connected, FastEthernet2/0
C       10.10.12.0/30 is directly connected, GigabitEthernet0/1
O       10.10.13.0/25 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O       10.10.13.128/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O       10.10.13.144/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O       10.10.13.160/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O       10.10.13.208/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
S*    0.0.0.0/0 [1/0] via 10.10.11.2
```

Refer to the exhibit. What is the prefix length for the route that router1 will use to reach host A?

- A. /25
- B. /27
- C. /28
- D. /29

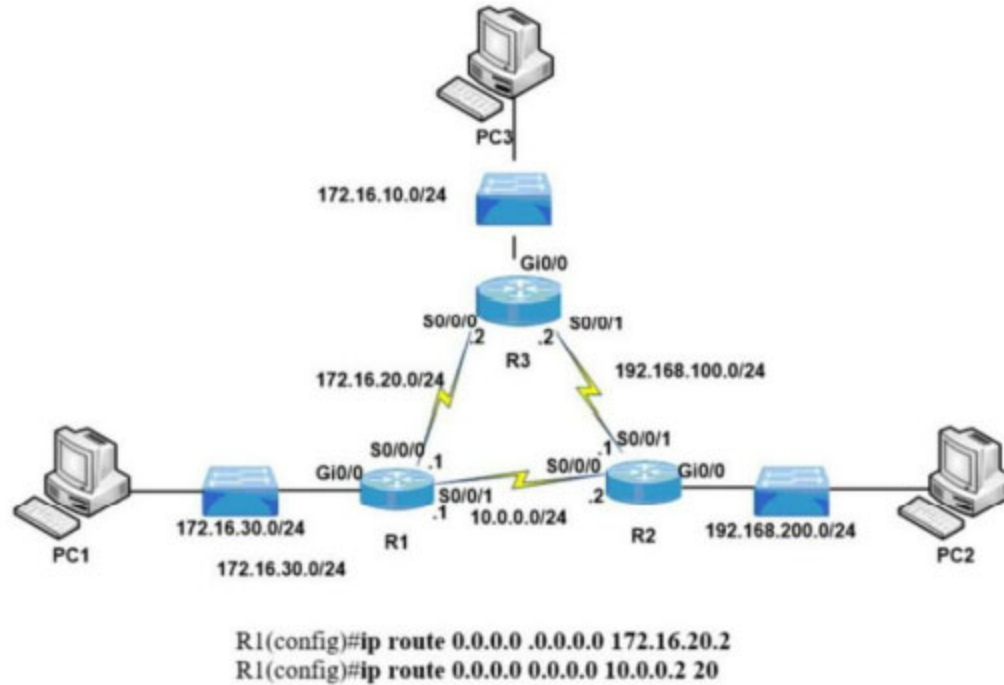
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 496

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. After applying this configuration to router R1, a network engineer is verifying the implementation. If all links are operating normally, and the engineer sends a series of packets from PC1 to PC3, how are the packets routed?

- A. They are distributed sent round robin to interfaces S0/0/0 and S0/0/1
- B. They are routed to 10.0.0.2
- C. They are routed to 192.168.100.2
- D. They are routed to 172.16.20.2

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 497

Topic #: 1

[\[All 200-301 Questions\]](#)

**R1#**

**Gateway of last resort is 10.56.0.1 to network 0.0.0.0**

```
S* 0.0.0.0/0 [1/0] via 10.56.0.1
    10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C   10.56.0.0/16 is directly connected, Null0
C   10.56.0.0/26 is directly connected, Vlan58
C   10.56.0.0/17 is directly connected, Vlan59
C   10.56.0.0/24 is directly connected, Vlan60
```

Refer to the exhibit. When router R1 receives a packet with destination IP address 10.56.0.62, through which interface does it route the packet?

- A. Vlan58
- B. Null0
- C. Vlan59
- D. Vlan60

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 498

Topic #: 1

[\[All 200-301 Questions\]](#)

### Current Neighbor Relationship

Neighbor ID	Pri	State	Dead Time	Address	Interface
192.168.1.1	1	FULL/DR	00:00:33	192.168.1.1	GigabitEthernet0/0

### Desired Neighbor Relationship

Neighbor ID	Pri	State	Dead Time	Address	Interface
192.168.1.1	0	FULL/-	00:00:31	192.168.1.1	GigabitEthernet0/0

Refer to the exhibit. How much OSPF be configured on the GigabitEthernet0/0 interface of the neighbor device to achieve the destined neighbor relationship?

- A. Router(config)#interface GigabitEthernet 0/0 Router(config-if)#ip ospf cost 5
- B. Router(config)#interface GigabitEthernet 0/0 Router(config-if)#ip ospf priority 1
- C. Router(config)#interface GigabitEthernet 0/0 Router(config-if)#ip ospf area 2
- D. Router(config)#interface GigabitEthernet 0/0 Router(config-if)#ip ospf network point-to-point

Show Suggested Answer

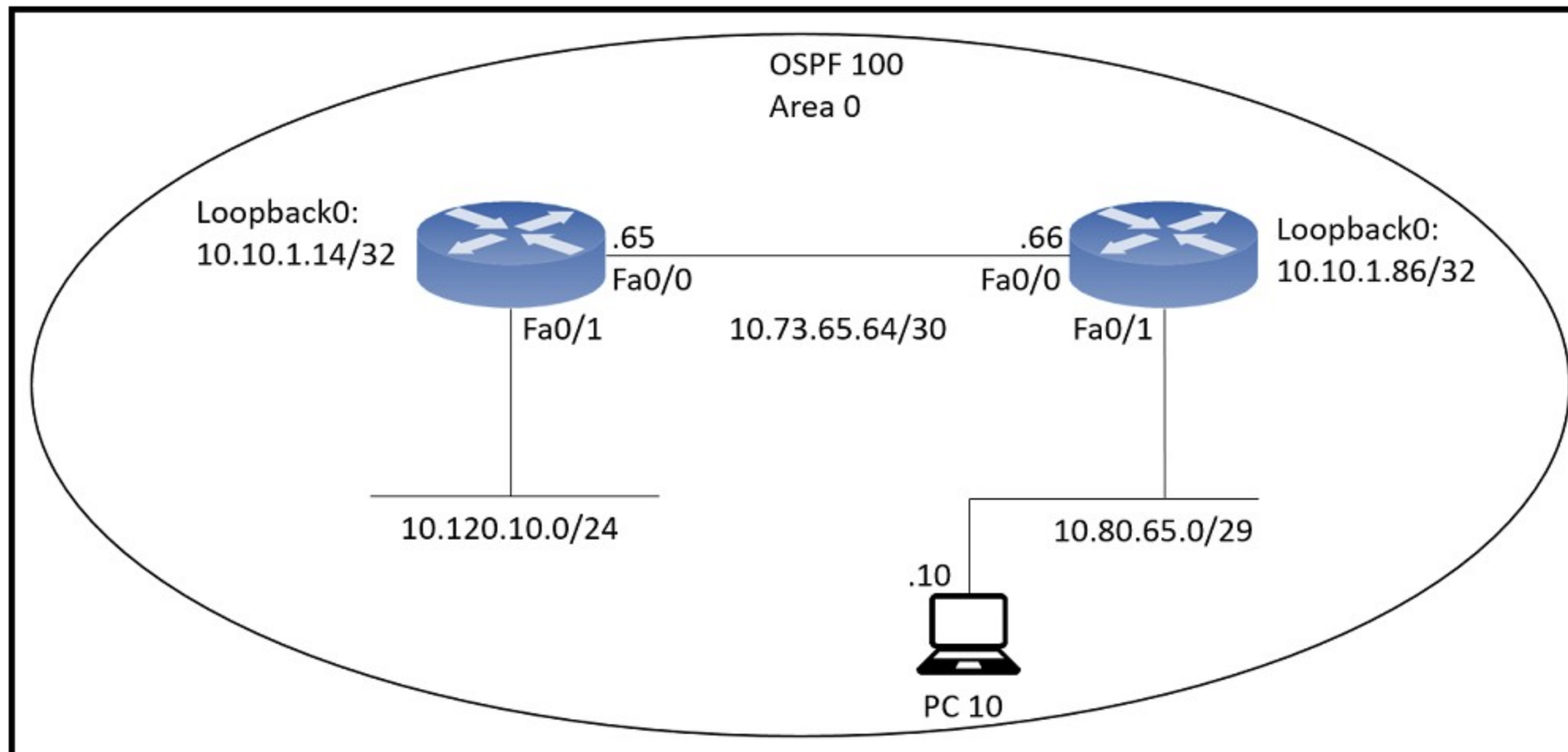


Actual exam question from Cisco's 200-301

Question #: 499

Topic #: 1

[\[All 200-301 Questions\]](#)



An engineer just installed network 10.120.10.0/24. Which configuration must be applied to the R14 router to add the new network to its OSPF routing table?

- A. Router ospf 100 Network 10.120.10.0 0.0.0.255 area 0
- B. Router ospf 120 Network 10.120.10.0 255.255.255.0 area 0 ip route 10.120.10.0 255.255.255.0 fa0/1
- C. Router ospf 100 area 0 Network 10.120.10.0 0.0.0.255
- D. Router ospf 100 Network 10.120.10.0 255.255.255.0 area 0

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 500

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two benefits of FHRPs? (Choose two.)

- A. They allow encrypted traffic
- B. They prevent loops in the Layer 2 network.
- C. They are able to bundle multiple ports to increase bandwidth
- D. They enable automatic failover of the default gateway
- E. They allow multiple devices to serve as a single virtual gateway for clients in the network

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 501

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the MAC address used with VRRP as a virtual address?

- A. 00-05-42-38-53-31
- B. 00-00-5E-00-01-0a
- C. 00-00-0C-07-AD-89
- D. 00-07-C0-70-AB-01

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 502

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Why would VRRP be implemented when configuring a new subnet in a multivendor environment?

- A. when a gateway protocol is required that supports more than two Cisco devices for redundancy
- B. to interoperate normally with all vendors and provide additional security features for Cisco devices
- C. to ensure that the spanning-tree forwarding path to the gateway is loop-free
- D. to enable normal operations to continue after a member failure without requiring a change in a host ARP cache

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 503

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Why implement VRRP?

- A. To hand over to end users the autodiscovery of virtual gateways
- B. To provide end users with a virtual gateway in a multivendor network
- C. To leverage a weighting scheme to provide uninterrupted service
- D. To detect link failures without the overhead of Bidirectional Forwarding Detection

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 504

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of address is shared by routers in a HSRP implementation and used by hosts on the subnet as their default gateway address?

- A. multicast address
- B. virtual IP address
- C. loopback IP address
- D. broadcast address

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 505

Topic #: 1

[\[All 200-301 Questions\]](#)

---

By default, which virtual MAC address does HSRP group 14 use?

- A. 00:05:5e:19:0c:14
- B. 00:05:0c:07:ac:14
- C. 04:15:26:73:3c:0e
- D. 00:00:0c:07:ac:0e

Show Suggested Answer

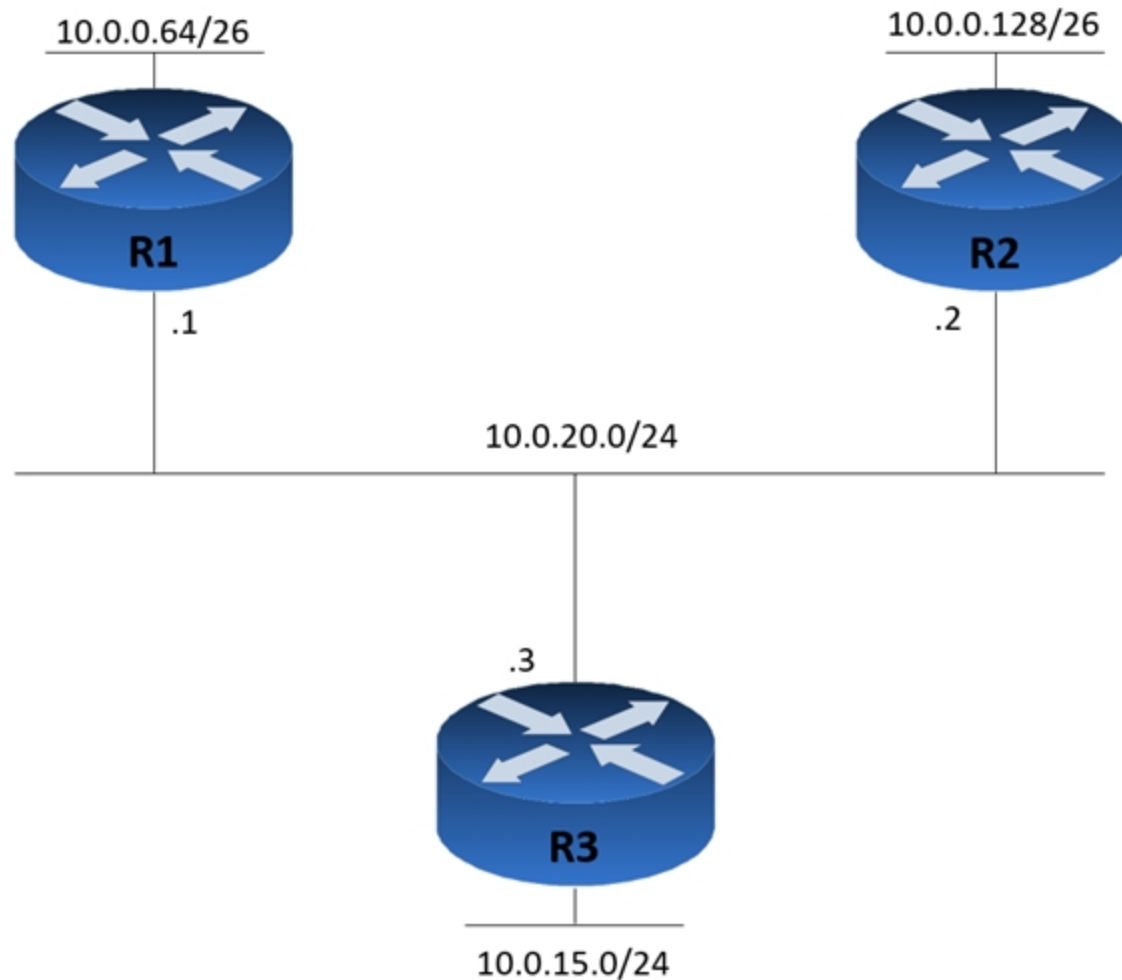


Actual exam question from Cisco's 200-301

Question #: 506

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Router R1 is added to the network and configured with the 10.0.0.64/26 and 10.0.20.0/26 subnets. However, traffic destined for the LAN on R3 is not accessible. Which command when executed on R1 defines a static route to reach the R3 LAN?

- A. `ip route 10.0.0.64 255.255.255.192 10.0.20.3`
- B. `ip route 10.0.15.0 255.255.255.0 10.0.20.1`
- C. `ip route 10.0.15.0 255.255.255.192 10.0.20.1`
- D. `ip route 10.0.15.0 255.255.255.0 10.0.20.3`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 507

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A router has two static routes to the same destination network under the same OSPF process. How does the router forward packets to the destination if the net- hop devices are different?

- A. The router chooses the route with the oldest age.
- B. The router chooses the next hop with the lowest IP address.
- C. The router chooses the next hop with the lowest MAC address.
- D. The router load-balances traffic over all routes to the destination.

[Show Suggested Answer](#)







Actual exam question from Cisco's 200-301

Question #: 508

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What does the implementation of a first-hop redundancy protocol protect against on a network?

- A. default gateway failure
- B. BGP neighbor flapping
- C. spanning-tree loops
- D. root-bridge loss

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 509

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which feature or protocol is required for an IP SLA to measure UDP jitter?

- A. LLDP
- B. EEM
- C. CDP
- D. NTP

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 510

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which feature is enabled by this configuration?

```
R1(config)#ip nat pool cisco 10.1.1.0 10.1.1.50 255.255.255.0
```

- A. static NAT translation
- B. a DHCP pool
- C. a dynamic NAT address pool
- D. PAT

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 511

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which NAT term is defined as a group of addresses available for NAT use?

- A. NAT pool
- B. dynamic NAT
- C. static NAT
- D. one-way NAT

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 512

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command can you enter to allow Telnet to be supported in addition to SSH?

- A. transport input telnet ssh
- B. transport input telnet
- C. no transport input telnet
- D. privilege level 15

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 513

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. After you apply the given configuration to a router, the DHCP clients behind the device cannot communicate with hosts outside of their subnet. Which action is most likely to correct the problem?

```
ip dhcp pool test
  network 192.168.10.0 /27
  domain-name cisco.com
  dns-server 172.16.1.1 172.16.2.1
  netbios-name-server 172.16.1.10 172.16.2.10
```

- A. Configure the dns server on the same subnet as the clients
- B. Activate the dhcp pool
- C. Correct the subnet mask
- D. Configure the default gateway

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 514

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which rule does the DHCP server use when there is an IP address conflict?

```
Router# show ip dhcp conflict
IP address      Detection method  Detection time
172.16.1.32     Ping              Feb 16 1998 12:28 PM
172.16.1.64     Gratuitous ARP    Feb 23 1198 08:12 AM
```

- A. The address is removed from the pool until the conflict is resolved.
- B. The address remains in the pool until the conflict is resolved.
- C. Only the IP detected by Gratuitous ARP is removed from the pool.
- D. Only the IP detected by Ping is removed from the pool.
- E. The IP will be shown, even after the conflict is resolved.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 515

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command can you enter to determine the addresses that have been assigned on a DHCP Server?

- A. Show ip DHCP database.
- B. Show ip DHCP pool.
- C. Show ip DHCP binding.
- D. Show ip DHCP server statistic.

[Show Suggested Answer](#)







Actual exam question from Cisco's 200-301

Question #: 516

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the authoritative source for an address lookup?

- A. a recursive DNS search
- B. the operating system cache
- C. the ISP local cache
- D. the browser cache

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 517

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command is used to verify the DHCP relay agent address that has been set up on your Cisco IOS router?

- A. show ip interface brief
- B. show ip dhcp bindings
- C. show ip route
- D. show ip interface
- E. show interface
- F. show ip dhcp pool

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 518

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of information resides on a DHCP server?

- A. a list of the available IP addresses in a pool
- B. a list of public IP addresses and their corresponding names
- C. usernames and passwords for the end users in a domain
- D. a list of statically assigned MAC addresses

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 519

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two roles of Domain Name Services (DNS)? (Choose two.)

- A. builds a flat structure of DNS names for more efficient IP operations
- B. encrypts network Traffic as it travels across a WAN by default
- C. improves security by protecting IP addresses under Fully Qualified Domain Names (FQDNs)
- D. enables applications to identify resources by name instead of IP address
- E. allows a single host name to be shared across more than one IP address

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 520

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which Cisco IOS command will indicate that interface GigabitEthernet 0/0 is configured via DHCP?

- A. show ip interface GigabitEthernet 0/0 dhcp
- B. show interface GigabitEthernet 0/0
- C. show ip interface dhcp
- D. show ip interface GigabitEthernet 0/0
- E. show ip interface GigabitEthernet 0/0 brief

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 521

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What will happen if you configure the logging trap debug command on a router?

- A. It causes the router to send messages with lower severity levels to the syslog server
- B. It causes the router to send all messages with the severity levels Warning, Error, Critical, and Emergency to the syslog server
- C. It causes the router to send all messages to the syslog server
- D. It causes the router to stop sending all messages to the syslog server

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 522

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network administrator enters the following command on a router: logging trap 3. What are three message types that will be sent to the Syslog server? (Choose three.)

- A. informational
- B. emergency
- C. warning
- D. critical
- E. debug
- F. error

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 523

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the network protocols from the left onto the correct transport services on the right.

Select and Place:

### Answer Area

FTP
SMTP
SNMP
SSH
TFTP
VoIP

Connection Oriented

Connectionless

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 524

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer must back up 20 network router configurations globally within a customer environment. Which protocol allows the engineer to perform this function using the Cisco IOS MIB?

- A. ARP
- B. SNMP
- C. SMTP
- D. CDP

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 525

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command enables a router to become a DHCP client?

- A. ip address dhcp
- B. ip dhcp client
- C. ip helper-address
- D. ip dhcp pool

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 526

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which function does an SNMP agent perform?

- A. It sends information about MIB variables in response to requests from the NMS
- B. It manages routing between Layer 3 devices in a network
- C. It coordinates user authentication between a network device and a TACACS+ or RADIUS server
- D. It requests information from remote network nodes about catastrophic system events

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 527

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two roles of the Dynamic Host Configuration Protocol (DHCP)? (Choose two.)

- A. The DHCP server assigns IP addresses without requiring the client to renew them.
- B. The DHCP server leases client IP addresses dynamically.
- C. The DHCP client is able to request up to four DNS server addresses.
- D. The DHCP server offers the ability to exclude specific IP addresses from a pool of IP addresses.
- E. The DHCP client maintains a pool of IP addresses it is able to assign.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 528

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command must be entered when a device is configured as an NTP server?

- A. ntp peer
- B. ntp master
- C. ntp authenticate
- D. ntp server

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 529

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What event has occurred if a router sends a notice level message to a syslog server?

- A. A certificate has expired
- B. An interface line has changed status
- C. A TCP connection has been torn down
- D. An ICMP connection has been built

Show Suggested Answer

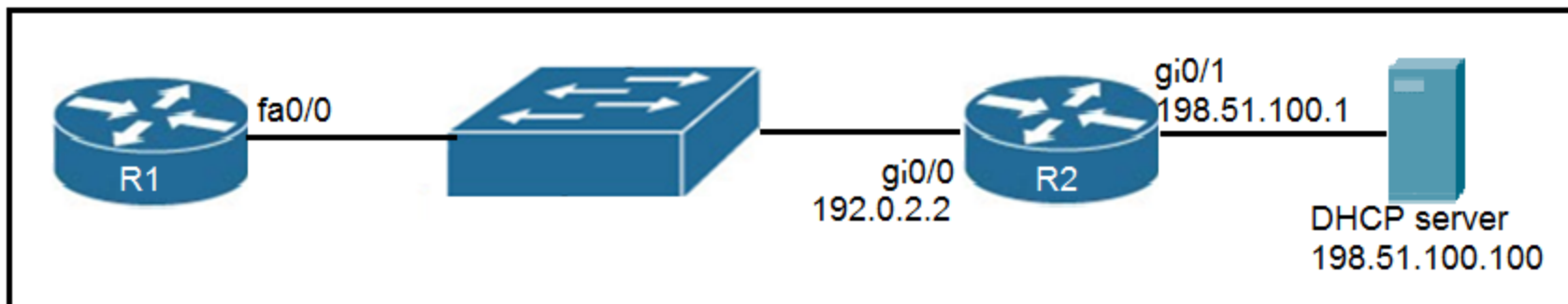


Actual exam question from Cisco's 200-301

Question #: 530

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer deploys a topology in which R1 obtains its IP configuration from DHCP. If the switch and DHCP server configurations are complete and correct, which two sets of commands must be configured on R1 and R2 to complete the task? (Choose two.)

- A. R1(config)# interface fa0/0 R1(config-if)# ip helper-address 198.51.100.100
- B. R2(config)# interface gi0/0 R2(config-if)# ip helper-address 198.51.100.100
- C. R1(config)# interface fa0/0 R1(config-if)# ip address dhcp R1(config-if)# no shutdown
- D. R2(config)# interface gi0/0 R2(config-if)# ip address dhcp
- E. R1(config)# interface fa0/0 R1(config-if)# ip helper-address 192.0.2.2

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 531

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two actions are performed by the Weighted Random Early Detection mechanism? (Choose two.)

- A. It supports protocol discovery.
- B. It guarantees the delivery of high-priority packets.
- C. It can identify different flows with a high level of granularity.
- D. It can mitigate congestion by preventing the queue from filling up.
- E. It drops lower-priority packets before it drops higher-priority packets.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 532

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R2#show ip nat translations
Pro  Inside global      Inside local      Outside local      Outside global
tcp  172.23.104.3:43268  10.4.4.4:43268   172.23.103.10:23  172.23.103.10:23
tcp  172.23.104.4:45507  10.4.4.5:45507   172.23.103.10:80  172.23.103.10:80
```

Refer to the exhibit. An engineer configured NAT translations and has verified that the configuration is correct. Which IP address is the source IP after the NAT has taken place?

- A. 10.4.4.4
- B. 10.4.4.5
- C. 172.23.103.10
- D. 172.23.104.4

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 533

Topic #: 1

[\[All 200-301 Questions\]](#)

---

If a notice-level message is sent to a syslog server, which event has occurred?

- A. A network device has restarted.
- B. A debug operation is running.
- C. A routing instance has flapped.
- D. An ARP inspection has failed.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 534

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the functions from the left onto the correct network components on the right.

Select and Place:

### Answer Area

resolves web URLs to IP addresses

assigns a default gateway to a client

holds the TCP/IP settings to be distributed to the clients

stores a list of IP addresses mapped to names

assigns IP addresses to enabled clients

DHCP Server

DNS Server

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 535

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two tasks must be performed to configure NTP to a trusted server in client mode on a single network device? (Choose two.)

- A. Enable NTP authentication.
- B. Verify the time zone.
- C. Specify the IP address of the NTP server.
- D. Set the NTP server private key.
- E. Disable NTP broadcasts.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 536

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the primary purpose of a First Hop Redundancy Protocol?

- A. It allows directly connected neighbors to share configuration information
- B. It reduces routing failures by allowing Layer 3 load balancing between OSPF neighbors that have the same link metric
- C. It allows a router to use bridge priorities to create multiple loop-free paths to a single destination
- D. It reduces routing failures by allowing more than one router to represent itself as the default gateway of a network

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 537

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer is configuring NAT to translate the source subnet of 10.10.0.0/24 to any one of three addresses: 192.168.3.1, 192.168.3.2, or 192.168.3.3. Which configuration should be used?

- A. enable configure terminal ip nat pool mypool 192.168.3.1 192.168.3.3 prefix-length 30 access-list 1 permit 10.10.0.0 0.0.0.255 ip nat outside destination list 1 pool mypool interface g1/1 ip nat inside interface g1/2 ip nat outside
- B. enable configure terminal ip nat pool mypool 192.168.3.1 192.168.3.3 prefix-length 30 access-list 1 permit 10.10.0.0 0.0.0.254 ip nat inside source list 1 pool mypool interface g1/1 ip nat inside interface g1/2 ip nat outside
- C. enable configure terminal ip nat pool mypool 192.168.3.1 192.168.3.3 prefix-length 30 route map permit 10.10.0.0 255.255.255.0 ip nat outside destination list 1 pool mypool interface g1/1 ip nat inside interface g1/2 ip nat outside
- D. enable configure terminal ip nat pool mypool 192.168.3.1 192.168.3.3 prefix-length 30 access-list 1 permit 10.10.0.0 0.0.0.255 ip nat inside source list 1 pool mypool interface g1/1 ip nat inside interface g1/2 ip nat outside

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 538

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When the active router in an HSRP group fails, which router assumes the role and forwards packets?

- A. forwarding
- B. listening
- C. standby
- D. backup

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 539

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What protocol allows an engineer to back up 20 network router configurations globally while using the copy function?

- A. TCP
- B. SMTP
- C. FTP
- D. SNMP

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 540

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of address is the public IP address of a NAT device?

- A. outside global
- B. outside local
- C. inside global
- D. inside local
- E. outside public
- F. inside public

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 541

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two pieces of information can you determine from the output of the show ntp status command? (Choose two.)

- A. whether the NTP peer is statically configured
- B. the IP address of the peer to which the clock is synchronized
- C. the configured NTP servers
- D. whether the clock is synchronized
- E. the NTP version number of the peer

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 542

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which keyword in a NAT configuration enables the use of one outside IP address for multiple inside hosts?

- A. source
- B. static
- C. pool
- D. overload

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 543

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which feature or protocol determines whether the QoS on the network is sufficient to support IP services?

- A. LLDP
- B. CDP
- C. IP SLA
- D. EEM

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 544

Topic #: 1

[\[All 200-301 Questions\]](#)

---

In QoS, which prioritization method is appropriate for interactive voice and video?

- A. traffic policing
- B. round-robin scheduling
- C. low-latency queuing
- D. expedited forwarding

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 545

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the SNMP components from the left onto the descriptions on the right.

Select and Place:

### Answer Area

MIB

collection of variables that can be monitored

SNMP agent

unsolicited message

SNMP manager

responds to status requests and requests for information about a device

SNMP trap

resides on an NMS

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 546

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the purpose of traffic shaping?

- A. to be a marking mechanism that identifies different flows
- B. to provide fair queuing for buffered flows
- C. to mitigate delays over slow links
- D. to limit the bandwidth that a flow can use

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 547

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of TFTP in network operations?

- A. transfers IOS images from a server to a router for firmware upgrades
- B. transfers a backup configuration file from a server to a switch using a username and password
- C. transfers configuration files from a server to a router on a congested link
- D. transfers files between file systems on a router

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 548

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a DHCP client?

- A. a workstation that requests a domain name associated with its IP address
- B. a host that is configured to request an IP address automatically
- C. a server that dynamically assigns IP addresses to hosts.
- D. a router that statically assigns IP addresses to hosts.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 549

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Where does the configuration reside when a helper address is configured to support DHCP?

- A. on the router closest to the server
- B. on the router closest to the client
- C. on every router along the path
- D. on the switch trunk interface

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 550

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What facilitates a Telnet connection between devices by entering the device name?

- A. SNMP
- B. DNS lookup
- C. syslog
- D. NTP

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 551

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When deploying syslog, which severity level logs informational messages?

- A. 0
- B. 2
- C. 4
- D. 6

Show Suggested Answer



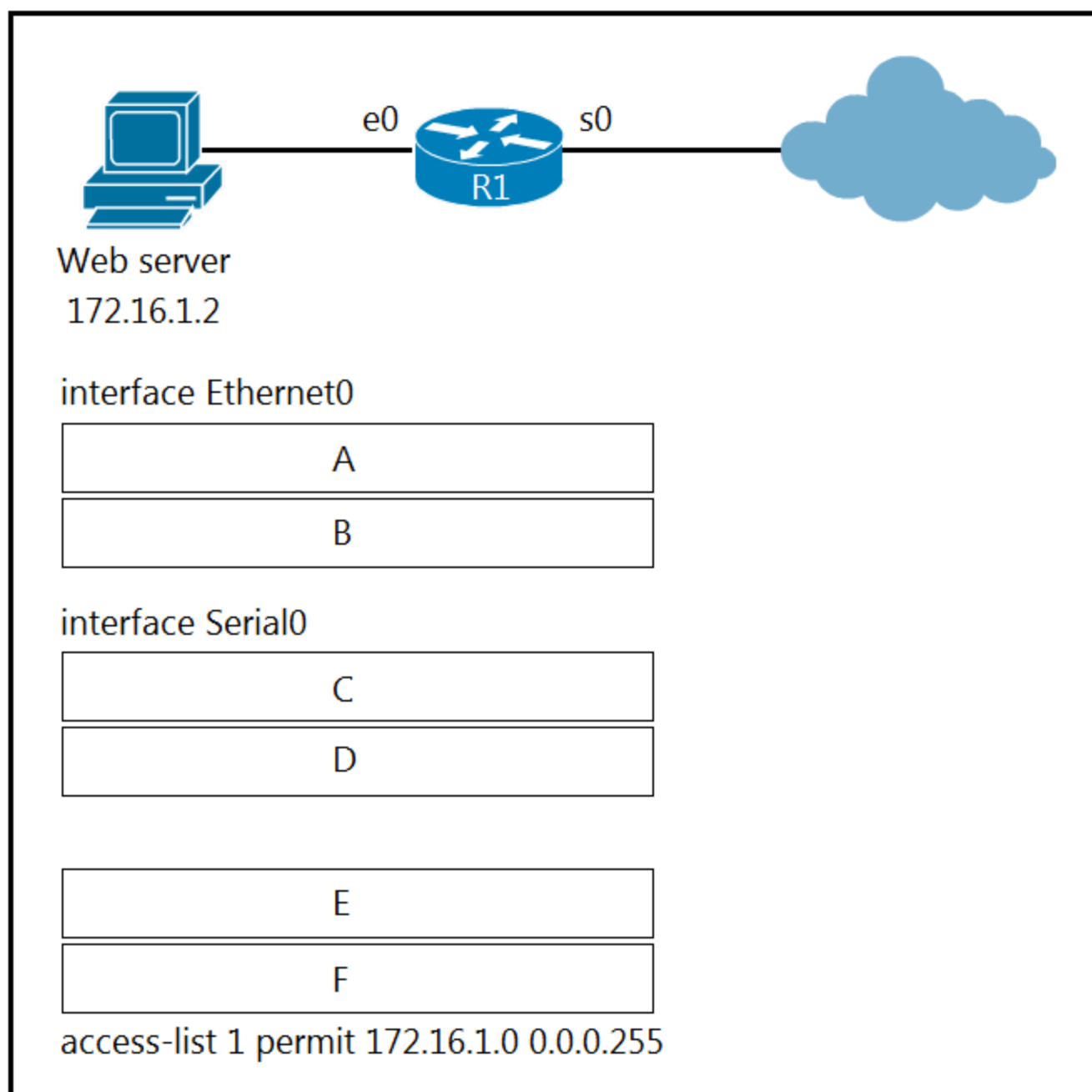
Actual exam question from Cisco's 200-301

Question #: 552

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -



Refer to the exhibit. An engineer is configuring the router to provide static NAT for the webserver. Drag and drop the configuration commands from the left onto the letters that correspond to its position in the configuration on the right.

Select and Place:

ip address 172.16.1.1 255.255.255.0	position A
ip address 45.83.2.214 255.255.255.240	position B
ip nat inside	position C
ip nat inside source list 1 interface s0 overload	position D
ip nat inside source static tcp 172.16.1.2 80 45.83.2.214 80 extendable	position E
ip nat outside	position F

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 553

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two QoS tools provide congestion management? (Choose two.)

- A. CBWFQ
- B. FRTS
- C. CAR
- D. PBR
- E. PQ

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 554

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which QoS tool is used to optimize voice traffic on a network that is primarily intended for data traffic?

- A. WRED
- B. FIFO
- C. WFQ
- D. PQ

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 555

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer is installing a new wireless printer with a static IP address on the Wi-Fi network. Which feature must be enabled and configured to prevent connection issues with the printer?

- A. client exclusion
- B. DHCP address assignment
- C. passive client
- D. static IP tunneling

[Show Suggested Answer](#)







Actual exam question from Cisco's 200-301

Question #: 556

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When a client and server are not on the same physical network, which device is used to forward requests and replies between client and server for DHCP?

- A. DHCPOFFER
- B. DHCP relay agent
- C. DHCP server
- D. DHCPDISCOVER

Show Suggested Answer

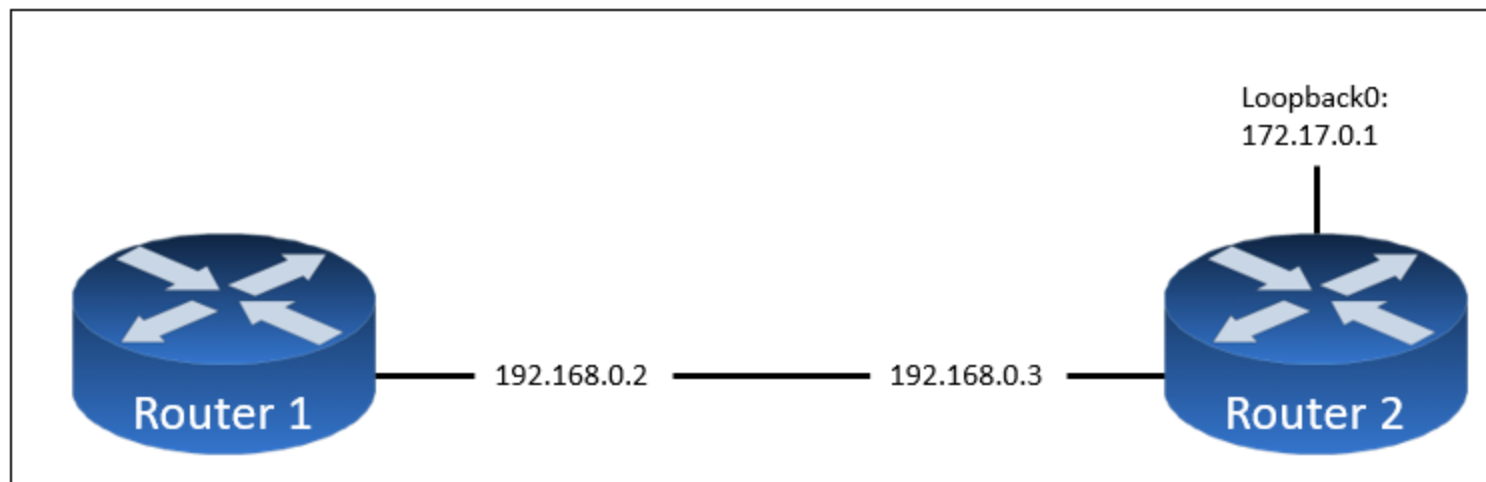


Actual exam question from Cisco's 200-301

Question #: 557

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The `ntp server 192.168.0.3` command has been configured on router 1 to make it an NTP client of router 2. Which command must be configured on router 2 so that it operates in server-only mode and relies only on its internal clock?

- A. `Router2(config)#ntp server 172.17.0.1`
- B. `Router2(config)#ntp server 192.168.0.2`
- C. `Router2(config)#ntp passive`
- D. `Router2(config)#ntp master 4`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 558

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which protocol requires authentication to transfer a backup configuration file from a router to a remote server?

- A. FTP
- B. SMTP
- C. TFTP
- D. DTP

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 559

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which condition must be met before an NMS handles an SNMP trap from an agent?

- A. The NMS must receive the same trap from two different SNMP agents to verify that it is reliable.
- B. The NMS must receive a trap and an inform message from the SNMP agent within a configured interval.
- C. The NMS software must be loaded with the MIB associated with the trap.
- D. The NMS must be configured on the same router as the SNMP agent.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 560

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer is configuring switch SW1 to act as an NTP server when all upstream NTP server connectivity fails. Which configuration must be used?

- A. SW1# config t SW1(config)#ntp peer 192.168.1.1 SW1(config)#ntp access-group peer accesslist1
- B. SW1# config t SW1(config)#ntp master SW1(config)#ntp server192.168.1.1
- C. SW1# config t SW1(config)#ntp backup SW1(config)#ntp server192.168.1.1
- D. SW1# config t SW1(config)#ntp server192.168.1.1 SW1(config)#ntp access-group peer accesslist1

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 561

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network administrator must enable DHCP services between two sites. What must be configured for the router to pass DHCPDISCOVER messages on to the server?

- A. DHCP Binding
- B. a DHCP Relay Agent
- C. DHCP Snooping
- D. a DHCP Pool

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 562

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which level of severity must be set to get informational syslogs?

- A. alert
- B. critical
- C. notice
- D. debug

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 563

Topic #: 1

[\[All 200-301 Questions\]](#)

---

On workstations running Microsoft Windows, which protocol provides the default gateway for the device?

- A. STP
- B. DHCP
- C. SNMP
- D. DNS

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 564

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two statements about NTP operations are true? (Choose two.)

- A. NTP uses UDP over IP.
- B. Cisco routers can act as both NTP authoritative servers and NTP clients.
- C. Cisco routers can act only as NTP servers.
- D. Cisco routers can act only as NTP clients.
- E. NTP uses TCP over IP.

Show Suggested Answer

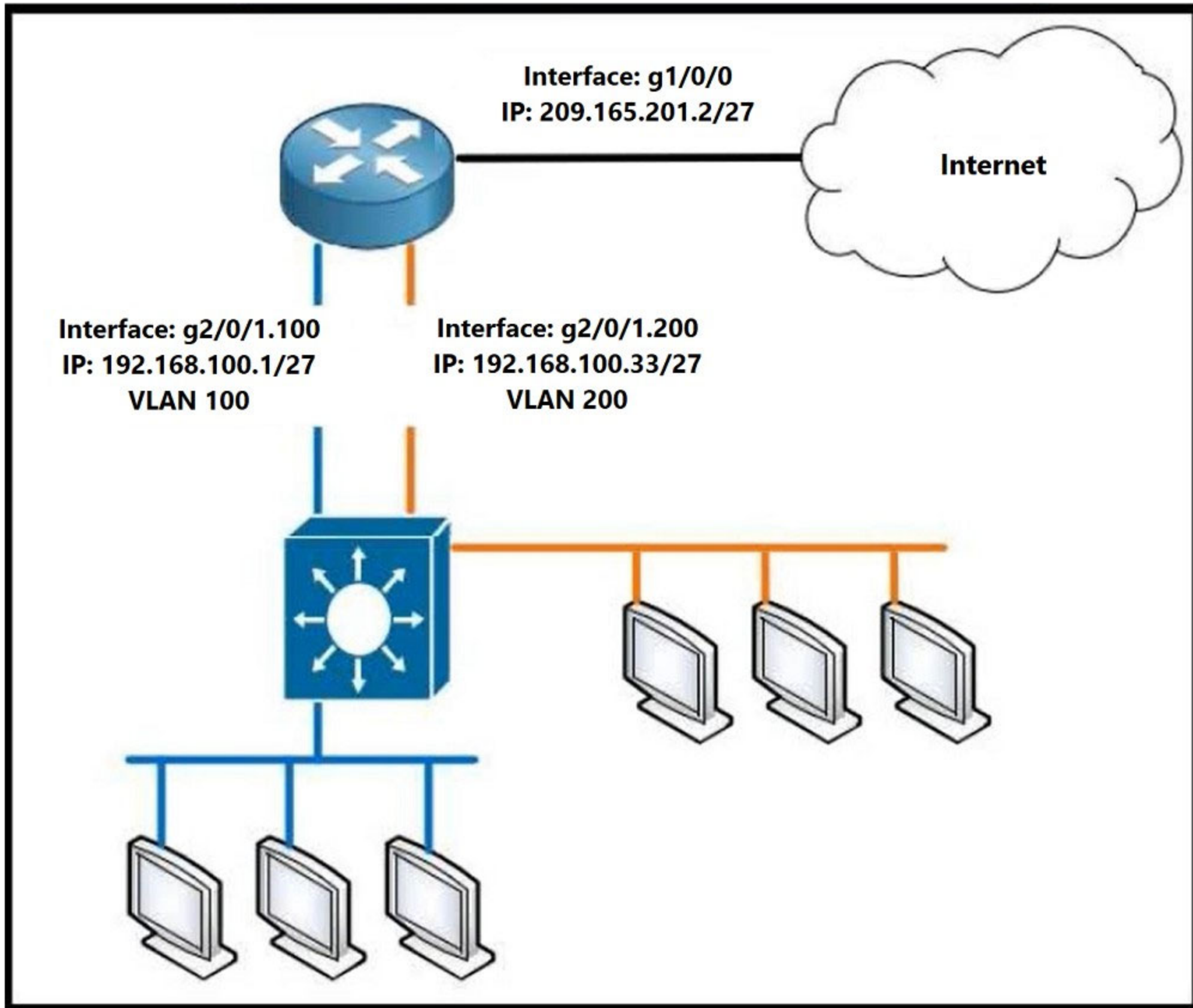


Actual exam question from Cisco's 200-301

Question #: 565

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which configuration must be applied to the router that configures PAT to translate all addresses in VLAN 200 while allowing devices on VLAN 100 to use their own IP addresses?

- A. Router1(config)#access-list 99 permit 192.168.100.32 0.0.0.31 Router1(config)#ip nat inside source list 99 interface gi1/0/0 overload Router1(config)#interface gi2/0/1.200 Router1(config)#ip nat inside Router1(config)#interface gi1/0/0 Router1(config)#ip nat outside
- B. Router1(config)#access-list 99 permit 192.168.100.0 0.0.0.255 Router1(config)#ip nat inside source list 99 interface gi1/0/0 overload Router1(config)#interface gi2/0/1.200 Router1(config)#ip nat inside Router1(config)#interface gi1/0/0 Router1(config)#ip nat outside
- C. Router1(config)#access-list 99 permit 209.165.201.2 255.255.255.255 Router1(config)#ip nat inside source list 99 interface gi1/0/0 overload Router1(config)#interface gi2/0/1.200 Router1(config)#ip nat inside Router1(config)#interface gi1/0/0 Router1(config)#ip nat outside
- D. Router1(config)#access-list 99 permit 209.165.201.2 0.0.0.0 Router1(config)#ip nat inside source list 99 interface gi1/0/0 overload Router1(config)#interface gi2/0/1.200 Router1(config)#ip nat inside Router1(config)#interface gi1/0/0 Router1(config)#ip nat outside

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 566

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1#show run
Building configuration...
!
hostname R1
!
username CNAC password 0 conal23
!
ip domain-name CNAC.com
!
interface GigabitEthernet0/0/0
 ip address 192.168.1.10 255.255.255.0
 duplex auto
 speed auto
!
line vty 0 15
 login local

R1#show crypto key mypubkey rsa

R1#show ssh
%No SSHv2 server connections running.
%No SSHv1 server connections running.
```

Refer to the exhibit. Which two commands must be added to update the configuration of router R1 so that it accepts only encrypted connections? (Choose two.)

- A. transport input ssh
- B. username CNAC secret R!41!3705926@
- C. crypto key generate rsa 1024
- D. line vty 0 4
- E. ip ssh version 2

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 567

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command implies the use of SNMPv3?

- A. snmp-server user
- B. snmp-server host
- C. snmp-server enable traps
- D. snmp-server community

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 568

Topic #: 1

[\[All 200-301 Questions\]](#)

---

R1 as an NTP server must have:

- ⇒ NTP authentication enabled
- ⇒ NTP packets sourced from Interface loopback 0
- ⇒ NTP stratum 2
- ⇒ NTP packets only permitted to client IP 209.165.200.225

How should R1 be configured?

- A. `ntp authenticate ntp authentication-key 2 sha1 CISC0123 ntp source Loopback0 ntp access-group server-only 10 ntp master 2 ! access-list 10 permit udp host 209.165.200.225 any eq 123`
- B. `ntp authenticate ntp authentication-key 2 md5 CISC0123 ntp interface Loopback0 ntp access-group server-only 10 ntp stratum 2 ! access-list 10 permit 209.165.200.225`
- C. `ntp authenticate ntp authentication-key 2 md5 CISC0123 ntp source Loopback0 ntp access-group server-only 10 ntp master 2 ! access-list 10 permit 209.165.200.225`
- D. `ntp authenticate ntp authentication-key 2 md5 CISC0123 ntp source Loopback0 ntp access-group server-only 10 ntp stratum 2 ! access-list 10 permit udp host 209.165.200.225 any eq 123`

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 569

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a capability of FTP in network management operations?

- A. offers proprietary support at the session layer when transferring data
- B. uses separate control and data connections to move files between server and client
- C. encrypts data before sending between data resources
- D. devices are directly connected and use UDP to pass file information

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 570

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer is configuring a switch so that it is remotely reachable via SSH. The engineer has already configured the host name on the router. Which additional command must the engineer configure before entering the command to generate the RSA key?

- A. password password
- B. ip ssh authentication-retries 2
- C. ip domain-name domain
- D. crypto key generate rsa modulus 1024

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 571

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which QoS traffic handling technique retains excess packets in a queue and reschedules these packets for later transmission when the configured maximum bandwidth has been surpassed?

- A. traffic policing
- B. weighted random early detection
- C. traffic prioritization
- D. traffic shaping

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 572

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command must be entered to configure a DHCP relay?

- A. ip dhcp relay
- B. ip dhcp pool
- C. ip address dhcp
- D. ip helper-address

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 573

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Switch#show ip dhcp snooping
Switch DHCP snooping is enabled
Switch DHCP gleaning is disabled
DHCP snooping is configured on following VLANs:
1
DHCP snooping is operational on following VLANs:
1
DHCP snooping is configured on the following L3 Interfaces:
Insertion of option 82 is disabled
circuit-id default format: vlan-mod-port
remote-id: aabb.cc00.6500 (MAC)
Option 82 on untrusted port is not allowed
Verification of hwaddr field is enabled
Verification of giaddr field is enabled
DHCP snooping trust/rate is configured on the following Interfaces:
Interface Trusted Allow option Rate limit (pps)

Switch#show ip dhcp snooping statistics detail
Packets Processed by DHCP Snooping = 34
Packets Dropped Because
IDB not known = 0
Queue full = 0
Interface is in errdisabled = 0
Received on untrusted ports = 32
Nonzero giaddr = 0
Source mac not equal to chaddr = 0
No binding entry = 0
Insertion of opt82 fail = 0
Unknown packet = 0
Interface Down = 0
Unknown output interface = 0
Misdirected Packets = 0
Packets with Invalid Size = 0
Packets with Invalid Option = 0
```

Refer to the exhibit. The DHCP server and clients are connected to the same switch. What is the next step to complete the DHCP configuration to allow clients on VLAN 1 to receive addresses from the DHCP server?

- A. Configure the ip dhcp snooping trust command on the interface that is connected to the DHCP client.
- B. Configure ip dhcp relay information option command on the interface that is connected to the DHCP server.
- C. Configure ip dhcp snooping trust command on the interface that is connected to the DHCP server.
- D. Configure the ip dhcp information option command on the interface that is connected to the DHCP client.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 574

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network analyst is tasked with configuring the date and time on a router using EXEC mode. The date must be set to January 1, 2020 and the time must be set to 12:00 am. Which command should be used?

- A. clock timezone
- B. clock summer-time date
- C. clock summer-time recurring
- D. clock set

[Show Suggested Answer](#)



Actual exam question from Cisco's 200-301

Question #: 575

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route
Gateway of last resort is 192.168.30.10 to network 0.0.0.0
 192.168.30.0/29 is subnetted, 2 subnets
 C      192.168.30.0 is directly connected, FastEthernet0/0
 C      192.168.30.8 is directly connected, Serial0/0.1
 192.168.10.0/24 is variably subnetted, 2 subnets, 2 masks
 O IA   192.168.10.32/28 [110/193] via 192.168.30.10, 00:18:49, Serial0/0.1
 O IA   192.168.10.0/27 [110/192] via 192.168.30.10, 00:18:49, Serial0/0.1
 192.168.20.0/30 is subnetted, 1 subnets
 O IA   192.168.20.0 [110/128] via 192.168.30.10, 00:18:49, Serial0/0.1
 192.168.50.0/32 is subnetted, 1 subnets
 C      192.168.50.1 is directly connected, Loopback0
 O*IA  0.0.0.0/0 [110/84] via 192.168.30.10, 00:10:36, Serial0/0.1
```

Refer to the exhibit. What is the metric of the route to the 192.168.10.33/28 subnet?

- A. 84
- B. 110
- C. 192
- D. 193

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 576

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command creates a static NAT binding for a PC address of 10.1.1.1 to the public routable address 209.165.200.225 assigned to the PC?

- A. R1(config)#ip nat inside source static 10.1.1.1 209.165.200.225
- B. R1(config)#ip nat outside source static 209.165.200.225 10.1.1.1
- C. R1(config)#ip nat inside source static 209.165.200.225 10.1.1.1
- D. R1(config)#ip nat outside source static 10.1.1.1 209.165.200.225

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 577

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What prevents a workstation from receiving a DHCP address?

- A. STP
- B. VTP
- C. 802.1Q
- D. DTP

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 578

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a feature of TFTP?

- A. offers anonymous user login ability
- B. uses two separate connections for control and data traffic
- C. relies on the well-known TCP port 20 to transmit data
- D. provides secure data transfer

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 579

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which QoS forwarding per-hop behavior changes a specific value in a packet header to set the class of service for the packet?

- A. shaping
- B. classification
- C. policing
- D. marking

Show Suggested Answer



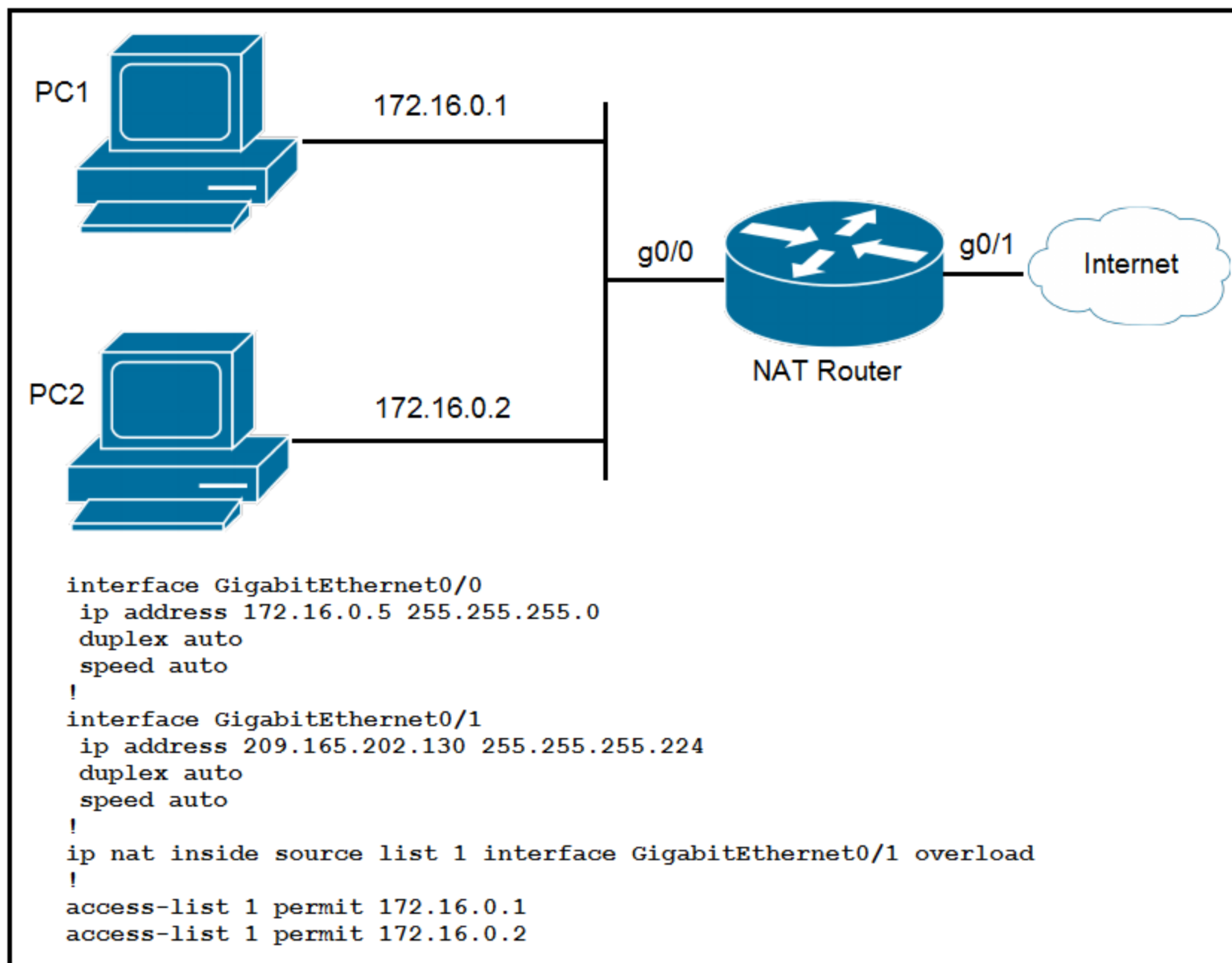


Actual exam question from Cisco's 200-301

Question #: 580

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. How should the configuration be updated to allow PC1 and PC2 access to the Internet?

- A. Modify the configured number of the second access list
- B. Change the ip nat inside source command to use interface GigabitEthernet0/0
- C. Remove the overload keyword from the ip nat inside source command
- D. Add either the ip nat {inside|outside} command under both interfaces

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 581

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the purpose of the ip address dhcp command?

- A. to configure an interface as a DHCP relay
- B. to configure an interface as a DHCP client
- C. to configure an interface as a DHCP helper
- D. to configure an interface as a DHCP server

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 582

Topic #: 1

[\[All 200-301 Questions\]](#)

```
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
!
hostname R4
!
boot-start-marker
boot-end-marker
!
ip cef
!
interface FastEthernet0/0
description WAN_INTERFACE
ip address 10.0.1.2 255.255.255.252
ip access-group 100 in
!
interface FastEthernet0/1
description LAN_INTERFACE
ip address 10.148.2.1 255.255.255.0
duplex auto
speed auto
!
ip forward-protocol nd
!
access-list 100 permit eigrp any any
access-list 100 permit icmp any any
access-list 100 permit tcp 10.149.3.0 0.0.0.255 host 10.0.1.2 eq 22
access-list 100 permit tcp any any eq 80
access-list 100 permit tcp any any eq 443
access-list 100 deny ip any any log
```

Refer to the exhibit. Which configuration enables DHCP addressing for hosts connected to interface FastEthernet0/1 on router R4?

- A. interface FastEthernet0/1 ip helper-address 10.0.1.1 ! access-list 100 permit tcp host 10.0.1.1 eq 67 host 10.148.2.1
- B. interface FastEthernet0/0 ip helper-address 10.0.1.1 ! access-list 100 permit udp host 10.0.1.1 eq bootps host 10.148.2.1
- C. interface FastEthernet0/0 ip helper-address 10.0.1.1 ! access-list 100 permit host 10.0.1.1 host 10.148.2.1 eq bootps
- D. interface FastEthernet0/1 ip helper-address 10.0.1.1 ! access-list 100 permit udp host 10.0.1.1 eq bootps host 10.148.2.1

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 583

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the SNMP manager and agent identifier commands from the left onto the functions on the right.

Select and Place:

show snmp chassis

displays information about the SNMP recipient

show snmp community

displays the IP address of the remote SNMP device

show snmp engineID

displays the SNMP security model in use

show snmp group

displays the SNMP access string

show snmp host

displays the SNMP server serial number

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 584

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer is configuring SSH version 2 exclusively on the R1 router. What is the minimum configuration required to permit remote management using the cryptographic protocol?

- A. hostname R1 service password-encryption crypto key generate rsa general-keys modulus 1024 username cisco privilege 15 password 0 cisco123 ip ssh version 2 line vty 0 15 transport input ssh login local
- B. hostname R1 ip domain name cisco crypto key generate rsa general-keys modulus 1024 username cisco privilege 15 password 0 cisco123 ip ssh version 2 line vty 0 15 transport input ssh login local
- C. hostname R1 crypto key generate rsa general-keys modulus 1024 username cisco privilege 15 password 0 cisco123 ip ssh version 2 line vty 0 15 transport input ssh login local
- D. hostname R1 ip domain name cisco crypto key generate rsa general-keys modulus 1024 username cisco privilege 15 password 0 cisco123 ip ssh version 2 line vty 0 15 transport input all login local

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 585

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which per-hop traffic-control feature does an ISP implement to mitigate the potential negative effects of a customer exceeding its committed bandwidth?

- A. policing
- B. queuing
- C. marking
- D. shaping

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 586

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the QoS terms from the left onto the descriptions on the right.

Select and Place:

cloud-based weighted  
fair queueing

categorizes packets based  
on the value of a traffic descriptor

classification

guarantees minimum bandwidth  
to specific traffic classes when  
an interface is congested

congestion

prevents congestion by reducing  
the flow of outbound traffic

policing

outcome of overutilization

shaping

uses defined criteria to limit  
the transmission of one or more  
classes of traffic

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 587

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which remote access protocol provides unsecured remote CLI access?

- A. console
- B. Telnet
- C. SSH
- D. Bash

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 588

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the functions of SNMP fault-management from the left onto the definitions on the right.

Select and Place:

event correlation and  
aggregation

The administrator can manually  
intervene at the source of the fault.

fault detection

The network management system  
launches a preconfigured script  
to restore functionality.

fault diagnosis and isolation

The system groups alarms  
from related issues.

problem resolution

The system identifies  
performance degradation  
or service interruption.

restoration of service

The system reports on the source  
of the issue.

Show Suggested Answer

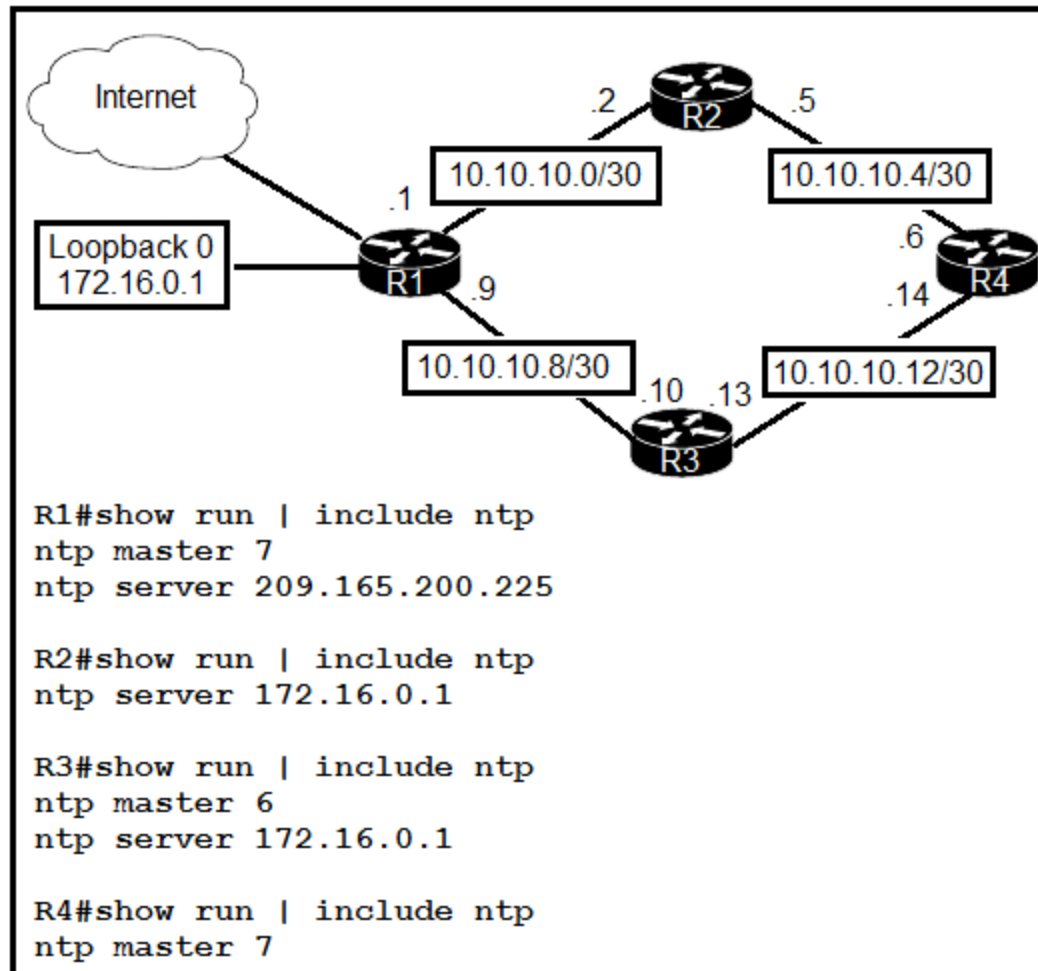


Actual exam question from Cisco's 200-301

Question #: 589

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which router or router group are NTP clients?

- A. R1
- B. R2 and R3
- C. R1, R3, and R4
- D. R1, R2, and R3

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 590

Topic #: 1

[\[All 200-301 Questions\]](#)

```
CPE1# show protocols e0/1
Ethernet0/1 is up, line protocol is up
Internet address is 10.0.12.2/24

CPE1# show ip access-list LAN
Standard IP access list LAN
 10 permit 10.0.12.0, wildcard bits 0.0.0.255

CPE1# show ip nat translations

CPE1# show ip nat statistics
Total active translations: 0 (0 static, 0 dynamic; 0 extended)
Peak translations: 0
Outside interfaces:
Inside interfaces:
  Ethernet0/1
Hits: 0 Misses: 0
CEF Translated packets: 0, CEF Punted packets: 0
Expired translations: 0
Dynamic mappings:
-- Inside Source
[Id: 1] access-list LAN pool NATPOOL refcount 0
  pool NATPOOL: netmask 255.255.255.0
    start 198.51.100.11 end 198.51.100.20
    type generic, total addresses 10, allocated 0 (0%), misses 0

Total doors: 0
Appl doors: 0
Normal doors: 0
Queued Packets: 0
```

Refer to the exhibit. What is the next step to complete the implementation for the partial NAT configuration shown?

- A. Modify the access list for the internal network on e0/1.
- B. Reconfigure the static NAT entries that overlap the NAT pool.
- C. Apply the ACL to the pool configuration.
- D. Configure the NAT outside interface.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 591

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a syslog facility?

- A. host that is configured for the system to send log messages
- B. password that authenticates a Network Management System to receive log messages
- C. group of log messages associated with the configured severity level
- D. set of values that represent the processes that can generate a log message

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 592

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the functions of DHCP from the left onto any of the positions on the right. Not all functions are used.

Select and Place:

provides local control for network segments  
using a client-server scheme

uses authoritative servers for record  
keeping

maintains an address pool

associates hostnames to IP address

offers domain name server configuration

reduces the administrative burden for  
onboarding end users

assigns IP addresses to local hosts for a  
configurable lease time

function

function

function

function

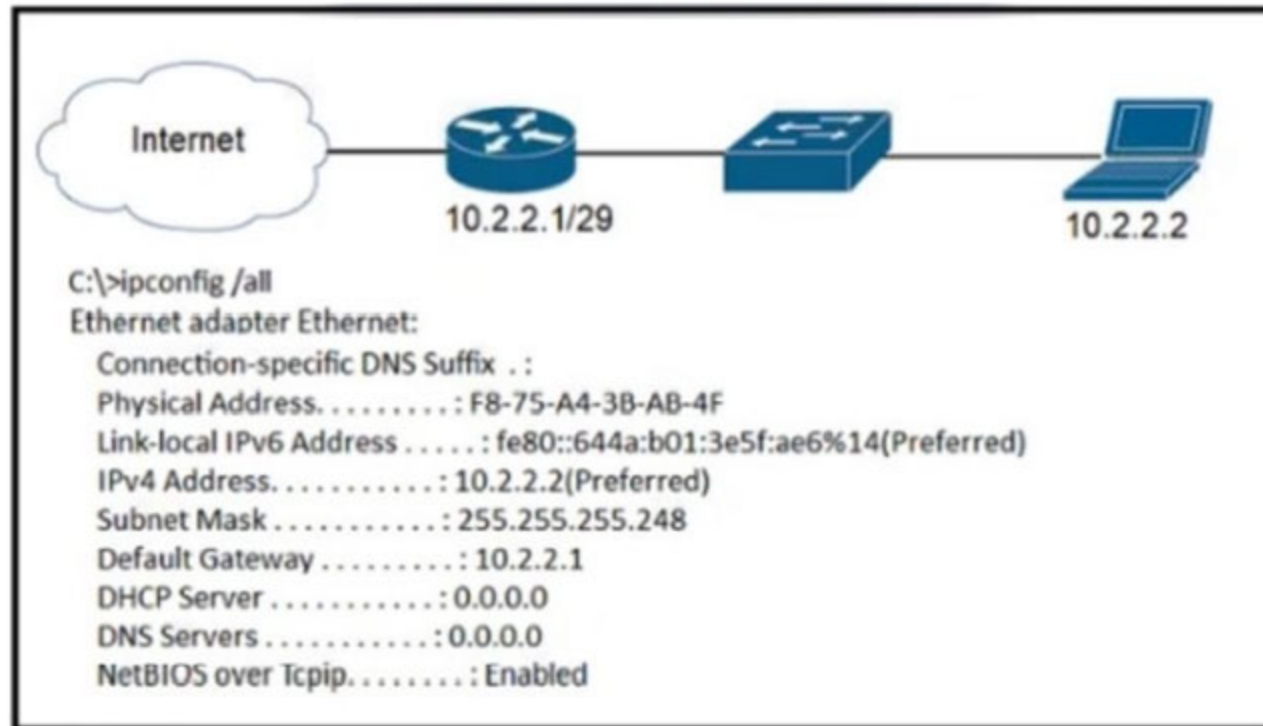
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 593

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A newly configured PC fails to connect to the internet by using TCP port 80 to [www.cisco.com](http://www.cisco.com). Which setting must be modified for the connection to work?

- A. Subnet Mask
- B. DNS Servers
- C. Default Gateway
- D. DHCP Servers

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 594

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which QoS queuing method discards or marks packets that exceed the desired bit rate of traffic flow?

- A. CBWFQ
- B. policing
- C. LLQ
- D. shaping

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 595

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which QoS per-hop behavior changes the value of the ToS field in the IPv4 packet header?

- A. Shaping
- B. Policing
- C. Classification
- D. Marking

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 596

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the function of FTP?

- A. Always operated without user connection validation
- B. Uses block number to identify and mitigate data-transfer errors
- C. Relies on the well-known UDO port 69 for data transfer
- D. Uses two separate connections for control and data traffic

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 597

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does TFTP operate in a network?

- A. Provides secure data transfer
- B. Relies on the well-known TCP port 20 to transmit data
- C. Uses block numbers to identify and mitigate data-transfer errors
- D. Requires two separate connections for control and data traffic

Show Suggested Answer

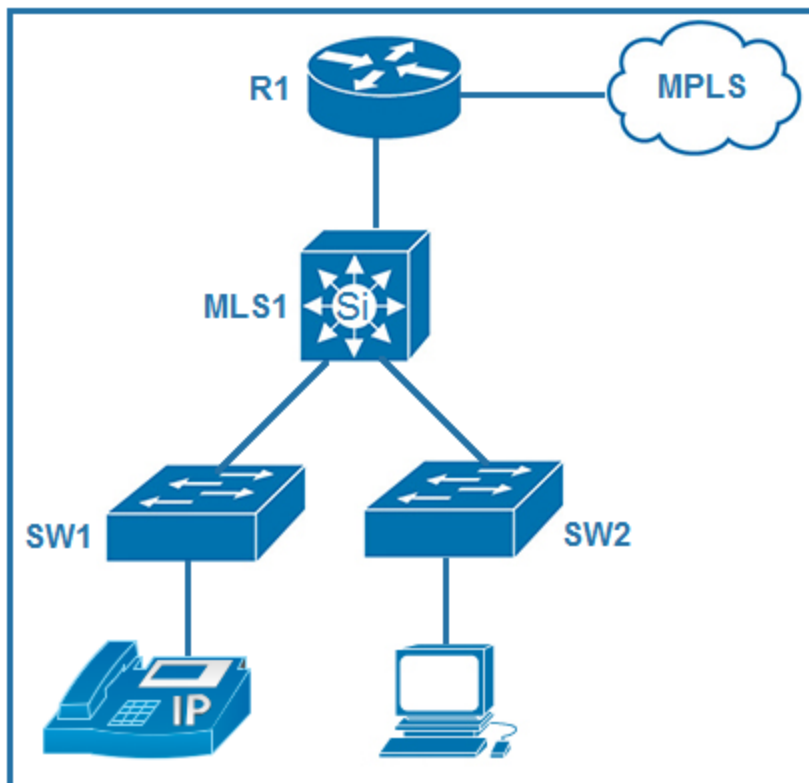


Actual exam question from Cisco's 200-301

Question #: 598

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which plan must be implemented to ensure optimal QoS marking practices on this network?

- A. Trust the IP phone markings on SW1 and mark traffic entering SW2 at SW2
- B. As traffic traverses MLS1 remark the traffic, but trust all markings at the access layer
- C. Remark traffic as it traverses R1 and trust all markings at the access layer.
- D. As traffic enters from the access layer on SW1 and SW2, trust all traffic markings.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 599

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does QoS optimize voice traffic?

- A. by reducing bandwidth usage
- B. by reducing packet loss
- C. by differentiating voice and video traffic
- D. by increasing jitter

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 600

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which QoS tool can you use to optimize voice traffic on a network that is primarily intended for data traffic?

- A. WRED
- B. FIFO
- C. PQ
- D. WFQ

Show Suggested Answer

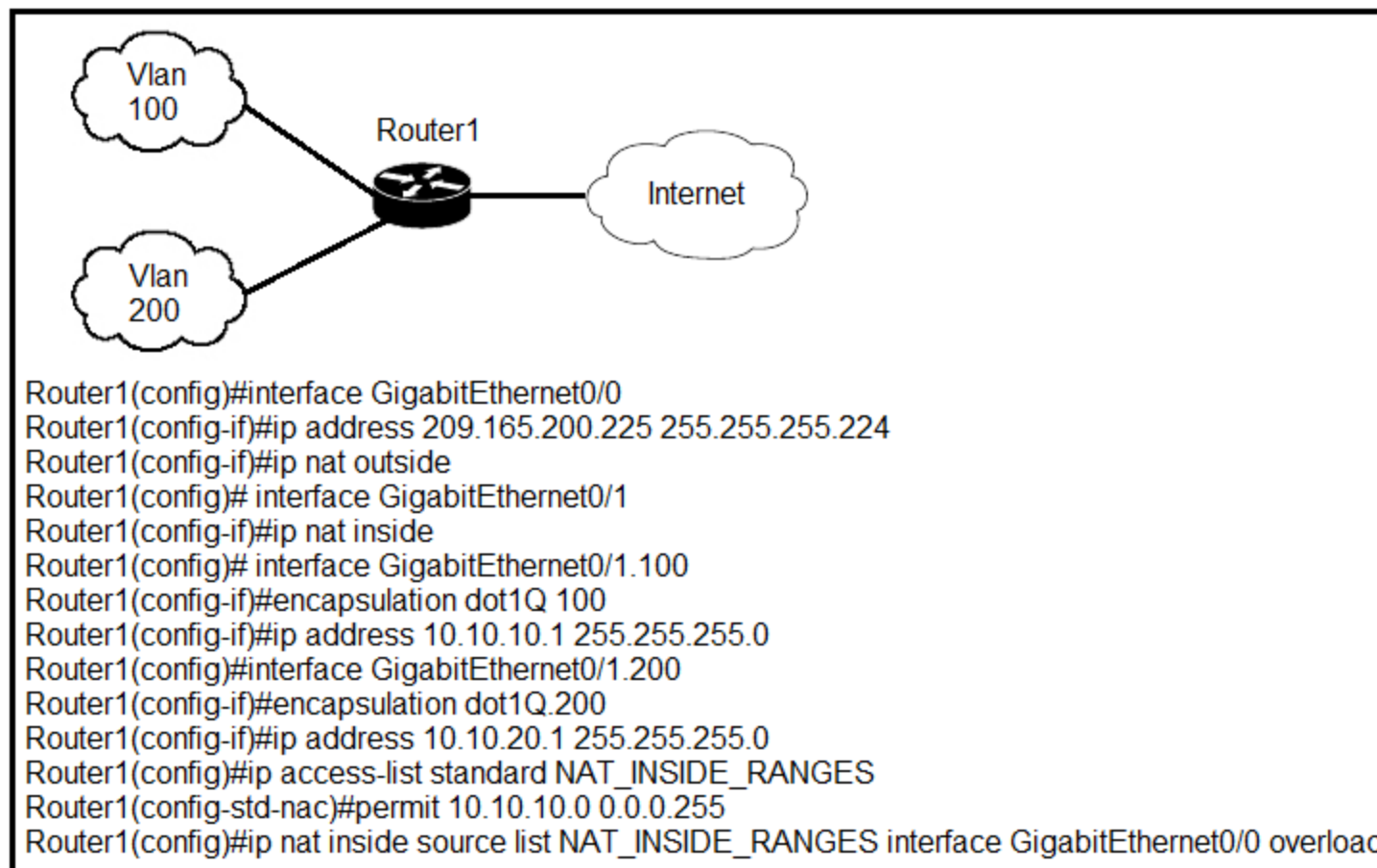


Actual exam question from Cisco's 200-301

Question #: 601

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Users on existing VLAN 100 can reach sites on the Internet. Which action must the administrator take to establish connectivity to the Internet for users in VLAN 200?

- A. Define a NAT pool on the router.
- B. Configure the ip nat outside command on another interface for VLAN 200
- C. Configure static NAT translations for VLAN 200.
- D. Update the NAT\_INSIDE\_RANGES ACL.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 602

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An organization secures its network with multi-factor authentication using an authenticator app on employee smartphones. How is the application secured in the case of a user's smartphone being lost or stolen?

- A. The application requires the user to enter a PIN before it provides the second factor
- B. The application requires an administrator password to reactivate after a configured interval
- C. The application verifies that the user is in a specific location before it provides the second factor
- D. The application challenges a user by requiring an administrator password to reactivate when the smartphone is rebooted

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 603

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which device performs stateful inspection of traffic?

- A. switch
- B. firewall
- C. access point
- D. wireless controller

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 604

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network administrator enabled port security on a switch interface connected to a printer. What is the next configuration action in order to allow the port to learn the MAC address of the printer and insert it into the table automatically?

- A. enable dynamic MAC address learning
- B. implement static MAC addressing
- C. enable sticky MAC addressing
- D. implement auto MAC address learning

[Show Suggested Answer](#)



Actual exam question from Cisco's 200-301

Question #: 605

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Switch(config)#hostname R1
R1(config)#interface FastEthernet0/1
R1(config-if)#no switchport
R1(config-if)#ip address 10.100.20.42 255.255.255.0
R1(config-if)#line vty 0 4
R1(config-line)#login
```

Refer to the exhibit. An engineer booted a new switch and applied this configuration via the console port. Which additional configuration must be applied to allow administrators to authenticate directly to enable privilege mode via Telnet using a local username and password?

- A. R1(config)#username admin R1(config-if)#line vty 0 4 R1(config-line)#password p@ss1234 R1(config-line)#transport input telnet
- B. R1(config)#username admin privilege 15 secret p@ss1234 R1(config-if)#line vty 0 4 R1(config-line)#login local
- C. R1(config)#username admin secret p@ss1234 R1(config-if)#line vty 0 4 R1(config-line)#login local R1(config)#enable secret p@ss1234
- D. R1(config)#username admin R1(config-if)#line vty 0 4 R1(config-line)#password p@ss1234

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 606

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which effect does the aaa new-model configuration command have?

- A. It enables AAA services on the device.
- B. It configures the device to connect to a RADIUS server for AAA.
- C. It associates a RADIUS server to the group.
- D. It configures a local user on the device.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 607

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which two events occur on the interface, if packets from an unknown Source address arrive after the interface learns the maximum number of secure MAC address? (Choose two.)

```
Port Security : Enabled
Port Status : Secure-up
Violation Mode : Protect
Aging Time : 0 mins
Aging Type : Absolute
SecureStatic Address Aging : Disabled
Maximum MAC Addresses : 4
Total MAC Addresses : 3
Configured MAC Addresses: 1
Sticky MAC Addresses : 2
Last Source Address:Vlan : 0001:0fAA.33BB:1
Security Vioaltion Count : 0
```

- A. The security violation counter dose not increment
- B. The port LED turns off
- C. The interface is error-disabled
- D. A syslog message is generated
- E. The interface drops traffic from unknown MAC address

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 608

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which technology must be implemented to configure network device monitoring with the highest security?

- A. IP SLA
- B. syslog
- C. NetFlow
- D. SNMPv3

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 609

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which two statements about the interface that generated the output are true? (Choose two.)

```
Port Security : Enabled
Port Status : Secure-up
Violation Mode : Protect
Aging Time : 5 mins
Aging Type : Inactivity
SecureStatic Address Aging : Disabled
Maximum MAC Addresses : 3
Total MAC Addresses : 3
Configured MAC Addresses : 1
Sticky MAC Addresses : 2
Last Source Address : Vlan : 0001.0fAA.33BB:1
Security Violation Count : 0
```

- A. learned MAC addresses are deleted after five minutes of inactivity
- B. the interface is error-disabled if packets arrive from a new unknown source address
- C. it has dynamically learned two secure MAC addresses
- D. it has dynamically learned three secure MAC addresses
- E. the security violation counter increments if packets arrive from a new unknown source address

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 610

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which statement about the interface that generated the output is true?

```
Port Security           : Enabled
Port Status             : Secure-up
Violation Mode          : Shutdown
Aging Time              : 0 mins
Aging Type              : Absolute
SecureStatic Address Aging : Disabled
Maximum MAC Addresses  : 5
Total MAC Addresses     : 1
Configured MAC Addresses : 1
Sticky MAC Addresses    : 0
Last Source Address : Vlan : 0001.0fAA.33BB:1
Security Violation Count : 0
```

- A. A syslog message is generated when a violation occurs.
- B. One secure MAC address is manually configured on the interface.
- C. One secure MAC address is dynamically learned on the interface.
- D. Five secure MAC addresses are dynamically learned on the interface.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 611

Topic #: 1

[\[All 200-301 Questions\]](#)

```
ip arp inspection vlan 2
interface fastethernet 0/1
    switchport mode access
    switchport access vlan 2
```

Refer to the exhibit. What is the effect of this configuration?

- A. The switch port remains administratively down until the interface is connected to another switch.
- B. Dynamic ARP Inspection is disabled because the ARP ACL is missing.
- C. The switch port interface trust state becomes untrusted.
- D. The switch port remains down until it is configured to trust or untrust incoming packets.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 612

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the difference between AAA authentication and authorization?

- A. Authentication identifies and verifies a user who is attempting to access a system, and authorization controls the tasks the user performs.
- B. Authentication controls the system processes a user accesses, and authorization logs the activities the user initiates.
- C. Authentication verifies a username and password, and authorization handles the communication between the authentication agent and the user database.
- D. Authentication identifies a user who is attempting to access a system, and authorization validates the user's password.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 613

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When configuring a WLAN with WPA2 PSK in the Cisco Wireless LAN Controller GUI, which two formats are available to select? (Choose two.)

- A. decimal
- B. ASCII
- C. hexadecimal
- D. binary
- E. base64

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 614

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the AAA functions from the left onto the correct AAA services on the right.

Select and Place:

### Answer Area

controls the actions that a user can perform

provides analytical information for the network administrator

records user activities

restricts the services that are available to a user

verifies the password associated with a user

identifies the user

Authentication

Authorization

Accounting

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 615

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer is asked to protect unused ports that are configured in the default VLAN on a switch. Which two steps will fulfill the request? (Choose two.)

- A. Configure the ports as trunk ports.
- B. Enable the Cisco Discovery Protocol.
- C. Configure the port type as access and place in VLAN 99.
- D. Administratively shut down the ports.
- E. Configure the ports in an EtherChannel.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 616

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An email user has been lured into clicking a link in an email sent by their company's security organization. The webpage that opens reports that it was safe, but the link may have contained malicious code.

Which type of security program is in place?

- A. user awareness
- B. brute force attack
- C. physical access control
- D. social engineering attack

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 617

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the Cisco Wireless LAN Controller security settings from the left onto the correct security mechanism categories on the right.

Select and Place:

### Answer Area

web policy
Passthrough
WPA+WPA2
802.1X

Layer 2 Security Mechanisms
Layer 3 Security Mechanisms (for WLAN)

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 618

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which feature on the Cisco Wireless LAN Controller when enabled restricts management access from specific networks?

- A. TACACS
- B. CPU ACL
- C. Flex ACL
- D. RADIUS

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 619

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which set of actions satisfy the requirement for multifactor authentication?

- A. The user enters a user name and password, and then re-enters the credentials on a second screen.
- B. The user swipes a key fob, then clicks through an email link.
- C. The user enters a user name and password, and then clicks a notification in an authentication app on a mobile device.
- D. The user enters a PIN into an RSA token, and then enters the displayed RSA key on a login screen.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 620

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which configuration is needed to generate an RSA key for SSH on a router?

- A. Configure VTY access.
- B. Configure the version of SSH.
- C. Assign a DNS domain name.
- D. Create a user with a password.

Show Suggested Answer

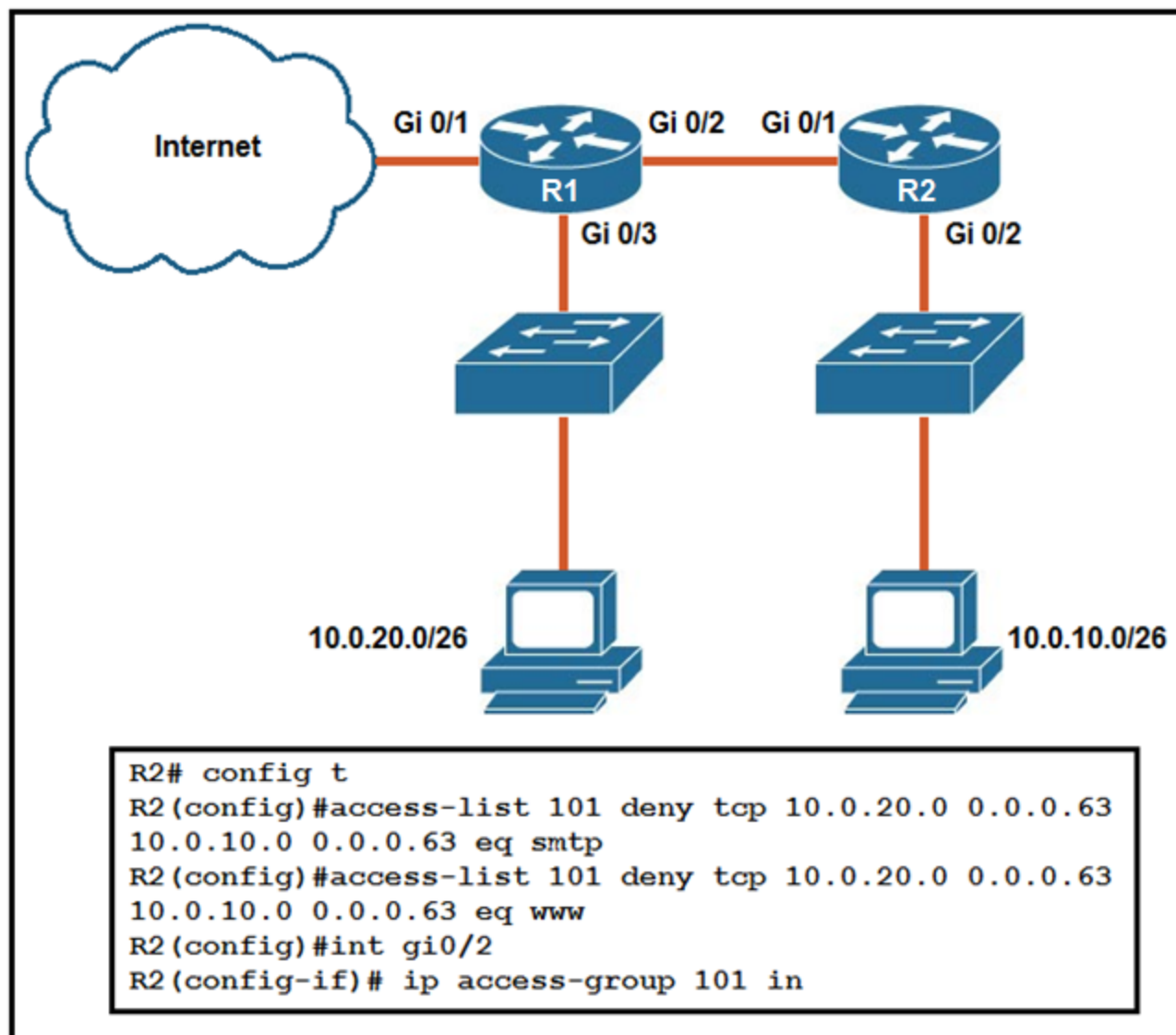


Actual exam question from Cisco's 200-301

Question #: 621

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An extended ACL has been configured and applied to router R2. The configuration failed to work as intended.

Which two changes stop outbound traffic on TCP ports 25 and 80 to 10.0.20.0/26 from the 10.0.10.0/26 subnet while still allowing all other traffic? (Choose two.)

- A. Add a `permit ip any any` statement at the end of ACL 101 for allowed traffic.
- B. Add a `permit ip any any` statement to the beginning of ACL 101 for allowed traffic.
- C. The ACL must be moved to the Gi0/1 interface outbound on R2.
- D. The source and destination IPs must be swapped in ACL 101.
- E. The ACL must be configured the Gi0/2 interface inbound on R1.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 622

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer must configure a WLAN using the strongest encryption type for WPA2-PSK. Which cipher fulfills the configuration requirement?

- A. WEP
- B. AES
- C. RC4
- D. TKIP

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 623

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the attack-mitigation techniques from the left onto the types of attack that they mitigate on the right.

Select and Place:

### Answer Area

configure 802.1x authenticate

configure DHCP snooping

configure the native VLAN with a nondefault VLAN ID

disable DTP

802.1q double-tagging VLAN-hopping attack

MAC flooding attack

man-in-the-middle spoofing attack

switch-spoofing VLAN-hopping attack

Show Suggested Answer



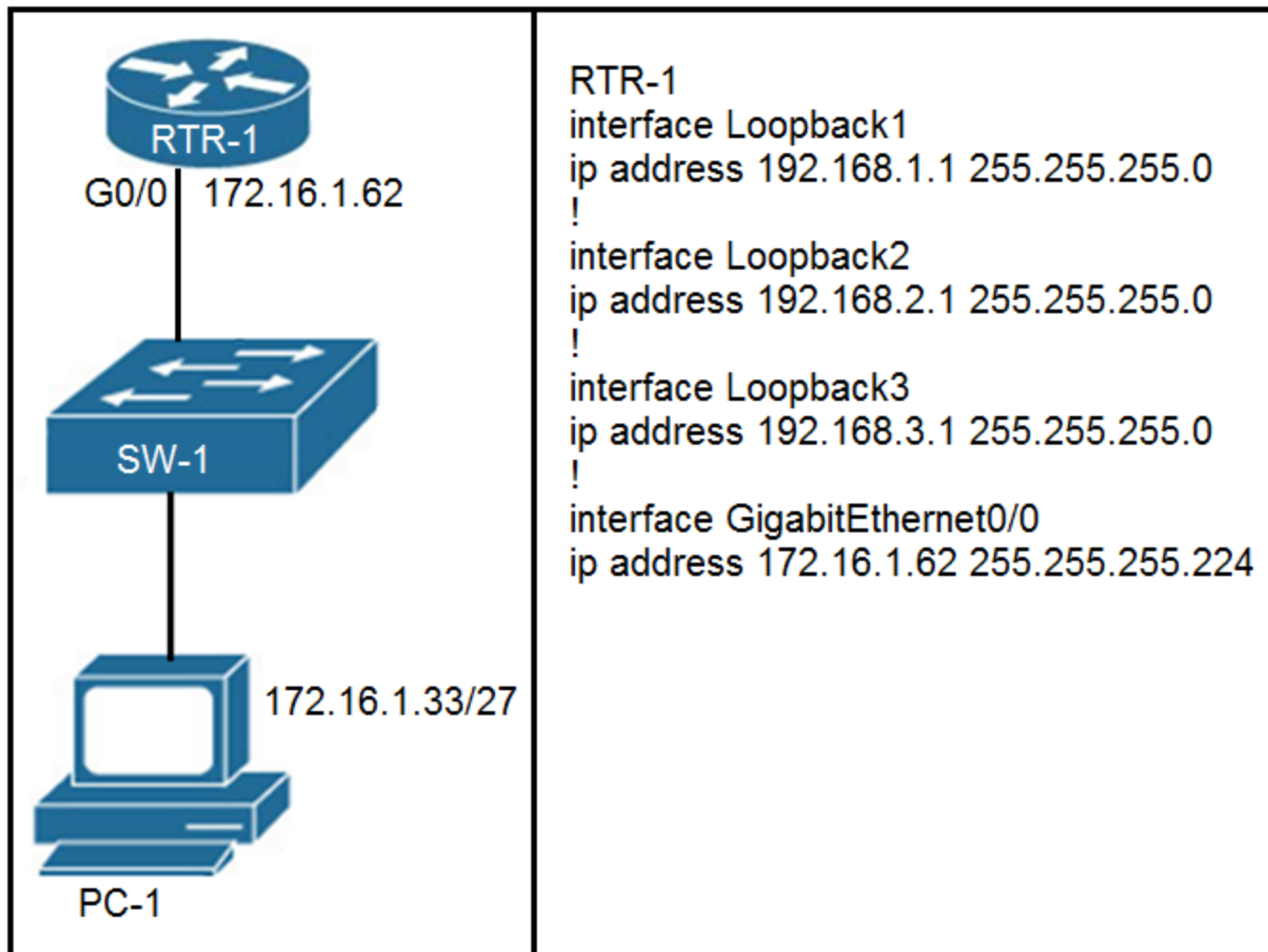
Actual exam question from Cisco's 200-301

Question #: 624

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. Which configuration for RTR-1 denies SSH access from PC-1 to any RTR-1 interface and allows all other traffic?



A.

```

access-list 100 deny tcp host 172.16.1.33 any eq 22
access-list 100 permit ip any any

```

```

interface GigabitEthernet0/0
ip access-group 100 in

```

B.

```

access-list 100 deny tcp host 172.16.1.33 any eq 22
access-list 100 permit ip any any

```

```

line vty 0 15
access-class 100 in

```

C.

```

access-list 100 deny tcp host 172.16.1.33 any eq 23
access-list 100 permit ip any any

```

```

interface GigabitEthernet0/0
ip access-group 100 in

```

D.

```

access-list 100 deny tcp host 172.16.1.33 any eq 23
access-list 100 permit ip any any

```

```

line vty 0 15
access-class 100 in

```

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 625

Topic #: 1

[\[All 200-301 Questions\]](#)

---

While examining excessive traffic on the network, it is noted that all incoming packets on an interface appear to be allowed even though an IPv4 ACL is applied to the interface. Which two misconfigurations cause this behavior? (Choose two.)

- A. The ACL is empty
- B. A matching permit statement is too broadly defined
- C. The packets fail to match any permit statement
- D. A matching deny statement is too high in the access list
- E. A matching permit statement is too high in the access list

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 626

Topic #: 1

[\[All 200-301 Questions\]](#)

---

The service password-encryption command is entered on a router. What is the effect of this configuration?

- A. restricts unauthorized users from viewing clear-text passwords in the running configuration
- B. prevents network administrators from configuring clear-text passwords
- C. protects the VLAN database from unauthorized PC connections on the switch
- D. encrypts the password exchange when a VPN tunnel is established

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 627

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which WPA3 enhancement protects against hackers viewing traffic on the Wi-Fi network?

- A. SAE encryption
- B. TKIP encryption
- C. scrambled encryption key
- D. AES encryption

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 628

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. If the network environment is operating normally, which type of device must be connected to interface fastethernet 0/1?

```
ip arp inspection vlan 2-10
interface fastethernet 0/1
    ip arp inspection trust
```

- A. DHCP client
- B. access point
- C. router
- D. PC

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 629

Topic #: 1

[\[All 200-301 Questions\]](#)

Refer to the exhibit. An administrator configures four switches for local authentication using passwords that are stored as a cryptographic hash. The four switches must also support SSH access for administrators to manage the network infrastructure. Which switch is configured correctly to meet these requirements?

```
SW1(config-line) #line vty 0 15
SW1(config-line) #no login local
SW1(config-line) #password cisco
```

```
SW2(config) #username admin1 password abcd1234
SW2(config) #username admin2 password abcd1234
SW2(config-line) #line vty 0 15
SW2(config-line) #login local
```

```
SW3(config) #username admin1 secret abcd1234
SW3(config) #username admin2 secret abcd1234
SW3(config-line) #line vty 0 15
SW3(config-line) #login local
```

```
SW4(config) #username admin1 secret abcd1234
SW4(config) #username admin2 secret abcd1234
SW4(config-line) #line console 0
SW4(config-line) #login local
```

- A. SW1
- B. SW2
- C. SW3
- D. SW4

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 630

Topic #: 1

[\[All 200-301 Questions\]](#)

```
ip arp inspection vlan 5-10
interface fastethernet 0/1
    switchport mode access
    switchport access vlan 5
```

Refer to the exhibit. What is the effect of this configuration?

- A. The switch discards all ingress ARP traffic with invalid MAC-to-IP address bindings.
- B. All ARP packets are dropped by the switch.
- C. Egress traffic is passed only if the destination is a DHCP server.
- D. All ingress and egress traffic is dropped because the interface is untrusted.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 631

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When a site-to-site VPN is used, which protocol is responsible for the transport of user data?

- A. IPsec
- B. IKEv1
- C. MD5
- D. IKEv2

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 632

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of wireless encryption is used for WPA2 in preshared key mode?

- A. AES-128
- B. TKIP with RC4
- C. AES-256
- D. RC4

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 633

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the difference between an IPv6 link-local address and a unique local address?

- A. The scope of an IPv6 link-local address is limited to a directly attached interface, but an IPv6 unique local address is used throughout a company site or network.
- B. The scope of an IPv6 link-local address is global, but the scope of an IPv6 unique local address is limited to a loopback address.
- C. The scope of an IPv6 link-local address can be used throughout a company site or network, but an IPv6 unique local address is limited to a loopback address.
- D. The scope of an IPv6 link-local address is limited to a loopback address, and an IPv6 unique local address is limited to a directly attached interface.

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 634

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command prevents passwords from being stored in the configuration as plain text on a router or switch?

- A. enable secret
- B. enable password
- C. service password-encryption
- D. username cisco password encrypt

Show Suggested Answer

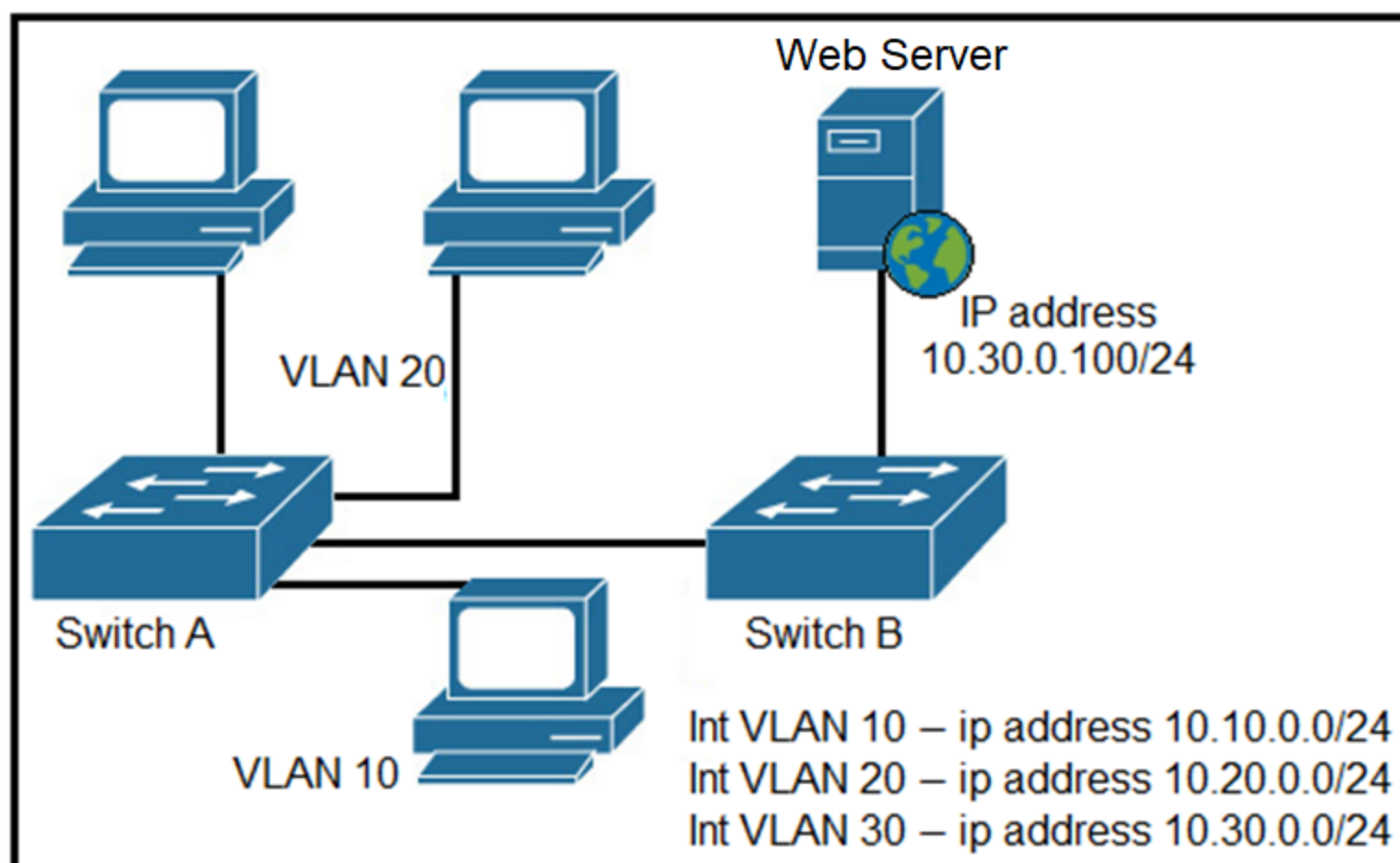


Actual exam question from Cisco's 200-301

Question #: 635

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A network engineer must block access for all computers on VLAN 20 to the web server via HTTP. All other computers must be able to access the web server. Which configuration when applied to switch A accomplishes the task?

A.

```
config t
ip access-list extended wwwblock
permit ip any any
deny tcp any host 10.30.0.100 eq 80
int vlan 20
ip access-group wwwblock in
```

B.

```
config t
ip access-list extended wwwblock
permit ip any any
deny tcp any host 10.30.0.100 eq 80
int vlan 30
ip access-group wwwblock in
```

C.

```
config t
ip access-list extended wwwblock
deny tcp any host 10.30.0.100 eq 80
int vlan 10
ip access-group wwwblock in
```

D.

```
config t
ip access-list extended wwwblock
deny tcp any host 10.30.0.100 eq 80
permit ip any any
int vlan 20
ip access-group wwwblock in
```

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 636

Topic #: 1

[\[All 200-301 Questions\]](#)

---

In which two ways does a password manager reduce the chance of a hacker stealing a user's password? (Choose two.)

- A. It encourages users to create stronger passwords
- B. It uses an internal firewall to protect the password repository from unauthorized access
- C. It stores the password repository on the local workstation with built-in antivirus and anti-malware functionality
- D. It automatically provides a second authentication factor that is unknown to the original user
- E. It protects against keystroke logging on a compromised device or web site

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 637

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which goal is achieved by the implementation of private IPv4 addressing on a network?

- A. provides an added level of protection against Internet exposure
- B. provides a reduction in size of the forwarding table on network routers
- C. allows communication across the Internet to other private networks
- D. allows servers and workstations to communicate across public network boundaries

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 638

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of attack is mitigated by dynamic ARP inspection?

- A. DDoS
- B. malware
- C. man-in-the-middle
- D. worm

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 639

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of a remote access VPN?

- A. establishes a secure tunnel between two branch sites
- B. uses cryptographic tunneling to protect the privacy of data for multiple users simultaneously
- C. used exclusively when a user is connected to a company's internal network
- D. allows the users to access company internal network resources through a secure tunnel

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 640

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two recommendations for protecting network ports from being exploited when located in an office space outside of an IT closet? (Choose two.)

- A. enable the PortFast feature on ports
- B. configure static ARP entries
- C. configure ports to a fixed speed
- D. implement port-based authentication
- E. shut down unused ports

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 641

Topic #: 1

[\[All 200-301 Questions\]](#)

```
interface GigabitEthernet0/1
ip address 192.168.1.2 255.255.255.0
ip access-group 2699 in
!
access-list 2699 deny icmp any 10.10.1.0 0.0.0.255 echo
access-list 2699 deny ip any 10.20.1.0 0.0.0.255
access-list 2699 permit ip any 10.10.1.0 0.0.0.255
access-list 2699 permit tcp any 10.20.1.0 0.0.0.127 eq 22
```

Refer to the exhibit. A network administrator must permit SSH access to remotely manage routers in a network. The operations team resides on the 10.20.1.0/25 network. Which command will accomplish this task?

- A. access-list 2699 permit udp 10.20.1.0 0.0.0.255
- B. no access-list 2699 deny tcp any 10.20.1.0 0.0.0.127 eq 22
- C. access-list 2699 permit tcp any 10.20.1.0 0.0.0.255 eq 22
- D. no access-list 2699 deny ip any 10.20.1.0 0.0.0.255

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 642

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A port security violation has occurred on a switch port due to the maximum MAC address count being exceeded. Which command must be configured to increment the security-violation count and forward an SNMP trap?

- A. switchport port-security violation access
- B. switchport port-security violation protect
- C. switchport port-security violation restrict
- D. switchport port-security violation shutdown

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 643

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a practice that protects a network from VLAN hopping attacks?

- A. Enable dynamic ARP inspection
- B. Configure an ACL to prevent traffic from changing VLANs
- C. Change native VLAN to an unused VLAN ID
- D. Implement port security on internet-facing VLANs

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 644

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Where does a switch maintain DHCP snooping information?

- A. In the CAM table
- B. In the frame forwarding database
- C. In the MAC address table
- D. In the binding database

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 645

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network administrator must configure SSH for remote access to router R1. The requirement is to use a public and private key pair to encrypt management traffic to and from the connecting client. Which configuration, when applied, meets the requirements?

- A. R1#enable R1#configure terminal R1(config)#ip domain-name cisco.com R1(config)#crypto key generate ec keysize 1024
- B. R1#enable R1#configure terminal R1(config)#ip domain-name cisco.com R1(config)#crypto key generate ec keysize 2048
- C. R1#enable R1#configure terminal R1(config)#ip domain-name cisco.com R1(config)#crypto key encrypt rsa name myKey
- D. R1#enable R1#configure terminal R1(config)#ip domain-name cisco.com R1(config)#crypto key generate rsa modulus 1024

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 646

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When a WLAN with WPA2 PSK is configured in the Wireless LAN Controller GUI, which format is supported?

- A. decimal
- B. ASCII
- C. unicode
- D. base64

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 647

Topic #: 1

[\[All 200-301 Questions\]](#)

```
access-list 101 permit ospf any any
access-list 101 permit tcp any any eq 179
access-list 101 permit tcp any eq 179 any
access-list 101 permit gre any any
access-list 101 permit esp any any

access-list 101 deny ospf any any
access-list 101 permit tcp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq telnet
access-list 101 permit udp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq 500
access-list 101 permit udp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq 4500
access-list 101 deny ip any any log

interface Ethernet0/0
 ip address 10.1.1.25 255.255.255.0
 ip access-group 101 in
```

Refer to the exhibit. A network administrator has been tasked with securing VTY access to a router. Which access-list entry accomplishes this task?

- A. access-list 101 permit tcp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq telnet
- B. access-list 101 permit tcp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq scp
- C. access-list 101 permit tcp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq https
- D. access-list 101 permit tcp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq ssh

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 648

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two protocols must be disabled to increase security for management connections to a Wireless LAN Controller? (Choose two.)

- A. HTTPS
- B. SSH
- C. HTTP
- D. Telnet
- E. TFTP

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 649

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which security program element involves installing badge readers on data-center doors to allow workers to enter and exit based on their job roles?

- A. physical access control
- B. biometrics
- C. role-based access control
- D. multifactor authentication

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 650

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which function is performed by DHCP snooping?

- A. listens to multicast traffic for packet forwarding
- B. rate-limits certain traffic
- C. propagates VLAN information between switches
- D. provides DDoS mitigation

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 651

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

An engineer is configuring an encrypted password for the enable command on a router where the local user database has already been configured. Drag and drop the configuration commands from the left into the correct sequence on the right. Not all commands are used.

Select and Place:

configure terminal

enable

enable secret \$hfl@4fs

exit

line vty 0 4

service password-encryption

first

second

third

fourth

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 652

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which protocol is used for secure remote CLI access?

- A. Telnet
- B. HTTP
- C. HTTPS
- D. SSH

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 653

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which implementation provides the strongest encryption combination for the wireless environment?

- A. WEP
- B. WPA + TKIP
- C. WPA + AES
- D. WPA2 + AES

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 654

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What does physical access control regulate?

- A. access to networking equipment and facilities
- B. access to servers to prevent malicious activity
- C. access to specific networks based on business function
- D. access to computer networks and file systems

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 655

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer is asked to configure VLANS 2, 3, and 4 for a new implementation. Some ports must be assigned to the new VLANS with unused ports remaining. Which action should be taken for the unused ports?

- A. configure in a nondefault native VLAN
- B. configure ports in the native VLAN
- C. configure ports in a black hole VLAN
- D. configure ports as access ports

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 656

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When a WPA2-PSK WLAN is configured in the Wireless LAN Controller, what is the minimum number of characters that is required in ASCII format?

A. 6

B. 8

C. 12

D. 18

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 657

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What mechanism carries multicast traffic between remote sites and supports encryption?

- A. ISATAP
- B. IPsec over ISATAP
- C. GRE
- D. GRE over IPsec

[Show Suggested Answer](#)

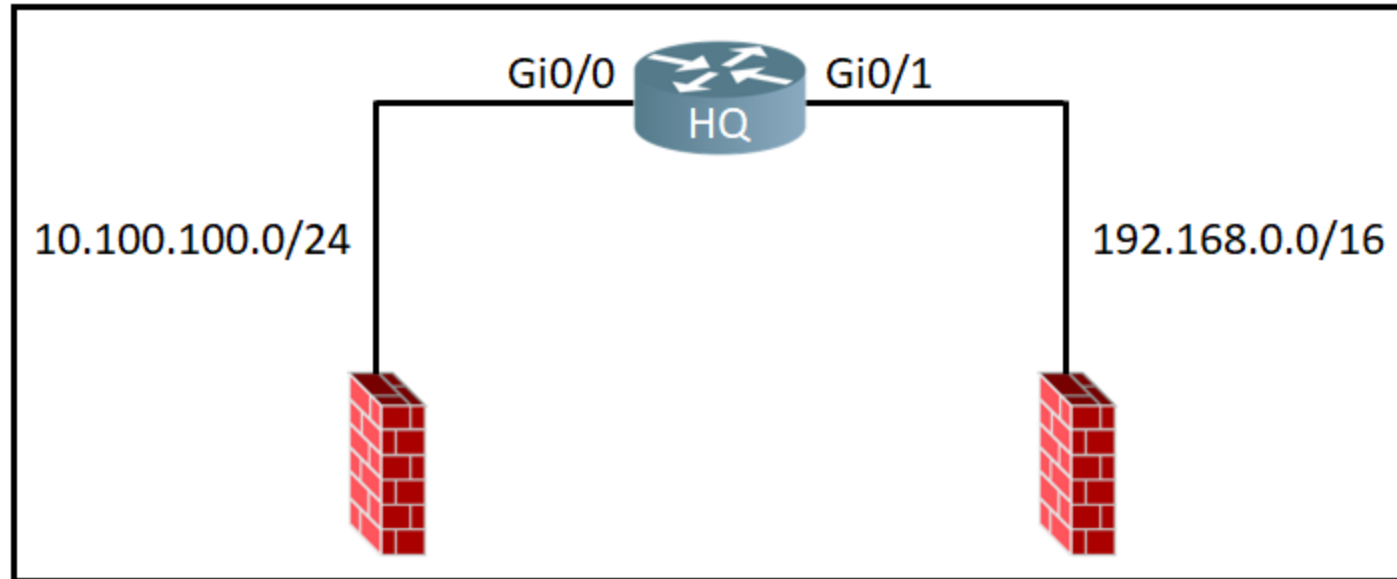


Actual exam question from Cisco's 200-301

Question #: 658

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An access-list is required to permit traffic from any host on interface Gi0/0 and deny traffic from interface Gi0/1. Which access list must be applied?

- A. ip access-list standard 99 permit 10.100.100.0 0.0.0.255 deny 192.168.0.0 0.0.255.255
- B. ip access-list standard 99 permit 10.100.100.0 0.0.0.255 deny 192.168.0.0 0.255.255.255
- C. ip access-list standard 199 permit 10.100.100.0 0.0.0.255 deny 192.168.0.0 0.255.255.255
- D. ip access-list standard 199 permit 10.100.100.0 0.0.0.255 deny 192.168.0.0 0.0.255.255

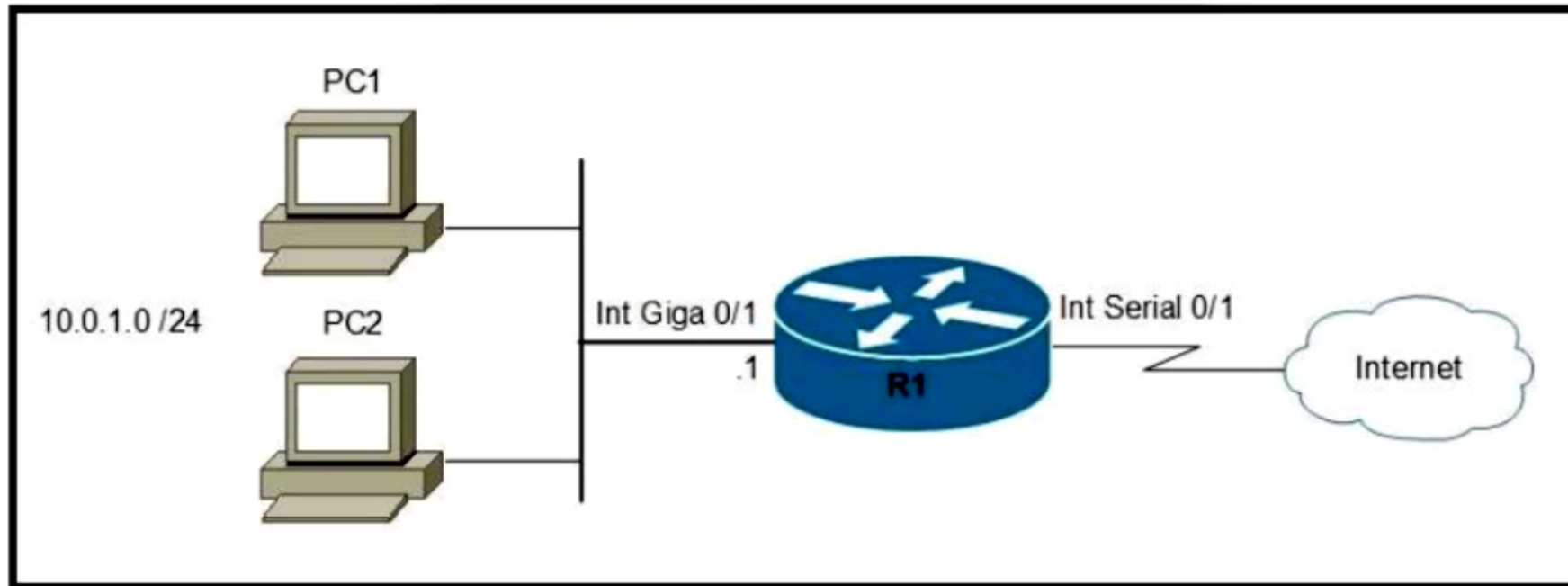
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 659

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which two commands must be configured on router R1 to enable the router to accept secure remote-access connections? (Choose two.)

- A. `ip ssh pubkey-chain`
- B. `username cisco password 0 cisco`
- C. `crypto key generate rsa`
- D. `transport input telnet`
- E. `login console`

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 660

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which service is missing when RADIUS is selected to provide management access to the WLC?

- A. authorization
- B. authentication
- C. accounting
- D. confidentiality

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 661

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which action implements physical access control as part of the security program of an organization?

- A. setting up IP cameras to monitor key infrastructure
- B. configuring a password for the console port
- C. backing up syslogs at a remote location
- D. configuring enable passwords on network devices

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 662

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which field within the access-request packet is encrypted by RADIUS?

- A. authorized services
- B. password
- C. authenticator
- D. username

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 663

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A Cisco engineer is configuring a factory-default router with these three passwords:

- ⇒ The user EXEC password for console access is p4ssw0rd1.
- ⇒ The user EXEC password for Telnet access is s3cr3t2.
- ⇒ The password for privileged EXEC mode is priv4t3p4ss.

Which command sequence must the engineer configure?

- A. enable secret priv4t3p4ss ! line con 0 password p4ssw0rd1 ! line vty 0 15 password s3cr3t2
- B. enable secret priv4t3p4ss ! line con 0 password p4ssw0rd1 login ! line vty 0 15 password s3cr3t2 login
- C. enable secret priv4t3p4ss ! line con 0 password login p4ssw0rd1 ! line vty 0 15 password login s3cr3t2 login
- D. enable secret privilege 15 priv4t3p4ss ! line con 0 password p4ssw0rd1 login ! line vty 0 15 password s3cr3t2 login

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 664

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does MAC learning function?

- A. sends the frame back to the source to verify availability
- B. rewrites the source and destination MAC address
- C. drops received MAC addresses not listed in the address table
- D. adds unknown source MAC addresses to the CAM table

[Show Suggested Answer](#)



Actual exam question from Cisco's 200-301

Question #: 665

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

An engineer is tasked to configure a switch with port security to ensure devices that forward unicasts, multicasts, and broadcasts are unable to flood the port. The port must be configured to permit only two random MAC addresses at a time. Drag and drop the required configuration commands from the left onto the sequence on the right. Not all commands are used.

Select and Place:

### Answer Area

switchport mode access

1

switchport port-security

2

switchport port-security mac-address 0060.3EDD.77AB

3

switchport port-security mac-address 00D0.D3ED.622A

4

switchport port-security mac-address sticky

switchport port-security maximum 2

switchport port-security violation shutdown

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 666

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of Opportunistic Wireless Encryption in an environment?

- A. provide authentication
- B. protect traffic on open networks
- C. offer compression
- D. increase security by using a WEP connection

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 667

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the AAA features from the left onto the corresponding AAA security services on the right. Not all options are used.

Select and Place:

### Answer Area

It enables the device to allow user- or group-based access.

It leverages a RADIUS server to grant user access to a reverse Telnet session.

It records the amount of time for which a user accesses the network on a remote server.

It restricts the CLI commands that a user can perform.

It uses TACACS+ to log the configuration commands entered by a network administrator.

It verifies the user and password before granting access to the device.

### Accounting

### Authorization

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 668

Topic #: 1

[\[All 200-301 Questions\]](#)

**Layer 2** **Layer 3** **AAA Servers**

Layer 2 Security <sup>6</sup> WPA+WPA2

MAC Filtering<sup>9</sup>

**Fast Transition**

Fast Transition Adaptive

Over the DS

Reassociation Timeout 20 Seconds

**Protected Management Frame**

PMF Disabled

**WPA+WPA2 Parameters**

WPA Policy

WPA2 Policy

WPA2 Encryption  AES  TKIP  CCMP256  GCMP128  GCMP256

OSEN Policy

**Authentication Key Management <sup>19</sup>**

802.1X  Enable

CCKM  Enable

PSK  Enable

FT 802.1X  Enable

FT PSK  Enable

SUITEB-1X  Enable

SUITEB192-1X  Enable

WPA gtk-randomize State <sup>14</sup> Disable

Refer to the exhibit. Clients on the WLAN are required to use 802.11r. What action must be taken to meet the requirement?

- A. Under Protected Management Frames, set the PMF option to Required.
- B. Enable CCKM under Authentication Key Management.
- C. Set the Fast Transition option and the WPA gtk-randomize State to disable.
- D. Set the Fast Transition option to Enable and enable FT 802.1X under Authentication Key Management.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 669

Topic #: 1

[\[All 200-301 Questions\]](#)

**General** **Security** **QoS** **Policy-Mapping** **Advanced**

**Layer 2** **Layer 3** **AAA Servers**

Layer 2 Security [6](#) WPA+WPA2

Security Type Enterprise

MAC Filtering [9](#)

**WPA+WPA2 Parameters**

WPA Policy

WPA2 Policy

WPA2 Encryption  CCMP128(AES)  TKIP  CCMP256  GCMP128  GCMP256

OSEN Policy

**Fast Transition**

Fast Transition Disable

**Protected Management Frame**

PMF Disabled

**Authentication Key Management** [19](#)

802.1X-SHA1  Enable

Refer to the exhibit. What must be configured to enable 802.11w on the WLAN?

- A. Set Fast Transition to Enabled.
- B. Enable WPA Policy.
- C. Set PMF to Required.
- D. Enable MAC Filtering.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 670

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which encryption method is used by WPA3?

- A. TKIP
- B. AES
- C. SAE
- D. PSK

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 671

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of traffic is sent with pure IPsec?

- A. multicast traffic from a server at one site to hosts at another location
- B. broadcast packets from a switch that is attempting to locate a MAC address at one of several remote sites
- C. unicast messages from a host at a remote site to a server at headquarters
- D. spanning-tree updates between switches that are at two different sites

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 672

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does authentication differ from authorization?

- A. Authentication is used to record what resource a user accesses, and authorization is used to determine what resources a user can access.
- B. Authentication verifies the identity of a person accessing a network, and authorization determines what resource a user can access.
- C. Authentication is used to determine what resources a user is allowed to access, and authorization is used to track what equipment is allowed access to the network.
- D. Authentication is used to verify a person's identity, and authorization is used to create syslog messages for logins.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 673

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer has configured the domain name, user name, and password on the local router. What is the next step to complete the configuration for a Secure Shell access RSA key?

- A. `crypto key import rsa pem`
- B. `crypto key generate rsa`
- C. `crypto key zeroize rsa`
- D. `crypto key pubkey-chain rsa`

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 674

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of network attack overwhelms the target server by sending multiple packets to a port until the half-open TCP resources of the target are exhausted?

- A. SYN flood
- B. reflection
- C. teardrop
- D. amplification

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 675

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two components comprise part of a PKI? (Choose two.)

- A. preshared key that authenticates connections
- B. one or more CRLs
- C. RSA token
- D. CA that grants certificates
- E. clear-text password that authenticates connections

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 676

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the descriptions of AAA services from the left onto the corresponding services on the right.

Select and Place:

allows the user to change to enable mode

limits the user's access permissions

log session statistics

records user commands

secures access to routers

validates user credentials

Accounting

Authentication

Authorization

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 677

Topic #: 1

[\[All 200-301 Questions\]](#)

---

After a recent security breach and a RADIUS failure, an engineer must secure the console port of each enterprise router with a local username and password. Which configuration must the engineer apply to accomplish this task?

- A. `aaa new-model`  
`line con 0`  
`password plaintextpassword`  
`privilege level 15`
- B. `aaa new-model`  
`aaa authorization exec default local`  
`aaa authentication login default radius`  
`username localuser`  
`privilege 15`  
`secret plaintextpassword`
- C. `username localuser`  
`secret plaintextpassword`  
`line con 0`  
`no login`  
`local`  
`privilege level 15`
- D. `username localuser`  
`secret plaintextpassword`  
`line con 0`  
`login`  
`authentication default`  
`privilege level 15`

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 678

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which wireless security protocol relies on Perfect Forward Secrecy?

- A. WEP
- B. WPA2
- C. WPA
- D. WPA3

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 679

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a zero-day exploit?

- A. It is when the network is saturated with malicious traffic that overloads resources and bandwidth.
- B. It is when an attacker inserts malicious code into a SQL server.
- C. It is when a new network vulnerability is discovered before a fix is available.
- D. It is when the perpetrator inserts itself in a conversation between two parties and captures or alters data.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 680

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer is replacing the switches that belong to a managed-services client with new Cisco Catalyst switches. The new switches will be configured for updated security standards including replacing.

Telnet services with encrypted connections and doubling the modulus size from 1024. Which two commands must the engineer configure on the new switches? (Choose two.)

- A. transport input ssh
- B. transport input all
- C. crypto key generate rsa modulus 2048
- D. crypto key generate rsa general-keys modulus 1024
- E. crypto key generate rsa usage-keys

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 681

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two examples of multifactor authentication? (Choose two.)

- A. single sign-on
- B. soft tokens
- C. passwords that expire
- D. shared password repository
- E. unique user knowledge

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 682

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which characteristic differentiates the concept of authentication from authorization and accounting?

- A. consumption-based billing
- B. identity verification
- C. user-activity logging
- D. service limitations

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 683

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of Cisco Advanced Malware Protection for a Next-Generation IPS?

- A. inspecting specific files and file types for malware
- B. authorizing potentially compromised wireless traffic
- C. authenticating end users
- D. URL filtering

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 684

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a feature of WPA?

- A. TKIP/MIC encryption
- B. small Wi-Fi application
- C. preshared key
- D. 802.1x authentication

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 685

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two practices are recommended for an acceptable security posture in a network? (Choose two.)

- A. Use a cryptographic keychain to authenticate to network devices.
- B. Place internal email and file servers in a designated DMZ.
- C. Back up device configurations to encrypted USB drives for secure retrieval.
- D. Disable unused or unnecessary ports, interfaces, and services.
- E. Maintain network equipment in a secure location.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 686

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does WPA3 improve security?

- A. It uses SAE for authentication.
- B. It uses RC4 for encryption.
- C. It uses TKIP for encryption.
- D. It uses a 4-way handshake for authentication.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 687

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of a Next-Generation IPS?

- A. correlates user activity with network events
- B. serves as a controller within a controller-based network
- C. integrates with a RADIUS server to enforce Layer 2 device authentication rules
- D. makes forwarding decisions based on learned MAC addresses

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 688

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the statements about AAA from the left onto the corresponding AAA services on the right. Not all options are used.

Select and Place:

It supports local, PPP, RADIUS, and TACACS+ options

It tracks the services that a user is using.

It records the amount of network resources consumed by the user.

It assigns per-user attributes.

It permits and denies login attempts.

Accounting

Authentication

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 689

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the elements of a security program from the left onto the corresponding descriptions on the right.

Select and Place:

awareness	document that outlines an organization's security goals and practices and the roles and responsibilities of the organization's personnel
education	tactical document that sets out specific tasks and methods to maintain security
security policy	user-awareness learning level that focuses on learning about topics and practices beyond what is typically required by the user's job
security standard	user-awareness learning level that focuses on security practices that all employees must understand and enforce
training	user-awareness learning level that focuses on teaching employees how to perform tasks specifically required by their jobs

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 690

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which IPsec transport mode encrypts the IP header and the payload?

- A. pipe
- B. transport
- C. control
- D. tunnel

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 691

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the default port-security behavior on a trunk link?

- A. It places the port in the err-disabled state if it learns more than one MAC address.
- B. It causes a network loop when a violation occurs.
- C. It disables the native VLAN configuration as soon as port security is enabled.
- D. It places the port in the err-disabled state after 10 MAC addresses are statically configured.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 692

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which device separates networks by security domains?

- A. intrusion protection system
- B. firewall
- C. wireless controller
- D. access point

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 693

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How are VLAN hopping attacks mitigated?

- A. manually implement trunk ports and disable DTP
- B. configure extended VLANs
- C. activate all ports and place in the default VLAN
- D. enable dynamic ARP inspection

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 694

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which enhancements were implemented as part of WPA3?

- A. Forward secrecy and SAE in personal mode for secure initial key exchange
- B. 802.1x authentication and AES-128 encryption
- C. AES-64 in personal mode and AES-128 in enterprise mode
- D. TKIP encryption improving WEP and per-packet keying

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 695

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When a site-to-site VPN is configured which IPsec mode provides encapsulation and encryption of the entire original IP packet?

- A. IPsec transport mode with AH
- B. IPsec tunnel mode with AH
- C. IPsec transport mode with ESP
- D. IPsec tunnel mode with ESP

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 696

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An engineer is configuring remote access to a router from IP subnet 10.139.58.0/28. The domain name, crypto keys, and SSH have been configured. Which configuration enables the traffic on the destination router?

- A. line vty 0 15 access-class 120 in ! ip access-list extended 120 permit tcp 10.139.58.0 0.0.0.15 any eq 22
- B. interface FastEthernet0/0 ip address 10.122.49.1 255.255.255.252 ip access-group 10 in ! ip access-list standard 10 permit udp 10.139.58.0 0.0.0.7 host 10.122.49.1 eq 22
- C. interface FastEthernet0/0 ip address 10.122.49.1 255.255.255.252 ip access-group 110 in ! ip access-list standard 110 permit tcp 10.139.58.0 0.0.0.15 eq 22 host 10.122.49.1
- D. line vty 0 15 access-group 120 in ! ip access-list extended 120 permit tcp 10.139.58.0 0.0.0.15 any eq 22

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 697

Topic #: 1

[\[All 200-301 Questions\]](#)

---

In an SDN architecture, which function of a network node is centralized on a controller?

- A. Creates the IP routing table
- B. Discards a message due filtering
- C. Makes a routing decision
- D. Provides protocol access for remote access devices

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 698

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which management security process is invoked when a user logs in to a network device using their username and password?

- A. authentication
- B. auditing
- C. accounting
- D. authorization

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 699

Topic #: 1

[\[All 200-301 Questions\]](#)

The screenshot shows a configuration page with tabs for General, Security, QoS, Policy-Mapping, and Advanced. Under the Security tab, there are sub-tabs for Layer 2, Layer 3, and AAA Servers. The Layer 2 sub-tab is active. The configuration includes:

- Layer 2 Security: A dropdown menu.
- MAC Filtering:
- Fast Transition:
- Protected Management Frame (PMF): Disabled
- WPA+WPA2 Parameters:
  - WPA Policy:
  - WPA2 Policy:
  - WPA2 Encryption:  AES  TKIP
- Authentication Key Management:
  - 802.1X:  Enable
  - CCKM:  Enable
  - PSK:  Enable

Refer to the exhibit. What are the two steps an engineer must take to provide the highest encryption and authentication using domain credentials from LDAP?  
(Choose two.)

- A. Select PSK under Authentication Key Management.
- B. Select Static-WEP + 802.1X on Layer 2 Security.
- C. Select WPA+WPA2 on Layer 2 Security.
- D. Select 802.1X from under Authentication Key Management.
- E. Select WPA Policy with TKIP Encryption.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 700

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which enhancement is implemented in WPA3?

- A. employs PKI to identify access points
- B. applies 802.1x authentication
- C. uses TKIP
- D. protects against brute force attacks

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 701

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the Cisco IOS attack mitigation features from the left onto the types of network attack they mitigate on the right.

Select and Place:

DHCP snooping

rogue server that spoofs IP configuration

Dynamic ARP Inspection

cache poisoning

IP Source Guard

flood attacks

storm control

rogue clients on the network

Show Suggested Answer

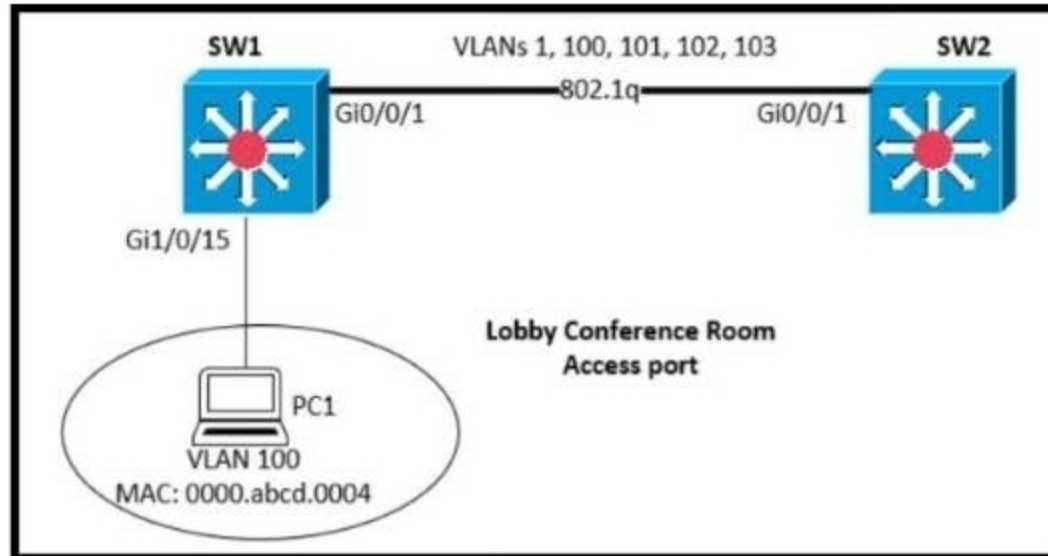


Actual exam question from Cisco's 200-301

Question #: 702

Topic #: 1

[\[All 200-301 Questions\]](#)



SW1 supports connectivity for a lobby conference room and must be secured. The engineer must limit the connectivity from PC1 to the SW1 and SW2 network. The MAC addresses allowed must be limited to two. Which configuration secures the conference room connectivity?

- A. interface gi1/0/15 switchport port-security switchport port-security maximum 2
- B. interface gi1/0/15 switchport port-security switchport port-security mac-address 0000.abcd.0004vlan 100
- C. interface gi1/0/15 switchport port-security mac-address 0000.abcd.0004 vlan 100
- D. interface gi1/0/15 switchport port-security mac-address 0000.abcd.0004 vlan 100 interface switchport secure-mac limit 2

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 703

Topic #: 1

[\[All 200-301 Questions\]](#)

```
SW1#show run
Building configuration...
!
hostname SW1
!
ip domain-name CCNA-test
!
username CCNA privilege 1 password 0 cisco123
!
interface FastEthernet0/1
 switchport access vlan 10
!
interface Vlan10
 ip address 192.168.1.2 255.255.255.0
!
line vty 0 4
 login local
 transport input telnet
line vty 5 15
 login local
 transport input telnet

SW1#show crypto key mypubkey rsa
% Key pair was generated at: 0:1:23 UTC Mar 1 2020
Key name: SW1.CCNA-test
```

Refer to the exhibit. An engineer is updating the management access configuration of switch SW1 to allow secured, encrypted remote configuration. Which two commands or command sequences must the engineer apply to the switch? (Choose two.)

- A. SW1(config)#enable secret ccnaTest123
- B. SW1(config)#username NEW secret R3mote123
- C. SW1(config)#line vty 0 15 SW1(config-line)#transport input ssh
- D. SW1(config)# crypto key generate rsa
- E. SW1(config)# interface f0/1 SW1(confif-if)# switchport mode trunk

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 704

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which port security violation mode allows from valid MAC addresses to pass but blocks traffic from invalid MAC addresses?

- A. restrict
- B. shutdown
- C. protect
- D. shutdown VLAN

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 705

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A customer wants to provide wireless access to contractors using a guest portal on Cisco ISE. The portal is also used by employees. A solution is implemented, but contractors receive a certificate error when they attempt to access the portal. Employees can access the portal without any errors. Which change must be implemented to allow the contractors and employees to access the portal?

- A. Install an Internal CA signed certificate on the Cisco ISE.
- B. Install a trusted third-party certificate on the Cisco ISE.
- C. Install an internal CA signed certificate on the contractor devices.
- D. Install a trusted third-party certificate on the contractor devices.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 706

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two wireless security standards use counter mode cipher block chaining Message Authentication Code Protocol for encryption and data integrity? (Choose two.)

- A. Wi-Fi 6
- B. WPA3
- C. WEP
- D. WPA2
- E. WPA

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 707

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer is implementing a corporate SSID for WPA3-Personal security with a PSK. Which encryption cipher must be configured?

- A. CCMP128
- B. GCMP256
- C. CCMP256
- D. GCMP128

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 708

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a practice that protects a network from VLAN hopping attacks?

- A. Implement port security on internet-facing VLANs
- B. Enable dynamic ARP inspection
- C. Assign all access ports to VLANs other than the native VLAN
- D. Configure an ACL to prevent traffic from changing VLANs

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 709

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An administrator must use the password complexity not manufacturer-name command to prevent users from adding `Cisco` as a password. Which command must be issued before this command?

- A. login authentication my-auth-list
- B. service password-encryption
- C. password complexity enable
- D. confreg 0x2142

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 710

Topic #: 1

[\[All 200-301 Questions\]](#)

---

An organization has decided to start using cloud-provided services. Which cloud service allows the organization to install its own operating system on a virtual machine?

- A. platform-as-a-service
- B. network-as-a-service
- C. software-as-a-service
- D. infrastructure-as-a-service

[Show Suggested Answer](#)



Actual exam question from Cisco's 200-301

Question #: 711

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How do traditional campus device management and Cisco DNA Center device management differ in regards to deployment?

- A. Traditional campus device management allows a network to scale more quickly than with Cisco DNA Center device management.
- B. Cisco DNA Center device management can deploy a network more quickly than traditional campus device management.
- C. Cisco DNA Center device management can be implemented at a lower cost than most traditional campus device management options.
- D. Traditional campus device management schemes can typically deploy patches and updates more quickly than Cisco DNA Center device management.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 712

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which purpose does a northbound API serve in a controller-based networking architecture?

- A. facilitates communication between the controller and the applications
- B. reports device errors to a controller
- C. generates statistics for network hardware and traffic
- D. communicates between the controller and the physical network hardware

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 713

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What benefit does controller-based networking provide versus traditional networking?

- A. allows configuration and monitoring of the network from one centralized point
- B. provides an added layer of security to protect from DDoS attacks
- C. combines control and data plane functionality on a single device to minimize latency
- D. moves from a two-tier to a three-tier network architecture to provide maximum redundancy

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 714

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is an advantage of Cisco DNA Center versus traditional campus device management?

- A. It is designed primarily to provide network assurance.
- B. It supports numerous extensibility options, including cross-domain adapters and third-party SDKs.
- C. It supports high availability for management functions when operating in cluster mode.
- D. It enables easy autodiscovery of network elements in a brownfield deployment.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 715

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the characteristics of networking from the left onto the correct networking types on the right.

Select and Place:

### Answer Area

focused on network

focused on devices

user input is a configuration

user input is a policy

uses allow list security model

uses block list security model

#### Controller-Based Networking

#### Traditional Networking

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 716

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two fundamentals of virtualization? (Choose two.)

- A. It allows logical network devices to move traffic between virtual machines and the rest of the physical network.
- B. It allows multiple operating systems and applications to run independently on one physical server.
- C. It allows a physical router to directly connect NICs from each virtual machine into the network.
- D. It requires that some servers, virtual machines, and network gear reside on the Internet.
- E. The environment must be configured with one hypervisor that serves solely as a network manager to monitor SNMP traffic.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 717

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does Cisco DNA Center gather data from the network?

- A. Devices use the call-home protocol to periodically send data to the controller
- B. Devices establish an IPsec tunnel to exchange data with the controller
- C. The Cisco CLI Analyzer tool gathers data from each licensed network device and streams it to the controller
- D. Network devices use different services like SNMP, syslog, and streaming telemetry to send data to the controller

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 718

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which statement compares traditional networks and controller-based networks?

- A. Only controller-based networks decouple the control plane and the data plane.
- B. Traditional and controller-based networks abstract policies from device configurations.
- C. Only traditional networks natively support centralized management.
- D. Only traditional networks offer a centralized control plane.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 719

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two benefits of network automation? (Choose two.)

- A. reduced hardware footprint
- B. reduced operational costs
- C. faster changes with more reliable results
- D. fewer network failures
- E. increased network security

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 720

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two encoding methods are supported by REST APIs? (Choose two.)

- A. SGML
- B. YAML
- C. XML
- D. JSON
- E. EBCDIC

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 721

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two characteristics of a controller-based network? (Choose two.)

- A. It uses Telnet to report system issues.
- B. The administrator can make configuration updates from the CLI.
- C. It uses northbound and southbound APIs to communicate between architectural layers.
- D. It decentralizes the control plane, which allows each device to make its own forwarding decisions.
- E. It moves the control plane to a central point.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 722

Topic #: 1

[\[All 200-301 Questions\]](#)

Which output displays a JSON data representation?

A.

```
{  
  "response": {  
    "taskId": {},  
    "url": "string"  
  },  
  "version": "string"  
}
```

B.

```
{  
  "response"- {  
    "taskId"- {},  
    "url"- "string"  
  },  
  "version"- "string"  
}
```

C.

```
{  
  "response": {  
    "taskId": {},  
    "url": "string"  
  },  
  "version": "string"  
}
```

D.

```
{  
  "response", {  
    "taskId", {};  
    "url", "string"  
  };  
  "version", "string"  
}
```

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 723

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the descriptions from the left onto the configuration-management technologies on the right.

Select and Place:

### Answer Area

fundamental configuration elements are stored in a manifest

uses TCP port 10002 for configuration push jobs

uses Ruby for fundamental configuration elements

uses SSH for remote device communication

uses TCP 8140 for communication

uses YAML for fundamental configuration elements

Ansible

Chef

Puppet

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 724

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two capabilities of Cisco DNA Center make it more extensible as compared to traditional campus device management? (Choose two.)

- A. REST APIs that allow for external applications to interact natively
- B. adapters that support all families of Cisco IOS software
- C. SDKs that support interaction with third-party network equipment
- D. modular design that is upgradable as needed
- E. customized versions for small, medium, and large enterprises

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 725

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the descriptions of device management from the left onto the types of device management on the right.

Select and Place:

implements changes via an SSH terminal
manages device configurations on a per-device basis
monitors the cloud for software updates
security is managed near the perimeter of the network with firewalls, VPNs, and IPS
uses CLI templates to apply a consistent configuration to multiple devices at an individual location
uses NetFlow to analyze potential security threats throughout the network and take appropriate action on that traffic

Cisco DNA Center Device Management

Traditional Device Management

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 726

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What software-defined architecture plane assists network devices with making packet-forwarding decisions by providing Layer 2 reachability and Layer 3 routing information?

- A. management plane
- B. control plane
- C. data plane
- D. policy plane

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 727

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two benefits of controller-based networking compared to traditional networking? (Choose two.)

- A. controller-based increases network bandwidth usage, while traditional lightens the load on the network
- B. controller-based reduces network configuration complexity, while traditional increases the potential for errors
- C. controller-based allows for fewer network failures, while traditional increases failure rates
- D. controller-based provides centralization of key IT functions, while traditional requires distributed management functions
- E. controller-based inflates software costs, while traditional decreases individual licensing costs

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 728

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which type of API allows SDN controllers to dynamically make changes to the network?

- A. northbound API
- B. REST API
- C. SOAP API
- D. southbound API

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 729

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the AAA terms from the left onto the descriptions on the right.

Select and Place:

accounting

authentication

authorization

CoA

tracks activity

updates session attributes

verifies access rights

verifies identity

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 730

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which option about JSON is true -

- A. uses predefined tags or angle brackets () to delimit markup text
- B. used to describe structured data that includes arrays
- C. used for storing information
- D. similar to HTML, it is more verbose than XML

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 731

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which option best describes an API?

- A. a contract that describes how various components communicate and exchange data with each other
- B. an architectural style (versus a protocol) for designing applications
- C. a stateless client-server model
- D. request a certain type of data by specifying the URL path that models the data

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 732

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the characteristics of a cloud environment from the left onto the correct examples on the right.

Select and Place:

multitenancy

One or more clients can be hosted with the same physical or virtual infrastructure

on-demand

Resources can be added and removed as needed to support current workload and tasks

resiliency

Tasks can be migrated to different physical locations to increase efficiency or reduce cost.

scalability

Resources are dedicated only when necessary instead of on a permanent

workload movement

Tasks and data residing on a failed server can be seamlessly migrated to other physical resources.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 733

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which of the following is the JSON encoding of a dictionary or hash?

- A. {key :value}
- B. [key ,value]
- C. {key ,value}
- D. (key :value)

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 734

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which role does a hypervisor provide for each virtual machine in server virtualization?

- A. infrastructure-as-a-service
- B. Software-as-a-service
- C. control and distribution of physical resources
- D. services as a hardware controller

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 735

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the function of a server?

- A. It transmits packets between hosts in the same broadcast domain.
- B. It provides shared applications to end users.
- C. It routes traffic between Layer 3 devices.
- D. It réates security zones between trusted and untrusted networks.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 736

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which CRUD operation modifies an existing table or view?

- A. read
- B. update
- C. replace
- D. create

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 737

Topic #: 1

[\[All 200-301 Questions\]](#)

---

In software-defined architectures, which plane is distributed and responsible for traffic forwarding?

- A. management plane
- B. policy plane
- C. data plane
- D. control plane

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 738

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Refer to the exhibit. Which type of configuration is represented in the output?

```
cisco_ospf_vrf {"R1 default":  
  ensure => 'present',  
  auto_cost => '100',  
}
```

- A. Ansible
- B. JSON
- C. Chef
- D. Puppet

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 739

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which configuration management mechanism uses TCP port 22 by default when communicating with managed nodes?

- A. Ansible
- B. Python
- C. Puppet
- D. Chef

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 740

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What does an SDN controller use as a communication protocol to relay forwarding changes to a southbound API?

- A. Java
- B. REST
- C. OpenFlow
- D. XML

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 741

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What uses HTTP messages to transfer data to applications residing on different hosts?

- A. OpenStack
- B. OpFlex
- C. REST
- D. OpenFlow

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 742

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which JSON data type is an unordered set of attribute-value pairs?

- A. string
- B. array
- C. Boolean
- D. object

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 743

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which protocol is used in Software Defined Access (SDA) to provide a tunnel between two edge nodes in different fabrics?

- A. Generic Router Encapsulation (GRE)
- B. Virtual Local Area Network (VLAN)
- C. Virtual Extensible LAN (VXLAN)
- D. Point-to-Point Protocol (PPP)

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 744

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which plane is centralized by an SDN controller?

- A. management-plane
- B. data-plane
- C. services-plane
- D. control-plane

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 745

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Where is the interface between the control plane and data plane within the software-defined architecture?

- A. application layer and the management layer
- B. application layer and the infrastructure layer
- C. control layer and the application layer
- D. control layer and the infrastructure layer

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 746

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Why would a network administrator choose to implement automation in a network environment?

- A. To simplify the process of maintaining a consistent configuration state across all devices
- B. To centralize device information storage
- C. To implement centralized user account management
- D. To deploy the management plane separately from the rest of the network

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 747

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two events occur automatically when a device is added to Cisco DNA Center? (Choose two.)

- A. The device is placed into the Managed state.
- B. The device is placed into the Unmanaged state.
- C. The device is assigned to the Local site.
- D. The device is assigned to the Global site.
- E. The device is placed into the Provisioned state.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 748

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two components are needed to create an Ansible script that configures a VLAN on a switch? (Choose two.)

- A. playbook
- B. recipe
- C. model
- D. cookbook
- E. task

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 749

Topic #: 1

[\[All 200-301 Questions\]](#)

---

In software-defined architecture, which plane handles switching for traffic through a Cisco router?

- A. control
- B. data
- C. management
- D. application

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 750

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two southbound APIs? (Choose two.)

- A. Thrift
- B. DSC
- C. CORBA
- D. NETCONF
- E. OpenFlow

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 751

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What makes Cisco DNA Center different from traditional network management applications and their management of networks?

- A. Its modular design allows the implementation of different versions to meet the specific needs of an organization.
- B. It only supports auto-discovery of network elements in a greenfield deployment.
- C. It omits support high availability of management functions when operating in cluster mode.
- D. It abstracts policy from the actual device configuration.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 752

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which API is used in controller-based architectures to interact with edge devices?

- A. southbound
- B. overlay
- C. northbound
- D. underlay

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 753

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the statements about networking from the left onto the corresponding networking types on the right.

Select and Place:

### Answer Area

This type allows better control over how networks work and how networks are configured.

This type enables networks to integrate with applications through APIs.

New devices are configured using the physical infrastructure.

This type provisions resources from a centralized location.

This type requires a distributed control plane.

#### Controller-Based Networking

#### Traditional Networking

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 754

Topic #: 1

[\[All 200-301 Questions\]](#)

```
1 [  
2  { "switch": "3750", "port": e2 },  
3  { "router": "2951", "port": e20 },  
4  { "switch": "3750", "port": e23 },  
5 ]
```

Refer to the exhibit. What is represented beginning with line 1 and ending with line 5?

- A. object
- B. value
- C. key
- D. array

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 755

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which CRUD operation corresponds to the HTTP GET method?

- A. create
- B. read
- C. delete
- D. update

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 756

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What differentiates device management enabled by Cisco DNA Center from traditional campus device management?

- A. CLI-oriented device
- B. centralized
- C. device-by-device hands-on
- D. per-device

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 757

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the statements about networking from the left onto the corresponding networking types on the right.

Select and Place:

### Answer Area

This type deploys a consistent configuration across multiple devices.

A distributed control plane is needed.

This type requires a distributed management plane.

Southbound APIs are used to apply configurations.

Northbound APIs interact with end devices.

#### Controller-Based Networking

#### Traditional Networking

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 758

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two REST API status-code classes represent errors? (Choose two.)

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

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 759

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How do servers connect to the network in a virtual environment?

- A. a cable connected to a physical switch on the network
- B. wireless to an access point that is physically connected to the network
- C. a virtual switch that links to an access point that is physically connected to the network
- D. a software switch on a hypervisor that is physically connected to the network

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 760

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the function of the controller in a software-defined network?

- A. forwarding packets
- B. multicast replication at the hardware level
- C. making routing decisions
- D. fragmenting and reassembling packets

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 761

Topic #: 1

[\[All 200-301 Questions\]](#)

#### DRAG DROP -

Drag and drop the HTTP methods used with REST-based APIs from the left onto the descriptions on the right.

Select and Place:

DELETE	creates a resource and returns its URI in the response header
GET	creates or replaces a previously modified resource using information in the request body
POST	removes a resource
PATCH	retrieves a list of a resource's URIs
PUT	updates a resource using instructions included in the request body

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 762

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of a southbound API?

- A. Use orchestration to provision a virtual server configuration from a web server
- B. Automate configuration changes between a server and a switching fabric
- C. Manage flow control between an SDN controller and a switching fabric
- D. Facilitate the information exchange between an SDN controller and application

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 763

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which script paradigm does Puppet use?

- A. recipes and cookbooks
- B. playbooks and roles
- C. strings and marionettes
- D. manifests and modules

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 764

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which set of methods is supported with the REST API?

- A. GET, PUT, ERASE, CHANGE
- B. GET, POST, MOD, ERASE
- C. GET, PUT, POST, DELETE
- D. GET, POST, ERASE, CHANGE

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 765

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which technology is appropriate for communication between an SDN controller and applications running over the network?

- A. Southbound API
- B. REST API
- C. NETCONF
- D. OpenFlow

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 766

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop each characteristic of device-management technologies from the left onto the deployment type on the right.

Select and Place:

orchestrates background device configuration

provides greater flexibility for custom and non-standard configurations

relies on per-device management

supports centralized software management

supports open APIs

uses individual software management

Cisco DNA Center

Traditional

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 767

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the function of `off-the-shelf` switches in a controller-based network?

- A. setting packet-handling policies
- B. forwarding packets
- C. providing a central view of the deployed network
- D. making routing decisions

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 768

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which REST method updates an object in the Cisco DNA Center Intent API?

- A. CHANGE
- B. UPDATE
- C. POST
- D. PUT

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 769

Topic #: 1

[\[All 200-301 Questions\]](#)

```
{  
  "SW1" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],  
  "SW2" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],  
  "SW3" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],  
  "SW4" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"]  
}
```

Refer to the exhibit. How many JSON objects are represented?

- A. 1
- B. 2
- C. 3
- D. 4

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 770

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which definition describes JWT in regard to REST API security?

- A. an encrypted JSON token that is used for authentication
- B. an encrypted JSON token that is used for authorization
- C. an encoded JSON token that is used to securely exchange information
- D. an encoded JSON token that is used for authentication

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 771

Topic #: 1

[\[All 200-301 Questions\]](#)

```
1 [
2   { "switch": "3750", "port": e2 },
3   { "router": "2951", "port": e20 }.
4   { "switch": "3750", "port": e23 }
5 ]
```

Refer to the exhibit. What is identified by the word `switch` within line 2 of the JSON Schema?

- A. array
- B. value
- C. object
- D. key

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 772

Topic #: 1

[\[All 200-301 Questions\]](#)

```
{ "Employee's name": "Arthur" }
```

Refer to the exhibit. Which type of JSON data is shown?

- A. boolean
- B. array
- C. key
- D. object

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 773

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the characteristics from the left onto the technology types on the right.

Select and Place:

This type of technology provides automation across multiple technologies and domains.

This type of technology enables consistent configuration of infrastructure resources.

Puppet is used for this type of technology.

Ansible is used for this type of technology.

Configuration Management

Orchestration

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 774

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which communication interaction takes place when a southbound API is used?

- A. between the SDN controller and PCs on the network
- B. between the SDN controller and switches and routers on the network
- C. between the SDN controller and services and applications on the network
- D. between network applications and switches and routers on the network

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 775

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two characteristics of a public cloud implementation? (Choose two.)

- A. It is owned and maintained by one party, but it is shared among multiple organizations
- B. It enables an organization to fully customize how it deploys network resources
- C. It provides services that are accessed over the Internet
- D. It is a data center on the public Internet that maintains cloud services for only one company
- E. It supports network resources from a centralized third-party provider and privately-owned virtual resources

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 776

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the descriptions from the left on to the correct configuration-management technologies on the right.

Select and Place:

fundamental configuration elements are stored in a manifest

uses TCP port 10002 for configuration push jobs

uses Ruby for fundamental configuration elements

uses SSH for remote device communication

uses TCP 8140 for communication

uses YAML for fundamental configuration elements

Ansible

Chef

Puppet

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 777

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the REST API call methods for HTTP from the left onto the actions they perform on the right. Not all methods are used.

Select and Place:

DELETE

creates a resource on the server

GET

reads data from the server

POST

removes a resource from the server

PUT

updates an entry in the database

PATCH

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 778

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the REST principles from the left onto their definitions on the right.

Select and Place:

cacheable

divides architecture components into the consumers and producers of a service

client-server

divides the architecture into a hierarchy of levels

layered system

enables the client to reuse a previous response for subsequent equivalent requests

stateless

operates without any stored session information on the server

uniform interface

simplifies the communication between components, regardless of the architecture supporting them

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 779

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the Ansible terms from the left onto the right.

Select and Place:

control node

collection of actions to perform on target devices, expressed in YAML format

inventory

device with Ansible installed that manages target devices

managed node

network device, without Ansible installed, upon which commands can be executed

module

specific action to be performed on one or more target devices

playbook

unit of Python code to be executed

task

Ansible file that defines the target devices upon which commands and tasks can be executed

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 780

Topic #: 1

[\[All 200-301 Questions\]](#)

```
{
  "Test_Questions" : [
    "Automation",
    "Configuration",
  ],
  "Test_Exam_Level" : [
    "CCNA",
    "CCNP",
  ],
  "Test_Response" : [
    "Correct",
    "Incorrect",
  ],
}
```

Refer to the exhibit. How many objects keys, and JSON list values are present?

- A. Three objects, two keys, and three JSON list values
- B. Three objects, three keys, and two JSON list values
- C. One object, three keys, and three JSON list values
- D. One object, three keys, and two JSON list values

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 781

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two primary drivers support the need for network automation? (Choose two.)

- A. Increasing reliance on self-diagnostic and self-healing
- B. Eliminating training needs
- C. Policy-driven provisioning of resources
- D. Reducing hardware footprint
- E. Providing a single entry point for resource provisioning

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 782

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is an expected outcome when network management automation is deployed?

- A. A distributed management plane must be used.
- B. Complexity increases when new device configurations are added.
- C. Custom applications are needed to configure network devices.
- D. Software upgrades are performed from a central controller.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 783

Topic #: 1

[\[All 200-301 Questions\]](#)

```
{  
  "Routers": ["R1", "R2", "R3"],  
  "Switches": ["SW1", "SW2", "SW3"]  
}
```

Refer to the exhibit. What is represented by `R1` and `SW1` within the JSON output?

- A. object
- B. value
- C. key
- D. array

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 784

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP -

Drag and drop the statements about networking from the left onto the corresponding networking types on the right.

Select and Place:

Maintenance costs are higher than with other networking options.

This type provides a centralized view of the network.

This type implements changes individually at each device.

This type leverages controllers to handle network management.

Traditional Networking

Controller-Based Networking

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 785

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which HTTP status code is returned after a successful REST API request?

- A. 200
- B. 301
- C. 404
- D. 500

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 786

Topic #: 1

[\[All 200-301 Questions\]](#)

---

With REST API, which standard HTTP header tells a server which media type is expected by the client?

- A. Accept-Encoding: gzip, deflate
- B. Accept-Patch: text/example; charset=utf-8
- C. Content-Type: application/json; charset=utf-8
- D. Accept: application/json

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 787

Topic #: 1

[\[All 200-301 Questions\]](#)

```
{
  "aaaUser": {
    "attributes": {
      "pwd": "password1",
      "firstName": "Abraham",
      "lastName": "Lincoln",
      "phone": "5555551212",
      "email": "test@cisco.com"
    },
    "children": [(
      "aaaUserDomain": {
        "attributes": {
          "name": "ExampleCisco"
        },
        "children": [{
          "aaaUserRole": {
            "attributes": {
              "name": "admin"
            }
          }
        ]
      }
    )]
  }
}
```

Refer to the exhibit. How many objects are present in the given JSON-encoded data?

- A. One
- B. Four
- C. Seven
- D. Nine

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 788

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the purpose of the Cisco DNA Center controller?

- A. to securely manage and deploy network devices
- B. to scan a network and generate a Layer 2 network diagram
- C. to secure physical access to a data center
- D. to provide Layer 3 services to autonomous access points

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 789

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the function of the controller in a software-defined network?

- A. forwarding packets
- B. multicast replication at the hardware level
- C. setting packet-handling policies
- D. fragmenting and reassembling packets

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 790

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Device# configure terminal
Device(config)# netconf ssh acl 1
Device(config)# netconf lock-time 100
Device(config)# netconf max-sessions 1
Device(config)# netconf ma-message 10
```

Refer to the exhibit. A network engineer must configure NETCONF. After creating the configuration, the engineer gets output from the command show line but not from show running-config. Which command completes the configuration?

- A. Device(config)# netconf lock-time 500
- B. Device(config)# netconf max-message 1000
- C. Device(config)# no netconf ssh acl 1
- D. Device(config)# netconf max-sessions 100

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 791

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which statement identifies the functionality of virtual machines?

- A. Virtualized servers run most efficiently when they are physically connected to a switch that is separate from the hypervisor
- B. The hypervisor can virtualize physical components including CPU, memory, and storage
- C. Each hypervisor can support a single virtual machine and a single software switch
- D. The hypervisor communicates on Layer 3 without the need for additional resources

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 792

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which network plane is centralized and manages routing decisions?

- A. management plane
- B. data plane
- C. policy plane
- D. control plane

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 793

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a benefit of using private IPv4 addressing?

- A. Multiple companies can use the same addresses without conflicts.
- B. Direct connectivity is provided to internal hosts from outside an enterprise network.
- C. Communication to the internet is reachable without the use of NAT.
- D. All external hosts are provided with secure communication to the internet.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 794

Topic #: 1

[\[All 200-301 Questions\]](#)

```
MacOs$ ifconfig

en0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
  options=400<CHANNEL_IO>
  ether f0:18:98:64:60:32
  inet6 fe80::492:c09f:57cf:8c36%en0 prefixlen 64 secured scopeid 0x6
  inet 10.8.138.14 netmask 0xffffe000 broadcast 10.8.159.255
  nd6 options=201<PERFORMNUD,DAD>
  media: autoselect
  status: active
```

Refer to the exhibit. A network engineer must provide configured IP addressing details to investigate a firewall rule issue. Which subnet and mask identify what is configured on the en0 interface?

- A. 10.8.0.0/16
- B. 10.8.64.0/18
- C. 10.8.128.0/19
- D. 10.8.138.0/24

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 795

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two characteristics of a small office / home office connection environment? (Choose two.)

- A. It requires 10Gb ports on all uplinks.
- B. It supports between 1 and 50 users.
- C. It supports between 50 and 100 users.
- D. A router port connects to a broadband connection.
- E. It requires a core, distribution, and access layer architecture.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 796

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which element of a virtualization solution manages virtualized services and enables connections between virtualized services and external interfaces?

- A. software
- B. network functionality
- C. virtual machine
- D. hardware

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 797

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which group of channels in the 802.11b/g/n/ac/ax 2.4 GHz frequency bands are nonoverlapping channels?

- A. channels 1, 5, and 10
- B. channels 1, 6, and 11
- C. channels 1, 5, and 11
- D. channels 1, 6, and 10

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 798

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of Layer 3 switches?

- A. They route traffic between devices in different VLANs.
- B. They transmit broadcast traffic when operating in Layer 3 mode exclusively.
- C. They move frames between endpoints limited to IP addresses.
- D. They forward Ethernet frames between VLANs using only MAC addresses,

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 799

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP

Drag and drop the RF terms from the left onto the corresponding statements on the right.

absorption

measure of the minimum power required to decode a radio signal without excessive errors

noise floor

measure of the total unwanted signals at the receiver

reflection

deviation from the propagation path that occurs when a signal encounters an obstacle

receiver sensitivity

reduction of energy in a signal as it travels away from the access point and encounters free space or obstacles

signal-to-noise ratio

relative power of the desired radio signal to unwanted signals at the receiver

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 800

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which cable type must be used to interconnect one switch using 1000 BASE-SX GBIC modules and another switch using 1000 BASE-SX SFP modules?

- A. LC to SC
- B. SC to SC
- C. LC to LC
- D. SC to ST

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 801

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP

-

Drag and drop the virtualization concepts from the left onto the matching statements on the right.

guest operating system

An operating system instance that is decoupled from the server hardware.

host operating system

Each core can run more than one process simultaneously.

hypervisor

Runs on a physical server, manages, and allocates the physical resources.

multithreading

The software that manages the basic functions of the physical hardware.

virtual machine

The software that manages the basic functions of the virtual machine.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 802

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a benefit of a point-to-point leased line?

- A. low cost
- B. full-mesh capability
- C. simplicity of configuration
- D. flexibility of design

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 803

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Why is TCP desired over UDP for applications that require extensive error checking, such as HTTPS?

- A. UDP uses sequencing data for packets to arrive in order, and TCP offers the capability to receive packets in random order.
- B. UDP uses flow control mechanisms for the delivery of packets, and TCP uses congestion control for efficient packet delivery.
- C. UDP reliably guarantees delivery of all packets, and TCP drops packets under heavy load.
- D. UDP operates without acknowledgments, and TCP sends an acknowledgment for every packet received.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 804

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which component controls and distributes physical resources for each virtual machine?

- A. hypervisor
- B. OS
- C. CPU
- D. physical enclosure

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 805

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the role of nonoverlapping channels in a wireless environment?

- A. to increase bandwidth
- B. to stabilize the RF environment
- C. to allow for channel bonding
- D. to reduce interference

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 806

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two advantages of implementing a controller-based architecture instead of traditional network architecture? (Choose two.)

- A. It allows for seamless connectivity to virtual machines.
- B. It increases security against denial-of-service attacks.
- C. It supports complex and high-scale IP addressing schemes.
- D. It enables configuration task automation.
- E. It provides increased scalability and management options.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 807

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the purpose of the service-set identifier?

- A. It identifies the wireless network to which an application must connect.
- B. It identifies the wired network to which a network device is connected.
- C. It identifies the wired network to which a user device is connected.
- D. It identifies a wireless network for a mobile device to connect.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 808

Topic #: 1

[\[All 200-301 Questions\]](#)

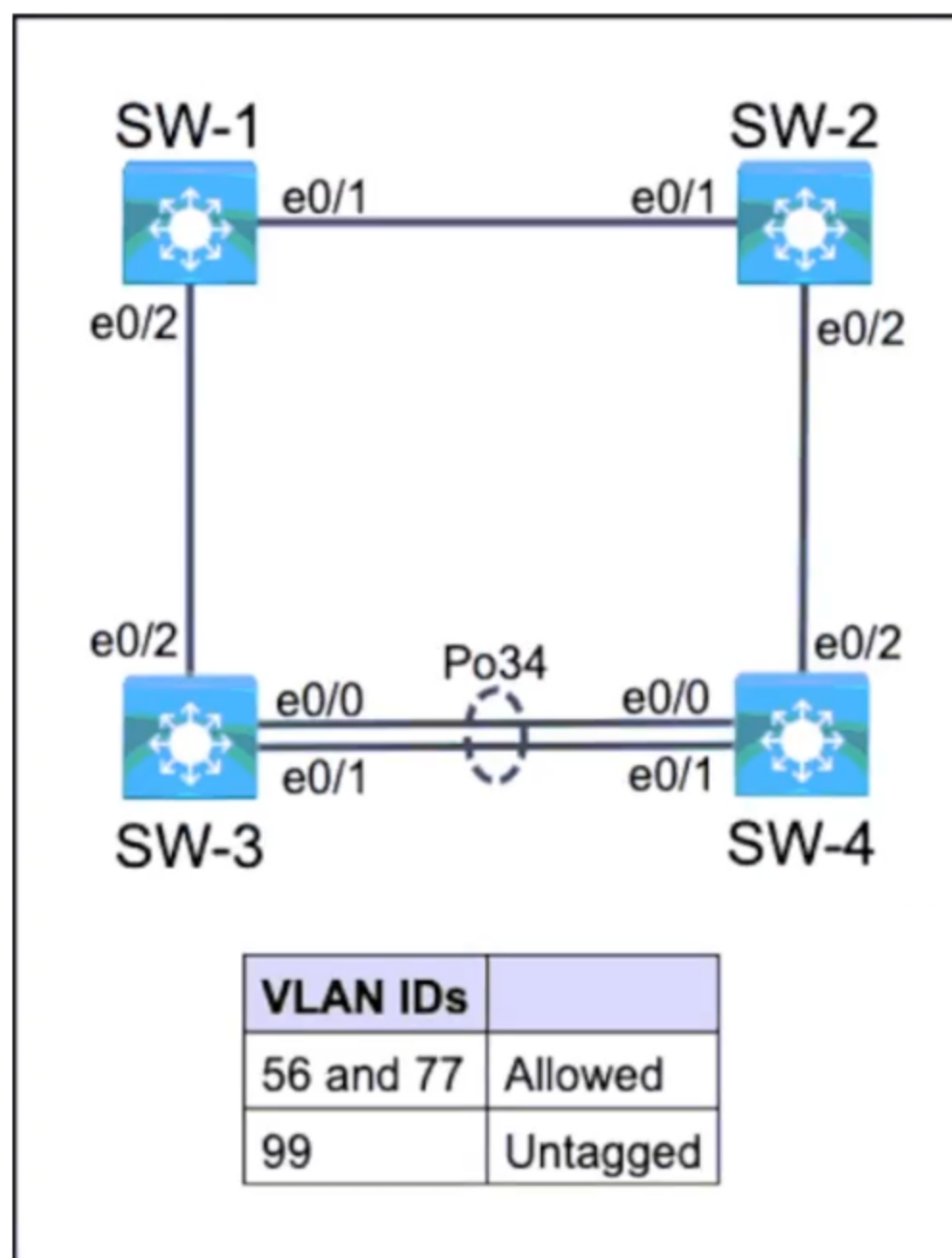
SIMULATION -

Guidelines -

This is a lab item in which tasks will be performed on virtual devices

- Refer to the Tasks tab to view the tasks for this lab item.
- Refer to the Topology tab to access the device console(s) and perform the tasks.
- Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
- All necessary preconfigurations have been applied.
- Do not change the enable password or hostname for any device.
- Save your configurations to NVRAM before moving to the next item.
- Click Next at the bottom of the screen to submit this lab and move to the next question.
- When Next is clicked the lab closes and cannot be reopened.

Topology -



Tasks -

All physical cabling is in place and verified. Connectivity between all four switches must be established and operational. All ports are pre-configured as 802.1q trunks.

1. Configure both SW-1 and SW-2 ports e0/1 and e0/2 to permit only the allowed VLANs
2. Configure both SW-3 and SW-4 ports e0/2 to permit only the allowed VLANs
3. Configure both SW-1 and SW-2 e0/1 ports to send and receive untagged traffic over VLAN 99
4. Configure both SW-3 and SW-4 ports e0/0 and e0/1 for link aggregation using the industry standard protocol. All ports must immediately negotiate the link aggregation
5. Permit only the allowed VLANs on the new link

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 809

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How do UTP and STP cables compare?

- A. UTP cables provide faster and more reliable data transfer rates and STP cables are slower and less reliable.
- B. STP cables are shielded and protect against electromagnetic interference and UTP lacks the same protection against electromagnetic interference.
- C. STP cables are cheaper to procure and easier to install and UTP cables are more expensive and harder to install.
- D. UTP cables are less prone to crosstalk and interference and STP cables are more prone to crosstalk and interference.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 810

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two disadvantages of a full-mesh topology? (Choose two.)

- A. It requires complex configuration.
- B. It needs a high MTU between sites.
- C. It works only with BGP between sites.
- D. It has a high implementation cost.
- E. It must have point-to-point communication.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 811

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP

Drag and drop the wireless standards from the left onto the number of nonoverlapping channels they support on the right.

802.11a

802.11b

802.11g

802.11n 2.4 GHz

802.11n 5 GHz

J Non-Overlapping Channels

2J Non-Overlapping Channels

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 812

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which technology allows for multiple operating systems to be run on a single host computer?

- A. virtual routing and forwarding
- B. virtual device contexts
- C. network port ID virtualization
- D. server virtualization

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 813

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Why would an administrator choose to implement an automated network management solution?

- A. to reduce operational costs
- B. to support simpler password policies
- C. to enable "box by box" configuration and deployment
- D. to limit recurrent management costs

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 814

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of the core and distribution layers in a collapsed-core architecture?

- A. The router can support HSRP for Layer 2 redundancy in an IPv6 network.
- B. The core and distribution layers are deployed on two different devices to enable failover.
- C. The router operates on a single device or a redundant pair.
- D. The router must use IPv4 and IPv6 addresses at Layer 3.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 815

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What must be considered before deploying virtual machines?

- A. resource limitations, such as the number of CPU cores and the amount of memory
- B. support for physical peripherals, such as monitors, keyboards, and mice
- C. whether to leverage VSM to map multiple virtual processors to two or more virtual machines
- D. location of the virtual machines within the data center environment

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 816

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two facts that differentiate optical-fiber cabling from copper cabling? (Choose two.)

- A. It is less expensive when purchasing patch cables.
- B. It carries electrical current further distances for PoE devices.
- C. It provides greater throughput options.
- D. It has a greater sensitivity to changes in temperature and moisture.
- E. It carries signals for longer distances.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 817

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two behaviors of a point-to-point WAN topology? (Choose two.)

- A. It leverages a dedicated connection.
- B. It provides direct connections between each router in the topology.
- C. It delivers redundancy between the central office and branch offices.
- D. It uses a single router to route traffic between sites.
- E. It connects remote networks through a single line.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 818

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a link-local all-nodes IPv6 multicast address?

- A. ff02:0:0:0:0:0:0:1
- B. 2004:33c:94d9:431e:255::
- C. fffe:034:0dd:45d6:789e::
- D. fe80:4433:034:0dd::2

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 819

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which is a reason to implement IPv4 private addressing?

- A. Comply with PCI regulations.
- B. Reduce the size of the forwarding table on network routers.
- C. Reduce the risk of a network security breach.
- D. Comply with local law.

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 820

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which signal frequency appears 60 times per minute?

- A. 1 Hz signal
- B. 1 GHz signal
- C. 60 Hz signal
- D. 60 GHz signal

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 821

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of spine-and-leaf architecture?

- A. offers predictable latency of the traffic path between end devices
- B. mitigates oversubscription by adding a layer of leaf switches
- C. exclusively sends multicast traffic between servers that are directly connected to the spine
- D. limits payload size of traffic within the leaf layer

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 822

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of an endpoint?

- A. It passes unicast communication between hosts in a network.
- B. It transmits broadcast traffic between devices in the same VLAN.
- C. It provides security between trusted and untrusted sections of the network.
- D. It is used directly by an individual user to access network services.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 823

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a function of MAC address learning?

- A. It is disabled by default on all interfaces connected to trunks.
- B. It increases security on the management VLAN.
- C. It is enabled by default on all VLANs and interfaces.
- D. It increases the potential for MAC address flooding.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 824

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which IPv6 address range is suitable for anycast addresses for distributed services such as DHCP or DNS?

- A. FF00:1/12
- B. 2001:db8:0234:ca3e::1/128
- C. FE80::1/10
- D. 2002:db84:3f30:ca84:be76:2/64

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 825

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a similarity between OM3 and OM4 fiber optic cable?

- A. Both have a 62.5 micron core diameter.
- B. Both have a 100 micron core diameter.
- C. Both have a 50 micron core diameter.
- D. Both have a 9 micron core diameter.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 826

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which device segregates a network into separate zones that have their own security policies?

- A. IPS
- B. switch
- C. access point
- D. firewall

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 827

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the primary purpose of private address space?

- A. limit the number of nodes reachable via the Internet
- B. simplify the addressing in the network
- C. conserve globally unique address space
- D. reduce network complexity

Show Suggested Answer







Actual exam question from Cisco's 200-301

Question #: 828

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a characteristic of a collapsed-core network topology?

- A. It enables all workstations in a SOHO environment to connect on a single switch with internet access.
- B. It enables the core and access layers to connect to one logical distribution device over an EtherChannel.
- C. It allows wireless devices to connect directly to the core layer, which enables faster data transmission.
- D. It allows the core and distribution layers to run as a single combined layer.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 829

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A technician receives a report of network slowness and the issue has been isolated to the interface FastEthernet0/13. What is the root cause of the issue?

FastEthernet0/13 is up, line protocol is up

Hardware is Fast Ethernet, address is 0001.4d27.66cd (bia 0001.4d27.66cd)

MTU 1500 bytes, BW 100000 Kbit, DLY 100 usec,

reliability 250/255, txload 1/255, rxload 1/255

Encapsulation ARPA, loopback not set

Keepalive not set -

Auto-duplex (Full) Auto Speed (100), 100BaseTX/FX

ARP type: ARPA, ARP Timeout 04:00:00

Last input 18:52:43, output 00:00:01, output hang never

Last clearing of "show interface" counters never

Queueing strategy: fifo -

Output queue 0/40, 0 drops; input queue 0/75, 0 drops

5 minute input rate 12000 bits/sec, 6 packets/sec

5 minute output rate 24000 bits/sec, 6 packets/sec

14488019 packets input, 2434163609 bytes

Received 345348 broadcasts, 0 runts, 0 giants, 0 throttles

261028 input errors, 259429 CRC, 1599 frame, 0 overrun, 0 ignored

0 watchdog, 84207 multicast

0 input packets with dribble condition detected

19658279 packets output, 3529106068 bytes, 0 underruns

0 output errors, 0 collisions, 1 interface resets

0 babbles, 0 late collision, 0 deferred

0 lost carrier, 0 no carrier

0 output buffer failures, 0 output buffers swapped out

- A. local buffer overload
- B. err-disabled port on the far end
- C. physical errors
- D. duplicate IP addressing

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 830

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What occurs when overlapping Wi-Fi channels are implemented?

- A. Users experience poor wireless network performance.
- B. Wireless devices are unable to distinguish between different SSIDs.
- C. The wireless network becomes vulnerable to unauthorized access.
- D. Network communications are open to eavesdropping.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 831

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Router1#show interface ethernet 1
Ethernet1 is up, line protocol is up
  Hardware is Lance, address is 0010.7b36.1be8 (bia 0010.7b36.1be8)
  Internet address is 10.100.48.240/24
  MTU 1500 bytes, BW 10000 Kbit, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:00, output 00:00:06, output hang never
  Last clearing of "show interface" counters never
  Input queue: 1/75/1/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: random early detection (RED)
  Output queue : 0/40 (size/max)
  5 minute input rate 1000 bits/sec, 2 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    7558065 packets input, 783768942 bytes, 1 no buffer
    Received 8280963 broadcasts, 0 runts, 0 giants, 1 throttles
    15 input errors, 14278 CRC, 0 frame, 0 overrun, 3 ignored
    0 input packets with dribble condition detected
  798092 packets output, 50280266 bytes, 0 underruns
  0 output errors, 15000 collisions, 0 interface resets
  0 babbles, 0 late collision, 179 deferred
  0 lost carrier, 0 no carrier
  0 output buffer failures, 0 output buffers swapped out
```

Refer to the exhibit. An administrator received a call from a branch office regarding poor application performance hosted at the headquarters. Ethernet 1 is connected between Router1 and the LAN switch. What identifies the issue?

- A. The MTU is not set to the default value.
- B. There is a duplex mismatch.
- C. The QoS policy is dropping traffic.
- D. The link is over utilized.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 832

Topic #: 1

[\[All 200-301 Questions\]](#)

### DRAG DROP

-

Drag and drop the cloud-computing components from the left onto the correct descriptions on the right.

broad network access

measured service

on-demand self-service

rapid elasticity

resource pooling

The consumer can choose when to start or stop using the service.

The provider can bill the consumer in accordance with the level of usage.

The provider allocates CPU, memory, and disk from its shared compute resources to multiple customers.

The resource pool can expand quickly to meet demand.

The service is available from many types of devices and networks.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 833

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the functionality of the Cisco DNA Center?

- A. IP address pool distribution scheduler
- B. data center network policy controller
- C. console server that permits secure access to all network devices
- D. software-defined controller for automation of devices and services

Show Suggested Answer

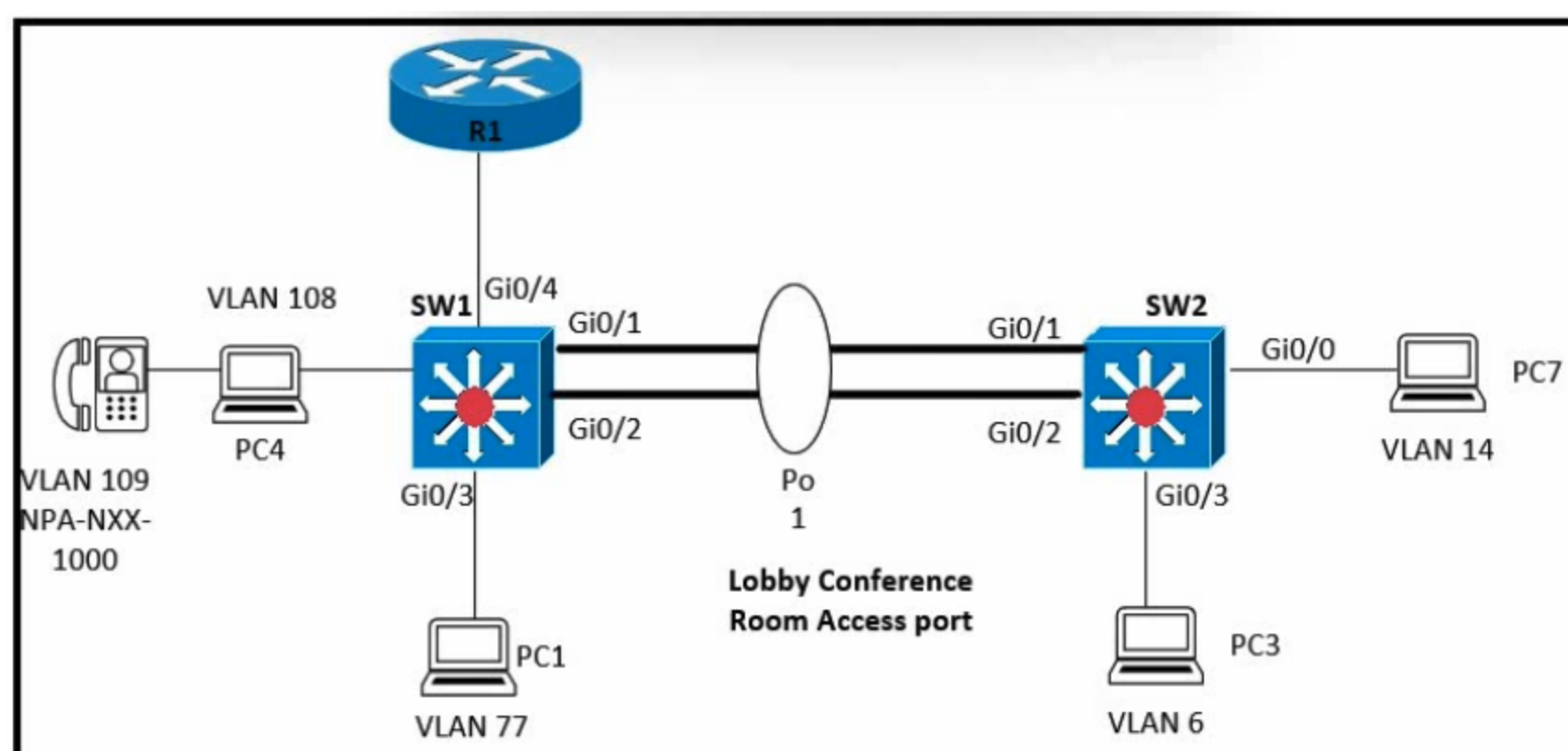


Actual exam question from Cisco's 200-301

Question #: 834

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which configuration enables an EtherChannel to form dynamically between SW1 and SW2 by using an industry-standard protocol, and to support full IP connectivity between all PCs?

A. SW1#

```
interface Gi0/1
switchport
switchport mode access
channel-group 1 mode active
!
interface Gi0/2
switchport
switchport mode access
channel-group 1 mode active
```

SW2#

```
interface Gi0/1
switchport
switchport mode access
channel-group 1 mode desirable
!
interface Gi0/2
switchport
switchport mode access
channel-group 1 mode desirable
```

B. SW1#

```
interface Gi0/1
switchport
switchport mode trunk
channel-group 1 mode on
!
interface Gi0/2
switchport
switchport mode trunk
channel-group 1 mode auto
```

SW2#

```
interface Gi0/1
switchport
switchport mode trunk
channel-group 1 mode auto
!
interface Gi0/2
switchport
switchport mode trunk
channel-group 1 mode on
interface port-channel 1
switchport
switchport mode trunk
```

C. SW1#

```
interface Gi0/1
switchport
switchport mode trunk
channel-group 1 mode active
!
interface Gi0/2
switchport
switchport mode trunk
channel-group 1 mode active
```

SW2#

```
interface Gi0/1
switchport
switchport mode trunk
channel-group 1 mode passive
!
interface Gi0/2
switchport
switchport mode trunk
channel-group 1 mode passive
```

D. SW1#

```
interface Gi0/1
switchport
switchport mode trunk
channel-group 1 mode auto
!
interface Gi0/2
switchport
switchport mode trunk
channel-group 1 mode auto
```

SW2#

```
interface Gi0/1
switchport
switchport mode trunk
channel-group 1 mode desirable
!
interface Gi0/2
switchport
switchport mode trunk
channel-group 1 mode desirable
```



Actual exam question from Cisco's 200-301

Question #: 835

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which functionality is provided by the console connection on a Cisco WLC?

- A. HTTP-based GUI connectivity
- B. secure in-band connectivity for device administration
- C. out-of-band management
- D. unencrypted in-band connectivity for file transfers

Show Suggested Answer



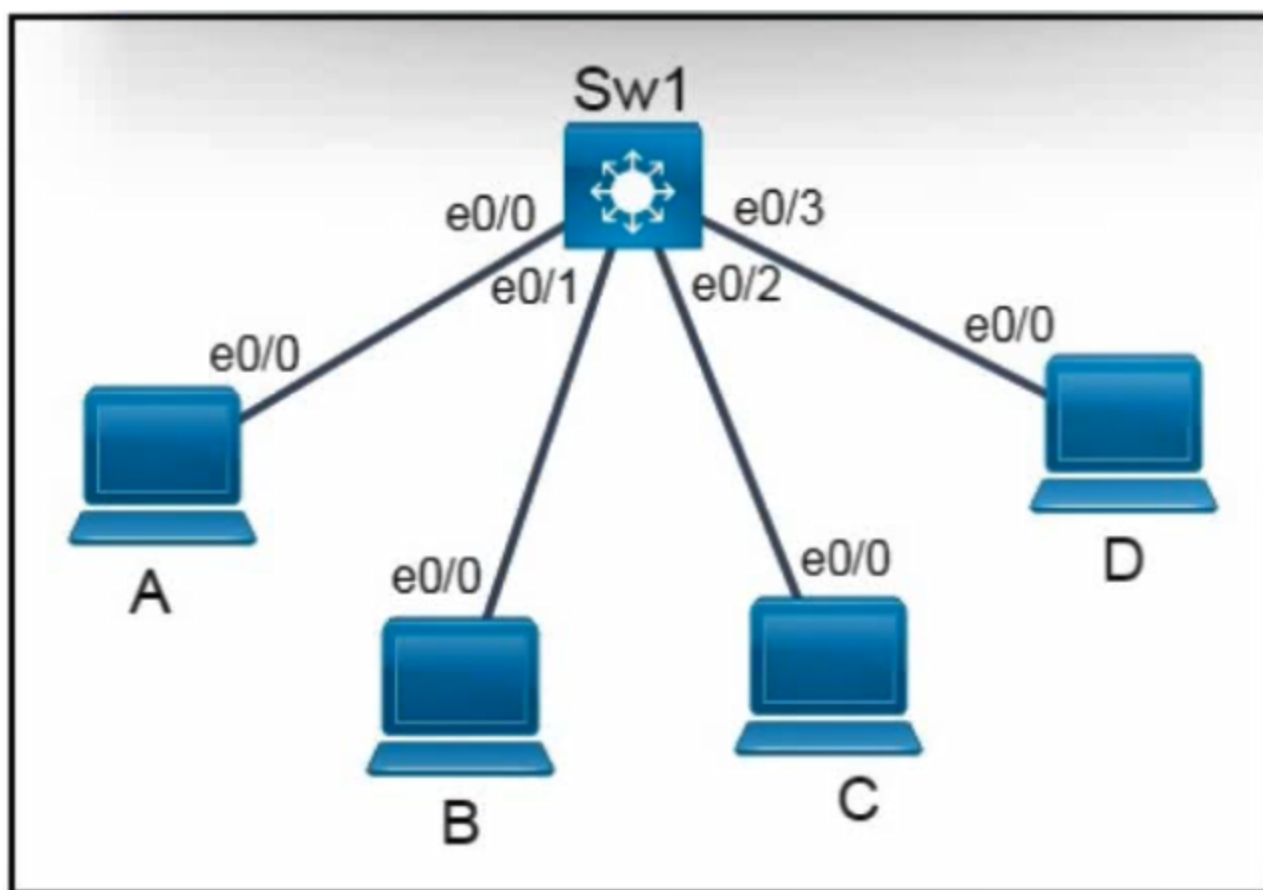


Actual exam question from Cisco's 200-301

Question #: 836

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Host A switch interface is configured in VLAN 2. Host D sends a unicast packet destined for the IP address of host A.

```
Sw1#show mac-address table
Mac Address Table
```

Vlan	Mac Address	Type	Ports
2	000c.859c.bb7b	DYNAMIC	e0/1
3	000c.859c.bb7b	DYNAMIC	e0/1
2	0010.11dc.3e91	DYNAMIC	e0/2
3	0010.11dc.3e91	DYNAMIC	e0/2
2	0043.29d9.c045	DYNAMIC	e0/3

```
Sw1#
```

What does the switch do when it receives the frame from host D?

- A. It floods the frame out of every ports except the source port.
- B. It creates a broadcast storm.
- C. It shuts down the source port and places it in err-disable mode.
- D. It drops the frame from the MAC table of the switch.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 837

Topic #: 1

[\[All 200-301 Questions\]](#)

The screenshot shows the Cisco configuration interface for a WLAN named 'lantest'. The interface is divided into several tabs: General, Security, QoS, Policy-Mapping, and Advanced. The Security tab is currently selected. The configuration details are as follows:

Field	Value
Profile Name	lantest
Type	WLAN
SSID	lantest
Status	<input type="checkbox"/> Enabled
Security Policies	[WPA2][Auth(802.1X)] (Modifications done under security tab will appear after applying the changes.)
Radio Policy	All
Interface/Interface Group(G)	guest
Multicast Vlan Feature	<input type="checkbox"/> Enabled
Broadcast SSID	<input type="checkbox"/> Enabled
NAS-ID	none

Refer to the exhibit. A Cisco engineer creates a new WLAN called lantest. Which two actions must be performed so that only high-speed 2.4-Ghz clients connect? (Choose two.)

- A. Enable the Status option.
- B. Set the Radio Policy option to 802.11g Only.
- C. Set the Radio Policy option to 802.11a Only.
- D. Set the Interface/Interface Group(G) to an interface other than guest.
- E. Enable the Broadcast SSID option.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 838

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How does Rapid PVST+ create a fast loop-free network topology?

- A. It uses multiple active paths between end stations.
- B. It requires multiple links between core switches.
- C. It maps multiple VLANs into the same spanning-tree instance.
- D. It generates one spanning-tree instance for each VLAN.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 839

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which two functions does a WLC perform in the lightweight access-point architecture that an AP performs independently in an autonomous architecture? (Choose two.)

- A. managing RF channels, including transmission power
- B. handling the association, authentication, and roaming of wireless clients
- C. sending and processing beacon frames
- D. encrypting and decrypting traffic that uses the WAP protocol family
- E. preventing collisions between wireless clients on the same RF channel

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 840

Topic #: 1

[\[All 200-301 Questions\]](#)

MONITOR WLANs CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs > Edit 'my\_WLAN'

General Security QoS Policy-Mapping Advanced

Layer 2 Layer 3 AAA Servers

Layer 2 Security

MAC Filtering

Fast Transition

Fast Transition

Over the DS

Reassociation Timeout  Seconds

Protected Management Frame

PMF

WPA+WPA2 Parameters

WPA Policy

WPA2 Policy

WPA2 Encryption  AES  TKIP  CCMP256  GCMP128  GCMP256

OSN Policy

Authentication Key Management

802.1X  Enable

CCKM  Enable

Refer to the exhibit. A network engineer is configuring a wireless LAN with Web Passthrough Layer 3 Web Policy. Which action must the engineer take to complete the configuration?

- A. Set the Layer 2 Security to 802.1X.
- B. Enable TKIP and CCMP256 WPA2 Encryption.
- C. Enable the WPA Policy.
- D. Set the Layer 2 Security to None.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 841

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network administrator plans an update to the WI-FI networks in multiple branch offices. Each location is configured with an SSID called "Office". The administrator wants every user who connects to the SSID at any location to have the same access level. What must be set the same on each network to meet the requirement?

- A. radio policy
- B. profile name
- C. NAS-ID configuration
- D. security policies

[Show Suggested Answer](#)



Actual exam question from Cisco's 200-301

Question #: 842

Topic #: 1

[\[All 200-301 Questions\]](#)

The screenshot shows the 'Advanced' configuration tab for a Wireless LAN Controller (WLC). The 'P2P Blocking Action' is currently set to 'Disabled'. Other visible settings include:

- Allow AAA Override:  Enabled
- Coverage Hole Detection:  Enabled
- Enable Session Timeout:  1800 (Session Timeout (secs))
- Aironet IE:  Enabled
- Diagnostic Channel:  Enabled
- Override Interface ACL: IPv4: None, IPv6: None
- Layer2 Ad: None
- URL ACL: None
- P2P Blocking Action: Disabled
- Client Exclusion:  Enabled, 180 (Timeout Value (secs))
- Maximum Allowed Clients: 0
- Static IP Tunneling:  Enabled
- Wi-Fi Direct Clients Policy: Disabled
- Maximum Allowed Clients Per AP Radio: 200
- DHCP: DHCP Server:  Override, 0.0.0.0 (DHCP Server IP Addr), DHCP Addr. Assignment:  Required
- Management Frame Protection (MFP): MFP Client Protection: Optional
- DTIM Period (in beacon intervals): 802.11a/n (1 - 255): 1, 802.11b/g/n (1 - 255): 1
- NAC: NAC State: None
- Load Balancing and Band Select: Client Load Balancing: , Client Band Select:

Refer to the exhibit. The P2P Blocking Action option is disabled on the WLC. The security team has a new requirement for each client to retain their assigned IP addressing as the clients move between locations in the campus network. Which action completes this configuration?

- A. Enable the Static IP Tunneling option.
- B. Disable the Coverage Hole Detection option.
- C. Set the P2P Blocking Action option to Forward-UpStream.
- D. Check the DHCP Addr. Assignment check box.

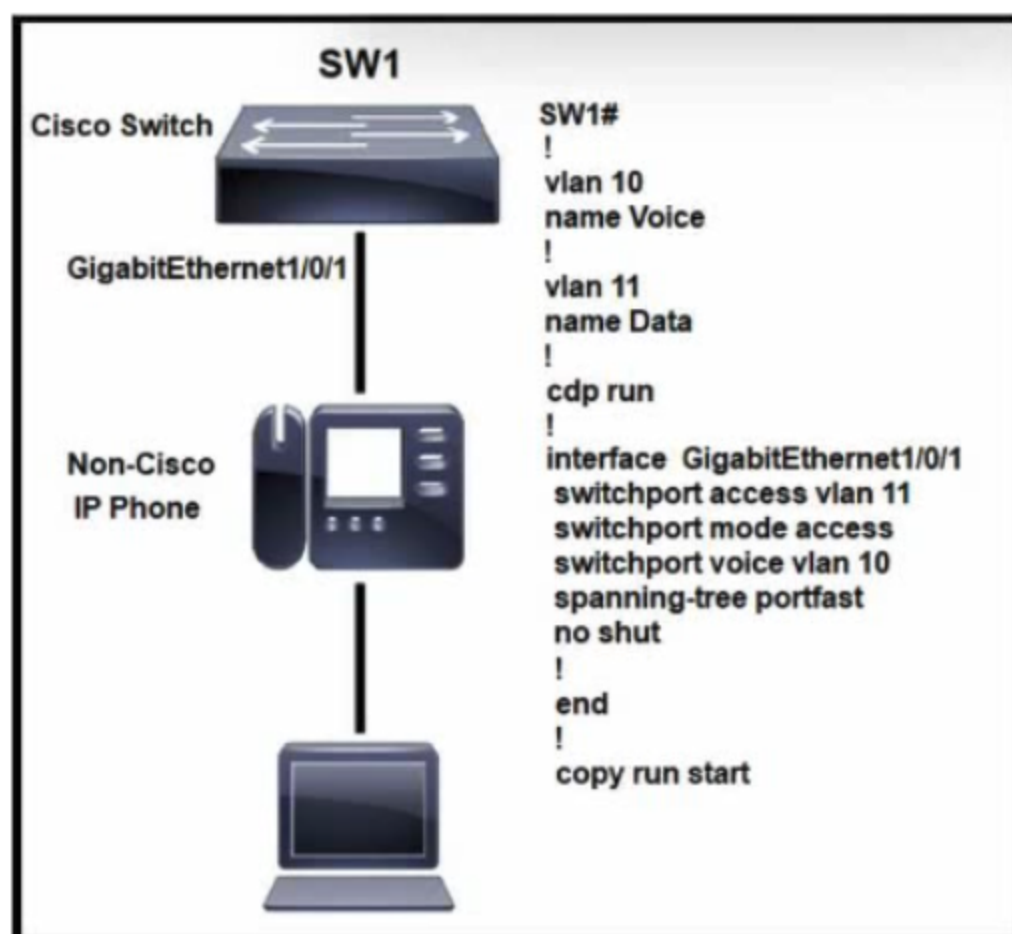
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 843

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A multivendor network exists and the company is implementing VoIP over the network for the first time. Which configuration is needed to implement the neighbor discovery protocol on the interface and allow it to remain off for the remaining interfaces?

- A. SW1(config)#lldp run -  
SW1(config)#interface gigabitethernet1/0/1  
SW1(config-if)#lldp enable
- B. SW1(config)#no cdp run -  
SW1(config)#interface gigabitethernet1/0/1  
SW1(config-if)#lldp transmit -  
SW1(config-if)#lldp receive
- C. SW1(contig)#lldp enable -  
SW1(config)#interface gigabitethernet1/0/1  
SW1(config-if)#lldp run
- D. SW1(config)#no cdp enable -  
SW1(config)#interface gigabitethernet1/0/1  
SW1(config-if)#cdp run

Show Suggested Answer

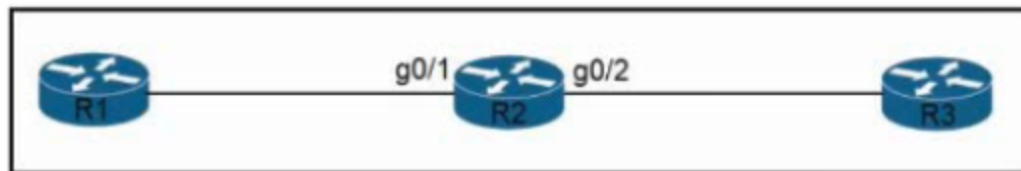


Actual exam question from Cisco's 200-301

Question #: 844

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Routers R1, R2, and R3 use a protocol to identify the neighbors' IP addresses, hardware platforms, and software versions. A network engineer must configure R2 to avoid sharing any neighbor information with R3, and maintain its relationship with R1. What action meets this requirement?

- A. Configure the `no lldp receive` command on `g0/1`.
- B. Configure the `no cdp run` command globally.
- C. Configure the `no cdp enable` command on `g0/2`.
- D. Configure the `no lldp run` command globally.

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 845

Topic #: 1

[\[All 200-301 Questions\]](#)

---

SIP-based Call Admission Control must be configured in the Cisco WLC GUI. SIP call-snooping ports are configured. Which two actions must be completed next? (Choose two.)

- A. Set the QoS level to silver or greater for voice traffic.
- B. Configure two different QoS roles for data and voice traffic.
- C. Enable Media Session Snooping on the WLAN.
- D. Set the QoS level to platinum for voice traffic.
- E. Enable traffic shaping for the LAN interface of the WLC.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 846

Topic #: 1

[\[All 200-301 Questions\]](#)

```
Cat9300-1# show interface g1/0/1 switchport
Name: Gi1/0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 321 (VLAN0321)
Administrative Native VLAN tagging: enabled
Trunking VLANs Enabled: 100,200,300
Pruning VLANs Enabled: 2-1001
```

Refer to the exhibit. A network administrator configures an interface on a new switch so that it connects to interface Gi1/0/1 on switch Cat9300-1. Which configuration must be applied to the new interface?

- A. switchport mode trunk  
switchport trunk native vlan 321  
switchport trunk allowed vlan 100,200,300
- B. switchport mode dynamic desirable  
switchport trunk native vlan 321  
switchport trunk allowed vian 100,200,300
- C. switchport trunk encapsulation dot1q  
switchport trunk native vlan 321  
switchport trunk allowed vlan 100-300
- D. switchport nonegotiate  
switchport access vlan 321  
switchport trunk allowed vlan except 2-1001

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 847

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command enables HTTP access to the Cisco WLC?

- A. config network telnet enable
- B. config network secureweb enable
- C. config certificate generate webadmin
- D. config network webmode enable

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 848

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which port state processes BPDUs, but does not forward packets or update the address database in Rapid PVST+?

- A. blocking
- B. learning
- C. listening
- D. disabled

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 849

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A switch is forwarding a frame out of all interfaces except the interface that received the frame. What is the technical term for this process?

- A. ARP
- B. CDP
- C. flooding
- D. multicast

Show Suggested Answer

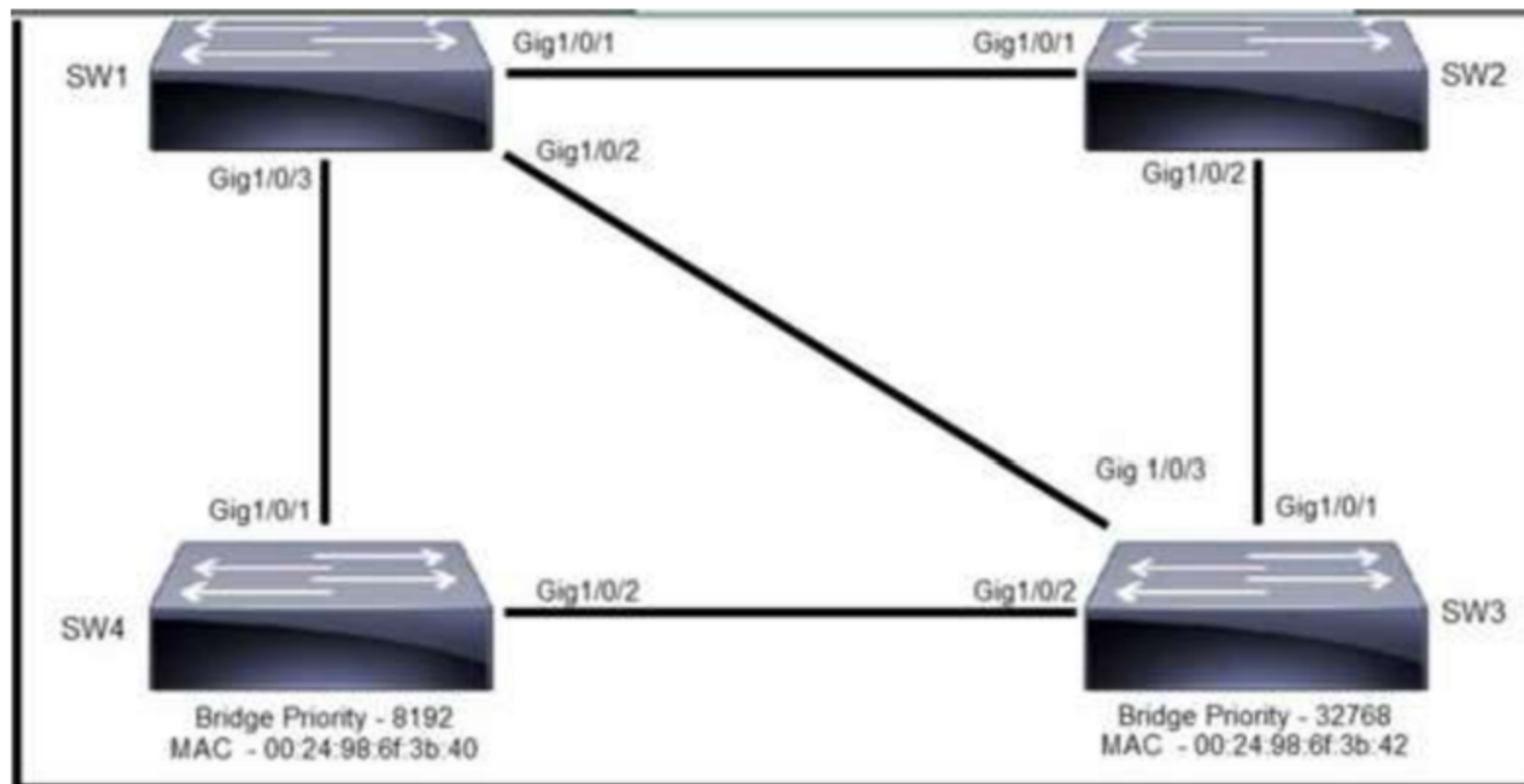


Actual exam question from Cisco's 200-301

Question #: 850

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Rapid PVST+ mode is on the same VLAN on each switch. Which switch becomes the root bridge and why?

- A. SW4, because its priority is highest and its MAC address is lower
- B. SW1, because its priority is the lowest and its MAC address is higher
- C. SW2, because its MAC address is the highest
- D. SW3, because its priority is the highest

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 851

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which EtherChannel mode must be configured when using LAG on a WLC?

- A. on
- B. passive
- C. active
- D. auto

[Show Suggested Answer](#)





Actual exam question from Cisco's 200-301

Question #: 852

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP

Drag and drop the VLAN port modes from the left onto the descriptions on the right.

dynamic access

allows the port to belong to one VLAN when manually configured

private

allows the port to be assigned automatically to one VLAN

static access

allows the port to belong to one or more VLANs

trunk

allows the port to support a single VLAN across a service-provider network

tunnel

allows the port to communicate with others within the same community VLAN

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 853

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which switch concept is used to create separate broadcast domains?

- A. STP
- B. VTP
- C. VLAN
- D. CSMA/CD

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 854

Topic #: 1

[\[All 200-301 Questions\]](#)

---

How must a switch interface be configured when an AP is in FlexConnect mode?

- A. access port
- B. EtherChannel
- C. PoE port
- D. trunk port

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 855

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two features of PortFast? (Choose two.)

- A. Convergence is fast after a link failure.
- B. STP loops are mitigated for uplinks to other switches.
- C. Ports transition directly from the blocking state to the forwarding state.
- D. Ports operate normally without receiving BPDUs.
- E. Ports that connect to the backbone automatically detect indirect link failures.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 856

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the root port in STP?

- A. It is the port with the highest priority toward the root bridge.
- B. It is the port on the root switch that leads to the designated port on another switch.
- C. It is the port that is elected only when the root bridge has precisely one port on a single LAN segment.
- D. It is the port on a switch with the lowest cost to reach the root bridge.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 857

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When a switch receives a frame from an unknown source MAC address, which action does the switch take with the frame?

- A. It sends the frame to ports within the CAM table identified with an unknown source MAC address.
- B. It floods the frame out all interfaces, including the interface it was received on.
- C. It associates the source MAC address with the LAN port on which it was received and saves it to the MAC address table.
- D. It attempts to send the frame back to the source to ensure that the source MAC address is still available for transmissions.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 858

Topic #: 1

[\[All 200-301 Questions\]](#)

---

When the LAG configuration is updated on a Cisco WLC, which additional task must be performed when changes are complete?

- A. Reboot the WLC.
- B. Flush all MAC addresses from the WLC.
- C. Re-enable the WLC interfaces.
- D. Re-associate the WLC with the access point.

Show Suggested Answer

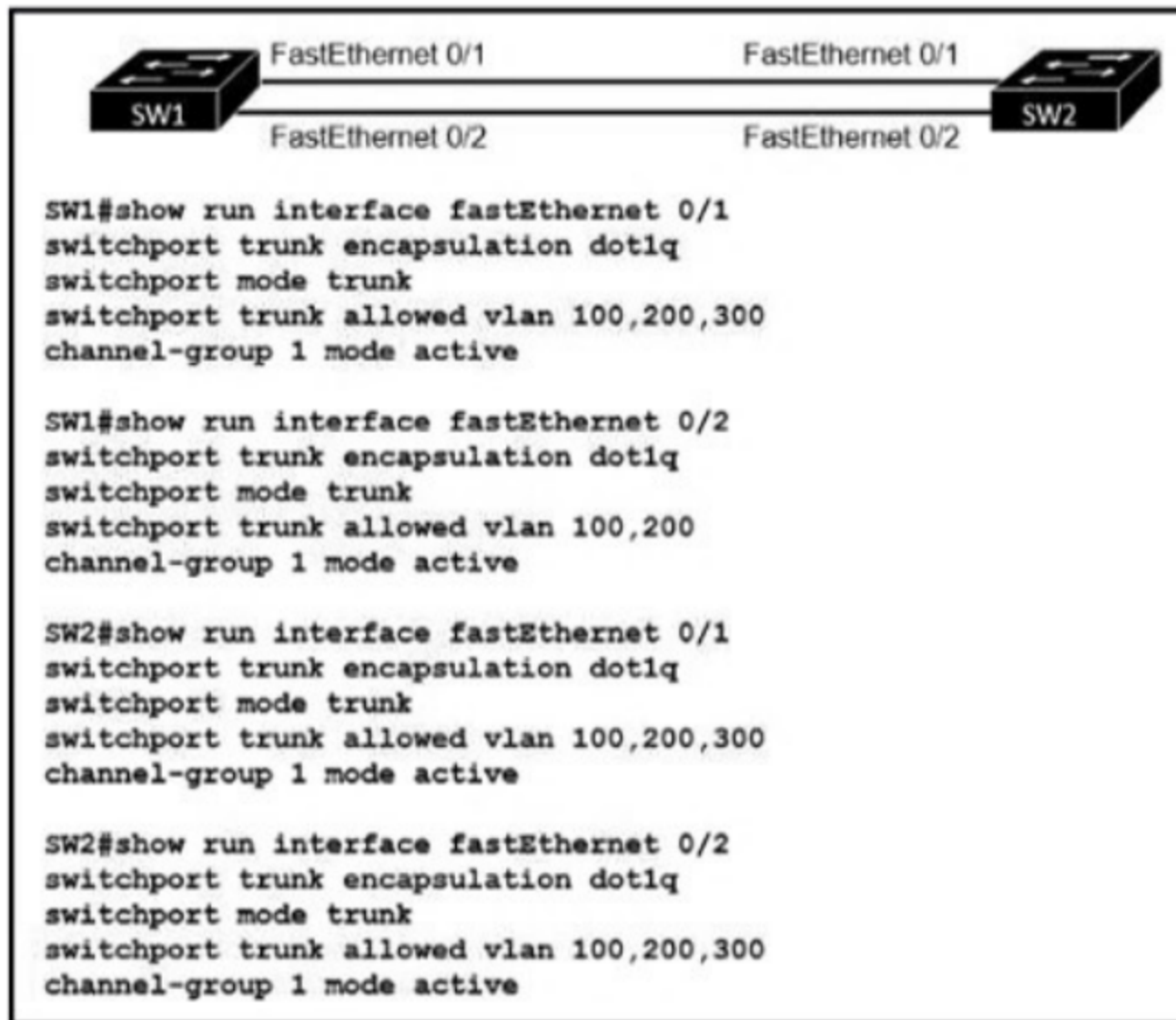


Actual exam question from Cisco's 200-301

Question #: 859

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An engineer is building a new Layer 2 LACP EtherChannel between SW1 and SW2, and they executed the given show commands to verify the work. Which additional task must be performed so that the switches successfully bundle the second member in the LACP port-channel?

- A. Configure the switchport trunk allowed vlan 300 command on SW1 port-channel 1.
- B. Configure the switchport trunk allowed vlan add 300 command on interface Fa0/2 on SW2.
- C. Configure the switchport trunk allowed vlan add 300 command on SW1 port-channel 1.
- D. Configure the switchport trunk allowed vlan 300 command on interface Fa0/2 on SW1.

Show Suggested Answer

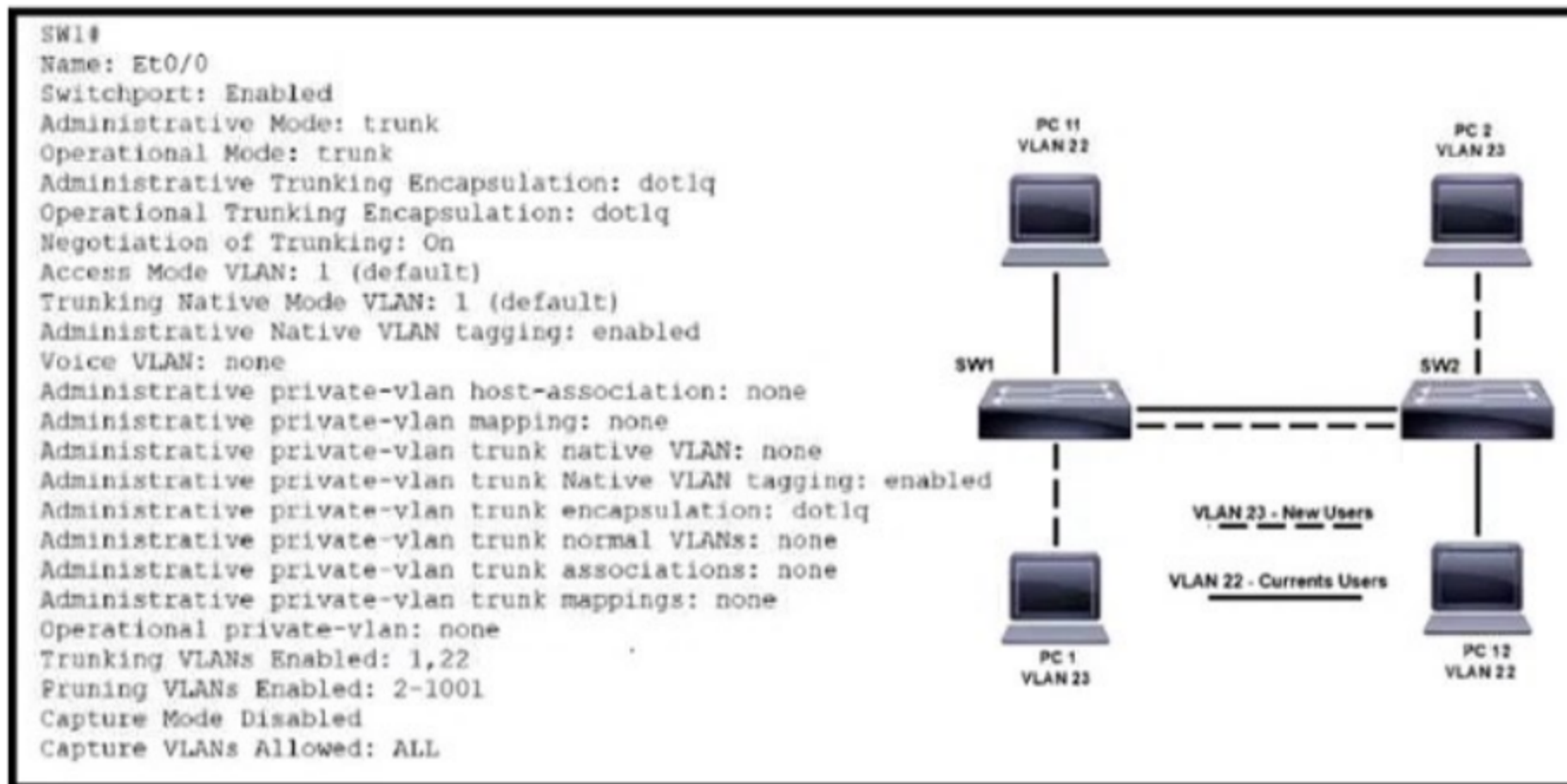


Actual exam question from Cisco's 200-301

Question #: 860

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. VLAN 23 is being implemented between SW1 and SW2. The command show interface ethernet0/0 switchport has been issued on SW1. Ethernet0/0 on SW1 is the uplink to SW2. Which command when entered on the uplink interface allows PC 1 and PC 2 to communicate without impact to the communication between PC 11 and PC 12?

- A. switchport trunk allowed vlan 2-1001
- B. switchport trunk allowed vlan 23
- C. switchport trunk allowed vian add 23
- D. switchport trunk allowed vian 22-23

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 861

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer starts to implement a new wireless LAN by configuring the authentication server and creating the dynamic interface. What must be performed next to complete the basic configuration?

- A. Create the new WLAN and bind the dynamic interface to it.
- B. Configure high availability and redundancy for the access points.
- C. Enable Telnet and RADIUS access on the management interface.
- D. Install the management interface and add the management IP.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 862

Topic #: 1

[\[All 200-301 Questions\]](#)

General	Security	OoS	Policy-Mapping	Advanced
<b>Off Channel Scanning Defer</b>				
Scan Defer Priority	0 1 2 3 4 5 6 7			
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>			
Scan Defer Time(msecs)	<input type="text" value="100"/>			
<b>FlexConnect</b>				
FlexConnect Local Switching <sup>2</sup>	<input type="checkbox"/> Enabled			
FlexConnect Local Auth <sup>12</sup>	<input type="checkbox"/> Enabled			
Learn Client IP Address <sup>5</sup>	<input checked="" type="checkbox"/> Enabled			
Vlan based Central Switching <sup>13</sup>	<input type="checkbox"/> Enabled			
Central DHCP Processing	<input type="checkbox"/> Enabled			
Override DNS	<input type="checkbox"/> Enabled			
NAT-PAT	<input type="checkbox"/> Enabled			
Central Assoc	<input type="checkbox"/> Enabled			
<b>Lync</b>				
Lync Server	<input type="text" value="Disabled"/>			
<b>HTTP Profiling</b>				
<input type="checkbox"/>				
<b>Local Client Profiling</b>				
<b>DHCP Profiling</b>				
<input type="checkbox"/>				
<b>HTTP Profiling</b>				
<input type="checkbox"/>				
<b>PMIP</b>				
<b>PMIP Mobility Type</b>				
<input type="checkbox"/>				
<b>PMIP NAI Type</b>				
<input type="text" value="Hexadecimal"/>				
<b>PMIP Profile</b>				
<input type="text" value="None"/>				
<b>PMIP Realm</b>				
<input type="text"/>				
<b>Universal AP Admin Support</b>				
<b>Universal AP admin</b>				
<input type="checkbox"/>				
<b>11v BSS Transition Support</b>				
<b>BSS Transition</b>				
<input type="checkbox"/>				
<b>Disassociation Imminent</b>				
<input checked="" type="checkbox"/>				
<b>Disassociation Timer (0 to 3000 TBTT)</b>				
<input type="text" value="200"/>				
<b>Optimized Roaming Disassociation Timer (0 to 40 TBTT)</b>				
<input type="text" value="40"/>				

Refer to the exhibit. An architect is managing a wireless network with APs from several branch offices connecting to the WLC in the data center. There is a new requirement for a single WLAN to process the client data traffic without sending it to the WLC. Which action must be taken to complete the request?

- A. Enable local HTTP profiling.
- B. Enable FlexConnect Local Switching.
- C. Enable local DHCP Profiling.
- D. Enable Disassociation Imminent.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 863

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What must be considered for a locally switched FlexConnect AP if the VLANs that are used by the AP and client access are different?

- A. The APs must be connected to the switch with multiple links in LAG mode.
- B. The native VLAN must match the management VLAN of the AP.
- C. The switch port mode must be set to trunk.
- D. IEEE 802.1Q trunking must be disabled on the switch port.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 864

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which command configures the Cisco WLC to prevent a serial session with the WLC CLI from being automatically logged out?

- A. config sessions maxsessions 0
- B. config serial timeout 9600
- C. config serial timeout 0
- D. config sessions timeout 0

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 865

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A Cisco engineer at a new branch office is configuring a wireless network with access points that connect to a controller that is based at corporate headquarters. Wireless client traffic must terminate at the branch office and access-point survivability is required in the event of a WAN outage. Which access point mode must be selected?

- A. Lightweight with local switching disabled
- B. FlexConnect with local switching enabled
- C. OfficeExtend with high availability disabled
- D. Local with AP fallback enabled

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 866

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is an advantage of using auto mode versus static mode for power allocation when an access point is connected to a PoE switch port?

- A. Power policing is enabled at the same time.
- B. The default level is used for the access point.
- C. All four pairs of the cable are used.
- D. It detects the device is a powered device.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 867

Topic #: 1

[\[All 200-301 Questions\]](#)

The screenshot shows the Cisco configuration interface for Local Net Users. The top navigation bar includes: MONITOR, WLANs, CONTROLLER, WIRELESS, SECURITY (highlighted), MANAGEMENT, and COMMANDS. The left sidebar shows the Security menu with AAA expanded, and Local Net Users selected. The main configuration area is titled 'Local Net Users > New' and contains the following fields:

User Name	NA-User
Password	.....
Confirm Password	.....
Guest User	<input checked="" type="checkbox"/>
Lifetime (seconds)	86400
Guest User Role	<input type="checkbox"/>
WLAN Profile	Any WLAN ▼
Description	For NA WLAN Auth

Refer to the exhibit. Wireless LAN access must be set up to force all clients from the NA WLAN to authenticate against the local database. The WLAN is configured for local EAP authentication. The time that users access the network must not be limited. Which action completes this configuration?

- A. Check the Guest User Role check box.
- B. Uncheck the Guest User check box.
- C. Set the Lifetime (seconds) value to 0.
- D. Clear the Lifetime (seconds) value.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 868

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP

Drag and drop the wireless architecture benefits from the left onto the architecture types on the right.

Appropriate for a small-business environment.

Work is divided between the access point and the controller.

The access points transmit beacon frames.

Supports per device configuration and management.

Uses the CAPWAP tunneling protocol.

Split-MAC

Autonomous

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 869

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a specification for SSIDs?

- A. They must include one number and one letter.
- B. They are a Cisco proprietary security feature.
- C. They are case sensitive.
- D. They define the VLAN on a switch.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 870

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a reason to configure a trunk port that connects to a WLC distribution port?

- A. Provide redundancy if there is a link failure for out-of-band management.
- B. Allow multiple VLANs to be used in the data path.
- C. Permit multiple VLANs to provide out-of-band management.
- D. Eliminate redundancy with a link failure in the data path.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 871

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP

-

Drag and drop the WLAN components from the left onto the correct descriptions on the right.

### Answer Area

access point

virtual interface

dynamic interface

service port

wireless LAN controller

manages access points

provides Wi-Fi devices with a connection to a wired network

used for out-of-band management

used for guest authentication

applied to the WLAN for wireless client communication

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 872

Topic #: 1

[\[All 200-301 Questions\]](#)

The screenshot shows the Cisco WLC configuration interface for a WLAN profile named 'TEST\_PROFILE'. The interface is divided into several tabs: General, Security, QoS, Policy-Mapping, and Advanced. The Security tab is currently selected. The configuration details are as follows:

Field	Value
Profile Name	TEST_PROFILE
Type	WLAN
SSID	CISCO_TEST
Status	<input type="checkbox"/> Enabled
Security Policies	[WPA2][Auth(802.1X)] (Modifications done under security tab will appear after applying the changes.)
Radio Policy	All
Interface/Interface Group(G)	management
Multicast Vlan Feature	<input type="checkbox"/> Enabled
Broadcast SSID	<input checked="" type="checkbox"/> Enabled
NAS-ID	Cisco_42:0e:44

Refer to the exhibit. A Cisco WLC administrator is creating a new wireless network with enhanced SSID security. The new network must operate at 2.4 Ghz with 54 Mbps of throughput. Which set of tasks must the administrator perform to complete the configuration?

- A. Uncheck the Broadcast SSID check box and set the Radio Policy to 802.11a/g only.
- B. Check the Broadcast SSID check box and set the Radio Policy to 802.11g only.
- C. Uncheck the Broadcast SSID check box and set the Radio Policy to 802.11g only.
- D. Check the Broadcast SSID check box and set the Radio Policy to 802.11a only.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 873

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which switching feature removes unused MAC addresses from the MAC address table, which allows new MAC addresses to be added?

- A. MAC address aging
- B. MAC move
- C. MAC address auto purge
- D. dynamic MAC address learning

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 874

Topic #: 1

[\[All 200-301 Questions\]](#)

WLANs > Edit 'CCNA'

**General** **Security** **QoS** **Policy-Mapping** **Advanced**

Allow AAA Override  Enabled

Coverage Hole Detection  Enabled

Enable Session Timeout    
Session Timeout (secs)

Aironet IE  Enabled

Diagnostic Channel [18](#)  Enabled

Override Interface ACL IPv4  IPv6

Layer2 Acl

P2P Blocking Action

Client Exclusion [2](#)  Enabled   
Timeout Value (secs)

Maximum Allowed Clients [8](#)

Static IP Tunneling [11](#)  Enabled

Wi-Fi Direct Clients Policy

Maximum Allowed Clients Per AP Radio

Clear HotSpot Configuration  Enabled

Client user idle timeout(15-100000)

Client user idle threshold (0-10000000)  Bytes

**DHCP**

DHCP Server  Override

DHCP Addr. Assignment  Required

**OEAP**

Split Tunnel  Enabled

**Management Frame Protection (MFP)**

MFP Client Protection [4](#)

**DTIM Period (in beacon intervals)**

802.11a/n (1 - 255)

802.11b/g/n (1 - 255)

**NAC**

NAC State

**Load Balancing and Band Select**

Client Load Balancing

Refer to the exhibit. A network engineer configures the CCNA WLAN so that clients must reauthenticate hourly and to limit the number of simultaneous connections to the WLAN to 10. Which two actions complete this configuration? (Choose two.)

- A. Enable the Wi-Fi Direct Clients Policy option
- B. Enable the Enable Session Timeout option and set the value to 3600.
- C. Enable the Client Exclusion option and set the value to 3600.
- D. Set the Maximum Allowed Clients value to 10.
- E. Set the Maximum Allowed Clients Per AP Radio value to 10.

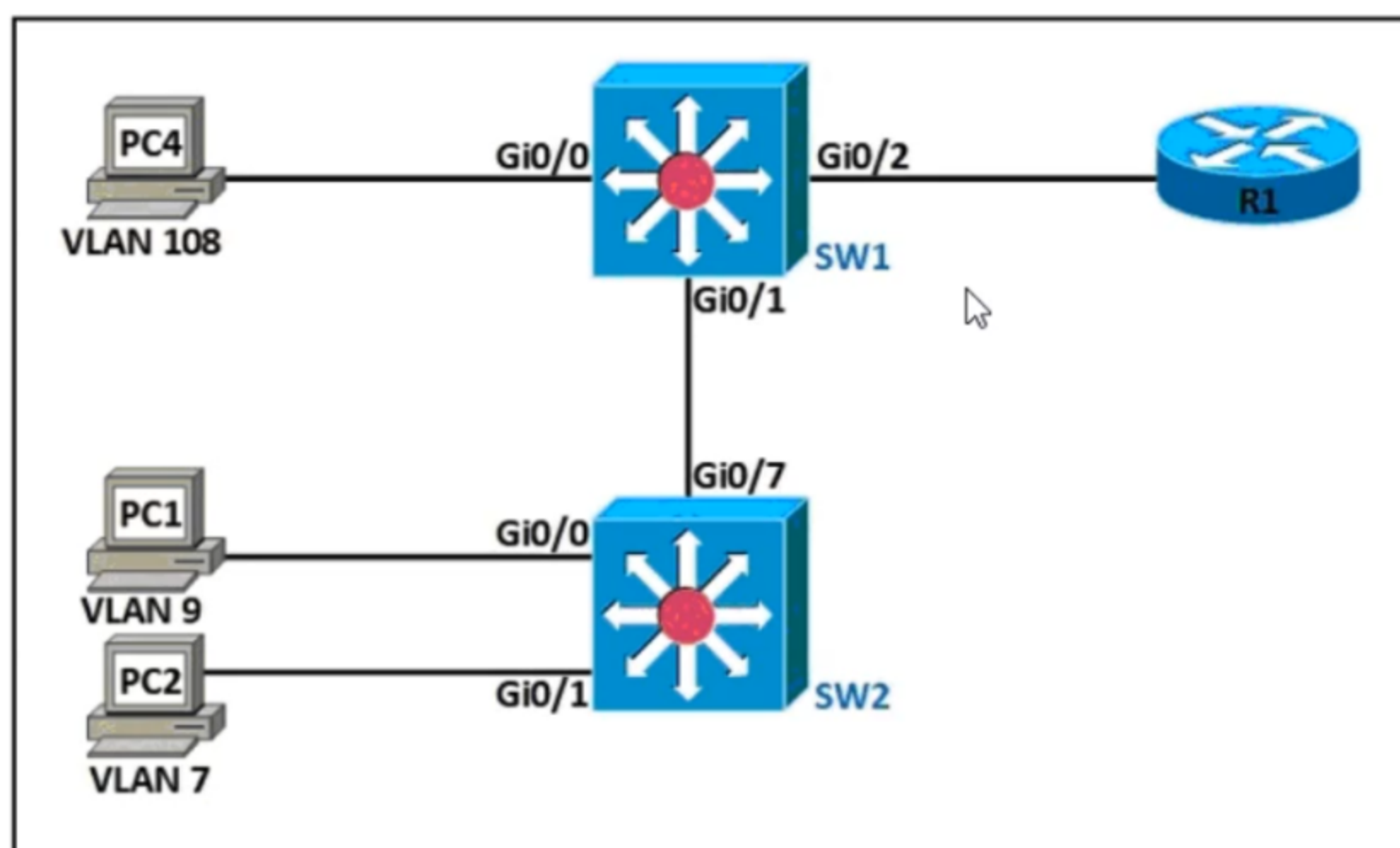
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 875

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The SW1 and SW2 Gi0/0 ports have been preconfigured. An engineer is given these requirements:

- Allow all PCs to communicate with each other at Layer 3.
- Configure untagged traffic to use VLAN 5.
- Disable VLAN 1 from being used.

Which configuration set meets these requirements?

A. SW1#

```
interface Gi0/1
switchport mode trunk
switchport trunk allowed vlan 5,7,9,108
switchport trunk native vlan 5
```

```
interface Gi0/2
switchport mode trunk
switchport trunk allowed vlan 5,7,9,108
```

SW2#

```
interface Gi0/1
switchport mode access
switchport access vlan 7
```

```
interface Gi0/7
switchport mode trunk
switchport trunk allowed vlan 7,9,108
```

B. SW1#

```
interface Gi0/1
switchport mode trunk
switchport trunk allowed vlan 5,7,9,108
switchport trunk native vlan 5
```

```
interface Gi0/2
switchport mode access
switchport trunk allowed vlan 7,9,108
```

SW2#

```
interface Gi0/1
switchport mode access
no switchport access vlan 1
switchport access vlan 7
```

```
interface Gi0/7
switchport mode trunk
switchport trunk allowed vlan 7,9,108
switchport trunk native vlan 5
```

C. SW#1 -

```
interface Gi0/1
switchport mode trunk
switchport trunk allowed vlan 5,7,9,108
switchport trunk native vlan 5
```

```
interface Gi0/2
switchport mode trunk
switchport trunk allowed vlan 5,7,9,108
```

SW2#

```
interface Gi0/1
switchport mode access
switchport access vlan 7
```

```
interface Gi0/7
switchport mode trunk
switchport trunk allowed vlan 5,7,9,108
switchport trunk native vlan 5
```

D. SW1#

```
interface Gi0/1
switchport mode trunk
switchport trunk allowed vian 5,7,9,108
```

```
interface Gi0/2
switchport mode trunk
switchport trunk allowed vlan 7,9,108
```

SW2#

```
interface Gi0/1
switchport mode trunk
switchport trunk allowed vlan 7
```

```
interface Gi0/7
switchport mode trunk
switchport trunk allowed vlan 5,7,9,108
```

Show Suggested Answer



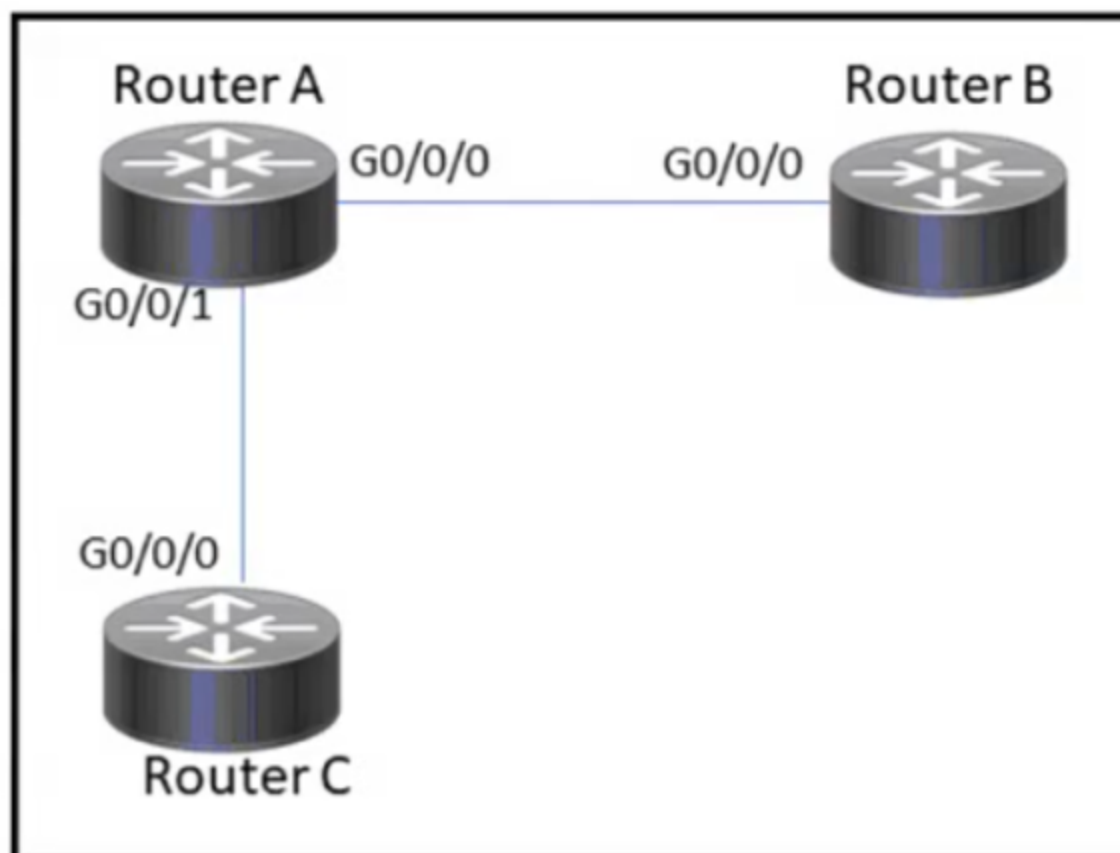


Actual exam question from Cisco's 200-301

Question #: 876

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. How must router A be configured so that it only sends Cisco Discovery Protocol information to router C?

A. #config t

```
Router A (config)#no cdp run -  
Router A (config)#interface gi0/0/1
```

```
Router A (config-if)#cdp enable -
```

B. #config t

```
Router A (config)#cdp run -  
Router A (config)#interface gi0/0/0  
Router A (config-if)#no cdp enable
```

C.#config t -

```
Router A (config)#cdp run -  
Router A (config)#interface gi0/0/1
```

```
Router A (config-if)#cdp enable -
```

D. #config t

```
Router A (config)#cdp run -  
Router A (config)#interface gi0/0/0  
Router A (config-if)#cdp enable
```

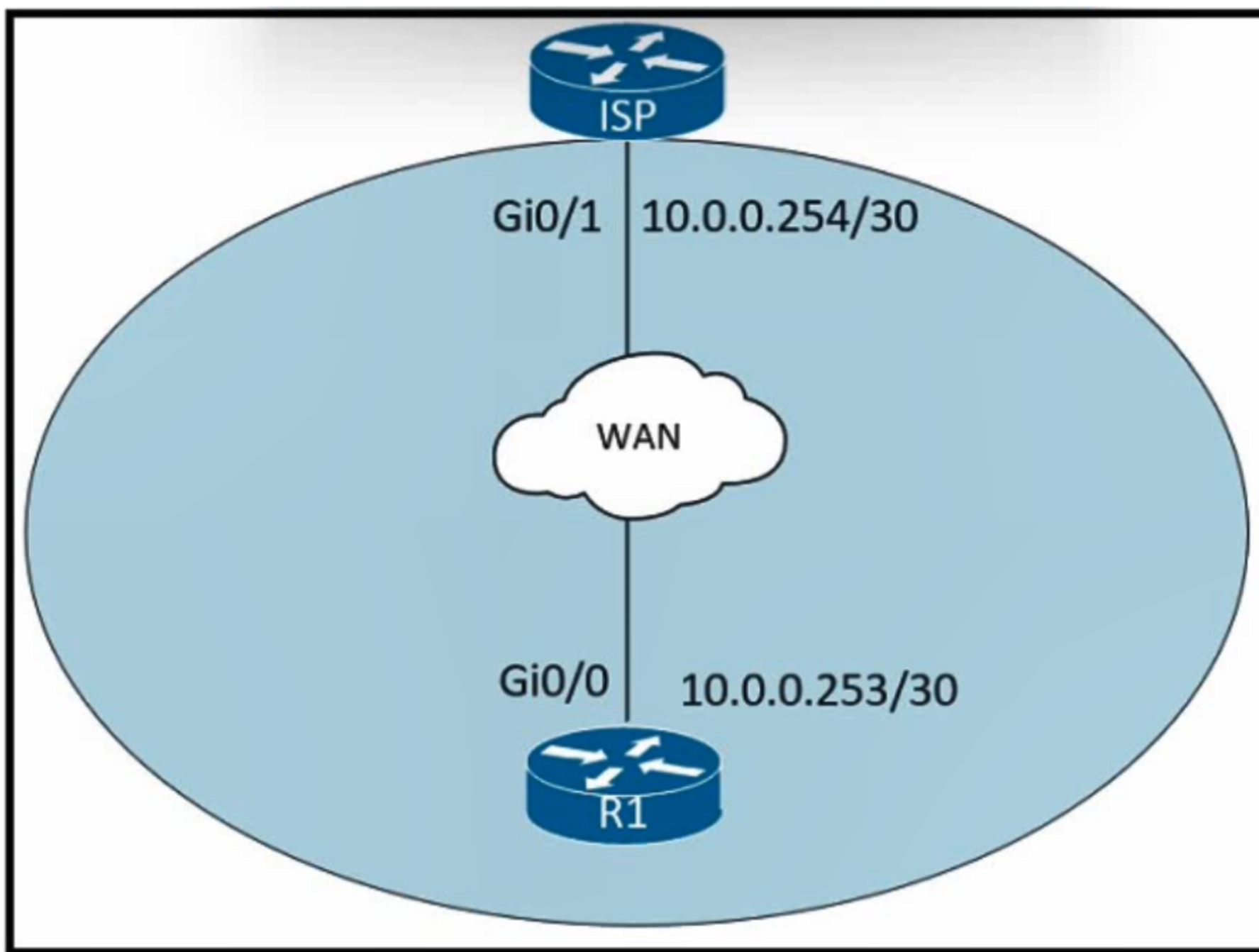
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 877

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. An administrator must turn off the Cisco Discovery Protocol on the port configured with address last usable address in the 10.0.0.0/30 subnet. Which command set meets the requirement?

- A. interface gi0/1  
no cdp enable
- B. interface gi0/0  
no cdp run
- C. interface gi0/0  
no cdp advertise-v2
- D. interface gi0/1  
clear cdp table

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 878

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which WLC port connects to a switch to pass normal access-point traffic?

- A. redundancy
- B. service
- C. console
- D. distribution system

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 879

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which default condition must be considered when an encrypted mobility tunnel is used between two Cisco WLCs?

- A. The tunnel uses the IPsec protocol for encapsulation.
- B. Control and data traffic encryption are enabled.
- C. The tunnel uses the EoIP protocol to transmit data traffic.
- D. TCP port 443 and UDP 21 are used.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 880

Topic #: 1

[\[All 200-301 Questions\]](#)

The screenshot shows the Cisco configuration interface for the Policy-Mapping tab. The configuration is divided into several sections:

- General:** Includes settings for Allow AAA Override, Coverage Hole Detection, Enable Session Timeout, Aironet IE (checked), Diagnostic Channel, Override Interface ACL (IPv4: None, IPv6: None), Layer2 Ad (None), URL ACL (None), P2P Blocking Action (Disabled), Client Exclusion (checked, 180 secs), Maximum Allowed Clients (0), Static IP Tunneling, Wi-Fi Direct Clients Policy (Disabled), and Maximum Allowed Clients Per AP Radio (200).
- DHCP:** Includes DHCP Server (Override), DHCP Addr. Assignment (Required), and Management Frame Protection (MFP).
- MFP Client Protection:** Set to Optional.
- DTIM Period (In beacon intervals):** 802.11a/n (1 - 255) is 1, and 802.11b/g/n (1 - 255) is 1.
- NAC:** NAC State is set to None.
- Load Balancing and Band Select:** Client Load Balancing and Client Band Select are both unchecked.

Refer to the exhibit. After a recent internal security audit, the network administrator decided to block all P2P-capable devices from the selected SSID. Which configuration setting must the administrator apply?

- A. Set the Wi-Fi Direct Client Policy to Not-Allow.
- B. Select a correctly configured Layer 2 ACL.
- C. Set the MFP Client Protection to Required.
- D. Set the P2P Block Action to Drop.

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 881

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is the primary purpose of a console port on a Cisco WLC?

- A. in-band management via an asynchronous transport
- B. in-band management via an IP transport
- C. out-of-band management via an asynchronous transport
- D. out-of-band management via an IP transport

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 882

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which port type does a lightweight AP use to connect to the wired network when it is configured in local mode?

- A. EtherChannel
- B. access
- C. LAG
- D. trunk

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 883

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which step immediately follows receipt of the EAP success message when session resumption is disabled for an EAP-TLS connection?

- A. PMKID caching
- B. four-way handshake
- C. 802.1X authentication
- D. EAPOL-key frame

Show Suggested Answer



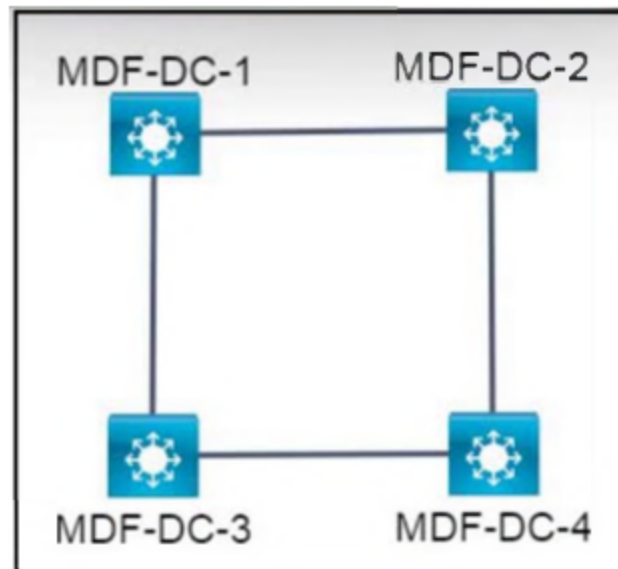


Actual exam question from Cisco's 200-301

Question #: 884

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. All interfaces are in the same VLAN. All switches are configured with the default STP priorities. During the STP elections, which switch becomes the root bridge?

- A. MDF-DC-1: 08:E0:43:42:70:13
- B. MDF-DC-2: 08:0E:18:22:05:97
- C. MDF-DC-4: 08:E0:19:A1:B3:19
- D. MDF-DC-3: 08:0E:18:1A:3C:9D

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 885

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What are two port types used by a Cisco WLC for out-of-band management? (Choose two.)

- A. service
- B. console
- C. management
- D. distribution system
- E. redundant

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 886

Topic #: 1

[\[All 200-301 Questions\]](#)

---

What is a reason to implement LAG on a Cisco WLC?

- A. Allow for stateful failover between WLCs.
- B. Increase security by encrypting management frames.
- C. Increase the available throughput on the link.
- D. Enable the connected switch ports to use different Layer 2 configurations.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 887

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A wireless access point is needed and must meet these requirements:

- “zero-touch” deployed and managed by a WLC
- process only real-time MAC functionality
- used in a split-MAC architecture

Which access point type must be used?

- A. mesh
- B. autonomous
- C. lightweight
- D. cloud-based

Show Suggested Answer





Actual exam question from Cisco's 200-301

Question #: 888

Topic #: 1

[\[All 200-301 Questions\]](#)

---

Which interface is used for out-of-band management on a WLC?

- A. management
- B. virtual
- C. dynamic
- D. service port

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 889

Topic #: 1

[\[All 200-301 Questions\]](#)

```
SW2
```

```
vtp domain cisco
```

```
vtp mode transparent
```

```
vtp password ciscotest
```

```
interface fastethernet0/1
```

```
description connection to sw1
```

```
switchport mode trunk
```

```
switchport trunk encapsulation dot1q
```

Refer to the exhibit. How does SW2 interact with other switches in this VTP domain?

- A. It transmits and processes VTP updates from any VTP clients on the network on its trunk ports.
- B. It processes VTP updates from any VTP clients on the network on its access ports.
- C. It receives updates from all VTP servers and forwards all locally configured VLANs out all trunk ports.
- D. It forwards only the VTP advertisements that it receives on its trunk ports.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 890

Topic #: 1

[\[All 200-301 Questions\]](#)

---

A network engineer is upgrading a small data center to host several new applications, including server backups that are expected to account for up to 90% of the bandwidth during peak times. The data center connects to the MPLS network provider via a primary circuit and a secondary circuit. How does the engineer inexpensively update the data center to avoid saturation of the primary circuit by traffic associated with the backups?

- A. Assign traffic from the backup servers to a dedicated switch.
- B. Place the backup servers in a dedicated VLAN.
- C. Advertise a more specific route for the backup traffic via the secondary circuit.
- D. Configure a dedicated circuit for the backup traffic.

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 891

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1
interface GigabitEthernet0/1
  ip address 192.168.12.1 255.255.255.128
  no shutdown
router ospf 1
  network 192.168.12.1 0.0.0.0 area 1

R2
interface GigabitEthernet0/1
  ip address 192.168.12.2 255.255.255.128
  no shutdown
```

Refer to the exhibit. A network engineer started to configure two directly-connected routers as shown. Which command sequence must the engineer configure on R2 so that the two routers become OSPF neighbors?

- A. interface GigabitEthernet0/1  
ip ospf 1 area 1
- B. router ospf 1  
network 192.168.12.1 0.0.0.0 area 1
- C. interface GigabitEthernet0/1  
ip ospf 1 area 0
- D. router ospf 1  
network 192.168.12.0 0.0.0.127 area 0

Show Suggested Answer



Actual exam question from Cisco's 200-301

Question #: 892

Topic #: 1

[\[All 200-301 Questions\]](#)

```
R1# show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate
       default
       U - per-user static route, o - ODR
Gateway of last resort is not set
C    10.0.0.0/8 is directly connected, Loopback0
     10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
O    10.0.1.3/32 [110/100] via 10.0.1.100, 00:39:08, Serial0
C    10.0.1.0/24 is directly connected, Serial0
O    10.0.1.5/32 [110/5] via 10.0.1.50, 00:39:08, Gigabit Ethernet 0/0
D    10.0.1.4/32 [110/10] via 10.0.1.4, 00:39:08, Gigabit Ethernet 0/0
```

Refer to the exhibit. What does route 10.0.1.3/32 represent in the routing table?

- A. all hosts in the 10.0.1.0 subnet
- B. a single destination address
- C. the source 10.0.1.100
- D. the 10.0.0.0 network

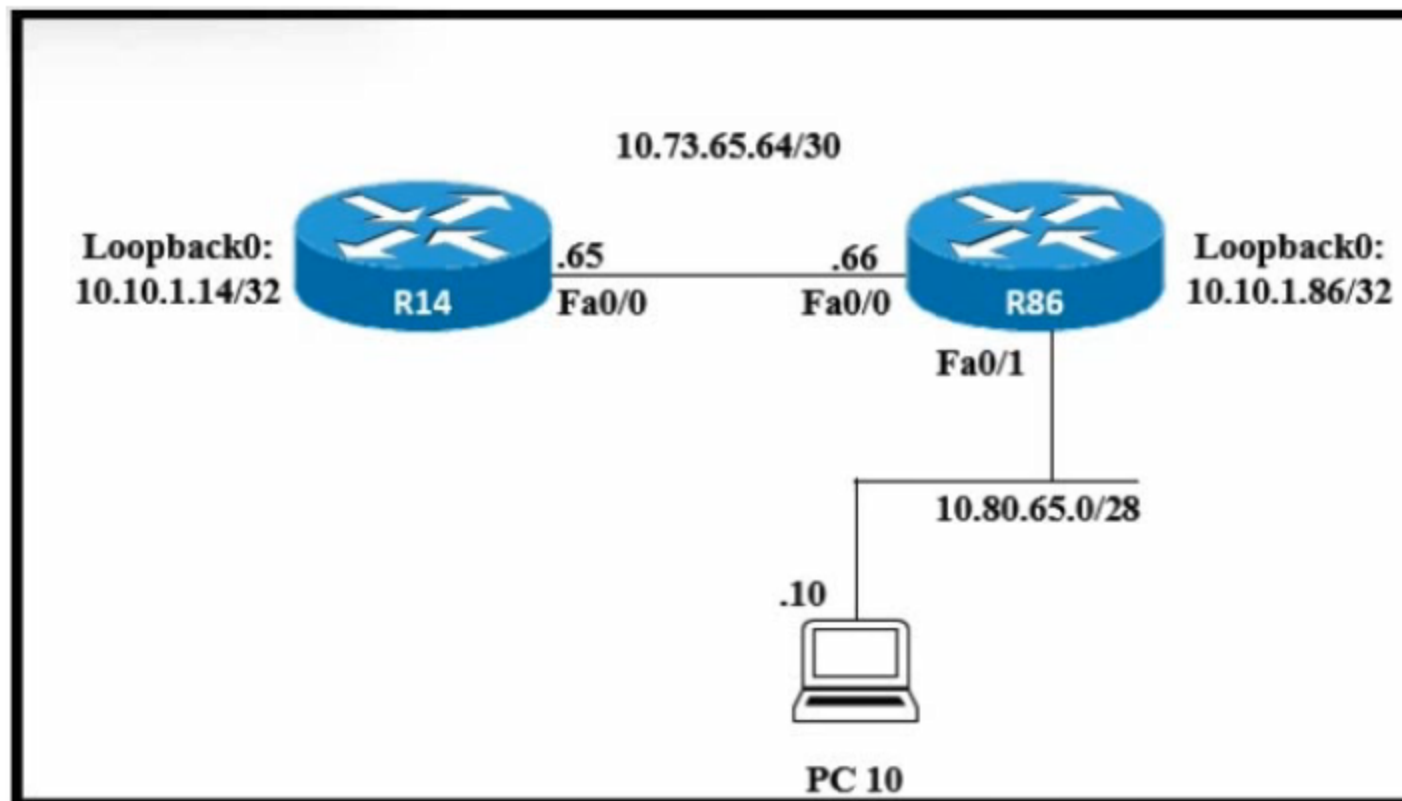
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 893

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Router R14 is in the process of being configured. Which configuration must be used to establish a host route to a PC 10?

- A. `ip route 10.80.65.10 255.255.255.254 10.80.65.1`
- B. `ip route 10.80.65.10 255.255.255.255 10.73.65.66`
- C. `ip route 10.73.65.66 0.0.0.255 10.80.65.10`
- D. `ip route 10.73.65.66 255.0.0.0 10.80.65.10`

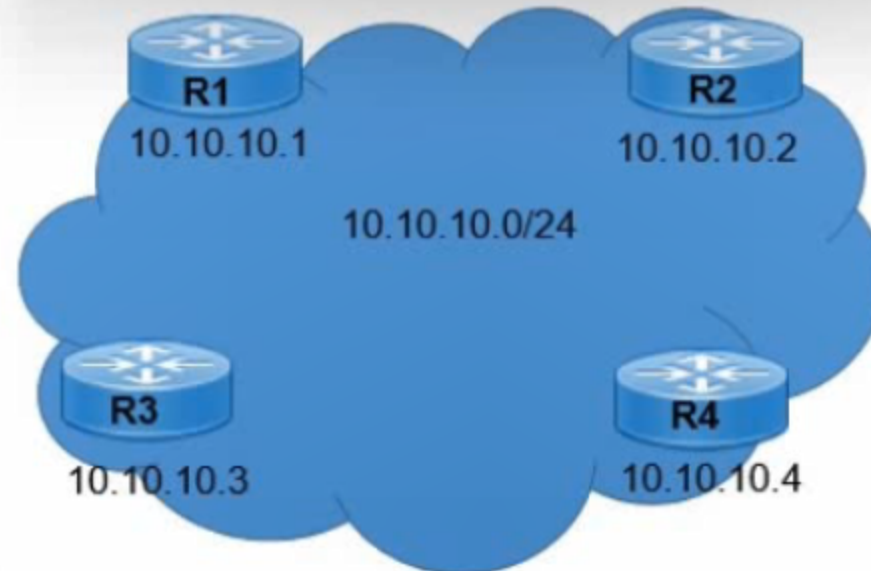
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 894

Topic #: 1

[\[All 200-301 Questions\]](#)



```
R1# show ip route
C    1.0.0.0/8 is directly connected, Loopback0
C    10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
O    10.10.10.3/32 [110/100] via 10.10.10.3, 00:39:08, GigabitEthernet0/3
C    10.10.10.0/24 is directly connected, GigabitEthernet0/0
O    10.10.10.2/32 [110/5] via 10.10.10.2, 00:39:08, GigabitEthernet0/2
R    10.10.10.4/32 [120/10] via 10.10.10.4, 00:39:08, GigabitEthernet0/4
```

Refer to the exhibit. Which next-hop IP address has the least desirable metric when sourced from R1?

- A. 10.10.10.4
- B. 10.10.10.5
- C. 10.10.10.3
- D. 10.10.10.2

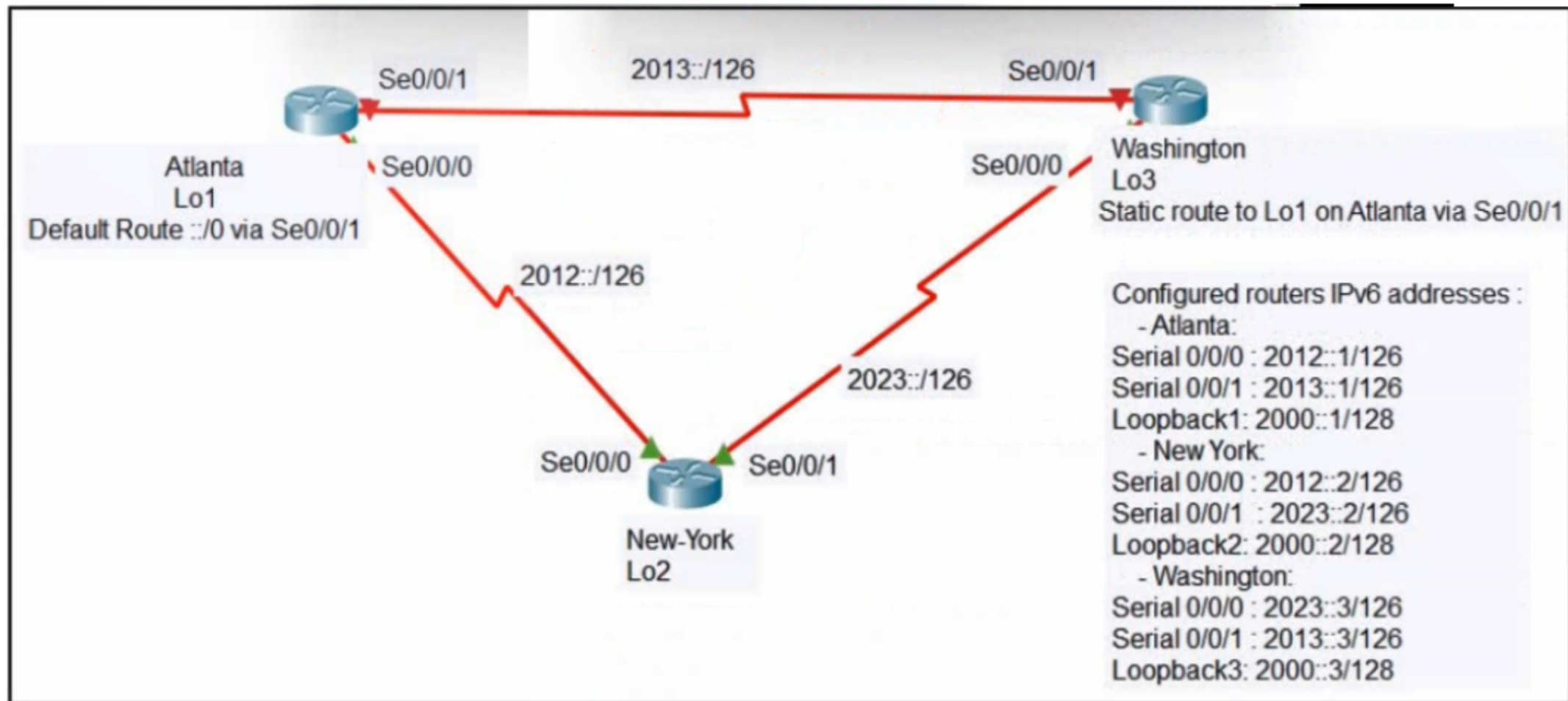
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 895

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The New York router must be configured so that traffic to 2000::1 is sent primarily via the Atlanta site, with a secondary path via Washington that has an administrative distance of 2. Which two commands must be configured on the New York router? (Choose two.)

- A. ipv6 route 2000::1/128 2012::1
- B. ipv6 route 2000::1/128 2012::1 5
- C. ipv6 route 2000::1/128 2012::2
- D. ipv6 route 2000::1/128 2023::2 5
- E. ipv6 route 2000::1/128 2023::3 2

Show Suggested Answer

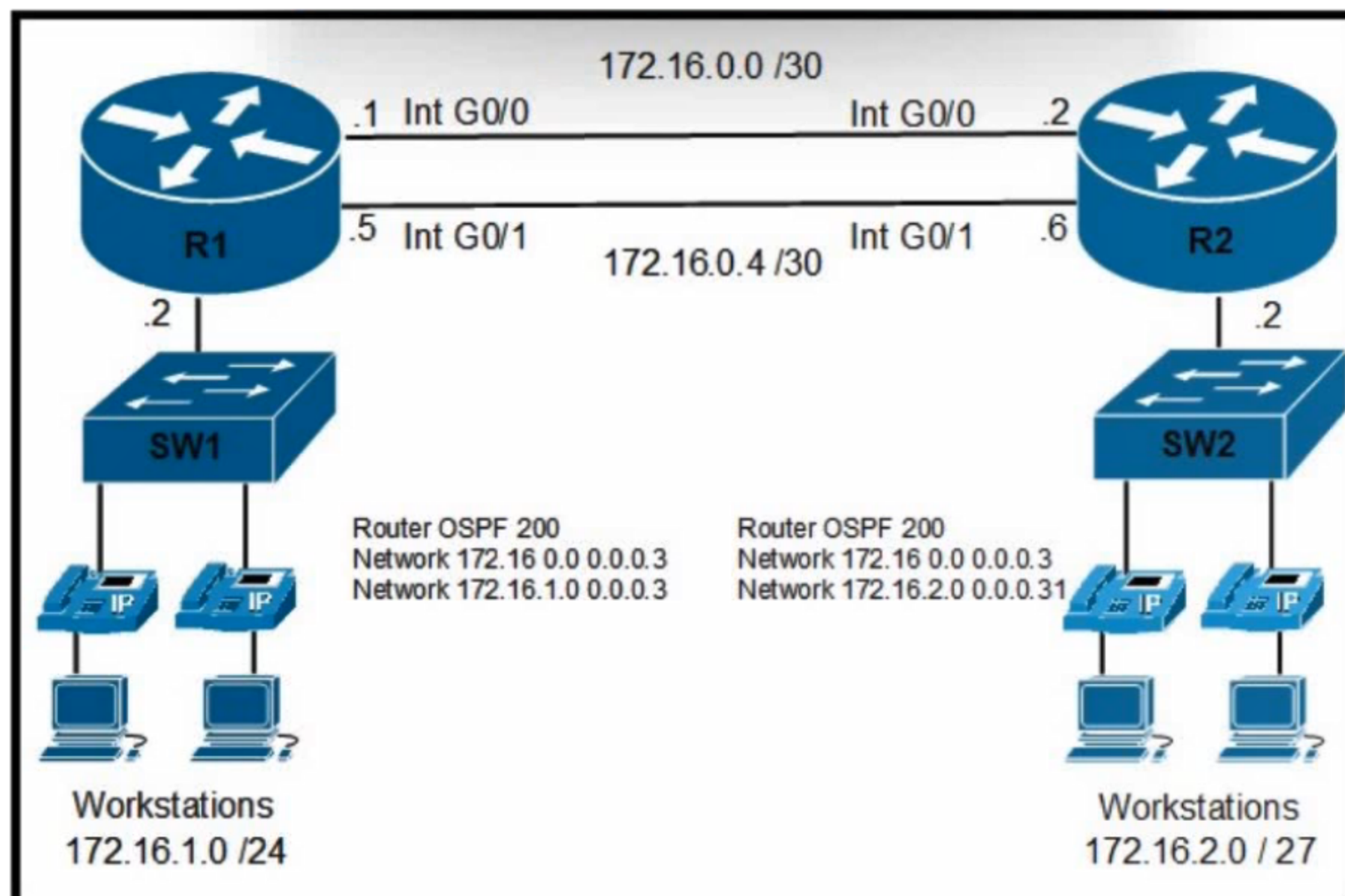


Actual exam question from Cisco's 200-301

Question #: 896

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. The primary route across Gi0/0 is configured on both routers. A secondary route must be configured to establish connectivity between the workstation networks. Which command set must be configured to complete this task?

A. R1 -

```
ip route 172.16.2.0 255.255.255.248 172.16.0.5 110
```

R2 -

```
ip route 172.16.1.0 255.255.255.0 172.16.0.6 110
```

B. R1 -

```
ip route 172.16.2.0 255.255.255.240 172.16.0.2 113
```

R2 -

```
ip route 172.16.1.0 255.255.255.0 172.16.0.1 114
```

C. R1 -

```
ip route 172.16.2.0 255.255.255.224 172.16.0.6 111
```

R2 -

```
ip route 172.16.1.0 255.255.255.0 172.16.0.5 112
```

D. R1 -

```
ip route 172.16.2.0 255.255.255.240 172.16.0.5 89
```

R2 -

```
ip route 172.16.1.0 255.255.255.0 172.16.0.6 89
```

Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 897

Topic #: 1

[\[All 200-301 Questions\]](#)

DRAG DROP

```

Router1#show ip route
Gateway of last resort is 10.10.11.2 to network 0.0.0.0
 209.165.200.0/27 is subnetted, 1 subnets
B    209.165.200.224 [20/0] via 10.10.12.2, 03:22:14
 209.165.201.0/27 is subnetted, 1 subnets
B    209.165.201.0 [20/0] via 10.10.12.2, 02:26:33
 209.165.202.0/27 is subnetted, 1 subnets
B    209.165.202.128 [20/0] via 10.10.12.2, 02:26:03
10.0.0.0/8 is variably subnetted, 10 subnets, 4 masks
O    10.10.13.0/25 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O    10.10.13.128/28 [110/2] via 10.10.10.5, 00:00:12, GigabitEthernet0/1
O    10.10.13.144/28 [110/2] via 10.10.10.9, 00:01:57, GigabitEthernet0/2
O    10.10.13.160/29 [110/2] via 10.10.10.5, 00:00:12, GigabitEthernet0/1
O    10.10.13.208/29 [110/2] via 10.10.10.13, 00:01:57, GigabitEthernet0/3
S*  0.0.0.0/0 [1/0] via 10.10.11.2
  
```

Refer to the exhibit. Drag and drop the destination IPs from the left pnto the paths to reach those destinations on the right.

1.1.1.1	Router2
10.10.13.126	Router3
10.10.13.129	Router5
10.10.13.150	Internet cloud
10.10.13.209	Router4
209.165.200.30	MPLS cloud

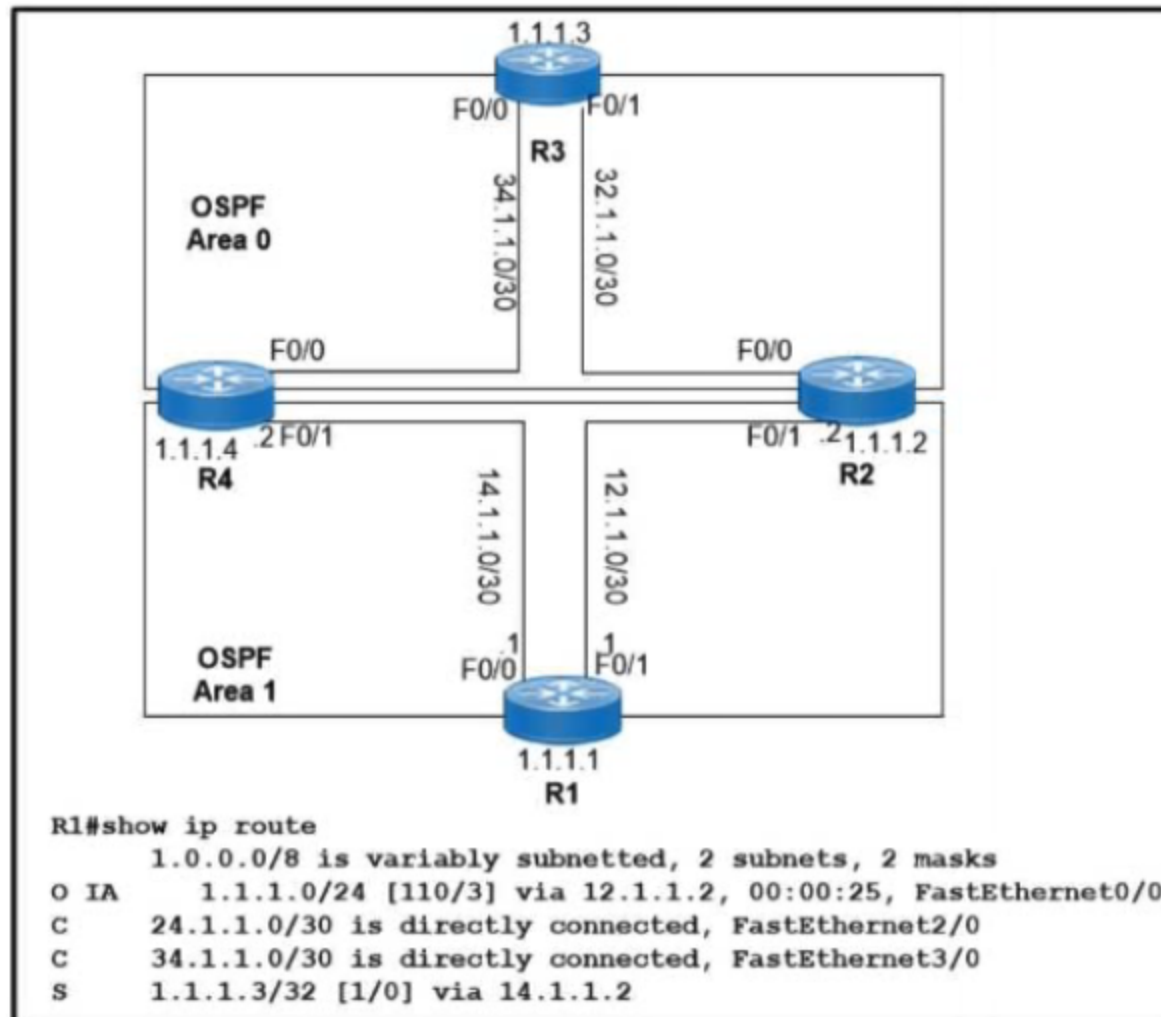
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 898

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. Which two values does router R1 use to determine the best path to reach destinations in network 1.0.0.0/8? (Choose two.)

- A. lowest cost to reach the next hop
- B. highest administrative distance
- C. lowest metric
- D. highest metric
- E. longest prefix match

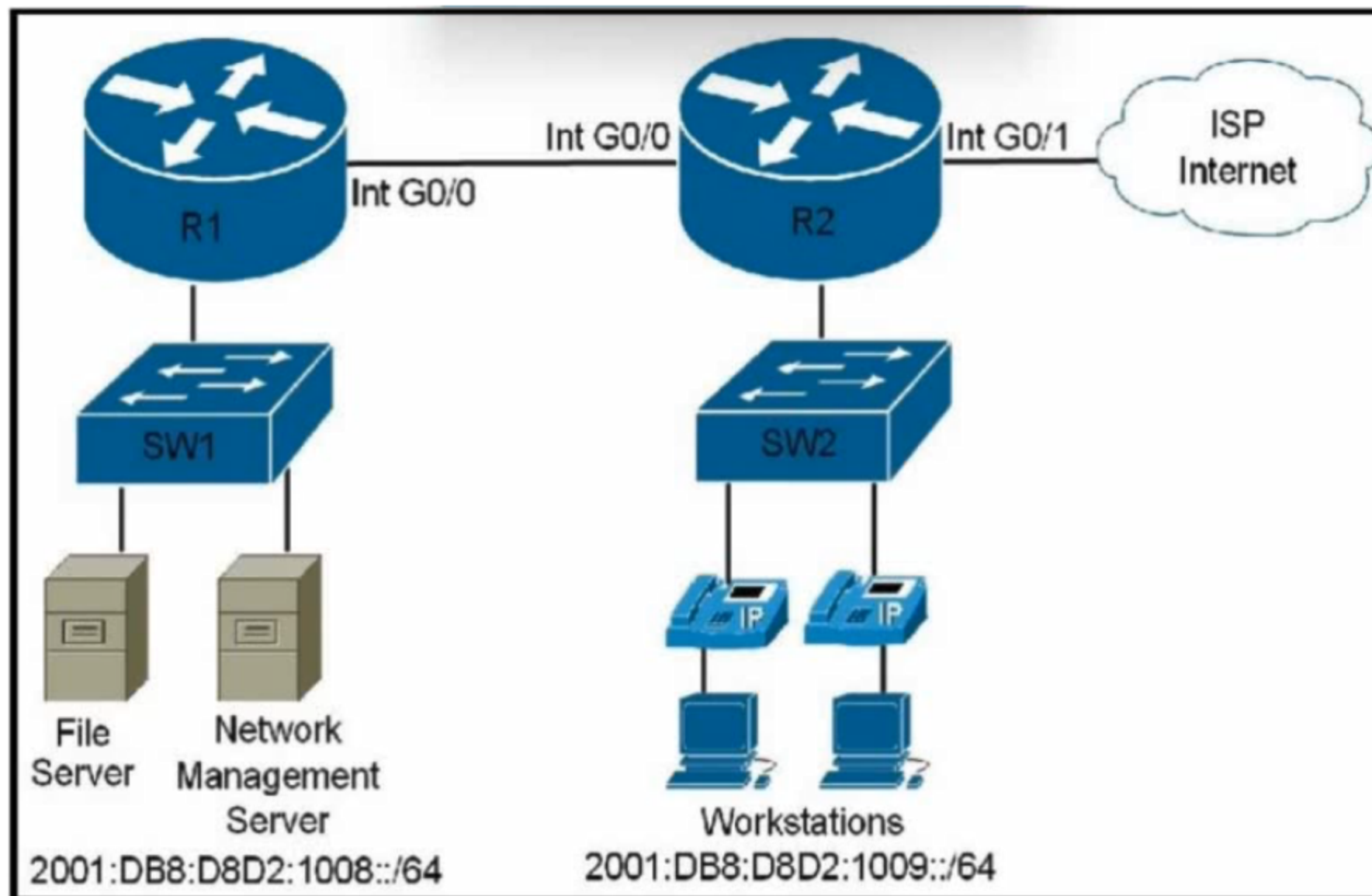
Show Suggested Answer

Actual exam question from Cisco's 200-301

Question #: 899

Topic #: 1

[\[All 200-301 Questions\]](#)



Refer to the exhibit. A public IPv6 address must be configured for internet access. Which command must be configured on the R2 WAN interface to the service provider?

- A. ipv6 address fe80::/10
- B. ipv6 address 2001:db8:433:37:7710:ffff:ffff:ffff/64 anycast
- C. ipv6 address 2001:db8:123:45::4/64
- D. ipv6 address fe80::260:3EFF:FE11:6770 link-local

Show Suggested Answer