

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 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 3

Which statement about LLDP-MED is true?

- A. LLDP-MED is an extension to LLDP that operates between endpoint devices and network devices.
- B. LLDP-MED is an extension to LLDP that operates only between network devices.
- C. LLDP-MED is an extension to LLDP that operates only between endpoint devices.
- D. LLDP-MED is an extension to LLDP that operates between routers that run BGP.

Answer: A

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

Which statement about using native VLANs to carry untagged frames is true?

- A. Cisco Discovery Protocol version 2 carries native VLAN information, but version 1 does not.
- B. Cisco Discovery Protocol version 1 carries native VLAN information, but version 2 does not.
- C. Cisco Discovery Protocol version 1 and version 2 carry native VLAN information.
- D. Cisco Discovery Protocol version 3 carries native VLAN information, but versions 1 and 2 do not.

Answer: A

NEW QUESTION 6

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 7

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 8

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 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

Which action allows a network engineer to limit a default VLAN from being propagated across all trunks?

- A. Upgrade to VTP version 3 for advanced feature set support.
- B. Enable VTP pruning on the VTP server.
- C. Manually prune default VLAN with switchport trunk allowed vlans remove.
- D. Use trunk pruning vlan 1.

Answer: C

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 12

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.

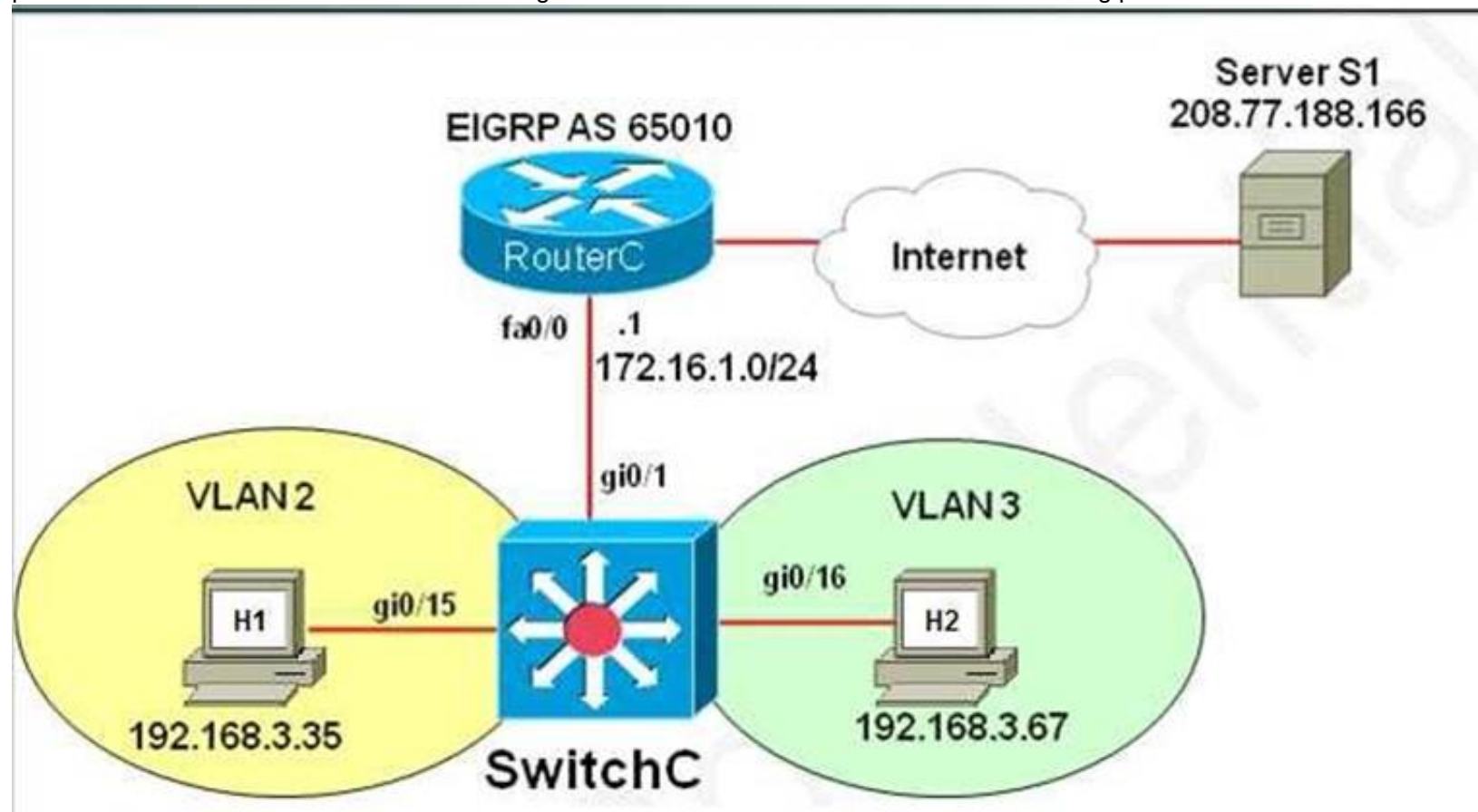
Routed interfaces should use the lowest host on a subnet when possible. The following subnets are available to implement this solution:

- 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 14

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 19

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 22

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.

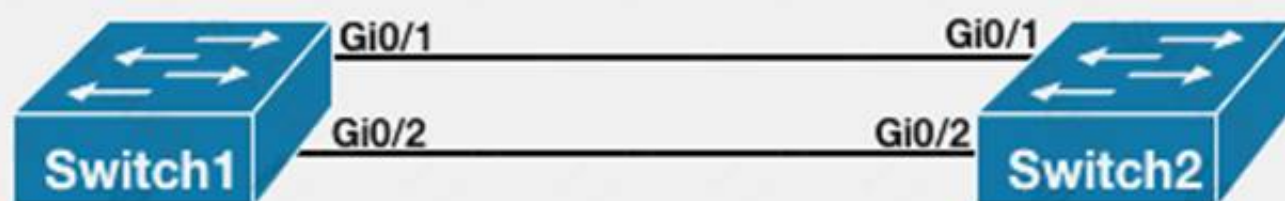
Answer: D

NEW QUESTION 25

Refer to the exhibit.


```
hostname Switch1
<output omitted>
!
port-channel load-balance dst-ip
!
interface GigabitEthernet0/1
channel-group 10 mode active
!
interface GigabitEthernet0/2
channel-group 10 mode passive
!
```

```
hostname Switch2
<output omitted>
!
port-channel load-balance src-mac
!
interface GigabitEthernet0/1
channel-group 10 mode passive
!
interface GigabitEthernet0/2
channel-group 10 mode active
!
```



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 30

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 31

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 34

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 39

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 41

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 42

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

Several new switches have been added to the existing network as VTP clients. All of the new switches have been configured with the same VTP domain, password, and version. However, VLANs are not passing from the VTP server (existing network) to the VTP clients. What must be done to fix this?

- A. Remove the VTP domain name from all switches with "null" and then replace it with the new domain name.
- B. Configure a different native VLAN on all new switches that are configured as VTP clients.
- C. Provision one of the new switches to be the VTP server and duplicate information from the existing network.
- D. Ensure that all switch interconnects are configured as trunks to allow VTP information to be transferred.

Answer: D

NEW QUESTION 49

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 50

While working in the core network building, a technician accidentally bumps the fiber connection between two core switches and damages one of the pairs of fiber. As designed, the link was placed into a non-forwarding state due to a fault with UDLD. After the damaged cable was replaced, the link did not recover. What solution allows the network switch to automatically recover from such an issue?

- A. macros
- B. errdisable autorecovery
- C. IP Event Dampening
- D. command aliases
- E. Bidirectional Forwarding Detection

Answer: B

NEW QUESTION 55

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 58

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 59

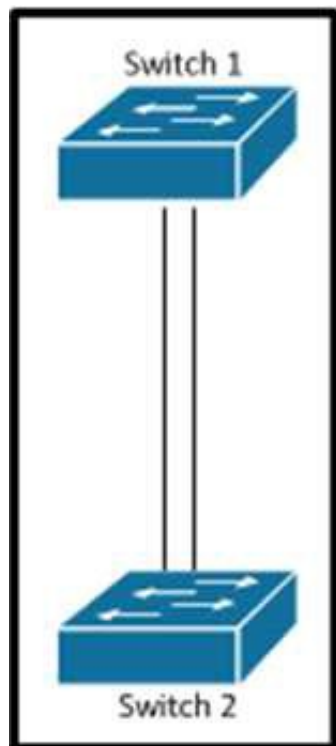
An access switch has been configured with an EtherChannel port. After configuring SPAN to monitor this port, the network administrator notices that not all traffic is being replicated to the management server. What is a cause for this issue?

- 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 62

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 66

For client server failover purposes, the application server team has indicated that they must not have the standard 30 second delay before their switchport enters a forwarding state. For their disaster recovery feature to operate successfully, they require the switchport to enter a forwarding state immediately. Which spanning-tree feature satisfies this requirement?

- A. Rapid Spanning-Tree
- B. Spanning-Tree Timers
- C. Spanning-Tree FastPort
- D. Spanning-Tree PortFast
- E. Spanning-Tree Fast Forward

Answer: D

NEW QUESTION 70

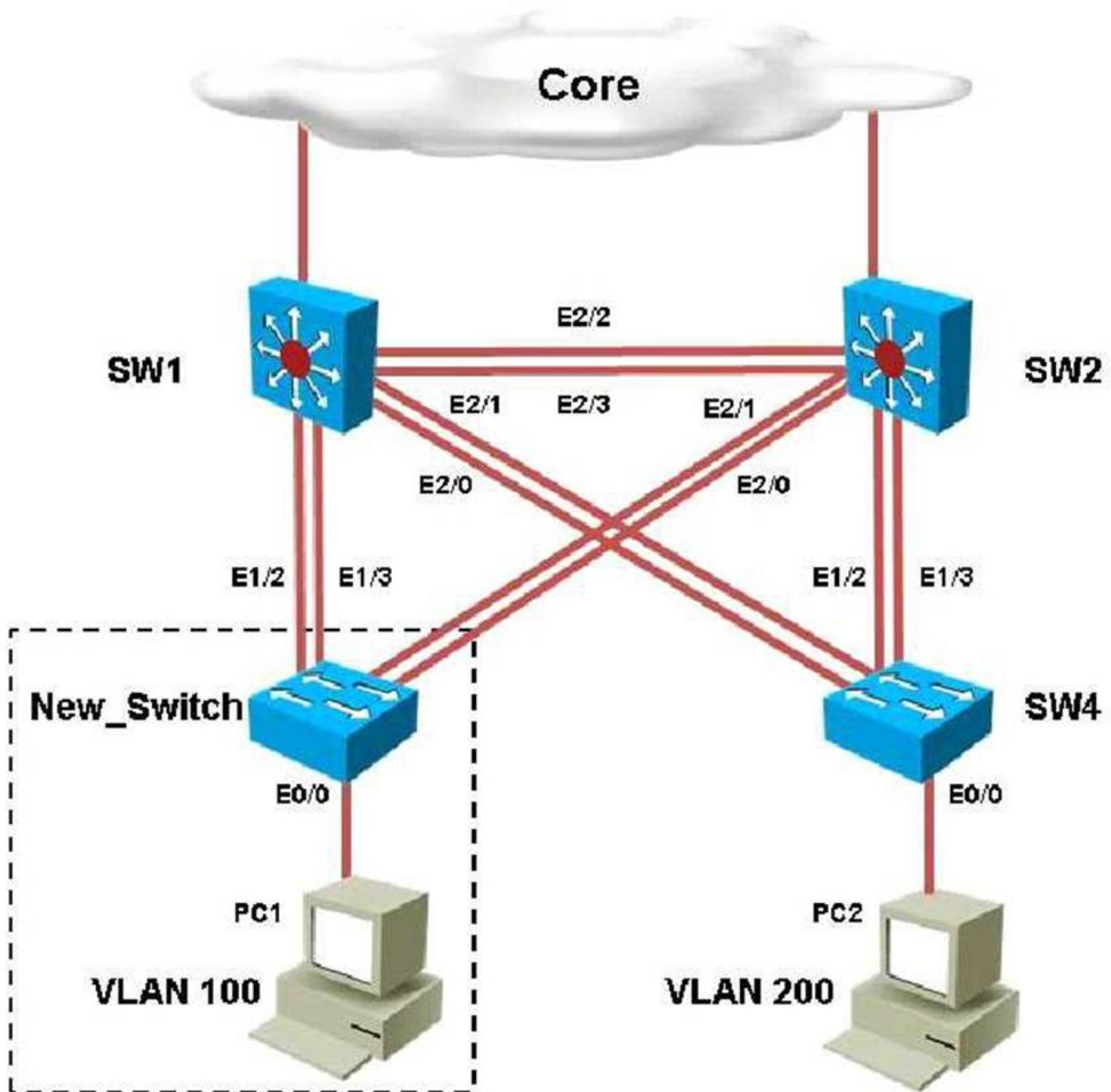
What effect does the mac address-table aging-time 180 command have on the MAC address-table?

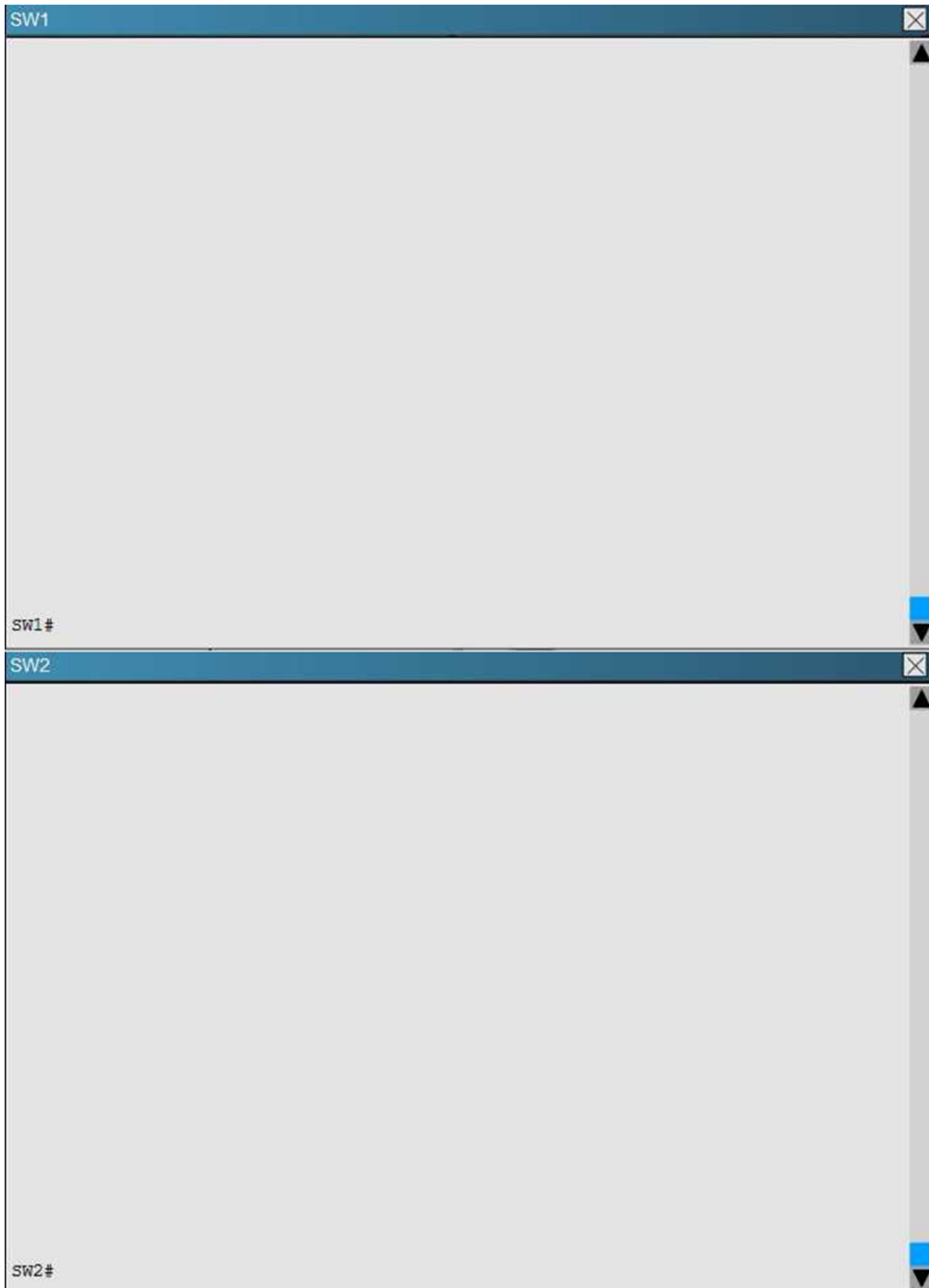
- A. This is how long a dynamic MAC address will remain in the CAM table.
- B. The MAC address-table will be flushed every 3 minutes.
- C. The default timeout period will be 360 seconds.
- D. ARP requests will be processed less frequently by the switch.
- E. The MAC address-table will hold addresses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

Answer: A

NEW QUESTION 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 73

A network is running VTPv2. After verifying all VTP settings, the network engineer notices that the new switch is not receiving the list of VLANs from the server. Which action resolves this problem?

- A. Reload the new switch.
- B. Restart the VTP process on the new switch.
- C. Reload the VTP server.
- D. Verify connected trunk ports.

Answer: D

NEW QUESTION 74

After the implementation of several different types of switches from different vendors, a network engineer notices that directly connected devices that use Cisco Discovery Protocol are not visible. Which vendor-neutral protocol could be used to resolve this issue?

- A. Local Area Mobility
- B. Link Layer Discovery Protocol
- C. NetFlow
- D. Directed Response Protocol

Answer: B

NEW QUESTION 77

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 80

Refer to the exhibit.

Company A# show vtp status

```
VTP Version           : 2
Configuration Revision : 0
Maximum VLANs supported locally: 1005
Number of existing VLANs : 9
VTP Operating Mode     : Server
VTP Domain Name        : company
VTP Pruning Mode       : Disabled
VTP V2 Mode            : Disabled
VTP Traps Generation   : Disabled
```

Company B# show vtp status

```
VTP Version           : 2
Configuration Revision : 2
Maximum VLANs supported locally: 1005
Number of existing VLANs : 42
VTP Operating Mode     : Server
VTP Domain Name        : company
VTP Pruning Mode       : Disabled
VTP V2 Mode            : Disabled
VTP Traps Generation   : Disable
```

The network switches for two companies have been connected and manually configured for the required VLANs, but users in company A are not able to access network resources in company B when DTP is enabled. Which action resolves this problem?

- A. Delete vlan.dat and ensure that the switch with lowest MAC address is the VTP server.
- B. Disable DTP and document the VTP domain mismatch.
- C. Manually force trunking with switchport mode trunk on both switches.
- D. Enable the company B switch with the vtp mode server command.

Answer: C

NEW QUESTION 83

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 85

After an EtherChannel is configured between two Cisco switches, interface port channel 1 is in the down/down state. Switch A is configured with channel-group 1 mode active, while Switch B is configured with channel-group 1 mode desirable. Why is the EtherChannel bundle not working?

- A. The switches are using mismatched EtherChannel negotiation modes.
- B. The switch ports are not configured in trunking mode.
- C. LACP priority must be configured on both switches.
- D. The channel group identifier must be different for Switch A and Switch B.

Answer: A

NEW QUESTION 86

Interface FastEthernet0/1 is configured as a trunk interface that allows all VLANs. This command is configured globally:
 monitor session 2 filter vlan 1 - 8, 39, 52

What is the result of the implemented command?

- A. All VLAN traffic is sent to the SPAN destination interface.
- B. Traffic from VLAN 4 is not sent to the SPAN destination interface.
- C. Filtering a trunked SPAN port effectively disables SPAN operations for all VLANs.
- D. The trunk's native VLAN must be changed to something other than VLAN 1.
- E. Traffic from VLANs 1 to 8, 39, and 52 is replicated to the SPAN destination port.

Answer: E

NEW QUESTION 91

A network engineer is setting up a new switched network. The network is expected to grow and add many new VLANs in the future. Which Spanning Tree Protocol should be used to reduce switch resources and managerial burdens that are associated with multiple spanning-tree instances?

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

Answer: C

NEW QUESTION 92

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 94

When you design a switched network using VTPv2, how many VLANs can be used to carry user traffic?

- A. 1000
- B. 1001
- C. 1024
- D. 2048
- E. 4095
- F. 4096

Answer: B

NEW QUESTION 97

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 98

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 103

What is the maximum number of 10 Gigabit Ethernet connections that can be utilized in an EtherChannel for the virtual switch link?

- A. 4
- B. 6
- C. 8
- D. 12

Answer: C

NEW QUESTION 105

Which statement about using EtherChannel on Cisco IOS switches is true?

- A. A switch can support up to eight compatibly configured Ethernet interfaces in an EtherChanne
- B. The EtherChannel provides full-duplex bandwidth up to 800 Mbps only for Fast EtherChannel or 8 Gbps only for Gigabit EtherChannel.
- C. A switch can support up to 10 compatibly configured Ethernet interfaces in an EtherChanne
- D. The EtherChannel provides full-duplex bandwidth up to 1000 Mbps only for Fast EtherChannel or 8 Gbps only for Gigabit EtherChannel.
- E. A switch can support up to eight compatibly configured Ethernet interfaces in an EtherChanne
- F. The EtherChannel provides full-duplex bandwidth up to 800 Mbps only for Fast EtherChannel or 16 Gbps only for Gigabit EtherChannel.
- G. A switch can support up to 10 compatibly configured Ethernet interfaces in an EtherChanne
- H. The EtherChannel provides full-duplex bandwidth up to 1000 Mbps only for Fast EtherChannel or 10 Gbps only for Gigabit EtherChannel.

Answer: A

NEW QUESTION 110

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 115

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 116

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 121

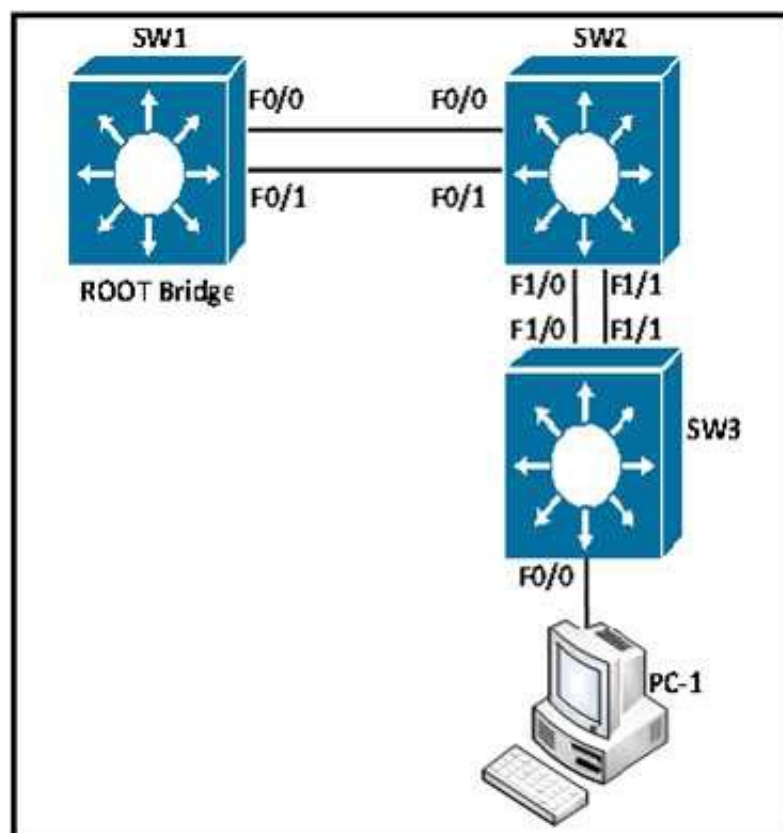
Which statement about restrictions for multichassis LACP is true?

- 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 123

Refer to the exhibit.



f1/0 and f1/1 have the same end-to-end path cost to the designated bridge. Which action is needed to modify the Layer 2 spanning-tree network so that traffic for PC1 VLAN from switch SW3 uses switchport f1/1 as a primary port?

- A. Modify the spanning-tree port-priority on SW1 f1/1 to 0 and f1/0 to 16.
- B. Modify the spanning-tree port-priority on SW1 f1/1 to 16 and f1/0 to 0.
- C. Modify the spanning-tree port-priority on SW2 f1/1 to 0 and f1/0 to 16.
- D. Modify the spanning-tree port-priority on SW2 f1/1 to 16 and f1/0 to 0.

Answer: C

NEW QUESTION 124

After implementing VTP, the extended VLANs are not being propagated to other VTP switches. What should be configured for extended VLANs?

- A. VTP does not support extended VLANs and should be manually added to all switches.
- B. Enable VTP version 3, which supports extended VLAN propagation.
- C. VTP authentication is required when using extended VLANs because of their ability to cause network instability.
- D. Ensure that all switches run the same Cisco IOS versio
- E. Extended VLANs will not propagate to different IOS versions when extended VLANs are in use.

Answer: B

NEW QUESTION 127

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 132

Refer to the exhibit.


```

S1# show etherchannel summary
Flags: D - down      P - bundled 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

      M - not in use, minimum links not met
      u - unsuitable for bundling
      w - waiting to be aggregated
      d - default port

Number of channel-groups in use: 1
Number of aggregators:          1

Group  Port-channel  Protocol    Ports
-----+-----+-----+-----
1     Po1(SU)        LACP       Fa0/13(P) Fa0/14(P) Fa0/15(P)

```

Which statement about switch S1 is true?

- A. Physical port Fa0/13, Fa0/14, and Fa0/15 successfully formed a Layer 2 port-channel interface using an open standard protocol.
- B. Logical port Fa0/13, Fa0/14, and Fa0/15 successfully formed a Layer 2 physical port-channel interface using a Cisco proprietary protocol.
- C. Physical port Fa0/13, Fa0/14, and Fa0/15 successfully formed a Layer 3 port-channel interface using a Cisco proprietary protocol.
- D. Logical port Fa0/13, Fa0/14, and Fa0/15 successfully formed a Layer 3 physical port-channel interface using an open standard protocol.

Answer: A

NEW QUESTION 133

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 136

Which VLAN range is eligible to be pruned when a network engineer enables VTP pruning on a switch?

- A. VLANs 1-1001
- B. VLANs 1-4094
- C. VLANs 2-1001
- D. VLANs 2-4094

Answer: C

NEW QUESTION 139

Which VTP mode is needed to configure an extended VLAN, when a switch is configured to use VTP versions 1 or 2?

- A. transparent
- B. client
- C. server
- D. Extended VLANs are only supported in version 3 and not in versions 1 or 2.

Answer: A

NEW QUESTION 144

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 148

Which SDM template disables routing and supports the maximum number of unicast MAC addresses?

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

Answer: A

NEW QUESTION 149

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

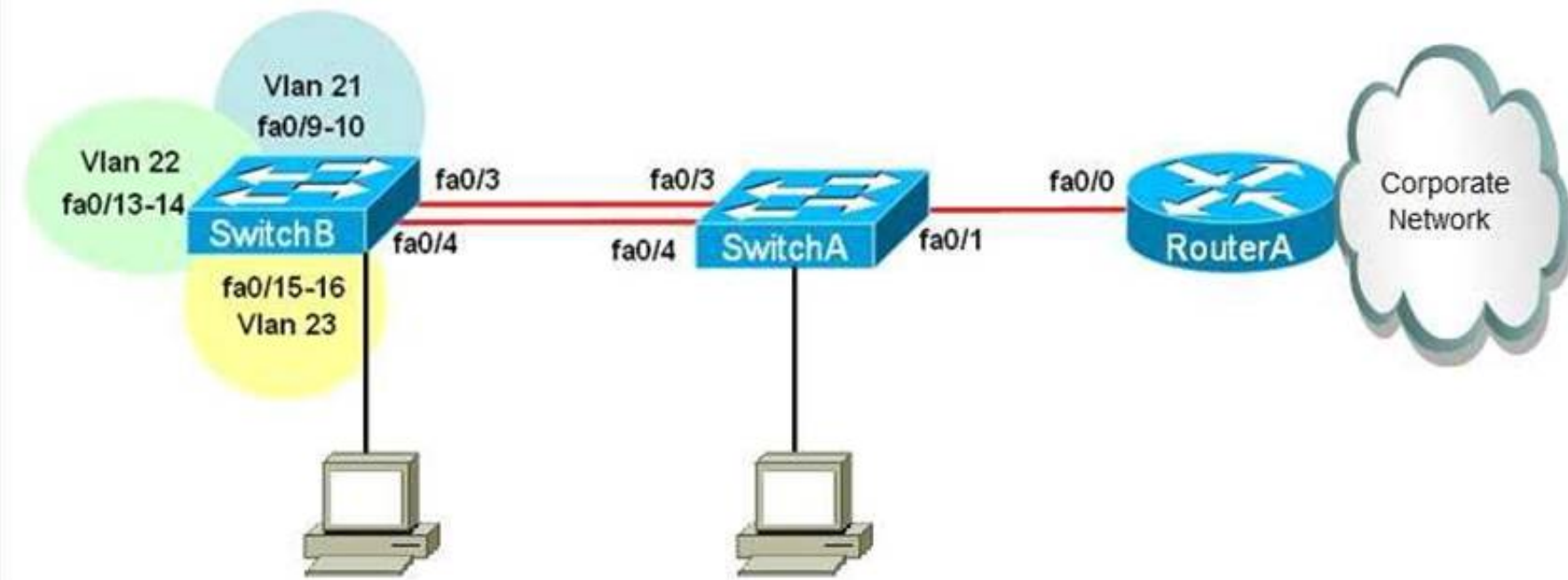
o will support two servers attached to fa0/15 and fa0/16

- 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.

Topology



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 154

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 158

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 162

What is the default HSRP priority?

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

Answer: B

NEW QUESTION 167

When IP Source Guard with source IP filtering is enabled on an interface, which feature must be enabled on the access VLAN for that interface?

- A. DHCP snooping
- B. storm control
- C. spanning-tree portfast
- D. private VLAN

Answer: A

NEW QUESTION 171

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 176

A switch is added into the production network to increase port capacity. A network engineer is configuring the switch for DHCP snooping and IP Source Guard, but is unable to configure ip verify source under several of the interfaces. Which option is the cause of the problem?

- A. The local DHCP server is disabled prior to enabling IP Source Guard.
- B. The interfaces are configured as Layer 3 using the no switchport command.
- C. No VLANs exist on the switch and/or the switch is configured in VTP transparent mode.
- D. The switch is configured for sdm prefer routing as the switched database management template.
- E. The configured SVIs on the switch have been removed for the associated interfaces.

Answer: B

NEW QUESTION 180

Which switch feature prevents traffic on a LAN from being overwhelmed by continuous multicast or broadcast traffic?

- A. storm control
- B. port security
- C. VTP pruning
- D. VLAN trunking

Answer: A

NEW QUESTION 185

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 189

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 191

Which First Hop Redundancy Protocol is an IEEE Standard?

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

Answer: C

NEW QUESTION 195

On which interface can port security be configured?

- A. static trunk ports
- B. destination port for SPAN
- C. EtherChannel port group
- D. dynamic access point

Answer: A

NEW QUESTION 198

Which command is needed to enable DHCP snooping if a switchport is connected to a DHCP server?

- A. ip dhcp snooping trust
- B. ip dhcp snooping
- C. ip dhcp trust
- D. ip dhcp snooping information

Answer: A

NEW QUESTION 200

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 203

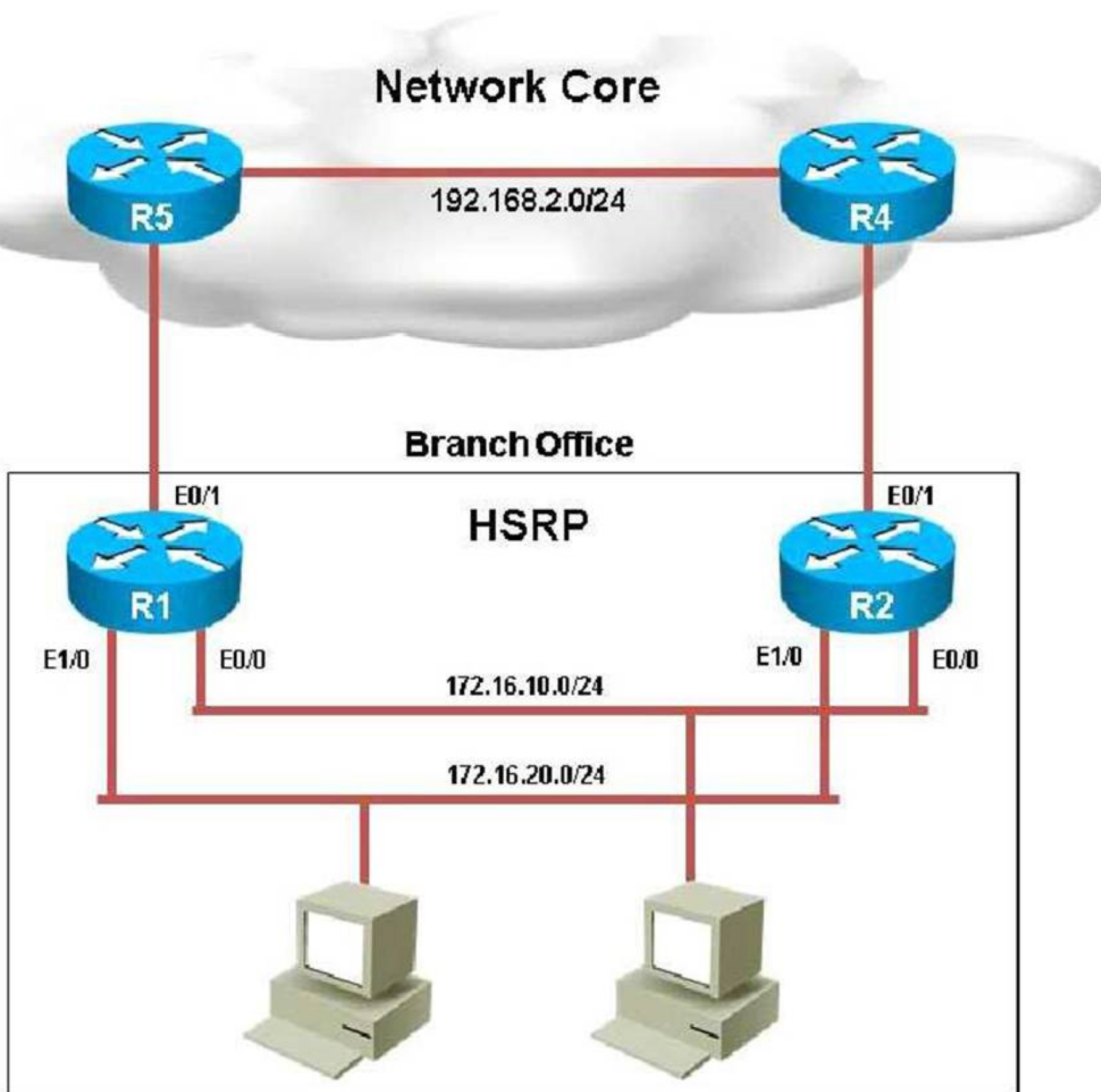
Which portion of AAA looks at what a user has access to?

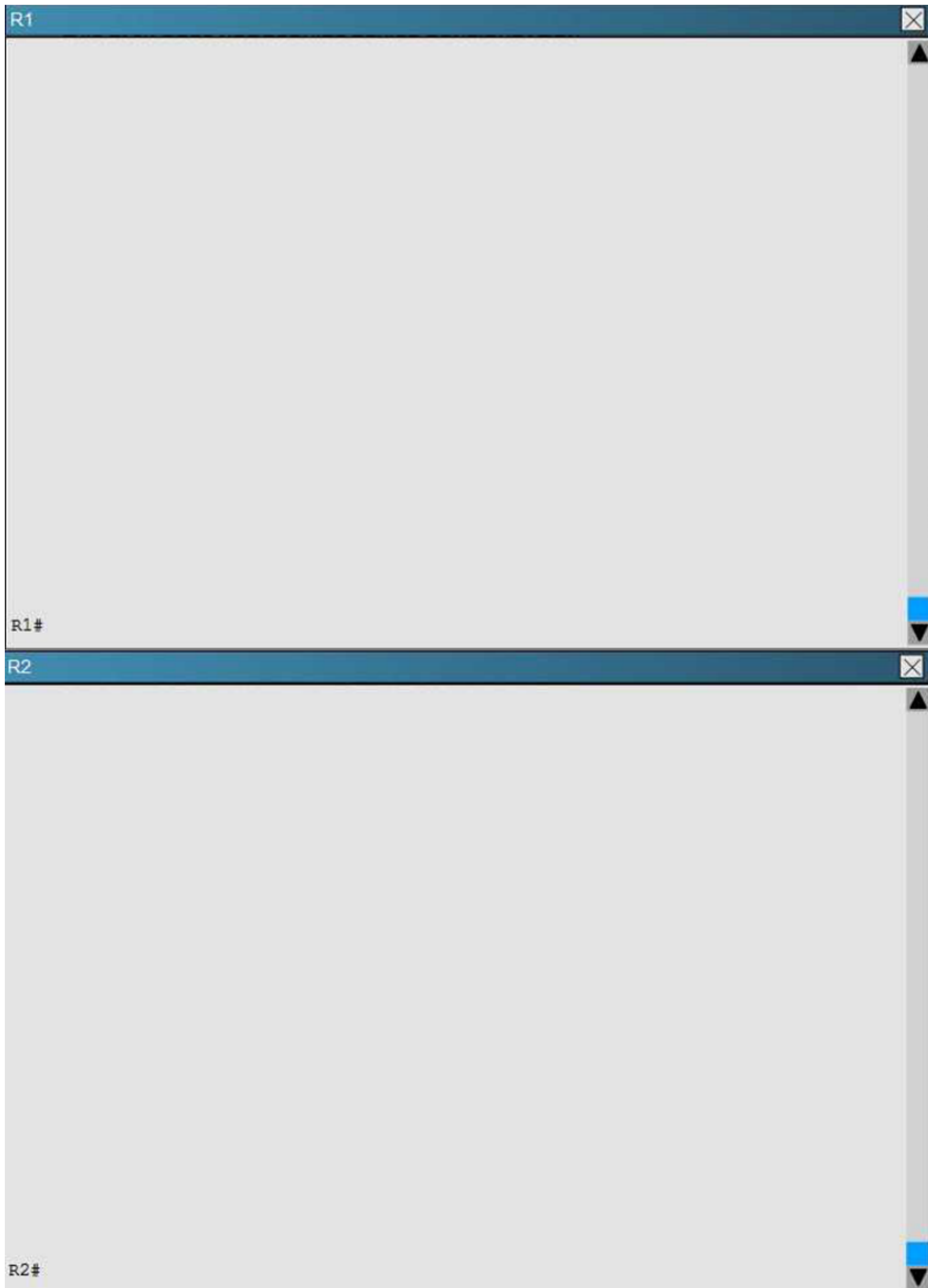
- A. authorization
- B. authentication
- C. accounting
- D. auditing

Answer: A

NEW QUESTION 207

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 211

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
```

When a network administrator is attempting an SSH connection to the device, in which order does the device check the login credentials?

- A. RADIUS server, local username, line password
- B. RADIUS server, line password, local username
- C. Line password, local username, RADIUS server
- D. Line password, RADIUS server, local username

Answer: A

NEW QUESTION 216

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 218

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 222

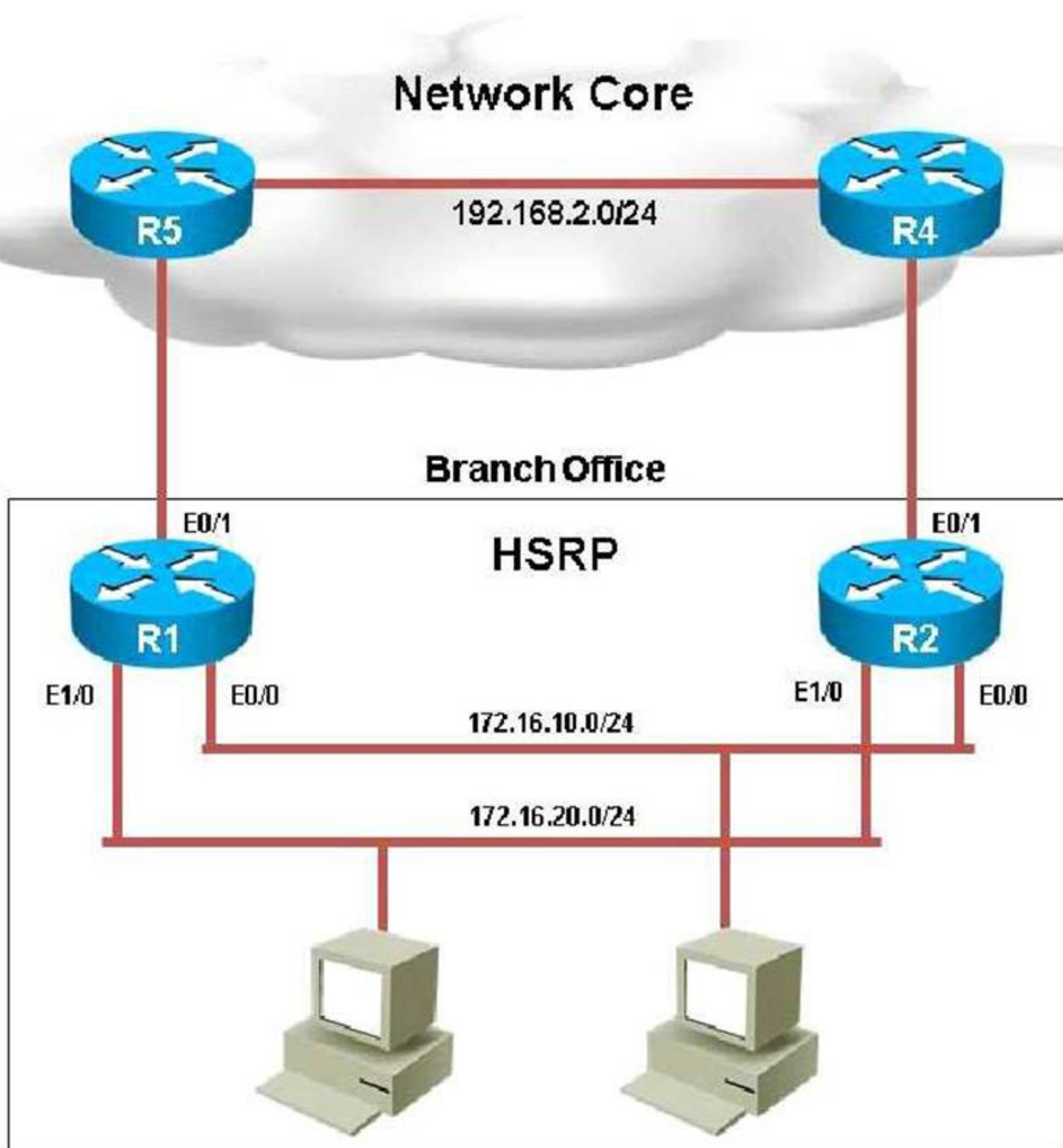
Which private VLAN can have only one VLAN and be a secondary VLAN that carries unidirectional traffic upstream from the hosts toward the promiscuous ports and the gateway?

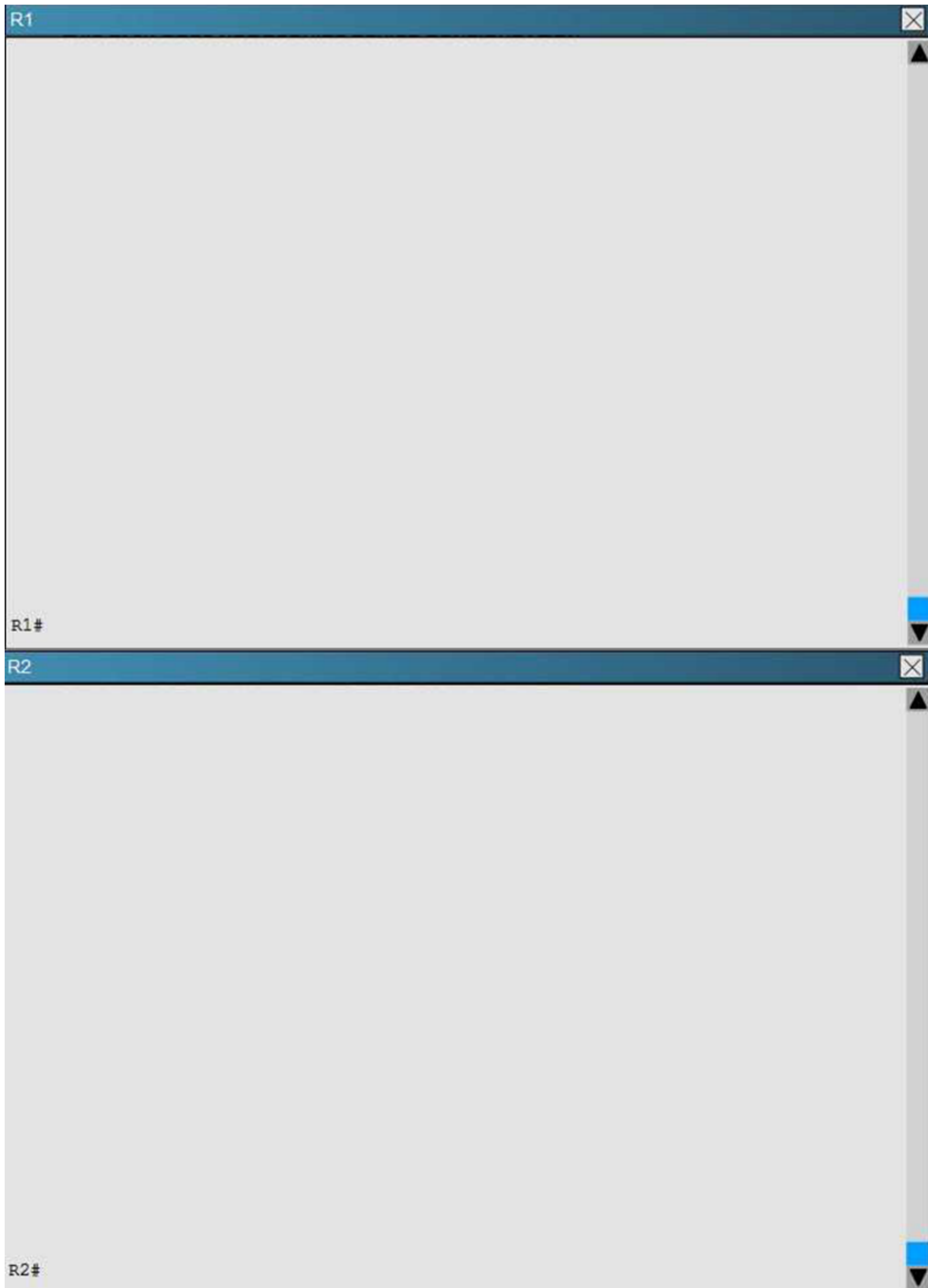
- A. isolated VLAN
- B. primary VLAN
- C. community VLAN
- D. promiscuous VLAN

Answer: A

NEW QUESTION 224

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%

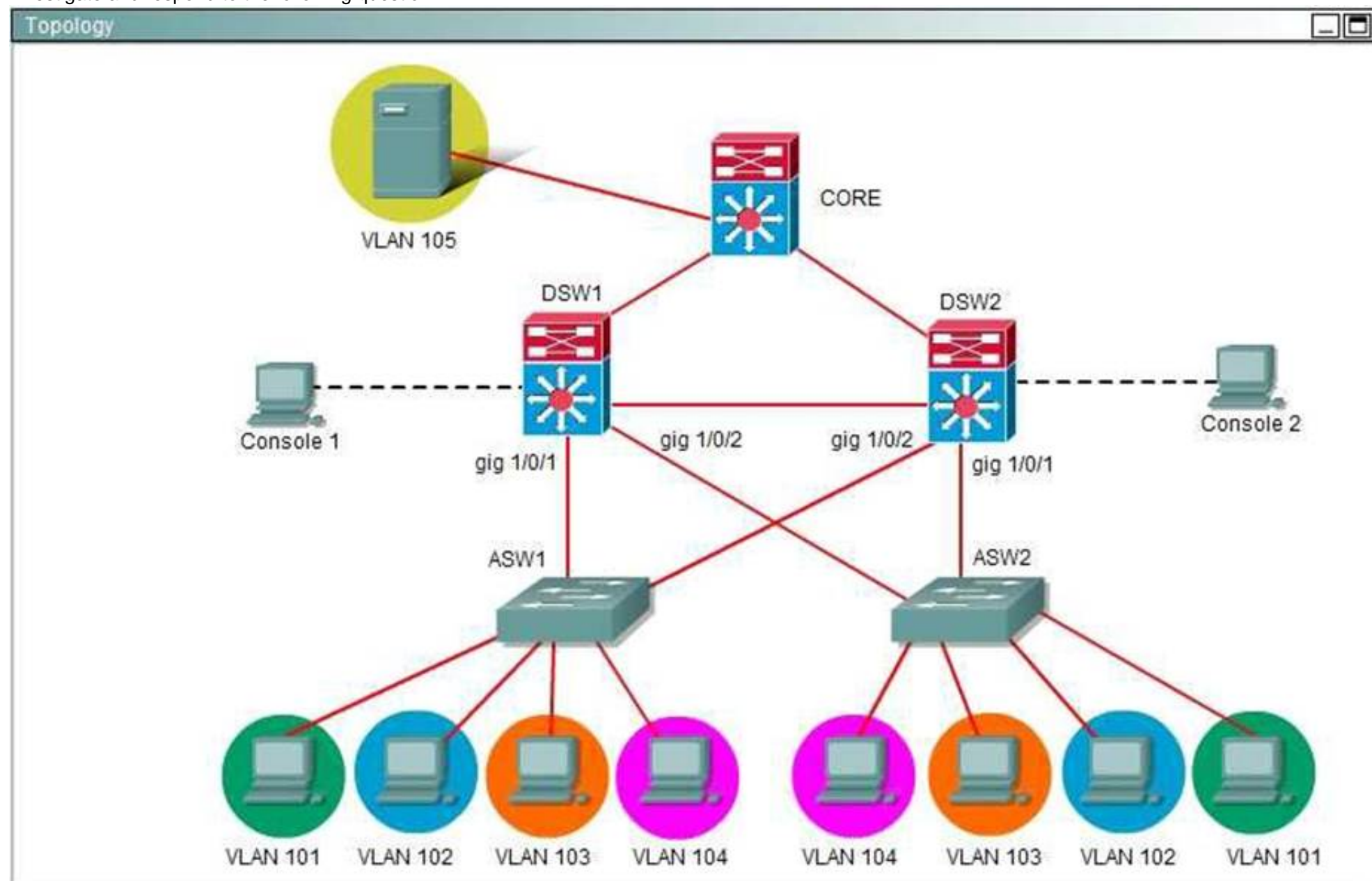
Answer: D

NEW QUESTION 227

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?

- Enable preempt in the VLAN 101 HSRP group on DSW1.
- Disable preempt in the VLAN 101 HSRP group on DSW2's.
- 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.
- 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.

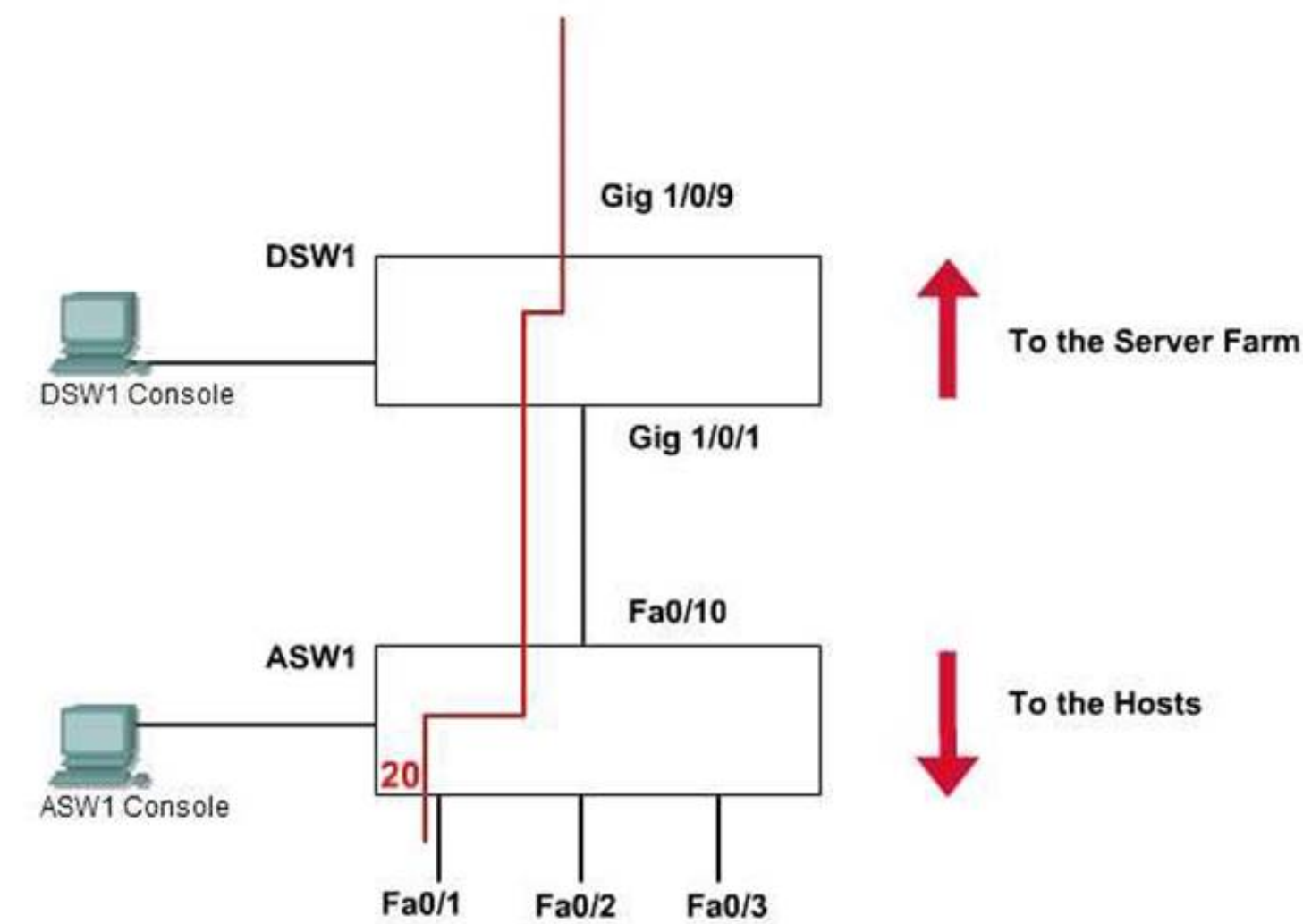
Answer: A

NEW QUESTION 229

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 server farm 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 233

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?

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

Answer: A

NEW QUESTION 234

Which command globally enables AAA on a device?

- A. aaa new-model
- B. aaa authentication
- C. aaa authorization
- D. aaa accounting

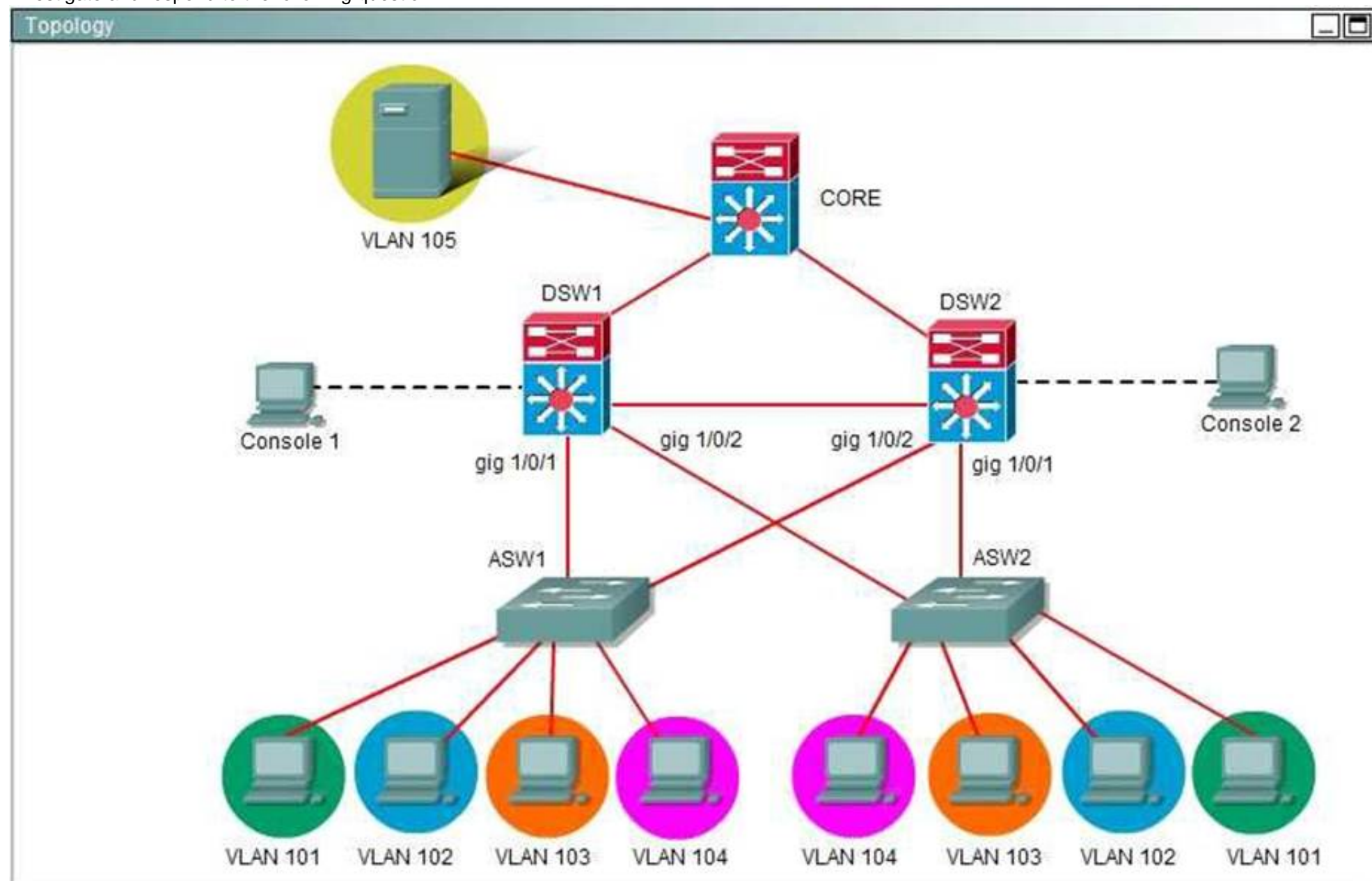
Answer: A

NEW QUESTION 239

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. All other interfaces were up. During this time, DSW1 remained the active device for the VLAN 102 HSRP group. You have determined that there is an issue with the decrement value in the track command for the VLAN 102 HSRP group. What needs to be done to make the group function properly?

- The decrement value on DSW1 should be greaterthan 5 and less than 15. 0
- The decrement value on DSW1 should be greaterthan 9 and less than 15.
- The decrement value on DSW1 should be greaterthan 11 and less than 19.
- The decrement value on DSWTs should be greaterthan 190 and less than 200.
- The decrement value on DSWTs should be greaterthan 195 and less than 205.

Answer: C

Explanation: The question clearly stated that there was an issue with the decrement value in VLAN 102 so we should check VLAN 102 on both DSW1 and DSW2 switches first. Click on the PC Console1 and PC Console2 to access these switches then use the “show running-config” command on both switches

DSW1>enable

DSW1#show running-config DSW2>enable

DSW2#show running-config

```
DSW1#show running-config
<output omitted>

interface Vlan102
  ip address 192.168.102.1 255.255.255.0
  standby 2 ip 192.168.102.254
  standby 2 priority 200
  standby 2 preempt
  standby 2 track GigabitEthernet1/0/1 5
!
```

```
DSW2#show running-config
<output omitted>

interface Vlan102
  ip address 192.168.102.2 255.255.255.0
  standby 2 ip 192.168.102.254
  standby 2 priority 190
  standby 2 preempt
  standby 2 track GigabitEthernet1/0/1
!
```

As shown in the outputs, the DSW1's priority is 200 and is higher than that of DSW2 so DSW1 becomes active switch for the group. Notice that the interface Gig1/0/1 on DSW1 is being tracked so when this interface goes down, HSRP automatically reduces the router's priority by a configurable amount, in this case 5. Therefore the priority of DSW1 goes down from 200 to 195. But this value is still higher than that of DSW2 (190) so DSW1 remains the active switch for the group. To make DSW2 take over this role, we have to configure DSW1's decrement value with a value equal or greater than 11 so that its result is smaller than that of DSW2 ($200 - 11 < 190$). Therefore C is the correct answer.

NEW QUESTION 242

Which command correctly configures standby tracking for group 1 using the default decrement priority value?

- A. standby 1 track 100
- B. standby 1 track 100 decrement 1
- C. standby 1 track 100 decrement 5
- D. standby 1 track 100 decrement 20

Answer: A

NEW QUESTION 247

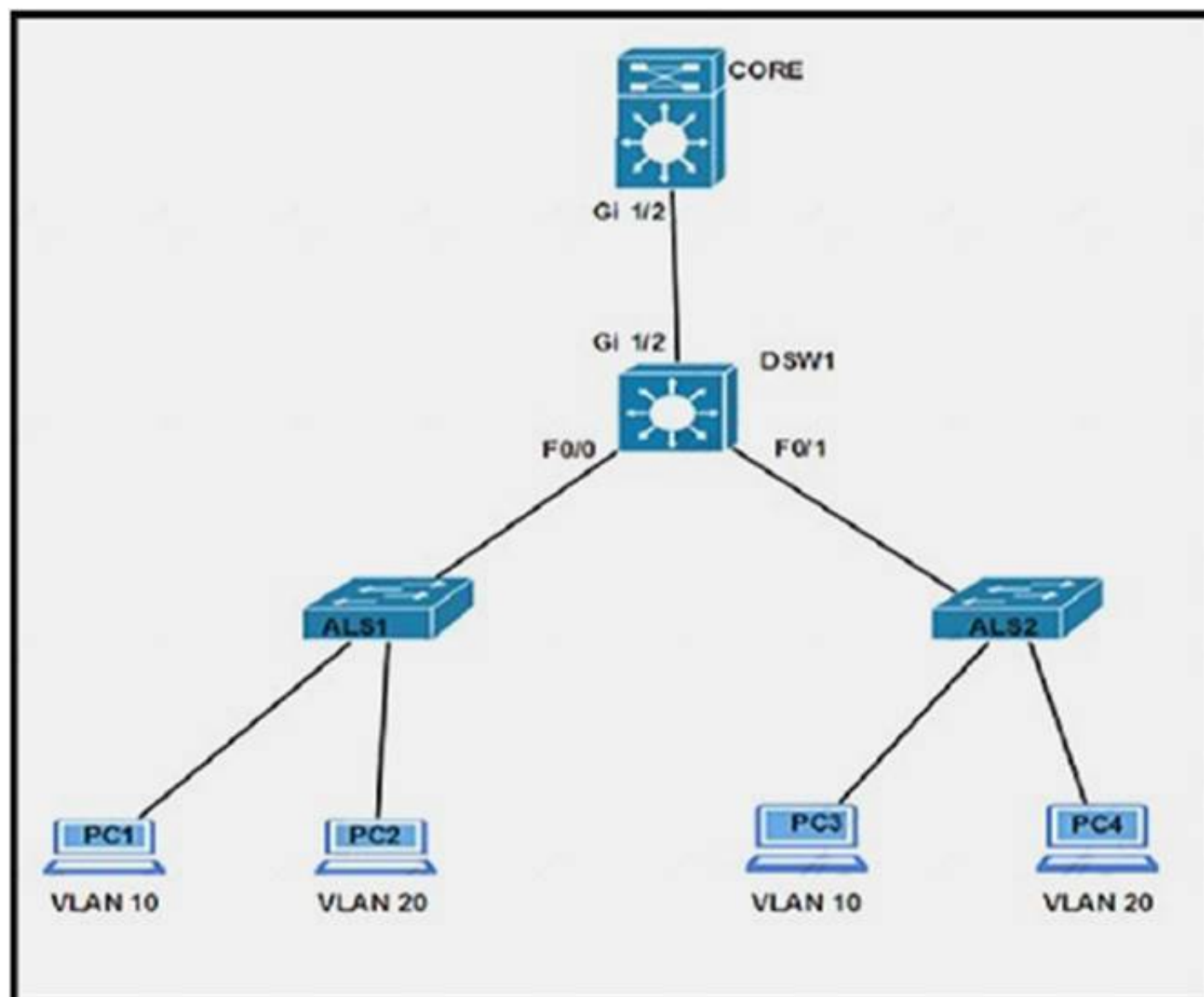
The command storm-control broadcast level 75 65 is configured under the switch port connected to the corporate mail server. In which three ways does this command impact the traffic? (Choose three.)

- A. SNMP traps are sent by default when broadcast traffic reaches 65% of the lower-level threshold.
- B. The switchport is disabled when unicast traffic reaches 75% of the total interface bandwidth.
- C. The switch resumes forwarding broadcasts when they are below 65% of bandwidth.
- D. Only broadcast traffic is limited by this particular storm control configuration.
- E. Multicast traffic is dropped at 65% and broadcast traffic is dropped at 75% of the total interface bandwidth.
- F. The switch drops broadcasts when they reach 75% of bandwidth.

Answer: CDF

NEW QUESTION 249

Refer to the exhibit.



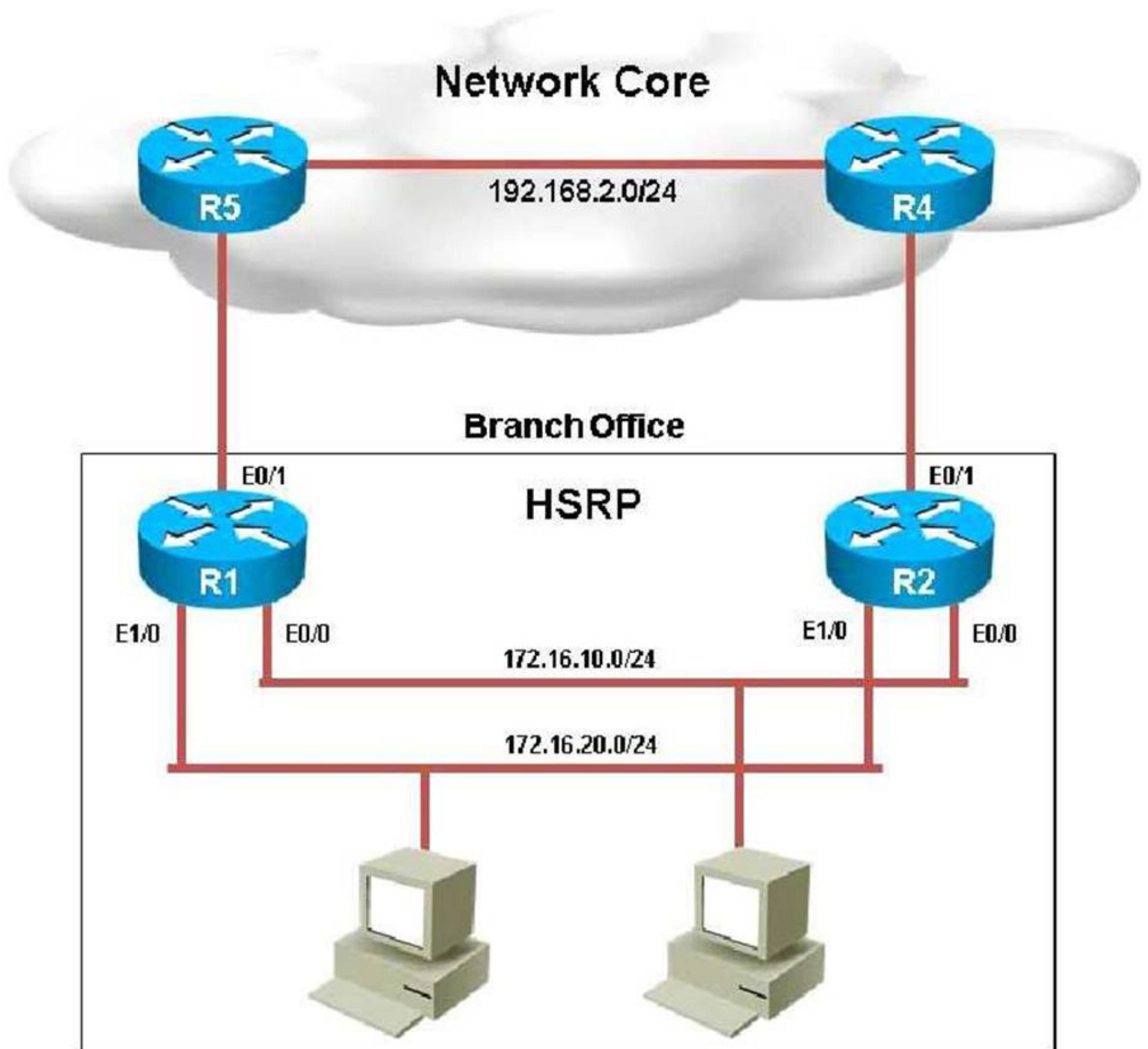
Which configuration ensures that the Cisco Discovery Protocol packet update frequency sent from DSW1 to ALS1 is half of the default value?

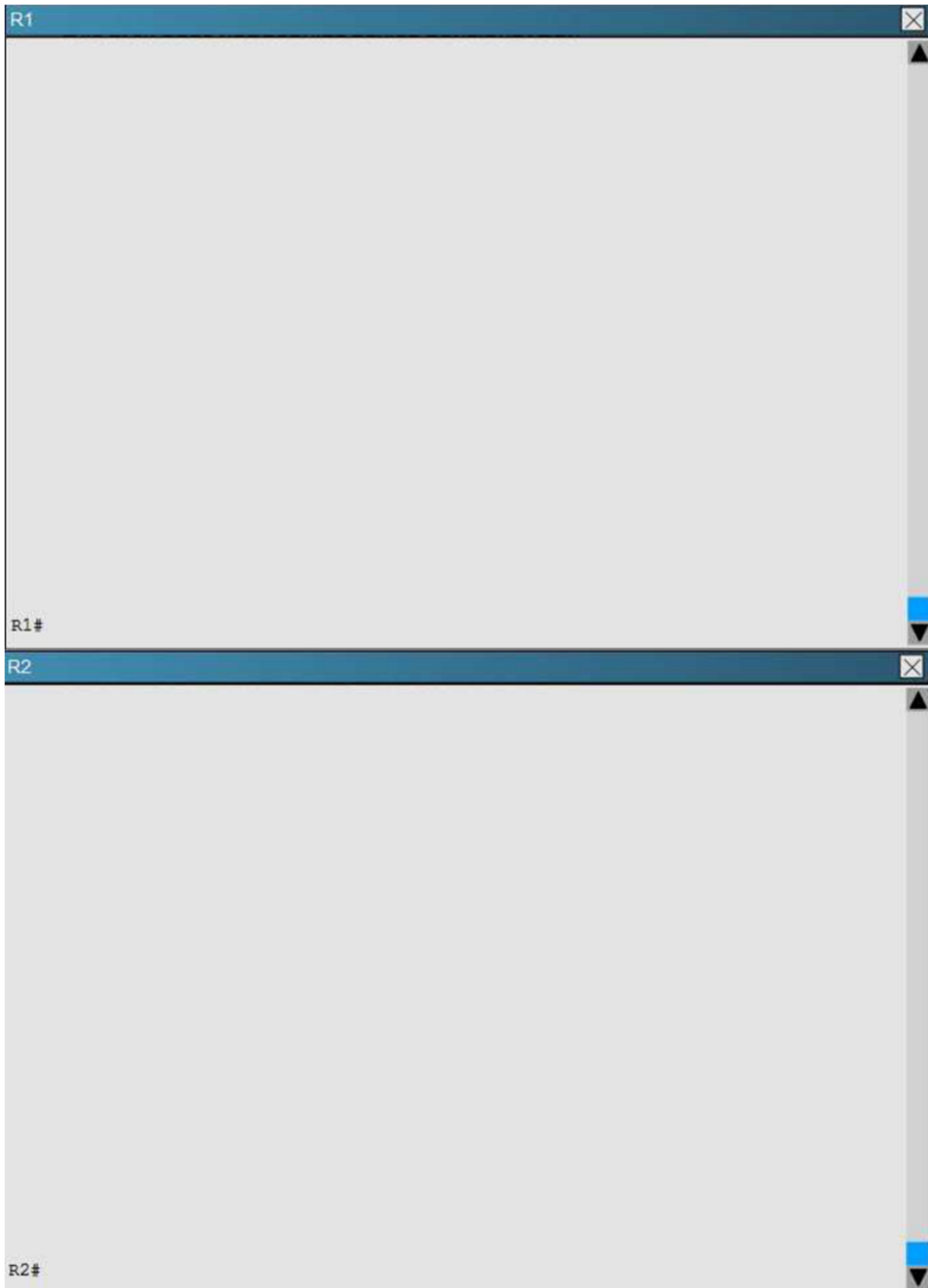
- A. DSW1(config)#cdp timer 90
- B. DSW1(config-if)#cdp holdtime 60
- C. DSW1(config)#cdp timer 30
- D. DSW1(config)#cdp holdtime 90
- E. DSW1(config-if)#cdp holdtime 30
- F. DSW1(config-if)#cdp timer 60

Answer: C

NEW QUESTION 250

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 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 251

A network engineer wants to ensure Layer 2 isolation of customer traffic using a private VLAN. Which configuration must be made before the private VLAN is configured?

- A. Disable VTP and manually assign VLANs.
- B. Ensure all switches are configured as VTP server mode.
- C. Configure VTP Transparent Mode.
- D. Enable VTP version 3.

Answer: C

NEW QUESTION 252

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 254

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 257

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 261

Which command configures an HSRP group to become a slave of another HSRP group?

- A. standby slave
- B. standby group track
- C. standby follow
- D. standby group backup

Answer: C

NEW QUESTION 262

In which two ways are IEEE STP BPDUs forwarded if VLAN 99 is configured as native? (Choose two)

- A. VLAN 1 STP BPDUs are sent tagged on VLAN 1
- B. VLAN 1 STP BPDUs are sent tagged on VLAN 99
- C. VLAN 1 and VLAN 99 BPDUs are sent tagged on VLAN 1
- D. VLAN 1 STP BPDUs are sent untagged on VLAN 1
- E. VLAN 1 STP BPDUs are sent untagged on VLAN 99

Answer: DE

NEW QUESTION 264

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 266

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 269

Which two actions can be configured for storm control violation?

- A. Shutdown
- B. Trap
- C. Notify admin
- D. Discard Port

Answer: AB

NEW QUESTION 271

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

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

Answer: B

NEW QUESTION 272

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

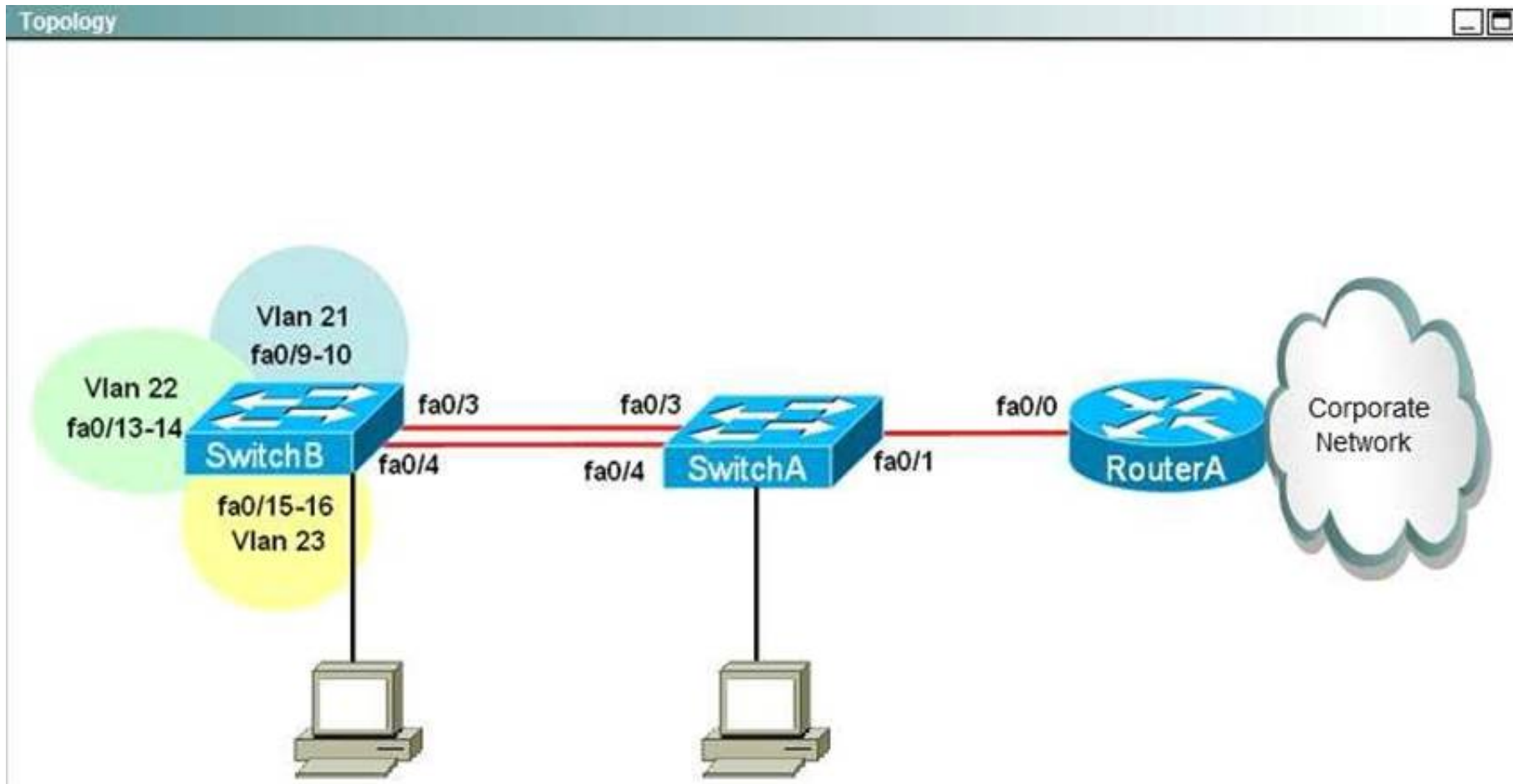
- The VTP and STP configuration modes on SwitchA should not be modified.
- SwitchA needs to be the root switch for vlans 11, 12, 13, 21, 22 and 23. All other vlans should be left are their default values.

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
 - Name: Engineering
 - 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 275

Refer to the exhibit.

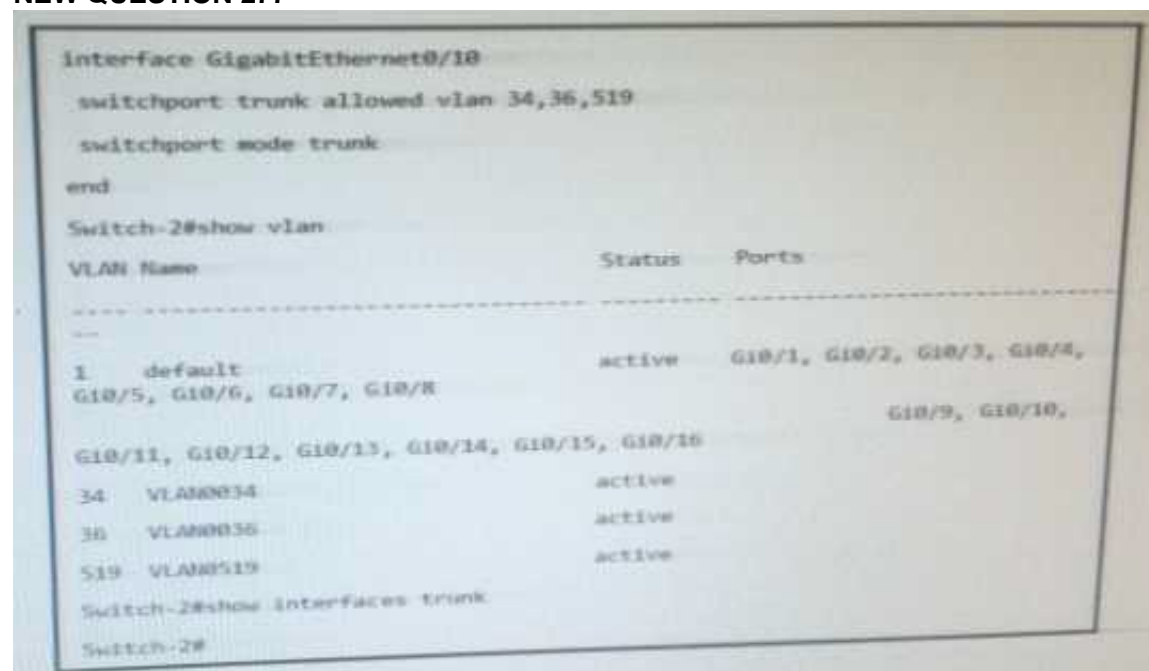
(Picture was showing from CLI “show spanning-tree vlan xx” that running on mode rapid-pvst).

If you have a new switch (that runs spanning-tree mode pvst+) connect to the exist switch, which statement is true?

- A. It will not working between two switches
- B. It will work, the new switch will communicate exist switch with PVST+
- C. It will work, the new switch will communicate exist switch with Rapid-PVST
- D. NA

Answer: B

NEW QUESTION 277



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 278

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.

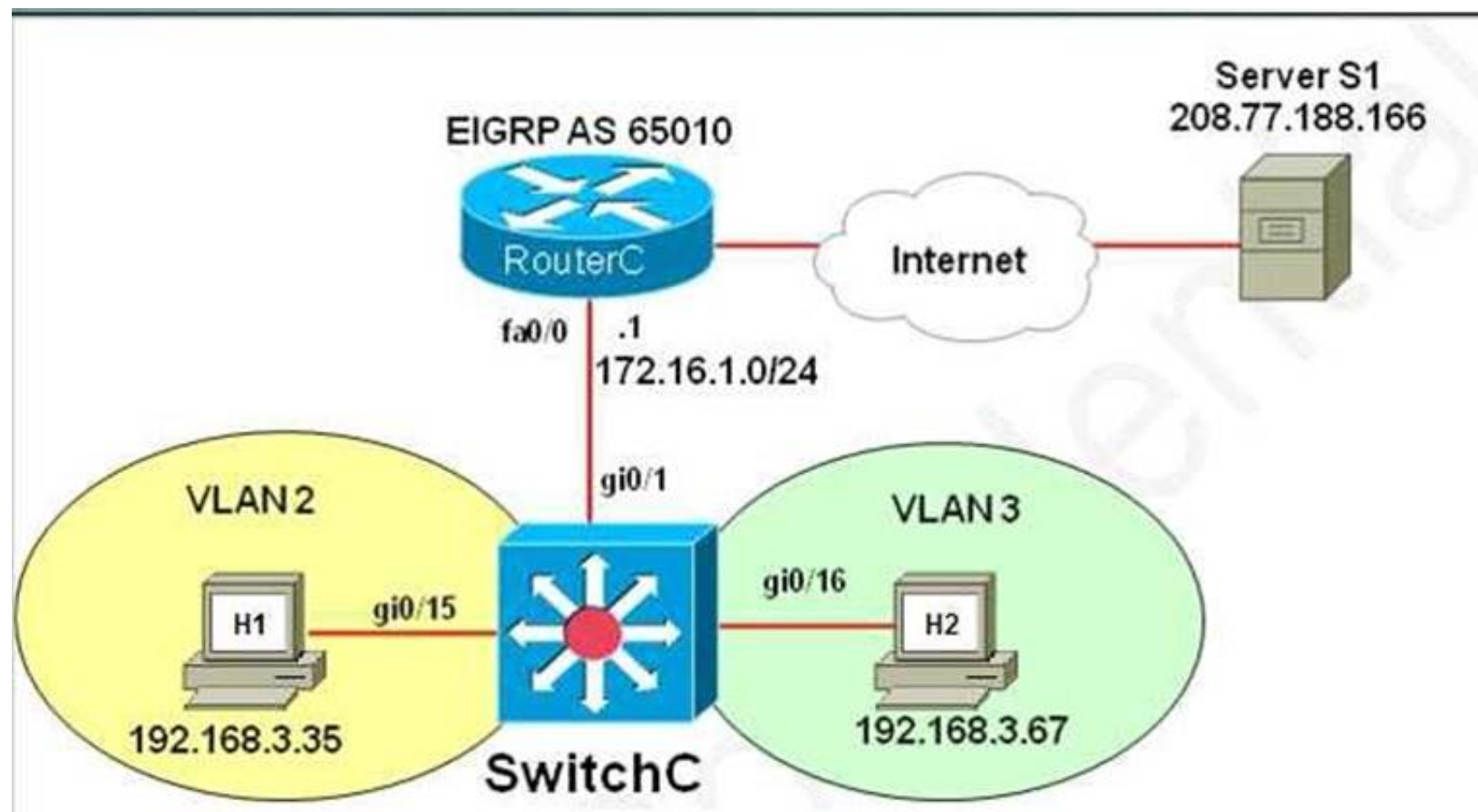
Routed interfaces should use the lowest host on a subnet when possible. The following subnets are available to implement this solution:

- 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.

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 282

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 283

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 288

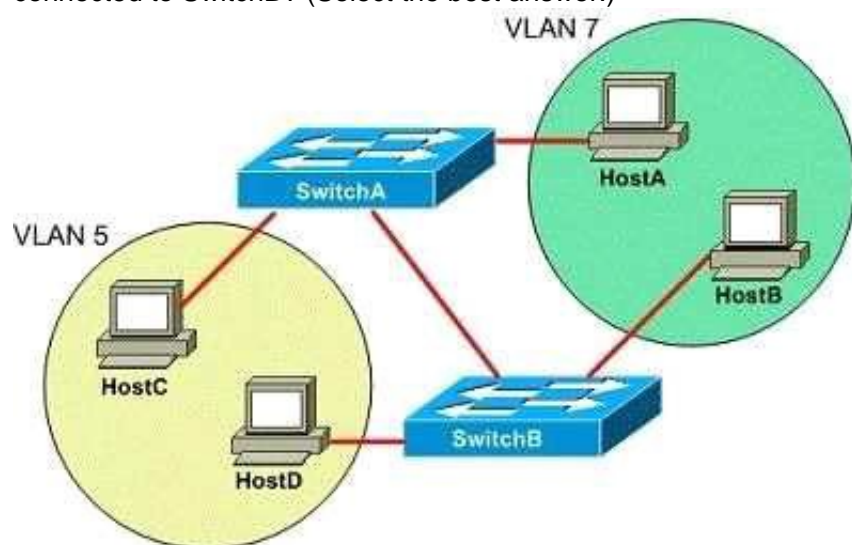
Behavior of an access port when a tagged packet is received other than the access VLAN value.

- 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 291

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 294

What is the effect of configuring the following command on a switch?

Switch(config) # spanning-tree portfast bpduguard default

- A. If BPDUs are received by a port configured for PortFast, then PortFast is disabled and the BPDUs are processed normally.
- B. If BPDUs are received by a port configured for PortFast, they are ignored and none are sent.
- C. If BPDUs are received by a port configured for PortFast, the port transitions to the forwarding state.
- D. The command enables BPDU filtering on all ports regardless of whether they are configured for BPDU filtering at the interface level.

Answer: A

NEW QUESTION 297

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 298

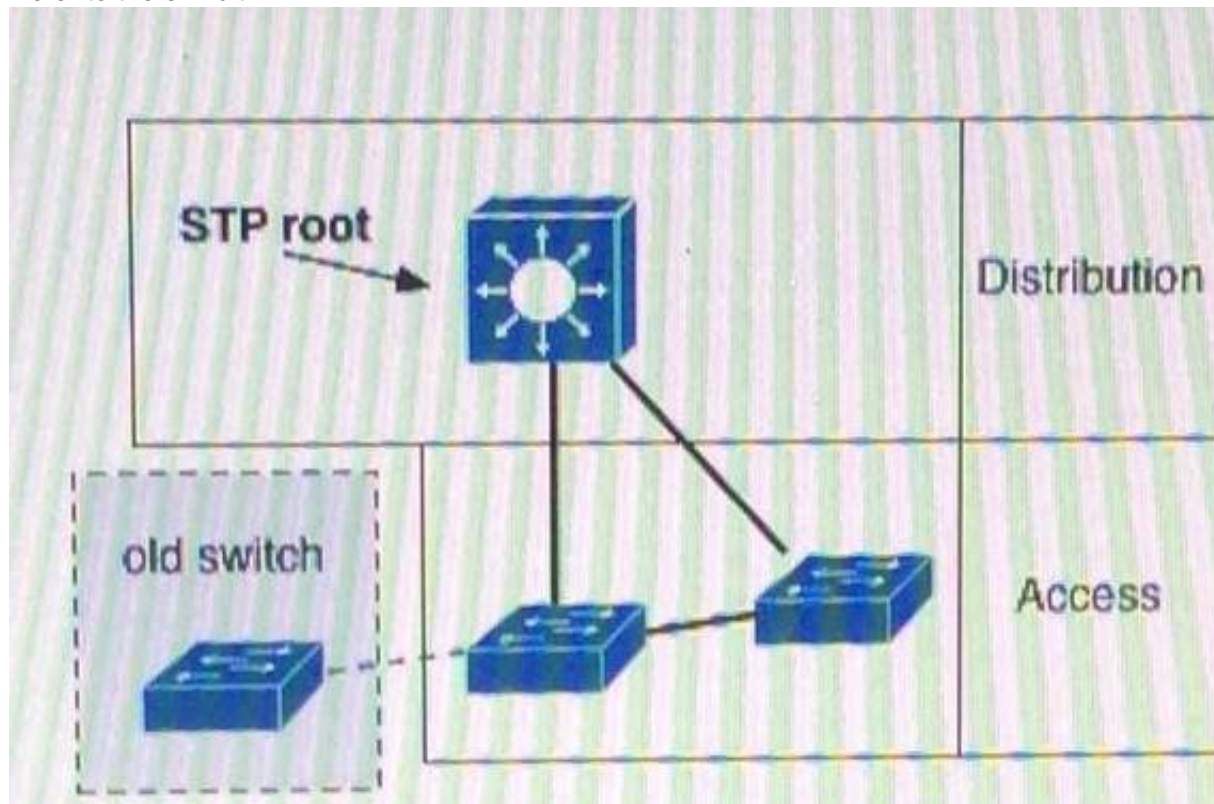
What happens spoofed packet or something like untrusted packet is detected? (Choose three)

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

Answer: ACE

NEW QUESTION 299

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 304

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 309

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 312

In the hardware address 0000.0c07.ac0a, what does 07.ac represent?

- A. vendor code
- B. HSRP group number
- C. HSRP router number
- D. HSRP well-known physical MAC address
- E. HSRP well-known virtual MAC address

Answer: E

NEW QUESTION 315

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 319

What happens if an interface within channel group is configure as SPAN destination?

- A. portchannel will forward traffic to source span
- B. will not be operational
- C. the link will be in error-disable

Answer: B

NEW QUESTION 322

Which form of centralized device authentication allows each AAA feature to function separately?

- A. TACASS
- B. Kerberos
- C. local database
- D. RADIUS

Answer: A

NEW QUESTION 327

If StormControl is enabled on a port and the traffic reaches the configured level, which two actions can be configured to occur? (Choose two)

- A. Trap
- B. notify admin
- C. redirect traffic
- D. log
- E. shut down

Answer: AC

NEW QUESTION 330

What is the default port security violation.

- A. log
- B. shutdown
- C. no change
- D. error-disable

Answer: B

NEW QUESTION 334

Drag and drop the characteristics from the left to the matching STP mode on the right.

default STP mode	PVST+
discarding port state	
based on 802.1 w	Rapid PVST+
maps VLANs to instances	
based on IEEE 802.1s	MSTP
based on IEEE 802.1D	

Answer:

Explanation:



NEW QUESTION 339

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 344

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 345

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 348

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 349

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 353

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 358

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 363

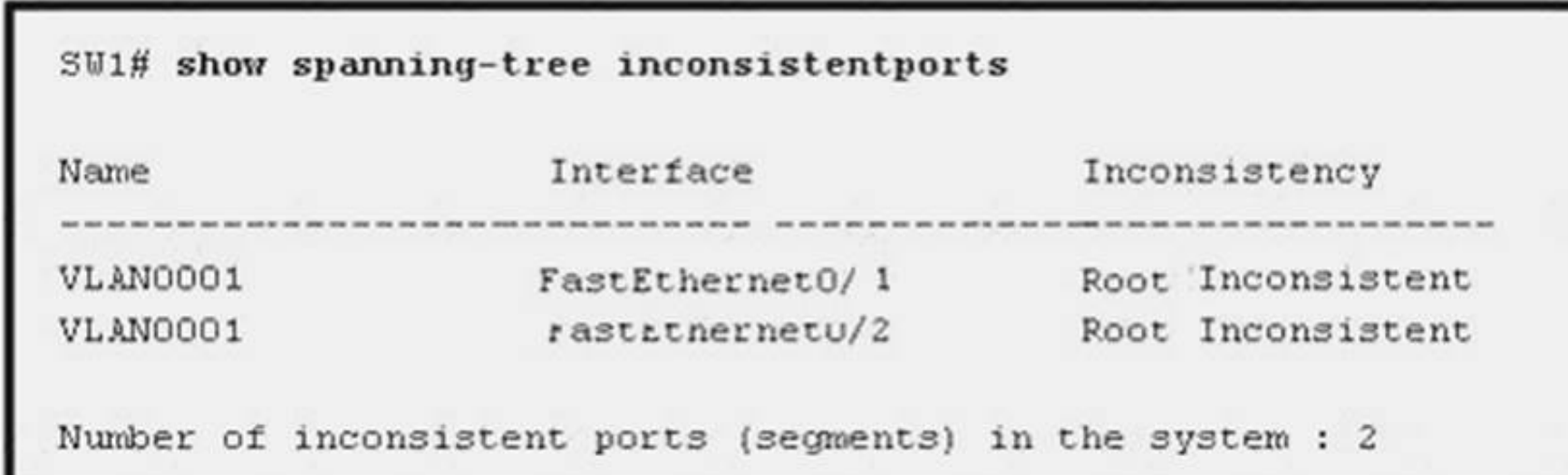
A network engineer wants to make sure that an access switch will never become a Spanning Tree root for VLAN 5. What action will accomplish this task?

- 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 364

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?



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 367

After you connected a host to switch port G0/1, the port error disabled. Which command can you enter to determine the reason?

- A. show ip interface brief
- B. Show run interface g0/1
- C. show interfaces g0/1 status
- D. show log

Answer: B

NEW QUESTION 371

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 374

Refer to the exhibit.



An engineer has run the show EtherChannel summary command and the output is displayed. Which statement about the status of the EtherChannel is true?

- A. The EtherChannel is operational and configured for PAgP
- B. The EtherChannel is down because of a mismatched EtherChannel protocol
- C. The EtherChannel is down and configured for LACP
- D. The EtherChannel is operational and is using no EtherChannel protocol

Answer: D

NEW QUESTION 376

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 381

What is needed for Virtual Switching System "VSS"?

- A. portchannel
- B. trunk
- C. Virtual Switching Link "or VSL"
- D. Virtual trunk

Answer: C

NEW QUESTION 384

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

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

Answer: B

NEW QUESTION 387

Which option is a Cisco recommended RSPAN 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 388

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

- A. Each frame contains a 12-byte VLAN Identifier field
- B. It inserts a 4-byte tag field to the Ethernet frame.
- C. When it is enabled, the minimum Ethernet frame size is 68 bytes
- D. The header is found within the Ethernet trailer.
- E. Trunking devices add an 8-byte VLAN tag to all VLAN packets.

Answer: CE

NEW QUESTION 393

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

- A. CDP uses a TLV to advertise the native VLAN
- B. CDP is not supported with SNMP
- C. CDP is supported on Frame Relay sub interfaces.
- D. CDP runs on OSI layer 2
- E. CDP runs on OSI layer 1

Answer: AD

NEW QUESTION 394

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 interface priority must be manually configured by the administrator

Answer: AB

NEW QUESTION 396

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 401

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 406

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 407

Which two statements about default FHRP behavior are true? (Choose two)

- A. A backup GLBP active virtual gateway can become active only if the current active virtual gateway fails.
- B. Preemption is enabled by default.
- C. Unless specifically Configured, the priority of an HSRP router is 200.
- D. A standby HSRP router becomes active if it has a higher priority than the priority of the current active router.
- E. A VRRP backup virtual router becomes the master router if its priority is higher than the priority of the current master router.

Answer: AE

NEW QUESTION 412

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 416

What VSS technology allows you to share downstream resources?

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

Answer: C

NEW QUESTION 420

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 423

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 428

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 429

In which two ways can a port respond to a port-security violation? (Choose two.)

- A. The port enters the en-disabled state
- B. The Security Violation counter is incremented and the port sends an SNMP trap
- C. The Security Violation counter is incremented and the port sends a critical syslog message to the console
- D. The port triggers an EEM script to notify support staff and continues to forward traffic normally
- E. The port immediately begins to drop all traffic.
- F. The port enters the shutdown state.

Answer: AB

NEW QUESTION 431

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 436

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 440

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 443

If router R1 interlace Etherne0/1 goes down and recovers, which of the statement regarding HSRP priority is true?

- A. The interface will nave the priority documented by 40 for HSRP group 1
- B. The interface will nave 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 446

When a switch is added to a stack, which switch automatically configures the new switch with the correct IOS?

- A. master
- B. peer
- C. adjacent
- D. slave

Answer: A

NEW QUESTION 450

A network engineer is trying to prevent users from connecting unauthorized equipment to a production network. Which option can be campus-wide to satisfy this requirement?

- A. IP Source Guard
- B. switch port block
- C. Uplink fast
- D. private VLAs
- E. BPDU Guard

Answer: A

NEW QUESTION 453

Which command maximizes system resources for ACL s'?

- A. Sdm prefer default
- B. Sdm prfer routing
- C. Sdm prefer access
- D. Sdm prefer vlan

Answer: C

NEW QUESTION 456

Which option is the minimum frame size of an 802.1Qframe?

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

Answer: B

NEW QUESTION 457

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 461

Refer to the exhibit.

```
Switch_A(config-if)# ip address 10.10.10.1 255.255.255.0
Switch_A(config-if)# standby 1 priority 200
Switch_A(config-if)# standby 1 preempt
Switch_A(config-if)# standby 1 track interface fa 1/1
Switch_A(config-if)# standby 1 ip 10.10.10.10
```

Which configuration on the HSRP neighboring device ensures that it becomes the active HSRP device in the event that port fa1/1 on Switch_A goes down?

- A. Switch_B(config-if)#ip address 10.10.10.2 255.255.255.0Switch_B(config-if)#standby 1 priority 200Switch_B(config-if)#standby 1 preemptSwitch_B(config-if)#standby 1 ip 10.10.10.10 Switch_B(config-if)#standby 1 track interface fa 1/1
- B. Switch_B(config-if)#ip address 10.10.10.2 255.255.255.0Switch_B(config-if)#standby 1 priority 200Switch_B(config-if)#standby 1 ip 10.10.10.10
- C. Switch_B(config-if)#ip address 10.10.10.2 255.255.255.0Switch_B(config-if)#standby 1 priority 195Switch_B(config-if)#standby 1 preemptSwitch_B(config-if)#standby 1 ip 10.10.10.10
- D. Switch_B(config-if)#ip address 10.10.10.2 255.255.255.0Switch_B(config-if)#standby 1 priority 190Switch_B(config-if)#standby 1 ip 10.10.10.10 Switch_B(config-if)#standby 1 track interface fa 1/1

Answer: C

NEW QUESTION 463

Which protocol specified by RFC 2281 provides network redundancy for IP networks, ensuring that user traffic immediately and transparently recovers from first-hop failures in network edge devices or access circuits?

- A. ICMP
- B. IRDP
- C. HSRP
- D. STP

Answer: C

NEW QUESTION 466

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 467

In regards to Cisco Virtual Switching System which technology is needed between two switches for them to act as one network element and share control information and data traffic?

- A. trunk
- B. virtual port channel
- C. EtherChannel
- D. virtual switch link

Answer: D

NEW QUESTION 471

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 475

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 480

Drag and drop the characteristic from the left to the matching Layer 2 protocol on the right.

- sends topology change notification
- Default time between protocol frames is 60 seconds.
- uses multicast address 01-80-C2-00-00-0E
- Default time between protocol frames is 30 seconds.
- uses multicast address 0100.0ccc.cccc
- supports IEEE 802.2 and 802.3 encapsulation

CDP

LLDP

Answer:

Explanation:

CDP

uses multicast address 0100.0ccc.cccc

supports IEEE 802.2 and 802.3 encapsulation

Default time between protocol frames is 60 seconds.

LLDP

sends topology change notification

uses multicast address 01-80-C2-00-00-0E

Default time between protocol frames is 30 seconds.

NEW QUESTION 481

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 484

Refer to the exhibit.

```
spanning-tree extend system-id
spanning-tree mode pvst
spanning-tree backbonefast
```

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 487

Which statement about HSRP, GLBP, and VRRP is true?

- A. VRRP group members communicate using multicast address 224.0.0.102.
- B. MAC address 0000.0c07.ac0c indicates that default gateway redundancy is provided through GLBP.
- C. HSRP group members communicate using multicast address 224.0.0.18.
- D. GLBP uses UDP port 3222 (source and destination) for hello messages.

Answer: A

NEW QUESTION 490

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 492

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 494

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 495

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 500

Which information in a RADIUS access-request packet is encrypted?

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

Answer: A

NEW QUESTION 502

Which of the following commands can be issued without interfering with the operation of loop guard?

- A. Switch(config-if)#spanning-tree guard root
- B. Switch(config-if)#spanning-tree portfast
- C. Switch(config-if)#switchport mode trunk
- D. Switch(config-if)#switchport mode access

Answer: C

NEW QUESTION 504

When a Layer 2 trunking EtherChannel is configured, which two attributes must match across the member ports? (Choose two)

- A. Interface Description.
- B. Spanning-tree cost.
- C. spanning-tree priority
- D. allowed VLANS
- E. trunking mode.

Answer: BC

NEW QUESTION 505

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 509

Regarding high availability, with the MAC address 0000.0c07.ac03, what does the “03” represent?

- A. The GLBP group number
- B. The type of encapsulation

- C. The HSRP router number
- D. The VRRP group number
- E. The HSRP group number
- F. The active router number

Answer: E

NEW QUESTION 511

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 515

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 517

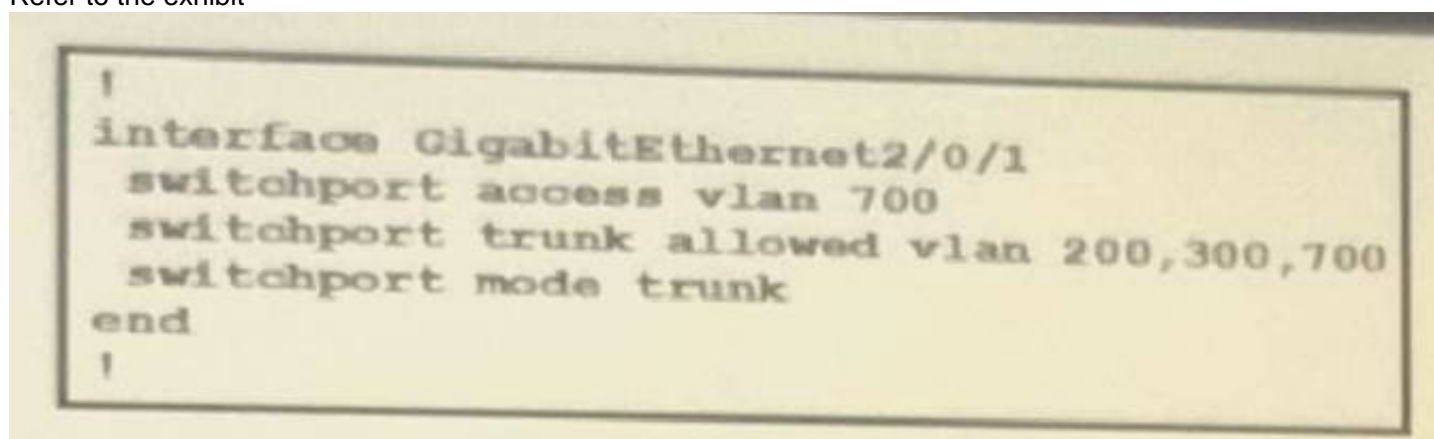
Which layer private VLAN partition the broadcast domain?

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

Answer: B

NEW QUESTION 520

Refer to the exhibit



```
!
interface GigabitEthernet2/0/1
  switchport access vlan 700
  switchport trunk allowed vlan 200,300,700
  switchport mode trunk
end
!
```

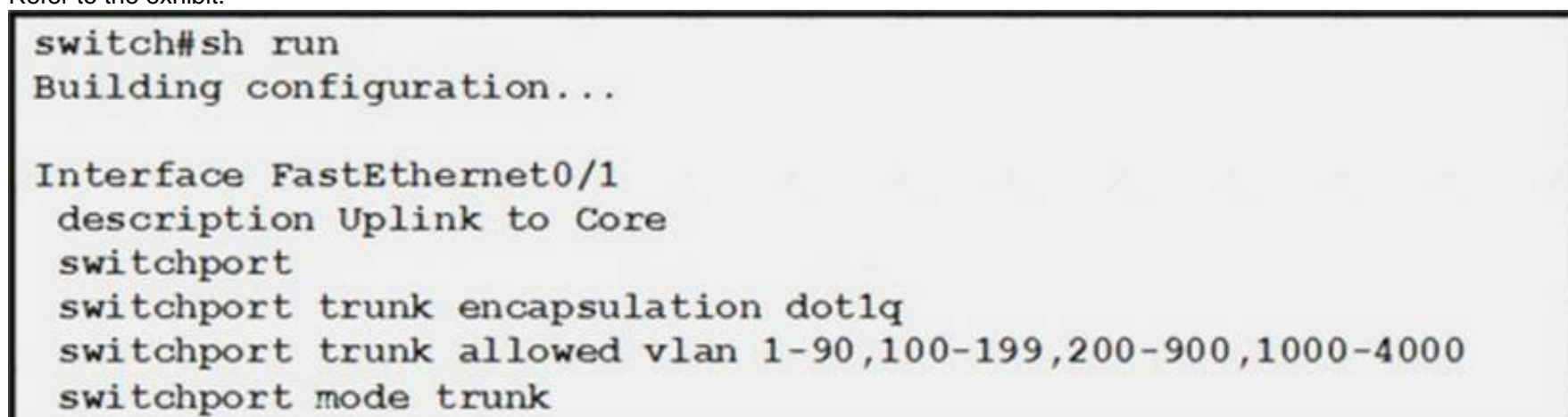
Which statement about the current configuration on port GigabitEthernet2/0/1 is true?

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

Answer: B

NEW QUESTION 524

Refer to the exhibit.



```
switch#sh run
Building configuration...

Interface FastEthernet0/1
  description Uplink to Core
  switchport
  switchport trunk encapsulation dot1q
  switchport trunk allowed vlan 1-90,100-199,200-900,1000-4000
  switchport mode trunk
```


A network engineer changes the default native VLAN to VLAN 999. After applying the settings on the uplinks to the core switches, the switch control traffic, such as CDP and VTP, is no longer working. The standard configuration is used for each uplink. What is wrong with the configuration?

- A. The interface is administratively down.
- B. The encapsulation type is incorrect.
- C. The switchport mode trunk command should be first in the output.
- D. The native VLAN is not present on the trunk.
- E. The control traffic must be manually enabled on the new native VLAN.

Answer: D

NEW QUESTION 526

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 booted 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 528

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

- A. Authentication commands must be entered under the interface.
- B. It sends advertisements to multicast address 224.0.0.9.
- C. It supports MD5 and IP sec authentication.
- D. It can use an interface IP address as the virtual IP address.
- E. It sends advertisements to multicast address 224.0.0.18.
- F. It is a Cisco proprietary protocol

Answer: AE

NEW QUESTION 530

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 533

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 537

In a switch stack environment, what is the total bidirectional traffic flow between two logical counter-rotating paths?

- A. 16 Gbps
- B. 32 Gbps
- C. 64 Gbps
- D. 128 Gbps

Answer: B

NEW QUESTION 541

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 544

Which two statements about SDM templates are true?

- A. They are used to allocate system resources
- B. Changing the SDM template will not disturb switch operation.
- C. You can verify the SDM template that is in use with the show sdm prefer command

Answer: AC

NEW QUESTION 545

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 550

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 553

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 557

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 562

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 566

Which three VLANs are part of the extended range to available VLANs? (Choose three.)

- A. 4094
- B. 1001
- C. 4095
- D. 4195
- E. 3000
- F. 100G

Answer: AEF

NEW QUESTION 569

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 pagp channel-group 1 mode desirable
- E. channel-protocol pagp channel-group 1 mode on

Answer: BD

NEW QUESTION 570

Refer to the exhibit.

```
spanning-tree mode pvst
spanning-tree etherchannel guard misconfig
```

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 575

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 580

Which component does the GLBP client cache stores for each host of a particular GLBP group?

- A. IP address
- B. MAC address
- C. VLAN
- D. Token ring
- E. DCSP

Answer: B

NEW QUESTION 581

Refer to the exhibit.

```
R1
interface GigabitEthernet0/0
ip address 192.168.250.2 255.255.255.0
standby 20 ip 192.168.250.1
standby 20 priority 120

R2
interface GigabitEthernet0/0
ip address 192.168.250.3 255.255.255.0
standby 20 ip 192.168.250.1
standby 20 priority 110
```

Which two effects of this configuration are true? (Choose two.)

- A. R1 becomes the active router
- B. If R2 goes down, R1 becomes active but reverts to standby when R2 comes back online
- C. Hello messages are sent to multicast address 224.0.0.5.
- D. If R1 goes down, R2 becomes active but reverts to standby when R1 comes back online.
- E. R1 goes down, R2 becomes active and remains the active device when R1 comes back online
- F. R1 becomes the standby router.

Answer: AE

NEW QUESTION 583

Which statement about VSPAN is true?

- A. It can monitor ingress and egress traffic on the source VLAN.
- B. It can monitor token ring VLANs.
- C. It sends all VLAN traffic to the destination port regardless of the VLAN's status.
- D. It can monitor destination port traffic that belongs to a source VLAN

Answer: D

NEW QUESTION 585

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 588

Which statement about local database device authentication is true?

- A. It supports the full functionality of the AAA accounting feature
- B. It can be used as a fallback authentication method when the connection to the remote network access server fails.
- C. It is most appropriate for authentication on a large network with many endusers
- D. It is primarily used for authentication without usernames

Answer: B

NEW QUESTION 593

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

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

Answer: C

NEW QUESTION 597

You are configuring dynamic ARP inspection. Which command must you configure on the devices to detect unexpected IP addresses in the

- A. ip Verify source
- B. ip arp inspection trust
- C. ip arp inspection vlan
- D. ip arp inspection validate ip

Answer: D

NEW QUESTION 602

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 604

Which two functions of DHCP snooping are true? (Choose two.)

- A. It listens to multicast messages between senders and receivers
- B. It filters invalid messages from untrusted sources.
- C. It rate-limits DHCP traffic from trusted and untrusted sources.

- D. It helps build the route table
- E. It correlates IP addresses to hostnames.

Answer: BC

NEW QUESTION 607

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

NEW QUESTION 608

How does SPAN interact with STP?

- 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 611

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