

Exam Questions 300-115

Implementing Cisco IP Switched Networks

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NEW QUESTION 1

A manager tells the network engineer to permit only certain VLANs across a specific trunk interface. Which option can be configured to accomplish this?

- A. allowed VLAN list
- B. VTP pruning
- C. VACL
- D. L2P tunneling

Answer: A

NEW QUESTION 2

Which statement about Cisco Discovery Protocol configuration on a Cisco switch is true?

- A. CDP is enabled by default and can be disabled globally with the command `no cdp run`.
- B. CDP is disabled by default and can be enabled globally with the command `cdp enable`.
- C. CDP is enabled by default and can be disabled globally with the command `no cdp enable`.
- D. CDP is disabled by default and can be enabled globally with the command `cdp run`.

Answer: A

NEW QUESTION 3

Which statement describes what happens when a port configured with root guard receives a superior BPDU?

- A. The port goes into errdisabled state and stops forwarding traffic.
- B. The port goes into BPDU-inconsistent state and stops forwarding traffic.
- C. The port goes into loop-inconsistent state and stops forwarding traffic.
- D. The port goes into root-inconsistent state and stops forwarding traffic.

Answer: D

NEW QUESTION 4

What is the size of the VLAN field inside an 802.1q frame?

- A. 8-bit
- B. 12-bit
- C. 16-bit
- D. 32-bit

Answer: B

NEW QUESTION 5

A network engineer changed the port speed and duplex setting of an existing EtherChannel bundle that uses the PAgP protocol. Which statement describes what happens to all ports in the bundle?

- A. PAgP changes the port speed and duplex for all ports in the bundle.
- B. PAgP drops the ports that do not match the configuration.
- C. PAgP does not change the port speed and duplex for all ports in the bundle until the switch is rebooted.
- D. PAgP changes the port speed but not the duplex for all ports in the bundle.

Answer: A

NEW QUESTION 6

A network engineer notices inconsistent Cisco Discovery Protocol neighbors according to the diagram that is provided. The engineer notices only a single neighbor that uses Cisco Discovery Protocol, but it has several routing neighbor relationships. What would cause the output to show only the single neighbor?

- A. The routers are connected via a Layer 2 switch.
- B. IP routing is disabled on neighboring devices.
- C. Cisco Express Forwarding is enabled locally.
- D. Cisco Discovery Protocol advertisements are inconsistent between the local and remote devices.

Answer: A

NEW QUESTION 7

After configuring new data VLANs 1020 through 1030 on the VTP server, a network engineer notices that none of the VTP clients are receiving the updates. What is the problem?

- A. The VTP server must be reloaded.
- B. The VTP version number must be set to version 3.
- C. After each update to the VTP server, it takes up to 4 hours propagate.
- D. VTP must be stopped and restarted on the server.
- E. Another switch in the domain has a higher revision number than the server.

Answer: B

NEW QUESTION 8

A network engineer must improve bandwidth and resource utilization on the switches by stopping the inefficient flooding of frames on trunk ports where the frames are not needed. Which Cisco IOS feature can be used to achieve this task?

- A. VTP pruning
- B. access list
- C. switchport trunk allowed VLAN
- D. VLAN access-map

Answer: A

NEW QUESTION 9

After the recent upgrade of the switching infrastructure, the network engineer notices that the port roles that were once "blocking" are now defined as "alternate" and "backup." What is the reason for this change?

- A. The new switches are using RSTP instead of legacy IEEE 802.1D STP.
- B. IEEE 802.1D STP and PortFast have been configured by default on all newly implemented Cisco Catalyst switches.
- C. The administrator has defined the switch as the root in the STP domain.
- D. The port roles have been adjusted based on the interface bandwidth and timers of the new Cisco Catalyst switches.

Answer: A

NEW QUESTION 10

What is the maximum number of VLANs that can be assigned to an access switchport without a voice VLAN?

- A. 1
- B. 2
- C. 1024

Answer: B

NEW QUESTION 10

Refer to the exhibit.

```
SW1#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: 3
Number of aggregators: 3
Group  Port-channel  Protocol    Ports
-----+-----+-----+-----
12      Po12 (SU)        -           Fa0/13(P) Fa0/14(P) Fa0/15(P)
13      Po13 (SU)        -           Fa0/16(P) Fa0/17(P) Fa0/18(P)
14      Po14 (SU)        -           Fa0/19(P) Fa0/20(P) Fa0/21(P)

SW1#show interface trunk
Port Mode Encapsulation  Status Native vlan
Po12 desirable n-isl trunking 1
Po13 desirable n-isl trunking 1
Po14 desirable n-isl trunking 1
Port Vlans allowed on trunk
Po12 1-4094
Po13 1-4094
Po14 1-4094
```

Which EtherChannel negotiation protocol is configured on the interface f0/13 – f0/15?

- A. Link Combination Control Protocol
- B. Port Aggregation Protocol
- C. Port Combination Protocol
- D. Link Aggregation Control Protocol

Answer: B

NEW QUESTION 13

You have been tasked with configuring multilayer SwitchC, which has a partial configuration and has been attached to RouterC as shown in the topology diagram. You need to configure SwitchC so that Hosts H1 and H2 can successfully ping the server S1. Also SwitchC needs to be able to ping server S1. Due to administrative restrictions and requirements you should not add/delete vlans or create trunk links. Company policies forbid the use of static or default routing. All routes must be learned via EIGRP 65010 routing protocol.

You do not have access to RouterC. RouterC is correctly configured. No trunking has been configured on RouterC.

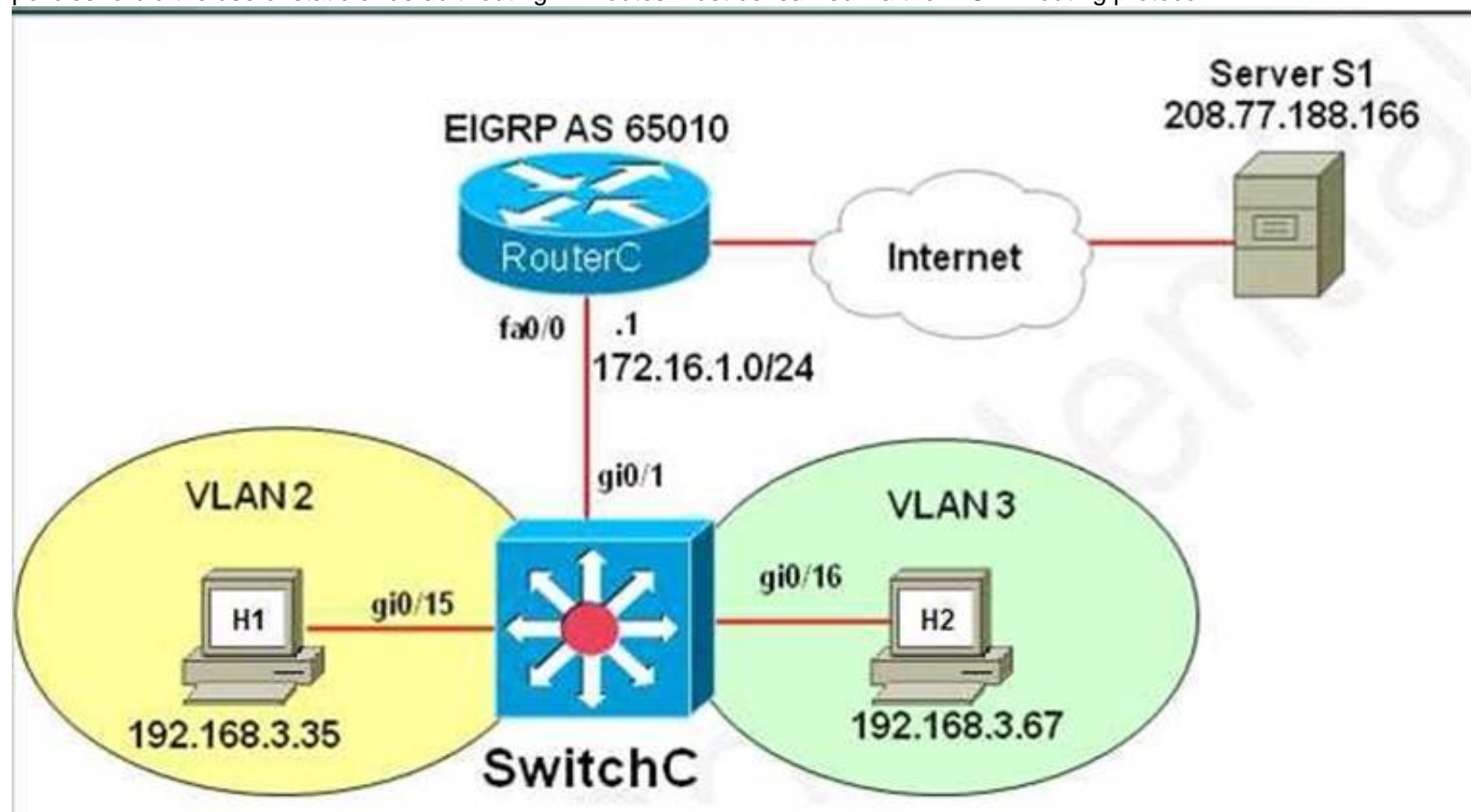
Routed interfaces should use the lowest host on a subnet when possible. The following subnets are available to implement this solution:

- 10.10.10.0/24
- 190.200.250.32/27
- 190.200.250.64/27

Hosts H1 and H2 are configured with the correct IP address and default gateway. SwitchC uses Cisco as the enable password.

Routing must only be enabled for the specific subnets shown in the diagram.

Note: Due to administrative restrictions and requirements you should not add or delete VLANs, changes VLAN port assignments or create trunks. Company policies forbid the use of static or default routing. All routes must be learned via the EIGRP routing protocol.






```
SwitchC
%LINK-3-UPDOWN: Interface GigabitEthernet0/22, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/23, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/24, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/25, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/26, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/27, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/28, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed stat
e to up
%LINK-3-UPDOWN: Interface GigabitEthernet0/16, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/16, changed sta
te to up
%LINK-3-UPDOWN: Interface GigabitEthernet0/15, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/15, changed sta
te to up
Press RETURN to get started!
SwitchC>
```

Answer:

Explanation: There are two ways to configure interVLAN routing in this case:

- + Use RouterC as a “router on a stick” and SwitchC as a pure Layer2 switch. Trunking must be established between RouterC and SwitchC.
- + Only use SwitchC for interVLAN routing without using RouterC, SwitchC should be configured as a Layer 3 switch (which supports ip routing function as a router). No trunking requires.

The question clearly states “No trunking has been configured on RouterC” so RouterC does not contribute to interVLAN routing of hosts H1 & H2 -> SwitchC must be configured as a Layer 3 switch with SVIs for interVLAN routing.

We should check the default gateways on H1 & H2. Click on H1 and H2 and type the “ipconfig” command to get their default gateways.

B. \>ipconfig

We will get the default gateways as follows:

Host1:

+ Default gateway: 190.200.250.33

Host2:

+ Default gateway: 190.200.250.65

Now we have enough information to configure SwitchC (notice the EIGRP AS in this case is 650)

Note: VLAN2 and VLAN3 were created and gi0/10, gi0/11 interfaces were configured as access ports so we don’t need to configure them in this sim.

SwitchC# configure terminal

SwitchC(config)# int gi0/1

SwitchC(config-if)#no switchport

IP address on Gi0/1 interface.

-> without using this command, the simulator does not let you assign

SwitchC(config-if)#

ip address 10.10.10.2 255.255.255.0 ->RouterC has used IP 10.10.10.1 so this is the lowest usable IP address.

SwitchC(config-if)# no shutdown SwitchC(config-if)# exit SwitchC(config)# int vlan 2

SwitchC(config-if)# ip address 190.200.250.33 255.255.255.224

SwitchC(config-if)# no shutdown

SwitchC(config-if)# int vlan 3

SwitchC(config-if)# ip address 190.200.250.65 255.255.255.224

SwitchC(config-if)# no shutdown

SwitchC(config-if)#exit

SwitchC(config)#

ip routing (Notice: MLS will not work without this command)

SwitchC(config)# router eigrp 65010

SwitchC(config-router)# network 10.10.10.0 0.0.0.255

SwitchC(config-router)# network 190.200.250.32 0.0.0.31

SwitchC(config-router)# network 190.200.250.64 0.0.0.31

NOTE: THE ROUTER IS CORRECTLY CONFIGURED, so you will not miss within it in the exam, also don’t modify/delete any port just do the above configuration. Also some reports said the “no auto-summary” command can’t be used in the simulator, in fact it is not necessary because the network 190.200.0.0/16 is not used anywhere else in this topology.

In order to complete the lab, you should expect the ping to SERVER to succeed from the MLS, and from the PCs as well.

Also make sure you use the correct EIGRP AS number (in the configuration above it is 650 but it will change when you take the exam) but we are not allowed to access RouterC so the only way to find out the EIGRP AS is to look at the exhibit above. If you use wrong AS number, no neighbor relationship is formed between RouterC and SwitchC.

In fact, we are pretty sure instead of using two commands “network 190.200.250.32 0.0.0.31 and “network 190.200.250.64 0.0.0.31 we can use one simple command “network 190.200.0.0 because it is the nature of distance vector routing protocol like EIGRP: only major networks need to be advertised; even without “no auto-summary” command the network still works correctly. But in the exam the sim is just a flash based simulator so we should use two above commands, just for sure. But after finishing the configuration, we can use “show run” command to verify, only the summarized network 190.200.0.0 is shown.

NEW QUESTION 18

A network engineer must set the load balance method on an existing port channel. Which action must be done to apply a new load balancing method?

- A. Configure the new load balancing method using port-channel load-balance.
- B. Adjust the switch SDM back to "default".
- C. Ensure that IP CEF is enabled globally to support all load balancing methods.
- D. Upgrade the PFC to support the latest load balancing methods.

Answer: A

NEW QUESTION 23

A network engineer has just deployed a non-Cisco device in the network and wants to get information about it from a connected device. Cisco Discovery Protocol is not supported, so the open standard protocol must be configured. Which protocol does the network engineer configure on both devices to accomplish this?

- A. IRDP
- B. LLDP
- C. NDP
- D. LLTD

Answer: B

NEW QUESTION 24

Which two protocols can be automatically negotiated between switches for trunking? (Choose two.)

- A. PPP
- B. DTP
- C. ISL
- D. HDLC
- E. DLCI
- F. DOT1Q

Answer: CF

NEW QUESTION 27

Refer to the exhibit.

```
SW1#show spanning-tree vlan 1
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 1
Address 001b.bbbb.dddd
This bridge is the root
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Bridge ID Priority 1 (priority 0 sys-id-ext 1)
Address 001b.bbbb.dddd

Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Aging Time 300

Interface Role Sts Cost Prio.Nbr Type
-----
Fa0/1 Desg FWD 19 128.15 P2p
Fa0/2 Desg FWD 19 128.16 P2p
Fa0/3 Desg FWD 19 128.17 P2p
Fa0/4 Desg FWD 19 128.18 P2p
Fa0/5 Desg FWD 19 128.19 P2p
Fa0/6 Desg FWD 19 128.19 P2p
```

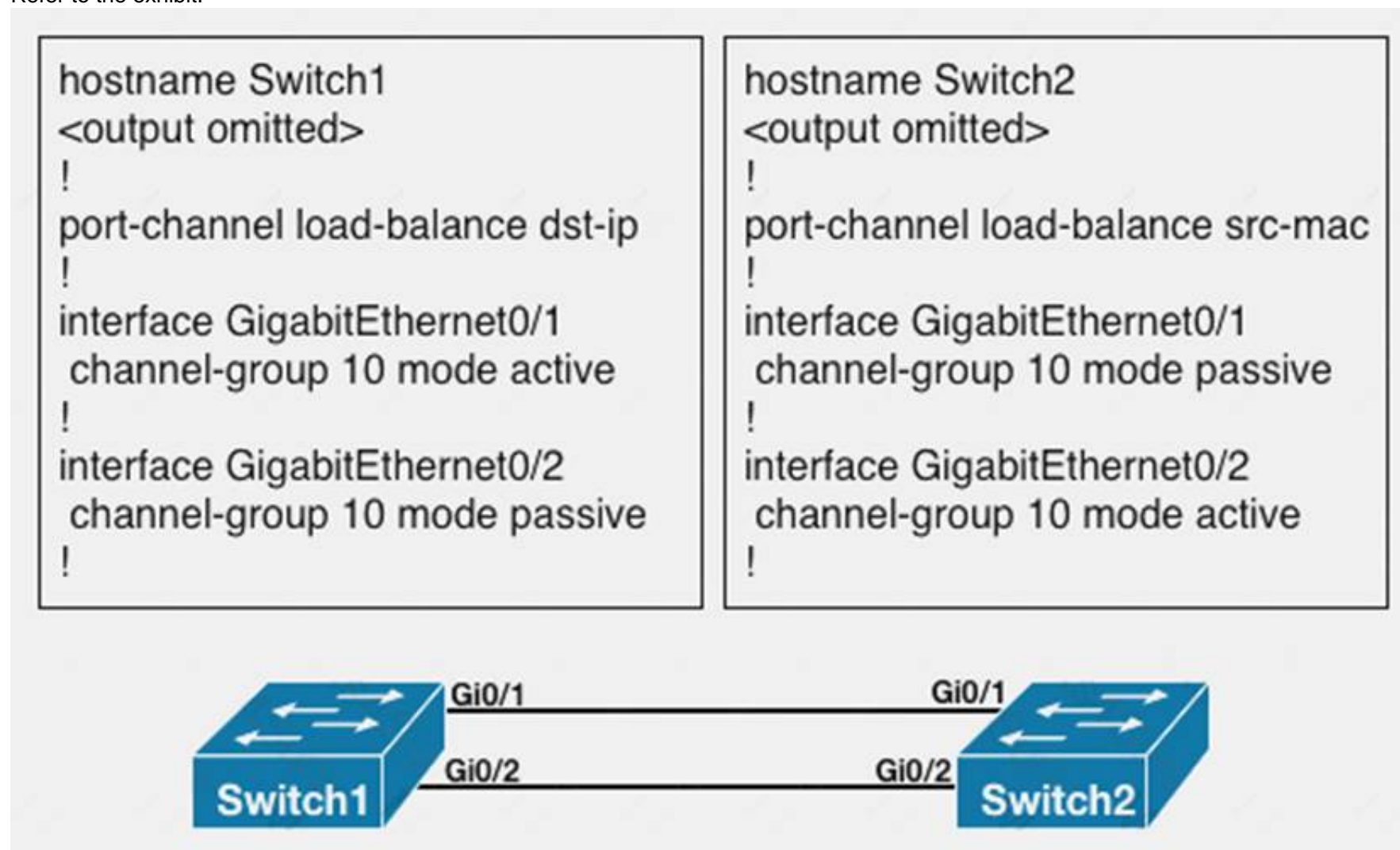
Why would the switch be considered as a root bridge?

- A. The bridge priority is 1 and all ports are forwarding.
- B. The switch priority for VLAN 1 and the macro specifies "This Bridge is the root".
- C. The bridge priority is 128.19 and all ports are forwarding.
- D. The switch priority value is zero, it has the lowest priority value for VLAN 1.

Answer: D

NEW QUESTION 30

Refer to the exhibit.



What is the result of the configuration?

- A. The EtherChannels would not form because the load-balancing method must match on the devices.
- B. The EtherChannels would form and function properly even though the load-balancing and EtherChannel modes do not match.
- C. The EtherChannels would form, but network loops would occur because the load-balancing methods do not match.
- D. The EtherChannels would form and both devices would use the dst-ip load-balancing method because Switch1 is configured with EtherChannel mode active.

Answer: B

NEW QUESTION 31

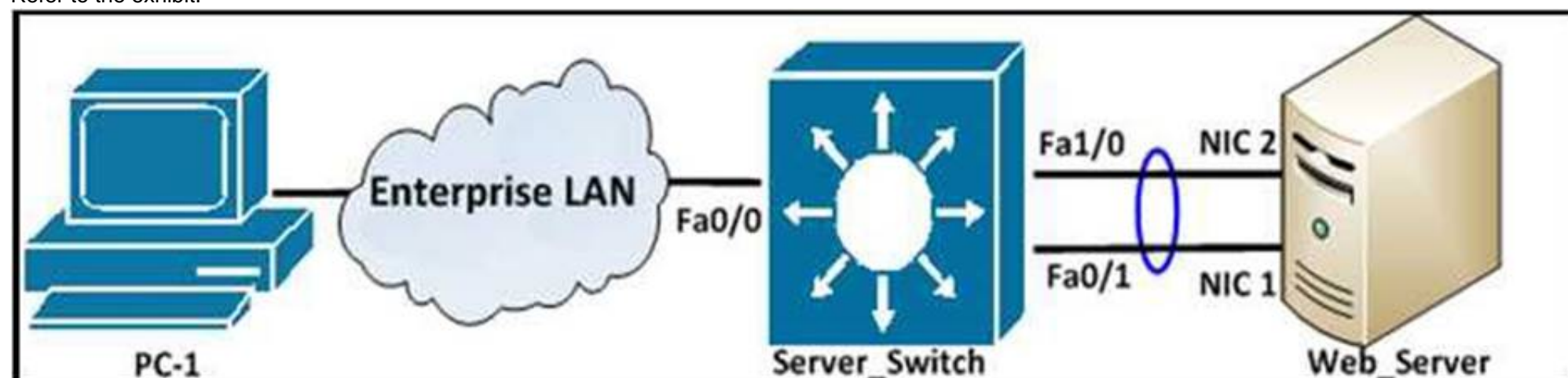
A network engineer must implement Ethernet links that are capable of transporting frames and IP traffic for different broadcast domains that are mutually isolated. Consider that this is a multivendor environment. Which Cisco IOS switching feature can be used to achieve the task?

- A. PPP encapsulation with a virtual template
- B. Link Aggregation Protocol at the access layer
- C. dot1q VLAN trunking
- D. Inter-Switch Link

Answer: C

NEW QUESTION 32

Refer to the exhibit.



Users of PC-1 experience slow connection when a webpage is requested from the server. To increase bandwidth, the network engineer configured an EtherChannel on interfaces Fa1/0 and Fa0/1 of the server farm switch, as shown here:

```
Server_Switch#sh etherchannel load-balance
EtherChannel Load-Balancing Operational State (src-mac): Non-IP: Source MAC address
IPv4: Source MAC address IPv6: Source IP address Server_Switch#
```

However, traffic is still slow. Which action can the engineer take to resolve this issue?

- A. Disable EtherChannel load balancing.
- B. Upgrade the switch IOS to IP services image.

- C. Change the load-balance method to dst-mac.
- D. Contact Cisco TAC to report a bug on the switch.

Answer: C

NEW QUESTION 34

What happens on a Cisco switch that runs Cisco IOS when an RSTP-configured switch receives 802.1d BPDU?

- A. 802.1d does not understand RSTP BPDUs because they are different versions, but when a RSTP switch receives an 802.1d BPDU, it responds with an 802.1d BPDU and eventually the two switches run 802.1d to communicate.
- B. 802.1d understands RSTP BPDUs because they are the same version, but when a RSTP switch receives a 802.1d BPDU, it responds with a 802.1d BPDU and eventually the two switches run 802.1d to communicate.
- C. 802.1d does not understand RSTP BPDUs because they are different versions, but when a RSTP switch receives a 802.1d BPDU, it does not respond with a 802.1d BPDU.
- D. 802.1d understands RSTP BPDUs because they are the same version, but when a RSTP switch receives a 802.1d BPDU, it does not respond with a 802.1d BPDU and eventually the two switches run 802.1d to communicate.

Answer: A

NEW QUESTION 36

Which feature is automatically enabled when a voice VLAN is configured, but not automatically disabled when a voice VLAN is removed?

- A. portfast
- B. port-security
- C. spanning tree
- D. storm control

Answer: A

NEW QUESTION 38

A network engineer is extending a LAN segment between two geographically separated data centers. Which enhancement to a spanning-tree design prevents unnecessary traffic from crossing the extended LAN segment?

- A. Modify the spanning-tree priorities to dictate the traffic flow.
- B. Create a Layer 3 transit VLAN to segment the traffic between the sites.
- C. Use VTP pruning on the trunk interfaces.
- D. Configure manual trunk pruning between the two locations.

Answer: C

NEW QUESTION 43

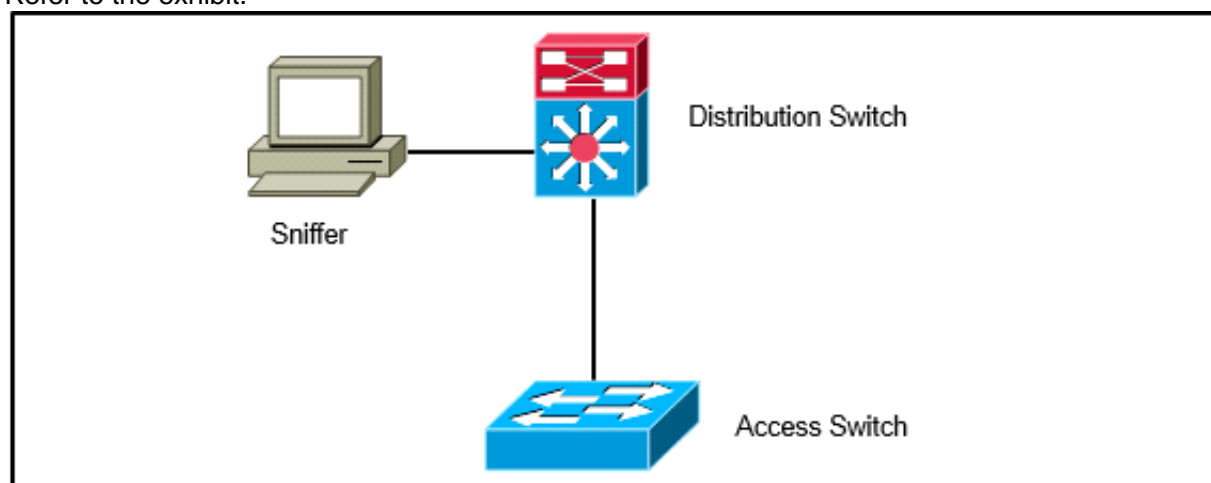
In a Cisco switch, what is the default period of time after which a MAC address ages out and is discarded?

- A. 100 seconds
- B. 180 seconds
- C. 300 seconds
- D. 600 seconds

Answer: C

NEW QUESTION 46

Refer to the exhibit.



A network engineer wants to analyze all incoming and outgoing packets for an interface that is connected to an access switch. Which three items must be configured to mirror traffic to a packet sniffer that is connected to the distribution switch? (Choose three.)

- A. A monitor session on the distribution switch with a physical interface as the source and the remote SPAN VLAN as the destination
- B. A remote SPAN VLAN on the distribution and access layer switch
- C. A monitor session on the access switch with a physical interface source and the remote SPAN VLAN as the destination
- D. A monitor session on the distribution switch with a remote SPAN VLAN as the source and physical interface as the destination
- E. A monitor session on the access switch with a remote SPAN VLAN source and the physical interface as the destination
- F. A monitor session on the distribution switch with a physical interface as the source and a physical interface as the destination

Answer: BCD

NEW QUESTION 47

Which statement about the use of SDM templates in a Cisco switch is true?

- A. SDM templates are used to configure system resources in the switch to optimize support for specific features, depending on how the switch is used in the network.
- B. SDM templates are used to create Layer 3 interfaces (switch virtual interfaces) to permit hosts in one VLAN to communicate with hosts in another VLAN.
- C. SDM templates are used to configure ACLs that protect networks and specific hosts from unnecessary or unwanted traffic.
- D. SDM templates are used to configure a set of ACLs that allows the users to manage the flow of traffic handled by the route processor.
- E. SDM templates are configured by accessing the switch using the web interface.

Answer: A

NEW QUESTION 52

A network engineer tries to configure storm control on an EtherChannel bundle. What is the result of the configuration?

- A. The storm control settings will appear on the EtherChannel, but not on the associated physical ports.
- B. The configuration will be rejected because storm control is not supported for EtherChannel.
- C. The storm control configuration will be accepted, but will only be present on the physical interfaces.
- D. The settings will be applied to the EtherChannel bundle and all associated physical interfaces.

Answer: D

NEW QUESTION 54

Which statement about Cisco devices learning about each other through Cisco Discovery Protocol is true?

- A. Each device sends periodic advertisements to multicast address 01:00:0C:CC:CC:CC.
- B. Each device broadcasts periodic advertisements to all of its neighbors.
- C. Each device sends periodic advertisements to a central device that builds the network topology.
- D. Each device sends periodic advertisements to all IP addresses in its ARP table.

Answer: A

NEW QUESTION 55

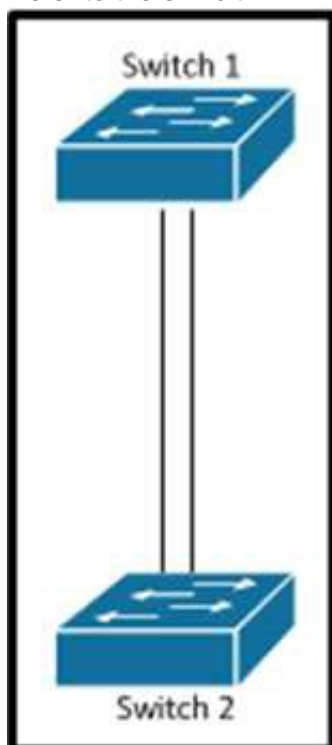
An access switch has been configured with an EtherChannel port. After configuring SPAN to monitor this port, the network administrator notices that not all traffic is being replicated to the management server. What is a cause for this issue?

- A. VLAN filters are required to ensure traffic mirrors effectively.
- B. SPAN encapsulation replication must be enabled to capture EtherChannel destination traffic.
- C. The port channel can be used as a SPAN source, but not a destination.
- D. RSPAN must be used to capture EtherChannel bidirectional traffic.

Answer: C

NEW QUESTION 59

Refer to the exhibit.



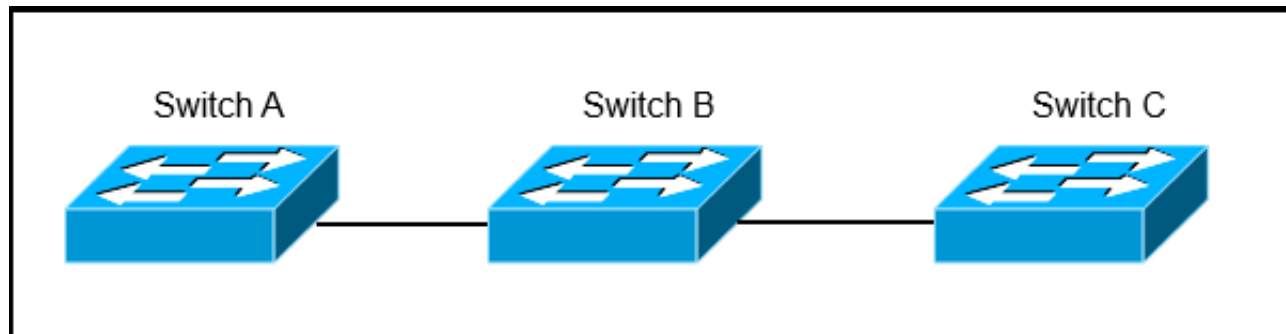
Which set of configurations will result in all ports on both switches successfully bundling into an EtherChannel?

- A. switch1channel-group 1 mode active switch2channel-group 1 mode auto
- B. switch1channel-group 1 mode desirable switch2channel-group 1 mode passive
- C. switch1channel-group 1 mode on switch2channel-group 1 mode auto
- D. switch1channel-group 1 mode desirable switch2channel-group 1 mode auto

Answer: D

NEW QUESTION 60

Refer to the exhibit.



Switch A, B, and C are trunked together and have been properly configured for VTP. Switch C receives VLAN information from the VTP server Switch A, but Switch B does not receive any VLAN information. What is the most probable cause of this behavior?

- A. Switch B is configured in transparent mode.
- B. Switch B is configured with an access port to Switch A, while Switch C is configured with a trunk port to Switch B.
- C. The VTP revision number of the Switch B is higher than that of Switch A.
- D. The trunk between Switch A and Switch B is misconfigured.

Answer: A

NEW QUESTION 65

What effect does the mac address-table aging-time 180 command have on the MAC address-table?

- A. This is how long a dynamic MAC address will remain in the CAM table.
- B. The MAC address-table will be flushed every 3 minutes.
- C. The default timeout period will be 360 seconds.
- D. ARP requests will be processed less frequently by the switch.
- E. The MAC address-table will hold addresses 180 seconds longer than the default of 10 minutes.

Answer: A

NEW QUESTION 68

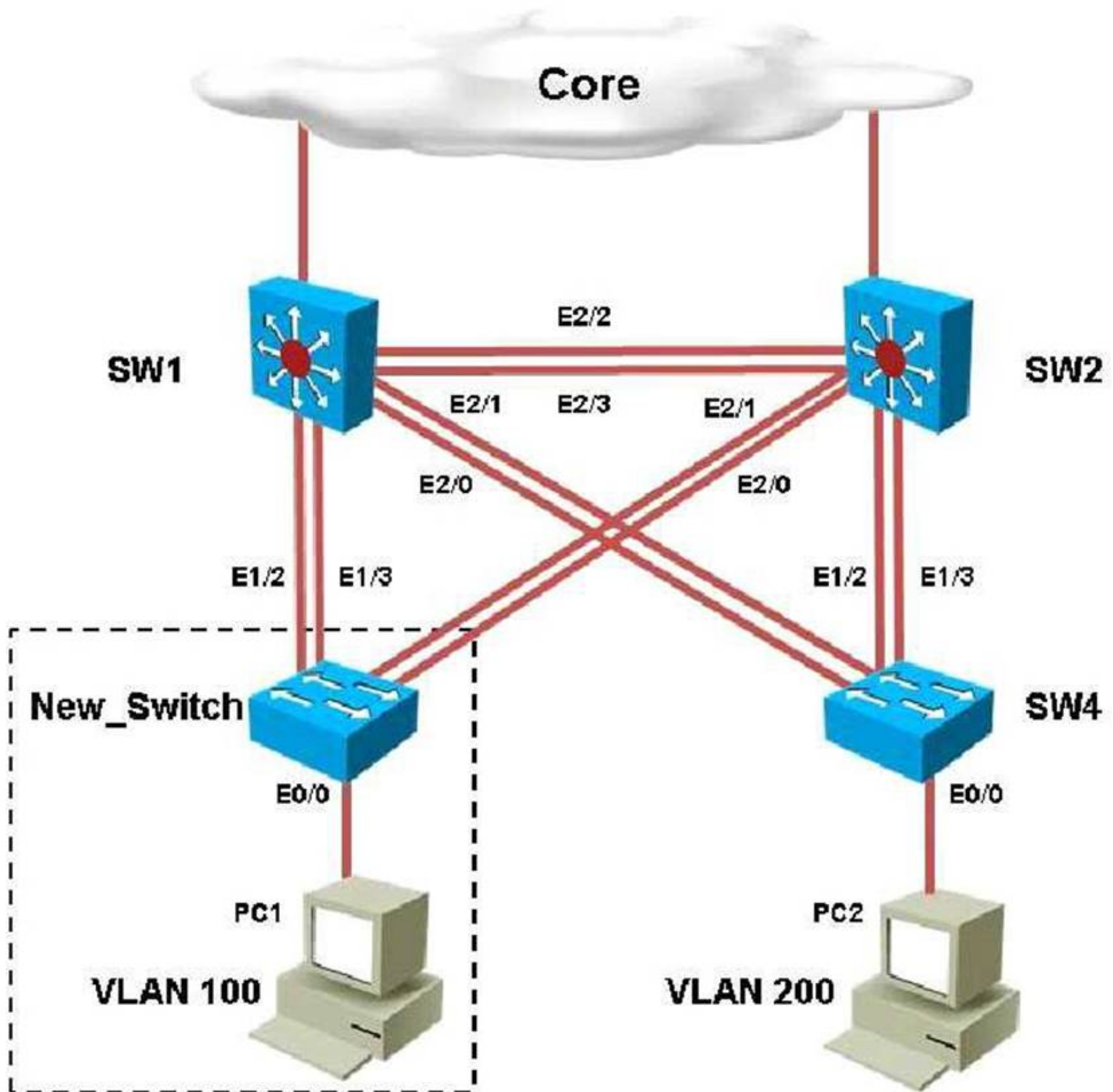
A network engineer wants to add a new switch to an existing switch stack. Which configuration must be added to the new switch before it can be added to the switch stack?

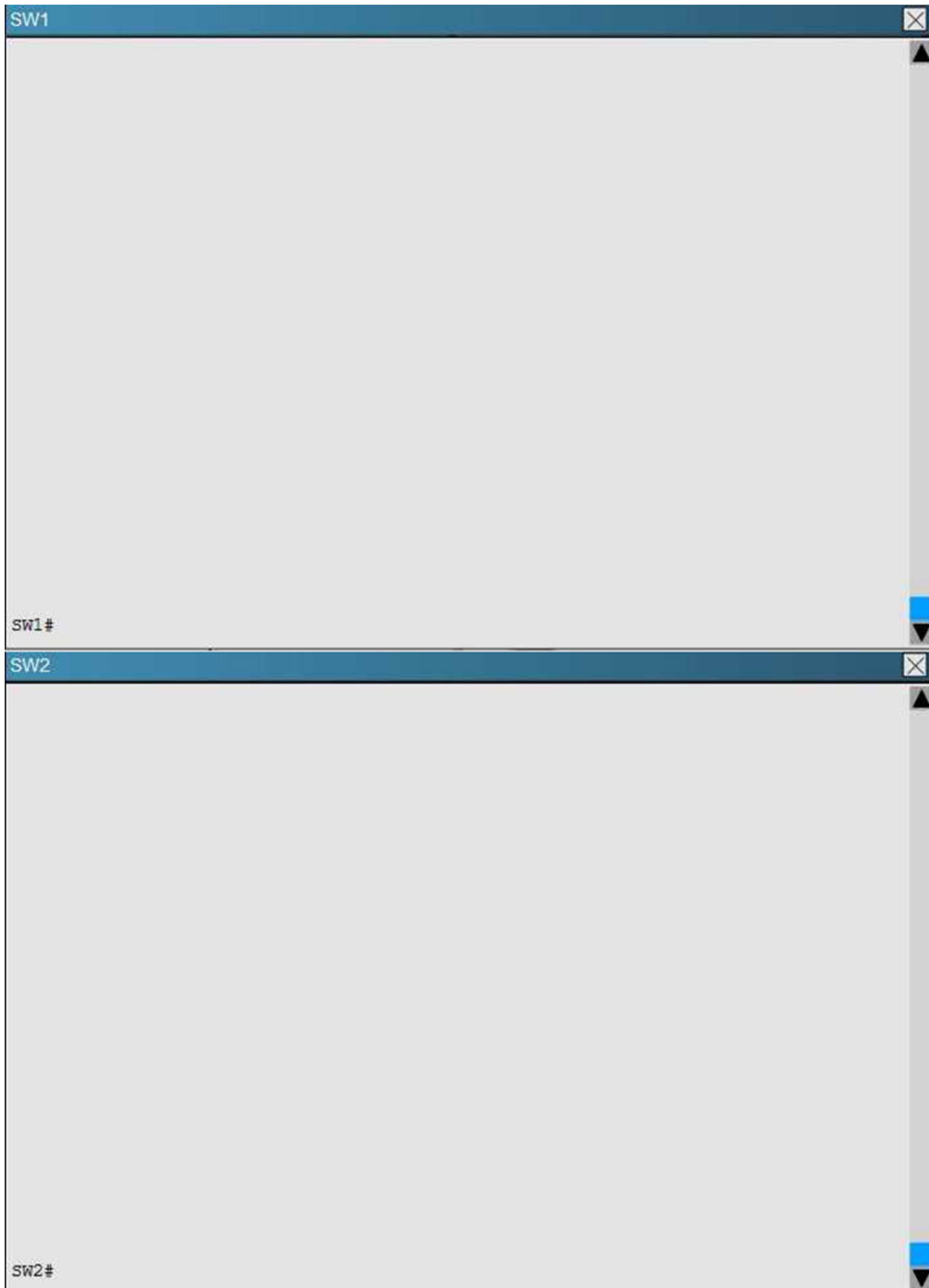
- A. No configuration must be added.
- B. stack ID
- C. IP address
- D. VLAN information
- E. VTP information

Answer: A

NEW QUESTION 72

You have been asked to install and configure a new switch in a customer network. Use the console access to the existing and new switches to configure and verify correct device configuration.





Refer to the configuration. For which configured VLAN are untagged frames sent over trunk between SW1 and SW2?

- A. VLAN1
- B. VLAN 99
- C. VLAN 999
- D. VLAN 40
- E. VLAN 50
- F. VLAN 200
- G. VLAN 300

Answer: B

Explanation: The native VLAN is used for untagged frames sent along a trunk. By issuing the “show interface trunk” command on SW1 and SW2 we see the native VLAN is 99.

NEW QUESTION 76

For security reasons, the IT manager has prohibited users from dynamically establishing trunks with their associated upstream switch. Which two actions can prevent interface trunking? (Choose two.)

- A. Configure trunk and access interfaces manually.
- B. Disable DTP on a per interface basis.
- C. Apply BPDU guard and BPDU filter.
- D. Enable switchport block on access ports.

Answer: AB

NEW QUESTION 81

If a network engineer applies the command mac-address-table notification mac-move on a Cisco switch port, when is a syslog message generated?

- A. A MAC address or host moves between different switch ports.
- B. A new MAC address is added to the content-addressable memory.
- C. A new MAC address is removed from the content-addressable memory.
- D. More than 64 MAC addresses are added to the content-addressable memory.

Answer: A

NEW QUESTION 85

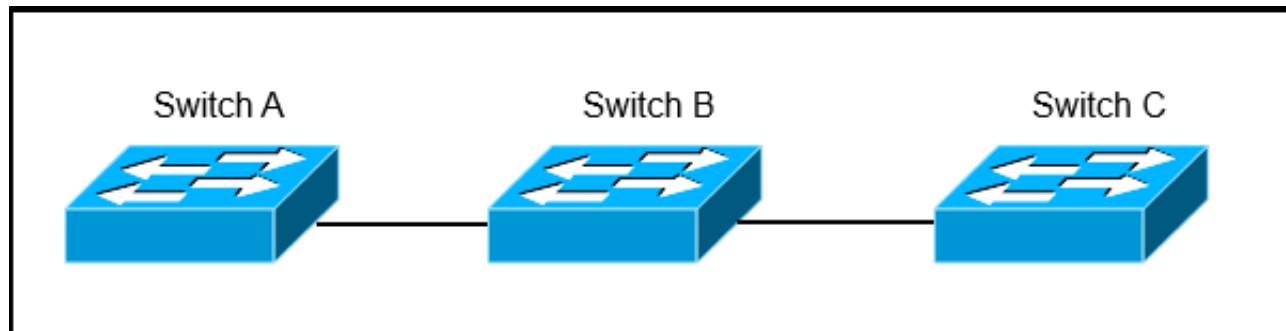
Pilot testing of the new switching infrastructure finds that when the root port is lost, STP immediately replaces the root port with an alternative root port. Which spanning-tree technology is used to accomplish backup root port selection?

- A. PVST+
- B. PortFast
- C. BackboneFast
- D. UplinkFast
- E. Loop Guard
- F. UDLD

Answer: D

NEW QUESTION 89

Refer to the exhibit.



Switch A, B, and C are trunked together and have been properly configured for VTP. Switch B has all VLANs, but Switch C is not receiving traffic from certain VLANs. What would cause this issue?

- A. A VTP authentication mismatch occurred between Switch A and Switch B.
- B. The VTP revision number of Switch B is higher than that of Switch A.
- C. VTP pruning is configured globally on all switches and it removed VLANs from the trunk interface that is connected to Switch C.
- D. The trunk between Switch A and Switch B is misconfigured.

Answer: C

NEW QUESTION 94

A network engineer configured an Ethernet switch using these commands. Switchone(config) # Spanning-tree portfast bpduguard default
 Which statement about the spanning-tree portfast feature on the switch is true?

- A. If an interface is enabled for portfast receives BPDU, the port goes through the spanning-tree listening, learning, and forwarding states.
- B. If an interface is enabled for portfast receives BPDU, the port does not go through the spanning-tree listening, learning, and forwarding states.
- C. If an interface is enabled for portfast receives BPDU, the port is shut down immediately.
- D. If an interface is enabled for portfast receives BPDU, the port goes into the spanning-tree inconsistent state.

Answer: A

NEW QUESTION 97

What is required for a LAN switch to support 802.1q Q-in-Q encapsulation?

- A. Support less than 1500 MTU
- B. Support 1504 MTU or higher

- C. Support 1522 layer 3 IP and IPX packet
- D. Support 1547 MTU only

Answer: B

NEW QUESTION 101

Which command does a network engineer use to verify the spanning-tree status for VLAN 10?

- A. switch# show spanning-tree vlan 10
- B. switch# show spanning-tree bridge
- C. switch# show spanning-tree brief
- D. switch# show spanning-tree summary
- E. switch# show spanning-tree vlan 10 brief

Answer: A

NEW QUESTION 106

Refer to the exhibit.

```
interface GigabitEthernet0/1
 switchport
 switchport mode trunk
 switchport trunk allowed vlan 1-100
!
interface GigabitEthernet0/48
 switchport
 switchport mode access
!
monitor session 1 source interface GigabitEthernet0/1
monitor session 1 destination interface GigabitEthernet0/48
```

How can the traffic that is mirrored out the GigabitEthernet0/48 port be limited to only traffic that is received or transmitted in VLAN 10 on the GigabitEthernet0/1 port?

- A. Change the configuration for GigabitEthernet0/48 so that it is a member of VLAN 10.
- B. Add an access list to GigabitEthernet0/48 to filter out traffic that is not in VLAN 10.
- C. Apply the monitor session filter globally to allow only traffic from VLAN 10.
- D. Change the monitor session source to VLAN 10 instead of the physical interface.

Answer: C

NEW QUESTION 109

What percentage of bandwidth is reduced when a stack cable is broken?

- A. 25
- B. 50
- C. 75
- D. 100

Answer: C

NEW QUESTION 114

Refer to the exhibit.

```
Switch# Show run
interface FastEthernet0/13
spanning-tree cost 1000
!
interface FastEthernet0/14
spanning-tree cost 1000
!
interface FastEthernet0/15
spanning-tree cost 1000
!
interface FastEthernet0/20
spanning-tree cost 2
!
interface FastEthernet0/21
spanning-tree cost 1
```

All ports are members of VLAN 10. Considering the default cost of upstream bridges to the root bridge is equal, which option will be the new root port for VLAN 10?

- A. interface f0/13
- B. interface f0/14
- C. interface f0/15
- D. interface f0/21

Answer: D

NEW QUESTION 118

Which option describes a limitation of LLDP?

- A. LLDP cannot provide information about VTP.
- B. LLDP does not support TLVs.
- C. LLDP can discover only Windows servers.
- D. LLDP can discover up to two devices per port.

Answer: A

NEW QUESTION 120

A network engineer configured a fault-tolerance link on Gigabit Ethernet links G0/1, G0/2, G0/3, and G0/4 between two switches using Ethernet port-channel. Which action allows interface G0/1 to always actively forward traffic in the port-channel?

- A. Configure G0/1 as half duplex and G0/2 as full duplex.
- B. Configure LACP port-priority on G0/1 to 1.
- C. Configure LACP port-priority on G0/1 to 65535.
- D. LACP traffic goes through G0/4 because it is the highest interface ID.

Answer: B

NEW QUESTION 124

What is the default value for the errdisable recovery interval in a Cisco switch?

- A. 30 seconds
- B. 100 seconds
- C. 300 seconds
- D. 600 seconds

Answer: C

NEW QUESTION 128

Which SDM template is the most appropriate for a Layer 2 switch that provides connectivity to a large number of clients?

- A. VLAN
- B. default
- C. access
- D. routing

Answer: A

NEW QUESTION 132

Which option is a possible cause for an errdisabled interface?

- A. routing loop
- B. cable unplugged
- C. STP loop guard
- D. security violation

Answer: D

NEW QUESTION 137

What is the default interval at which Cisco devices send Cisco Discovery Protocol advertisements?

- A. 30 seconds
- B. 60 seconds
- C. 120 seconds
- D. 300 seconds

Answer: B

NEW QUESTION 140

A network engineer deployed a switch that operates the LAN base feature set and decides to use the SDM VLAN template. The SDM template is causing the CPU of the switch to spike during peak working hours. What is the root cause of this issue?

- A. The VLAN receives additional frames from neighboring switches.
- B. The SDM VLAN template causes the MAC address-table to overflow.
- C. The VLAN template disables routing in hardware.
- D. The switch needs to be rebooted before the SDM template takes effect.

Answer: C

NEW QUESTION 142

An administrator recently configured all ports for rapid transition using PortFast. After testing, it has been determined that several ports are not transitioning as they should. What is the reason for this?

- A. RSTP has been enabled per interface and not globally.
- B. The STP root bridge selection is forcing key ports to remain in non-rapid transitioning mode.
- C. STP is unable to achieve rapid transition for trunk links.
- D. The switch does not have the processing power to ensure rapid transition for all ports.

Answer: C

NEW QUESTION 145

Which statement about restrictions for multichassis LACP is true?

- A. It is available only on a Cisco Catalyst 6500 Series chassis.
- B. It does not support 1Gb links.
- C. Converting a port channel to mLACP can cause a service disruption.
- D. It is not available in VSS.

Answer: C

NEW QUESTION 150

When two MST instances (MST 1 and MST 2) are created on a switch, what is the total number of spanning-tree instances running on the switch?

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

Answer: C

NEW QUESTION 153

A network engineer is trying to deploy a PC on a network. The engineer observes that when the PC is connected to the network, it takes 30 to 60 seconds for the PC to see any activity on the network interface card. Which Layer 2 enhancement can be used to eliminate this delay?

- A. Configure port duplex and speed to auto negotiation.
- B. Configure port to duplex full and speed 1000.
- C. Configure spanning-tree portfast.
- D. Configure no switchport.

Answer: C

NEW QUESTION 158

Which technique automatically limits VLAN traffic to only the switches that require it?

- A. access lists
- B. DTP in nonegotiate
- C. VTP pruning
- D. PBR

Answer: C

NEW QUESTION 162

A new network that consists of several switches has been connected together via trunking interfaces. If all switches currently have the default VTP domain name "null", which statement describes what happens when a domain name is configured on one of the switches?

- A. The switch with the non-default domain name restores back to "null" upon reboot.
- B. Switches with higher revision numbers does not accept the new domain name.
- C. VTP summary advertisements are sent out of all ports with the new domain name.
- D. All other switches with the default domain name become VTP clients.

Answer: C

NEW QUESTION 167

While doing network discovery using Cisco Discovery Protocol, it is found that rapid error tracking is not currently enabled. Which option must be enabled to allow for enhanced reporting mechanisms using Cisco Discovery Protocol?

- A. Cisco Discovery Protocol version 2
- B. Cisco IOS Embedded Event Manager
- C. logging buffered
- D. Cisco Discovery Protocol source interface
- E. Cisco Discovery Protocol logging options

Answer: A

NEW QUESTION 171

In which portion of the frame is the 802.1q header found?

- A. within the Ethernet header
- B. within the Ethernet payload
- C. within the Ethernet FCS
- D. within the Ethernet source MAC address

Answer: A

NEW QUESTION 176

What is the maximum number of switches that can be stacked using Cisco StackWise?

- A. 4
- B. 5
- C. 8
- D. 9
- E. 10
- F. 13

Answer: D

NEW QUESTION 179

The network manager has requested that several new VLANs (VLAN 10, 20, and 30) are allowed to traverse the switch trunk interface. After the command switchport trunk allowed vlan 10,20,30 is issued, all other existing VLANs no longer pass traffic over the trunk. What is the root cause of the problem?

- A. The command effectively removed all other working VLANs and replaced them with the new VLANs.
- B. VTP pruning removed all unused VLANs.
- C. ISL was unable to encapsulate more than the already permitted VLANs across the trunk.
- D. Allowing additional VLANs across the trunk introduced a loop in the network.

Answer: A

NEW QUESTION 183

Refer to the exhibit.

```
Switch1 (config)#vlan 10
VTP vlan configuration not allowed when device is in CLIENT mode.
Switch1#show interfaces trunk
Switch1#
```

The users in an engineering department that connect to the same access switch cannot access the network. The network engineer found that the engineering VLAN is missing from the database. Which action resolves this problem?

- A. Disable VTP pruning and disable 802.1q.
- B. Update the VTP revision number.
- C. Change VTP mode to server and enable 802.1q.
- D. Enable VTP pruning and disable 802.1q.

Answer: C

NEW QUESTION 186

SIMULATION

Scenario:

You work for SWITCH.com. They have just added a new switch (SwitchB) to the existing network as shown in the topology diagram.

RouterA is currently configured correctly and is providing the routing function for devices on SwitchA and SwitchB. SwitchA is currently configured correctly, but will need to be modified to support the addition of SwitchB. SwitchB has a minimal configuration. You have been tasked with completing the needed configuring of SwitchA and SwitchB. SwitchA and SwitchB use Cisco as the enable password.

Configuration Requirements for SwitchA

The VTP and STP configuration modes on SwitchA should not be modified.

- SwitchA needs to be the root switch for vlans 11, 12, 13, 21, 22 and 23. All other vlans should be left are their default values.

Configuration Requirements for SwitchB

- Vlan 21

▶ Name: Marketing

▶ will support two servers attached to fa0/9 and fa0/10

- Vlan 22

▶ Name: Sales

▶ will support two servers attached to fa0/13 and fa0/14

- Vlan 23

o Name: Engineering

o will support two servers attached to fa0/15 and fa0/16

- Access ports that connect to server should transition immediately to forwarding state upon detecting the connection of a device.

- SwitchB VTP mode needs to be the same as SwitchA.

- SwitchB must operate in the same spanning tree mode as SwitchA

- No routing is to be configured on SwitchB

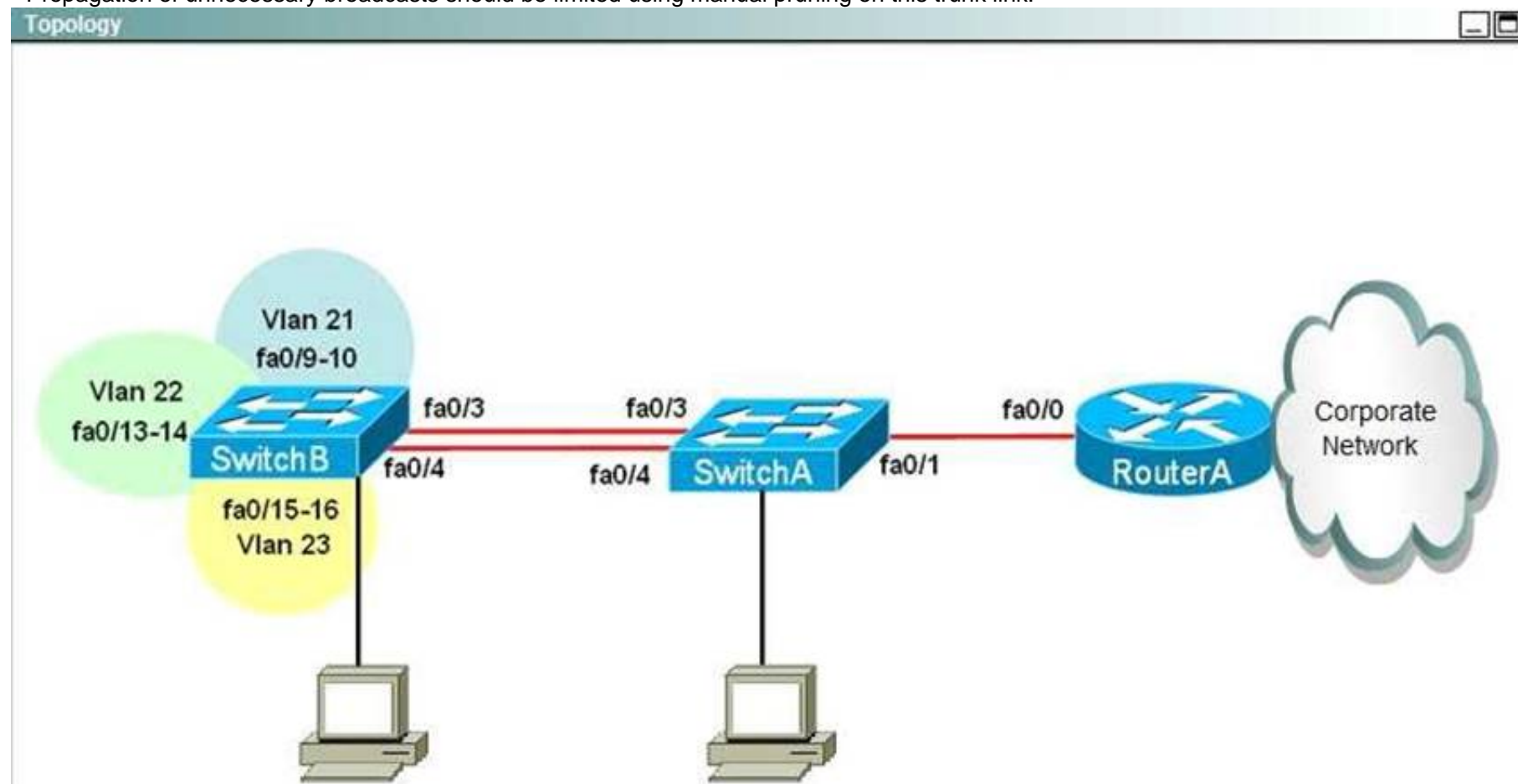
- Only the SVI vlan 1 is to be configured and it is to use address 192.168.1.11/24

Inter-switch Connectivity Configuration Requirements

- For operational and security reasons trunking should be unconditional and Vlans 1, 21, 22 and 23 should tagged when traversing the trunk link.

- The two trunks between SwitchA and SwitchB need to be configured in a mode that allows for the maximum use of their bandwidth for all vlans. This mode should be done with a non-proprietary protocol, with SwitchA controlling activation.

- Propagation of unnecessary broadcasts should be limited using manual pruning on this trunk link.



Answer:

Explanation: Here are steps: hostname SWITCH_B

!

!

vlan 21

name Marketing vlan 22

name Sales vlan 23

name Engineering

!

!

interface FastEthernet0/3

switchport trunk allowed vlan 1,21-23

```
channel-protocol lacp
channel-group 1 mode passive switchport mode trunk
!
interface FastEthernet0/4
switchport trunk allowed vlan 1,21-23 channel-protocol lacp
channel-group 1 mode passive switchport mode trunk
!
interface FastEthernet0/9 switchport access vlan 21 switchport mode access spanning-tree portfast
!
interface FastEthernet0/10 switchport access vlan 21 switchport mode access spanning-tree portfast
!
interface FastEthernet0/13 switchport access vlan 22 switchport mode access spanning-tree portfast
!
!
interface FastEthernet0/14 switchport access vlan 22 switchport mode access spanning-tree portfast
!
interface FastEthernet0/15 switchport access vlan 23 switchport mode access spanning-tree portfast
!
interface FastEthernet0/16 switchport access vlan 23 switchport mode access spanning-tree portfast
!
!
interface GigabitEthernet1/1
!
interface GigabitEthernet1/2
!
interface Port-channel 1 switchport mode trunk
switchport trunk encapsulation dot1q spanning-tree allowed vlans 1,21-23
!
interface Vlan1
ip address 192.168.1.11 255.255.255.0
!
end SWITCH_B(config)# hostname SWITCH_A
!
spanning-tree vlan 11 root primary spanning-tree vlan 12 root primary spanning-tree vlan 13 root primary spanning-tree vlan 21 root primary spanning-tree vlan 22
root primary spanning-tree vlan 23 root primary
!
interface FastEthernet0/3
switchport trunk allowed vlan 1,21-23 channel-protocol lacp
channel-group 1 mode active switchport mode trunk
!
interface FastEthernet0/4
switchport trunk allowed vlan 1,21-23 channel-protocol lacp
channel-group 1 mode active switchport mode trunk
!
interface FastEthernet0/21 switchport access vlan 21 switchport mode access
!
interface FastEthernet0/22 switchport access vlan 22 switchport mode access
!
interface FastEthernet0/23 switchport access vlan 23 switchport mode access
!
interface GigabitEthernet1/1
!
interface GigabitEthernet1/2
!
interface Port-channel 1
!
interface Vlan1 no ip address shutdown
!
ip default-gateway 192.168.1.1
!
!
End
```

NEW QUESTION 187

Which statement describes what happens if all VSL connections between the virtual switch members are lost?

- A. Both virtual switch members cease to forward traffic.
- B. The VSS transitions to the dual active recovery mode, and both virtual switch members continue to forward traffic independently.
- C. The virtual switch members reload.
- D. The VSS transitions to the dual active recovery mode, and only the new active virtual switch continues to forward traffic.

Answer: D

NEW QUESTION 191

After reviewing UDLD status on switch ports, an engineer notices that the. " Which statement describes what this indicates about the status of the port?

- A. The port is fully operational and no known issues are detected.
- B. The bidirectional status of "unknown" indicates that the port will go into the disabled state because it stopped receiving UDLD packets from its neighbor.
- C. UDLD moved into aggressive mode after inconsistent acknowledgements were detected.
- D. The UDLD port is placed in the "unknown" state for 5 seconds until the next UDLD packet is received on the interface.

Answer: A

Explanation: Topic 2, Exam Set B

NEW QUESTION 194

Which database is used to determine the validity of an ARP packet based on a valid IP-to-MAC address binding?

- A. DHCP snooping database
- B. dynamic ARP database
- C. dynamic routing database
- D. static ARP database

Answer: A

NEW QUESTION 199

Which authentication service is needed to configure 802.1x?

- A. RADIUS with EAP Extension
- B. TACACS+
- C. RADIUS with CoA
- D. RADIUS using VSA

Answer: A

NEW QUESTION 203

What is the default HSRP priority?

- A. 50
- B. 100
- C. 120
- D. 1024

Answer: B

NEW QUESTION 204

ADHCP configured router is connected directly to a switch that has been provisioned with DHCP snooping. IP Source Guard with the ip verify source port-security command is configured under the interfaces that connect to all DHCP clients on the switch. However, clients are not receiving an IP address via the DHCP server. Which option is the cause of this issue?

- A. The DHCP server does not support information option 82.
- B. The DHCP client interfaces have storm control configured.
- C. Static DHCP bindings are not configured on the switch.
- D. DHCP snooping must be enabled on all VLANs, even if they are not utilized for dynamic address allocation.

Answer: A

NEW QUESTION 206

To follow the Layer 2 switching guidelines, a network engineer decides to create a separate spanning tree for every group of 10 VLANs. Which version of spanning tree is appropriate to meet the company policy?

- A. MST
- B. PVST+
- C. RSTP
- D. RPVST+
- E. STP

Answer: A

NEW QUESTION 208

Which command would a network engineer apply to error-disable a switchport when a packet-storm is detected?

- A. router(config-if)#storm-control action shutdown
- B. router(config-if)#storm-control action trap
- C. router(config-if)#storm-control action error
- D. router(config-if)#storm-control action enable

Answer: A

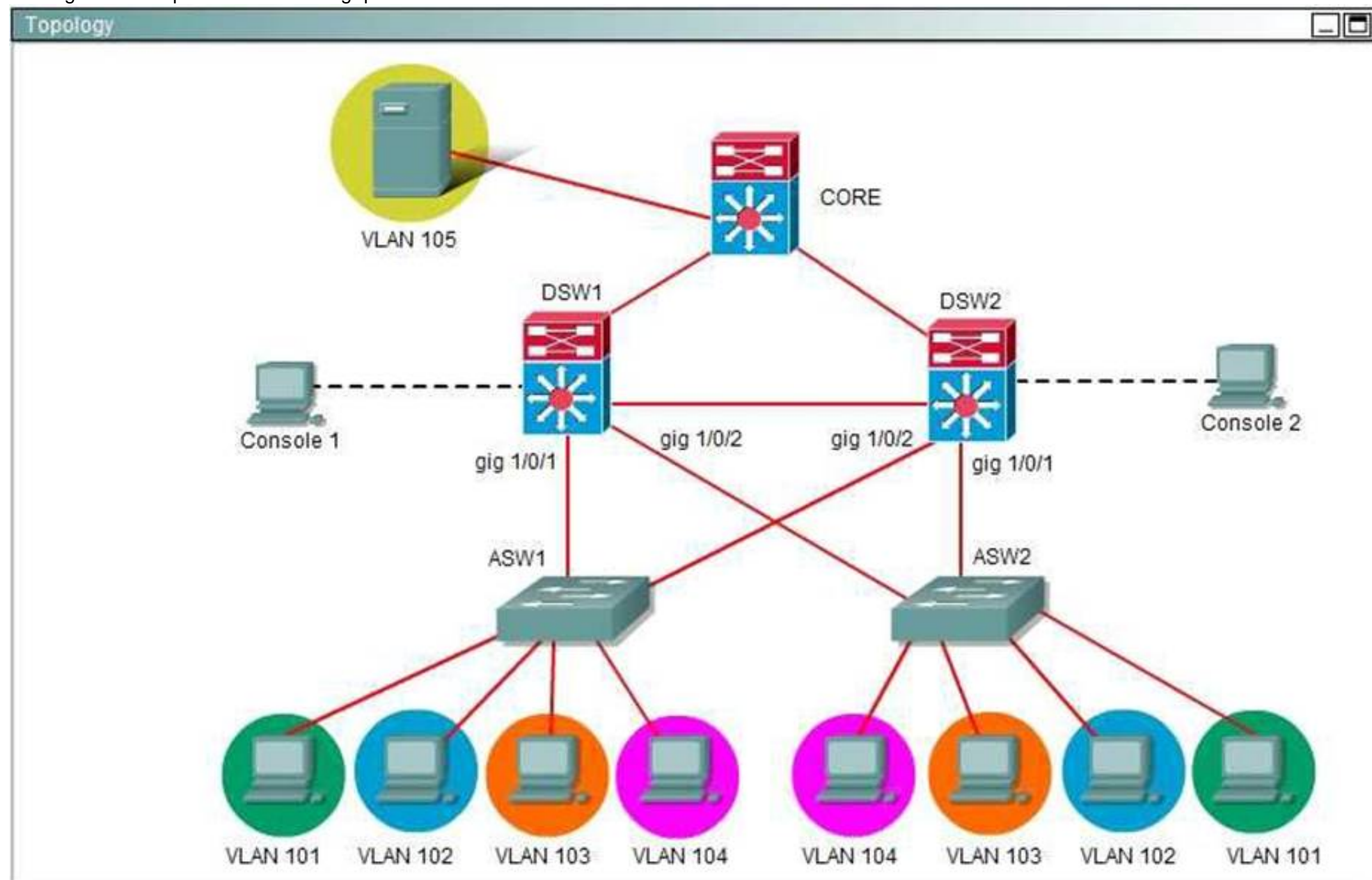
NEW QUESTION 209

Ferris Plastics, Inc. is a medium sized company, with an enterprise network (access, distribution and core switches) that provides LAN connectivity from user PCs to corporate servers. The distribution switches are configured to use HSRP to provide a high availability solution.

- DSW1 -primary device for VLAN 101 VLAN 102 and VLAN 105
- DSW2 - primary device for VLAN 103 and VLAN 104
- A failure of GigabitEthernet1/0/1 on primary device should cause the primary device to release its status as the primary device, unless GigabitEthernet1/0/1 on

backup device has also failed.

Troubleshooting has identified several issues. Currently all interfaces are up. Using the running configurations and show commands, you have been asked to investigate and respond to the following question.



If GigabitEthernet1/0/1 on DSW2 is shutdown, what will be the resulting priority value of the VLAN 105 HSRP group on router DSW2?

- A. 90
- B. 100
- C. 150
- D. 200

Answer: A

NEW QUESTION 213

Refer to the exhibit.

```
username cisco password cisco
!
aaa new-model
radius-server host 10.1.1.50 auth-port 1812 key C1sc0123
aaa authentication login default group radius local line
aaa authentication logging NO_AUTH none
!
line vty 0 15
login authentication default
password linepass
line console 0
login authentication NO_AUTH
```

Which login credentials are required when connecting to the console port in this output?

- A. none required
- B. username cisco with password cisco
- C. no username with password linepass
- D. login authentication default

Answer: A

NEW QUESTION 214

A network engineer configures port security and 802.1x on the same interface. Which option describes what this configuration allows?

- A. It allows port security to secure the MAC address that 802.1x authenticates.
- B. It allows port security to secure the IP address that 802.1x authenticates.
- C. It allows 802.1x to secure the MAC address that port security authenticates.
- D. It allows 802.1x to secure the IP address that port security authenticates.

Answer: A

NEW QUESTION 215

A network administrator configures 10 extended VLANs ranging from VLANs 3051 to 3060 in an enterprise network. Which version of VTP supports these extended VLANs?

- A. version 1
- B. version 2
- C. version 3
- D. VTP does not recognize extended VLANs.

Answer: C

NEW QUESTION 217

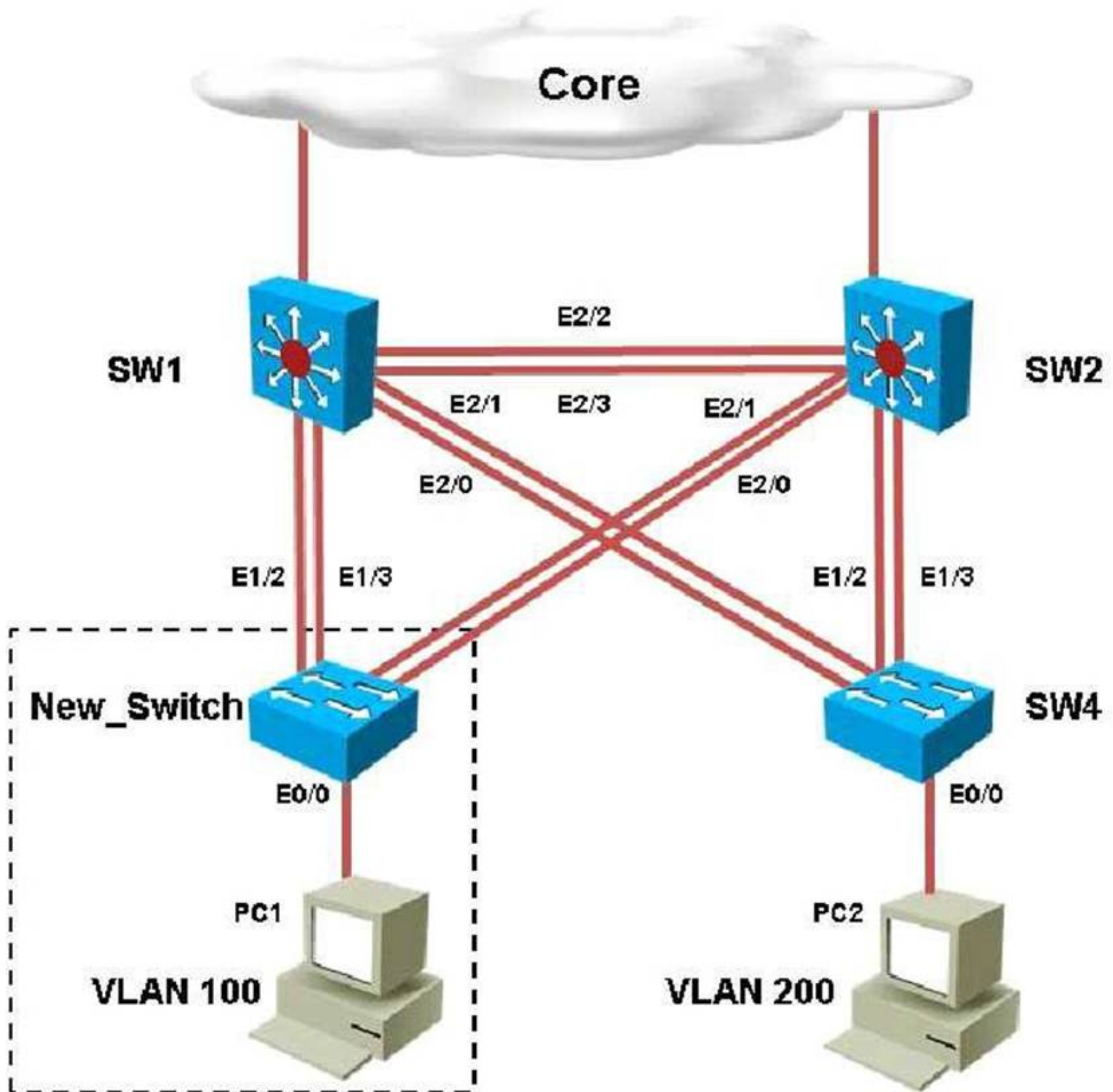
Interfaces are assigned to a VLAN, and then the VLAN is deleted. Which state are these interfaces in after the VLAN is deleted?

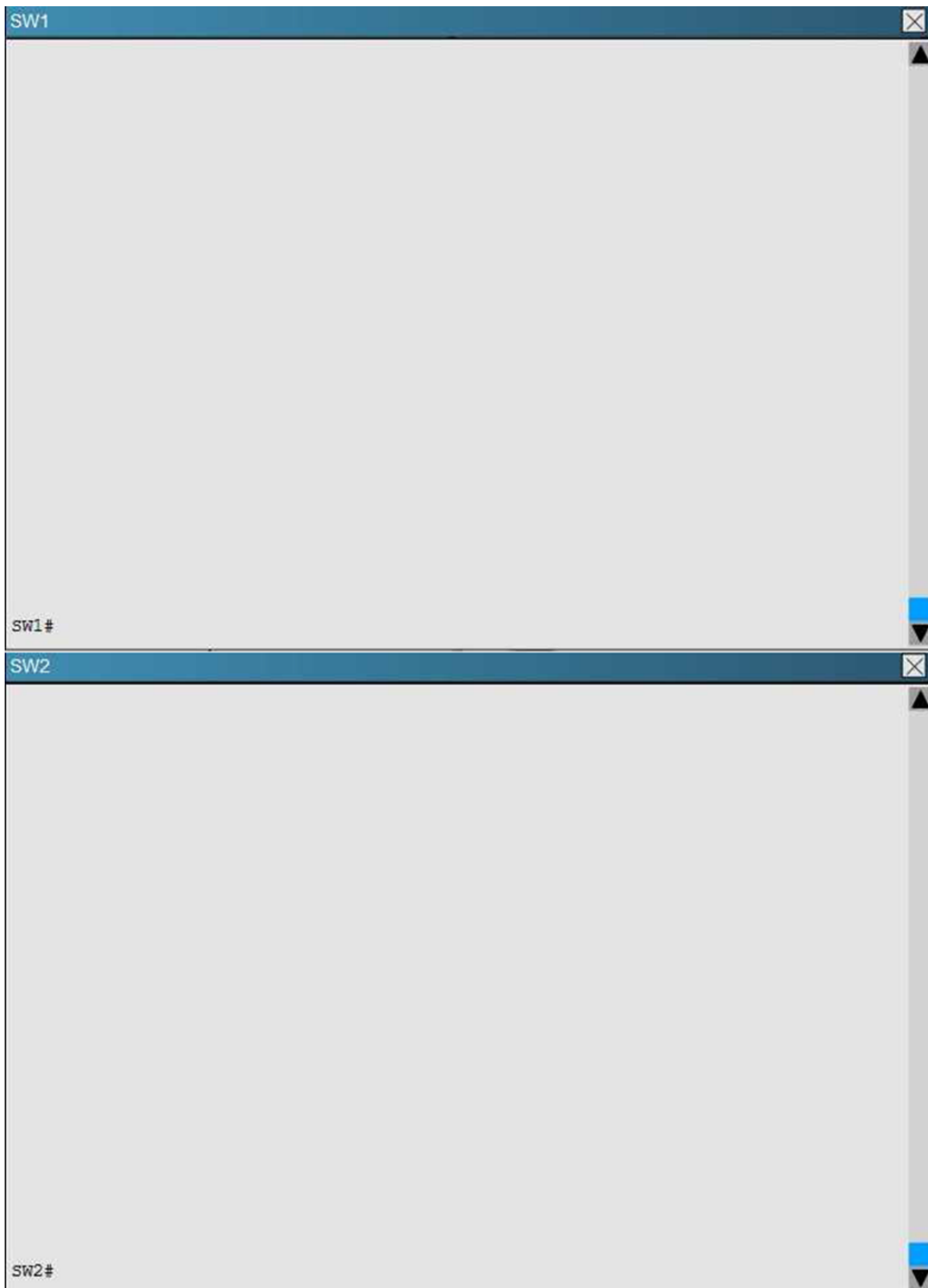
- A. They remain up, but they are reassigned to the default VLAN.
- B. They go down until they are reassigned to a VLAN.
- C. They go down, but they are reassigned to the default VLAN.
- D. They remain up, but they are reassigned to the native VLAN.

Answer: B

NEW QUESTION 222

You have been asked to install and configure a new switch in a customer network. Use the console access to the existing and new switches to configure and verify correct device configuration.





You are adding new VLANs. VLAN500 and VLAN600 to the topology in such way that you need to configure SW1 as primary root for VLAN 500 and secondary for VLAN 600 and SW2 as primary root for VLAN 600 and secondary for VLAN 500. Which configuration step is valid?

- A. Configure VLAN 500 & VLAN 600 on both SW1 & SW2
- B. Configure VLAN 500 and VLAN 600 on SW1 only
- C. Configure VLAN 500 and VLAN 600 on SW2 only
- D. Configure VLAN 500 and VLAN 600 on SW1 ,SW2 and SW4
- E. On SW2; configure vtp mode as off and configure VLAN 500 and VLAN 600; configure back to vtp server mode.

Answer: A

Explanation: By issuing the “show vtp status command on SW2, SW2, and SW4 we see that both SW1 and SW2 are operating in VTP server mode, but SW4 is a client, so we will need to add both VLANs to SW1 and SW2.

SW1

```
SW1#show vtp status
VTP Version capable      : 1 to 3
VTP version running      : 3
VTP Domain Name          : CCNP
VTP Pruning Mode         : Enabled
VTP Traps Generation     : Disabled
Device ID                : aabb.cc00.2500

Feature VLAN:
-----
VTP Operating Mode       : Server
Number of existing VLANs : 8
Number of existing extended VLANs : 0
Maximum VLANs supported locally : 4096
Configuration Revision   : 11
Primary ID               : aabb.cc00.2b00
Primary Description      : SW1
MD5 digest               : 0xA2 0xFA 0x6E 0x8D 0xD0 0xDE 0x5A 0xEF
                        0xE3 0x65 0x9A 0xF7 0x03 0xBF 0xBA 0x10
```

NEW QUESTION 226

DHCP snooping and IP Source Guard have been configured on a switch that connects to several client workstations. The IP address of one of the workstations does not match any entries found in the DHCP binding database. Which statement describes the outcome of this scenario?

- A. Packets from the workstation will be rate limited according to the default values set on the switch.
- B. The interface that is connected to the workstation in question will be put into the errdisabled state.
- C. Traffic will pass accordingly after the new IP address is populated into the binding database.
- D. The packets originating from the workstation are assumed to be spoofed and will be discarded.

Answer: D

NEW QUESTION 231

Which statement describes one major issue that VTP can cause in an enterprise network when a new switch is introduced in the network in VTP mode server?

- A. It can cause network access ports to go into err-disabled state.
- B. It can cause a network-wide VLAN configuration change if the revision number on the new switch is higher.
- C. It can cause a network-wide VLAN configuration change if the revision number on the new switch is lower.
- D. It can cause routing loops.

Answer: B

NEW QUESTION 235

Which First Hop Redundancy Protocol is an IEEE Standard?

- A. GLBP
- B. HSRP
- C. VRRP
- D. OSPF

Answer: C

NEW QUESTION 239

After UDLD is implemented, a Network Administrator noticed that one port stops receiving UDLD packets. This port continues to reestablish until after eight failed retries. The port then transitions into the errdisable state. Which option describes what causes the port to go into the errdisable state?

- A. Normal UDLD operations that prevent traffic loops.
- B. UDLD port is configured in aggressive mode.
- C. UDLD is enabled globally.
- D. UDLD timers are inconsistent.

Answer: B

NEW QUESTION 241

The network monitoring application alerts a network engineer of a client PC that is acting as a rogue DHCP server. Which two commands help trace this PC when the MAC address is known? (Choose two.)

- A. switch# show mac address-table
- B. switch# show port-security
- C. switch# show ip verify source
- D. switch# show ip arp inspection
- E. switch# show mac address-table address <mac address>

Answer: AE

NEW QUESTION 244

Which portion of AAA looks at what a user has access to?

- A. authorization
- B. authentication
- C. accounting
- D. auditing

Answer: A

NEW QUESTION 247

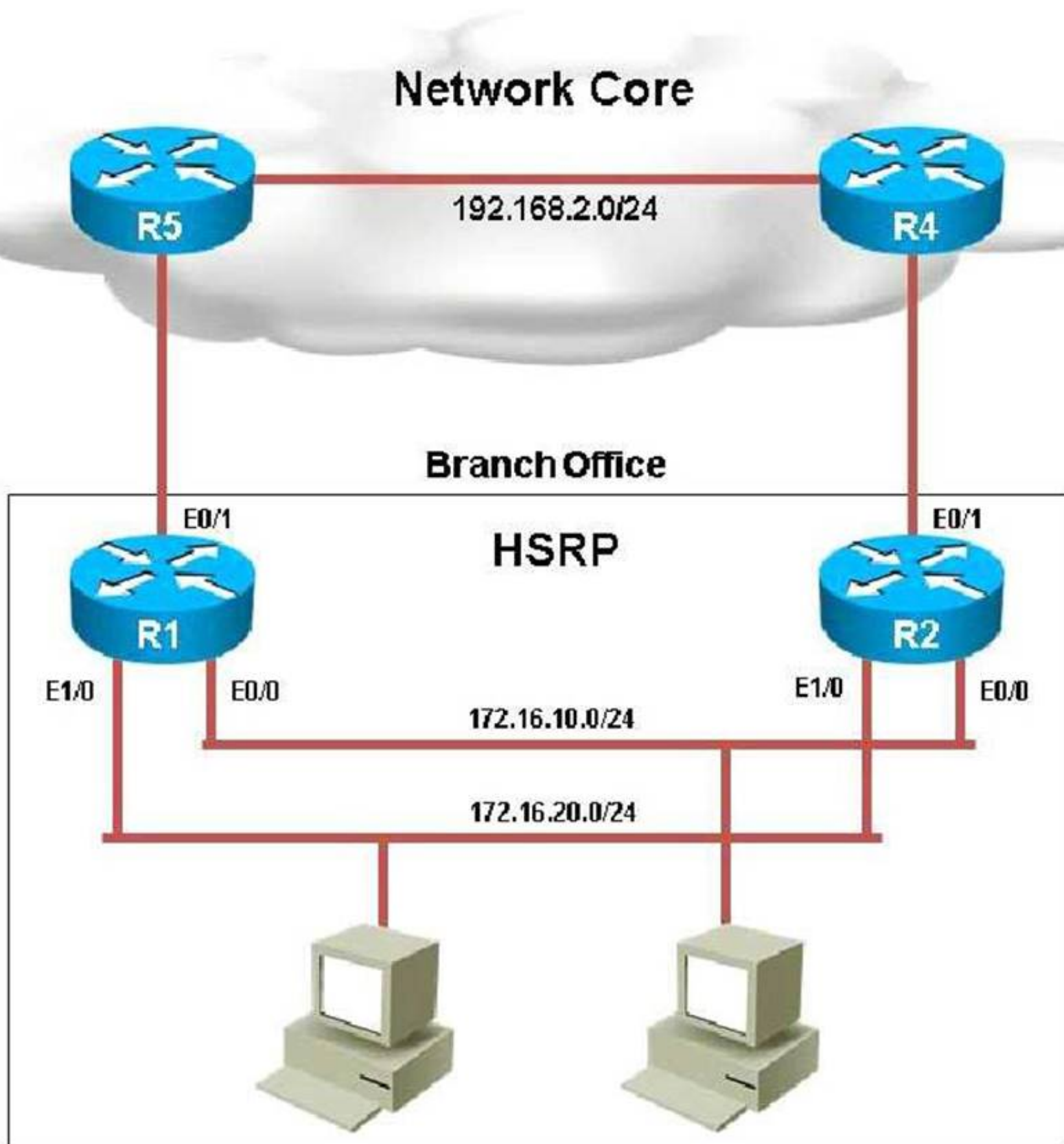
Which AAA Authorization type includes PPP, SLIP, and ARAP connections?

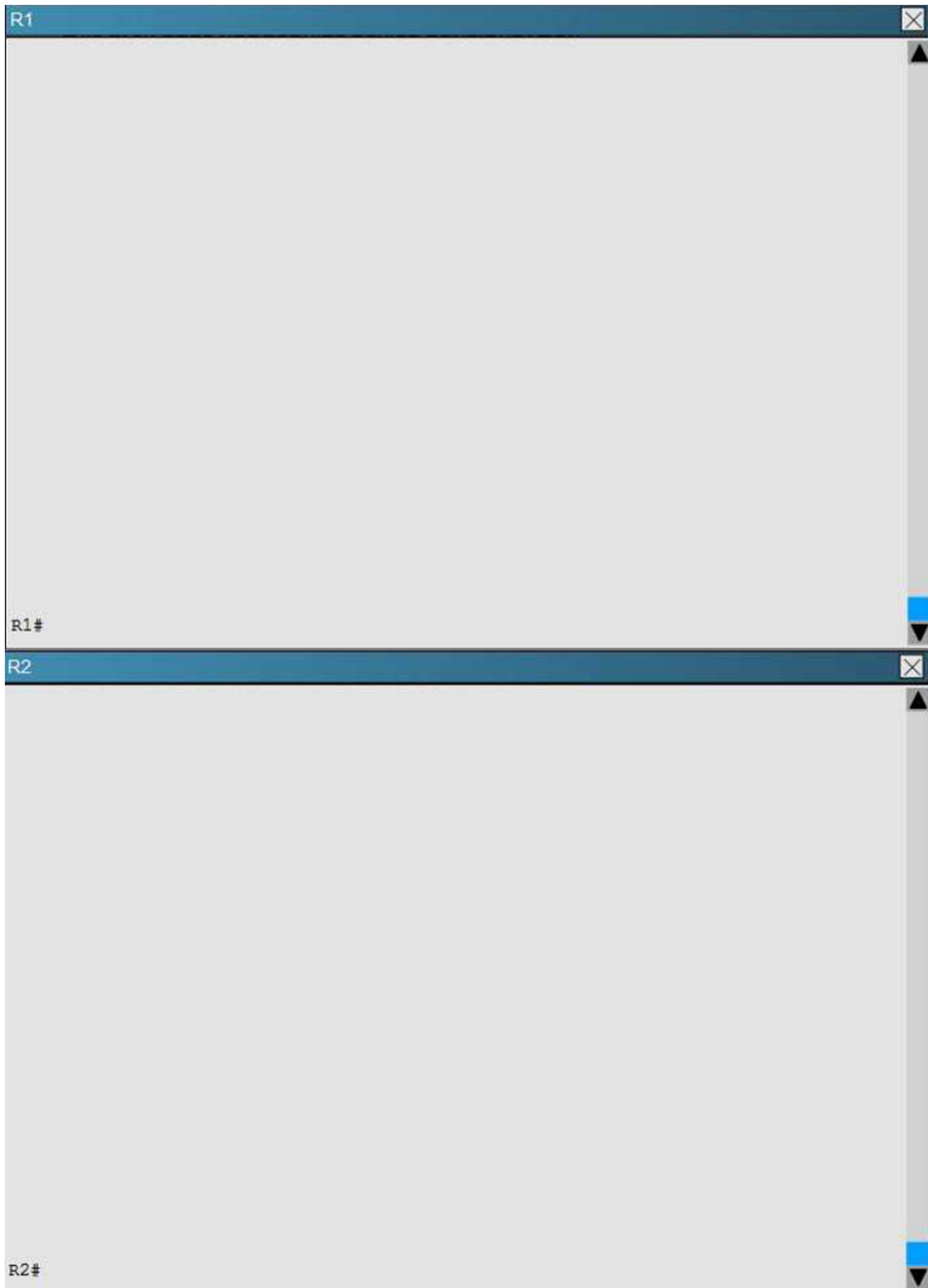
- A. network
- B. IP mobile
- C. EXEC
- D. auth-proxy

Answer: A

NEW QUESTION 248

Your customer has asked you to come in and verify the operation of routers R1 and R2 which are configured to use HSRP. They have questions about how these two devices will perform in the event of a device failure.





What issue is causing Router R1 and R2 to both be displayed as the HSRP active router for group 2?

- A. The HSRP group number mismatch
- B. The HSRP group authentication is misconfigured
- C. The HSRP Hello packets are blocked
- D. The HSRP timers mismatch
- E. The HSRP group priorities are different

Answer: B

NEW QUESTION 251

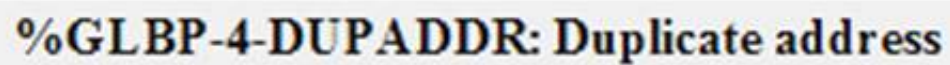
When SDM templates are configured, which action must be performed for the configuration to take effect?

- A. reload
- B. shutdown
- C. write memory
- D. backup config

Answer: A

NEW QUESTION 256

Refer to the exhibit.



```
%GLBP-4-DUPADDR: Duplicate address
```

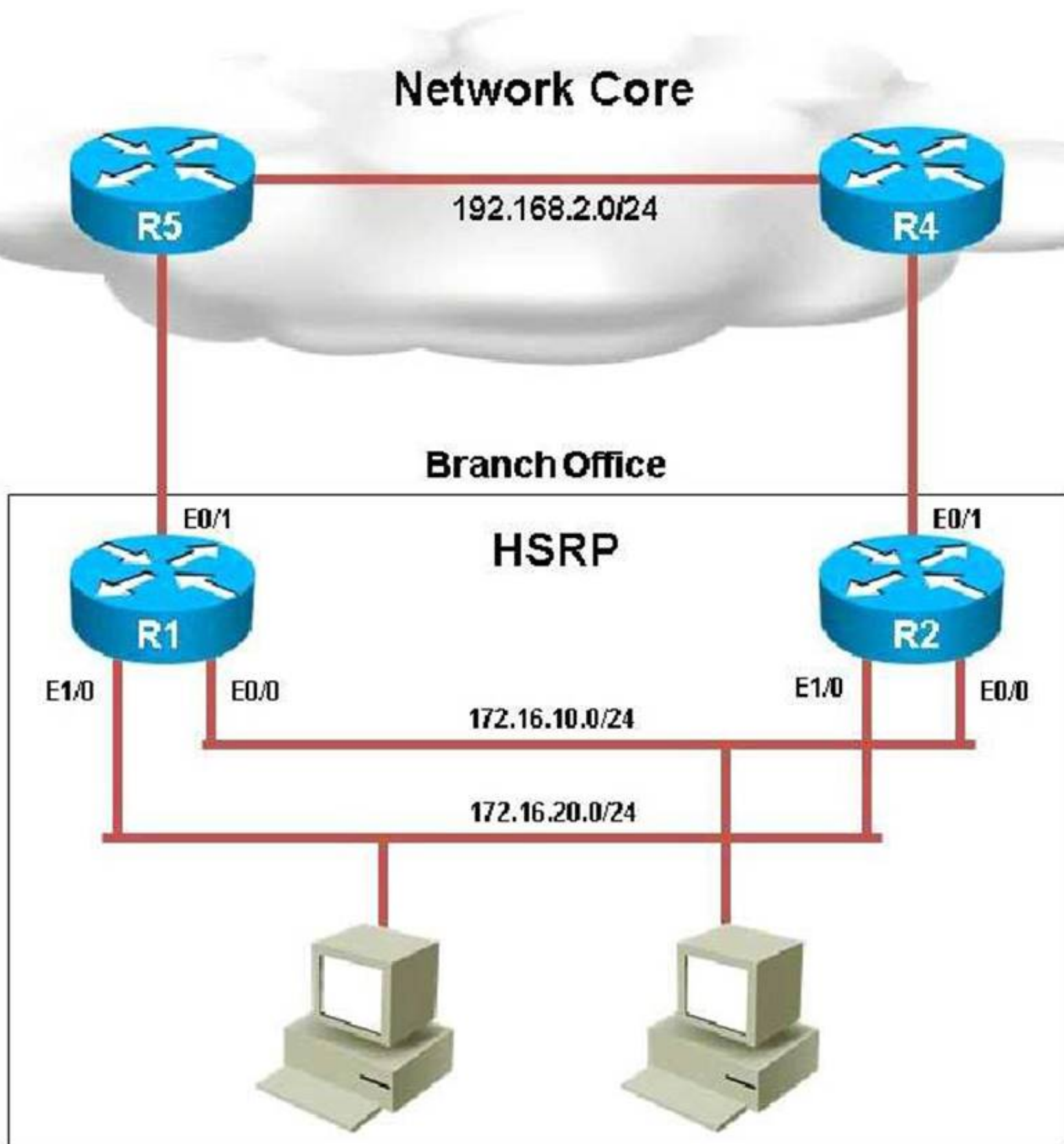
Which option describes the reason for this message in a GLBP configuration?

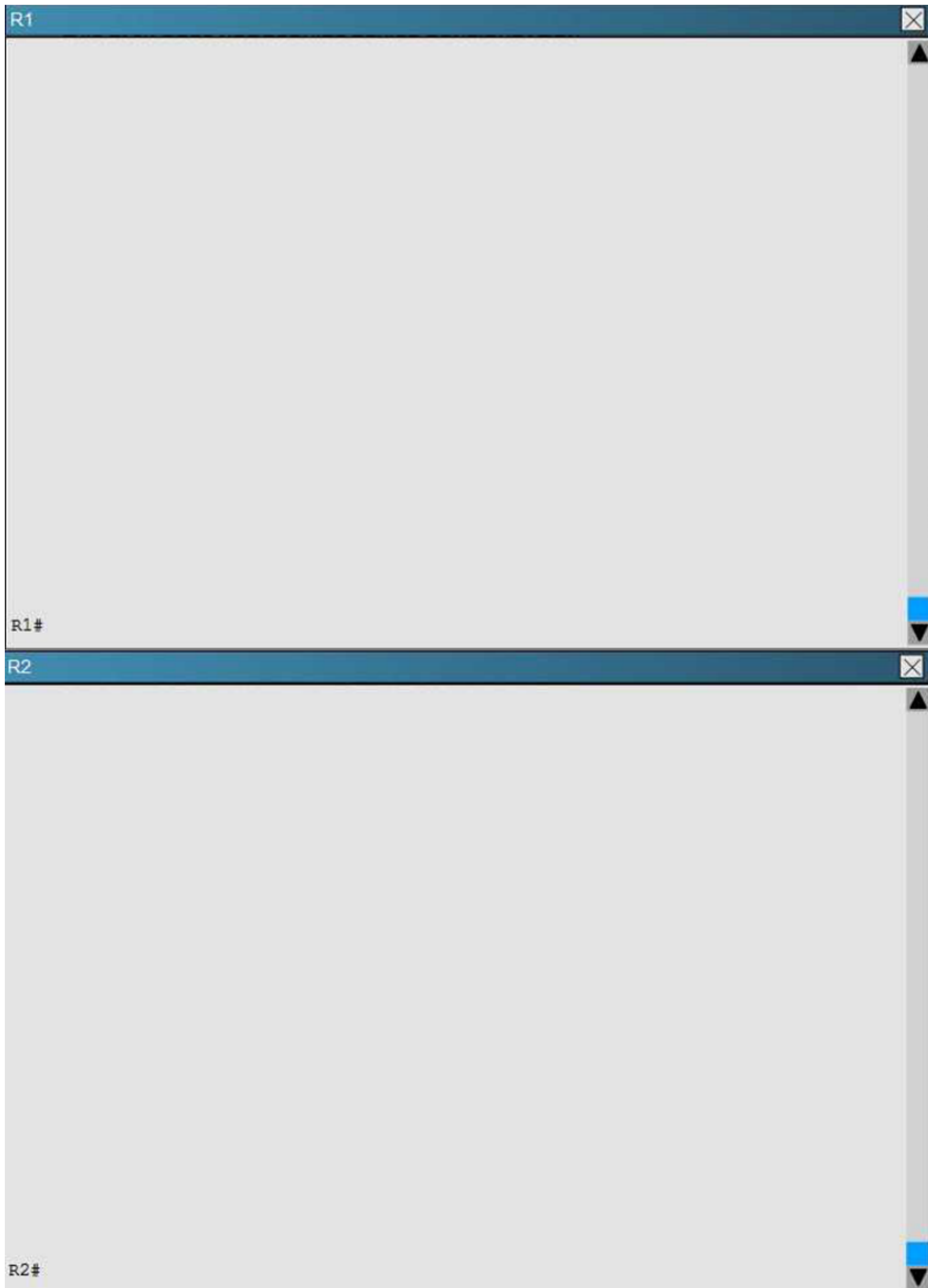
- A. Unavailable GLBP active forwarder
- B. Incorrect GLBP IP address
- C. HSRP configured on same interface as GLBP
- D. Layer 2 loop

Answer: D

NEW QUESTION 261

Your customer has asked you to come in and verify the operation of routers R1 and R2 which are configured to use HSRP. They have questions about how these two devices will perform in the event of a device failure.





What percentage of the outgoing traffic from the 172.16.10.0/24 subnet is being forwarded through R1?

- A. R1-0%
- B. R1-50 %, R2-50%
- C. R2-100%
- D. R1-100%

Answer: D

NEW QUESTION 262

When you configure a private VLAN, which type of port must you configure the gateway router port as?

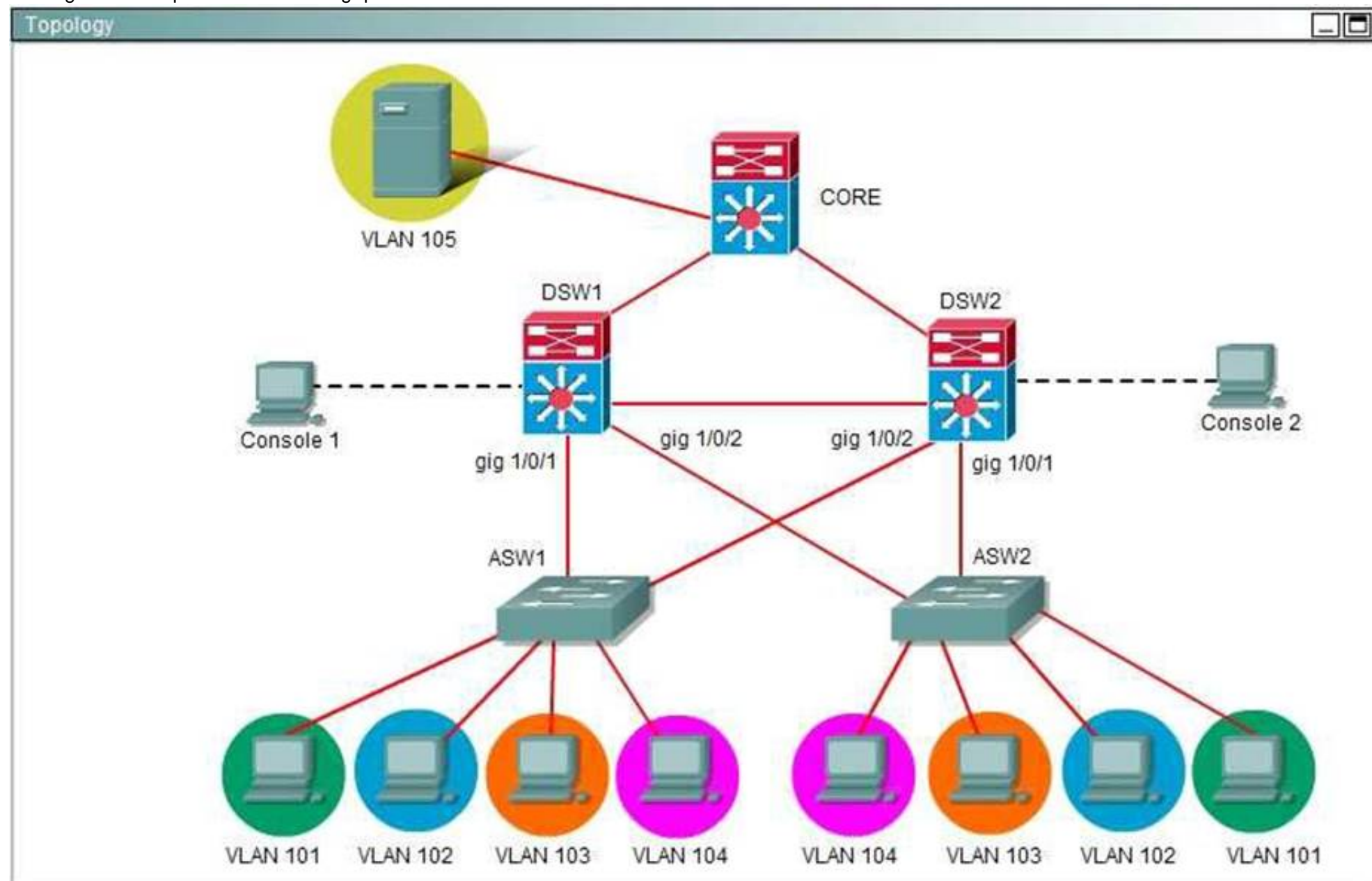
- A. promiscuous port
- B. isolated port
- C. community port
- D. access port

Answer: A

NEW QUESTION 264

Ferris Plastics, Inc. is a medium sized company, with an enterprise network (access, distribution and core switches) that provides LAN connectivity from user PCs to corporate servers. The distribution switches are configured to use HSRP to provide a high availability solution.

- DSW1 -primary device for VLAN 101 VLAN 102 and VLAN 105
 - DSW2 - primary device for VLAN 103 and VLAN 104
 - A failure of GigabitEthernet1/0/1 on primary device should cause the primary device to release its status as the primary device, unless GigabitEthernet1/0/1 on backup device has also failed.
- Troubleshooting has identified several issues. Currently all interfaces are up. Using the running configurations and show commands, you have been asked to investigate and respond to the following question.



During routine maintenance, GigabitEthernet1/0/1 on DSW1 was shut down. All other interfaces were up. DSW2 became the active HSRP device for VLAN 101 as desired. However, after GigabitEthernet1/0/1 on DSW1 was reactivated, DSW1 did not become the active router for VLAN 101 as desired. What needs to be done to make the group for VLAN 101 function properly?

- A. Enable preempt in the VLAN 101 HSRP group on DSW1.
- B. Disable preempt in the VLAN 101 HSRP group on DSW2's.
- C. In the VLAN 101 HSRP group on DSW1, decrease the priority value to a value that is less than the priority value configured in the VLAN 101 HSRP group on DSW2.
- D. Decrease the decrement value in the track command for the VLAN 101 HSRP group on DSW1 to a value less than the value in the track command for the VLAN 101 HSRP group on DSW2.

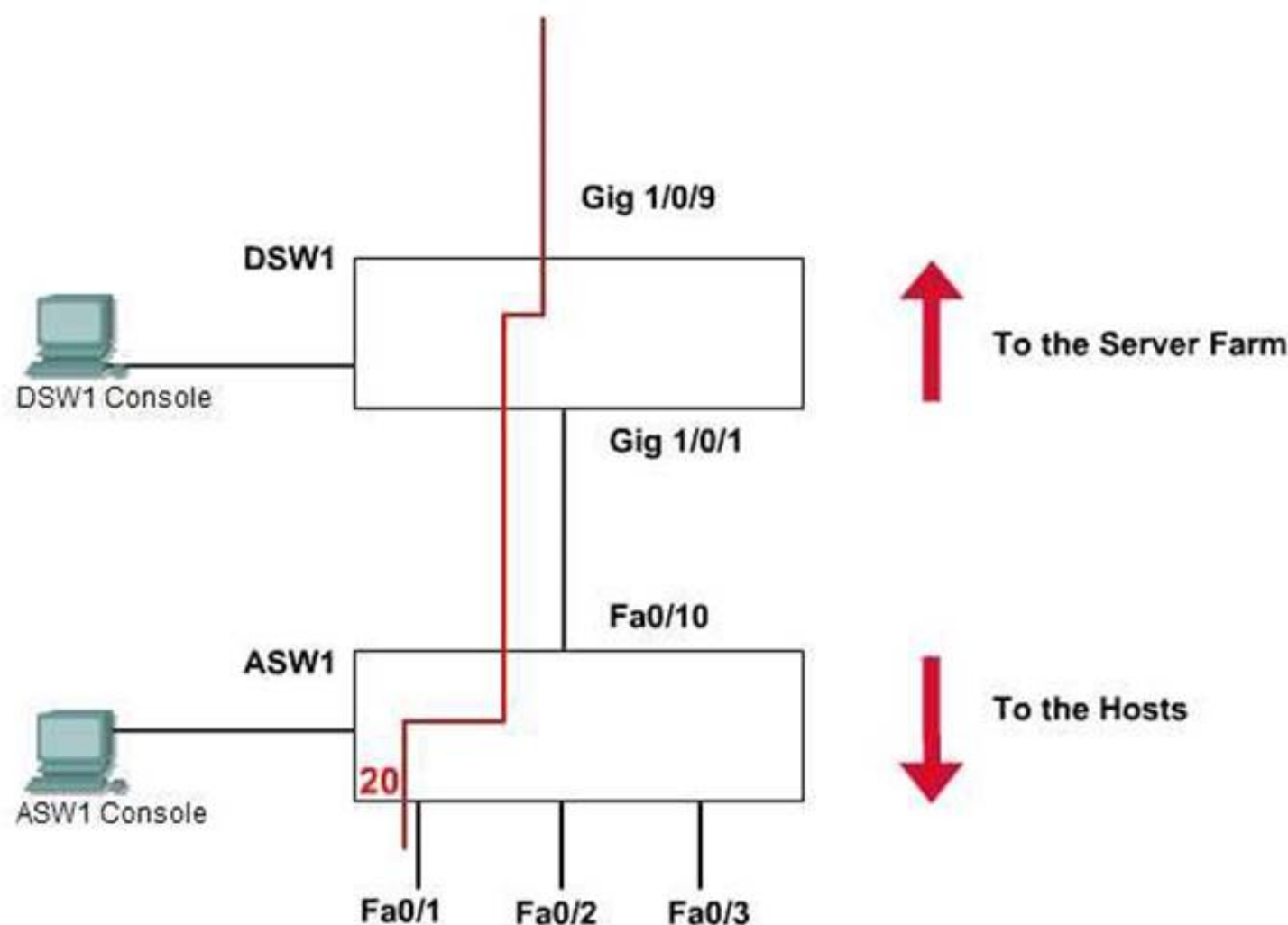
Answer: A

NEW QUESTION 266

SWITCH.com is an IT company that has an existing enterprise network comprised of two layer 2 only switches; DSW1 and ASW1. The topology diagram indicates their layer 2 mapping. VLAN 20 is a new VLAN that will be used to provide the shipping personnel access to the server. Corporate policies do not allow layer 3 functionality to be enabled on the switches. For security reasons, it is necessary to restrict access to VLAN 20 in the following manner:

- Users connecting to VLAN 20 via port 0/1 on ASW1 must be authenticated before they are given access to the network. Authentication is to be done via a Radius server:
- Radius server host: 172.120.40.46
- Radius key: rad123

- Authentication should be implemented as close to the host as possible.
 - Devices on VLAN 20 are restricted to the subnet of 172.120.40.0/24.
 - Packets from devices in the subnet of 172.120.40.0/24 should be allowed on VLAN 20.
 - Packets from devices in any other address range should be dropped on VLAN 20.
 - Filtering should be implemented as close to the serverfarm as possible.
- The Radius server and application servers will be installed at a future date. You have been tasked with implementing the above access control as a pre-condition to installing the servers. You must use the available IOS switch features.



Answer:

Explanation: The configuration:

Step1: Console to ASW1 from PC console 1 ASW1(config)#aaa new-model

ASW1(config)#radius-server host 172.120.39.46 key rad123 ASW1(config)#aaa authentication dot1x default group radius ASW1(config)#dot1x system-auth-control ASW1(config)#inter fastEthernet 0/1

ASW1(config-if)#switchport mode access ASW1(config-if)#dot1x port-control auto ASW1(config-if)#exit

ASW1#copy run start

Step2: Console to DSW1 from PC console 2 DSW1(config)#ip access-list standard 10 DSW1(config-ext-nacl)#permit 172.120.40.0 0.0.0.255

DSW1(config-ext-nacl)#exit DSW1(config)#vlan access-map PASS 10 DSW1(config-access-map)#match ip address 10 DSW1(config-access-map)#action forward

DSW1(config-access-map)#exit DSW1(config)#vlan access-map PASS 20 DSW1(config-access-map)#action drop DSW1(config-access-map)#exit

DSW1(config)#vlan filter PASS vlan-list 20 DSW1#copy run start

NEW QUESTION 270

Refer to the exhibit.

```
monitor session 1 source interface g0/4 rx
monitor session 1 filter vlan 3
monitor session 1 destination interface g0/5
```

What is the result of the SPAN configuration on a Cisco switch?

- Configure a SPAN session to monitor the received traffic on interface g0/4 only for VLAN 3.
- Configure a SPAN session to monitor the received traffic on interface g0/4 for all VLANs except VLAN 3.
- Configure a SPAN session to monitor the received traffic on interface g0/5 only for VLAN 3.
- Configure a SPAN session to monitor the received traffic on interface g0/5 for all VLANs except VLAN 3.

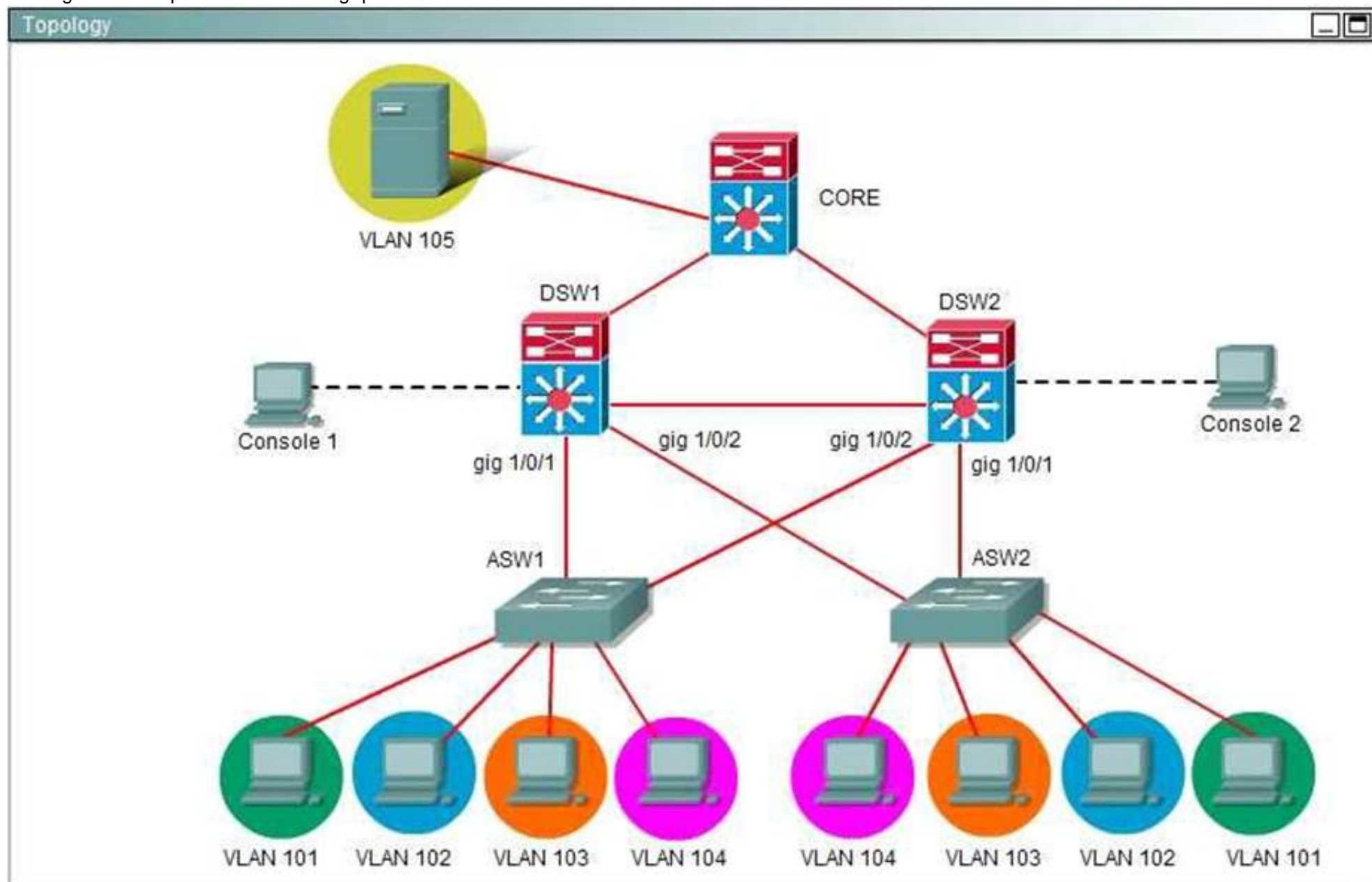
Answer: A

NEW QUESTION 272

Ferris Plastics, Inc. is a medium sized company, with an enterprise network (access, distribution and core switches) that provides LAN connectivity from user PCs to corporate servers. The distribution switches are configured to use HSRP to provide a high availability solution.

- DSW1 -primary device for VLAN 101 VLAN 102 and VLAN 105
- DSW2 - primary device for VLAN 103 and VLAN 104

- A failure of GigabitEthernet1/0/1 on primary device should cause the primary device to release its status as the primary device, unless GigabitEthernet1/0/1 on backup device has also failed.
- Troubleshooting has identified several issues. Currently all interfaces are up. Using the running configurations and show commands, you have been asked to investigate and respond to the following question.



All interfaces are active. DSW2 has not become the active device for the VLAN 103 HSRP group. As related to the VLAN 103 HSRP group, what can be done to make the group function properly?

- On DSW1, disable preempt.
- On DSW1, decrease the priority value to a value less than 190 and greater than 150.
- On DSW2, increase the priority value to a value greater 200 and less than 250.
- On DSW2, increase the decrement value in the track command to a value greater than 10 and less than 50.

Answer: C

Explanation: The reason DSW2 has not become the active switch for Vlan103 is because the priority value of DSW1 is higher than that of DSW2. In order to make DSW2 become the active switch, we need to increase DSW2's priority (to higher than 200) or decrease DSW1's priority (to lower than 190) -> B and C are correct.

But there is another requirement from this question that "A failure on gig1/0/1 on primary device should cause the primary device to release its status as the primary device, unless GigabitEthernet 1/0/1 on backup device has also failed". This requirement makes answer B incorrect. For example, we choose to decrease the priority value on DSW1 to 160 (according to answer B) then DSW2 will become active switch (that is good). When Gi1/0/1 on DSW2 goes down, the priority of DSW2 will be $190 - 50 = 140 < 160$ -> DSW1 will become new active switch (it is good, too). But when Gi1/0/1 on DSW1 also goes down, the priority of DSW1 will be 160

$- 10 = 150$ and it is still greater than 140 of DSW2 -> DSW2 cannot retake the active role as the requirement of this question.

NEW QUESTION 275

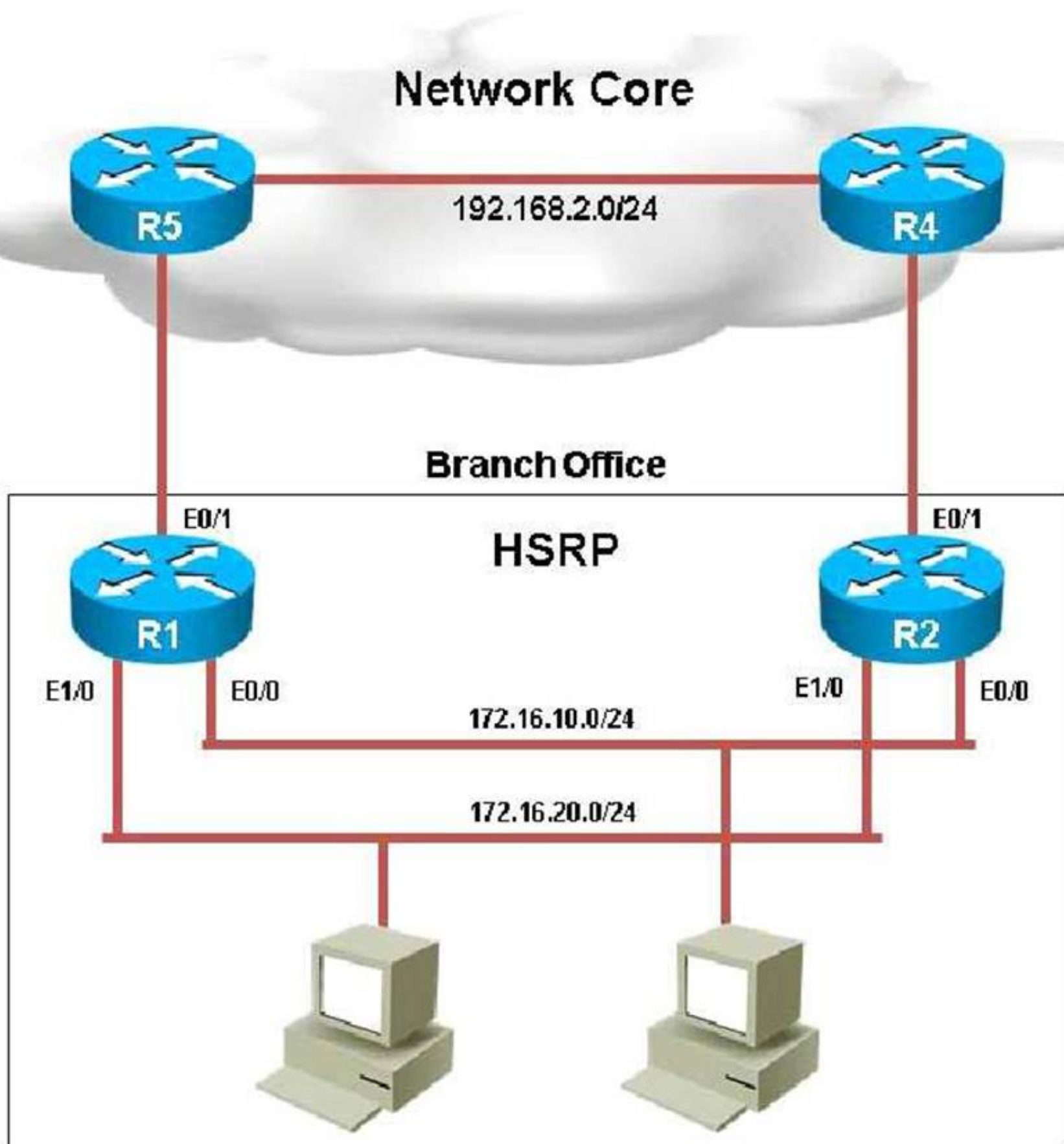
Which command globally enables AAA on a device?

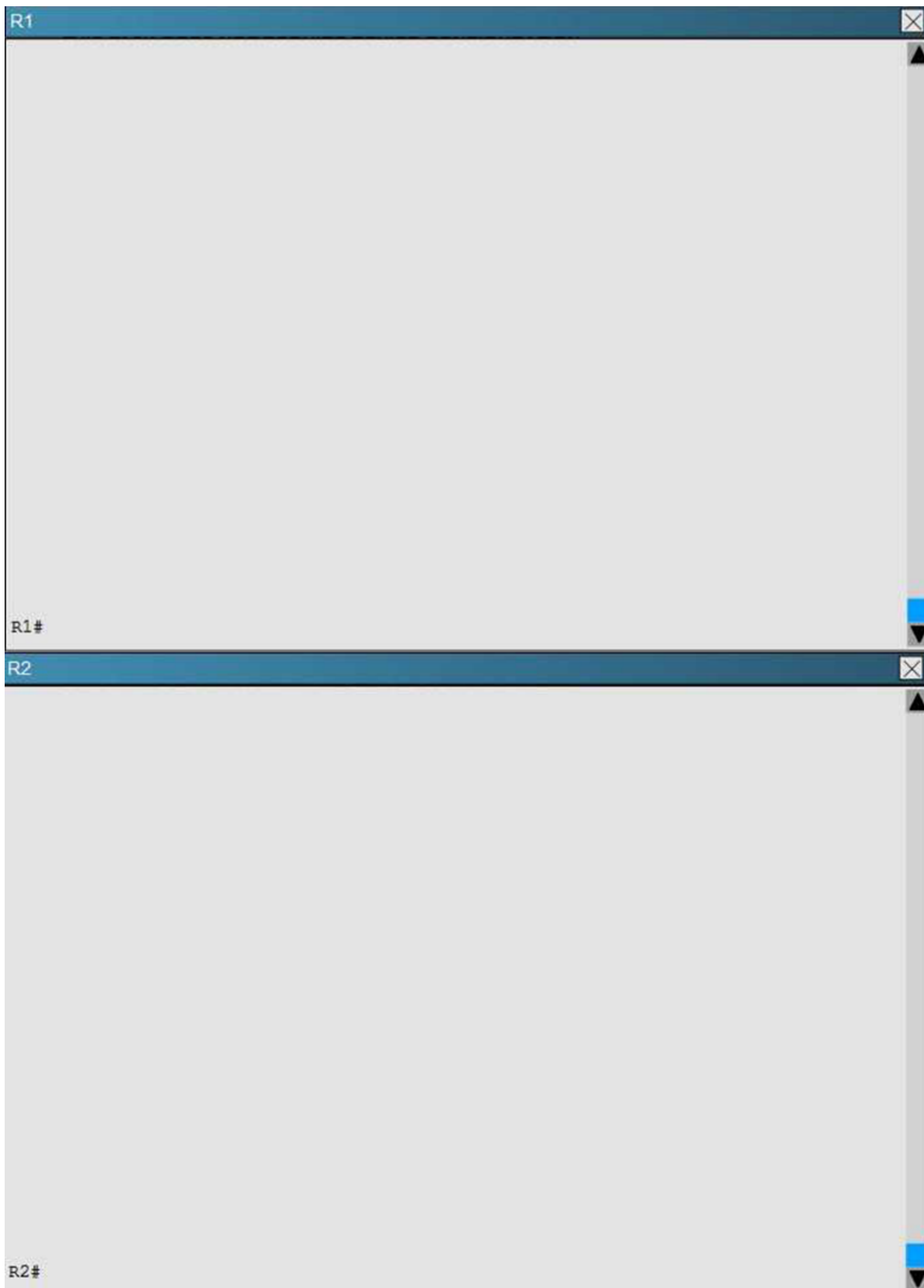
- aaa new-model
- aaa authentication
- aaa authorization
- aaa accounting

Answer: A

NEW QUESTION 279

Your customer has asked you to come in and verify the operation of routers R1 and R2 which are configured to use HSRP. They have questions about how these two devices will perform in the event of a device failure.





Refer to the exhibit. If router R1 interface Ethernet0/0 goes down and recovers, which of the statement regarding HSRP priority is true?

- A. The interface will have the priority decremented by 40 for HSRP group 1.
- B. The interface will have the priority decremented by 60 for HSRP group 1
- C. The interface will have its current priority incremented by 40 for HSRP group 1
- D. The interface will have its current priority incremented by 60 for HSRP group 1
- E. The interface will default to the a priority of 100 for HSRP group 1

Answer: C

NEW QUESTION 283

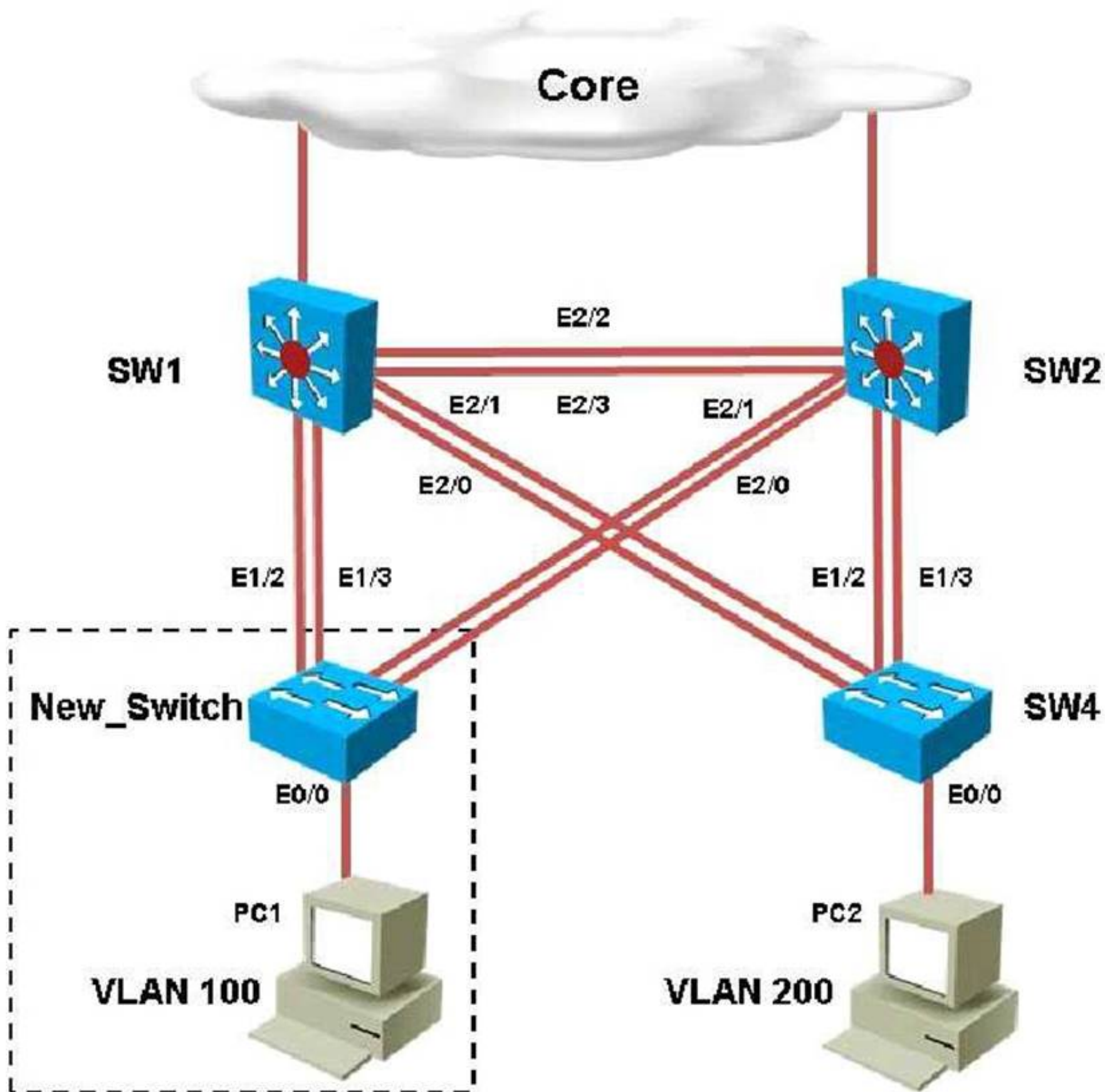
Which command creates a login authentication method named "login" that will primarily use RADIUS and fail over to the local user database?

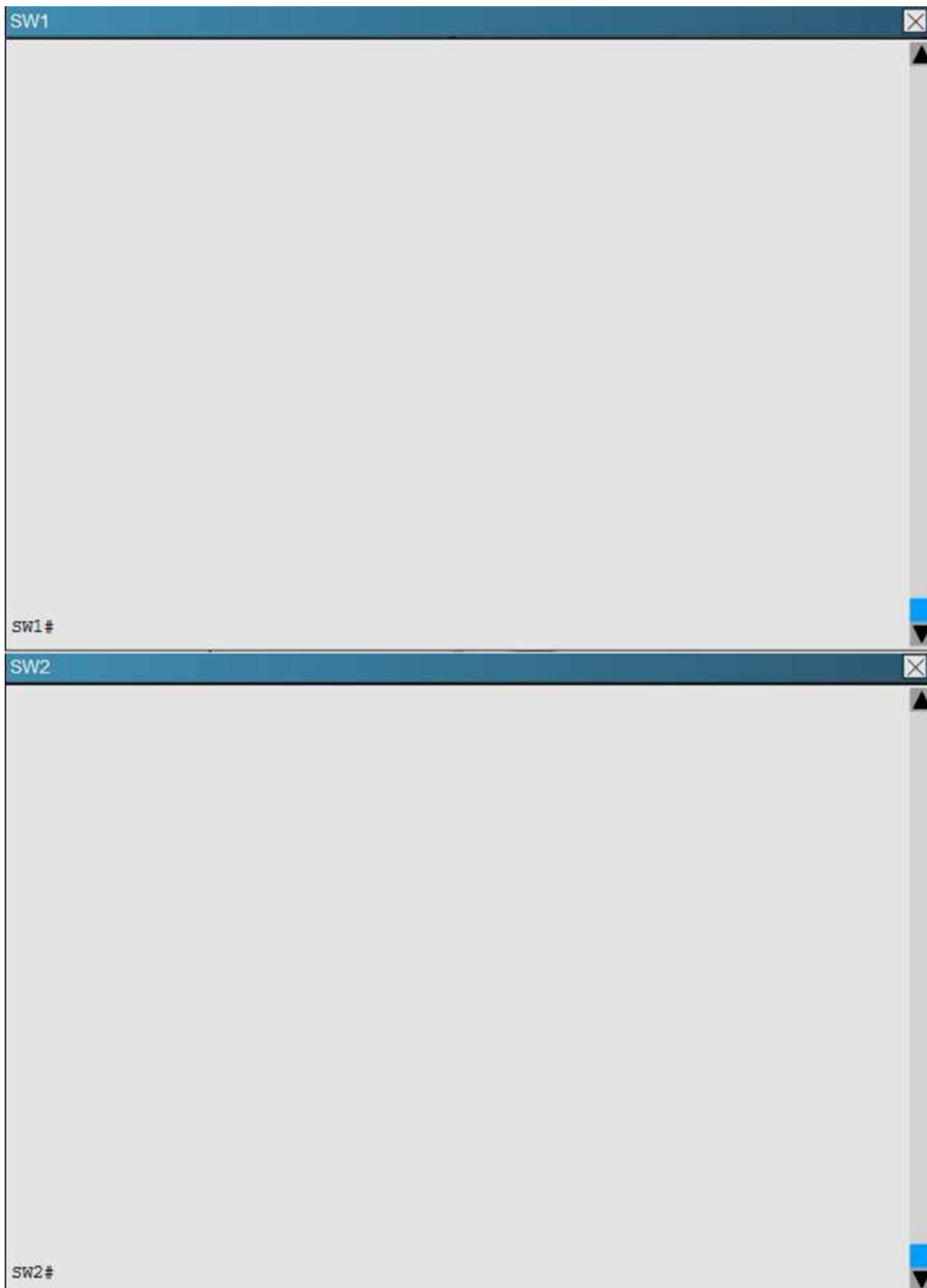
- A. (config)# aaa authentication login default radius local
- B. (config)# aaa authentication login login radius local
- C. (config)# aaa authentication login default local radius
- D. (config)# aaa authentication login radius local

Answer: B

NEW QUESTION 284

You have been asked to install and configure a new switch in a customer network. Use the console access to the existing and new switches to configure and verify correct device configuration.





Examine the VTP configuration. You are required to configure private VLANs for a new server deployment connecting to the SW4 switch. Which of the following configuration steps will allow creating private VLANs?

- A. Disable VTP pruning on SW1 only
- B. Disable VTP pruning on SW2 only
- C. Disable VTP pruning on SW4 only

- D. Disable VTP pruning on SW2, SW4 and New_Switch
- E. Disable VTP pruning on New_Switch and SW4 only.

Answer: C

Explanation: To create private VLANs, you will need to only disable pruning on the switch that contains the private VLANs. In this case, only SW4 will connect to servers in a private VLAN.

NEW QUESTION 285

Enablement of which feature puts the port into err-disabled state when the port has PortFast enabled and it receives BPDUs?

- A. BPDU filtering
- B. BackboneFast
- C. EtherChannel
- D. BPDU guard

Answer: D

NEW QUESTION 286

What is the default amount by which the hot standby priority for the router is decremented or incremented when the interface goes down or comes back up?

- A. 1
- B. 5
- C. 10
- D. 15

Answer: C

NEW QUESTION 287

Which private VLAN access port belongs to the primary VLAN and can communicate with all interfaces, including the community and isolated host ports?

- A. promiscuous port
- B. isolated port
- C. community port
- D. trunk port

Answer: A

NEW QUESTION 292

Which gateway role is responsible for answering ARP requests for the virtual IP address in GLBP?

- A. active virtual forwarder
- B. active virtual router
- C. active virtual gateway
- D. designated router

Answer: C

NEW QUESTION 297

Which option is valid for EtherChannel load balancing?

- A. source MAC address and source IP address
- B. destination MAC address and destination IP address
- C. source MAC address and destination IP address
- D. source MAC address and destination MAC address

Answer: D

NEW QUESTION 299

What is the maximum number of virtual MAC addresses that GLBP allows per group?

- A. 2
- B. 4
- C. 6
- D. 8

Answer: B

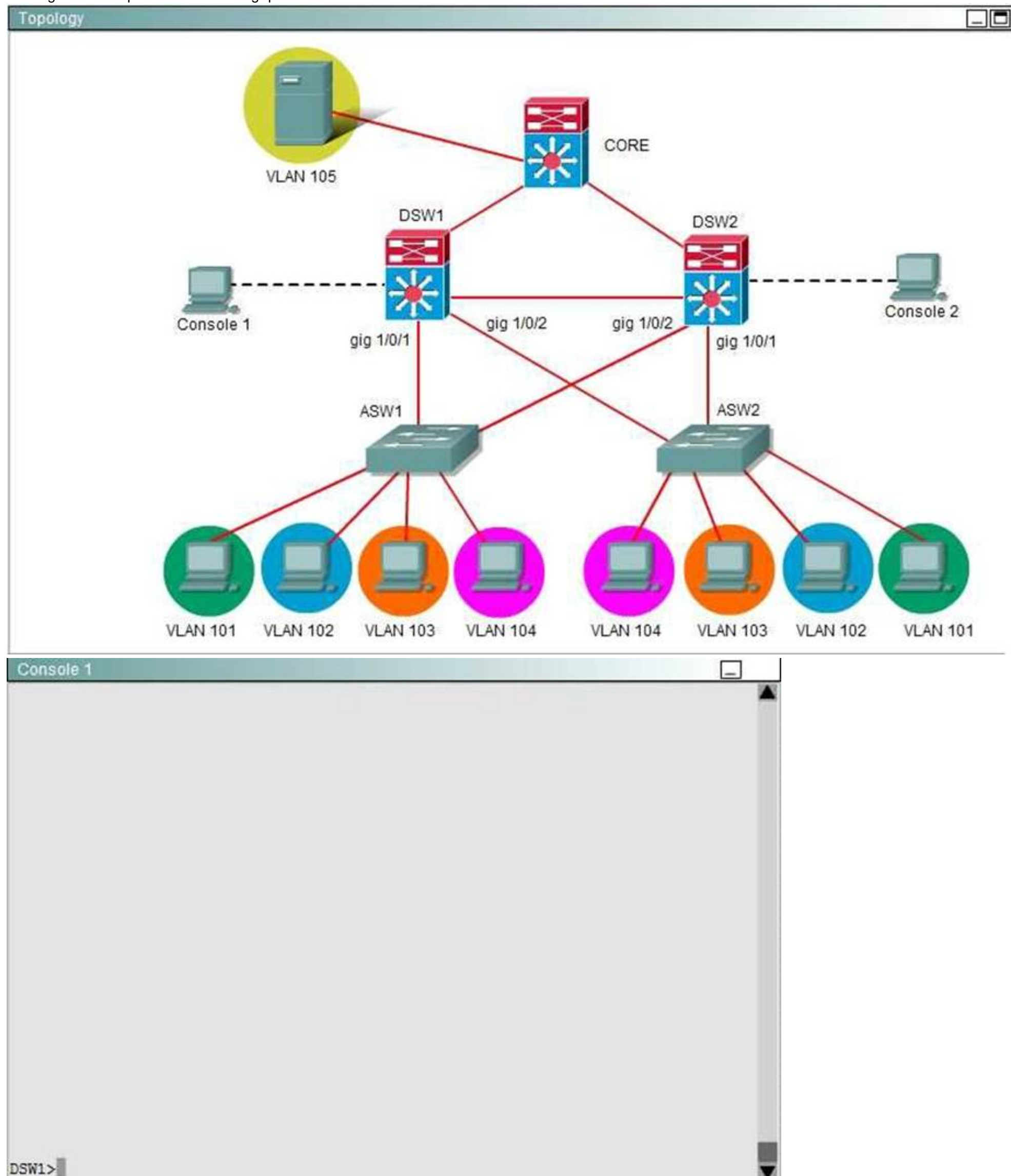
NEW QUESTION 304

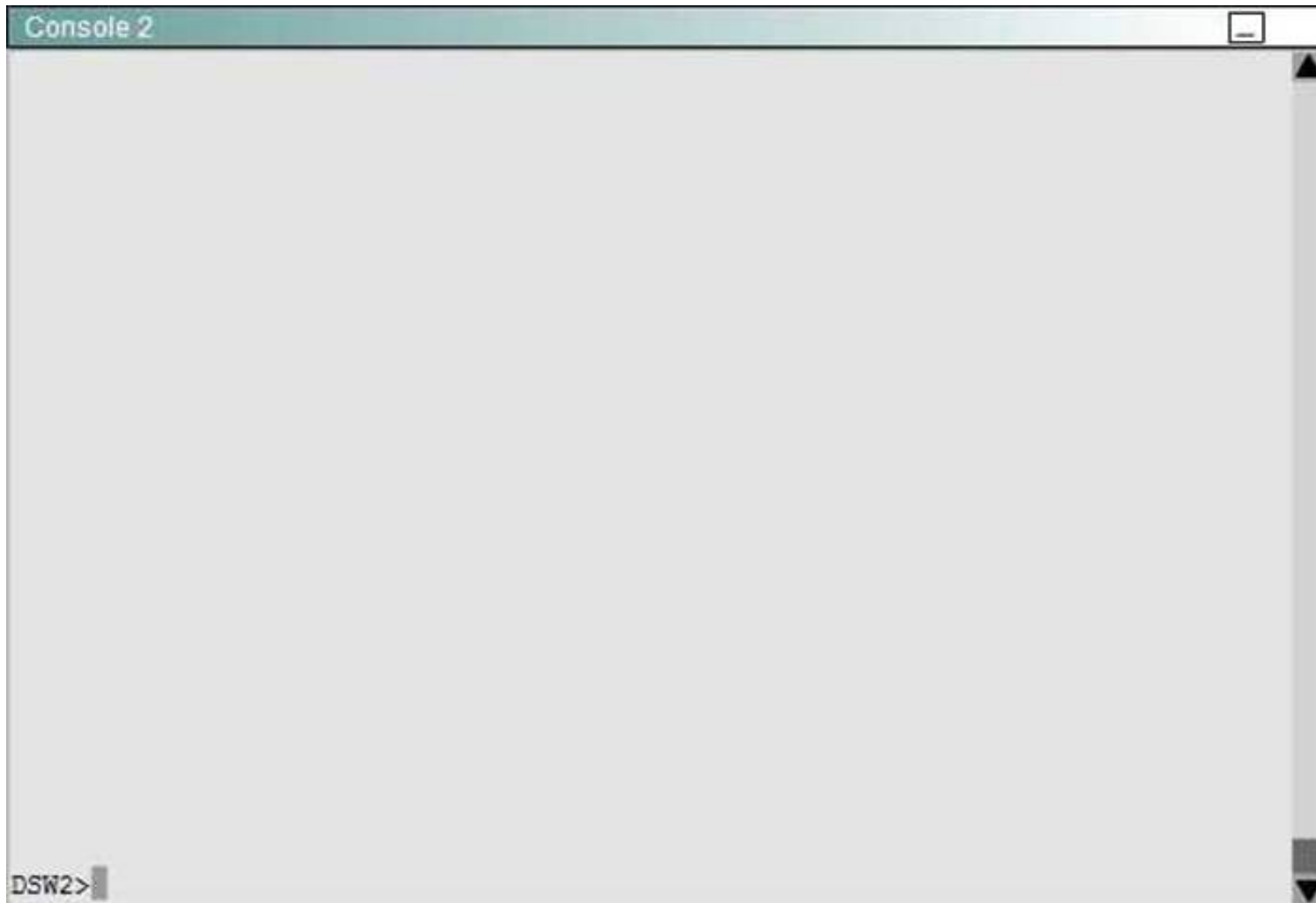
Ferris Plastics, Inc. is a medium sized company, with an enterprise network (access, distribution and core switches) that provides LAN connectivity from user PCs to corporate servers. The distribution switches are configured to use HSRP to provide a high availability solution.

- DSW1 -primary device for VLAN 101 VLAN 102 and VLAN 105
- DSW2 - primary device for VLAN 103 and VLAN 104
- A failure of GigabitEthernet1/0/1 on primary device should cause the primary device to release its status as the primary device, unless GigabitEthernet1/0/1 on

backup device has also failed.

Troubleshooting has identified several issues. Currently all interfaces are up. Using the running configurations and show commands, you have been asked to investigate and respond to the following question.





During routine maintenance, it became necessary to shut down the GigabitEthernet1/0/1 interface on DSW1 and DSW2. All other interfaces were up. During this time, DSW1 became the active router for the VLAN 104HSRP group. As related to the VLAN 104HSRP group, what can to be done to make the group function properly?

- A. On DSW1, disable preempt.
- B. On DSW2 decrease the priority value to a value less than 150.
- C. On DSW1, increase the decrement value in the track command to a value greater than 6.
- D. On DSW1, decrease the decrement value in the track command to a value less than 1.

Answer: C

NEW QUESTION 306

Which VRRP router is responsible for forwarding packets that are sent to the IP addresses of the virtual router?

- A. virtual router master
- B. virtual router backup
- C. virtual router active
- D. virtual router standby

Answer: A

Explanation: Topic 3, Exam Set C

NEW QUESTION 310

Which feature do you implement so that an interface enters the root inconsistent state if it receives a superior BPDU?

- A. DPDU filter
- B. root guard
- C. BPDU guard
- D. loop guard

Answer: B

NEW QUESTION 311

During the implementation of a voice solution, which two required items are configured at an access layer switch that will be connected to an IP phone to provide VoIP communication? (Choose two.)

- A. allowed codecs
- B. untagged VLAN
- C. auxiliary VLAN
- D. Cisco Unified Communications Manager IP address
- E. RSTP

Answer: BC

NEW QUESTION 316

By default, what is the state of port security on a switch?

- A. disabled

- B. on
- C. off
- D. learning

Answer: A

NEW QUESTION 317

How does VTP pruning enhance network bandwidth?

- A. by restricting unicast traffic across VTP domains
- B. by reducing unnecessary flooding of traffic to inactive VLANs
- C. by limiting the spreading of VLAN information
- D. by disabling periodic VTP updates

Answer: B

NEW QUESTION 318

Which option is the maximum frame size for an 802.1Q frame?

- A. 64 bytes
- B. 68 bytes
- C. 1518 bytes
- D. 1522 bytes

Answer: D

NEW QUESTION 323

On which layer does IP source guard provide filtering to prevent a malicious host from impersonating the IP address of a legitimate host?

- A. Layer 1
- B. Layer 2
- C. Layer 3
- D. Layer 7

Answer: B

NEW QUESTION 327

Scenario:

You work for SWITCH.com. They have just added a new switch (SwitchB) to the existing network as shown in the topology diagram.

RouterA is currently configured correctly and is providing the routing function for devices on SwitchA and SwitchB. SwitchA is currently configured correctly, but will need to be modified to support the addition of SwitchB. SwitchB has a minimal configuration. You have been tasked with completing the needed configuring of SwitchA and SwitchB. SwitchA and SwitchB use Cisco as the enable password.

Configuration Requirements for SwitchA

- ▶ The VTP and STP configuration modes on SwitchA should not be modified.
- ▶ SwitchA needs to be the root switch for vlans 11, 12, 13, 21, 22 and 23. All other vlans should be left are their default values.

Configuration Requirements for SwitchB

• Vlan 21

- ▶ Name: Marketing

- ▶ will support two servers attached to fa0/9 and fa0/10

• Vlan 22

- ▶ Name: Sales

- ▶ will support two servers attached to fa0/13 and fa0/14

• Vlan 23

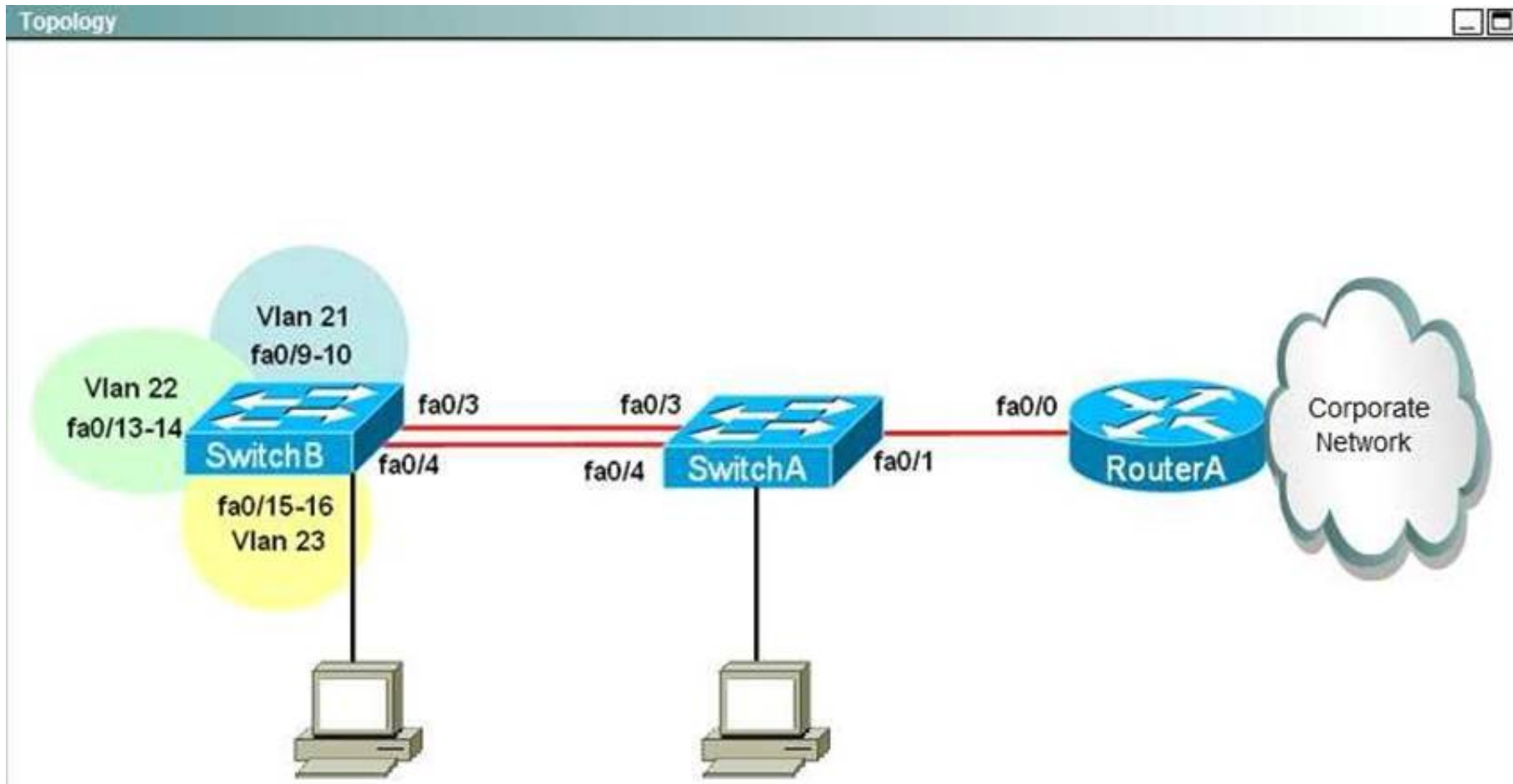
o Name: Engineering

o will support two servers attached to fa0/15 and fa0/16

- Access ports that connect to server should transition immediately to forwarding state upon detecting the connection of a device.
- SwitchB VTP mode needs to be the same as SwitchA.
- SwitchB must operate in the same spanning tree mode as SwitchA
- No routing is to be configured on SwitchB
- Only the SVI vlan 1 is to be configured and it is to use address 192.168.1.11/24

Inter-switch Connectivity Configuration Requirements

- For operational and security reasons trunking should be unconditional and Vlans 1, 21, 22 and 23 should tagged when traversing the trunk link.
- The two trunks between SwitchA and SwitchB need to be configured in a mode that allows for the maximum use of their bandwidth for all vlans. This mode should be done with a non-proprietary protocol, with SwitchA controlling activation.
- Propagation of unnecessary broadcasts should be limited using manual pruning on this trunk link.



Answer:

Explanation: hostname SWITCH_B

```

!
!
vlan 21
name Marketing vlan 22
name Sales vlan 23
name Engineering
!
!
interface FastEthernet0/3
switchport trunk allowed vlan 1,21-23 channel-protocol lacp
channel-group 1 mode passive switchport mode trunk
!
interface FastEthernet0/4
switchport trunk allowed vlan 1,21-23 channel-protocol lacp
channel-group 1 mode passive switchport mode trunk
!
interface FastEthernet0/9 switchport access vlan 21 switchport mode access spanning-tree portfast
!
interface FastEthernet0/10 switchport access vlan 21 switchport mode access spanning-tree portfast
!
interface FastEthernet0/13 switchport access vlan 22 switchport mode access spanning-tree portfast
!
!
interface FastEthernet0/14 switchport access vlan 22 switchport mode access spanning-tree portfast
!
interface FastEthernet0/15 switchport access vlan 23 switchport mode access spanning-tree portfast
!
interface FastEthernet0/16 switchport access vlan 23 switchport mode access spanning-tree portfast
!
!
interface GigabitEthernet1/1
!
interface GigabitEthernet1/2
!
interface Port-channel 1 switchport mode trunk
switchport trunk encapsulation dot1q spanning-tree allowed vlans 1,21-23
!
interface Vlan1
ip address 192.168.1.11 255.255.255.0
!
end SWITCH_B(config)# hostname SWITCH_A
!
spanning-tree vlan 11 root primary spanning-tree vlan 12 root primary spanning-tree vlan 13 root primary
spanning-tree vlan 21 root primary spanning-tree vlan 22 root primary spanning-tree vlan 23 root primary
!
interface FastEthernet0/3
switchport trunk allowed vlan 1,21-23 channel-protocol lacp
channel-group 1 mode active switchport mode trunk
!
interface FastEthernet0/4

```



```
switchport trunk allowed vlan 1,21-23 channel-protocol lacp
channel-group 1 mode active switchport mode trunk
!
interface FastEthernet0/21 switchport access vlan 21 switchport mode access
!
interface FastEthernet0/22 switchport access vlan 22 switchport mode access
!
interface FastEthernet0/23 switchport access vlan 23
switchport mode access
!
interface GigabitEthernet1/1
!
interface GigabitEthernet1/2
!
interface Port-channel 1
!
interface Vlan1 no ip address shutdown
!
ip default-gateway 192.168.1.1
!
!
End
```

NEW QUESTION 328

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

- A. It supports MAC address learning.
- B. RSPAN VLANs can carry RSPAN traffic only.
- C. Only one RSPAN VLAN can be configured per device.
- D. RSPAN VLANs are exempt from VTP pruning.
- E. MAC address learning is not supported.
- F. RSPAN uses a GRE tunnel to transmit captured traffic.

Answer: BE

NEW QUESTION 329



Refer to the exhibit. Which statement about the interface is true?

- A. The interface is down.
- B. The other side of the interface is set as access.
- C. The switch port command is missing from the configuration.
- D. The interface needs no shutdown configured.

Answer: A

NEW QUESTION 332

You have been tasked with configuring multilayer SwitchC, which has a partial configuration and has been attached to RouterC as shown in the topology diagram. You need to configure SwitchC so that Hosts H1 and H2 can successfully ping the server S1. Also SwitchC needs to be able to ping server S1.

Due to administrative restrictions and requirements you should not add/delete vlans or create trunk links. Company policies forbid the use of static or default routing. All routes must be learned via EIGRP 65010 routing protocol.

You do not have access to RouterC. RouterC is correctly configured. No trunking has been configured on RouterC.

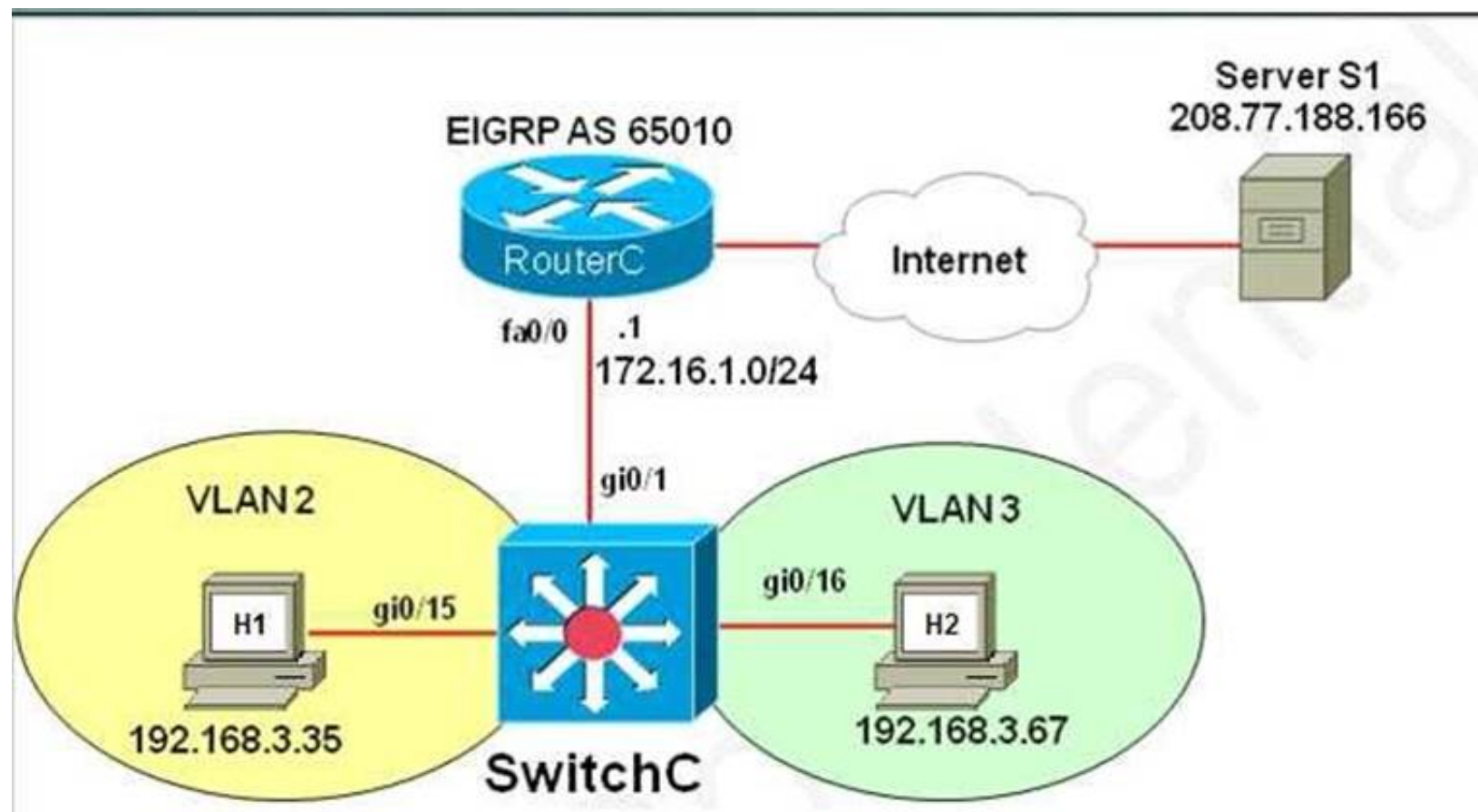
Routed interfaces should use the lowest host on a subnet when possible. The following subnets are available to implement this solution:

- 10.10.10.0/24
- 190.200.250.32/27
- 190.200.250.64/27

Hosts H1 and H2 are configured with the correct IP address and default gateway. SwitchC uses Cisco as the enable password.

Routing must only be enabled for the specific subnets shown in the diagram.

Note: Due to administrative restrictions and requirements you should not add or delete VLANs, change VLAN port assignments or create trunks. Company policies forbid the use of static or default routing. All routes must be learned via the EIGRP routing protocol.



```
SwitchC
%LINK-3-UPDOWN: Interface GigabitEthernet0/22, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/23, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/24, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/25, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/26, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/27, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/28, changed state to administratively
down
%LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed stat
e to up
%LINK-3-UPDOWN: Interface GigabitEthernet0/16, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/16, changed sta
te to up
%LINK-3-UPDOWN: Interface GigabitEthernet0/15, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/15, changed sta
te to up
Press RETURN to get started!
SwitchC>
```

Answer:

Explanation: There are two ways to configure interVLAN routing in this case:

+ Use RouterC as a “router on a stick” and SwitchC as a pure Layer2 switch. Trunking must be established between RouterC and SwitchC.+ Only use SwitchC for interVLAN routing without using RouterC, SwitchC should be configured as a Layer 3 switch (which supports ip routing function as a router). No trunking requires. The question clearly states “No trunking has been configured on RouterC” so RouterC does not contribute to interVLAN routing of hosts H1 & H2 -> SwitchC must be configured as a Layer 3 switch with SVIs for interVLAN routing.

We should check the default gateways on H1 & H2. Click on H1 and H2 and type the “ipconfig” command to get their default gateways.

C:\>ipconfig

We will get the default gateways as follows: Host1:+ Default gateway: 190.200.250.33 Host2:+ Default gateway: 190.200.250.65

Now we have enough information to configure SwitchC (notice the EIGRP AS in this case is 650)

Note: VLAN2 and VLAN3 were created and gi0/10, gi0/11 interfaces were configured as access ports so we don’t need to configure them in this sim.

SwitchC# configure terminalSwitchC(config)#

int gi0/S1witchC(config-if)#no switchport

-> without using

this command, the simulator does not let you assign IP address on Gi0/1 interface.SwitchC(config-if)# ip address 10.10.10.2 255.255.255.0

->RouterC has used IP 10.10.10.1 so this is the lowest usable IP

address.SwitchC(config-if)# no shutdownSwitchC(config-if)#

exitSwitchC(config)# int vlan 2

SwitchC(config-if)#

ip address 190.200.250.33 255.255.255.22S4witchC(config-if)# no shutdown

SwitchC(config-if)#

int vlanS3witchC(config-if)#

ip address 190.200.250.65 255.255.255.224

SwitchC(config-if)# no shutdownSwitchC(config-if)#exitSwitchC(config)#

ip routing (Notice: MLS will not

work without this command)SwitchC(config)#

router eigrp 65S0witchC(config-router)# network 10.10.10.0

1.1.1.255 SwitchC(config-router)# network 190.200.250.32 0.0.0.31SwitchC(config-router)# network 190.200.250.64 0.0.0.31

NOTE: THE ROUTER IS CORRECTLY CONFIGURED, so you will not miss within it in the exam , also don’t modify/delete any port just do the above configuration. Also some reports said the “no auto-summary” command can’t be used in the simulator, in fact it is not necessary because the network 190.200.0.0/16 is not used anywhere else in this topology.

In order to complete the lab, you should expect the ping to SERVER to succeed from the MLS , and from the PCs as well.

Also make sure you use the correct EIGRP AS number (in the configuration above it is 650 but it will change when you take the exam) but we are not allowed to access RouterC so the only way to find out the EIGRP AS is to look at the exhibit above. If you use wrong AS number, no neighbor relationship is formed between RouterC and SwitchC.

In fact, we are pretty sure instead of using two commands “network 190.200.250.32 0.0.0.31 and “network 190.200.250.64 0.0.0.31 we can use one simple command “network 190.200.0.0 because it is the nature of distance vector routing protocol like EIGRP: only major networks need to be advertised; even without “no auto-summary” command the network still works correctly. But in the exam the sim is just a flash based simulator so we should use two above commands, just for sure. But after finishing the configuration, we can use “show run” command to verify, only the summarized network 190.200.0.0 is shown.

NEW QUESTION 336

When using EtherChannel misconfiguration guard, which technology is used to prevent this type of misconfiguration from affecting the network?

- A. STP
- B. port security
- C. LACP

D. PAgP

Answer: A

NEW QUESTION 341

Refer to the exhibit.

****Exhibit is missing****

An engineer is configuring an etherchannel between two switches, he notices the error message on Switch 2 (error message channel-misconfiguring error), based on the output what is the problem:

- A. the etherchannel on the switch 1 using incorrect member port
- B. the etherchannel interface of switch 1 is not configured
- C. the etherchannel protocol on switch 1 is not correct
- D. the etherchannel interface of switch 2 is not configured

Answer: C

NEW QUESTION 345

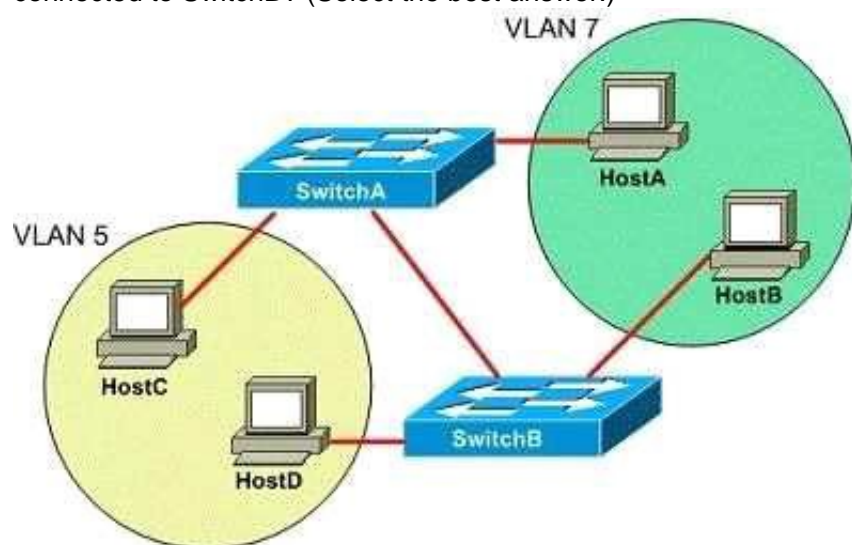
Behavior of an access port when a tagged packet is received other than the access VLAN value.

- A. Tag is removed and packet is forwarded of the VLAN mentioned in the tag.
- B. tag is removed and packet is forwarded on the VLAN of the access port
- C. Not Available
- D. packet is dropped

Answer: D

NEW QUESTION 350

You want to configure a switched internetwork with multiple VLANs as shown above. Which of the following commands should you issue on SwitchA for the port connected to SwitchB? (Select the best answer.)



- A. switchport mode trunk
- B. switchport access vlan 5
- C. switchport mode access vlan 5
- D. switchport trunk native vlan 5

Answer: A

NEW QUESTION 354

Which two configurations can you apply to a port so that it tags traffic with VLAN 915? (Choose two.)

- A. interface GigabitEthernet0/0 switchport mode access switchport access vlan 915
- B. interface GigabitEthernet0/0 switchport mode trunkswitchport trunk encapsulation dot1q switchport trunk allowed vlan 915
- C. interface GigabitEthernet0/0 switchport mode access switchport voice vlan 915 switchport access vlan 915
- D. interface GigabitEthernet0/0.915 encapsulation dot1q 915
- E. interface GigabitEthernet0/0.915 switchport mode access switchport access vlan 915

Answer: BD

NEW QUESTION 356

What happens if you apply this command "vlan dot1q tag native"?

- A. packet will be dropped
- B. packet go to defaultl vlan
- C. packet go to native vlan

Answer: A

NEW QUESTION 358

Which two options are advantages of deploying VTPv3? (Choose two)

- A. It stores the VTP domain password securely as a SHA-1 hash
- B. It adds on FCS field at the end of each VTP frame for consistency checking
- C. It supports the propagation of private VLANs.
- D. It supports the use of AES to encrypt VTP messaging
- E. It can be configured to allow only one VTP server to make changes to the VTP domain

Answer: CE

NEW QUESTION 360

Which three features can be optimized by using SDM templates? (Choose three.)

- A. port security
- B. trunk
- C. VLAN
- D. access
- E. DHCP snooping
- F. routing

Answer: CDF

NEW QUESTION 364

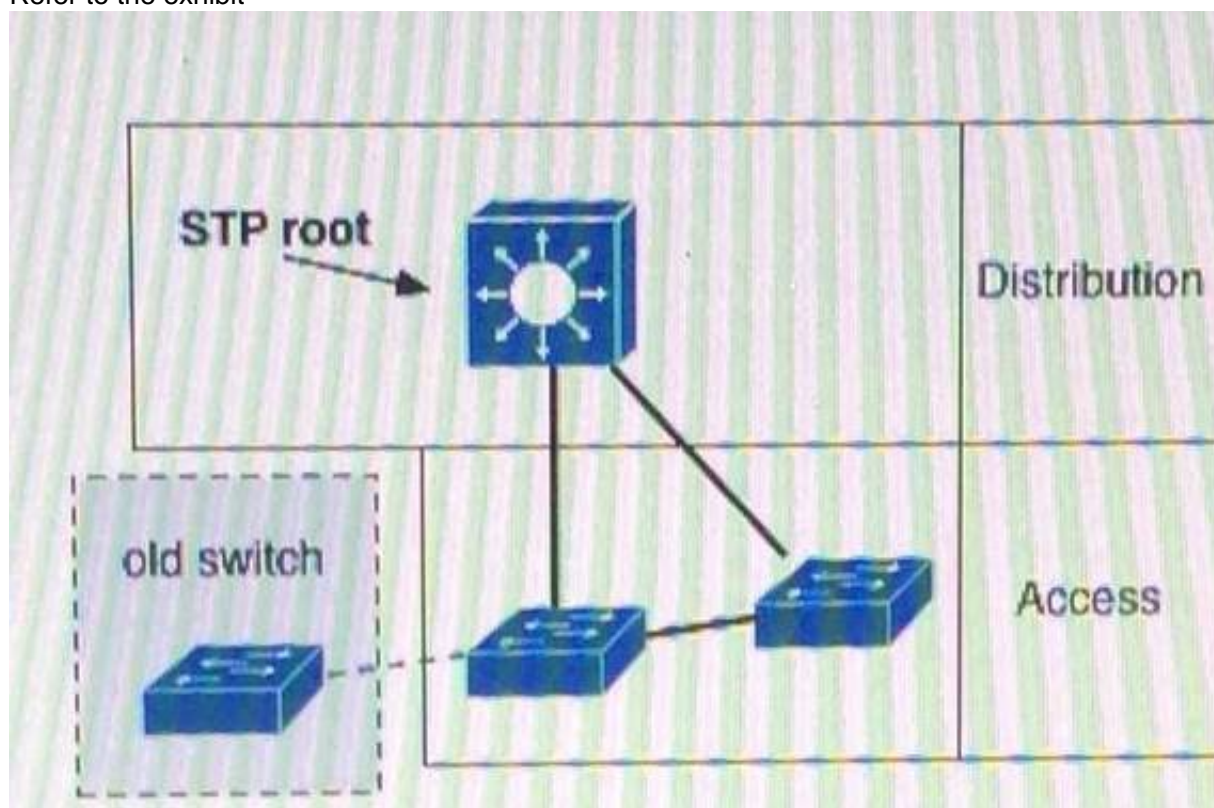
What happens spoofed packet or something like untrusted packet is detected? (Choose three)

- A. log
- B. deletes
- C. intercepts
- D. accepts
- E. discard

Answer: ACE

NEW QUESTION 365

Refer to the exhibit



A network engineer deployed an older switch with the same spanning-tree priority as the existing root, which caused a network outage. In which two locations should the Spanning Tree protocol root guard feature be implemented? (Choose two.)

- A. On the designated root switch downlinks to the access layer.
- B. On all of non-root switch facing ports of the access layer
- C. On the access layers root facing ports
- D. On Layer 3 boundaries in the distribution layer
- E. Globally on all network switches.

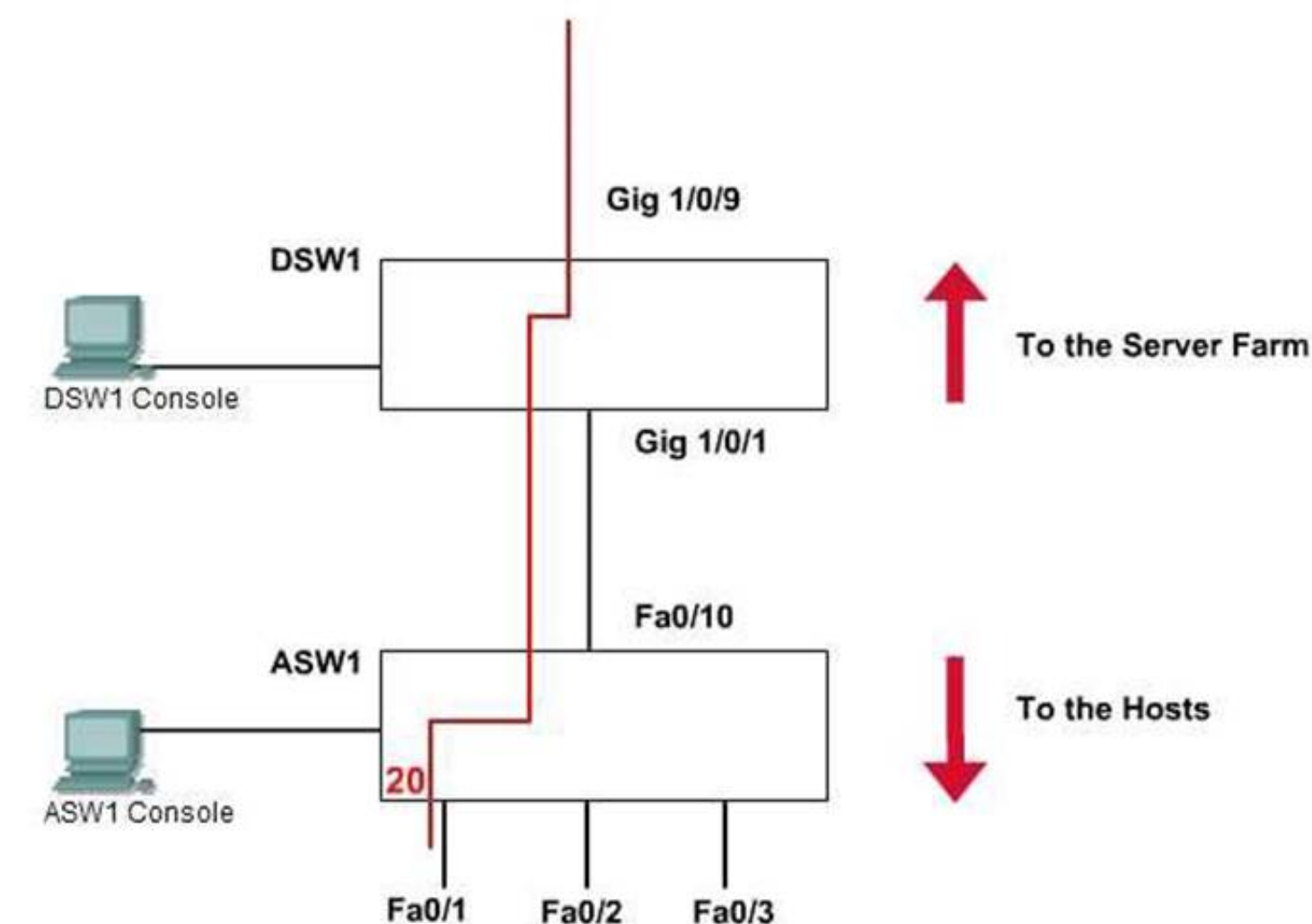
Answer: AB

NEW QUESTION 368

SWITCH.com is an IT company that has an existing enterprise network comprised of two layer 2 only switches; DSW1 and ASW1. The topology diagram indicates their layer 2 mapping. VLAN 20 is a new VLAN that will be used to provide the shipping personnel access to the server. Corporate policies do not allow layer 3 functionality to be enabled on the switches. For security reasons, it is necessary to restrict access to VLAN 20 in the following manner:

- Users connecting to VLAN 20 via portO/1 on ASW1 must be authenticated before they are given access to the network. Authentication is to be done via a Radius server:
- Radius server host: 172.120.40.46
- Radius key: rad123
- Authentication should be implemented as close to the host as possible.
- Devices on VLAN 20 are restricted to the subnet of 172.120.40.0/24.
- Packets from devices in the subnet of 172.120.40.0/24 should be allowed on VLAN 20.

- Packets from devices in any other address range should be dropped on VLAN 20.
 - Filtering should be implemented as close to the serverfarm as possible.
- The Radius server and application servers will be installed at a future date. You have been tasked with implementing the above access control as a pre-condition to installing the servers. You must use the available IOS switch features.



Answer:

Explanation: The configuration:

Step1: Console to ASW1 from PC console 1 ASW1(config)#aaa new-model
ASW1(config)#radius-server host 172.120.39.46 key rad123 ASW1(config)#aaa authentication dot1x default group radius ASW1(config)#dot1x system-auth-control ASW1(config)#inter fastEthernet 0/1
ASW1(config-if)#switchport mode access ASW1(config-if)#dot1x port-control auto ASW1(config-if)#exit
ASW1#copy run start
Step2: Console to DSW1 from PC console 2
DSW1(config)#ip access-list standard 10 DSW1(config-ext-nacl)#permit 172.120.40.0 0.0.0.255 DSW1(config-ext-nacl)#exit
DSW1(config)#vlan access-map PASS 10 DSW1(config-access-map)#match ip address 10 DSW1(config-access-map)#action forward DSW1(config-access-map)#exit DSW1(config)#vlan access-map PASS 20 DSW1(config-access-map)#action drop DSW1(config-access-map)#exit DSW1(config)#vlan filter PASS vlan-list 20 DSW1#copy run start

NEW QUESTION 369

Which two statements about 802.1q are true? (choose two)

- A. It inserts a 4-byte tag field to the Ethernet frame.
- B. Each frame contains a 12-byte VLAN Identifier field.
- C. When it is enabled, the minimum Ethernet frame size is 68 bytes.
- D. Trunking devices add a 4-byte VLAN tag to all VLAN packets.
- E. The header is found within the Ethernet trailer.

Answer: AC

NEW QUESTION 372

What is the command for configuring root guard?

- A. (config) spanning-tree guard root
- B. (config-if) spanning-tree guard root

Answer: B

NEW QUESTION 377

Which two commands prune VLAN 10 from a switch interface? (Choose two.)

- A. switchport trunk allowed except vlan 10

- B. switchport trunk native vlan 10
- C. switchport trunk allowed remove vlan 10
- D. switchport trunk allowed vlan add 10
- E. no vlan 10

Answer: BC

NEW QUESTION 378

Which two statements are result of using the command spanning-tree vlan 50 root primary within a spanning network under global configuration? (Choose two.)

- A. The priority value for VLAN 50 is set to 4094 on the root while the local switch priority is set to 32768.
- B. Spanning tree determines the priority of the current root for VLAN 50 and reduces the priority of the local switch to a lower value
- C. The switch port that is configured for VLAN 50 is the primary connection to the spanning tree root switch
- D. The Spanning-tree timers are reduced to improve the convergence time for VLAN 50
- E. All ports that are configured on the current switch with VLAN 50 transition to designated ports.

Answer: BE

NEW QUESTION 383

Network engineer want to use UDLD, what he need to consider?

- A. udld is a non-propriety
- B. udld is working with non cisco devices
- C. udld is layer 1
- D. udld can aggressively disabled the port after eight failed retries

Answer: D

NEW QUESTION 388

Which database about the switch database management template is true?

- A. The default template gives balance to all functions.
- B. The default template disables routing and supports the maximum number of unicast MAC addresses
- C. The default template maximizes system resources for access control list.
- D. The default template maximizes system resources for unicast routing.

Answer: A

NEW QUESTION 389

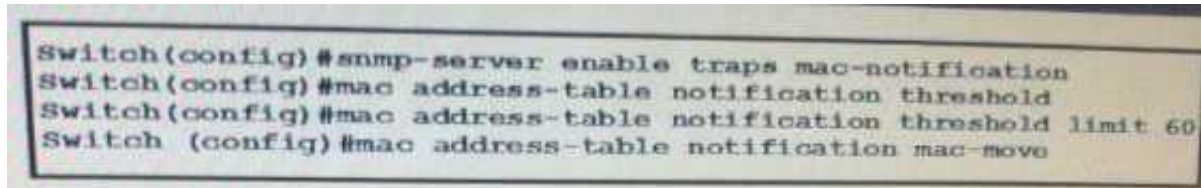
Where should the Root Guard be implemented in the network topology that Cisco recommends? (Choose two.)

- A. All non-root ports of the Access Switches.
- B. Downstream links from Distribution to Access Switches
- C. Access Switches to uplink ports to Distribution Switches
- D. On Layer 3 Switches.

Answer: AB

NEW QUESTION 393

Refer to the Exhibit:



```
Switch(config)#snmp-server enable traps mac-notification
Switch(config)#mac address-table notification threshold
Switch(config)#mac address-table notification threshold limit 60
Switch (config)#mac address-table notification mac-move
```

Which two statements correctly indicates when an SNMP trap is sent to the switch? (Choose Two)

- A. When a new workstation connects to port F0/1
- B. When 61 MAC address are in the switch
- C. When 61 percent of the Address table capacity is used
- D. When the switch loses power and reboots
- E. When the phone previously on Fa0/2 is now connect to Fa0/5

Answer: CE

NEW QUESTION 397

Refer to the exhibit.


```
hostname Switch1
interface Vlan10
ip address 172.16.10.32 255.255.255.0
no ip redirects
standby 1 ip 172.16.10.110
standby 1 timers msec 200 msec 700
standby 1 preempt
```

```
hostname Switch2
interface Vlan10
ip address 172.16.10.33 255.255.255.0
no ip redirects
standby 1 ip 172.16.10.110
standby 1 timers msec 200 msec 750
standby 1 priority 110
standby 1 preempt
```

```
hostname Switch3
interface Vlan10
ip address 172.16.10.34 255.255.255.0
no ip redirects
standby 1 ip 172.16.10.110
standby 1 timers msec 200 msec 750
standby 1 priority 150
standby 1 preempt
```

Three switches are configured for HSRP. Switch1 remains in the HSRP listen state. What is the most likely cause of this status?

- A. this is normal operation
- B. standby group number does not match VLAN number
- C. IP addressing is incorrect
- D. incorrect priority commands
- E. incorrect standby timers

Answer: A

NEW QUESTION 399

Which three functions does Dynamic ARP Inspection perform with invalid IP-to MAC address bindings?
 (Choose three.)

- A. accepts
- B. deletes
- C. discards
- D. bypasses
- E. intercepts
- F. logs

Answer: CEF

NEW QUESTION 403

switch#show standby
 Virtual IP address is X.X.X.X Hello time 3 sec, hold time 10 sec Preemption disabled
 Active router is X.X.X.3 priority 85 Standby router is local
 Priority 90 (configured 90)
 Track interface faX/X state decrement 10 (Choose two)

- A. The link will take over when
- B. X.X.X.3 is active because it has higher IP address
- C. when faX/x is down priority will be 80
- D. it is using default hello and hold values

Answer: CD

NEW QUESTION 408

Refer to the exhibit.

```
R2#show standby
FastEthernet1/0 - Group 50
  State is Active
    2 state changes, last state change 00:04:02
  Virtual IP address is 10.10.1.1
  Active virtual MAC address is 0000.0c07.ac32 (MAC In Use)
  Local virtual MAC address is 0000.0c07.ac32 (v1 default)
  Hello time 3 sec, hold time 10 sec
    Next hello sent in 1.504 secs
  Preemption enabled, delay reload 90 secs
  Active router is local
  Standby router is unknown
  Priority 200 (configured 200)
    Track interface FastEthernet0/0 state Up decrement 20
  Group name is "hsrp-Fa1/0-50" (default)
R2#
%IP-4-DUPADDR: Duplicate address 10.10.1.1 on FastEthernet1/0, sourced by 0000.0c07.ac28
R2#
```

Which option is the most likely explanation of the duplicate address message logged?

- A. spanning-tree loop
- B. HSRP misconfiguration
- C. a PC with IP of 10.10.1.1
- D. a hardware problem

Answer: B

NEW QUESTION 409

What are three possible router states of HSRP routers on a LAN? (Choose three)

- A. Standby
- B. Established
- C. Active
- D. Idle
- E. Backup
- F. Init

Answer: ACF

NEW QUESTION 410

Which two statements about RSPAN are true? (Choose two)

- A. RSPAN VLANs can carry RSPAN traffic only.
- B. It supports MAC address learning
- C. Only one RSPAN VLAN can be configured per device
- D. MAC address learning is not supported I RSPAN VLANs are exempt from VTP pruning
- E. RSPAN uses a GRE tunnel to transmit captured traffic

Answer: AD

NEW QUESTION 415

Which HSRP extension allows groups to share traffic loads?

- A. GLBP
- B. CHSRP
- C. MHSRP
- D. CGMP
- E. FHRP

Answer: C

NEW QUESTION 417

What do subordinate switches in a switch stack keep?

- A. Subordinate switches keep their own spanning trees for each VLAN that they support.
- B. Subordinate switches keep entire VLAN database
- C. Store running config all the switches

Answer: A

NEW QUESTION 420

Routers R1 and R2 are configured for HSRP as shown below: Router R1:

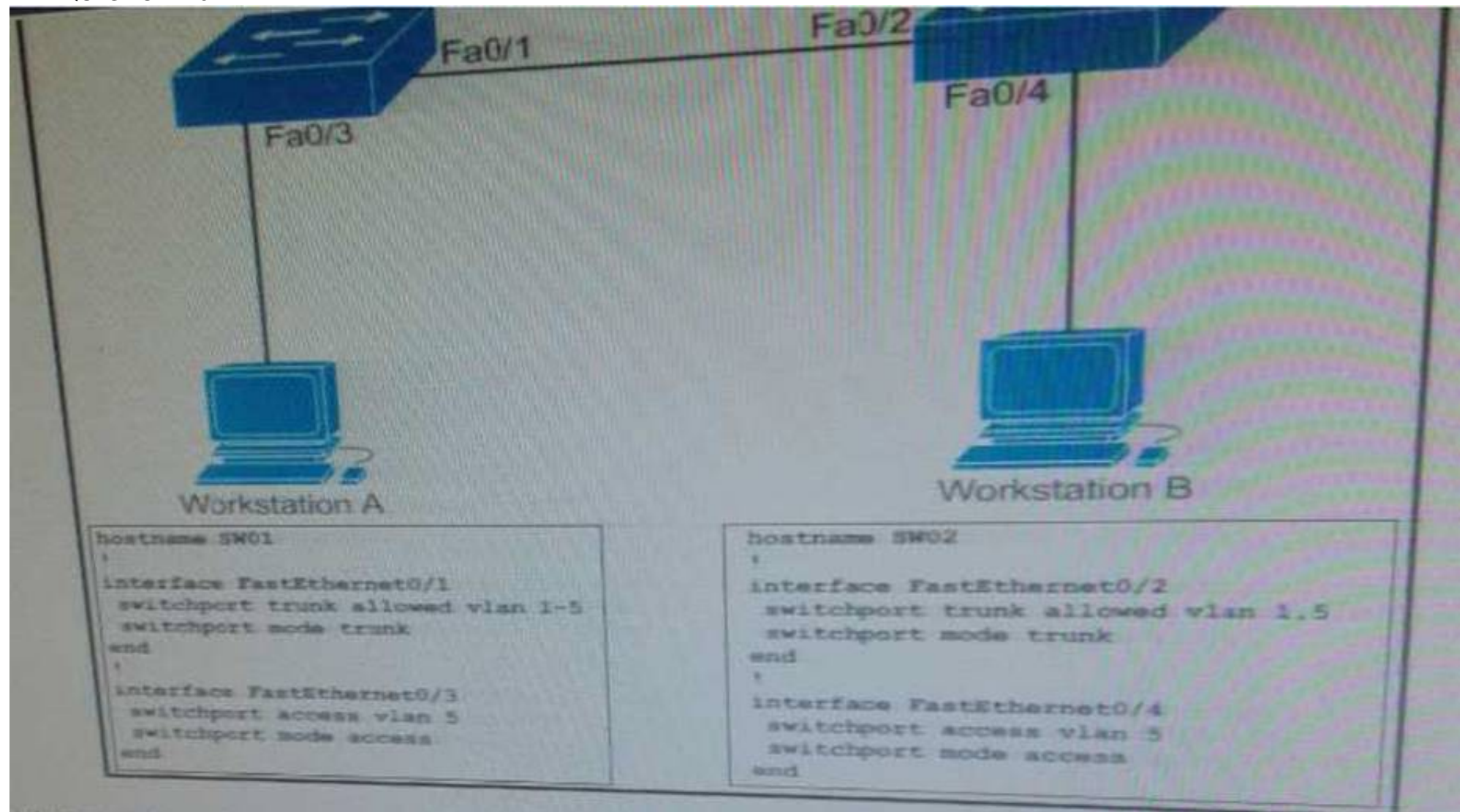
```
interface ethernet 0
ip address 20.6.2.1 255.255.255.0
standby 35 ip 20.6.2.21
standby 35 priority 100
interface ethernet 1
ip address 20.6.1.1.2 255.255.255.0
standby 34 ip 20.6.1.21 Router R2:
interface ethernet 0
ip address 20.6.2.2 255.255.255.0
standby 35 ip 20.6.2.21
interface ethernet 1
ip address 20.6.1.1.1 255.255.255.0
standby 34 ip 20.6.1.21
standby 34 priority 100
```

You have configured the routers R1 & R2 with HSRP. While debugging router R2 you notice very frequent HSRP group state transitions. What is the most likely cause of this?

- A. physical layer issues
- B. no spanning tree loops
- C. use of non-default HSRP timers
- D. failure to set the command standby 35 preempt

Answer: A

NEW QUESTION 425



Refer to the exhibit. Which description of the effect of entering the switch port trunk allowed vlan 2,3,4 command on Fast Ethernet 0/20 is true?

- A. The two workstations continue to communicate without a default gateway configured.
- B. the command is unsupported on a trunk where VLANs have already been pruned manually.
- C. The running configuration displays switch port trunk allowed vlan 1-5 for Fa0/20.
- D. the two workstation stop communicating because they are on VLAN 5. Which is not allowed on the trunk.

Answer: A

NEW QUESTION 429

In a switch stack where is the the SDM template stored?

- A. All switches in stack
- B. Master switch
- C. Flash memory
- D. Another

Answer: B

NEW QUESTION 434

A network engineer wants to make sure that an access switch will never become a Spanning Tree root for VLAN 5. What action will accomplish this task?

- A. adjust STP priority to the maximum value
- B. disable STP globally
- C. apply root guard to all outgoing neighbor interfaces
- D. enable MSTP and use a different revision number than all other switches

Answer: A

NEW QUESTION 438

An access switch at a remote location is connected to the spanning-tree root with redundant uplinks. A network engineer notices that there are issues with the physical cabling of the current root port. The engineer decides to force the secondary link to be the desired forwarding root port. Which action accomplishes this task?

- A. Change the link-type to point-to-point.
- B. Enable Rapid Spanning Tree to converge using the secondary link.
- C. Adjust the secondary link to have a lower priority than the primary link.
- D. Apply a BPDU filter on the primary interface of the remote switches.

Answer: C

NEW QUESTION 443

Refer to the exhibit. On the basis of the output of the show spanning-tree inconsistentports command, which statement about interfaces FastEthernet 0/1 and FastEthernet 0/2 is true?

SW1# show spanning-tree inconsistentports		
Name	Interface	Inconsistency

VLAN0001	FastEthernet0/ 1	Root Inconsistent
VLAN0001	FastEthernet0/2	Root Inconsistent
Number of inconsistent ports (segments) in the system : 2		

- A. They have been configured with the spanning-tree bpduguard disable command.
- B. They have been configured with the spanning-tree bpduguard enable command.
- C. They have been configured with the spanning-tree bpduguard disable command.
- D. They have been configured with the spanning-tree bpduguard enable command.
- E. They have been configured with the spanning-tree guard loop command.
- F. They have been configured with the spanning-tree guard root command.

Answer: F

NEW QUESTION 446

Which two statements about SPAN source and destination ports during an active session are true? (Choose two.)

- A. The source port can be only an Ethernet physical port.
- B. The source port can be monitored in multiple SPAN sessions.
- C. The destination port can be destination in multiple SPAN sessions.
- D. The destination port does not participate in STP.
- E. You can mix individual source ports and source VLANs within a single session.

Answer: BD

NEW QUESTION 447

Which option is the minimum number of bindings that the DHCP snooping database can store?

- A. 1000 bindings
- B. 2000 bindings
- C. 5000 bindings
- D. 8000 bindings

Answer: D

NEW QUESTION 449

Which describes the default load balacing scheme used by the Gateway Load Balancing Protocol (GLBP)?

- A. Per host using a strict priority scheme
- B. Per session using a round-robin scheme
- C. Per session using a strict priority scheme
- D. Per GLBP group using a strict priority scheme
- E. Per host basis using a round robin-scheme
- F. Per GLBP group using a round-robin scheme

Answer: E

NEW QUESTION 450

HSRP has been configured between two Company devices. Which of the following describe reasons for deploying HSRP? (Choose three)

- A. HSRP provides redundancy and fault tolerance.
- B. HSRP allows one router to automatically assume the function of the second router if the second router fails.
- C. HSRP allows one router to automatically assume the function of the second router if the second router starts.
- D. HSRP provides redundancy and load balancing.

Answer: ABD

NEW QUESTION 455

If a switch stack is configured to use SDM templates, where are the templates stored?

- A. all stack members
- B. stack master
- C. TFTP server
- D. flash memory

Answer: B

NEW QUESTION 456

Refer to the output below.

Which statement about the current configuration on port GigabitEthemet2/0/1 is true?

InterfaceGigabitEth emet2/0/1 description to mail room M 13-57- 050
switchport access vlan 700 switchport trunk allowed vlan 200,300,700

- A. It is a trunk port and the native VI AN is VLAN1
- B. It is a trunk port and the native VLAN is VLAN 700
- C. It is an access port configured for a phone and a PC
- D. It is an access port in VI AN /700

Answer: A

NEW QUESTION 461

What two things occur when an RSTP edge port receives a BPDU? (Choose two.)

- A. The port immediately transitions to the forwarding state.
- B. The switch generates a Topology Change Notification BPDU.
- C. The port immediately transitions to the err-disable state.
- D. The port becomes a normal STP switch port.

Answer: BD

NEW QUESTION 462

Which option is a Cisco recommended KSPAN configuration practice?

- A. Use a different RSPAN VLAN for each session it configuring RSPAN on multiple switches.
- B. Use only one destination port for each RSPAN session.
- C. Define an RSPAN VLAN before configuring an RSPAN source or destination session.
- D. Assign access ports to an RSPAN VLAN like any other campus VLAN

Answer: C

NEW QUESTION 464

Refer to the exhibit.


```

MST1
Spanning tree enabled protocol mstp
Root ID    Priority    32768
          Address    0010.7363.4300
          Cost      2
          Port      13 (FastEthernet0/11)
          Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID   Priority    32768 (priority 32768 sys-id-ext 1)
          Address    001b.0d8e.e080
          Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Interface   Role Sts Cost      Prio.Nbr Type
-----
Fa1/0/7     Desg FWD 2        128.9   P2p Bound (PVST)
Fa1/0/10    Desg FWD 2        128.12  P2p Bound (PVST)
Fa1/0/11    Root FWD 2        128.13  P2p
Fa1/0/12    Altn BLK 2        128.14  P2p

DSW1#sh spanning-tree mst
#### MST1    vlans mapped: 10,20
Bridge      address 001b.0d8e.e080 priority 32768 (32768 sysid 1)
Root        address 0010.7363.4300 priority 32768 (32768 sysid 1)
            port Fa1/0/11 cost 2    rcv hops 19

... output omitted

```

Which two commands ensure that DSW1 becomes root bridge for VLAN 10 and 20? (Choose two.)

- A. spanning-tree mstp 1 priority 0
- B. spanning-tree mst 1 root primary
- C. spanning-tree mst vlan 10,20 priority root
- D. spanning-tree mst 1 priority 4096
- E. spanning-tree mst 1 priority 1
- F. spanning-tree mstp vlan 10,20 root primary

Answer: BD

NEW QUESTION 467

What SPAN configuration is required to enable on a switch?

- A. A monitor VLAN is created for the SPAN traffic.
- B. Configure a source and destination port
- C. Disable VTP pruning on trunk links
- D. NA

Answer: B

NEW QUESTION 470

A network engineer is considering implementing UDLD throughout the network. Which option must the network engineer consider?

- A. UDLD works at Layer 1 of the OSI model.
- B. UDLD is already enabled by default on all ports on Cisco switches.
- C. UDLD aggressively disables the port after eight failed retries to connect to neighbor.
- D. UDLD is an IEEE standard that can be configured on non-Cisco devices.

Answer: C

NEW QUESTION 472

Which two statements about VRRP object tracking are true? (Choose two)

The priority Of a VRRP device can change in accordance with the up or down status of a VRRP object

- A. VRRP group can track only one object at a time
- B. VRRP supports only interface tracking
- C. VRRP can track the status of interfaces and routes
- D. The VRRP interlace priority must be manually configured by the administrator

Answer: AB

NEW QUESTION 474

When using EtherChannel reconfiguration guard, which technology is used to prevent this type of reconfiguration from affecting the network?

- A. STP
- B. port security
- C. LACP
- D. PAGP

Answer: A

NEW QUESTION 479

Which two statements about 802.1q are true? (Choose two)

- A. It encapsulates the original Ethernet frame and adds a VLAN identifier.
- B. It increases the maximum size an Ethernet frame to 1094 bytes.
- C. It is a Cisco proprietary protocol.
- D. When It is enabled, it forces a recalculation of the frame check sequence field.

- E. It supports 8-byte VLAN identifiers.
- F. It adds a 32-bit field to the Ethernet frame between the source MAC address and length fields.

Answer: BE

NEW QUESTION 481

Refer to the exhibit.

Missing Exhibit

Which statement describes the result if a switch that is running PVST+ is added to this network?

- A. Spanning tree is disabled automatically on the network
- B. Spanning tree continues to operate in Rapid PVST+ on DSW2 and the new switch operates in PVST+
- C. Both switches operate in the PVST+ mode
- D. Both switches operate in the Rapid PVST+ mode

Answer: B

NEW QUESTION 486

Which switch is chosen as the stack master during a stack master election or re-election?

- A. the switch with the highest stack member ID
- B. the switch with the lowest stack member ID
- C. the switch with the lowest stack member priority value
- D. the switch with the highest stack member priority value

Answer: D

NEW QUESTION 490

Which two statements apply to LLDP?

- A. It runs on the data link layer
- B. It runs on the network layer
- C. It is not enabled by default on Cisco devices
- D. Enabled on Cisco devices by default

Answer: AC

NEW QUESTION 492

What VSS technology allows you to share downstream resources?

- A. LACP
- B. PAgP
- C. MEC
- D. EOA

Answer: C

NEW QUESTION 495

Refer to the exhibit.

```
SW1#sh monitor session all
Session 1
-----
Type                : Remote Destination Session
Source RSPAN VLAN   : 50

Session 2
-----
Type                : Local Session
Source Ports        :
    Both            : Fa0/14
Destination Ports   : Fa0/15
Encapsulation       : Native
Ingress             : Disables
```

Which statement about the SPAN and RSPAN configuration on SW1 is true?

- A. SPAN session 2 only monitors egress traffic exiting port FastEthernet 0/14.

- B. RSPAN session 1 monitors activity on VLAN 50 of a remote switch.
- C. RSPAN session 1 is incompletely configured for monitoring.
- D. SPAN session 2 monitors all traffic entering and exiting port FastEthernet 0/15.

Answer: C

NEW QUESTION 497

A switch has been configured with the Vlan dot1 q tag native command. Which statement describes what the switch does with untagged frames that it receives on a trunked interface?

- A. It drops the untagged frames.
- B. Untagged frames are forwarded via the native VLAN
- C. The trunked port is put in err-disable state.
- D. Untagged frames are forwarded via the default VLAN

Answer: A

NEW QUESTION 498

Which statement is correct about 802.1Q trunking?

- A. Both switches must be in the same VTP domain.
- B. The encapsulation type of both ends of the trunk does not have to match.
- C. The native VLAN on both ends of the trunk must be VLAN 1.
- D. 802.1Q trunking can only be configured on a Layer 2 port.
- E. In 802.1Q trunking, all VLAN packets are tagged on the trunk link, except the native VLAN.

Answer: E

NEW QUESTION 501

A network engineer is considering implementing UDLD throughout the network. Which option must the network engineer consider?

- A. UDLD work at Layer 1 of the OSI model.
- B. UDLD aggressively disables the port after eight failed retries to connect to neighbor.
- C. UDLD is already enabled by default on all ports on Cisco switches.
- D. UDLD is an IEEE standard that can be configured on non-Cisco devices.

Answer: B

NEW QUESTION 503

Refer to the exhibit.

```
DSW1#sh vtp status
VTP Version                : running VTP1 (VTP2 capable)
Configuration Revision      : 2
Maximum VLANs supported locally : 1005
Number of existing VLANs    : 7
VTP Operating Mode          : Client
VTP Domain Name             : DALLAS
VTP Pruning Mode            : Disabled
VTP V2 Mode                 : Disabled
VTP Traps Generation        : Disabled
MD5 digest                  : 0xF1 0xAC 0x5E 0xCF 0xF7 0xEE 0x9E 0xD6
Configuration last modified by 10.101.101.11 at 3-1-93 23:57:30

DSW2#sh vtp status
VTP Version                : running VTP1 (VTP2 capable)
Configuration Revision      : 3
Maximum VLANs supported locally : 1005
Number of existing VLANs    : 7
VTP Operating Mode          : Server
VTP Domain Name             : DALLAS
VTP Pruning Mode            : Disabled
VTP V2 Mode                 : Disabled
VTP Traps Generation        : Disabled
MD5 digest                  : 0xE5 0x4D 0xC1 0xF0 0x8F 0xF1 0x4B 0x8C
Configuration last modified by 10.101.101.11 at 3-1-93 23:50:31

DSW2#sh spanning-tree mst configuration
Name      [DALLAS]
Revision  3      Instances configured 3

Instance  Vlans mapped
-----
0         1-9,11-19,21-29,41-4094
1         10,20
2         30-40
```

DSW1 should share the same MST region with switch DSW2. Which statement is true?

- A. Configure DSW1 with the same version number, and VLAN-to-instance mapping as shown on DSW2.
- B. DSW2 uses the VTP server mode to automatically propagate the MST configuration to DSW1.
- C. DSW1 automatically inherits MST configuration from DSW2 because they have the same domain name.
- D. Configure DSW1 with the same region name, revision number, and VLAN-to-instance mapping as shown on DSW2.
- E. DSW1 is in VTP client mode with a lower configuration revision number, therefore, it automatically inherits MST configuration from DSW2.

Answer: D

NEW QUESTION 508

Which two statements about Cisco StackWise are true? (Choose two.)

- A. Each stack identifies a stack master and a backup stack master
- B. It supports both homogeneous and mixed stacks.
- C. The LAN base feature set is supported on mixed stacks
- D. Stacks running the LAN base feature set support Layer 3 features
- E. It supports multiple switches in a stack

Answer: BE

NEW QUESTION 509

Your manager asked you to make every port on your switch bypass the normal spanning-tree timers which includes your uplink to other switches. What two commands can you apply on the interfaces? (Choose two.)

- A. spanning-tree portfast
- B. spanning-tree portfast default
- C. spanning-tree portfast access
- D. spanning-tree portfast trunk

Answer: AD

NEW QUESTION 513

Which will identify the master switch in stack wise?

- A. lower priority
- B. higher priority
- C. lower id
- D. higher id

Answer: B

NEW QUESTION 517

Your company wants to connect an internal switch to the uplink provider switch. What method / feature / functions you need to enable to prevent initial / potential broadcast of internal information/topology?

- A. BPDU Filter
- B. BPDU Guard
- C. BPDU Loop
- D. BPDU bridge

Answer: A

NEW QUESTION 519

VLAN maps have been configured on switch R1. Which of the following actions are taken in a VLAN map that does not contain a match clause?

- A. Implicit deny feature at end of list.
- B. Implicit deny feature at start of list.
- C. Implicit forward feature at end of list
- D. Implicit forward feature at start of list.

Answer: A

NEW QUESTION 521

Refer to the exhibit.


```
*Mar 1 00:16:43.095: %LINK-3-UPDOWN: Interface Vlan11, changed state to up
*Mar 1 00:16:43.099: SB: V111 Interface up
*Mar 1 00:16:43.099: SB11: V111 Init: a/HSRP enabled
*Mar 1 00:16:43.099: SB11: V111 Init -> Listen
*Mar 1 00:16:43.295: SB11: V111 Hello in 172.16.11.112 Active pri 50 ip 172.16.11.115
*Mar 1 00:16:43.295: SB11: V111 Active router is 172.16.11.112
*Mar 1 00:16:43.295: SB11: V111 Listen: h/Hello rcvd from lower pri Active router (50/172.16.11.112)
*Mar 1 00:16:43.295: SB11: V111 Active router is local, was 172.16.11.112
*Mar 1 00:16:43.299: %STANDBY-6-STATECHANGE: Vlan11 Group 11 state Listen -> Active
*Mar 1 00:16:43.299: SB11: V111 Hello out 172.16.11.111 Active pri 100 ip 172.16.11.115
*Mar 1 00:16:43.303: SB11: V111 Hello in 172.16.11.112 Speak pri 50 ip 172.16.11.115
*Mar 1 00:16:46.207: SB11: V111 Hello out 172.16.11.111 Active pri 100 ip 172.16.11.115
*Mar 1 00:16:49.095: SB11: V111 Hello in 172.16.11.112 Speak pri 50 ip 172.16.11.115
```

Based on the debug output, which three statements about HSRP are true? (Choose three.)

- A. The final active router is the router with IP address 172.16.11.111.
- B. The router with IP address 172.16.11.111 has preempt configured.
- C. The priority of the router with IP address 172.16.11.112 is preferred over the router with IP address 172.16.11.111.
- D. The IP address 172.16.11.115 is the virtual HSRP IP address.
- E. The router with IP address 172.16.11.112 has nonpreempt configured.
- F. The router with IP address 172.16.11.112 is using default HSRP priority.

Answer: ABD

NEW QUESTION 522

If router R1 interlace Ethernet0/1 goes down and recovers, which of the statement regarding HSRP priority is true?

- A. The interface will have the priority documented by 40 for HSRP group 1
- B. The interface will have the priority documented by 60 for HSRP group 1
- C. The interface will have its current priority incremented by 40 for HSRP group 1
- D. The interface will have its current priority incremented by 60 for HSRP group 1
- E. The interface will default to the a priority of 100 for HSRP group 1

Answer: C

NEW QUESTION 526

Which switchport feature will block the packet with unknown MAC address from sending it via port.

- A. switchport protect
- B. switchport block unicast
- C. switchport portfast
- D. packet with unknown MAC will be dropped

Answer: B

NEW QUESTION 529

What is the default mode for LACP EtherChannel when configured?

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

Answer: C

NEW QUESTION 532

Which two statements are true about recommended practices that are to be used in a local VLAN solution design where layer 2 traffic is to be kept to a minimum? (Choose two.)

- A. Routing should occur at the access layer if voice VLANs are utilize
- B. Otherwise, routing should occur at the distribution layer.
- C. Routing may be performed at all layers but is most commonly done at the core and distribution layers.
- D. Routing should not be performed between VLANs located on separate switches.
- E. VLANs should be local to a switch.
- F. VLANs should be localized to a single switch unless voice VLANs are being utilized.

Answer: BD

NEW QUESTION 534

To provide security, a service provider configures various private VLANs in its backbone network infrastructure to prevent certain VLAN communication to each other. Which version of VTP supports the use of private VLANs?

- A. Version 1
- B. Version 3
- C. VTP does not support private VLANs
- D. Version 2

Answer: B

NEW QUESTION 535

Given the configuration on a switch interface, what happens when a host with the MAC address of 0003.0003.0003 is directly connected to the switch port?

```
switchport mode access
switchport port-security
switchport port-security maximum 2
switchport port-security mac-address 0002.0002.0002
switchport port-security violation shutdown
```

- A. The host will be allowed to connect.
- B. The port will shut down.
- C. The host can only connect through a hub/switch where 0002.0002.0002 is already connected.
- D. The host will be refused access.

Answer: A

NEW QUESTION 536

What condition was match during etherchannel configuration.

- A. Spanning tree port priority
- B. Spanning tree cost
- C. Interface Description
- D. Trunk mode
- E. Trunk allow vlan

Answer: DE

NEW QUESTION 541

Which keyword must you use with the storm-control command to set both upper and lower thresholds for unicast, multicast, and broadcast traffic?

- A. pps
- B. level
- C. set
- D. limit

Answer: B

NEW QUESTION 544

Which two types of threshold can you configure for tracking objects? (Choose two.)

- A. weight
- B. bandwidth
- C. MTU
- D. percentage
- E. administrative distance 15
- F. delay

Answer: AD

NEW QUESTION 547

Based on the show spanning-tree vlan 200 output shown in the exhibit, which two statements about the STP process for VLAN 200 are true? (Choose two.)

```
Switch#show spanning-tree vlan 200

VLAN0200
Spanning tree enabled protocol ieee
Root ID          Priority      32968
                  Address        000c. ce29. ef00
                  Cost           19
                  Port           2 (FastEthernet0/2)
                  Hello Time     10 sec    Max Age 20 sec    Forward Delay 30 sec

Bridge ID        Priority      32968 (priority 32768 sys-id-ext 200)
                  Address        000c. ce2a. 4180
                  Hello Time     2 sec     Max Age 20 sec    Forward Delay 15 sec
                  Aging Time    300

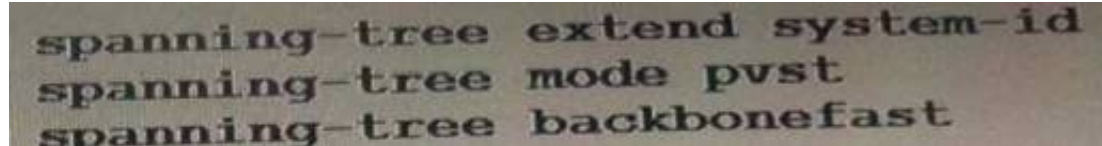
Interface                Role Sts Cost           Prio.Nbr Type
-----
Fa0/2                    Root FWD 19             128.2    P2p
Fa0/3                    Altn BLK 19             128.3    P2p
```

- A. BPDUs will be sent out every two seconds.
- B. The time spent in the listening state will be 30 seconds.
- C. The time spent in the learning state will be 15 seconds.
- D. The maximum length of time that the BPDU information will be saved is 30 seconds.
- E. This switch is the root bridge for VLAN 200.
- F. BPDUs will be sent out every 10 seconds.

Answer: BF

NEW QUESTION 550

Refer to the exhibit.



What is the effect of the given configuration?

- A. It enables the switch to become the spanning-tree root bridge.
- B. It enables the reduced MAC address feature.
- C. It enables spanning-tree to create dynamic system IDs.
- D. It enables extended VLANs.

Answer: C

NEW QUESTION 553

When a private VLAN is configured, which mode must be configured as a router facing port?

- A. isolated
- B. promiscuous
- C. community
- D. host

Answer: B

NEW QUESTION 556

Refer to the exhibit. Based upon the output of show vlan on switch CAT2, what can we conclude about interfaces Fa0/13 and Fa0/14?

```
CAT2#show vlan
```

VLAN	Name	Status	Ports
1	default	active	Fa0/1, Fa0/2, Fa0/3, Fa0/4 Fa0/5, Fa0/6, Fa0/7, Fa0/8 Fa0/9, Fa0/10, Fa0/11, Fa0/12 Fa0/15, Fa0/16, Fa0/17, Fa0/18 Fa0/19, Fa0/20, Fa0/21, Fa0/22 Fa0/23, Fa0/24, Gi0/1, Gi0/2
2	VLAN0002	active	
3	VLAN0003	active	
4	VLAN0004	active	
5	VLAN0005	active	
1002	fddi-default	act/unsup	
1003	trcrf-default	act/unsup	
1004	fddinet-default	act/unsup	
1005	trbrf-default	act/unsup	

- A. That interfaces Fa0/13 and Fa0/14 are in VLAN 1
- B. That interfaces Fa0/13 and Fa0/14 are down
- C. That interfaces Fa0/13 and Fa0/14 are trunk interfaces
- D. That interfaces Fa0/13 and Fa0/14 have a domain mismatch with another switch
- E. That interfaces Fa0/13 and Fa0/14 have a duplex mismatch with another switch

Answer: C

NEW QUESTION 561

Which three characteristics of AAA with RADIUS are true? (Choose three.)

- A. It runs on TCP port 49
- B. It is a standards-based implementation
- C. It runs on UDP port 1812.
- D. It uses a client-private cloud architecture
- E. It uses a client-server architecture
- F. It is a Cisco-proprietary implementation

Answer: BCE

NEW QUESTION 565

Which command do you enter so that the default authentication group on a device falls back to the case-sensitive local user database when the initial authentication fails?

- A. aaa authentication login default group tacacs+ radius local
- B. aaa authentication exec default group tacacs+ local if-authenticated
- C. aaa authentication login default group tacacs+ local-case if-authenticated
- D. aaa authentication exec default group tacacs+ if-authenticated local

Answer: C

NEW QUESTION 568

Refer to the exhibit.


```
Switch2#
01:25:08: %PM-4-ERR_DISABLE: channel-misconfig error detected on
Fa0/23, putting Fa0/23 in err-disable
state
01:25:08: %PM-4-ERR_DISABLE: channel-misconfig error detected on
Fa0/24, putting Fa0/24 in err-disable
state
Switch2#
```

```
Switch1#show etherchannel summary
```

```
!output omitted
```

Group	Port-channel	Protocol	Ports
1	Po2(SD)	LACP	Fa1/0/23(D)

```
Switch2#show etherchannel summary
```

```
!output omitted
```

Group	Port-channel	Protocol	Ports
1	Po1(SD)	-	Fa0/23(D) Fa0/24(D)

An engineer is configuring EtherChannel between two switches and notices the console message on switch 2. Based on the output, which option describes the reason for this error?

- A. Switch 1 does not have enough member ports configured.
- B. Switch 2 has too many member ports configured.
- C. The port channel interface numbers do not match.
- D. The EtherChannel protocols do not match.

Answer: D

NEW QUESTION 570

Which Cisco Stack Wise feature is supported?

- A. using different versions of the Cisco IOS on each switch
- B. using different SDM templates on each switch
- C. using same software feature set on all members
- D. using mixed software feature set on all members

Answer: C

NEW QUESTION 573

Which three statements are true of a default HSRP configuration? (Choose three.)

- A. The Standby hello time is 2 seconds.
- B. Two HSRP groups are configured.
- C. The Standby track interface priority decrement is 10.
- D. The Standby hold time is 10 seconds
- E. The Standby priority is 100.
- F. The Standby delay is 3 seconds.

Answer: CDE

NEW QUESTION 578

What is the virtual mac address of HSRP group 1?

- A. 0000 0C07 ac02
- B. 4000 0000 0010
- C. 0000 0c07 ac01
- D. 4000 0000 ac01

E. 4000 0000 ac02
F. 0000 0c07 0010

Answer: B

NEW QUESTION 580

Which two statements apply to topology-based switching?

- A. It is functionally equivalent to Cisco Express Forwarding
- B. It is the preferred switching mode in Cisco multilayer switches
- C. It uses Loop free protocol for switching
- D. disabled by default

Answer: AB

NEW QUESTION 582

Which three responses from a RADIUS server are valid? (Choose three.)

- A. REJECT
- B. CHALLENGE
- C. ACCEPT
- D. UPDATE PASSWORD
- E. CONFIRM

Answer: ABC

NEW QUESTION 586

Under which two conditions does Cisco StackWise Virtual transmit data over a virtual link? (choose two)

- A. Packets are processed on the ingress interface on the standby switch.
- B. A VLAN is flooded over Layer 2.
- C. Packets are processed on the ingress interface on the active switch.
- D. Packets are processed on the egress interface on the standby switch.
- E. Packets are processed on the egress interface on the active switch.

Answer: BC

NEW QUESTION 588

Which layer private VLAN partition the broadcast domain?

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

Answer: B

NEW QUESTION 589

You have recently deployed an access switch with two fiber cables that connect it to a distribution switch in Ether Channel mode. Soon after it booked up one of the uplink ports to the distribution switch was error disabled. Which option is the most likely reason for the problem”?

- A. The switch is operating in UDLD normal mode and it failed to receive UDLD message from the peer.
- B. The switch is operating in UDLD aggressive mode and it failed to receive a UDLD message from peer.
- C. Spanning tree detected loop
- D. The port-channel detected an inconsistent configuration

Answer: B

NEW QUESTION 592

Refer to the exhibit.

SW1#show int trunk				
Port	Mode	Encapsulation	Status	Native vlan
Gi5/1	on	802.1q	trunking	1
Gi6/2	on	802.1q	trunking	600
Port	Vlans allowed on trunk			
Gi5/1	113			
Gi6/2	1,3,10,36,600			
Port	Vlans allowed and active in management domain			
Gi5/1	113			
Gi6/2	1,3,10,36,600			
Port	Vlans in spanning tree forwarding state and not pruned			
Gi5/1	113			
Gi6/2	1,3,10,36,600			

Which two statements about SW1 are true? (Choose two)

- A. Interface Gi5/1 is using a Cisco proprietary trunking protocol
- B. On Interface Gi5/1, all untagged traffic is tagged with VLAN 113
- C. The device is configured with the default MST region
- D. Interface Gi5/1 is using an industry-standard trunking protocol
- E. Interface Gi6/2 is the root port for VLAN 36
- F. On interface Gi6/2, all untagged traffic is tagged with VLAN 600

Answer: DF

NEW QUESTION 593

The following command was issued on a router that is being configured as the active HSRP router.
standby ip 10.2.1.1

Which statement is true about this command?

- A. This command will not work because the HSRP group information is missing
- B. The HSRP MAC address will be 0000 0c07 ac00
- C. The HSRP MAC address will be 0000 0c07 ac01.
- D. The HSRP MAC address will be 0000.070c ad01.
- E. This command will not work because the active parameter is missing

Answer: B

NEW QUESTION 595

What action should a network administrator take to enable VTP pruning on an entire management domain?

- A. Enable VTP pruning on any client switch in the domain.
- B. Enable VTP pruning on every switch in the domain.
- C. Enable VTP pruning on any switch in the management domain.
- D. Enable VTP pruning on a VTP server in the management domain.

Answer: D

NEW QUESTION 600

Which statement is true about RSTP topology changes?

- A. Any change in the state of the port generates a TC BPDU.
- B. Only nonedge ports moving to the forwarding state generate a TC BPDU.
- C. If either an edge port or a nonedge port moves to a block state, then a TC BPDU is generated.
- D. Only edge ports moving to the blocking state generate a TC BPDU.
- E. Any loss of connectivity generates a TC BPDU.

Answer: B

NEW QUESTION 604

Which two features can you configure on an access port? (Choose two.)

- A. voice VLAN
- B. 802.1q
- C. QinQ
- D. STP mode
- E. PortFast

Answer: AE

NEW QUESTION 609

In which EtherChannel mode does a port receive and respond to PAGP messages without initiating EtherChannel communication?

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

Answer: C

NEW QUESTION 613

It a switch stack is configured to used SDM templates, where are the templates stored?

- A. stack master
- B. TFTP server
- C. flash memory
- D. all stack members

Answer: A

NEW QUESTION 615

Which virtual MAC address does HSRP group 37 USE with default configuration?

- A. 00:00:c:07ac:25
- B. 00:00:c:07ac:37
- C. 00:00:c:37:00:00
- D. 00:00:c:25:00:00

Answer: A

NEW QUESTION 619

Which two statements about the HSRP priority are true? (Choose two)

- A. To assign the HSRP router priority in a standby group, the standby group-number priority priority-value global configuration command must be used.
- B. The default priority of a router is zero (0).
- C. The no standby priority command assigns a priority of 100 to the router.
- D. Assuming that preempting has also been configured, the router with the lowest priority in an HSRP group would become the active router.
- E. When two routers in an HSRP standby group are configured with identical priorities, the router with the highest configured IP address will become the active router.

Answer: CE

NEW QUESTION 622

If all devices on an EtherChannel are sending traffic to a single MAC address, which two methods of load balancing on the EtherChannel are preferred? (Choose two.)

- A. destination-MAC
- B. dest-source-MAC
- C. destination-IP
- D. source-MAC
- E. source-IP

Answer: BD

NEW QUESTION 625

Which mechanism is specific for RSPAN and not for SPAN?

- A. source port
- B. monitor port
- C. reflector port
- D. redundant port
- E. destination port

Answer: C

NEW QUESTION 629

An enterprise network has port security sticky enabled on all access ports. A network administrator moves a PC from one office desk to another After the PC is moved, the network administrator clears the port security on the new network switch port connecting to the PC, but the port keeps going back into err-disabled mode. Which two factors are possible causes of this issue? (Choose two)

- A. Port security sticky exists on the new network switch port.
- B. Port security sticky is disabled on the new network switch port.
- C. Port security must be disabled on all access ports.
- D. Port security is still enabled on the older network switch port.
- E. Port security sticky is still enabled on the older network switch port.

Answer: AE

NEW QUESTION 631

What is the benefit of UDLD?

- A. provides backup for fiber
- B. help in preventing loops
- C. removes loops
- D. determines switch path

Answer: B

NEW QUESTION 632

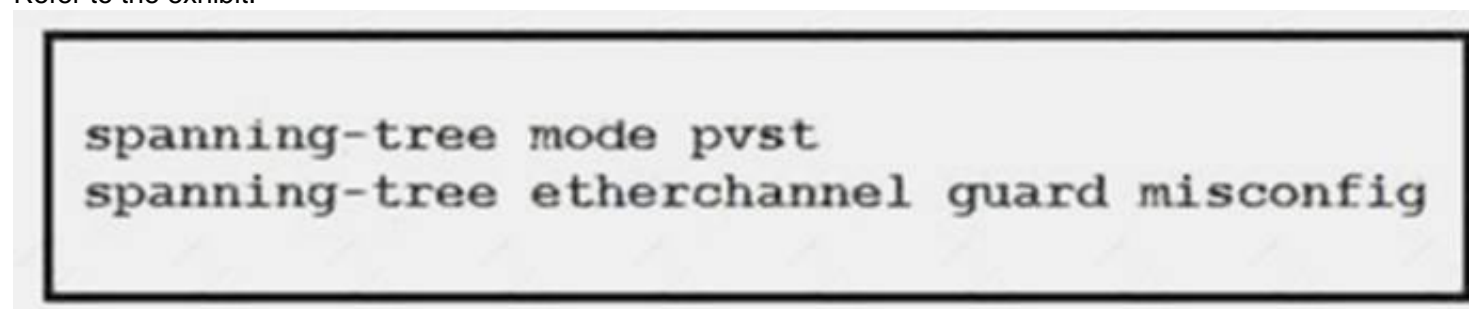
Which two command sequences must you enter on a pair of switches so that they negotiate an EtherChannel using the Cisco proprietary port-aggregation protocol? (Choose two.)

- A. channel-protocol lacp channel-group 1 mode on
- B. channel-protocol pagp channel-group 1 mode auto
- C. channel-protocol lacp channel-group 1 mode active
- D. channel-protocol pagpchannel-group 1 mode desirable
- E. channel-protocol pagp channel-group 1 mode on

Answer: BD

NEW QUESTION 637

Refer to the exhibit.



Which effect of this configuration is true?

- A. Spanning tree blocks EtherChannel formation on the device
- B. Spanning tree is disabled if the switch port establishes an EtherChannel
- C. The switch port continues to negotiate an EtherChannel even when there are configuration discrepancies between the two ports
- D. The switch port error disables when a port attempts to form an EtherChannel with a port that has a different configuration

Answer: D

NEW QUESTION 640

Which errdisable recovery command option enables a device to recover from an EtherChannel error?

- A. channel-misconfig
- B. security-violation
- C. sfp-config-nusmatch
- D. port-mode-failure

Answer: A

NEW QUESTION 642

in a Cisco StackWise Virtual environment, which planes on the component devices are virtually combined in the common logical switch?

- A. management and data only
- B. control and data only
- C. control and management only
- D. control, data, and management

Answer: C

NEW QUESTION 646

Which AAA authorization method uses a vendor-neutral directory information protocol?

- A. LDAP
- B. TACACS+
- C. RADIUS
- D. Kerberos

Answer: C

NEW QUESTION 651

Which statement about Cisco StackWise is true?

- A. The entire stack communicates using a single management IP address.

- B. The stack elects a master switch and a standby switch to support rapid failover.
- C. When a new switch is added, the master switch suspends traffic forwarding until the new switch is updated with the latest running configuration.
- D. If a single interconnect cable in the stack fails, the stack can continue to operate at full bandwidth.

Answer: B

NEW QUESTION 653

Drag and drop the LLDP-MED TLVs from the left onto the correct statements on the right.

inventory management	Advertises the Layer 2 and Layer 3 configuration of the port
LLDP-MED capabilities	Indicates whether the device supports specific features
location	Shares caller ELIN
network policy	Shares the endpoint hardware profile

Answer:

Explanation:

Advertises the Layer 2 and Layer 3 configuration of the port
network policy
Indicates whether the device supports specific features
LLDP-MED capabilities
Shares caller ELIN
location
Shares the endpoint hardware profile
inventory management

NEW QUESTION 657

Drag the description from the left to add on appropriate section of Port Cost / Switch Port Priority / Port Priority

- multiple of 4096
- 8 default is being the interface value
- lower the better
- multiple of 16
- range 1 - 200k (200,000)
- default value is 128

Port Cost

Switch Port Priority

Switch Priority

Answer:

Explanation:

Port Cost

8 default is being the interface value

range 1 - 200k (200,000)

Switch Port Priority

default value is 128

multiple of 16

Switch Priority

lower the better

multiple of 4096

- A. STP is disabled on a destination port when a SPAN monitor session is active.
- B. STP is disabled on trunk ports carrying the SPAN VLAN.
- C. A designated SPAN source port maintains its STP learning status.
- D. Designated SPAN source ports direct traffic to the root bridge of STP.

Answer: A

NEW QUESTION 663

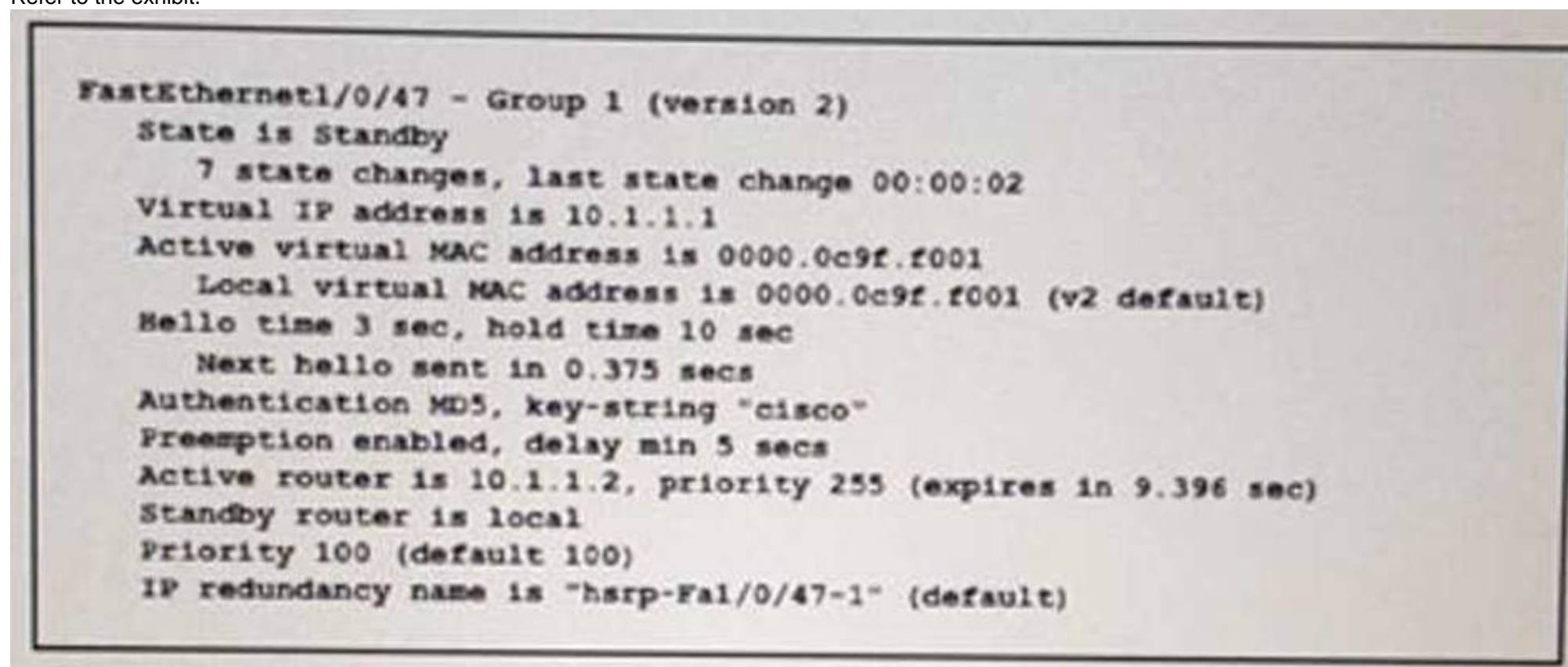
Which two TLVs are included in Cisco Discovery Protocol advertisements? (Choose two)

- A. Native VLAN TLV
- B. VTP Management Domain TLV
- C. Network Policy TLV
- D. System Name TLV
- E. Inventory Management TLV

Answer: AB

NEW QUESTION 665

Refer to the exhibit.



Which two statements about the network environment of the device that generated this output are true? (Choose two.)

- A. The local device has a higher priority setting than the active router.
- B. The virtual IP address of the HSRP group is 10.1.1.1
- C. If a router with a higher IP address and same HSRP priority as the active router becomes available, that router becomes the new active router 5 seconds later.
- D. If the local device fails to receive a hello from the active router for more than 5 seconds, it can become the active router.
- E. The hello and hold timers are set to custom values.

Answer: BC

NEW QUESTION 666

Which two statements correctly describe the benefits of GLBP? (Choose two.)

- A. It can load-share LAN traffic across up to four AVFs in a GLBP group
- B. It uses dual active AVGs for redundancy
- C. LAN traffic can be distributed to up to six routers in a GLBP group
- D. It supports up to 128 virtual routers per physical interface
- E. It can automatically adjust group weighting when an interface goes down.

Answer: AE

NEW QUESTION 670

Which feature is enabled automatically when you configure HSRP on an interface?

- A. ICMP redirect messages
- B. HSRP tracking
- C. IGMP snooping
- D. HSRP preemption

Answer: A

NEW QUESTION 675

Which Cisco technology provides network redundancy by combining two physically separate switches to a single logical switch?

- A. VSS
- B. IPPS
- C. PAGP
- D. LACP

Answer: A

NEW QUESTION 679

Which two statements about an access port with voice VLAN are true? (Choose two.)

- A. Frames on the Voice VLAN are tagged with a Layer 2 CoS value.
- B. They can be configured on trunk ports and access ports.
- C. They can be configured on VLANs 1 through 1001 only.
- D. They support a single VLAN for data traffic.
- E. They require VTP

Answer: AD

NEW QUESTION 683

Which command sets the interval at which a device sends LLDP updates to its neighbors?

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

Answer: B

NEW QUESTION 684

Which command enables you to determine whether any interface on a device was shut down as a result of a port security violation?

- A. show errdisable detect
- B. show interface err-disabled status
- C. show port-security address
- D. show port-security

Answer: D

NEW QUESTION 686

Which two Criteria must be met to support SSO redundancy in a Cisco StackWise environment? (Choose two)

- A. The two switches must use the same license type.
- B. The software version can be different between switches.
- C. Both switches must be in the same StackWise logical group.
- D. You must manually configure the role of each switch.
- E. The two switches must use the same StackWise Virtual Configuration.

Answer: AE

NEW QUESTION 688

Which information in a RADIUS access request packet is encrypted?

- A. username and password
- B. entire payload
- C. entire header
- D. password

Answer: A

NEW QUESTION 689

Refer to the exhibit.

```
FastEthernet2/0/47 - Group 1
  State is Active
    7 state changes, last state change 00:00:19
  Virtual IP address is 10.1.1.1
  Active virtual MAC address is 0000.0c07.ac01
    Local virtual MAC address is 0000.0c07.ac01 (v1 default)
  Hello time 3 sec, hold time 10 sec
    Next hello sent in 1.616 secs
  Authentication MD5, key-string "cisco"
  Preemption enabled
  Active router is local
  Standby router is 10.1.1.3, priority 100 (expires in 9.455 sec)
  Priority 255 (configured 255)
  IP redundancy name is "hsrp-Fa2/0/47-1" (default)
```

Which two statements about the network environment of the device that generated this output are true? (Choose two.)

- A. The default hello and hold timer values are in use.
- B. The standby router can take the active HSRP if it fails to receive a hello packet from the active router within 1.616 seconds.
- C. The priority value of the HSRP group is 1.
- D. HSRP version 2 is in use.
- E. The standby router can take the active HSRP role if it fails to receive a hello packet from the active router within 10 seconds.

Answer: AE

NEW QUESTION 693

Which two tasks must you perform to configure DHCP snooping on a device? (choose two)

- A. Enable DHCP snooping on the VLAN
- B. Enable VRF support for the DHCP relay agent
- C. Enable DHCP snooping globally
- D. Enable DHCP packet validation on the device.
- E. Enable DHCP option 82.

Answer: AC

NEW QUESTION 695


Which two statements about the VLAN database are true? (Choose two)

- A. VLAN information is stored in the running configuration
- B. It supports VLANs 1 to 1001.
- C. If the switch is in VTP transparent mode, the VLAN can be configured if it is in VLAN database mode.
- D. It supports extended VLANs.
- E. VLAN IDs can be duplicated, but their names must be unique.

Answer: BC

NEW QUESTION 697


The central offices for a footwear distributor are enhancing their wiring closets with Layer3 switches. The new distribution-layer switch has been installed and a new access-layer switch cabled to it. Your task is to configure VTP to share VLAN information from the distribution-layer switch to the access-layer devices. Then, it is necessary to configure interVLAN routing on the distribution-layer switch to route traffic between the different VLANs that are configured on the access-layer switches; however, it is not necessary for you to make the specific VLAN port assignments on the access-layer switches. Also, because VLAN database mode is being deprecated by Cisco, all VLAN and VTP configurations are to be completed in the global configuration mode. Please reference the following table for the VTP and VLAN information to be configured:

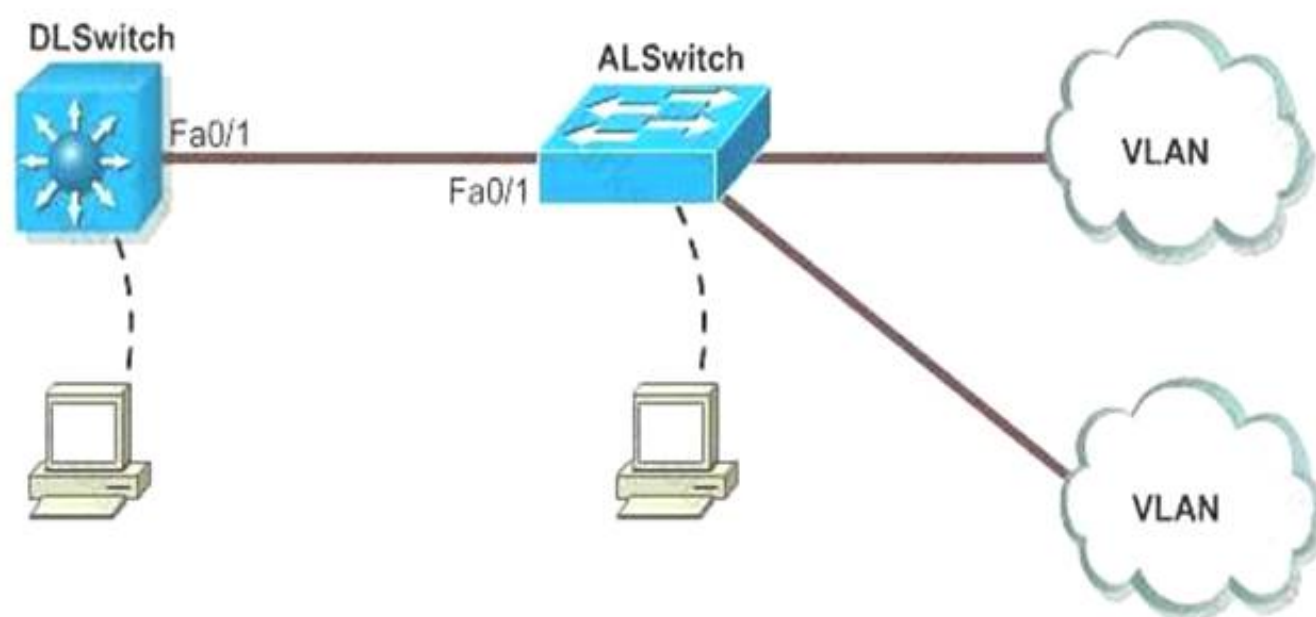


You will have to scroll this window and the problem statement window to view the entire problem.

To configure the switch click on a host icon that is connected to a switch by a serial console cable (shown in the diagram as a curved dashed black line).

The [Tab] key

 Hide Topology



VTP Domain name : cisco VLAN Ids 20 31

IP Addresses 172.16.71.1/24 172.16.132.1/24

These are your specific tasks:

1. Configure the VTP information with the distribution layer switch as the VTP server
2. Configure the VTP information with the access layer switch as a VTP client
3. Configure VLANs on the distribution layer switch
4. Configure inter-VLAN routing on the distribution layer switch
5. Specific VLAN port assignments will be made as users are added to the access layer switches in the future.
6. All VLANs and VTP configurations are to be completed in the global configuration

To configure the switch click on the host icon that is connected to the switch by way of a serial console cable.

Answer:

Explanation: vtp server configuration: switch#conf t switch(config)#vtp mode server

switch(config)#vtp domain CISCO switch(config)#vtp mode client

switch(config)#vtp mode client

switch(config)#int vlan 20

switch(if-config)#ip add 172.64.20.1 255.255.255.0 switch(if-config)#no shut

switch(if-config)#int vlan 31

switch(if-config)#ip add 192.162.31.1 255.255.255.0 switch(if-config)#no shut

switch(if-config)#exit switch#ip routing switch#copy run start vtp client configuration: switch#conf t

switch(config)#vtp mode client switch(config)#vtp domain CISCO switch#copy run start

Alternative #1

VTP DomainDistribution VLAN Ids2031

IP Addresses172.16.16.1/24172.16.193.1/24

Alternative #12

VTP DomainDistribution VLAN Ids3021

IP Addresses172.16.203.1/24172.16.93.1/24

NEW QUESTION 700

Which VTP mode you configure on a VTP domain so that the switch with the highest VTP configuration revision number in the domain propagates VLAN

information to the other switches?

- A. client mode
- B. server mode
- C. off mode
- D. transparent mode

Answer: B

NEW QUESTION 704

Which two StackWise configuration setting types are applied at the system level? (Choose two)

- A. port-security settings
- B. VLAN settings
- C. speed/duplex settings
- D. SNMH settings
- E. 802.1k settings

Answer: BD

NEW QUESTION 705

Which two statements about source port monitoring in SPAN are true? (Choose two)

- A. Traffic through a destination port can be copied and included in the SPAN session.
- B. It can monitor individual interfaces within a port channel
- C. The entire EtherChannel must be monitored.
- D. It can monitor only FaStEthernet and GigabitEthernet port types.
- E. It can monitor ingress and egress traffic

Answer: AE

NEW QUESTION 706

Which two statements about static mac addresses are true ?

- A. They are configured without an aging time
- B. They have a default aging time of 300 seconds
- C. They supersede dynamically learned mac address
- D. They can be configured on multiple interfaces in the same vlan
- E. They have a default aging time of 60 seconds.

Answer: BD

NEW QUESTION 709

Which two statements about HSRP, GLBP, and VRRP are true? (Choose two.)

- A. HSRP is the preferred protocol to be used on multivendor environments.
- B. VRRP has one master router, one standby router, and many listening routers.
- C. GLBP allows for a maximum of four MAC addresses per group.
- D. HSRP supports up to 255 groups on the same switch or router.
- E. VRRP is a Cisco proprietary protocol.

Answer: CD

NEW QUESTION 714

Which command enables you to detect whether both sides of an aggregate link are configured properly?

- A. spanning-tree etherchannel guard misconfig
- B. spanning-tree backbone fast
- C. spanning-tree loopguard default.
- D. spanning-tree guard root

Answer: A

NEW QUESTION 716

Which statement about the default Switch Database Management template is true?

- A. The default template disables routing and supports the maximum number of unicast MAC addresses
- B. The default template gives balance to all functions.
- C. The default template maximizes system resources for unicast routing
- D. The default template maximizes system resources for access control lists

Answer: B

NEW QUESTION 718

Which two commands to command sequences configure a switch so that it tags native VLAN 3939? (Choose two.)

- A. interface GigabitEthernet0/0 description to HR Building M 9373-810 witchport trunk native vlan 3939
- B. switch(config)#set switch native vlan 3939
- C. switch (config)#vlan dot1q native vlan 3939
- D. Interface GigabitEthernet0/0 Description to HR Building M 9373-810Encapsulation dot1q tag vlan native 3939
- E. switch(config)#vlan dotlq tag native

Answer: AE

NEW QUESTION 720

Which statement about SPAN is true'?

- A. it uses a specific VLAN to transfer mirrored traffic.
- B. SPAN destinations also can be SPAN sources.
- C. It is an industry standard protocol for mirroring traffic
- D. SPAN destinations participate in spanning tree instances
- E. It mirrors traffic from a source port to a destination port on the same switch only

Answer: D

NEW QUESTION 722

Which command do you enter to enable Dynamic ARP Inspection for VLAN 15?

- A. SW1(config-vlan)#ip arp inspection vlan 15
- B. SW1(config-v1an)#ip arp inspection trust
- C. SW1(config)#ip arp inspection vlan 15
- D. SW1(config-if)#ip arp-inspection trust

Answer: C

NEW QUESTION 725

Drag the appropriate from left to right on description.

mode desirable

mode active

mode auto

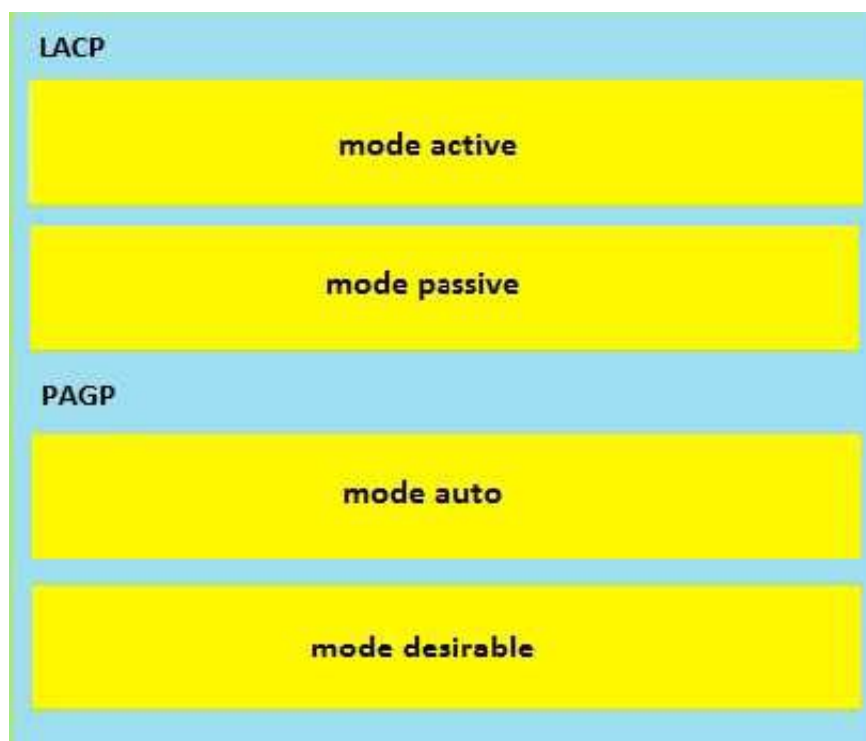
mode passive

LACP

PAGP

Answer:

Explanation:



NEW QUESTION 728

Which two statements about the LACP port priority of a device are true? (Choose two.)

- A. To manually configure a link with an EtherChannel to come up first, set its lacp port-priority value lower than the default.
- B. It determines which links in an EtherChannel group are active.
- C. To manually configure uses the port a link within an EtherChannel to come up first, set its lacp port-priority value higher than the default.
- D. The system uses the port priority of the local and remote device to determine which links in an EtherChannel group are hot-standby.
- E. LACP port-priority is used in the hashing algorithm to load-balance links within an EtherChannel.
- F. They system uses the port priority of the local and remote devices to determine which links in an EtherChannel group are active.

Answer: AB

NEW QUESTION 729

Which two prerequisites for HSRP to become active on an interface are true? (Choose two.)

- A. Cisco Express Forwarding must be disabled globally.
- B. The VIP must be in the same subnet as the primary IP address.
- C. A Virtual-MAC address must be configured on the interface.
- D. An IP address must be configured on the interface.
- E. PIM routing must be disabled on the interface.

Answer: BD

NEW QUESTION 732

Which two authentication types does VRRP support? (Choose two.)

- A. Plain-text
- B. CHAP
- C. PAP
- D. 802.1x
- E. MD5

Answer: AE

NEW QUESTION 734

How can you set VLAN 99 on a trunk to become a native VLAN?

- A. switchport trunk native vlan 99
- B. switchport trunk vlan 99 native
- C. switchport native vlan 99 trunk
- D. switchport native trunk vlan 99
- E. switchport vlan 99 native
- F. switchport vlan native trunk 99

Answer: A

NEW QUESTION 738

Drag the appropriate from left to right on description.

Uses proprietary cable for connection

Can be connected in up to 9 devices

Can be used even in geographically distributed equipment

Is supported only on line 3750 and ??? (2960,3650,3850 or 3750+)

Is supported only on line 4500 and 6500

Uses 10G interfaces? (The last choice I do not remember)

VSS

STACK

Answer:

Explanation:

VSS

Can be used even in geographically distributed equipment

Is supported only on line 4500 and 6500

Uses 10G interfaces? (The last choice I do not remember)

STACK

Can be connected in up to 9 devices

Is supported only on line 3750 and ??? (2960,3650,3850 or 3750+)

Uses proprietary cable for connection

NEW QUESTION 743

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

- A. It groups multiple switch ports as a single EtherChannel.
- B. It can use one IP address to communicate with n/w (network).
- C. It monitors multiple switches from a central console.
- D. It enables multiple switch ports to share a single master configuration.
- E. It allows multiple switches to operate as a single switch.

Answer: BE

Explanation: https://www.cisco.com/c/en/us/products/collateral/switches/catalyst-3750-series-switches/prod_white_paper091

NEW QUESTION 748

Which option is the value of the Tag Protocol Identifier for an 802.1Q tagged frame?

- A. 0x0806
- B. 0x888E
- C. 0x0800
- D. 0x8100

Answer: D

NEW QUESTION 749

Which two statements about RPVST+ are True ?

- A. It automatically enables uplinkfast and backbonefast.
- B. It elects one root switch per vlan instance
- C. It support two stp instances per vlan
- D. It is incompatible with spanning tree portfast
- E. Backwards compatibility with 802.1d is not supported
- F. It requires approximately 50 seconds to complete reconvergence

Answer: AB

NEW QUESTION 751

Which two statements about configuring VLANs on switches in VTP server mode are true'? (Choose two)

- A. The first VLAN configured on a switch becomes the native VLAN
- B. Devices in a topology without a router can communicate only with other devices on the same VLAN.
- C. Newly configured VLANs remain in the down state until they are manually enabled
- D. VLANs must be configured individually
- E. Switches in the same domain propagate their VLAN configurations over VTP

Answer: CD

NEW QUESTION 756

Which two statements about IP Source Guard are true? (Choose two)

- A. It works together with DHCP snooping to verify source IP packets
- B. When it is first enabled, it blocks all IP packets except DHCP packets
- C. It is enabled automatically when DHCP snooping is enabled
- D. When it is configured on a Layer 2 port channel, it is applied only to the port channel interface
- E. When it is first enabled, it allows all IP packets except DHCP packets
- F. It must be enabled globally for all ports

Answer: DF

NEW QUESTION 759

When Ether Channel guard is enabled and a misconfiguration is detected on a port, how does the port respond"?

- A. It enters the channel-error state
- B. enters the errdisable state
- C. The port remains u
- D. but it is unable to pass traffic
- E. enters the shutdown state
- F. The port state remains unchanged, but the EtherChannel stays down.

Answer: B

NEW QUESTION 763

Which feature rate-limits DHCP traffic?

- A. DHCP Snooping
- B. DHCP Acknowledge
- C. DHCP Request
- D. DHCP Spoofing

Answer: A

NEW QUESTION 768

Which two tasks must you perform to enable AAA operations with a remote security database? (Choose two)

- A. Configure network equipment to query the remote security database.
- B. Configure a user profile in the local database of each device to which the user will have access.
- C. Configure SSH to provide remote access to network equipment.
- D. Configure Cisco Discovery Protocol on all interfaces used for authentication.
- E. Configure user profiles on the remote security database.

Answer: BE

NEW QUESTION 770

Which command is required for root guard for Cisco device to place ID:2071948x? (Where x is the last digit ID)

- A. (config if)# spanning-tree guard root
- B. (config)# spanning-tree guard root
- C. (config-if)# spanning-tree root guard
- D. (config)# spanning-tree root guard

Answer: A

NEW QUESTION 771

A network engineer is installing a switch for temporary workers to connect to. The engineer does not want this switch participating in Spanning Tree with the rest of the network; however, end user connectivity is still required. Which spanning-tree feature accomplishes this?

- A. BPDUblock
- B. BPDUfilter
- C. BPDUignore
- D. BPDUguard
- E. BPDUdisable

Answer: B

NEW QUESTION 775

Refer to Exhibit.

```
SwitchA(config)#interface FastEthernet 0/1
SwitchA(config-if)#switchport mode access
SwitchA(config-if)#switchport access vlan 10

Switch B
SwitchB#configure terminal
SwitchB(config)#interface FastEthernet 0/1
SwitchB(config-if)#switchport mode access
SwitchB(config-if)#switchport access vlan 10

Switch C
SwitchC#configure terminal
SwitchC(config)#interface FastEthernet 0/1
SwitchC(config-if)#switchport mode access
SwitchC(config-if)#switchport access vlan 10

Switch D
SwitchD#configure terminal
SwitchD(config)#interface FastEthernet 0/1
SwitchD(config-if)#switchport mode access
SwitchD(config-if)#switchport access vlan 20
```

You have applied these configurations to switches A, B, C and D respectively and the switches are connected to one another on a trunk port that is passing all VLAN traffic. Which statements about traffic on the network is true?

- A. Unless a Layer 3 device is installed, hosts on any of the switches will be able to communicate only with other hosts on the same switch.
- B. Hosts on all four switches can communicate normally with one another on VLAN 10 only.
- C. Unless a Layer 3 device is installed, hosts on the FastEthernet 0/1 interface of switch D will be unable to communicate with hosts on the other switches.
- D. Hosts on all four switches can communicate normally with one another over the trunk port.

Answer: C

NEW QUESTION 780

Which two statements about extended-range VLANs are true? (Choose two.)

- A. They support pruning
- B. They can be created in VTP server mode in VTP version 3.
- C. VTP versions 1 and 2 store extended range VLANs in the VLAN database
- D. They can be created when the switch is in VTP server mode.

E. VTP version 3 stores extended range VLANs in the VLAN database

Answer: BE

NEW QUESTION 783

Refer to the exhibit.

```
Switch# configure terminal
Switch(config)# vlan 3
Switch(config-vlan)# end
```

You have applied this configuration to Switches A, B, C, and D, and the switches are connected to one another on access ports. Which two additional actions must you take to enable the hosts on VLAN 3 to communicate with one another considering future growth with hosts on additional VLANs? (Choose two.)

- A. Assign VLAN 3 to the ports connecting to the hosts.
- B. Configure VLAN 3 as an SVI with a working IP address.
- C. Configure VLAN 3 in VLAN database mode.
- D. Configure VTP transparent mode to allow hosts with additional VLANs.
- E. Reconfigure the access ports connecting the switches as trunk ports.

Answer: AE

NEW QUESTION 787

In which EtherChannel mode does a port receive and respond to PAgP messages without EtherChannel communication?

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

Answer: B

NEW QUESTION 788

Which command enables a RADIUS server configuration to use vendor-proprietary attributes?

- A. radius-server host non-standard
- B. radius-server attribute nas-port extended
- C. radius-server configure-nas
- D. radius-server vsa send authentication

Answer: D

NEW QUESTION 793

Which command enables PortFast and disables port channel on a physical interface?

- A. switchport mode dynamic auto
- B. switchport host
- C. switchport mode access
- D. spanning-tree portfast

Answer: D

NEW QUESTION 798

Which three options are reasons for an interface to go into err-disable state? (Choose three.)

- A. BPDU guard violation
- B. hard-coded speed duplex match on both sides
- C. security violation
- D. storm-control broadcast
- E. grouping ports into a port channel
- F. ARP inspection

Answer: ACD

NEW QUESTION 800

Which three characteristics of AAA with TACACS+ are true? (Choose three.)

- A. It is a Cisco-proprietary implementation
- B. It runs on UDP port 49.
- C. It runs on TCP port 49
- D. It is a standards-based implementation
- E. It uses a client-server architecture.
- F. It uses a client-private cloud architecture

Answer: ACE

NEW QUESTION 801

Which Cisco StackWise feature is supported?

- A. using different versions of the Cisco IOS on each switch
- B. using different SDM templates on each switch
- C. using same software feature set on all members
- D. using mixed software feature set on all members

Answer: C

NEW QUESTION 805

Which AAA authorization type applies security policies on a per-user basis?

- A. network
- B. auth-proxy
- C. EXEC
- D. command

Answer: B

NEW QUESTION 808

Refer to the exhibit.

```
DSW1#sh spanning-tree vlan 20

VLAN0020
  Spanning tree enabled protocol ieee
    Root ID    Priority    24596
              Address    0018.7363.4300
              Cost        2
              Port        13 (FastEthernet1/0/11)
              Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec

    Bridge ID   Priority    28692 (priority 28672 sys-id-ext 20)
              Address    001b.0d8e.e080
              Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
              Aging Time   300

Interface                Role Sts Cost        Prio.Nbr Type
-----
Fa1/0/7                  Desg FWD 2          128.9    P2p
Fa1/0/10                 Desg FWD 2          128.12   P2p
Fa1/0/11                 Root FWD 2          128.13   P2p
Fa1/0/12                 Altn BLK 2          128.14   P2p
```

Which two statements about the spanning-tree operation of this switch are true? (Choose two)

- A. The switch is operating in the default Cisco spanning-tree mode
- B. The spanning-tree operation mode for this switch is IEEE
- C. The spanning-tree mode stp ieee command was entered on this switch
- D. The spanning -tree operation mode for this switch is PVST+.
- E. The spanning-tree operation mode for this switch is PVST

Answer: AD

NEW QUESTION 810

Which two statements about Cisco Discovery Protocol are true? (Choose two)

- A. It is not supported with SNMP
- B. It runs on OSI Layer 2
- C. It is supported on Frame Relay subinterfaces
- D. It uses a TLV to advertise the native VLAN
- E. It runs on OSI Layer 1

Answer: BD

NEW QUESTION 815

Which feature places a port in an err-disabled state when it receives an unanticipated BPDU?

- A. loop guard
- B. root guard
- C. BPOU guard
- D. BPDU filtering

Answer: C

NEW QUESTION 816

How many active virtual gateways can each GLBP group support?

- A. 1
- B. 2
- C. 4
- D. 16

Answer: C

NEW QUESTION 818

Which command configures all access ports on a switch to immediately enter the forwarding state when the switch is reset?

- A. spanning-tree portfast
- B. spanning-tree portfast bpduguard default
- C. spanning-tree portfast default
- D. spanning-tree portfast bpdufilter default

Answer: A

NEW QUESTION 821

A physical switch port is part of an EtherChannel group. What happens while the same port is configured as a SPAN destination?

- A. The port is removed from the EtherChannel group.
- B. The operation is not allowed as an EtherChannel member cannot be a SPAN source port.
- C. The port forwards traffic in the EtherChannel group and acts as a SPAN source simultaneously.
- D. The port is put in the errdisabled state and can only be re-enabled manually.

Answer: A

NEW QUESTION 824

Which two commands displays IP Source Guard bindings? (Choose two)

- A. show ip dhcp binding
- B. show ip source binding
- C. show ip dhcp snooping database
- D. show ip guard source
- E. show ip verify source

Answer: BE

NEW QUESTION 826

Which statement about the configuration of MST on an IOS switch is true?

- A. When MST is enable
- B. RSTP is automatically enabled and MST will use BPDU version 4, maximum of 16 instances of MST can exist
- C. When MST is enable
- D. RSTP is automatically disabled and MST will use BPDU version 2. maximum of 16 instances of MST can exist.
- E. When MST is enable
- F. RSTP is automatically enabled and MST will use BPDU version 2, maximum of 16 instances of MST can exist.
- G. When MST is enabled, RSTP is automatically disabled and MST will use BPDU version 4, maximum of 16 instances of MST can exist.

Answer: C

NEW QUESTION 829

Which type of port can serve as a Cisco StackWise Virtual link?

- A. an uplink port only
- B. any physical port
- C. a downlink port only
- D. a switched port only

Answer: B

NEW QUESTION 832

Which two new features are included in VTPv3? (Choose two.)

- A. VTPs can now be configured in off mode.
- B. It can be configured to prevent the override of the VLAN database.
- C. VTP now supports MD5 passwords.
- D. VLANs configured for token ring are now eligible to participate in VTP.
- E. VLANs in the extended range are now eligible to participate in VTP.

Answer: AE

Explanation: Explanation:/Reference:

<http://brbccie.blogspot.com/2014/07/vtp-v3.html>

Supports extended VLANs (1006 - 4094)

VTP can now be turned off completely, as opposed to just transparent mode

Fixes the bane of VTP v1/2, the accidental-high-configuration-revision-wipes-out-your-network issue, by design it does this no configuration is necessary.

NEW QUESTION 837

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

- A. You must manually configure ICMP redirect messages on HSRP interfaces.
- B. It is supported on switch virtual interfaces and routed ports.
- C. Primary and secondary HSRP switches forward traffic in a round-robin style.
- D. The interfaces in a HSRP group share a virtual MAC address.
- E. An HSRP group can support a maximum of eight switches.

Answer: BD

NEW QUESTION 839

In which UDLD mode does a link remain up, even when a unidirectional link failure is detected?

- A. aggressive
- B. enable
- C. reset
- D. normal

Answer: A

NEW QUESTION 840

For which reason would you configure RSPAN instead of SPAN on your network?

- A. Only RSPAN can log traffic on a VLAN that spans multiple switches
- B. RSPAN provides more complete monitoring of the traffic on a single switch.
- C. Only RSPAN supports STP on multiple switches across a campus
- D. Only RSPAN devices can monitor traffic on other devices

Answer: D

NEW QUESTION 843

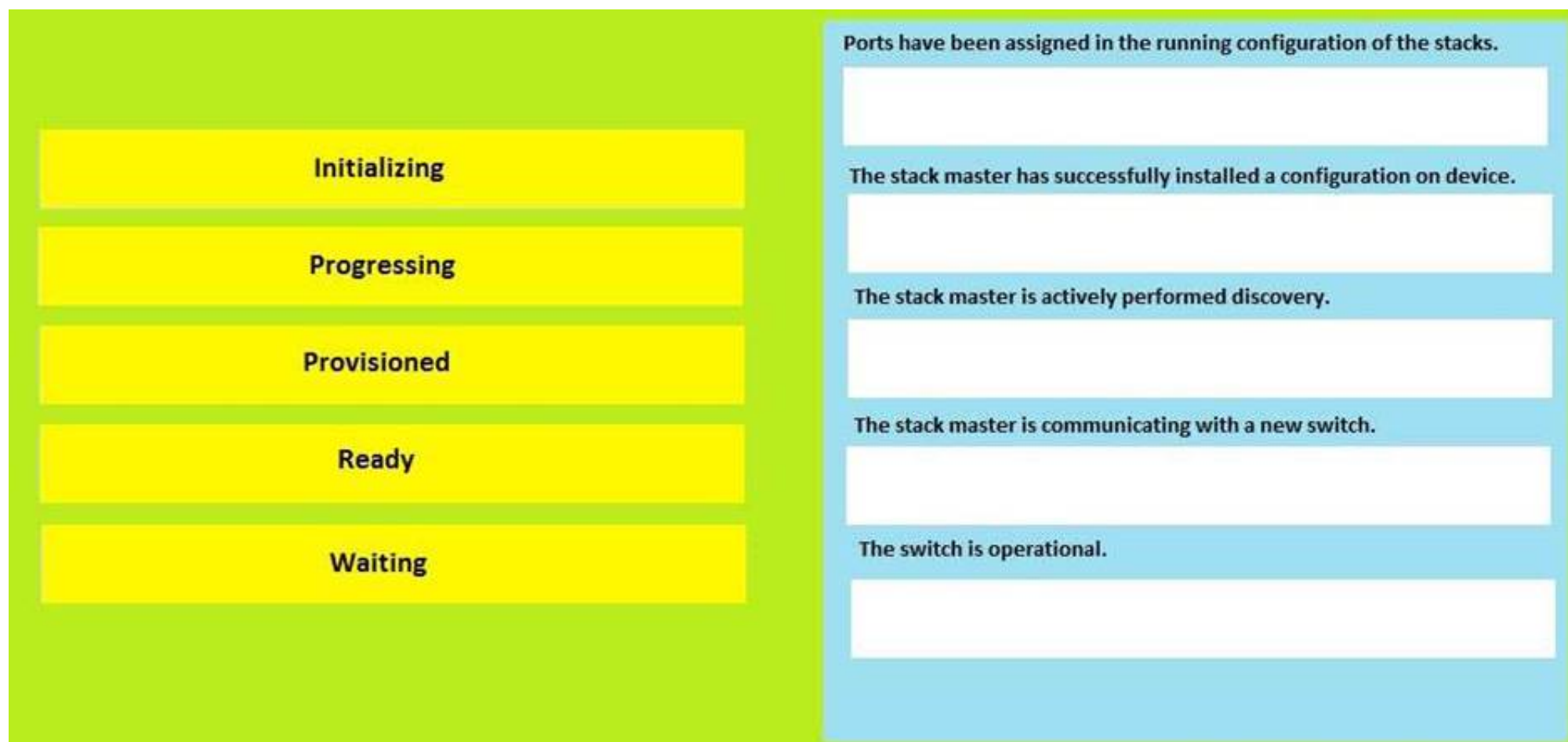
Which two tasks must you perform to correctly configure IP Source Guard on a switch? (Choose two)

- A. Enable DHCP option 82
- B. Enable DHCP packet validation on the device
- C. Configure the DHCP snooping relay
- D. Enable DHCP snooping on the switch
- E. Configure the Ip verify source vlan dhcp-snooping command

Answer: DE

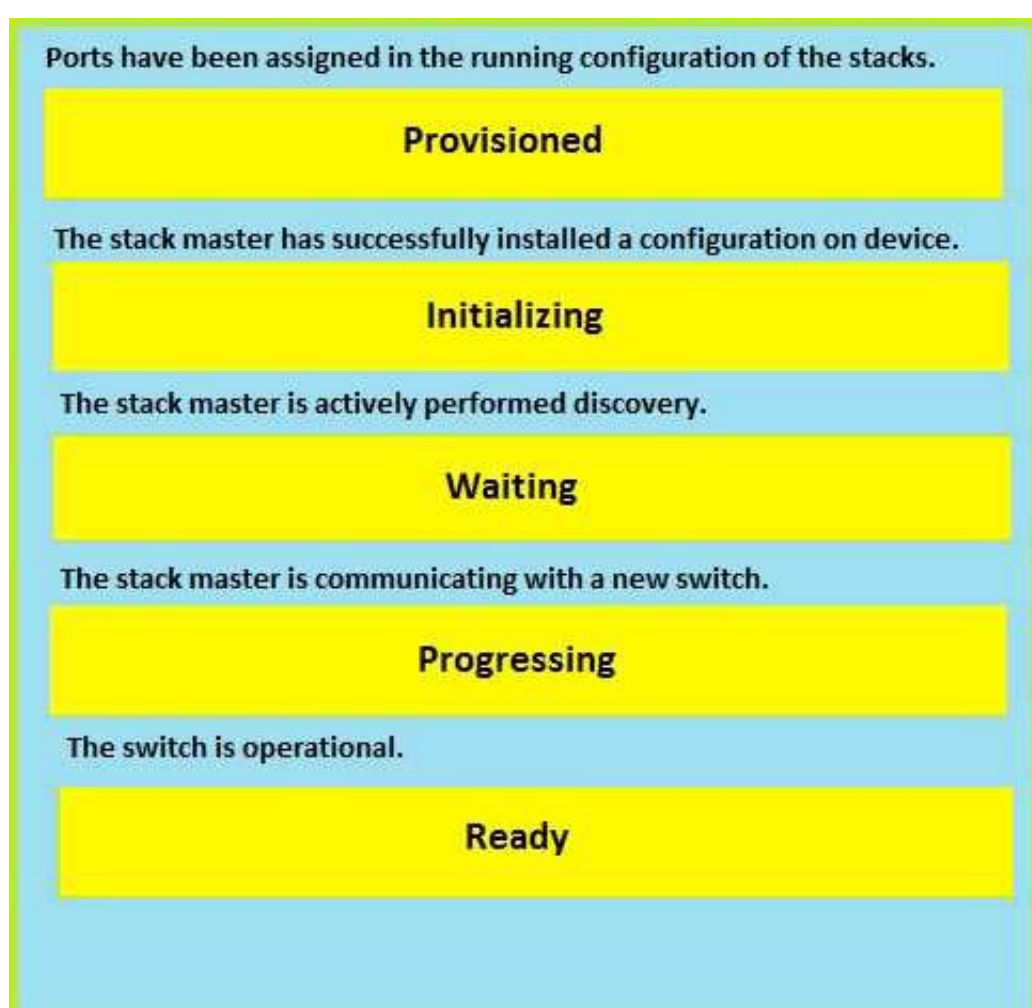
NEW QUESTION 845

Drag the appropriate from left to right on description.



Answer:

Explanation:



NEW QUESTION 848

Which two statements about VRRP advertisements are true? (Choose two)

- A. They are sent every three seconds by default.
- B. They include VRRP timer information.
- C. They are sent from the master router and standby routers.
- D. They are sent only from the master router.
- E. They include priority information.

Answer: DE

Explanation: VRRP AdvertisementsThe virtual router master sends VRRP advertisements to other VRRP routers in the same group. The advertisements communicate the priority and state of the virtual router master. The VRRP advertisements are encapsulated in IP packets and sent to the IP Version 4 multicast address assigned to the VRRP group. The advertisements are sent every second by default; the interval is configurable. Although the VRRP protocol as per RFC 3768 does not support millisecond timers, Cisco routers allow you to configure millisecond timers. You need to manually configure the millisecond timer values on both the primary and the backup routers. The master advertisement value displayed in the show vrrp command output on the backup routers is always 1 second because the packets on the backup routers do not accept millisecond values.

You must use millisecond timers where absolutely necessary and with careful consideration and testing. Millisecond values work only under favorable circumstances, and you must be aware that the use of the millisecond timer values restricts VRRP operation to Cisco devices only.

NEW QUESTION 850

Which keyword can be applied to the spanning-tree priority command that allows the IT department to adjust the timers based on the number of switches between any two end stations?

- A. hello-time
- B. cost
- C. diameter
- D. priority
- E. root primary

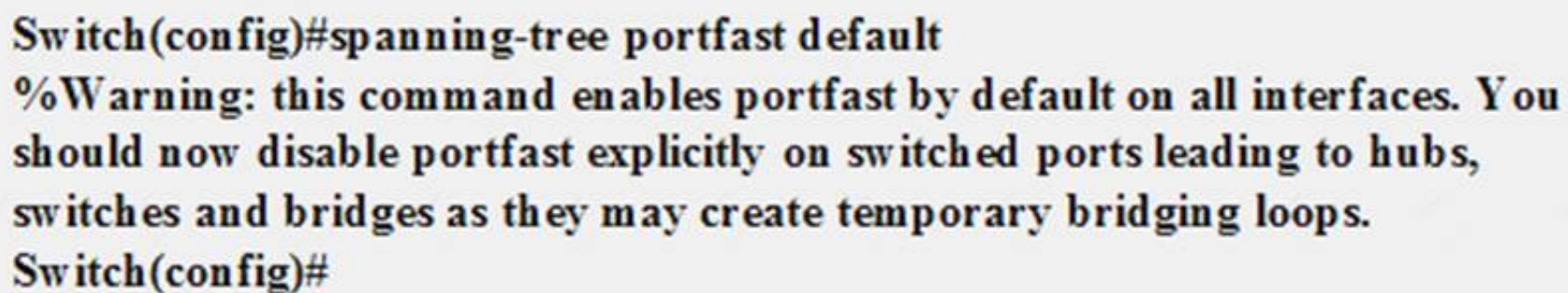
Answer: C

Explanation: Use the diameter

keyword to specify the Layer 2 network diameter (that is, the maximum number of switch hops between any two end stations in the Layer 2 network). When you specify the network diameter, the switch automatically sets an optimal hello time, forward-delay time, and maximum-age time for a network of that diameter, which can significantly reduce the convergence time. You can use the hello keyword to override the automatically calculated hello time.

NEW QUESTION 854

Refer to the exhibit.



```
Switch(config)#spanning-tree portfast default
%Warning: this command enables portfast by default on all interfaces. You
should now disable portfast explicitly on switched ports leading to hubs,
switches and bridges as they may create temporary bridging loops.
Switch(config)#
```

When troubleshooting a network problem, a network analyzer is connected to Port f0/1 of a LAN switch. Which command can prevent BPDU transmission on this port?

- A. spanning-tree portfast bpduguard enable
- B. spanning-tree bpduguard default
- C. spanning-tree portfast bpdufilter default
- D. no spanning-tree link-type shared

Answer: C

NEW QUESTION 855

Which command displays the current SDM template?

- A. show sdm prefer routing
- B. show sdm prefer layer 2
- C. show sdm prefer
- D. show sdm prefer default

Answer: C

NEW QUESTION 859

Which command configures VLAN 99 as an untagged VLAN on a trunk?

- A. switchport access vlan 99
- B. switchport trunk pruning vlan except 99
- C. switchport trunk allowed vlan 99
- D. switchport trunk native vlan 99

Answer: D

NEW QUESTION 861

Which two limitations of local SPAN are true? (Choose two.)

- A. The source and destination ports must reside in the same switch or switch stack.
- B. It can monitor only traffic that ingresses or egresses on the source interface or VLAN.
- C. A SPAN session can support multiple destination ports only if they are on the same VLAN.
- D. Each SPAN session supports only one source VLAN or interface.
- E. A switch can support only one local SPAN session at a time.

Answer: AB

NEW QUESTION 863

Which two accounting types does AAA support'? (Choose two)

- A. authorization
- B. privilege
- C. system
- D. connection
- E. authentication

Answer: AE

NEW QUESTION 868

Drag and drop the descriptions of switching technologies from the left correct technologies on the right.

uses proprietary cabling	StackWise	
combines exactly two devices		
supported on Cisco 3750 and 3850 devices		
supported on the Cisco 4500 and 6500 series	VSS	
supports devices that are geographically separated		
supports up to nine devices		

Answer:

Explanation: Stackwise

Support up to nine devices

Supported on Cisco 3750 and 3850 devices Uses proprietary cabling

VSS

Combines exactly two devices

Support on the Cisco 4500 and 6500 series

Support devices that are geographically separated.

NEW QUESTION 872

Which security feature inspects ARP packets based on valid-to-MAC address bindings?

- A. DAI
- B. BPDU guard
- C. port security
- D. IP Source Guard

Answer: A

NEW QUESTION 874

Which statement about GLBP is true?

- A. Unused bandwidth is never utilized.
- B. They communicate under TCP port 3222 for both source and destination.
- C. They become active if any of the existing forwarding switches fail.
- D. They become restricted if any of the existing forwarding switches fail.

Answer: C

NEW QUESTION 879

In which state does the standby virtual gateway take election?

- A. learn
- B. listen
- C. init
- D. reply

Answer: B

NEW QUESTION 883

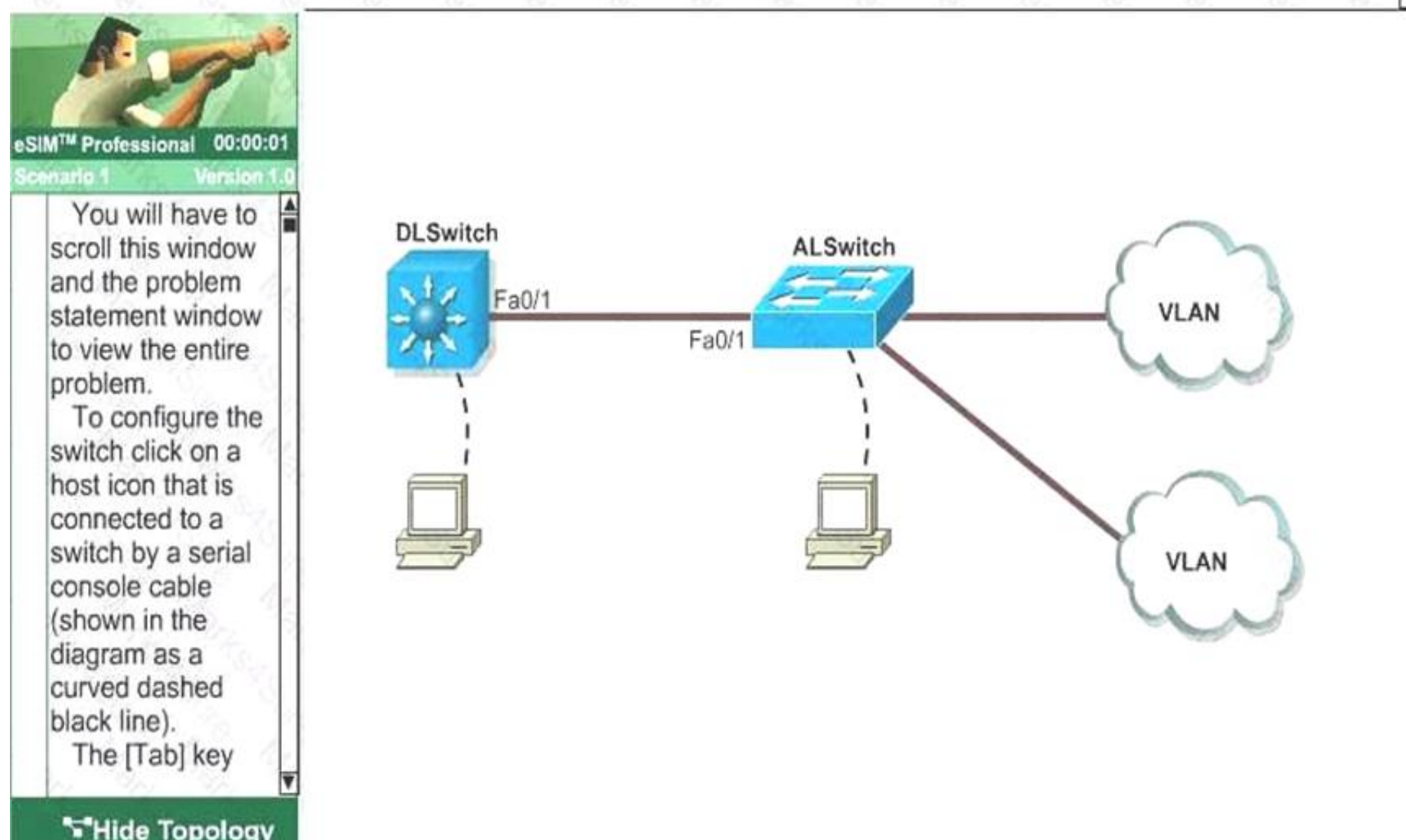
Which statement about VLAN pruning on trunk ports is true?

- A. Manually pruning VLANs reduces unnecessary forwarding of the broadcast traffic.
- B. VLANs can be pruned only VTP pruning.
- C. Broadcast traffic for a manually pruned VLAN is allowed to cross the trunk port.
- D. Manually pruning extended VLANs increases switch security.

Answer: A

NEW QUESTION 888

The headquarter offices for a book retailer are enhancing their wiring closets with Layer3 switches. The new distribution-layer switch has been installed and a new access-layer switch cabled to it. Your task is to configure VTP to share VLAN information from the distribution-layer switch to the access-layer devices. Then, it is necessary to configure interVLAN routing on the distribution-layer switch to route traffic between the different VLANs that are configured on the access-layer switches; however, it is not necessary for you to make the specific VLAN port assignments on the access-layer switches. Also, because VLAN database mode is being deprecated by Cisco, all VLAN and VTP configurations are to be completed in the global configuration mode. Please reference the following table for the VTP and VLAN information to be configured:



The information of the question VTP Domain name : cisco VLAN Ids 20 31

IP Addresses 172.16.71.1/24 172.16.132.1/24

These are your specific tasks:

1. Configure the VTP information with the distribution layer switch as the VTP server
2. Configure the VTP information with the access layer switch as a VTP client
3. Configure VLANs on the distribution layer switch
4. Configure inter-VLAN routing on the distribution layer switch
5. Specific VLAN port assignments will be made as users are added to the access layer switches in the future.
6. All VLANs and VTP configurations are to be completed in the global configuration To configure the switch click on the host icon that is connected to the switch by way of a serial console cable.

Answer:

Explanation: The information of the question These are your specific tasks:

1. Configure the VTP information with the distribution layer switch TestKing1 as the VTP server
 2. Configure the VTP information with the access layer switch TestKing2 as a VTP client
 3. Configure VLANs on the distribution layer switch TestKing1
 4. Configure inter-VLAN routing on the distribution layer switch TestKing1
 5. Specific VLAN port assignments will be made as users are added to the access layer switches in the future.
 6. All VLANs and VTP configurations are to be completed in the global configuration To configure the switch click on the host icon that is connected to the switch by way of a serial console cable.
- vtp server configuration: switch#conf t switch(config)#vtp mode server

```
switch(config)#vtp domain CISCO switch(config)#vlan 20
switch(config)#vlan 31
switch(config)#int vlan 20
switch(if-config)#ip add 172.64.20.1 255.255.255.0 switch(if-config)#no shut
switch(if-config)#int vlan 31
switch(if-config)#ip add 192.162.31.1 255.255.255.0 switch(if-config)#no shut
switch(if-config)#exit switch#ip routing switch#copy run start vtp client configuration: switch#conf t
switch(config)#vtp mode client switch(config)#vtp domain CISCO switch#copy run start
```

NEW QUESTION 892

Which two restrictions of the port security feature are true? (Choose two.)

- A. It is not supported on destination SPAN ports.
- B. It is not supported on EtherChannel port-channel interfaces.
- C. Static port MAC address assignments are not supported
- D. A single device can learn a maximum of three sticky MAC addresses.
- E. It is not supported on PVLAN ports.

Answer: BC

Explanation: https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst6500/ios/12-2SY/configuration/guide/sy_swcg/port_

NEW QUESTION 896

Which feature do you implement so that a physical port enters the loop inconsistent state if it fails to receive BPDUs?

- A. loop guard
- B. loop disable
- C. root guard
- D. flex links
- E. BPDU ignore
- F. loop block

Answer: A

NEW QUESTION 900

Refer to the exhibit.

```
monitor session 1 source vlan 10 - 12 rx
monitor session 1 destination interface gigabitethernet0/1
```

Which effect of this configuration is true?

- A. Traffic sent on VLANs 10, 11, and 12 is copied and sent to interface g0/1.
- B. Traffic received on VLANs 10, 11, and 12 is copied and sent to interface g0/1.
- C. Traffic sent on VLANs 10 and 12 only is copied and sent to interface g0/1.
- D. Traffic received on VLANs 10 and 12 only is copied and sent to interface g0/1.

Answer: B

NEW QUESTION 902

Which two ways can you use to disable Cisco Discovery Protocol? (Choose two.)

- A. Enter the no cdp enablecommand to disable it on a device.
- B. Enter the no cdp runcommand to disable it in the global configuration.
- C. Enter the no cdp runcommand to disable it on an individual interface.
- D. Enter the cdp disablecommand to disable it on an individual interface.
- E. Enter the no cdp enablecommand to disable it on an individual interface.

Answer: BE

NEW QUESTION 903

For which reason does an administrator disable MAC address learning within a VLAN?

- A. to configure a VLAN as an SVI
- B. to free up space in the MAG address table
- C. to implement port security
- D. to reduce flooding in the network

Answer: C

NEW QUESTION 907

ACisco Catalyst switch that is prone to reboots continues to rebuild the DHCP snooping database. What is the solution to avoid the snooping database from being

rebuilt after every device reboot?

- A. ADHCP snooping database agent should be configured.
- B. Enable DHCP snooping for all VLANs that are associated with the switch.
- C. Disable Option 82 for DHCP data insertion.
- D. Use IP Source Guard to protect the DHCP binding table entries from being lost upon rebooting.
- E. Apply ip dhcp snooping trust on all interfaces with dynamic addresses.

Answer: A

NEW QUESTION 910

Drag the description from the left to add on appropriate section on right

port self recovery

protect designated port from receiving superior BPDU

a better BPDU disables the port as err-disabled

detecting unidirectional switching links

Guard Root

Guard Loop

Answer:

Explanation:

Guard Root

a better BPDU disables the port as err-disabled

protect designated port from receiving superior BPDU

Guard Loop

detecting unidirectional switching links

port self recovery

NEW QUESTION 912

Which two statements about VRRP are true? (Choose Two)

- A. Preemption is not supported
- B. It support clear text authentication only
- C. It uses a shared vip to support default gateway redundancy
- D. It requires each device in the group to participate in the same dynamic routing protocol.
- E. It can use a single virtual address to provide default gateways redundancy

Answer: CD

Explanation: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipapp_fhrp/configuration/xr-3s/asr903/fhrp-xr-3s-asr903-boo

NEW QUESTION 913

Which two tasks must you perform to enable DHCP option 82 on an untrusted port? (Choose two)

- A. Enter the ip dhcp snooping information option replace command to enable DHCP option 82.
- B. Enter the ip dhcp snooping trust command to enable DHCP option 82.
- C. Enter the ip dhcp snooping information option allow-untrusted command to enable the untrusted port.
- D. Enter the ip dhcp snooping information option command to enable option 82.
- E. Enter the ip dhcp snooping trust command to enable data insertion DHCP option 82.

Answer: CD

NEW QUESTION 915

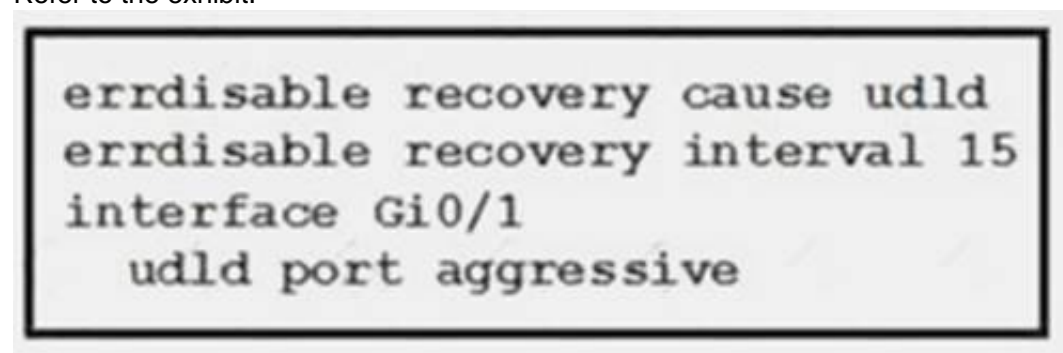
Which two statements about native VLANs are true? (Choose two)

- A. VLAN 1 and VLAN 1001 are native VLANs by default
- B. The native VLAN is untagged over trunks
- C. Cisco Discovery Protocol versions 1 and 2 can carry native VLAN information.
- D. Only one VLAN can be the native VLAN on a device.
- E. The native VLAN can be changed on a per-port basis

Answer: BE

NEW QUESTION 919

Refer to the exhibit.



A pair of fiber that is connected to Gi0/1 has been damaged. What is likely to happen?

- A. The interface is prevented from causing spanning-tree loops
- B. After the fiber pair is replaced the interface recovers within 15 minutes
- C. The interface is shut down until the fiber pair is replaced
- D. The interface actively tries to fix the damaged fiber link

Answer: A

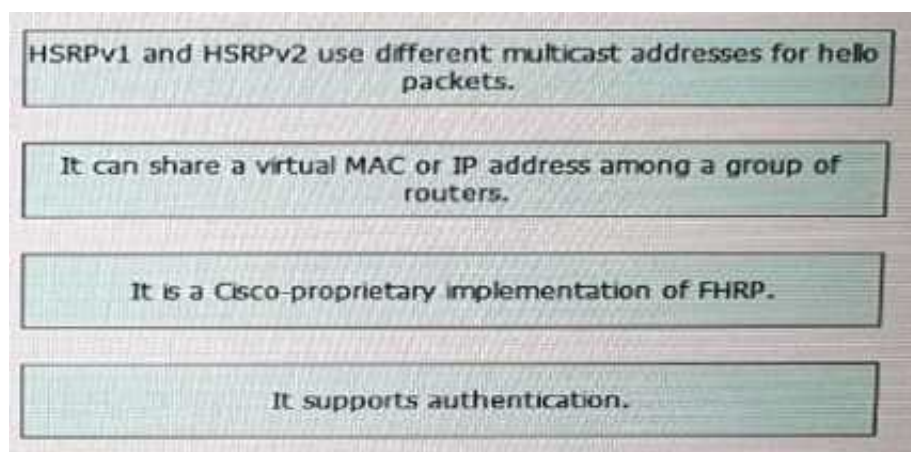
NEW QUESTION 921

Drag and drop the correct statements about HSRP from the left into the True column on the right. Not all options are used.

It supports authentication.	
HSRPv1 and HSRPv2 use the same packet format.	
It can share a virtual MAC or IP address among a group of routers.	
It is a Cisco-proprietary implementation of FHRP.	
It is supported on Layer 3 interfaces, including tunneled interfaces.	
HSRPv1 and HSRPv2 use different multicast addresses for hello packets.	
The HSRPv2 group number ranges from 0 to 255.	

Answer:

Explanation:



NEW QUESTION 924

Which two features are new in VTPv3? (Choose two)

- A. extended VLAN support
- B. support for token ring VLANs
- C. using multiple switches in the server role
- D. private VLAN propagation
- E. transparent mode

Answer: AD

NEW QUESTION 926

Which statement describes what a port that is configured as an access port does if it receives an 802.1Q tagged frame?

- A. It passes the frame on to the VLAN that the frame is tagged for.
- B. It removes the tag and forwards the frame in the VLAN assigned to the port.
- C. It err-disables the port.
- D. It drops the frame.

Answer: B

NEW QUESTION 928

Which file lists all of the configured VLANs on a switch?

- A. flash:vlan.dat
- B. nvram:vlangs.xml
- C. flash:vlangs.txt
- D. nvram:vlan.txt
- E. flash.config.txt
- F. flash:vlan.xml

Answer: A

NEW QUESTION 932

Which feature actively validates DHCP messages and drops invalid messages?

- A. IGMP snooping
- B. DHCP host tracking
- C. CGMP binding
- D. DHCP snooping
- E. DHCP inspection
- F. Dynamic ARP inspection

Answer: D

NEW QUESTION 936

Drag and drop the characteristic from the left to the matching STP feature on the right.

disables Spanning Tree on a configured interface

shuts down port and places it in err-disabled mode

configured trunk interface goes immediately to forwarding state from blocking state

protects configured interface from sending and receiving unauthorized BPDU frames

configured on access port with a single host device

protects configured interface from receiving unauthorized BPDU frames

PortFast

BPDUGuard

BPDUfilter

Answer:

Explanation:

PortFast

configured on access port with a single host device

configured trunk interface goes immediately to forwarding state from blocking state

BPDUGuard

protects configured interface from receiving unauthorized BPDU frames

shuts down port and places it in err-disabled mode

BPDUfilter

disables Spanning Tree on a configured interface

protects configured interface from sending and receiving unauthorized BPDU frames

NEW QUESTION 937

In which circumstances does a port security violation occur? (Choose two.)

- A. when the port has received more MAC addresses than allowed
- B. when a port with a secure MAC address attempts to use a different port in the same VLAN
- C. when the same MAC address enters a port more than once
- D. when sticky MAC address learning is enabled and the port has a link-down condition
- E. when the CAN table overflows with dynamically learned MAC addresses

Answer: A

NEW QUESTION 939

Drop the STP components from the left onto the correct descriptions on the right.

bridge transit delay

root bridge

transmit halt delay

medium access delay

Measure of the time between the receipt and transmission of a frame

Measure of the time required for a frame to begin leaving the bridge after the CPU has decided to send it

Measure of the time required for a port to be blocked after a blocking trigger

Directs all traffic

Answer:

Explanation:



NEW QUESTION 943

Which feature is new in RPVST+?

- A. UplinkFast is implemented.
- B. BackupFast is implemented.
- C. All port can generate and send BPDUs.
- D. Only the root bridge send configuration BPDUs.

Answer: D

NEW QUESTION 946

Which command do you enter to troubleshoot a misconfigured EtherChannel?

- A. CORE-SW(config)#spanning-tree etherchannel guard misconfig.
- B. CORE-SW(config-if)#spanning-tree guard root
- C. CORE-SW(config-if)#spanning-tree loopguard default
- D. CORE-SW(config-if)#spanning-tree etherchannel guard misconfig

Answer: A

NEW QUESTION 951

Refer to the exhibit.


```
R1#show running-config interface fa0/0
Building configuration...

Current configuration : 192 bytes
!
interface FastEthernet0/0
 ip address 192.168.3.5 255.255.255.0
 duplex full
 vrrp 1 ip 192.168.3.1
 vrrp 1 priority 110
 vrrp 1 authentication text cisco
 vrrp 1 track 20 decrement 20
end

R1#show running-config | include track 20
track 20 ip route 10.10.1.1 255.255.255.255 reachability

R2#show running-config interface fa0/0
Building configuration...

Current configuration : 141 bytes
!
interface FastEthernet0/0
 ip address 192.168.3.2 255.255.255.0
 duplex full
 vrrp 1 ip 192.168.3.1
 vrrp 1 authentication text cisco
end
```

Currently, R1 is the VRRP master virtual router. Which statement about the VRRP configuration on R1 and R2 is true?

- A. Communication between VRRP members is encrypted using MD5.
- B. R1 has a route to 10.10.1.1/32 in its routing table.
- C. R2 does not have a route to 10.10.1.11/32 in its routing table.
- D. R2 becomes master if R1 reboots or track in R1 does not fail.

Answer: B

NEW QUESTION 956

Which statement about configuring an RSPAN session is true?

- A. RSPAN supports, by default, the monitoring of Layer 2 switch protocols.
- B. The same RSPAN VLAN is used for a RSPAN session on all the switches.
- C. Only the source switch in a session must support RSPAN
- D. At least one access port must be configured in the RSPAN VLAN

Answer: B

NEW QUESTION 959

Under which two circumstances does a stack master lose its role?

- A. When the stack master is reset
- B. When the priority value of a stack member is changed to a higher value
- C. When a switch with a higher priority is added to the stack
- D. When a stack member fails
- E. When switch stack resets

Answer: BE

NEW QUESTION 963

Which three design types of capable Ethernet LANs does HSRP support? (Choose three.)

- A. Multicaccess
- B. Multicast
- C. Broadcast
- D. Unicast
- E. Token Ring
- F. FDDI

Answer: ABC

NEW QUESTION 968

Which type of MAC address can be dropped by a switch that is configured for MAC address filtering?

- A. unicast
- B. router
- C. multicast
- D. CPU-destined

Answer: A

NEW QUESTION 969

RSPAN has been configured on a Cisco Catalyst switch; however, traffic is not being replicated to the remote switch. Which type of misconfiguration is a cause?

- A. The RSPAN designated VLAN is missing the remote span command.
- B. The local and remote RSPAN switches are configured using different session IDs.
- C. The local RSPAN switch is replicating only Rx traffic to the remote switch.
- D. The local switch is overloaded with the amount of sourced traffic that must be replicated to the remote switch.

Answer: A

NEW QUESTION 970

Refer to the output below.

```
interface FastEthernet0/1
description to server room A 92-09066
switchport trunk allowed vlan 81-97,99-121
switchport mode trunk
end
!
```

Which two commands remove VLAN 100 from the VLANs allowed on the trunk port? (Choose two)

- A. switchport trunk allowed vlan 81-97.99.101-121
- B. switchport trunk allowed vlan 81-121 remove 98,100
- C. switchport trunk allowed vlan remove 100
- D. switchport trunk vlan remove 100
- E. no switchport trunk allowed vlan 100

Answer: AC

NEW QUESTION 971

Which three pieces of information about the remote device are reported by Cisco Discovery Protocol? (Choose three.)

- A. The routing protocols in use on the device
- B. Its spanning-tree state
- C. Its hostname
- D. Its port number
- E. Its configuration register value
- F. Its hardware platform

Answer: CDF

NEW QUESTION 973

If all switches in a network have the same spanning-tree priority, which switch is elected as the root bridge?

- A. the switch with the lowest MAC address.
- B. the switch with the highest physical interface IP address.
- C. the switch with the highest MAC address
- D. the switch with the lowest loopback interface IP address

Answer: A

NEW QUESTION 976

On which PVLAN type can host ports communicate with promiscuous ports?

- A. primary
- B. community
- C. promiscuous
- D. isolated

Answer: C

NEW QUESTION 977

Which command disables spanning tree on multiple ports?

- A. no spanning-tree vlan <vlan_range>
- B. no spanning-tree mode pvst
- C. no spanning-tree mode mst
- D. no spanning-tree mode rapid-pvst

Answer: A

NEW QUESTION 980

Which virtual MAC address does HSRP group 37 use with default configuration?

- A. C0.00:00:25:00:00
- B. 00:00:0c:07:ac:25
- C. C0:00:00:37:00:00
- D. 00:00:00c:07:ac:37

Answer: B

NEW QUESTION 981

If a switch that is configured globally with DHCP snooping receives a packet that has DHCP Option-82 set to 192 168.1.254, how does the switch handle the packet?

- A. It replaces the source MAC address of the packet with its own MAC address and forwards the packet
- B. It forwards the packet normally
- C. It sends a proxy ARP request for the MAC address of 192 168.1 254
- D. It drops the packet
- E. It removes the Option-82 information from the packet and forwards the packet
- F. It replaces the source IP address of the packet with its own management IP address and forwards the packet

Answer: B

NEW QUESTION 982

Which three features of AAA with TACACS+ are true? (Choose three.)

- A. It encrypts the entire transmission.
- B. It encrypts the password for transmission.
- C. It secures access to endpoint devices.
- D. It secures access to network devices.
- E. It separates authorization and authentication functions.
- F. It integrates authorization and authentication functions.

Answer: ADE

NEW QUESTION 983

You want a device to use the local user database if the TACACS+ server is unreachable. Which AAA login authentication command must you configure?

- A. aaa authentication login TAG ACS group tacacs+ local
- B. aaa authentication login default group tacacs+ local
- C. aaa authentication login default group local
- D. aaa authentication login default group local tacacs+

Answer: B

NEW QUESTION 986

Under which two conditin does Cisco StackWise Virtual transmit data over a virtual link? (Choose two.)

- A. Packets are processed on the ingress interface on the standby switch.
- B. A VLAN is flooded over Layer 2.
- C. Packets are processed on the ingress interface on the active switch.
- D. Packets are processed on the egress interface on the standby switch.
- E. Packets are processed on the egress interface on the active switch.

Answer: BC

NEW QUESTION 988

Which two statements about error-disabled ports are true? (Choose two.)

- A. They can be recovered only by resetting the interface.
- B. When a port is error-disabled, all traffic on the port stops.
- C. When a port is error-disabled, it may continue to pass management traffic.
- D. When a port is error-disabled, the port LED changes to solid orange.
- E. By default, error-disabled ports automatically recover once the issue is resolved.

Answer: BD

Explanation: When a port is in error-disabled state, it is effectively shut down and no traffic is sent or received on that port. The port LED is set to the orange color and, when you issue the show interfaces command, the port status shows as Errdisabled.

NEW QUESTION 993

Which option is a primary difference between HSRP and GLBP?

- A. Only HSRP uses multiple virtual IP addresses to provide gateway redundancy in a single standby group.
- B. Only GLBP supports gateway load balancing over multiple routers.

- C. Only HSRP can use multiple MAC addresses to provide gateway load balancing over multiple routers.
- D. Only GLBP uses a router BIA to provide gateway redundancy.

Answer: B

NEW QUESTION 996

Which type of load balancing is most appropriate for an Etherchannel that passes traffic from multiple sources to a single end device?

- A. destination IP address forwarding
- B. source and destination IP address forwarding
- C. destination MAC address forwarding
- D. source MAC address forwarding

Answer: C

NEW QUESTION 1000

Which statement is true when one of its virtual gateway redundancy with an AVF has failed?

- A. If an AVF has failed, one of the primary virtual forwarders in the listen state assumes responsibility for the virtual MAC address.
- B. If an AVF has failed, one of the secondary virtual forwarders in the listen state assumes responsibility for the virtual MAC address.
- C. If an AVF has failed, one of the secondary virtual forwarders in the listen state will also fail.
- D. If an AVF has failed, one of the primary virtual forwarders in the listen state will also fail.

Answer: B

NEW QUESTION 1002

Which command prevent ill access port-; on a switch from sending or receiving BPDUs Us?

- A. spanning-tree portfast bpduguard default
- B. spanning-tree portfast bpdufilter default
- C. spanning-tree bpdufilter default
- D. spanning-tree bpdufilter enable

Answer: D

NEW QUESTION 1003

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