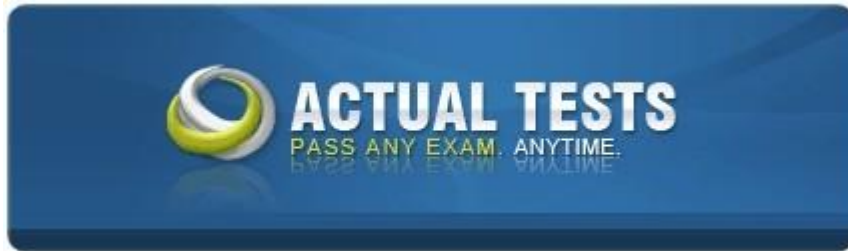**CCNP SW 300-115 latest_formatted**

VCEplus.com

Number: 000-000
Passing Score: 800
Time Limit: 120 min
File Version: 1.0

Cisco 300-115

Implementing Cisco IP Switched Networks

Version: 9.0 (June 28 2015) 164 Questions
Cisco 300-115 Exam

Topic 1, Layer 2 Technologies

Exam A

QUESTION 1
What is the maximum number of switches that can be stacked using Cisco StackWise?

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

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 2
A network engineer wants to add a new switch to an existing switch stack. Which configuration must be added to the new switch before it can be added to the switch stack?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 3
What percentage of bandwidth is reduced when a stack cable is broken?

A. 0

B. 25

C. 50

D. 75

E. 100

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 4
Refer to the exhibit.

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

A. switch1
    channel-group 1 mode active
    switch2
    channel-group 1 mode auto

B. switch1
    channel-group 1 mode desirable
    switch2
    channel-group 1 mode passive

C. switch1
    "Pass Any Exam. Any Time." - www.actualtests.com 3
    Cisco 300-115 Exam
    channel-group 1 mode on
    switch2
    channel-group 1 mode auto

D. switch1
    channel-group 1 mode desirable
    switch2
    channel-group 1 mode auto

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 5
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.
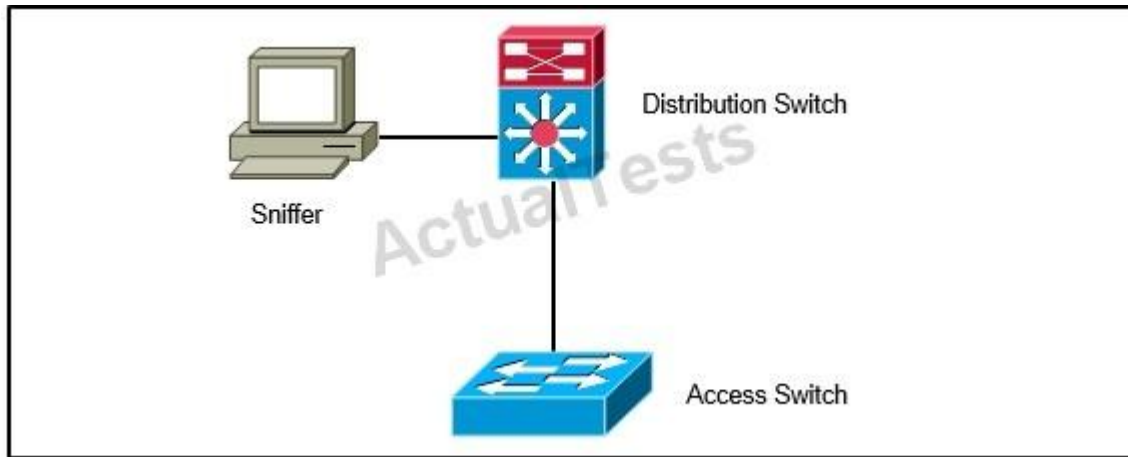
Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 6
Refer to the exhibit.

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

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

Correct Answer: BCD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 7
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 8
An EtherChannel bundle has been established between a Cisco switch and a corporate web server. The network administrator noticed that only one of the EtherChannel links is being utilized to reach the web server. What should be done on the Cisco switch to allow for better EtherChannel utilization to the corporate web server?

A. Enable Cisco Express Forwarding to allow for more effective traffic sharing over the EtherChannel bundle.
B. Adjust the EtherChannel load-balancing method based on destination IP addresses.
C. Disable spanning tree on all interfaces that are participating in the EtherChannel bundle.
D. Use link-state tracking to allow for improved load balancing of traffic upon link failure to the server.
E. Adjust the EtherChannel load-balancing method based on source IP addresses.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 9
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.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 10
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 11
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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 12
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 "Pass Any Exam. Any Time." - www.actualtests.com 7
   Cisco 300-115 Exam
   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.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 13
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 version. Extended VLANs will not propagate to different IOS versions when extended VLANs are in use.
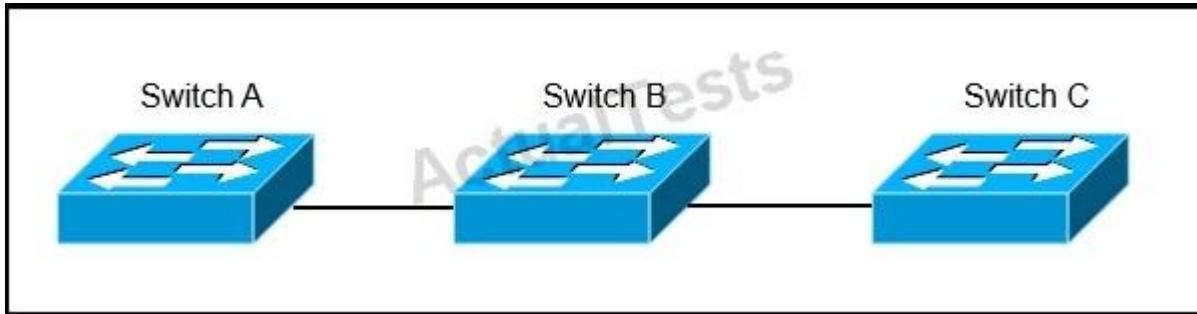
Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 14
Refer to the exhibit.

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

A. Switch B is configured in transparent mode.
B. Switch B is configured with an access port to Switch A, while Switch C is configured with a trunk port to Switch B.
C. The VTP revision number of the Switch B is higher than that of Switch A.
D. The trunk between Switch A and Switch B is misconfigured.
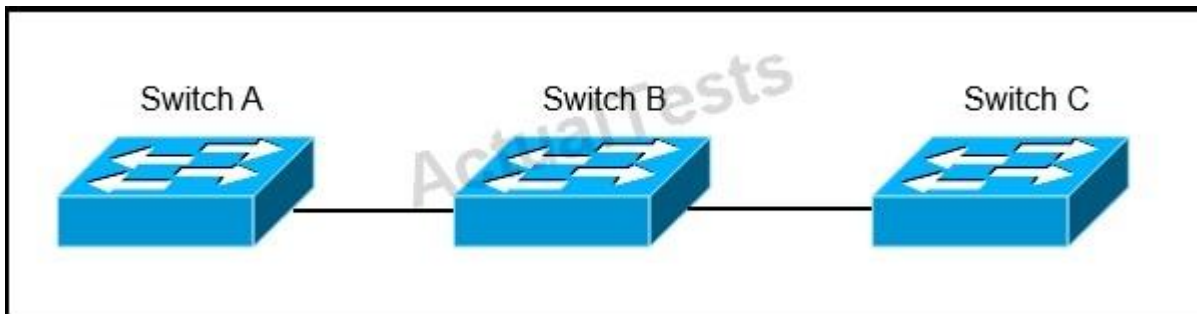
Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 15
Refer to the exhibit.

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

A. A VTP authentication mismatch occurred between Switch A and Switch B.

B. The VTP revision number of Switch B is higher than that of Switch A.

C. VTP pruning is configured globally on all switches and it removed VLANs from the trunk interface that is connected to Switch C.

D. The trunk between Switch A and Switch B is misconfigured.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 16
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 17
An administrator recently configured all ports for rapid transition using PortFast. After testing, it has been determined that several ports are not transitioning as they should. What is the reason for this?

A. RSTP has been enabled per interface and not globally.

B. The STP root bridge selection is forcing key ports to remain in non-rapid transitioning mode.

C. STP is unable to achieve rapid transition for trunk links.

D. The switch does not have the processing power to ensure rapid transition for all ports.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 18
Which technique automatically limits VLAN traffic to only the switches that require it?

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 19
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 20
While working in the core network building, a technician accidently 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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 21
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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 22
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.
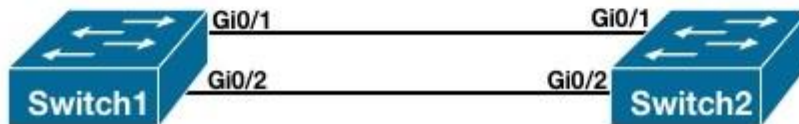
Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 23
Refer to the exhibit.

```
hostname Switch1                         hostname Switch2
<output omitted>                         <output omitted>
!                                        !
port-channel load-balance dst-ip         port-channel load-balance src-mac
!                                        !
interface GigabitEthernet0/1             interface GigabitEthernet0/1
 channel-group 10 mode active             channel-group 10 mode passive
!                                        !
interface GigabitEthernet0/2             interface GigabitEthernet0/2
 channel-group 10 mode passive            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.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 24
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.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 25
What is the function of NSF?

A. forward traffic simultaneously using both supervisors
B. forward traffic based on Cisco Express Forwarding
C. provide automatic failover to back up supervisor in VSS mode
D. provide nonstop forwarding in the event of failure of one of the member supervisors

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 26
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.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 27
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 28
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

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 29
A network engineer must adjust the STP interface attributes to influence root port selection. Which two elements are used to accomplish this? (Choose two.)

A. port-priority
B. cost
C. forward-timers
D. link type
E. root guard

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 30
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 31
Refer to the exhibit.

```
Switch#sh int g0/12
GigabitEthernet0/23 is up, line protocol is down (monitoring)
  Hardware is C6k 1000Mb 802.3, address is 001c.f9d4.7500 (bia
  001c.f9d4.750)
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
    Reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 1000Mb/s
```

A network engineer investigates a recent network failure and notices that one of the interfaces on the switch is still down. What is causing the line protocol on this interface to be shown as down?

A. There is a layer 1 physical issue.
B. There is a speed mismatch on the interface.
C. The interface is configured as the target of the SPAN session.
D. The interface is configured as the source of the SPAN session.
E. There is a duplex mismatch on the interface.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 32
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

Correct Answer: A

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 33
Which technique allows specific VLANs to be strictly permitted by the administrator?

A. VTP pruning
B. transparent bridging
C. trunk allowed VLANs
D. VLAN access-list
E. L2P tunneling

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 34
For security reasons, the IT manager has prohibited users from dynamically establishing trunks with their associated upstream switch. Which two actions can prevent interface trunking? (Choose two.)

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

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 35
Which two protocols can be automatically negotiated between switches for trunking? (Choose two.)

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

Correct Answer: CF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 36
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.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 37
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.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 38
A network engineer is extending a LAN segment between two geographically separated data centers. Which enhancement to a spanning-tree design prevents unnecessary traffic from crossing the extended LAN segment?

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 39
The network manager has requested that several new VLANs (VLAN 10, 20, and 30) are allowed to traverse the switch trunk interface. After the command switchport trunk allowed vlan 10,20,30 is issued, all other existing VLANs no longer pass traffic over the trunk. What is the root cause of the problem?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 40
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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 41
What does the command vlan dot1q tag native accomplish when configured under global configuration?

A. All frames within the native VLAN are tagged, except when the native VLAN is set to 1.
B. It allows control traffic to pass using the non-default VLAN.
C. It removes the 4-byte dot1q tag from every frame that traverses the trunk interface(s).
D. Control traffic is tagged.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 42
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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 43
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 44
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

Correct Answer: D
Section: (none)
Explanation

QUESTION 45
Which command does a network engineer use to verify the spanning-tree status for VLAN 10?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 46
A new network that consists of several switches has been connected together via trunking interfaces. If all switches currently have the default VTP domain name "null", which statement describes what happens when a domain name is configured on one of the switches?

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 47
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+

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 48
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 49
Which SDM template disables routing and supports the maximum number of unicast MAC addresses?

A. VLAN

B. access

C. default

D. routing

Correct Answer: A
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 50
Which SDM template is the most appropriate for a Layer 2 switch that provides connectivity to a large number of clients?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 51
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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 52
If a network engineer applies the command mac-address-table notification mac-move on a Cisco switch port, when is a syslog message generated?

A. A MAC address or host moves between different switch ports.
B. A new MAC address is added to the content-addressable memory.

C. A new MAC address is removed from the content-addressable memory.

D. More than 64 MAC addresses are added to the content-addressable memory.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 53
Which option is a possible cause for an errdisabled interface?

A. routing loop

B. cable unplugged

C. STP loop guard

D. security violation

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 54
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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 55
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 56
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 57
Which option lists the information that is contained in a Cisco Discovery Protocol advertisement?

A. native VLAN IDs, port-duplex, hardware platform
B. native VLAN IDs, port-duplex, memory errors
C. native VLAN IDs, memory errors, hardware platform
D. port-duplex, hardware platform, memory errors

Correct Answer: A
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 58
Which option describes a limitation of LLDP?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 59
Which statement about the UDLD protocol is true?

A. UDLD is a Cisco-proprietary Layer 2 protocol that enables devices to monitor the physical status of links and detect unidirectional failures.
B. UDLD is a Cisco-proprietary Layer 2 protocol that enables devices to advertise their identity, capabilities, and neighbors on a local area network.
C. UDLD is a standardized Layer 2 protocol that enables devices to monitor the physical status of links and detect unidirectional failures.
D. UDLD is a standardized Layer 2 protocol that enables devices to advertise their identity, capabilities, and neighbors on a local area network.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 60
Which option lists the modes that are available for configuring UDLD on a Cisco switch?

A. normal and aggressive
B. active and aggressive

C. normal and active

D. normal and passive

E. normal and standby

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 61
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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 62
Which statement about Cisco Discovery Protocol configuration on a Cisco switch is true?

A. CDP is enabled by default and can be disabled globally with the command no cdp run.

B. CDP is disabled by default and can be enabled globally with the command cdp enable.

C. CDP is enabled by default and can be disabled globally with the command no cdp enable.

D. CDP is disabled by default and can be enabled globally with the command cdp run.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 63
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.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 64
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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 65
What is the maximum number of VLANs that can be assigned to an access switchport without a voice VLAN?

A. 0
B. 1
C. 2
D. 1024

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 66
Refer to the exhibit.

```
Interface GigabitEthernet1/0/1
 switchport access vlan 10
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport voice vlan 11
 spanning-tree portfast
 !
```

Which option shows the expected result if a show vlan command is issued?

A.
```
Switch#sh vlan

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Gi1/0/2, Gi1/0/3, Gi1/0/4
                                                Gi1/0/5, Gi1/0/6, Gi1/0/7
                                                Gi1/0/8, Gi1/0/9, Gi1/0/10
                                                Gi1/0/11, Gi1/0/12, Gi1/0/13
                                                Gi1/0/14, Gi1/0/15, Gi1/0/16
                                                Gi1/0/17, Gi1/0/18, Gi1/0/19
                                                Gi1/0/20, Gi1/0/21, Gi1/0/22
                                                Gi1/0/23, Gi1/0/24
10   Data                             active
11   voice                            active
1002 fddi-default                     act/unsup
1003 token-ring-default               act/unsup
1004 fddinet-default                  act/unsup
1005 trnet-default                    act/unsup
```

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```
Switch#sh vlan

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Gi1/0/2, Gi1/0/3, Gi1/0/4
                                                Gi1/0/5, Gi1/0/6, Gi1/0/7
                                                Gi1/0/8, Gi1/0/9, Gi1/0/10
                                                Gi1/0/11, Gi1/0/12, Gi1/0/13
                                                Gi1/0/14, Gi1/0/15, Gi1/0/16
                                                Gi1/0/17, Gi1/0/18, Gi1/0/19
                                                Gi1/0/20, Gi1/0/21, Gi1/0/22
                                                Gi1/0/23, Gi1/0/24
10   Data                             active    Gi1/0/1
11   Voice                            active    Gi1/0/1
1002 fddi-default                     act/unsup
1003 token-ring-default               act/unsup
1004 fddinet-default                  act/unsup
1005 trnet-default                    act/unsup
```

C.
```
Switch#sh vlan

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Gi1/0/1, Gi1/0/2, Gi1/0/3
                                                Gi1/0/4, Gi1/0/5, Gi1/0/6
                                                Gi1/0/7, Gi1/0/8, Gi1/0/9
                                                Gi1/0/10, Gi1/0/11, Gi1/0/12
                                                Gi1/0/13, Gi1/0/14, Gi1/0/15
                                                Gi1/0/16, Gi1/0/17, Gi1/0/18
                                                Gi1/0/19, Gi1/0/20, Gi1/0/21
                                                Gi1/0/22, Gi1/0/23, Gi1/0/24
10   Data                             active
11   voice                            active    Gi1/0/1
1002 fddi-default                     act/unsup
1003 token-ring-default               act/unsup
1004 fddinet-default                  act/unsup
1005 trnet-defaul
```

D.
```
Switch#sh vlan

VLAN Name                             Status    Ports
---- -------------------------------- --------- -------------------------------
1    default                          active    Gi1/0/2, Gi1/0/3, Gi1/0/4
                                                Gi1/0/5, Gi1/0/6, Gi1/0/7
                                                Gi1/0/8, Gi1/0/9, Gi1/0/10
                                                Gi1/0/11, Gi1/0/12, Gi1/0/13
                                                Gi1/0/14, Gi1/0/15, Gi1/0/16
                                                Gi1/0/17, Gi1/0/18, Gi1/0/19
                                                Gi1/0/20, Gi1/0/21, Gi1/0/22
                                                Gi1/0/23, Gi1/0/24
10   Data                             active    Gi1/0/1
11   voice                            active
1002 fddi-default                     act/unsup
1003 token-ring-default               act/unsup
1004 fddinet-default                  act/unsup
1005 trnet-default                    act/unsup
```

A. Exhibit A
B. Exhibit B
C. Exhibit C

D. Exhibit D

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 67
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 68
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 69

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 70
Which feature must be enabled to eliminate the broadcasting of all unknown traffic to switches that are not participating in the specific VLAN?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 71
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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 72
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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

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QUESTION 73
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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 74
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 75
Refer to the exhibit.

```
SW-1#sh logging
%SPANTREE-SP-2-RECV_PVID_ERR: Received BPDU with inconsistent peer
Vlan id 1 on GigabitEthernet11/2 VLAN2013.
%SPANTREE-SP-2-BLOCK_PVID_PEER: Blocking GigabitEthernet11/2 on
VLAN0001. Inconsistent peer vlan.
```

A multilayer switch has been configured to send and receive encapsulated and tagged frames. VLAN 2013 on the multilayer switch is configured as the native VLAN. Which option is the cause of the spanning-tree error?

A. VLAN spanning-tree in SW-2 is configured.
B. spanning-tree bpdu-filter is enabled.
C. 802.1q trunks are on both sides, both with native VLAN mismatch.
D. VLAN ID 1 should not be used for management traffic because its unsafe.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 76
A network engineer must improve bandwidth and resource utilization on the switches by stopping the inefficient flooding of frames on trunk ports where the frames are not needed. Which Cisco IOS feature can be used to achieve this task?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 77
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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 78
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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 79
Refer to the exhibit.

```
3512xl(config)#int fastEthernet 0/1
3512xl(config-if)#switchport mode trunk
3512xl(config-if)#switchport trunk encapsulation dot1q
```

How many bytes are added to each frame as a result of the configuration?

A. 4-bytes except the native VLAN
B. 8-bytes except the native VLAN
C. 4-bytes including native VLAN
D. 8-bytes including native VLAN

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 80
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.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 81
Which statement about the use of PAgP link aggregation on a Cisco switch that is running Cisco IOS Software is true?

A. PAgP modes are off, auto, desirable, and on. Only the combinations auto-desirable, desirable- desirable, and on-on allow the formation of a channel.
B. PAgP modes are active, desirable, and on. Only the combinations active-desirable, desirable- desirable, and on-on allow the formation of a channel.
C. PAgP modes are active, desirable, and on. Only the combinations active-active, desirable- desirable, and on-on allow the formation of a channel.
D. PAgP modes are off, active, desirable, and on. Only the combinations auto-auto, desirable- desirable, and on-on allow the formation of a channel.

Correct Answer: A

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 82
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
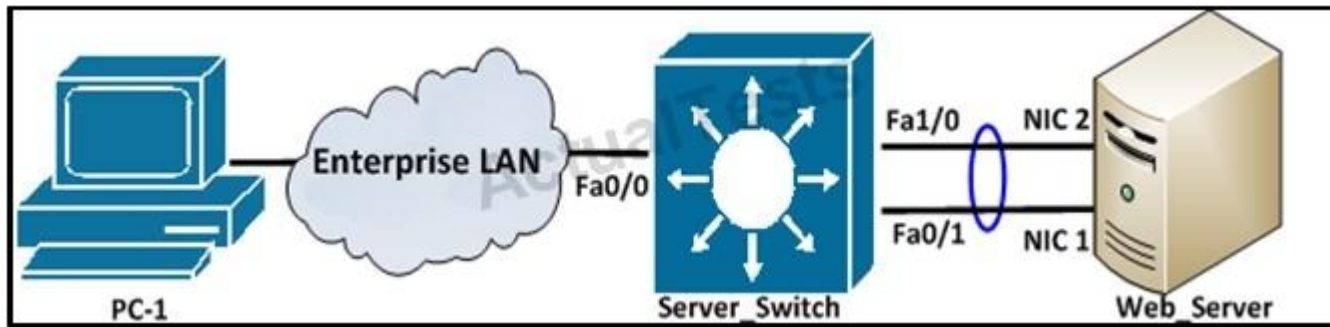
Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 83
Refer to the exhibit.

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

Server_Switch#sh etherchannel load-balance

EtherChannel Load-Balancing Operational State (src-mac):

Non-IP: Source MAC address

IPv4: Source MAC address

IPv6: Source IP address

Server_Switch#

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

A. Disable EtherChannel load balancing.
B. Upgrade the switch IOS to IP services image.
C. Change the load-balance method to dst-mac.

D. Contact Cisco TAC to report a bug on the switch.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 84
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 85
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 EtherChannel.
   The EtherChannel provides full-duplex bandwidth up to 800 Mbps only for Fast EtherChannel or 8 Gbps only for Gigabit EtherChannel.
B. A switch can support up to 10 compatibly configured Ethernet interfaces in an EtherChannel.
   The EtherChannel provides full-duplex bandwidth up to 1000 Mbps only for Fast EtherChannel or 8 Gbps only for Gigabit EtherChannel.
C. A switch can support up to eight compatibly configured Ethernet interfaces in an EtherChannel.
   The EtherChannel provides full-duplex bandwidth up to 800 Mbps only for Fast EtherChannel or 16 Gbps only for Gigabit EtherChannel.
D. A switch can support up to 10 compatibly configured Ethernet interfaces in an EtherChannel.
   The EtherChannel provides full-duplex bandwidth up to 1000 Mbps only for Fast EtherChannel or 10 Gbps only for Gigabit EtherChannel.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 86
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 87
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 88
When two MST instances (MST 1 and MST 2) are created on a switch, what is the total number of spanning-tree instances running on the switch?

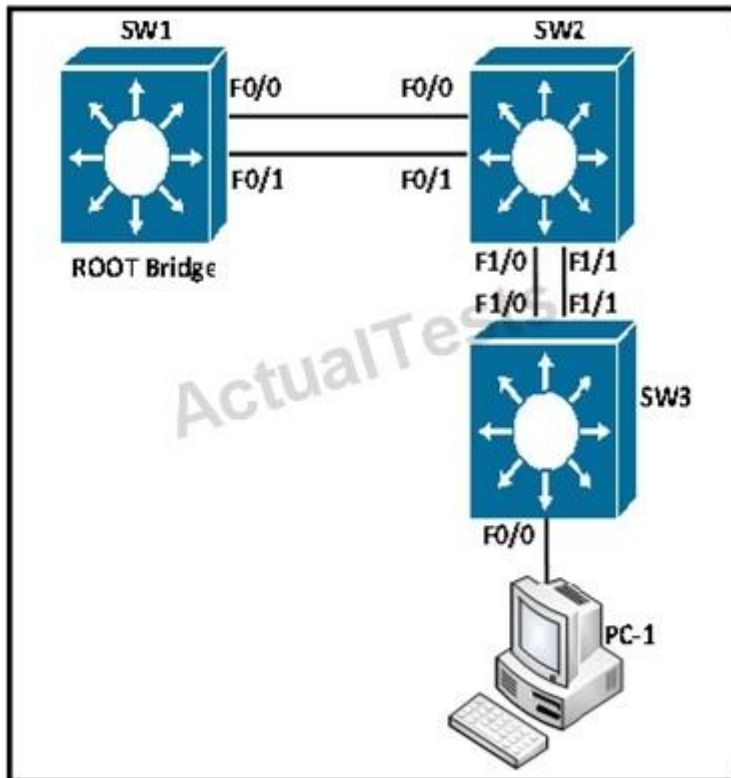A. 1
B. 2
C. 3
D. 4

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 89
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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 90
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.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 91
Refer to the exhibit.

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

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

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

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 92
A network engineer is trying to deploy a PC on a network. The engineer observes that when the PC is connected to the network, it takes 30 to 60 seconds for the PC to see any activity on the network interface card. Which Layer 2 enhancement can be used to eliminate this delay?

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 93
A network engineer configured an Ethernet switch using these commands.

Switchone(config) # Spanning-tree portfast bpdufilter default

Which statement about the spanning-tree portfast feature on the switch is true?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 94
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.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 95
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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 96
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

Correct Answer: C
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 97
Which statement describes what happens if all VSL connections between the virtual switch members are lost?

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

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 98
Which statement describes what happens when a switch enters dual active recovery mode?

A. The switch shuts down and waits for the VSL link to be restored before sending traffic.
B. All interfaces are shut down in the formerly active virtual switch member, but the new active virtual switch forwards traffic on all links.
C. The switch continues to forward traffic out all links and enables spanning tree on VSL link and all other links to prevent loops.
D. The VSS detects which system was last in active state and shuts down the other switch.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 99
CORRECT TEXT

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 competing 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
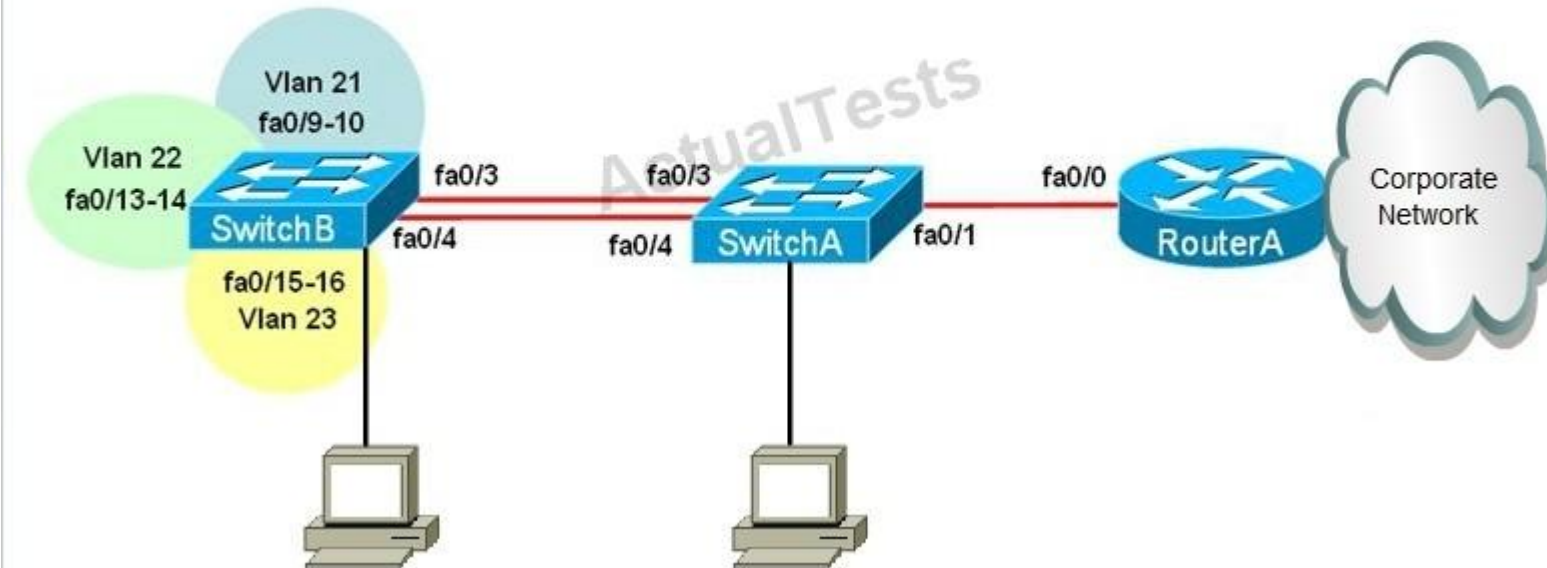- will support two servers attached to fa0/13 and fa0/14 · Vlan 23

-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.

A.

B.

C.

D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:
Answer: 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
!
panning-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

QUESTION 100
CORRECT TEXT

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 RouteC. 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:
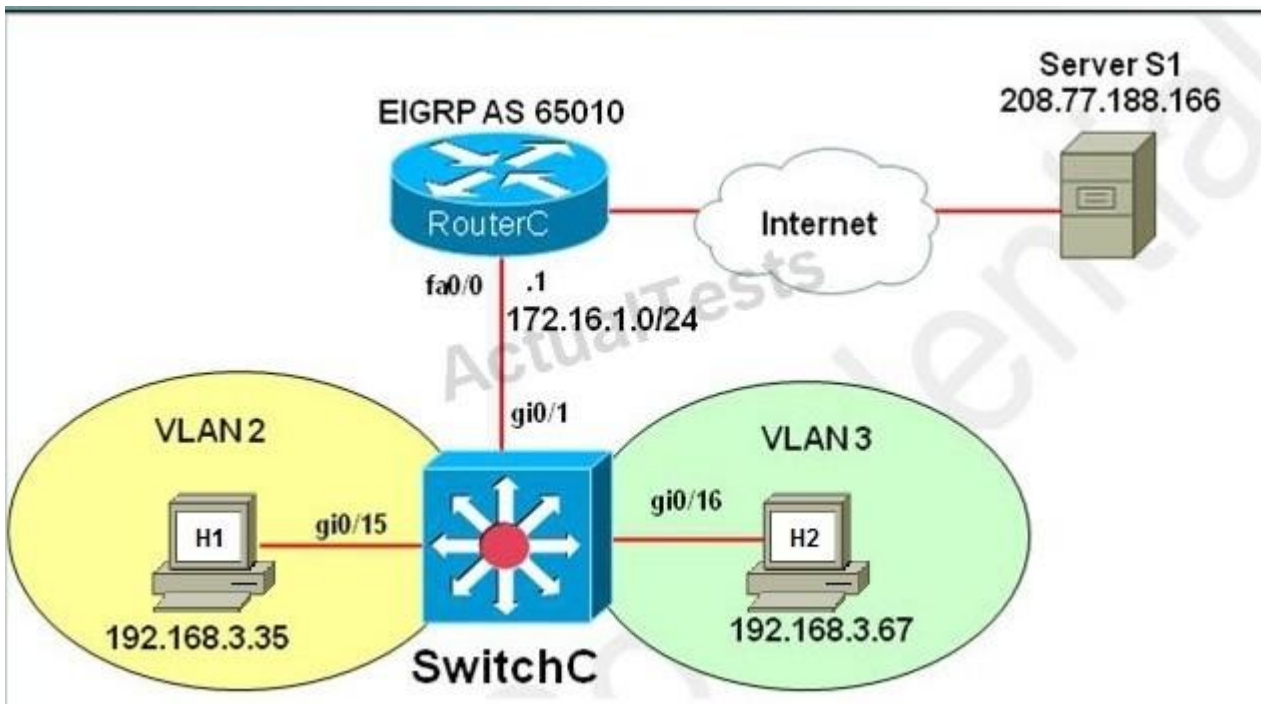
10.10.10.0/24

190.200.250.32/27

190.200.250.64/27

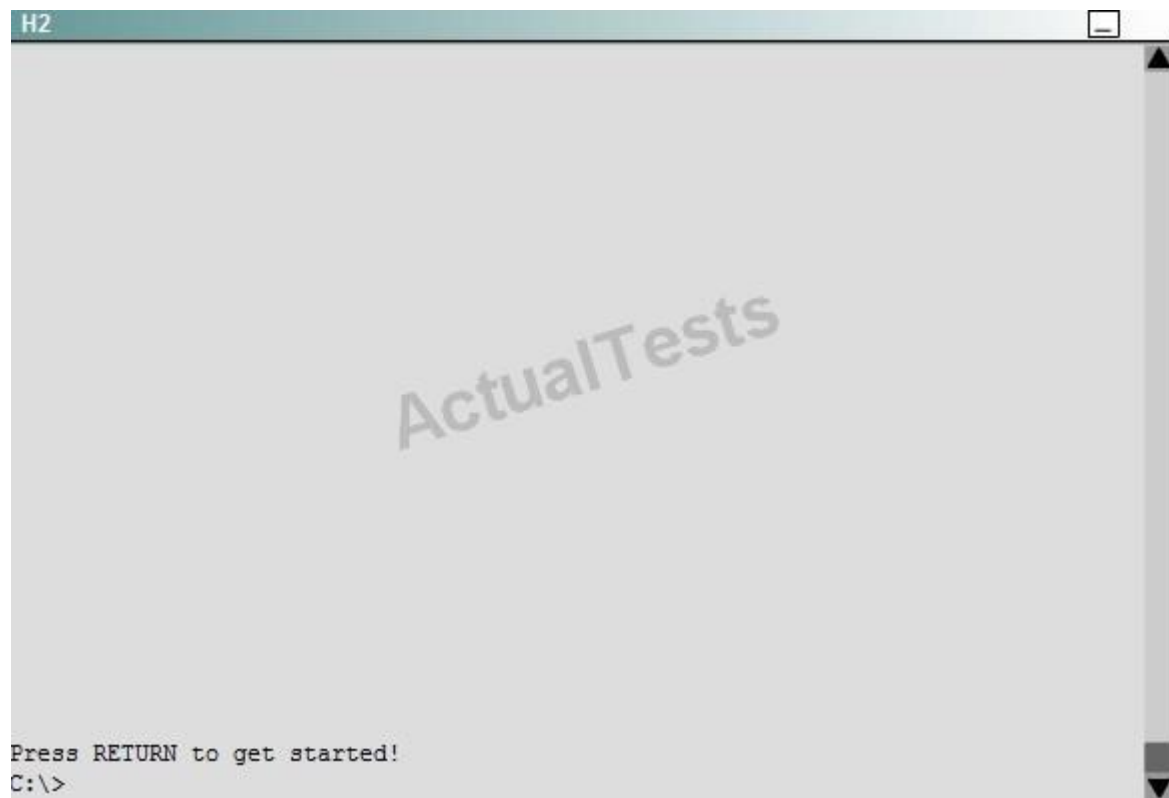Hosts H1 and H2 are configured with the correct IP address and default gateway.

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.

H1

Press RETURN to get started!
C:\>

```
H2
```

```
Press RETURN to get started!
C:\>
```

```
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>
```

A.

B.

C.

D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:
Answer: 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.
Answer: \>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 -> 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 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
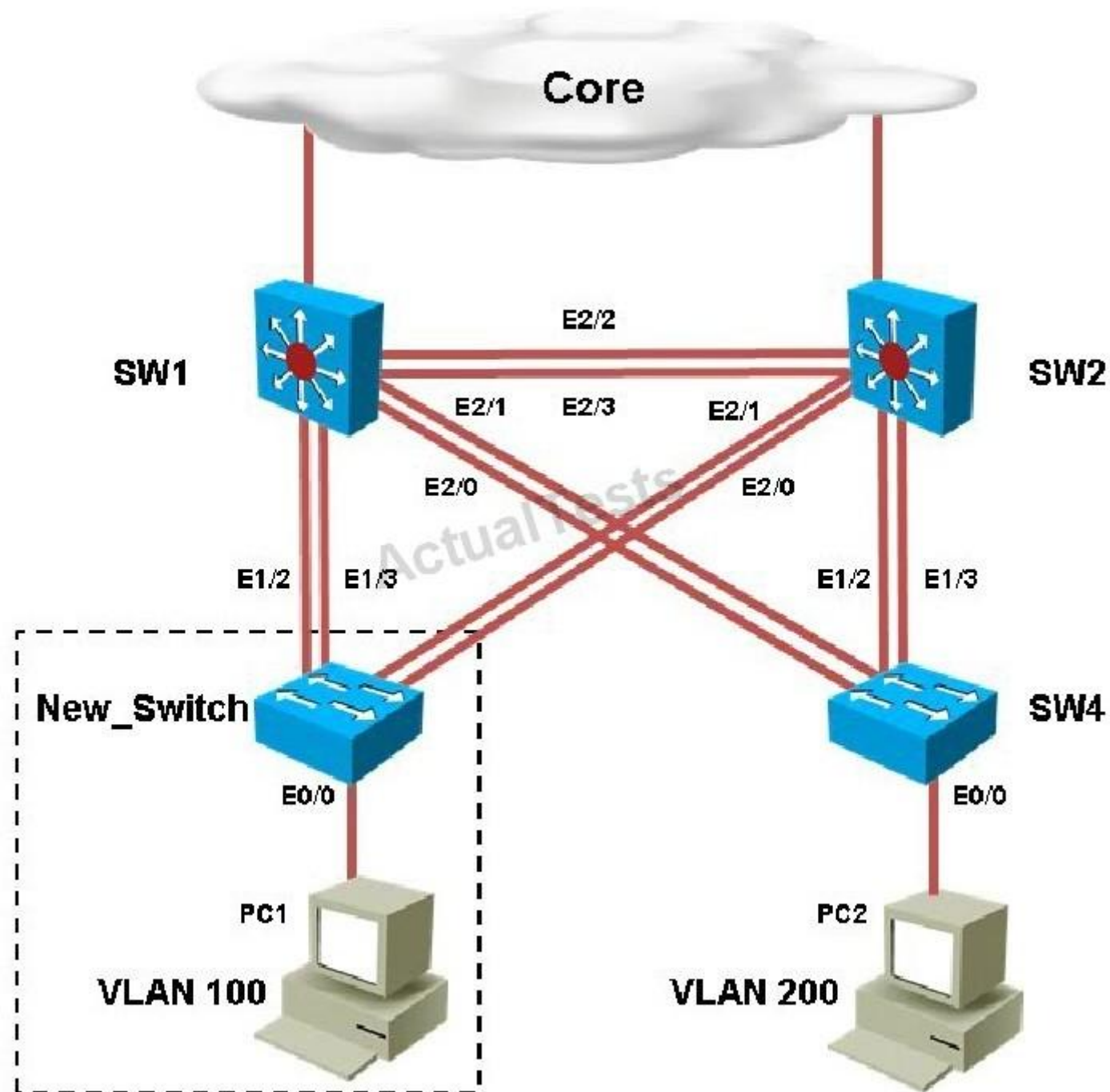SwitchC(config-router)# network 10.10.10.0 0.0.0.255 SwitchC(config-router)# network 190.200.250.32 0.0.0.31 SwitchC(config-router)# network 190.200.250.64 0.0.0.31 NOTE: THE ROUTER IS CORRECTLY CONFIGURED, so you will not miss within it in the exam, also don't modify/delete any port just do the above 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.
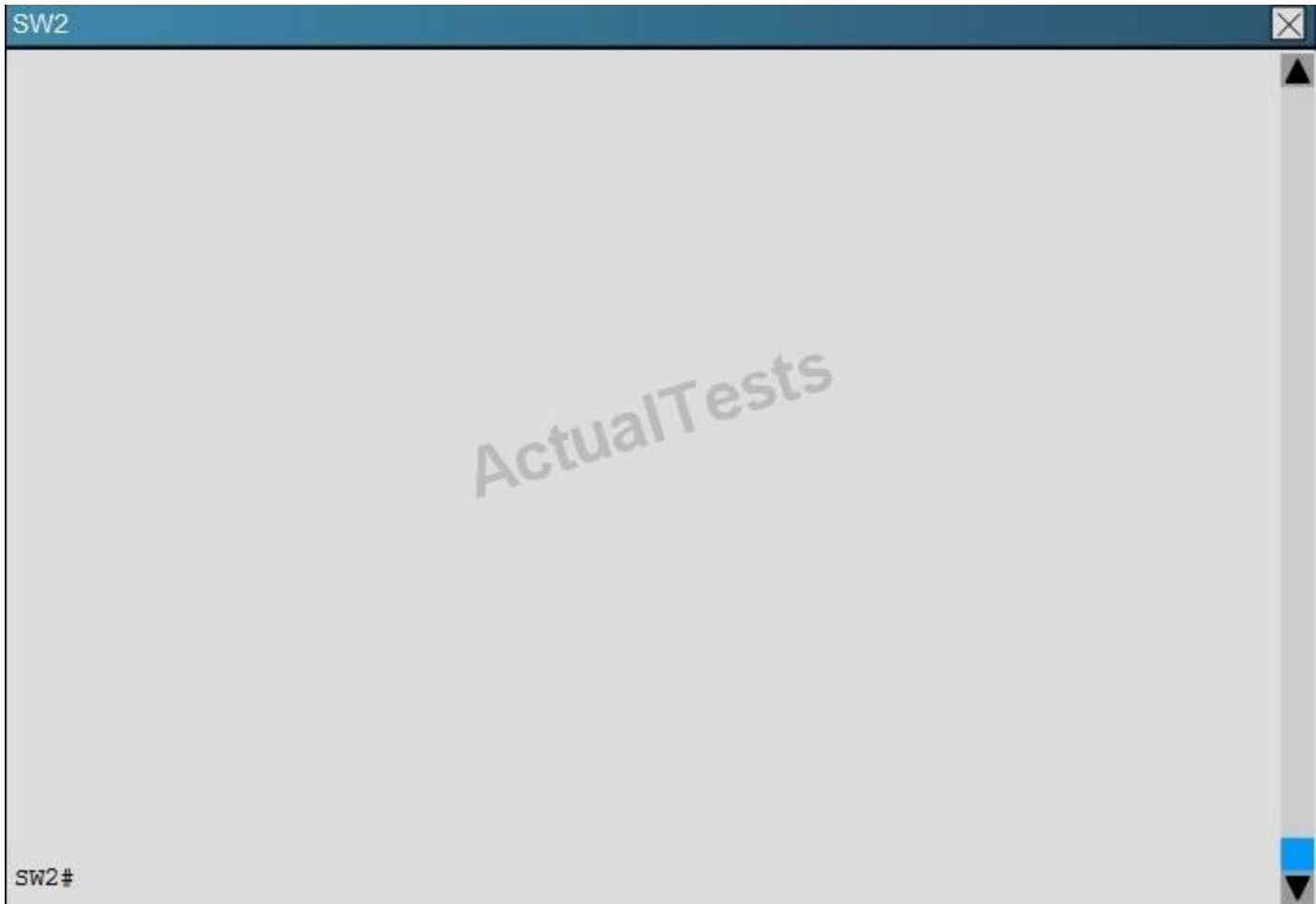In fact, we are pretty sure instead of using two commands "network 190.200.250.32 0.0.0.31 and "network 190.200.250.64 0.0.0.31 we can use one simple command "network 190.200.0.0 because it is the nature of distance vector routing protocol like EIGRP: only major networks need to be advertised; even without "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.

QUESTION 101
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.

Core

SW1

SW2

E2/2

E2/1   E2/3   E2/1

E2/0   E2/0

E1/2   E1/3   E1/2   E1/3

New_Switch

SW4

E0/0   E0/0

PC1

PC2

VLAN 100

VLAN 200

SW1

SW1#

SW2

SW2#

New_Switch

New_Switch#

SW4

SW4#

You are connecting the New_Switch to the LAN topology; the switch has been partially configured and you need to complete the rest of configuration to enable PC1 communication with PC2. Which of the configuration is correct?

○ vtp domain CCNP_TEST
  vtp password cisco123
  vtp version 3
  vtp mode server
  int e0/0
  switchport mode access
  switchport access vlan 100

○ vtp domain CCNP_TEST
  vtp password cisco123
  vtp version 3
  vtp mode client
  int e0/0
  switchport mode access
  switchport access vlan 200

○ vtp domain CCNP_TEST
  vtp password cisco123
  vtp version 2
  vtp mode client
  int e0/0
  switchport mode access
  switchport access vlan 100

○ vtp domain CCNP
  vtp password cisco
  vtp version 3
  vtp mode client
  int e0/0
  switchport mode access
  switchport access vlan 100

○ vtp domain CCNP
  vtp password cisco
  vtp version 2
  vtp mode transparent
  int e0/0
  switchport mode access
  switchport access vlan 200

A. Option A
B. Option B
C. Option C
D. Option D
E. Option E

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Within any VTP, the VTP domain name must match. So, step one is to find the correct VTP name on the other switches. Logging in to SW1 and using the "show vtp status" command we see this:

SW1

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

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

Feature MST:
```
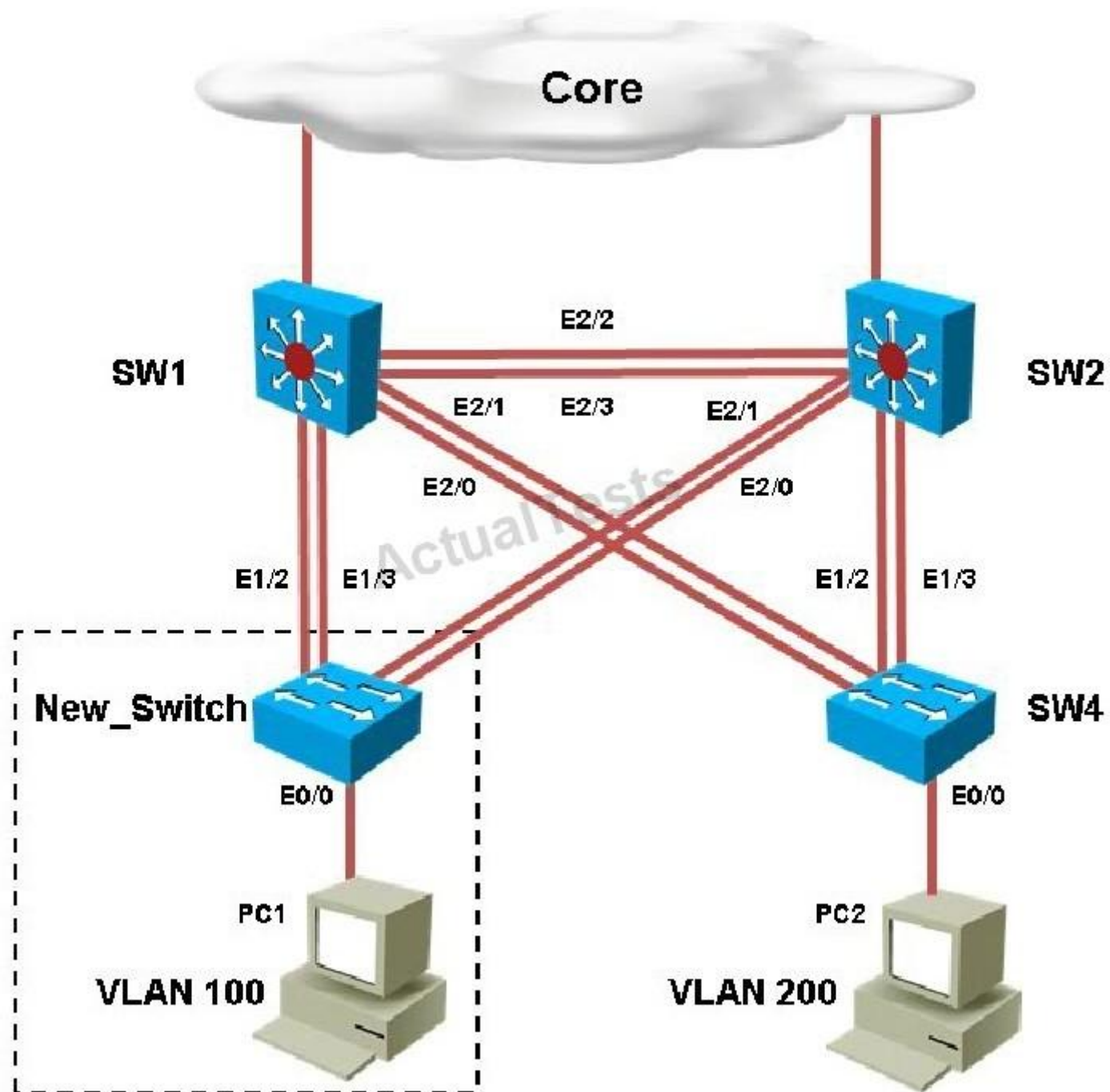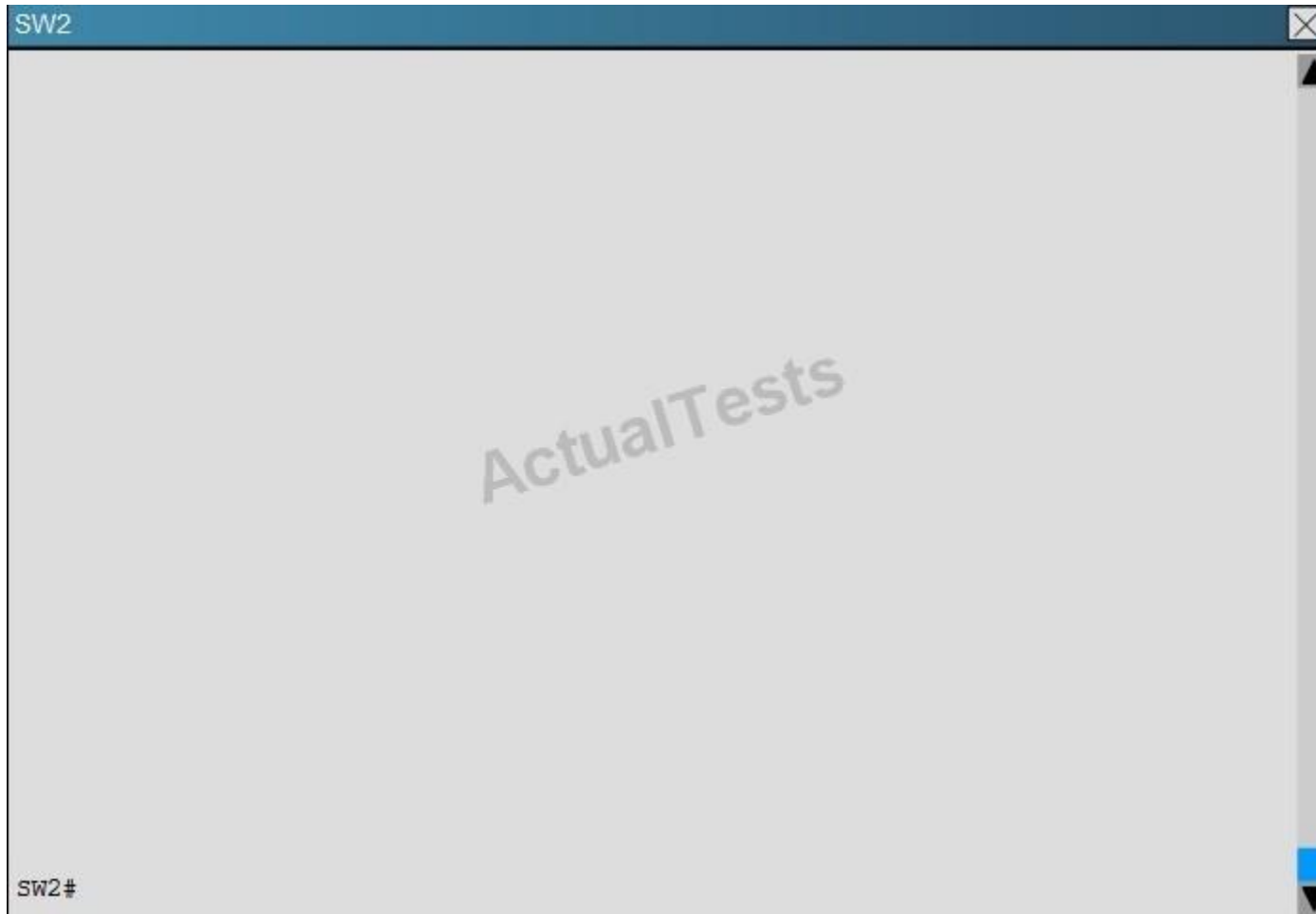
So we know that the VTP domain must be CCNP. This leaves only choice D and E. We also see from the topology diagram that eth 0/0 of the new switch connects to a PC in VLNA 100, so we know that this port must be an access port in VLAN 100, leaving only choice D as correct. Note that the VTP versions supported in this network are 1, 2, 3 so either VTP version 2 or 3 can be configured on the new switch.

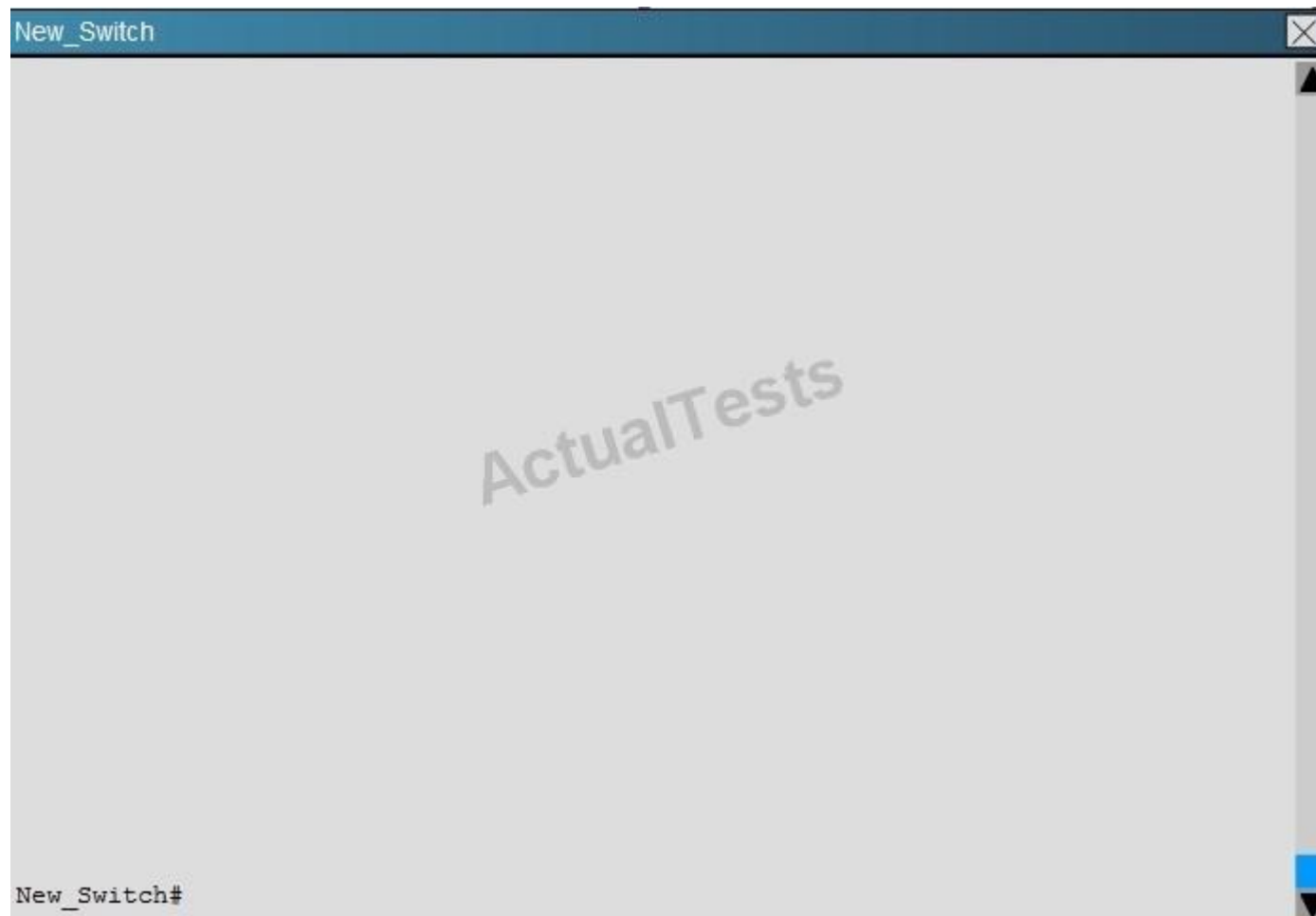**QUESTION 102**
You have been asked to install and configure a new switch in a customer network. Use the console access to the existing and new switches to configure and verify correct device configuration.

Core

SW1

SW2

E2/2

E2/1   E2/3   E2/1

E2/0   E2/0

E1/2   E1/3   E1/2   E1/3

New_Switch

SW4

E0/0   E0/0

PC1

PC2

VLAN 100   VLAN 200

SW1

SW1#

SW2

SW2#

New_Switch

New_Switch#

```
SW4                                                    ☒

                                                       ▲




              ActualTests




                                                       ■
SW4#                                                   ▼
```

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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
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.

SW1

```
SW1#show interfaces trunk

Port          Mode          Encapsulation  Status      Native vlan
Et1/2         on            802.1q         trunking    99
Et1/3         on            802.1q         trunking    99
Et2/0         on            802.1q         trunking    99
Et2/1         on            802.1q         trunking    99
Et2/2         on            802.1q         trunking    99
Et2/3         on            802.1q         trunking    99
```

SW2

```
SW2#show interfaces trunk

Port            Mode              Encapsulation  Status           Native vlan
Et1/2           on                802.1q         trunking         99
Et1/3           on                802.1q         trunking         99
Et2/0           on                802.1q         trunking         99
Et2/1           on                802.1q         trunking         99
Et2/2           on                802.1q         trunking         99
Et2/3           on                802.1q         trunking         99
```
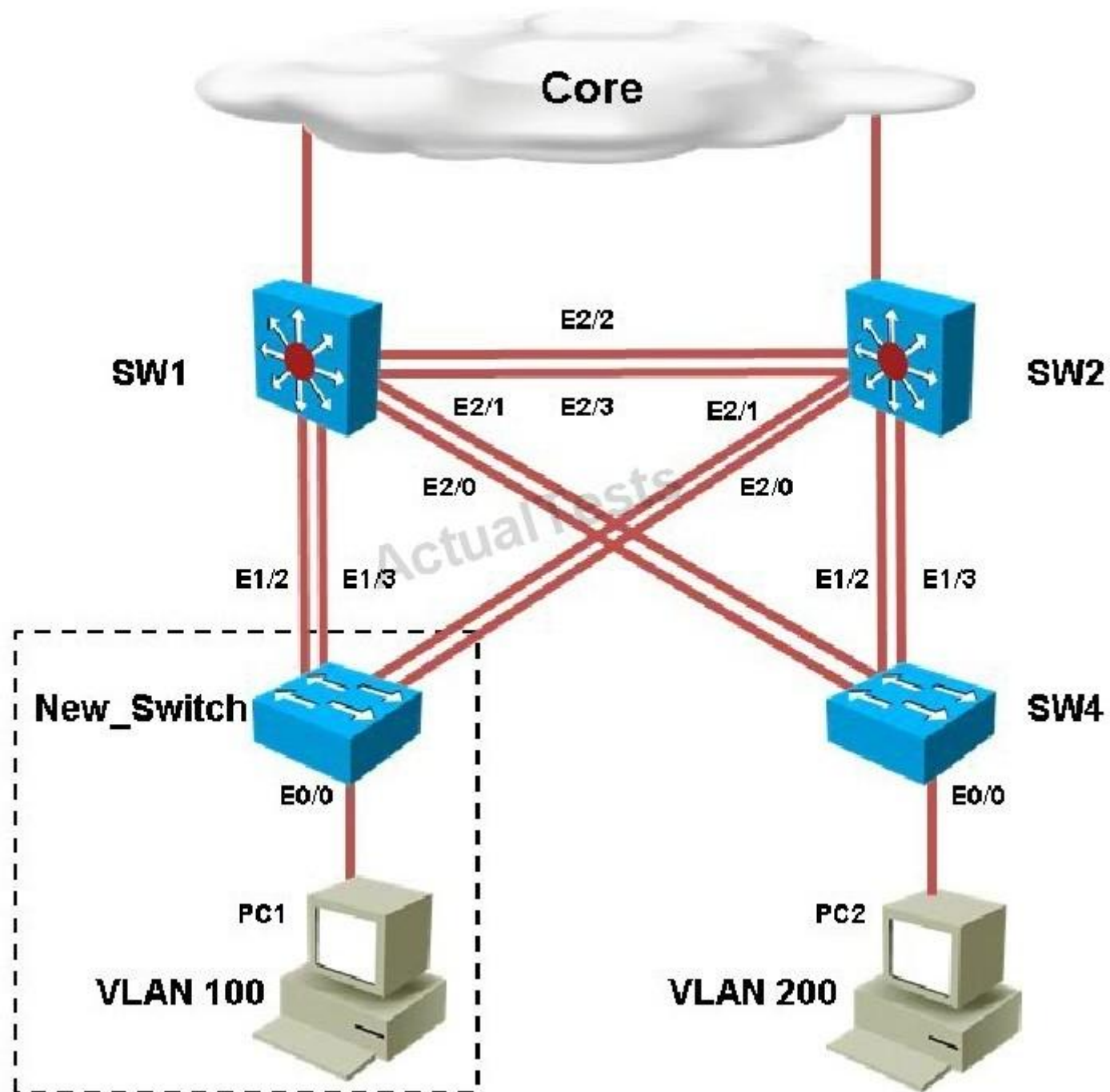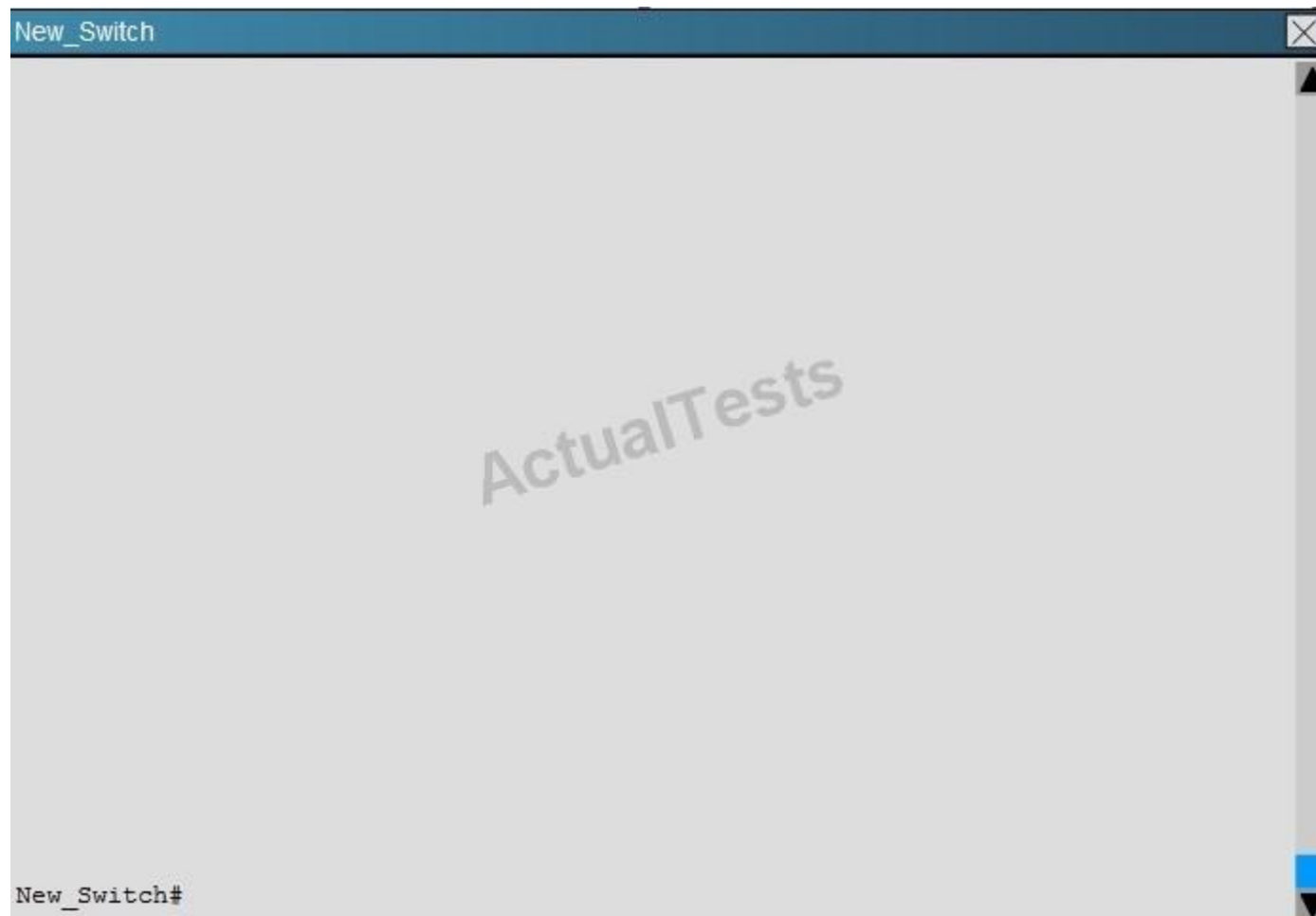
QUESTION 103
You have been asked to install and configure a new switch in a customer network. Use the console access to the existing and new switches to configure and verify correct device configuration.

Core

SW1

SW2

E2/2

E2/1   E2/3   E2/1

E2/0   E2/0

E1/2   E1/3   E1/2   E1/3

New_Switch

SW4

E0/0   E0/0

PC1   PC2

VLAN 100   VLAN 200

SW1   ☒

ActualTests

SW1#

SW2

SW2#

New_Switch

New_Switch#

```
SW4

SW4#
```

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

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

Correct Answer: A
Section: (none)
Explanation

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

SW1

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

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

SW2

```
SW2#show vtp status
VTP Version capable              : 1 to 3
VTP version running              : 3
VTP Domain Name                  : CCNP
VTP Pruning Mode                 : Enabled
VTP Traps Generation             : Disabled
Device ID                        : aabb.cc00.2600

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

SW4

```
SW4#show vtp status
VTP Version capable                  : 1 to 3
VTP version running                  : 3
VTP Domain Name                      : CCNP
VTP Pruning Mode                     : Enabled
VTP Traps Generation                 : Disabled
Device ID                            : aabb.cc00.2800

Feature VLAN:
---------------
VTP Operating Mode                   : Client
Number of existing VLANs             : 8
Number of existing extended VLANs    : 0
Maximum VLANs supported locally      : 4096
Configuration Revision               : 11
Primary ID                           : aabb.cc00.2b00
Primary Description                  : SW1
MD5 digest                           : 0xA2 0xFA 0x6E 0x8D 0xD0 0xDE 0x5A 0xEF
                                       0xE3 0x65 0x9A 0xF7 0x03 0xBF 0xBA 0x10
```
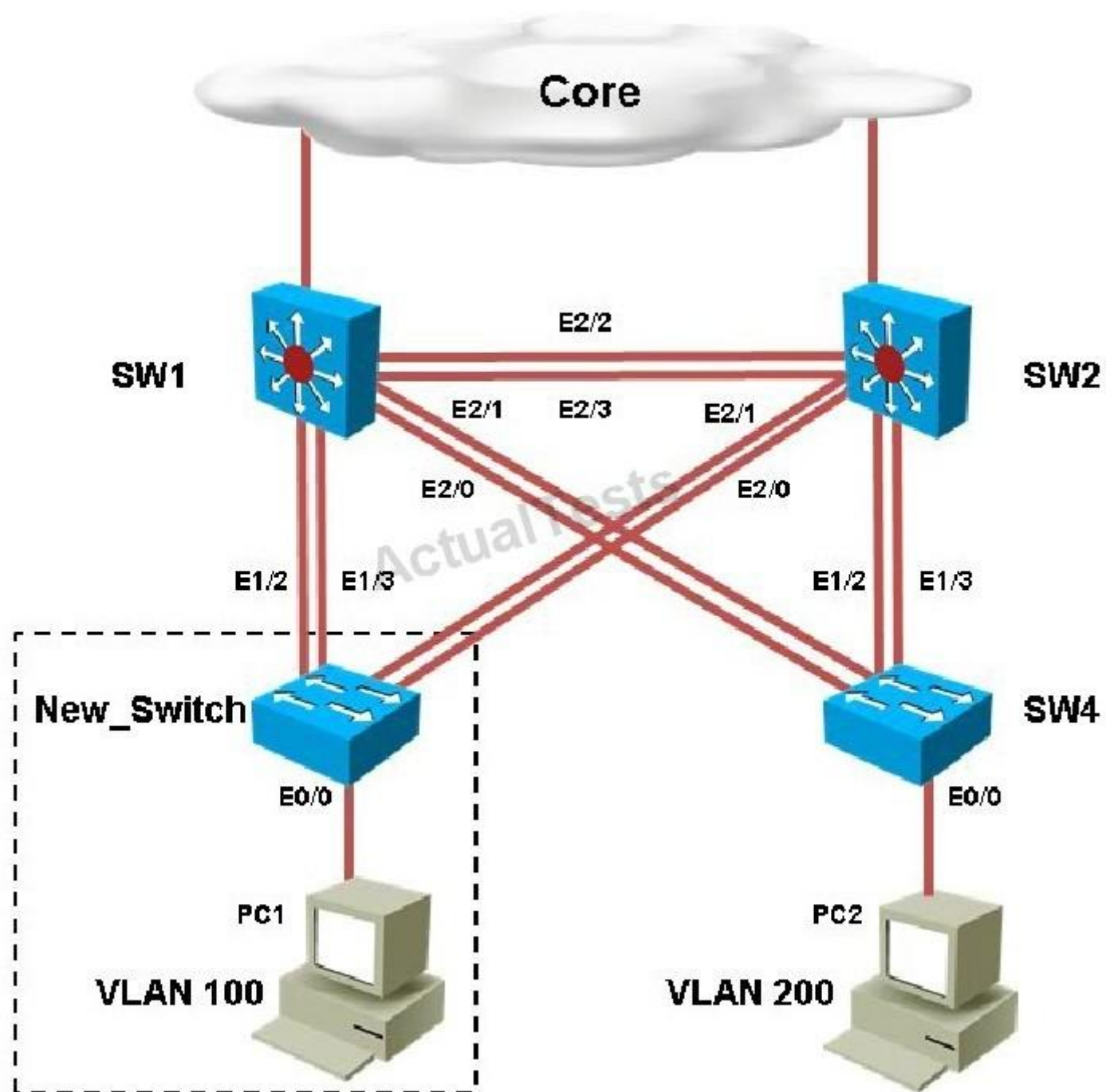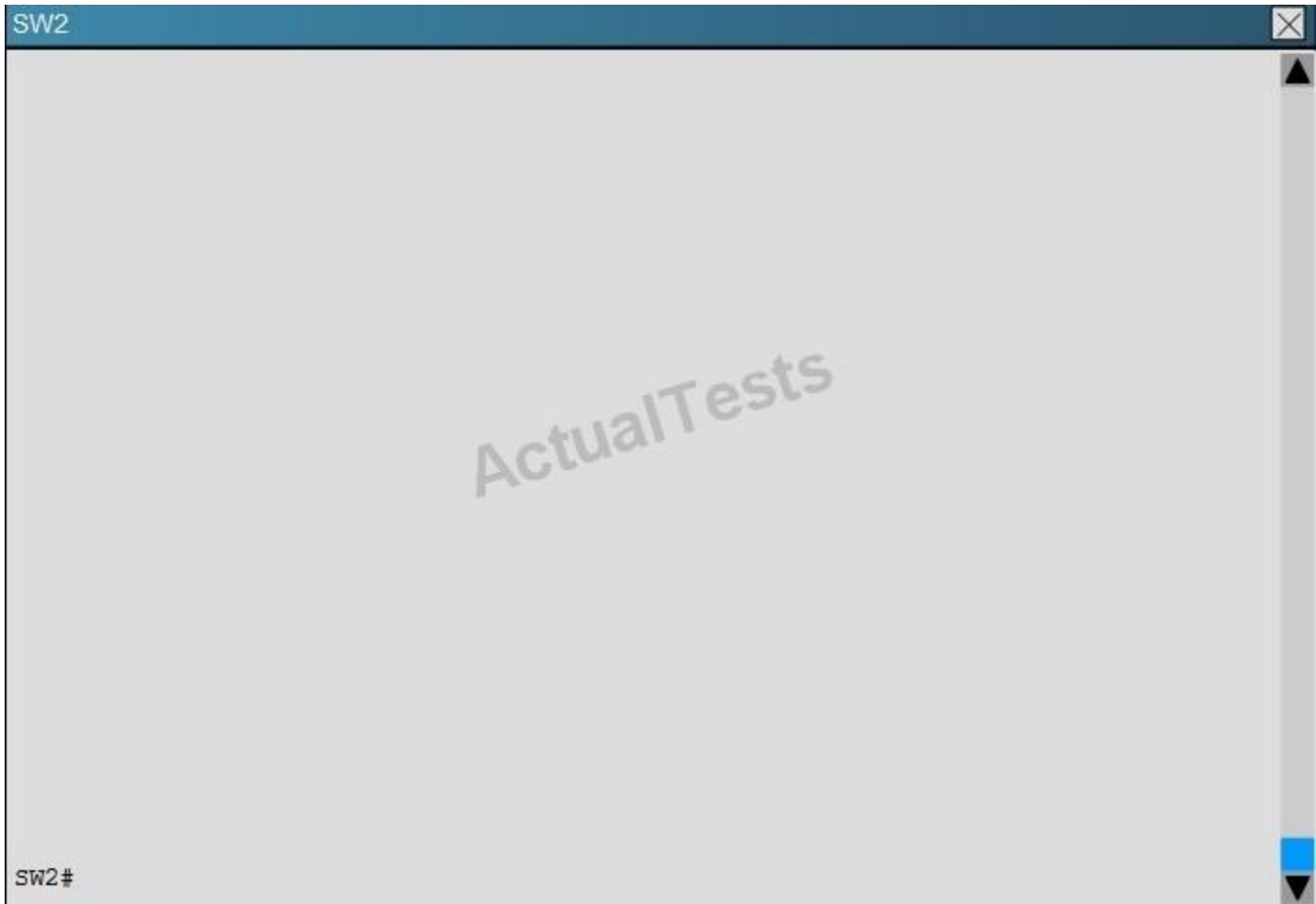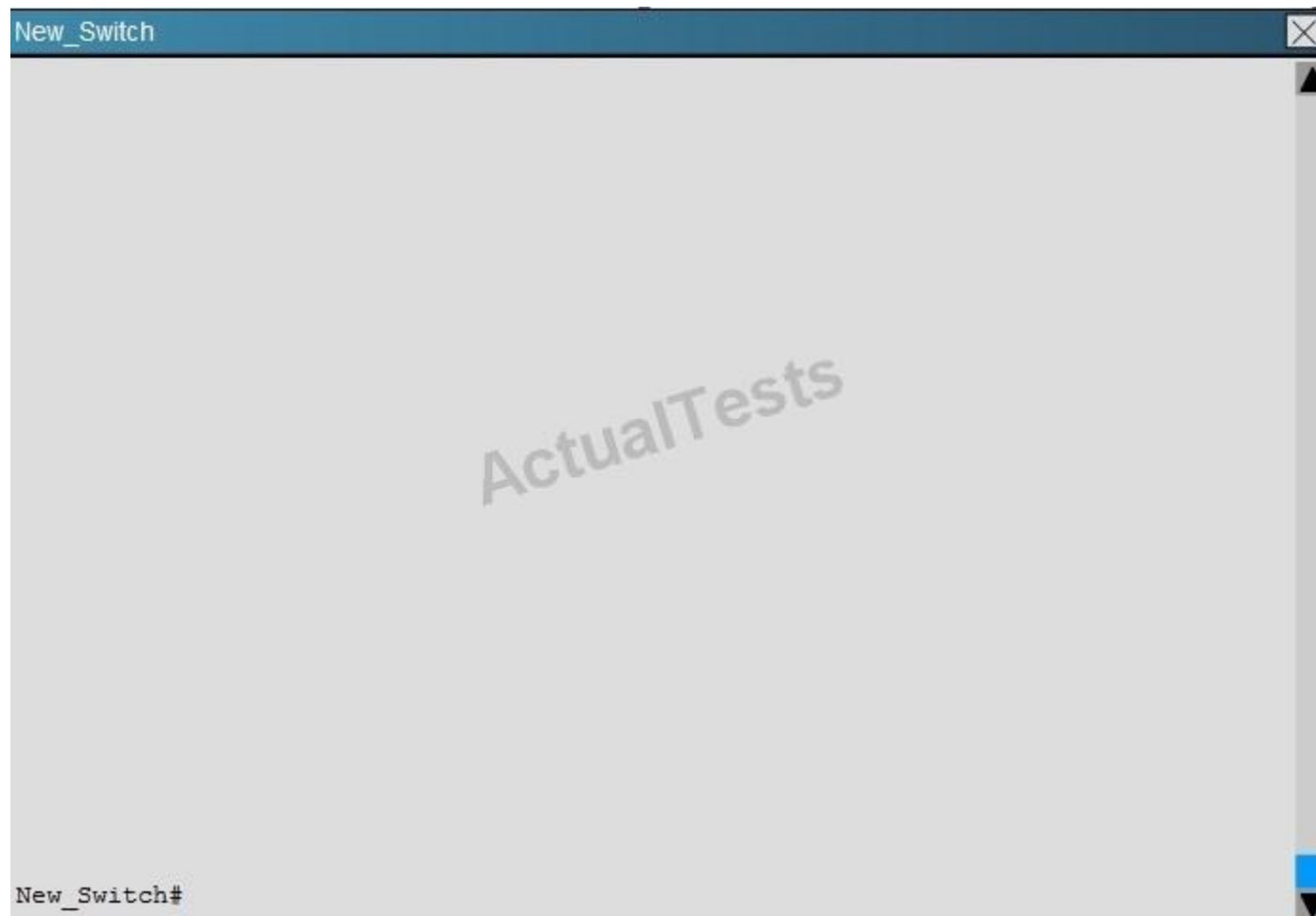
QUESTION 104
You have been asked to install and configure a new switch in a customer network. Use the console access to the existing and new switches to configure and verify correct device configuration.

Core

SW1

SW2

E2/2

E2/1   E2/3   E2/1

E2/0   E2/0

E1/2   E1/3   E1/2   E1/3

New_Switch

SW4

E0/0   E0/0

PC1

PC2

VLAN 100   VLAN 200

SW1

ActualTests

SW1#

SW2

SW2#

New_Switch

New_Switch#

SW4   ☒

                                                                        ▲

                            ActualTests

SW4#   ▼

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

A. Disable VTP pruning on SW1 only
B. Disable VTP pruning on SW2 only
C. Disable VTP pruning on SW4 only
D. Disable VTP pruning on SW2, SW4 and New_Switch
E. Disable VTP pruning on New_Switch and SW4 only.

Correct Answer: C
Section: (none)
Explanation

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

Topic 2, Infrastructure Security

QUESTION 105
A Cisco Catalyst switch that is prone to reboots continues to rebuild the DHCP snooping database. What is the solution to avoid the snooping database from being rebuilt after every device reboot?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 106
Which portion of AAA looks at what a user has access to?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 107
Which command creates a login authentication method named "login" that will primarily use RADIUS and fail over to the local user database?

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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 108
A server with a statically assigned IP address is attached to a switch that is provisioned for DHCP snooping. For more protection against malicious attacks, the network team is considering enabling dynamic ARP inspection alongside DHCP snooping. Which solution ensures that the server maintains network reachability in the future?

A. Disable DHCP snooping information option.
B. Configure a static DHCP snooping binding entry on the switch.
C. Trust the interface that is connected to the server with the ip dhcp snooping trust command.
D. Verify the source MAC address of all untrusted interfaces with ip dhcp snooping verify mac- address command.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 109
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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 110
DHCP snooping and IP Source Guard have been configured on a switch that connects to several client workstations. The IP address of one of the workstations does not match any entries found in the DHCP binding database. Which statement describes the outcome of this scenario?

A. Packets from the workstation will be rate limited according to the default values set on the switch.

B. The interface that is connected to the workstation in question will be put into the errdisabled state.

C. Traffic will pass accordingly after the new IP address is populated into the binding database.

D. The packets originating from the workstation are assumed to be spoofed and will be discarded.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 111
A DHCP configured router is connected directly to a switch that has been provisioned with DHCP snooping. IP Source Guard with the ip verify source port-security command is configured under the interfaces that connect to all DHCP clients on the switch. However, clients are not receiving an IP address via the DHCP server. Which option is the cause of this issue?

A. The DHCP server does not support information option 82.

B. The DHCP client interfaces have storm control configured.

C. Static DHCP bindings are not configured on the switch.

D. DHCP snooping must be enabled on all VLANs, even if they are not utilized for dynamic address allocation.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 112
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.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 113
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.

Correct Answer: CDF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 114

After port security is deployed throughout an enterprise campus, the network team has been overwhelmed with port reset requests. They decide to configure the network to automate the process of re-enabling user ports. Which command accomplishes this task?

A. switch(config)# errdisable recovery interval 180
B. switch(config)# errdisable recovery cause psecure-violation
C. switch(config)# switchport port-security protect
D. switch(config)# switchport port-security aging type inactivity
E. switch(config)# errdisable recovery cause security-violation

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 115
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>

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 116
While troubleshooting a network outage, a network engineer discovered an unusually high level of broadcast traffic coming from one of the switch interfaces. Which option decreases consumption of bandwidth used by broadcast traffic?

A. storm control
B. SDM routing
C. Cisco IOS parser

D. integrated routing and bridging

E. Dynamic ARP Inspection

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 117
Which command globally enables AAA on a device?

A. aaa new-model

B. aaa authentication

C. aaa authorization

D. aaa accounting

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 118
Which AAA Authorization type includes PPP, SLIP, and ARAP connections?

A. network

B. IP mobile

C. EXEC

D. auth-proxy

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 119
Which authentication service is needed to configure 802.1x?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 120
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 loging NO_AUTH none
!
line vty 0 15
login authentication default
password linepass
line console 0
login authentication NO_AUTH
```

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

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 121
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 loging 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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 122
Which type of information does the DHCP snooping binding database contain?

A. untrusted hosts with leased IP addresses
B. trusted hosts with leased IP addresses
C. untrusted hosts with available IP addresses
D. trusted hosts with available IP addresses

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 123
Which switch feature determines validity based on IP-to-MAC address bindings that are stored in a trusted database?

A. Dynamic ARP Inspection
B. storm control
C. VTP pruning
D. DHCP snooping

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 124
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

Correct Answer: A

QUESTION 125
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 126
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 127
Which database is used to determine the validity of an ARP packet based on a valid IP-to-MAC address binding?

A. DHCP snooping database

B. dynamic ARP database

C. dynamic routing database

D. static ARP database

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 128
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 129
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 130
Which command would a network engineer apply to error-disable a switchport when a packet- storm is detected?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 131
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 132
Which feature describes MAC addresses that are dynamically learned or manually configured, stored in the address table, and added to the running configuration?

A. sticky
B. dynamic
C. static

D. secure

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 133
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 134
When you configure private VLANs on a switch, which port type connects the switch to the gateway router?

A. promiscuous
B. community
C. isolated
D. trunked

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 135
When you configure a private VLAN, which type of port must you configure the gateway router port as?

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

Correct Answer: A
Section: (none)
Explanation

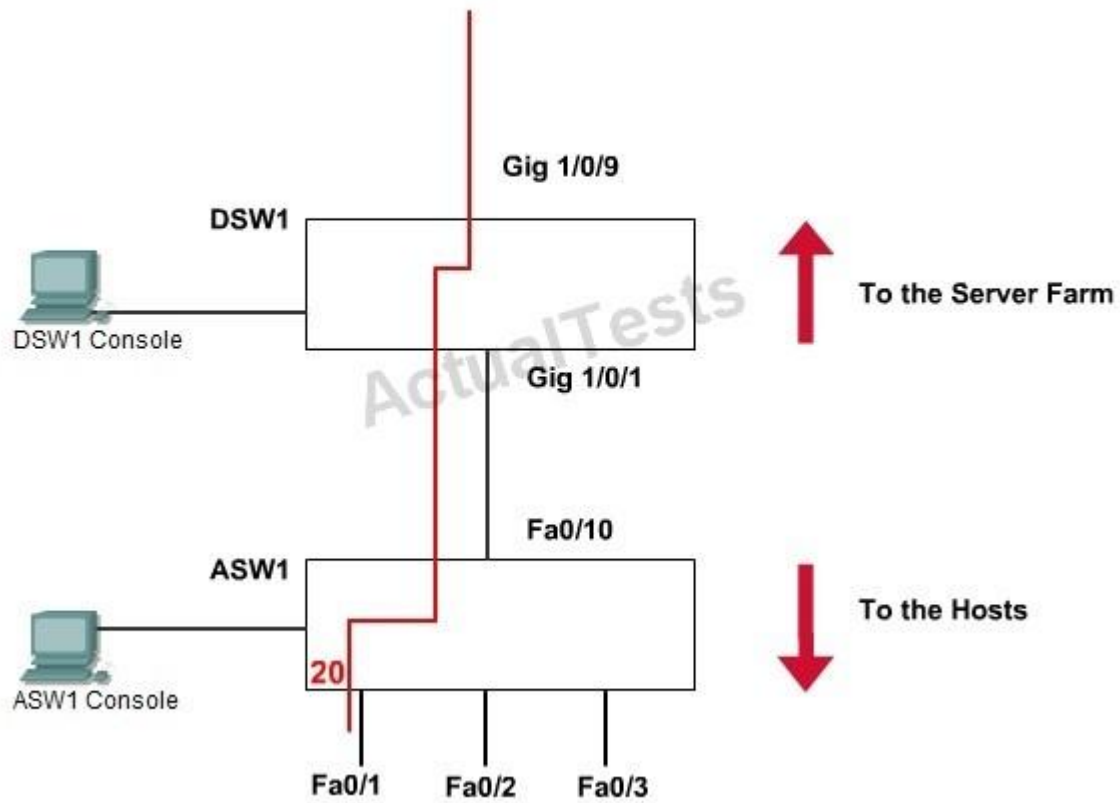**Explanation/Reference:**
Explanation:

QUESTION 136
CORRECT TEXT

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 polices 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 portfO/1 on ASW1 must be authenticated before they are given access to the network. Authentication is to be done via a Radius server:

· Radius server host: 172.120.40.46

· Radius key: rad123

· Authentication should be implemented as close to the host as possible.

· Devices on VLAN 20 are restricted to the subnet of 172.120.40.0/24.

· Packets from devices in the subnet of 172.120.40.0/24 should be allowed on VLAN 20.

· Packets from devices in any other address range should be dropped on VLAN 20.

· Filtering should be implemented as close to the serverfarm as possible.

The Radius server and application servers will be installed at a future date. You have been tasked with implementing the above access control as a pre-condition to installing the servers. You must use the available IOS switch features.

Gig 1/0/9

DSW1

DSW1 Console

To the Server Farm

Gig 1/0/1

Fa0/10

ASW1

ASW1 Console

20

To the Hosts

Fa0/1   Fa0/2   Fa0/3

```
DSW1 Console                                    [_]

DSW1>
```

ASW1 Console ☐

ActualTests

ASW1>

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:
Answer: 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

Topic 3, Infrastructure Services

QUESTION 137
Which configuration command ties the router hot standby priority to the availability of its interfaces?

A. standby group
B. standby priority
C. backup interface
D. standby track

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 138
What is the default HSRP priority?

A. 50
B. 100

C. 120
D. 1024

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 139
Which option is a benefit of using VSS?

A. reduces cost
B. simplifies configuration
C. provides two independent supervisors with two different control planes
D. removes the need for a First Hop Redundancy Protocol

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 140
Which First Hop Redundancy Protocol is an IEEE Standard?

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 141
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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 142
What is the maximum number of virtual MAC addresses that GLBP allows per group?

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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 143
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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 144
Which VRRP router is responsible for forwarding packets that are sent to the IP addresses of the virtual router?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 145
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 146
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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 147
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

Correct Answer: D
Section: (none)
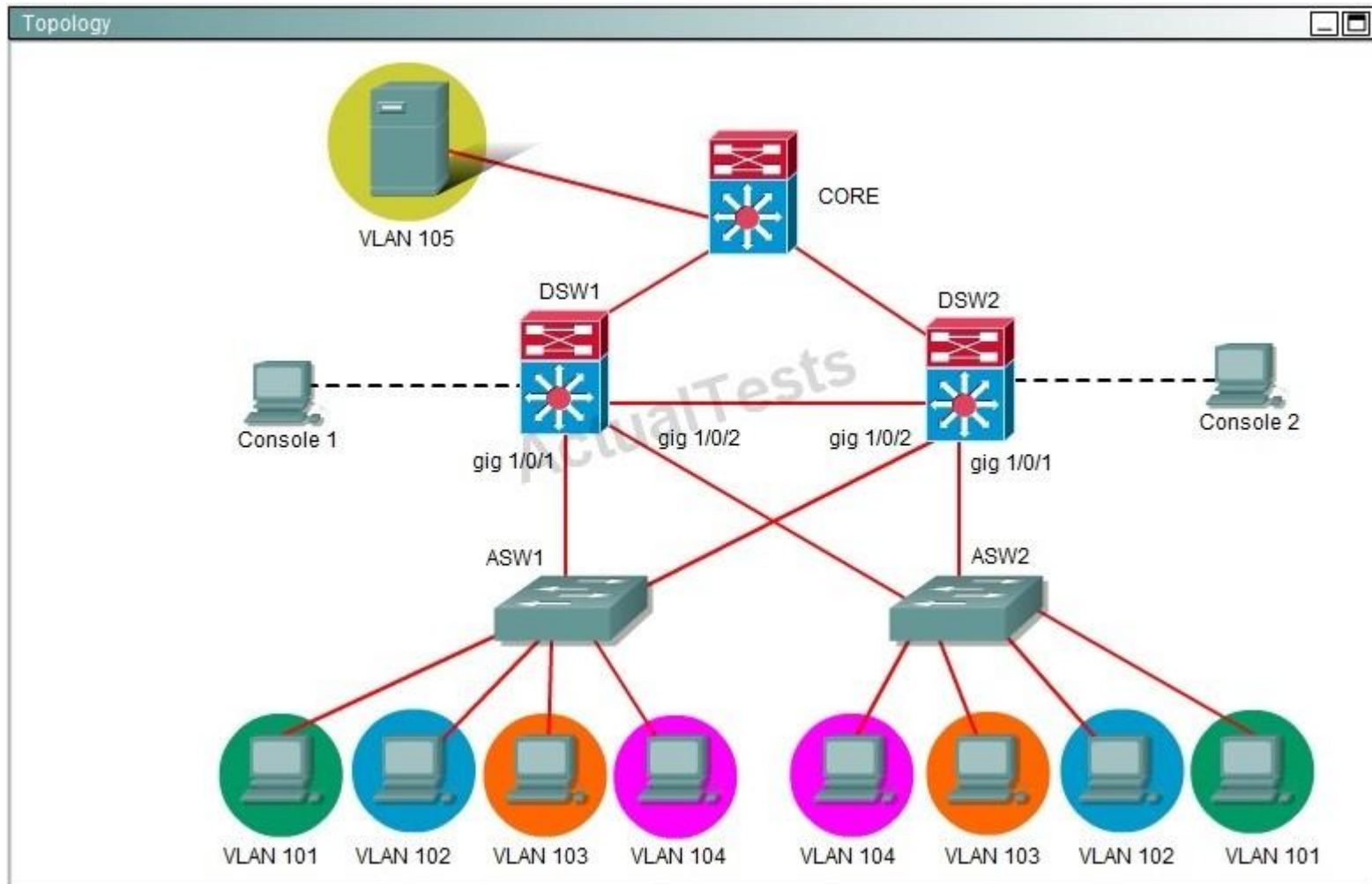**Explanation**

Explanation/Reference:
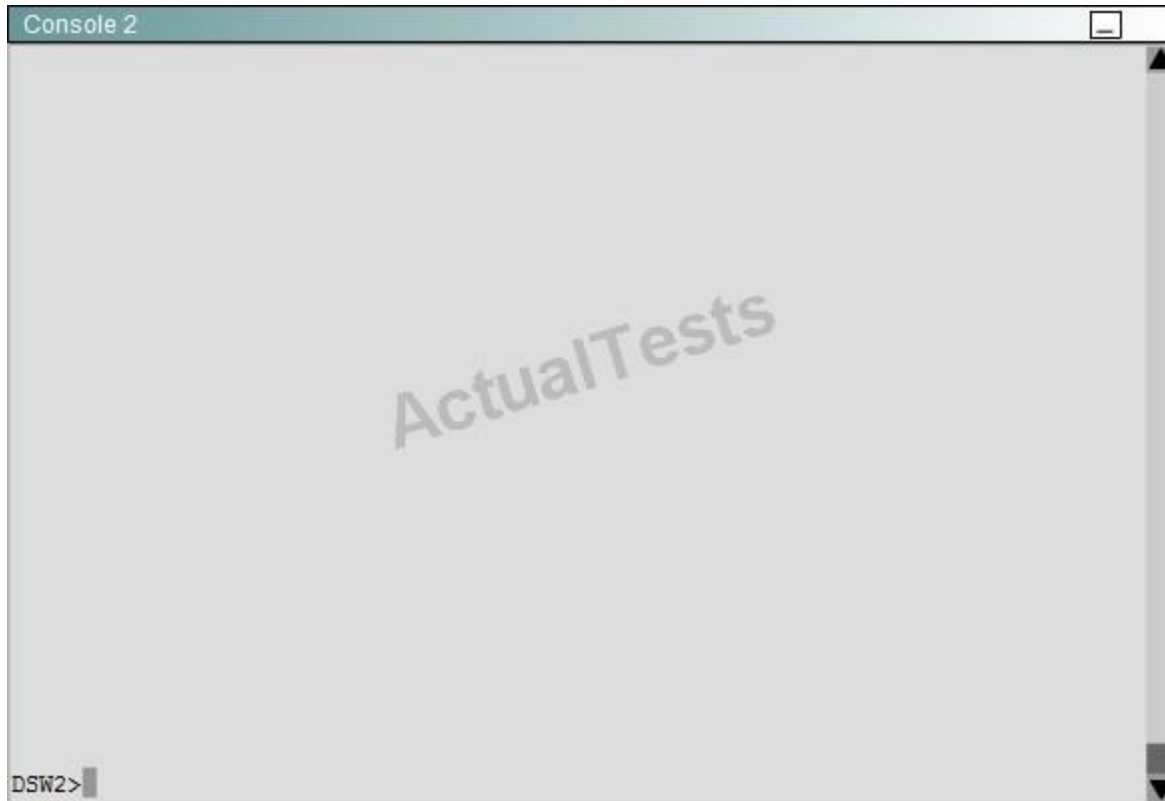Explanation:

QUESTION 148
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 GigabitEthemet1/0/1 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.

Topology

CORE

VLAN 105

DSW1

DSW2

Console 1

gig 1/0/1

gig 1/0/2

gig 1/0/2

gig 1/0/1

Console 2

ASW1

ASW2

VLAN 101   VLAN 102   VLAN 103   VLAN 104   VLAN 104   VLAN 103   VLAN 102   VLAN 101

Console 1

DSW1>

```
Console 2                                          _

                      ActualTests




DSW2>|
```

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 GigabitEthemet1/0/1 on DSW1 was reactivated, DSW1 did not become the active router for VLAN 101 as desired. What needs to be done to make the group for VLAN 101 function properly?

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

Correct Answer: A
Section: (none)
Explanation
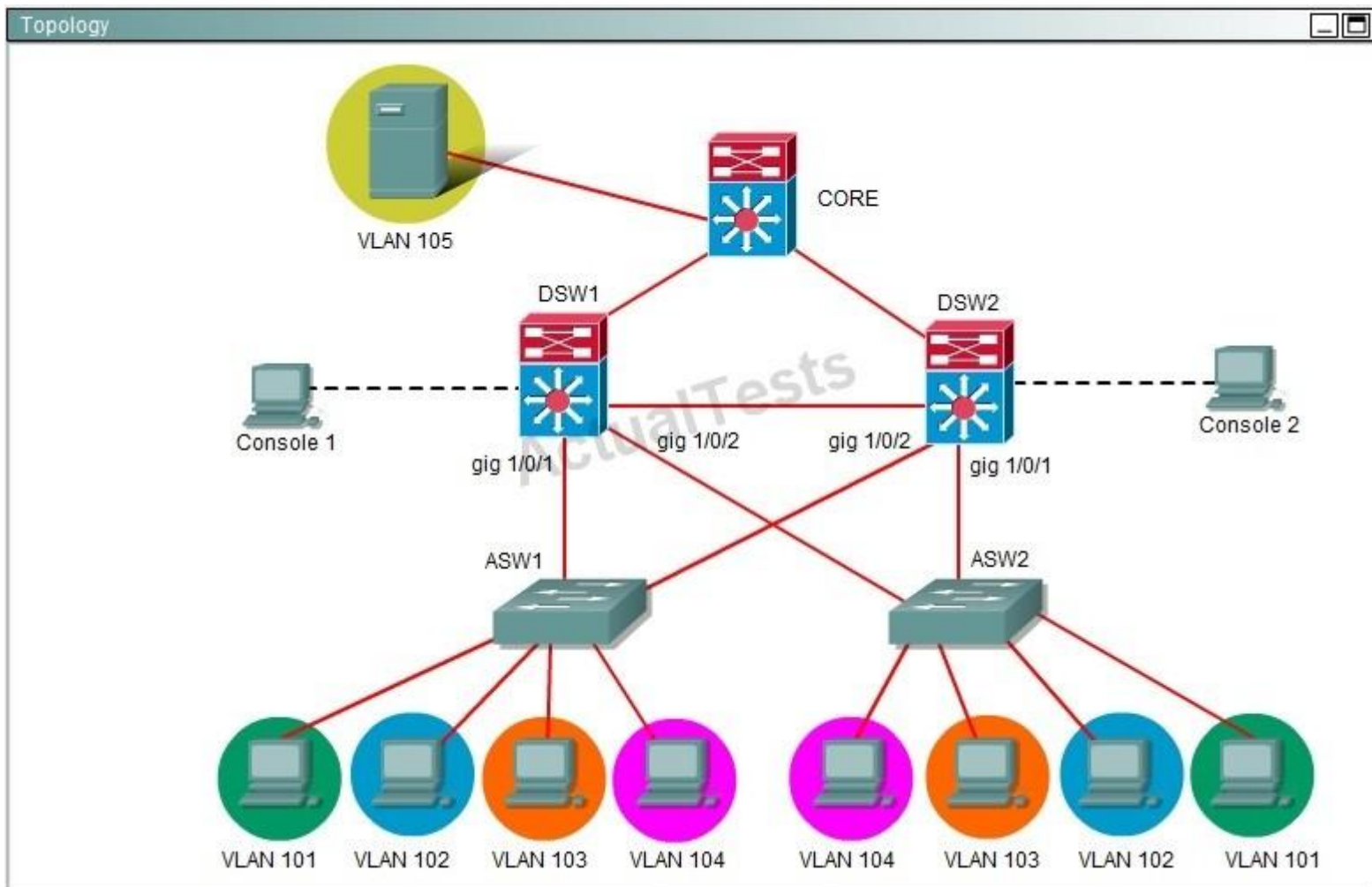
Explanation/Reference:
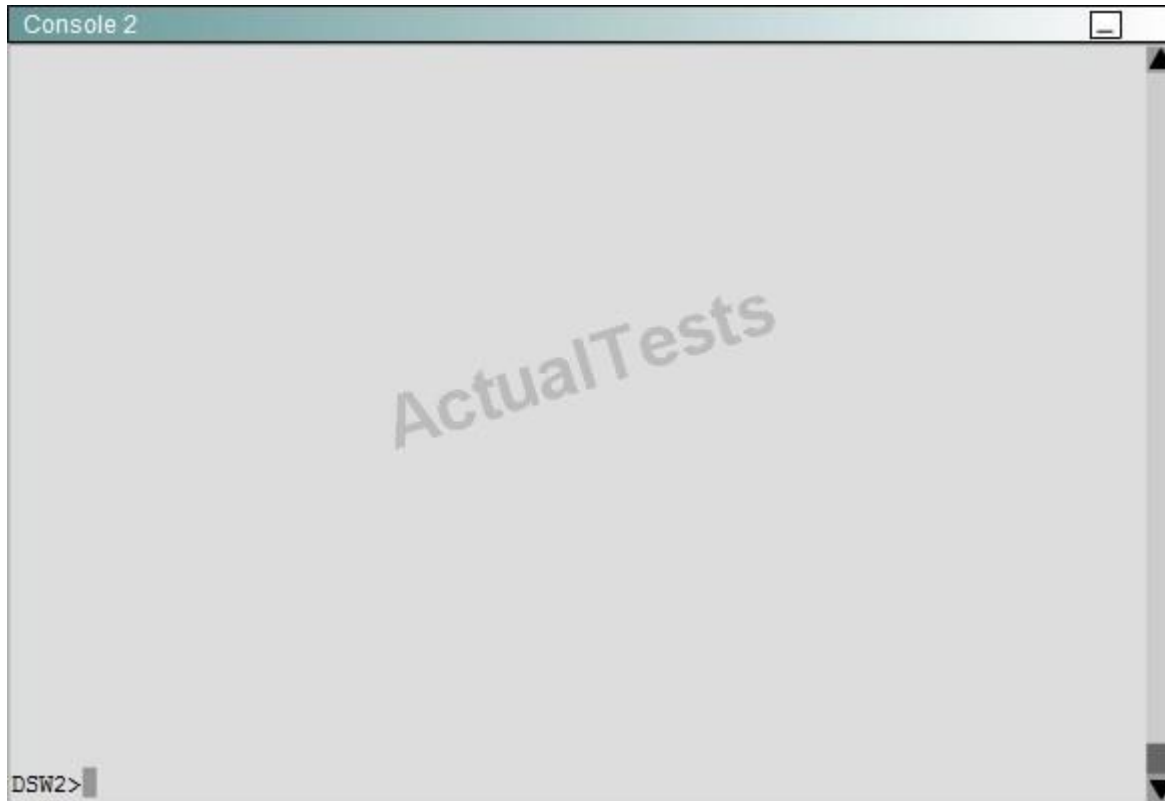Explanation:

QUESTION 149
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 GigabitEthemet1/0/1 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.

Topology

CORE

VLAN 105

DSW1   DSW2

Console 1   Console 2

gig 1/0/1   gig 1/0/2   gig 1/0/2   gig 1/0/1

ASW1   ASW2

VLAN 101   VLAN 102   VLAN 103   VLAN 104   VLAN 104   VLAN 103   VLAN 102   VLAN 101

```
Console 1                                                    [_]

















DSW1>
```

```
Console 2                                              □


                        ActualTests




DSW2>
```

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?

A. The decrement value on DSW1 should be greaterthan 5 and less than 15. 0
B. The decrement value on DSW1 should be greaterthan 9 and less than 15.
C. The decrement value on DSW1 should be greaterthan 11 and less than 19.
D. The decrement value on DSWTs should be greaterthan 190 and less than 200.
E. The decrement value on DSWTs should be greaterthan 195 and less than 205.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
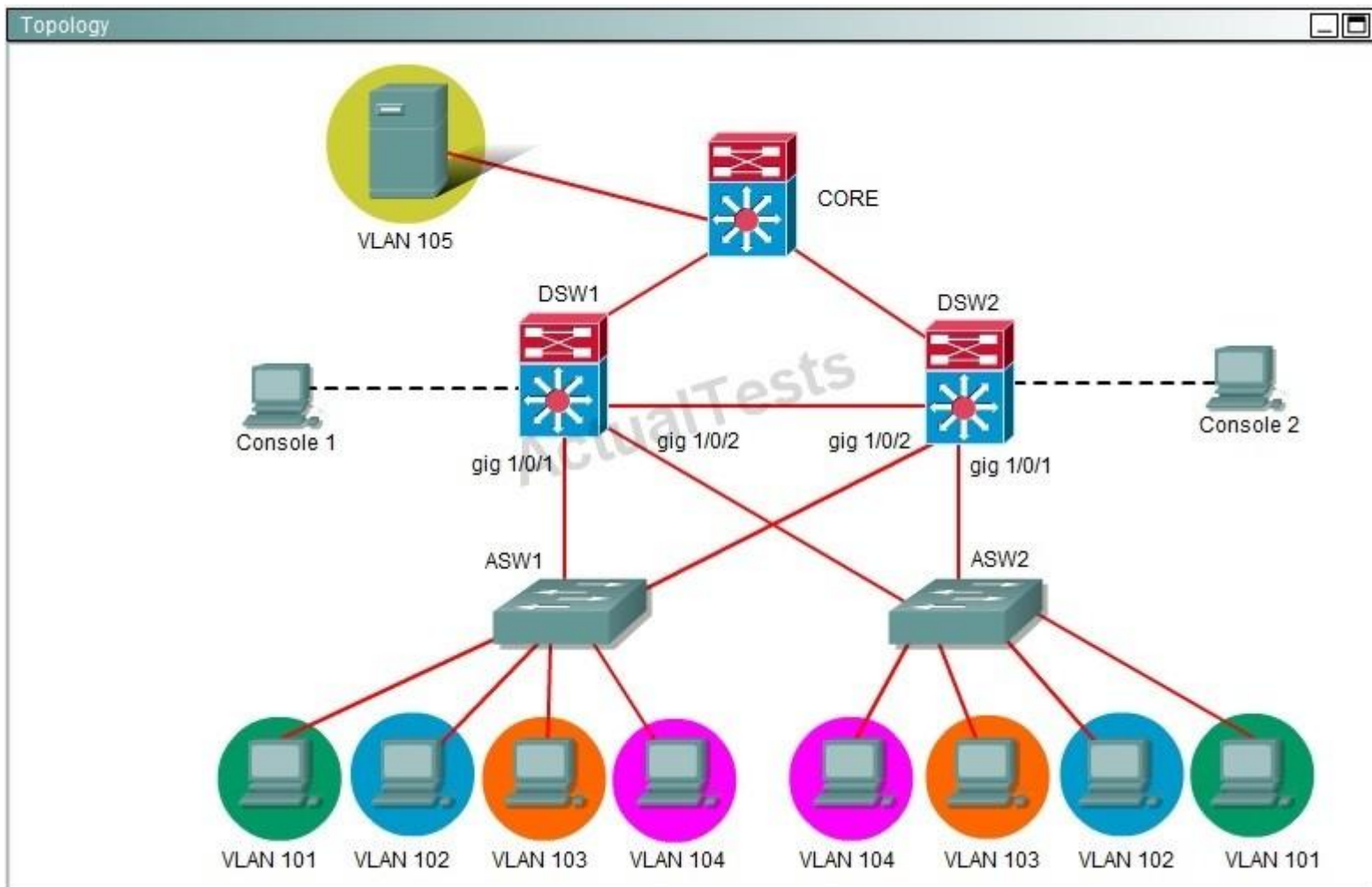Explanation:

QUESTION 150
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.

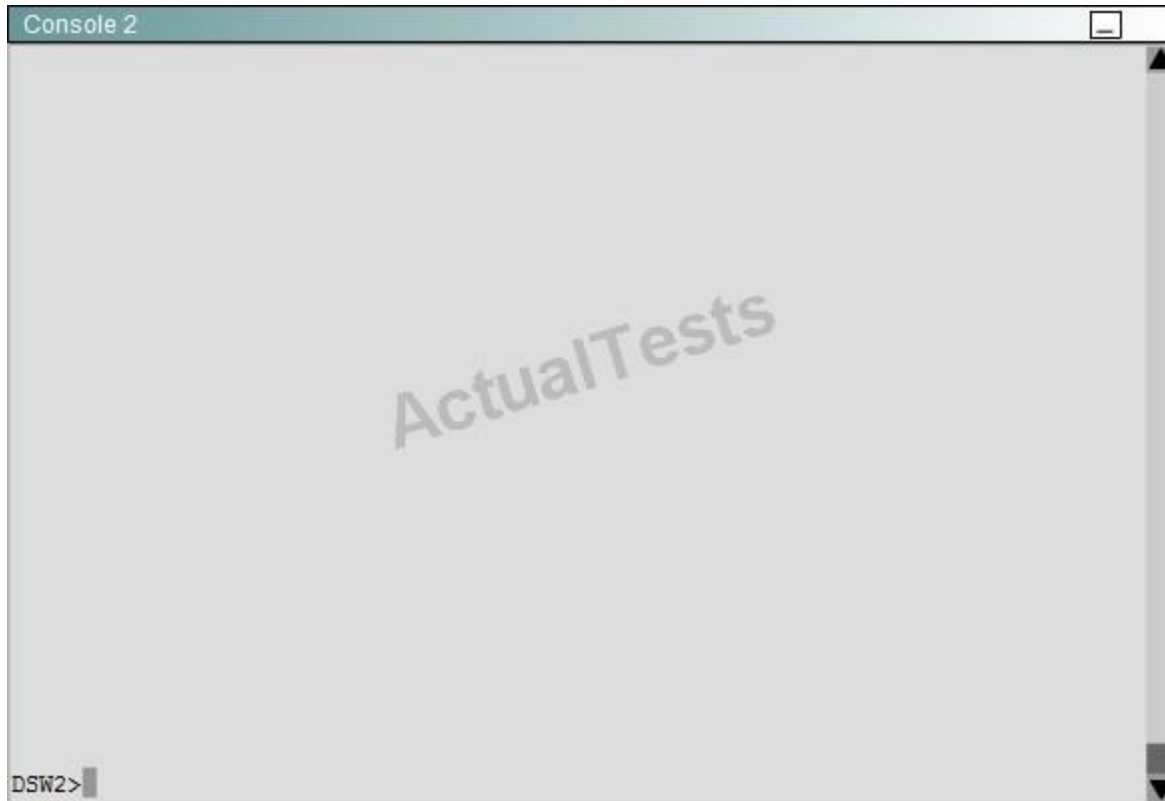· DSW1 -primary device for VLAN 101 VLAN 102 and VLAN 105

· DSW2 - primary device for VLAN 103 and VLAN 104

· A failure of GigabitEthemet1/0/1 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.

Topology

CORE

DSW1   DSW2

VLAN 105

Console 1   Console 2

gig 1/0/1   gig 1/0/2   gig 1/0/2   gig 1/0/1

ASW1   ASW2

VLAN 101   VLAN 102   VLAN 103   VLAN 104   VLAN 104   VLAN 103   VLAN 102   VLAN 101

DSW1>

Console 2   ▬

ActualTests

DSW2>

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

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

Correct Answer: C
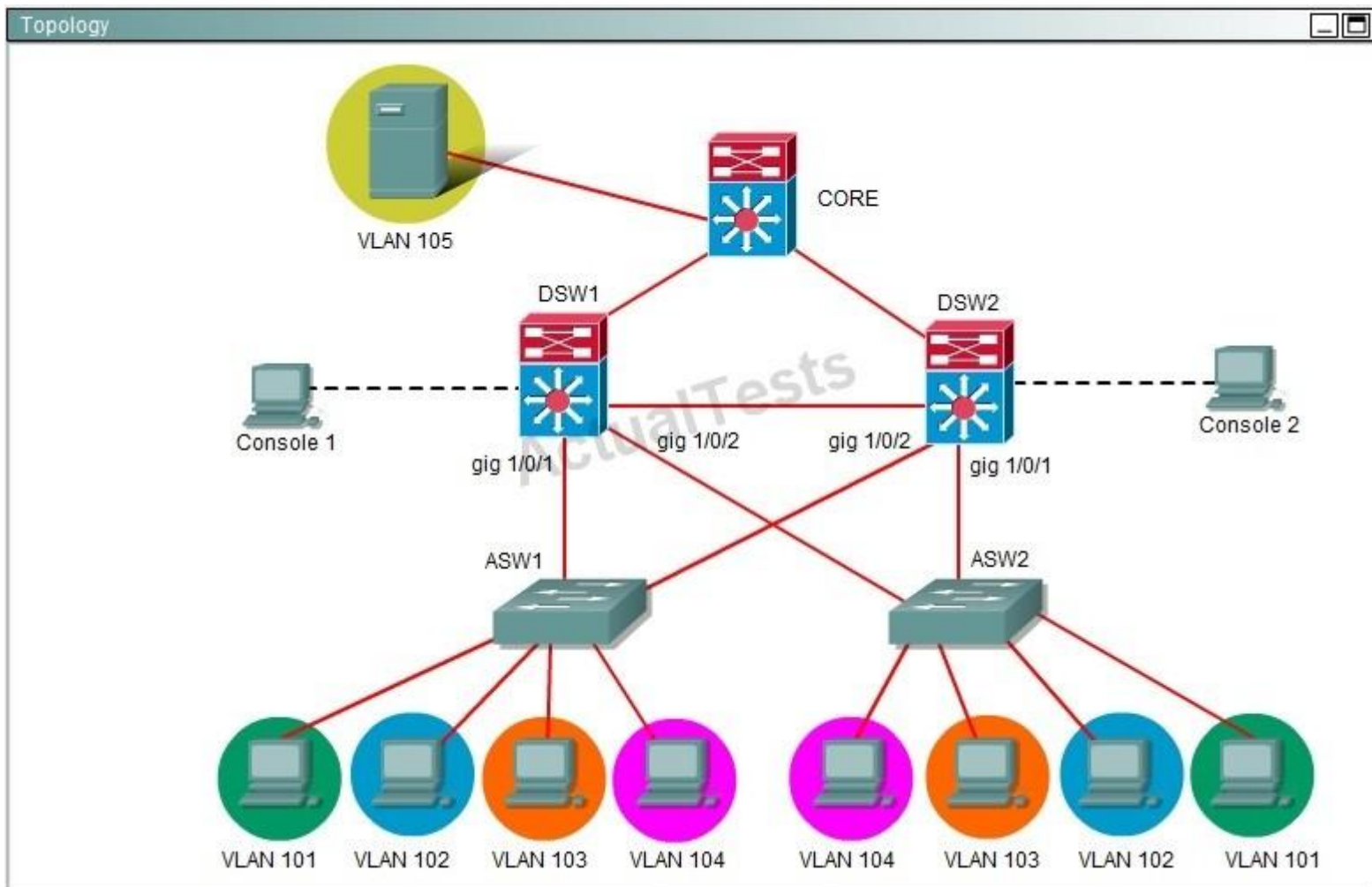**Section: (none)**
Explanation

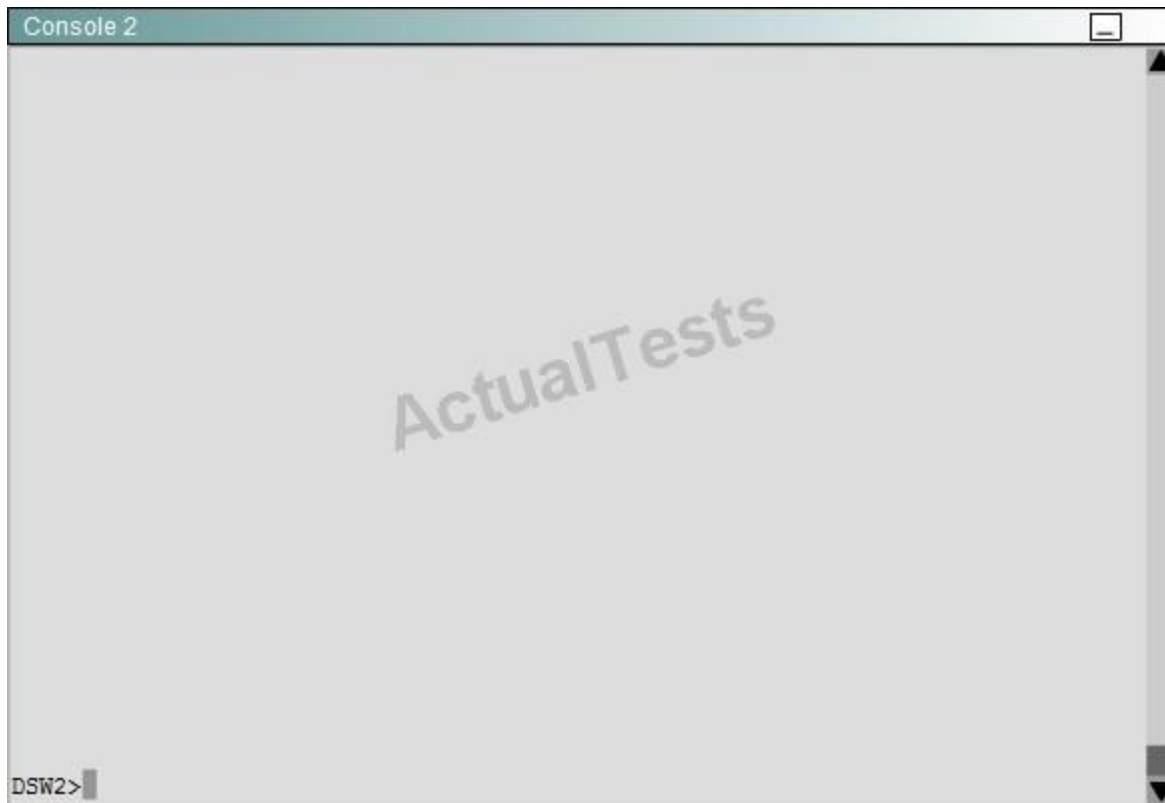**Explanation/Reference:**
Explanation:

QUESTION 151
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 GigabitEthemet1/0/1 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.

```
Console 1                                                    ▲




                        ActualTests




DSW1>                                                        ▼
```

Console 2 ▢

DSW2>

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

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

Correct Answer: C
Section: (none)
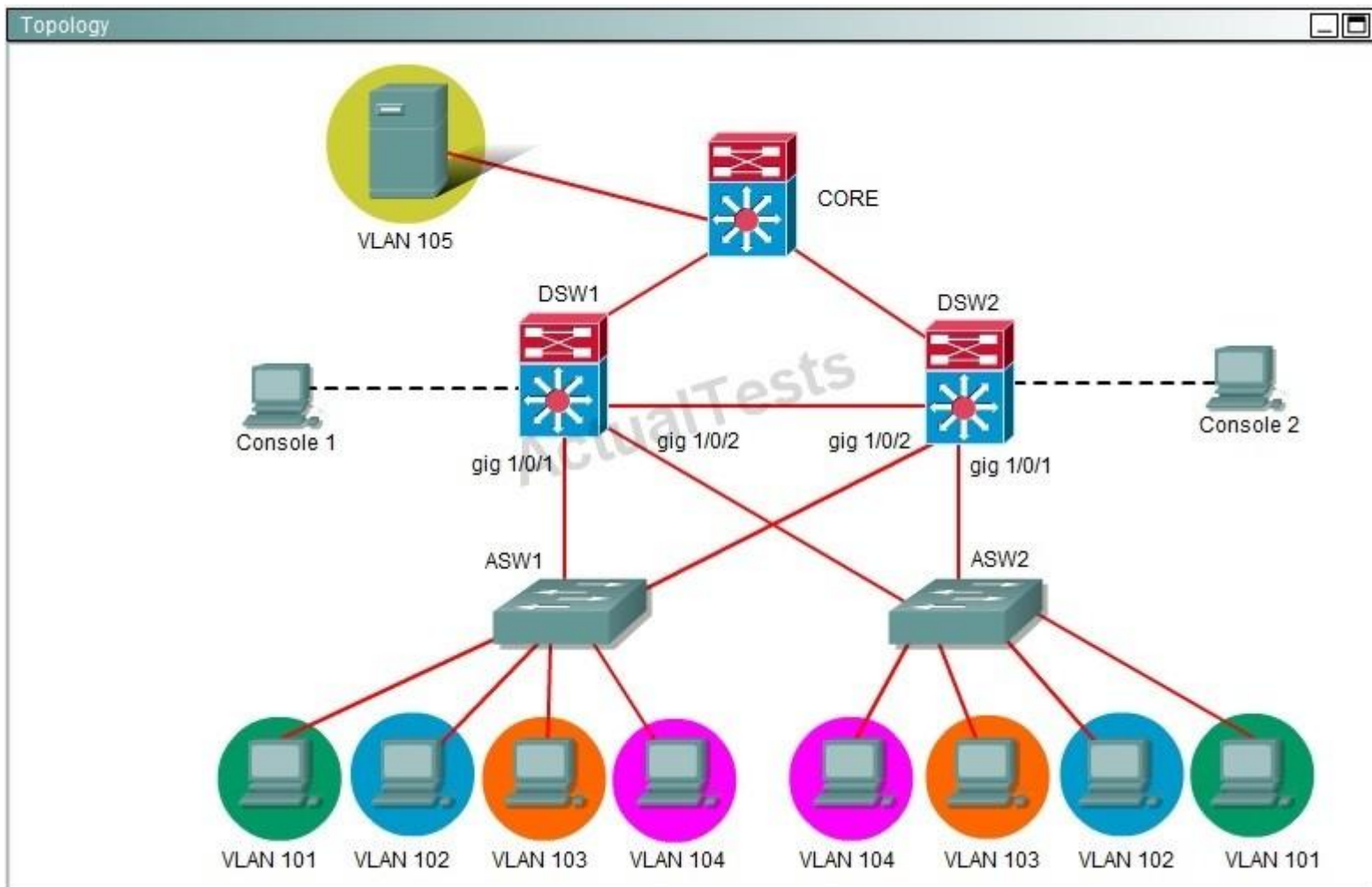**Explanation**

Explanation/Reference:
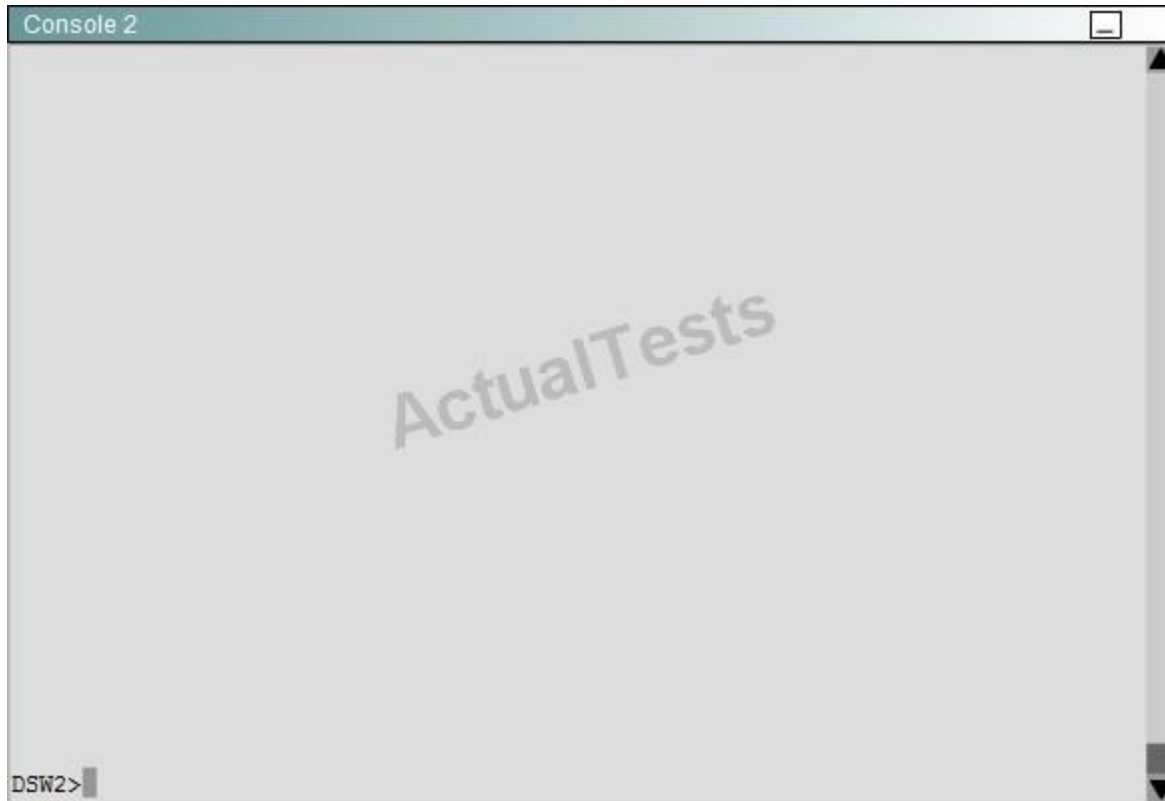
Explanation:

QUESTION 152
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 GigabitEthemet1/0/1 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.

VLAN 105

CORE

DSW1

DSW2

Console 1

Console 2

gig 1/0/2

gig 1/0/2

gig 1/0/1

gig 1/0/1

ASW1

ASW2

VLAN 101   VLAN 102   VLAN 103   VLAN 104   VLAN 104   VLAN 103   VLAN 102   VLAN 101

```
Console 1                                    ▲
                                             ▲




                ActualTests




DSW1>                                        ▼
```

```
┌─────────────────────────────────────────────────────────────┐
│ Console 2                                          ─         │
├─────────────────────────────────────────────────────────────┤
│                                                            ▲ │
│                                                              │
│                                                              │
│                                                              │
│                                                              │
│                               ActualTests                    │
│                                                              │
│                                                              │
│                                                              │
│                                                              │
│                                                              │
│                                                            ■ │
│ DSW2>                                                      ▼ │
└─────────────────────────────────────────────────────────────┘
```

What is the priority value of the VLAN 105 HSRP group on DSW2?

A. 50
B. 100
C. 150
D. 200

Correct Answer: B
Section: (none)
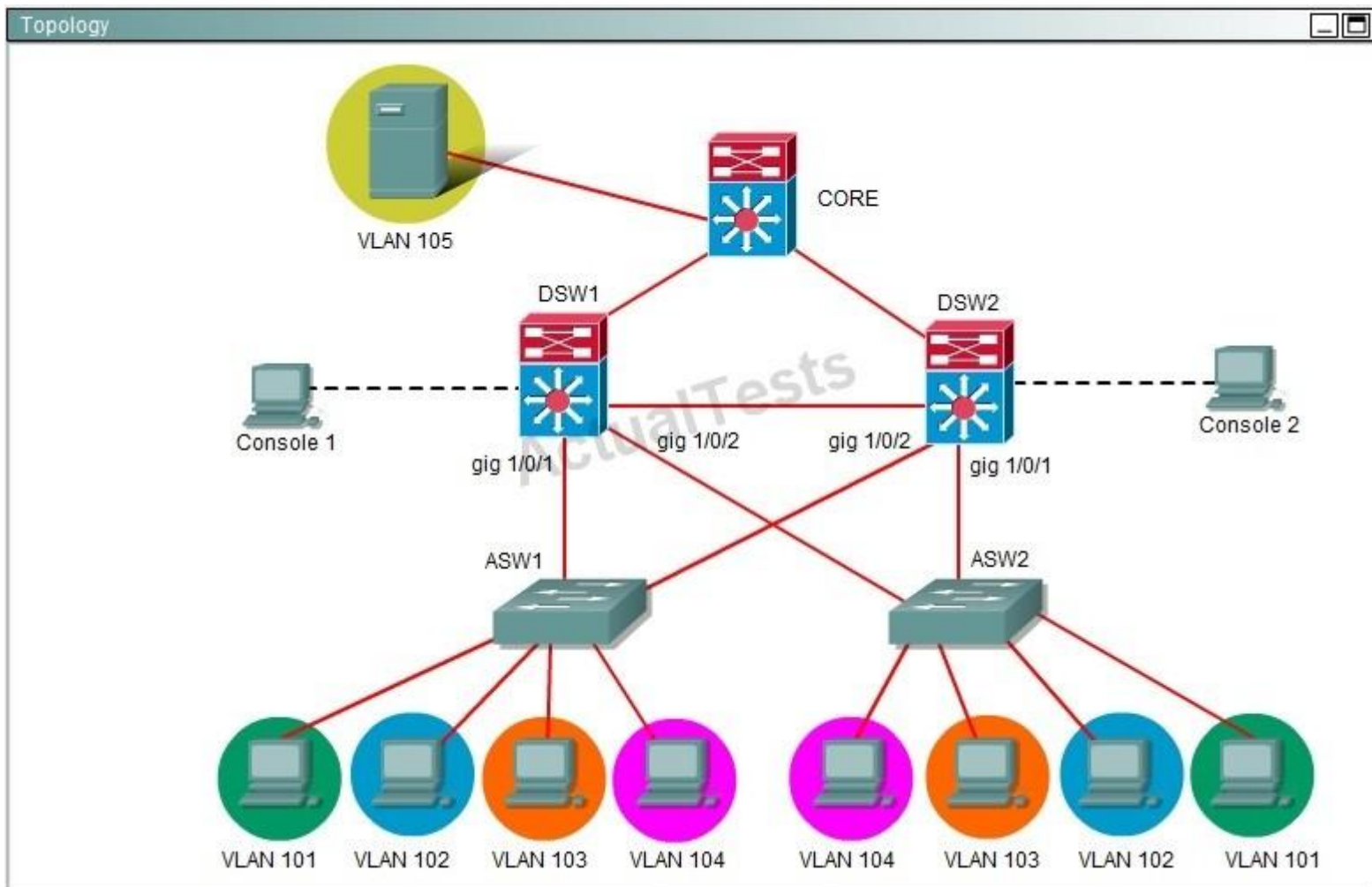**Explanation**

Explanation/Reference:
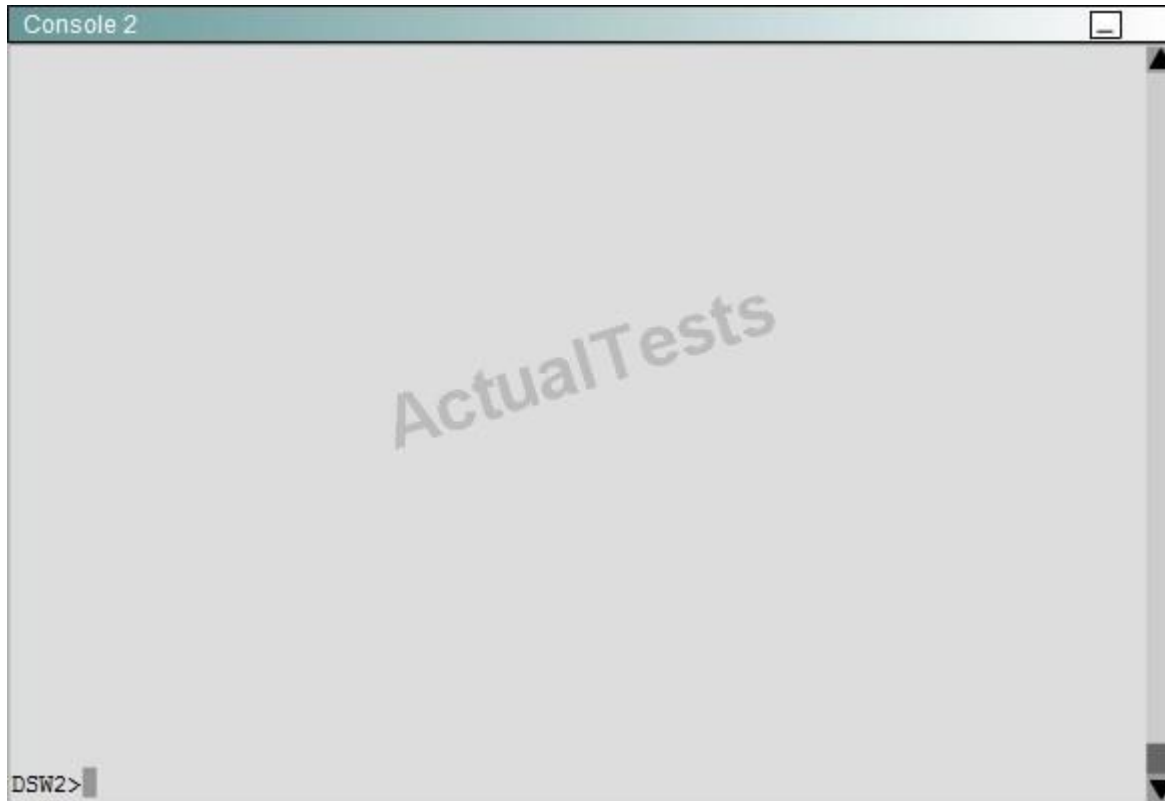Explanation:

QUESTION 153
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 GigabitEthemet1/0/1 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.

Topology

CORE

VLAN 105

DSW1

DSW2

Console 1

gig 1/0/1

gig 1/0/2

gig 1/0/2

gig 1/0/1

Console 2

ASW1

ASW2

VLAN 101   VLAN 102   VLAN 103   VLAN 104   VLAN 104   VLAN 103   VLAN 102   VLAN 101

Console 1

DSW1>

```
Console 2                                              [_]
                                                        ▲




                        ActualTests










DSW2>                                                   ▼
```

If GigabitEthemet1/0/1 on DSW2 is shutdown, what will be the resulting priority value of the VLAN 105 HSRP group on router DSW2?

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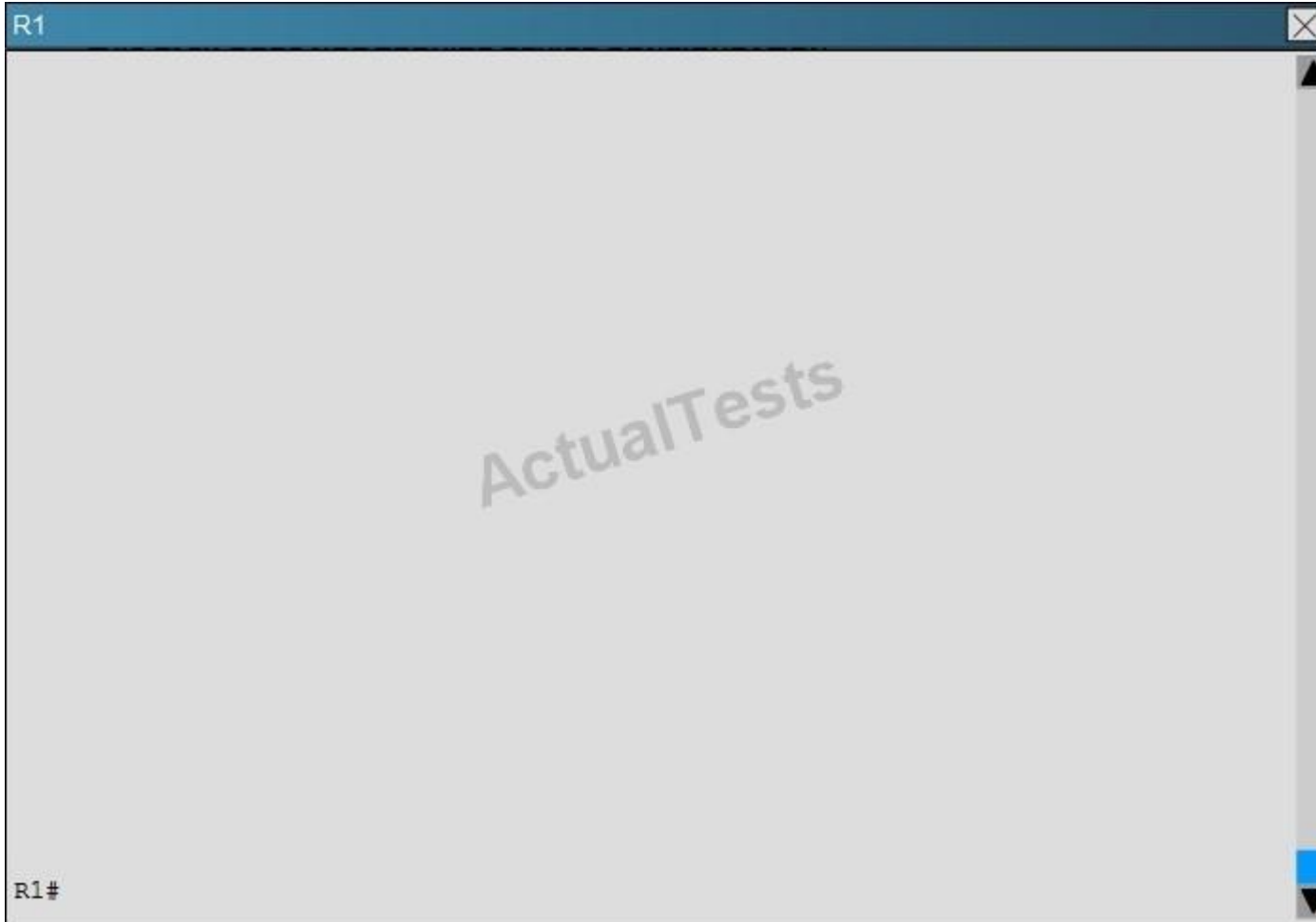D. 200

Correct Answer: A
Section: (none)
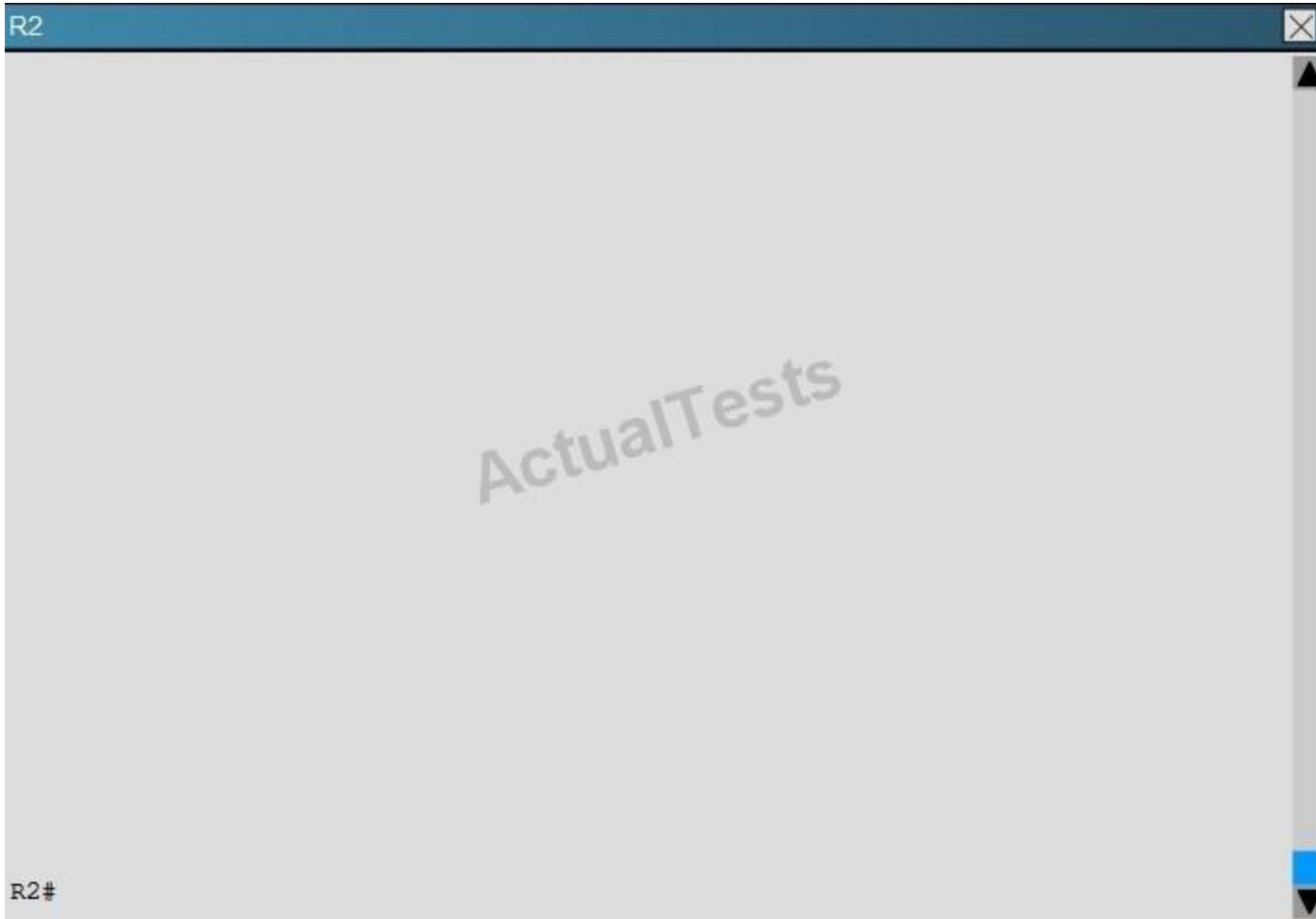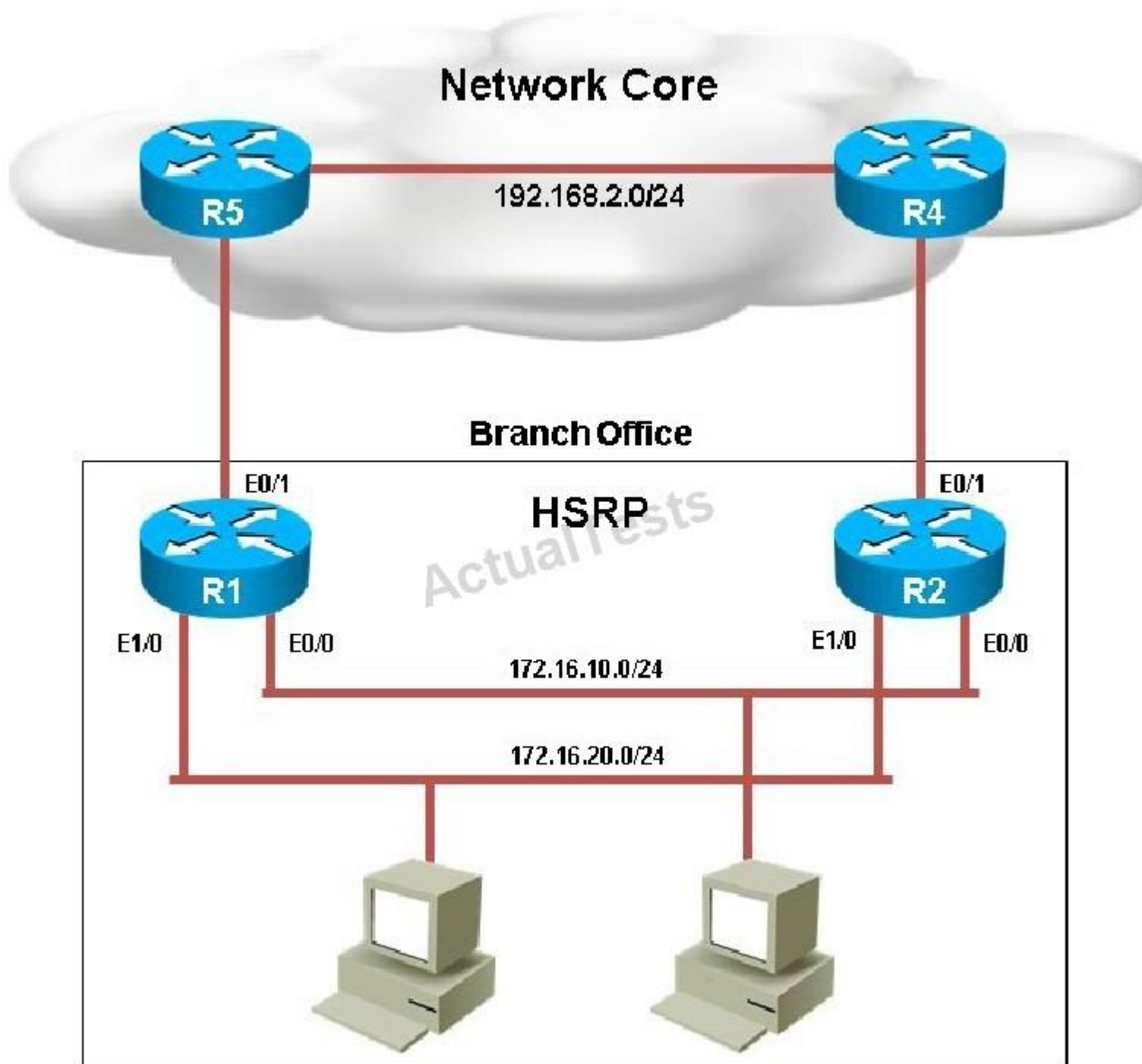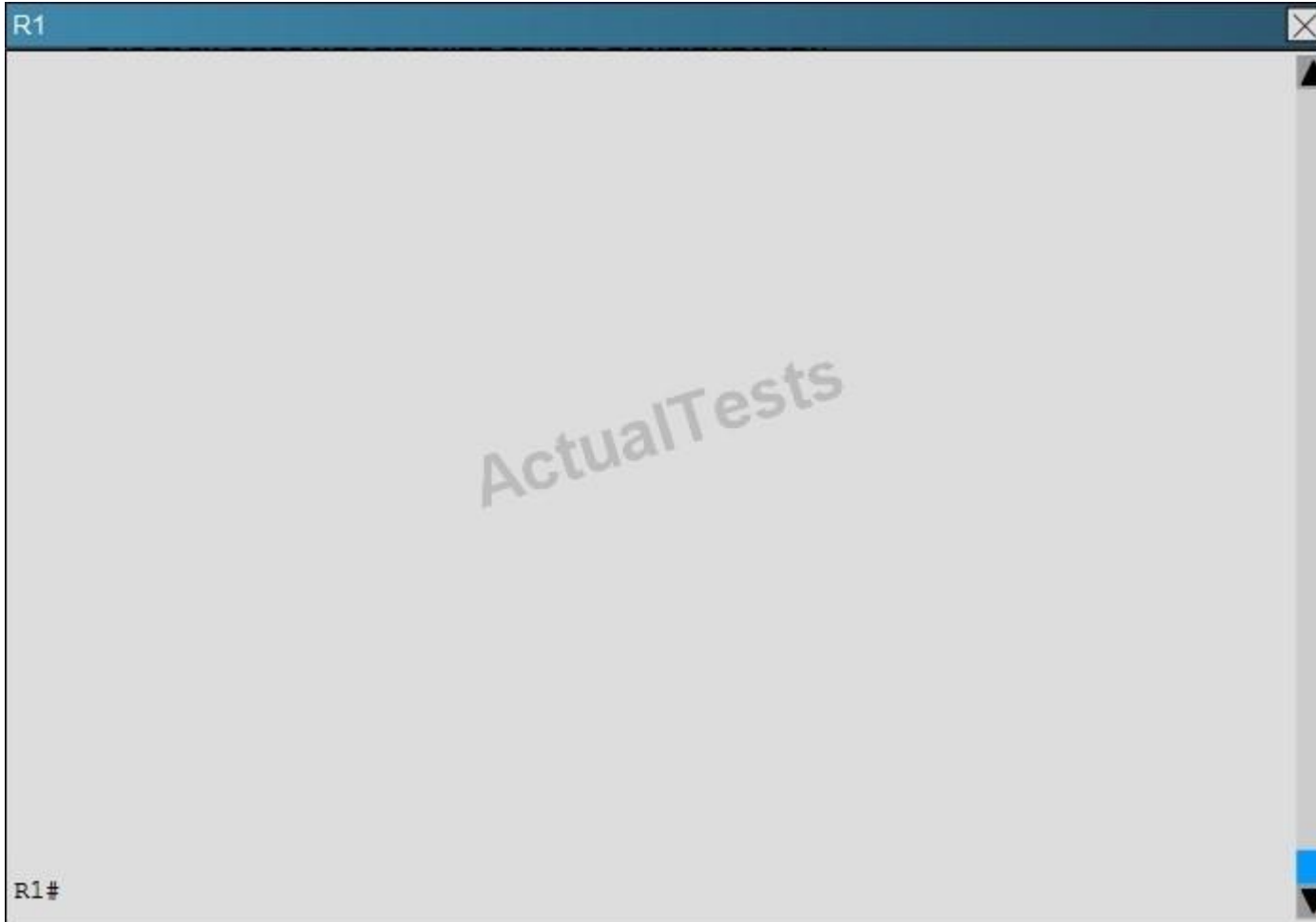**Explanation**

Explanation/Reference:
Explanation:

QUESTION 154
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.

Network Core

R5 ——— 192.168.2.0/24 ——— R4

Branch Office

HSRP

ActualTests

R1
- E0/1
- E1/0
- E0/0

R2
- E0/1
- E1/0
- E0/0

172.16.10.0/24

172.16.20.0/24

R1

ActualTests

R1#

```
R2                                                                    ☒

                                                                      ▲




                              ActualTests




R2#                                                                   ▼
```

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%

Correct Answer: D
Section: (none)
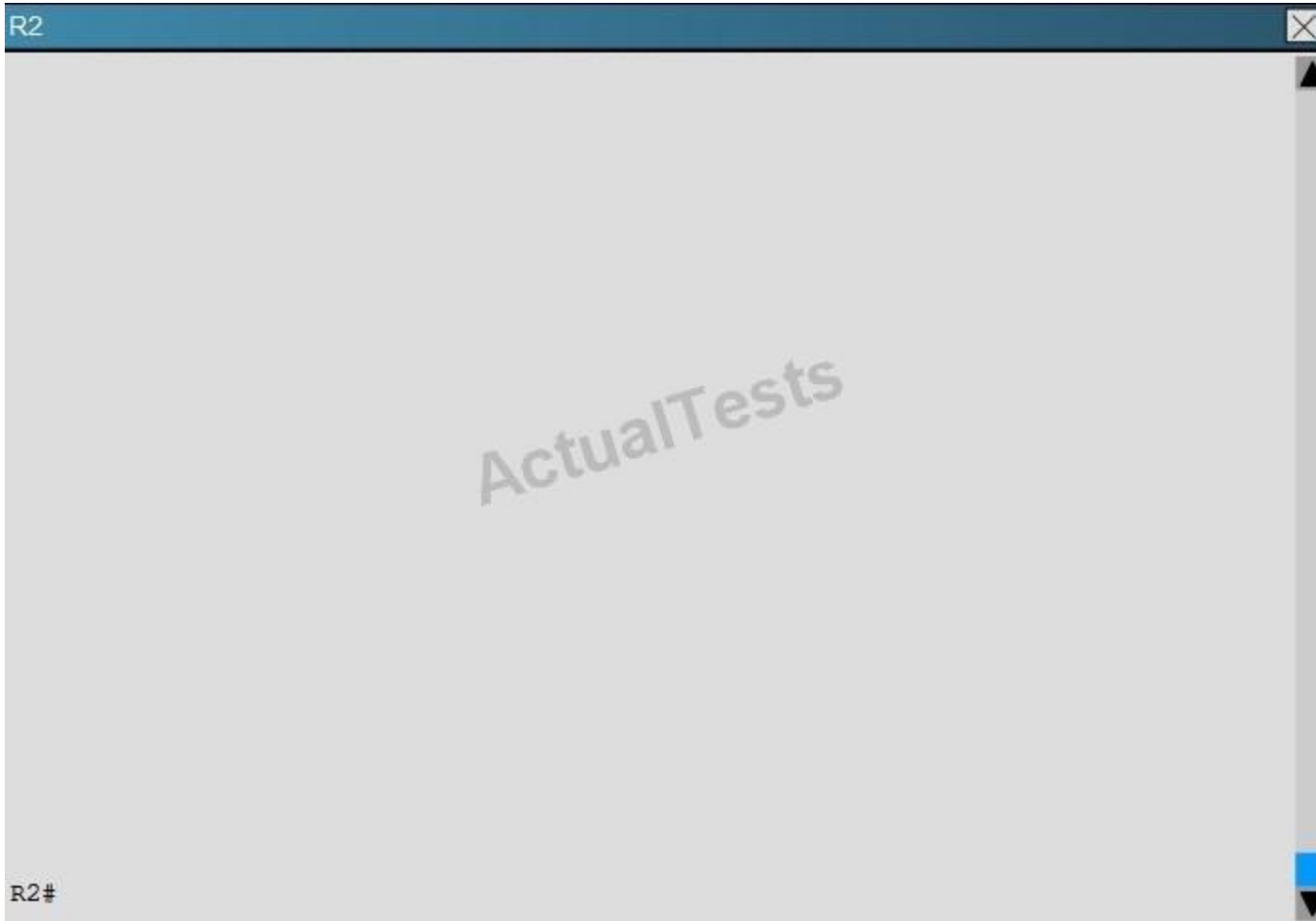
Explanation

Explanation/Reference:
Explanation:

QUESTION 155
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.

Network Core

R5 — 192.168.2.0/24 — R4

Branch Office

HSRP

ActualTests

R1
E0/1

R2
E0/1

E1/0   E0/0   E1/0   E0/0

172.16.10.0/24

172.16.20.0/24

R1   ☒

R1#

R2

R2#

Refer to the exhibit. If router R1 interface Etherne0/0 goes down and recovers, which of the statement regarding HSRP priority is true?

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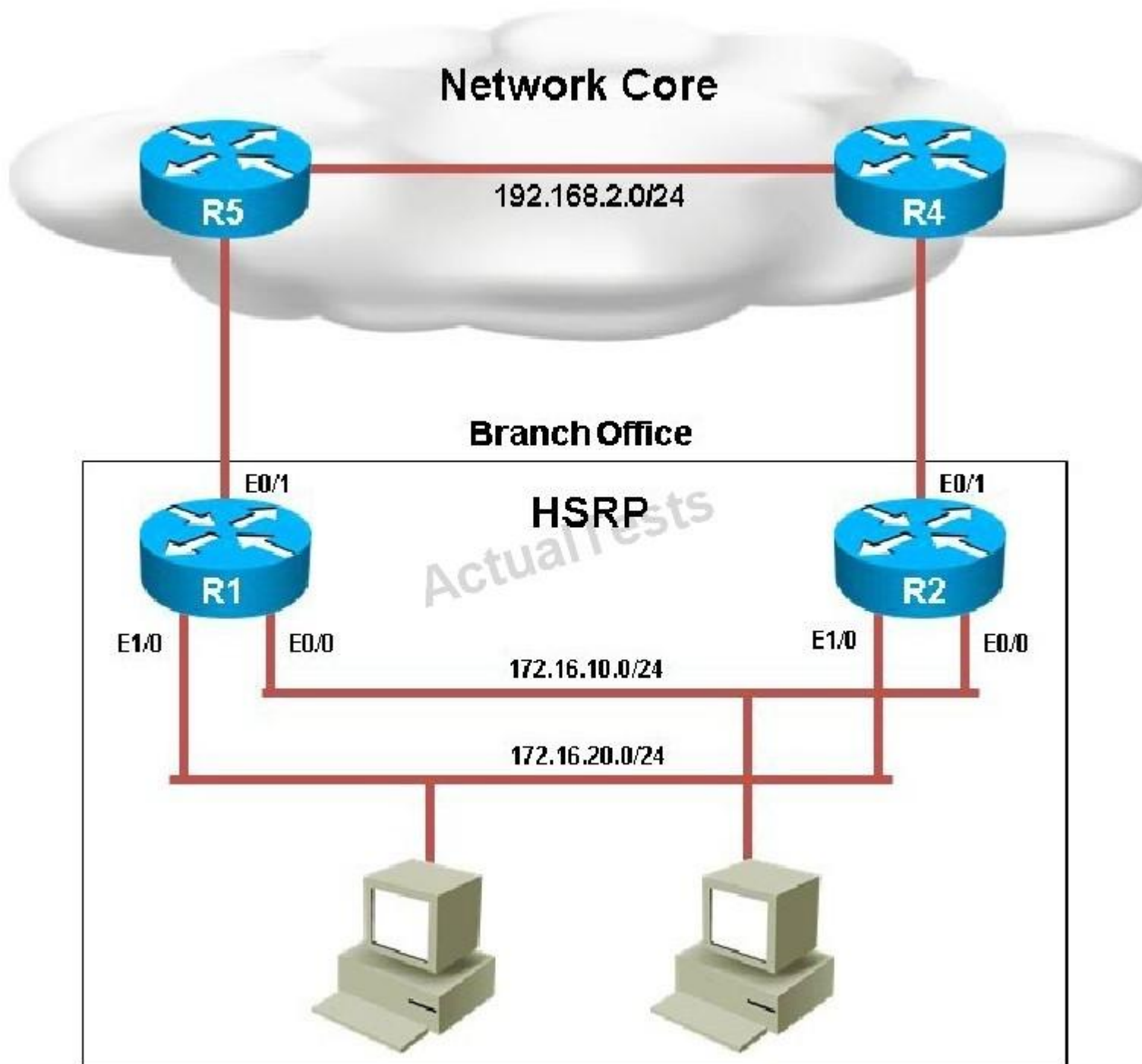
Correct Answer: C

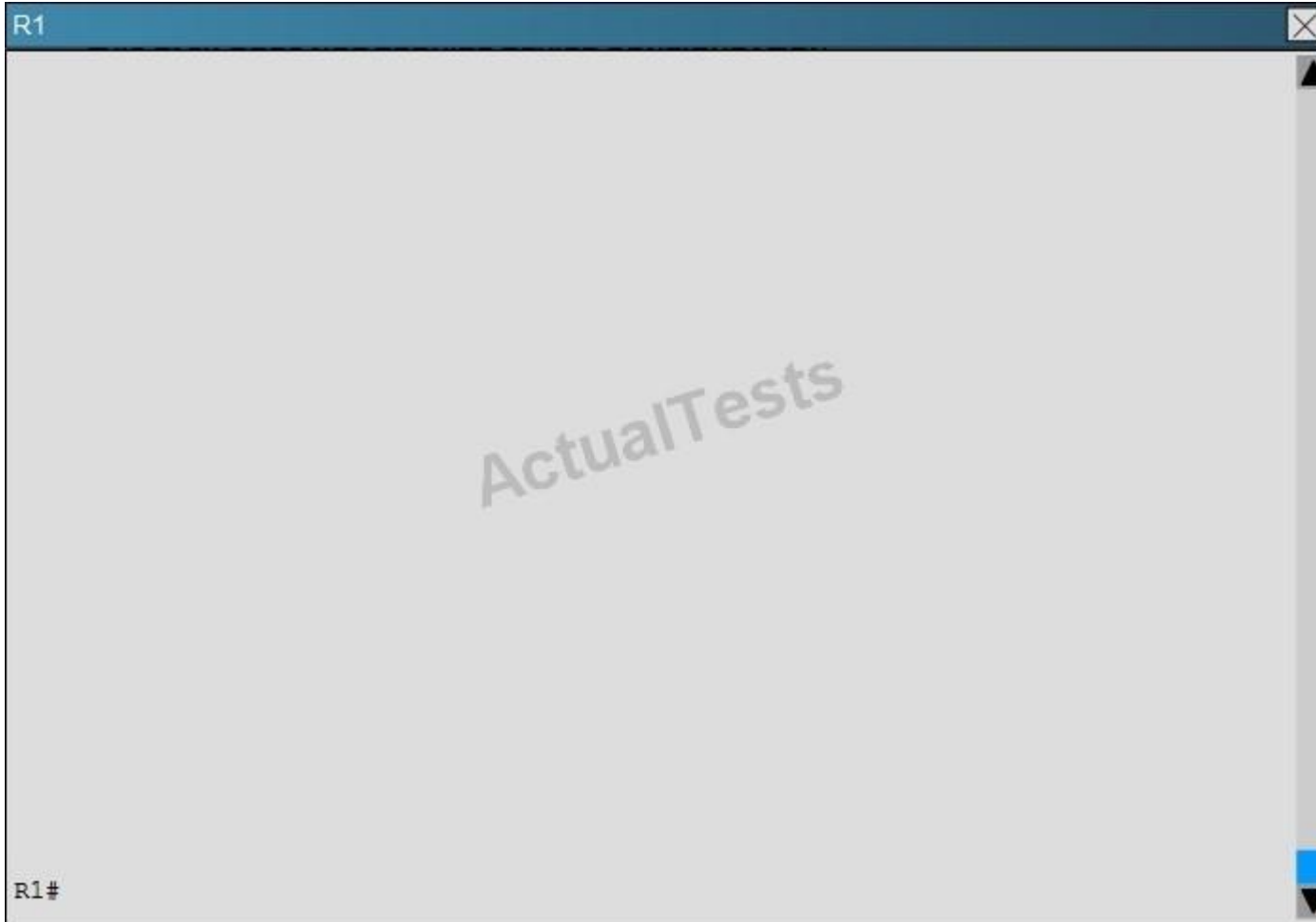**Section: (none)**
Explanation
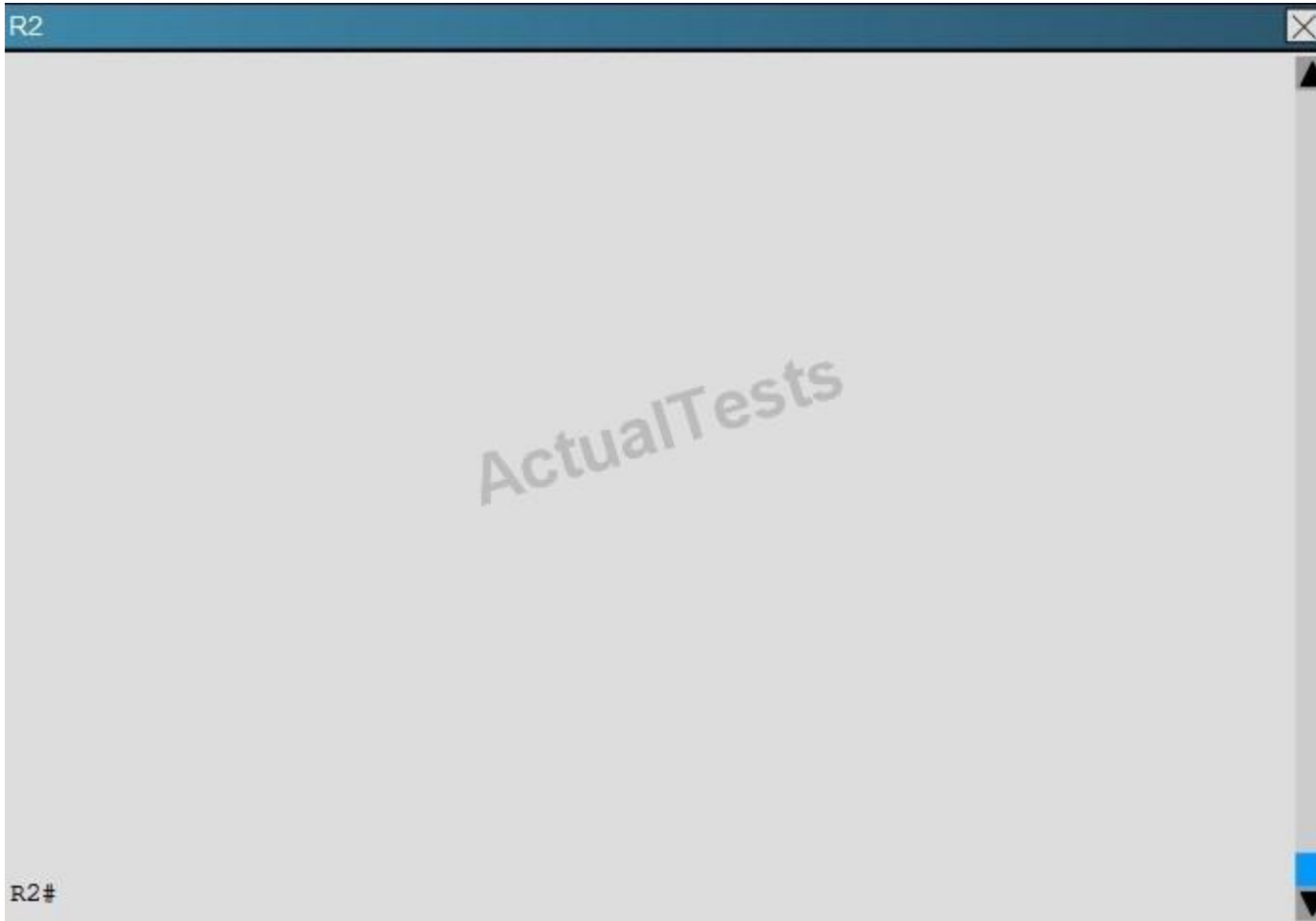
Explanation/Reference:
Explanation:

QUESTION 156
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.

Network Core

R5 ——— 192.168.2.0/24 ——— R4

Branch Office

HSRP

ActualTests

R1
E0/1

R2
E0/1

E1/0   E0/0

E1/0   E0/0

172.16.10.0/24

172.16.20.0/24

R1

R1#

```
R2

                                                                      ▲

                              ActualTests




R2#                                                                   ■
                                                                      ▼
```

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
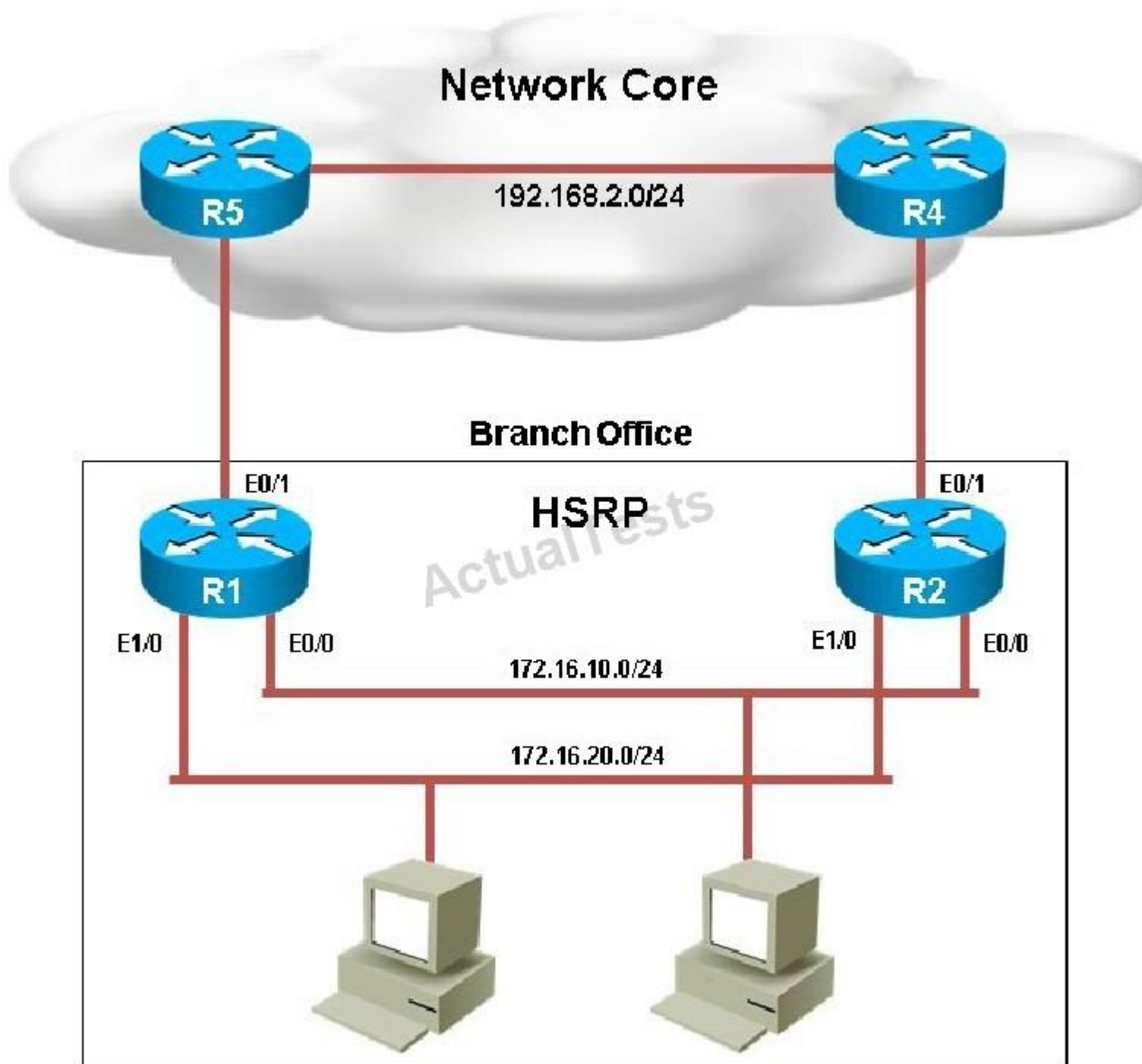
Correct Answer: B
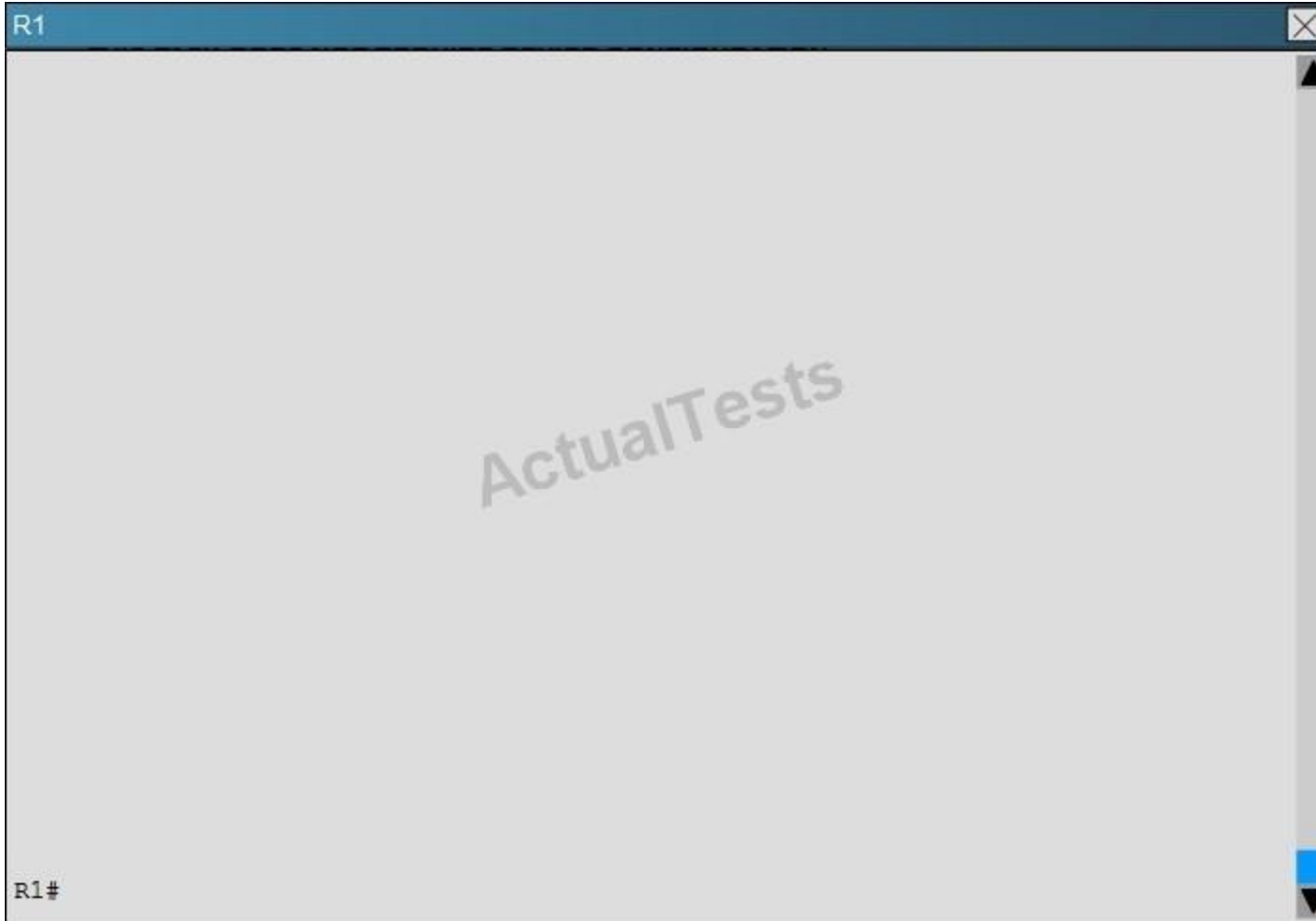
Section: (none)
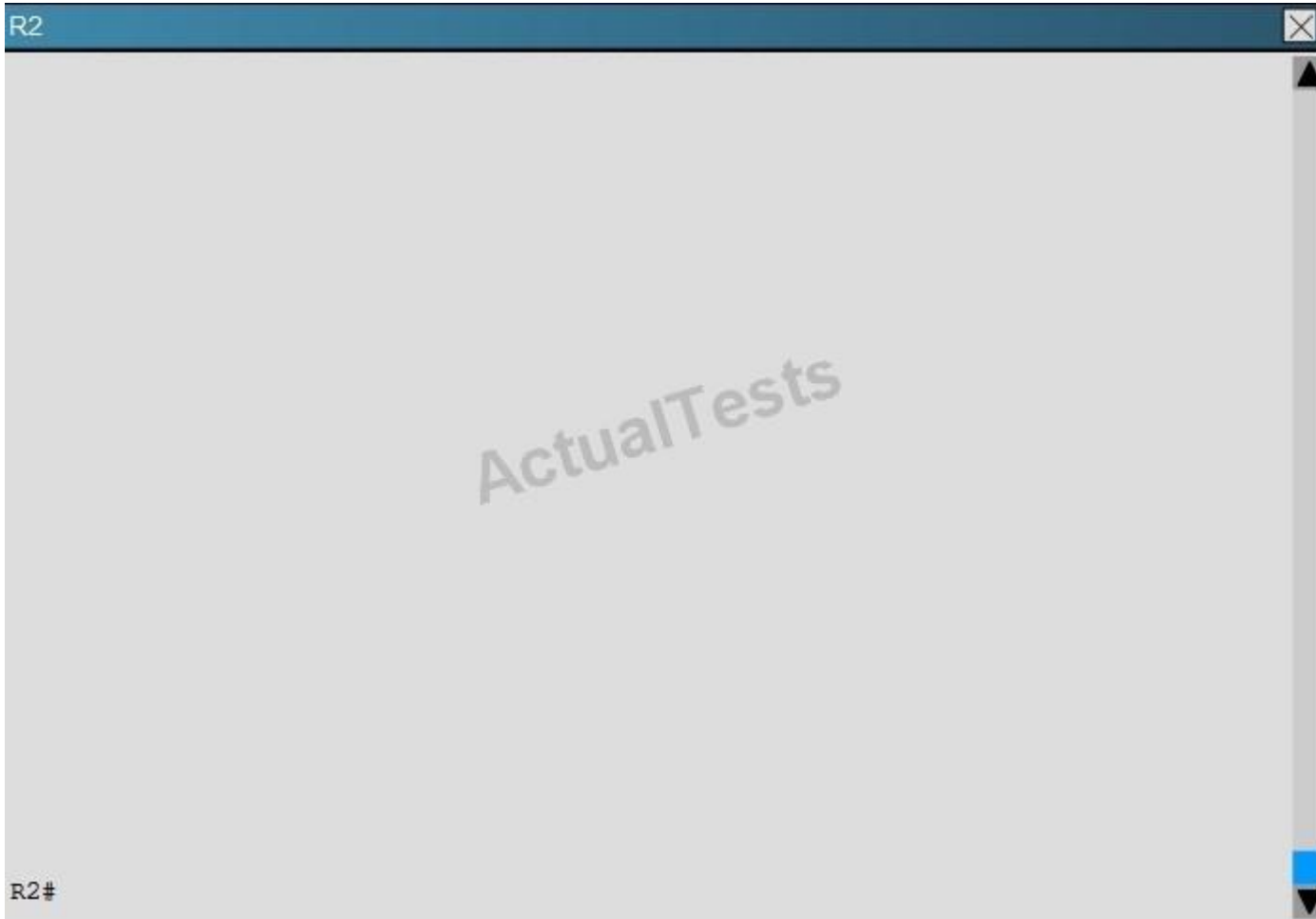**Explanation**

Explanation/Reference:
Explanation:

QUESTION 157
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.

Network Core

R5 ——— 192.168.2.0/24 ——— R4

Branch Office

HSRP

ActualTests

R1
- E0/1
- E1/0
- E0/0

R2
- E0/1
- E1/0
- E0/0

172.16.10.0/24

172.16.20.0/24

R1

R1#

```
R2                                                    ☒

                                                       ▲

R2#                                                    ▼
```

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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Topic 4, Mix QUESTIONS

QUESTION 158
Refer to the exhibit.

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

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

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 159
Which four LACP components are used to determine which hot-standby links become active after an interface failure within an EtherChannel bundle? (Choose four.)

A. LACP system priority
B. LACP port priority

C. interface MAC address

D. system ID

E. port number

F. hot-standby link identification number

G. interface bandwidth

Correct Answer: ABDE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 160
RSPAN has been configured on a Cisco Catalyst switch; however, traffic is not being replicated to the remote switch. Which type of misconfiguration is a cause?

A. The RSPAN designated VLAN is missing the remote span command.

B. The local and remote RSPAN switches are configured using different session IDs.

C. The local RSPAN switch is replicating only Rx traffic to the remote switch.

D. The local switch is overloaded with the amount of sourced traffic that must be replicated to the remote switch.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 161
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.

Correct Answer: B

QUESTION 162
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 163
A network engineer is installing a switch for temporary workers to connect to. The engineer does not want this switch participating in Spanning Tree with the rest of the network; however, end user connectivity is still required. Which spanning-tree feature accomplishes this?

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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 164
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation: