

200-301 Dumps

Cisco Certified Network Associate

<https://www.certleader.com/200-301-dumps.html>



NEW QUESTION 1

- (Exam Topic 2)

Refer to Exhibit.

```
SW2
vtp domain cisco
vtp mode transparent
vtp password ciscotest
interface fastethernet0/1
description connection to sw1
switchport mode trunk
switchport trunk encapsulation dot1q
```

How does SW2 interact with other switches in this VTP domain?

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

Answer: C

Explanation:

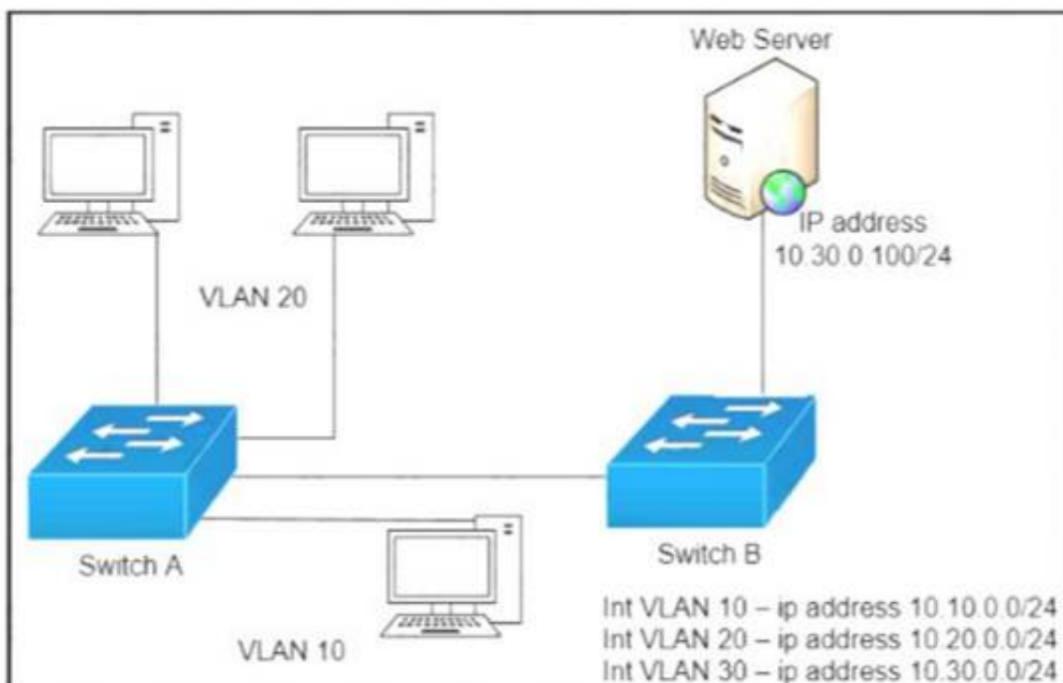
Reference: <https://www.cisco.com/c/en/us/support/docs/lan-switching/vtp/10558-21.html>

The VTP mode of SW2 is transparent so it only forwards the VTP updates it receives to its trunk links without processing them.

NEW QUESTION 2

- (Exam Topic 2)

Refer to the exhibit.



A network engineer must block access for all computers on VLAN 20 to the web server via HTTP. All other computers must be able to access the web server. Which configuration when applied to switch A accomplishes this task?

```
config t
ip access-list extended wwwblock
deny tcp any host 10.30.0.100 eq 80
int vlan 10
ip access-group wwwblock in
```

```
config t
ip access-list extended wwwblock
deny tcp any host 10.30.0.100 eq 80
permit ip any any
int vlan 20
ip access-group wwwblock in
```

```
config t
ip access-list extended wwwblock
permit ip any any
deny tcp any host 10.30.0.100 eq 80
int vlan 30
ip access-group wwwblock in
```

```
config t
ip access-list extended wwwblock
permit ip any any
deny tcp any host 10.30.0.100 eq 80
int vlan 20
ip access-group wwwblock in
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

NEW QUESTION 3

- (Exam Topic 2)

What are two characteristics of a public cloud Implementation? (Choose two.)

- A. It is owned and maintained by one party, but it is shared among multiple organizations.
- B. It enables an organization to fully customize how It deploys network resources.
- C. It provides services that are accessed over the Internet.
- D. It Is a data center on the public Internet that maintains cloud services for only one company.
- E. It supports network resources from a centralized third-party provider and privately-owned virtual resources

Answer: CE

Explanation:

Private cloud is cloud infrastructure operated solely for a single organization, whether managed internally or by a third party, and hosted either internally or externally.
Most public-cloud providers offer direct-connection services that allow customers to securely link their legacy data centers to their cloud-resident applications.

NEW QUESTION 4

- (Exam Topic 2)

Where does a switch maintain DHCP snooping information?

- A. in the MAC address table
- B. in the CAM table
- C. in the binding database
- D. in the frame forwarding database

Answer: C

NEW QUESTION 5

- (Exam Topic 2)

Which command must be entered when a device is configured as an NTP server?

- A. ntp authenticate
- B. ntp server
- C. ntp peer
- D. ntp master

Answer: D

Explanation:

To configure a Cisco device as an Authoritative NTP Server, use the ntp master [stratum] command. To configure a Cisco device as a NTP client, use the command ntp server <IP address>. For example: Router(config)#ntp server 192.168.1.1. This command will instruct the router to query 192.168.1.1 for the time.

NEW QUESTION 6

- (Exam Topic 2)

What is the function of a server?

- A. It transmits packets between hosts in the same broadcast domain.
- B. It provides shared applications to end users.
- C. It routes traffic between Layer 3 devices.
- D. It Creates security zones between trusted and untrusted networks

Answer: B

NEW QUESTION 7

- (Exam Topic 2)

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

```
interface Gi1/0
description HQ_DC3978-87297
duplex full
speed 100
negotiation auto
lldp transmit
lldp receive
```

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

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

Answer: D

NEW QUESTION 8

- (Exam Topic 2)

Which configuration is needed to generate an RSA key for SSH on a router?

- A. Configure the version of SSH
- B. Configure VTY access.
- C. Create a user with a password.
- D. Assign a DNS domain name

Answer: D

NEW QUESTION 9

- (Exam Topic 2)

Which IPv6 address type provides communication between subnets and is unable to route on the Internet?

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

Answer: B

NEW QUESTION 10

- (Exam Topic 2)

Which protocol requires authentication to transfer a backup configuration file from a router to a remote server?

- A. DTP
- B. FTP
- C. SMTP
- D. TFTP

Answer: B

NEW QUESTION 10

- (Exam Topic 2)

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

DHCP
FTP
SMTP
SSH
SNMP
TFTP

TCP

UDP

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

DHCP
FTP
SMTP
SSH
SNMP
TFTP

TCP
FTP
SMTP
SSH

UDP
DHCP
SNMP
TFTP

NEW QUESTION 12

- (Exam Topic 1)

If a notice-level messaging is sent to a syslog server, which event has occurred?

- A. A network device has restarted
- B. An ARP inspection has failed
- C. A routing instance has flapped
- D. A debug operation is running

Answer: C

Explanation:

Usually no action is required when a route flaps so it generates the notification syslog level message (level 5).

NEW QUESTION 17

- (Exam Topic 1)

What occurs when overlapping Wi-Fi channels are implemented?

- A. The wireless network becomes vulnerable to unauthorized access.
- B. Wireless devices are unable to distinguish between different SSIDs
- C. Users experience poor wireless network performance.
- D. Network communications are open to eavesdropping.

Answer: C

NEW QUESTION 19

- (Exam Topic 1)

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

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

Answer: C

NEW QUESTION 24

- (Exam Topic 1)

What are network endpoints?

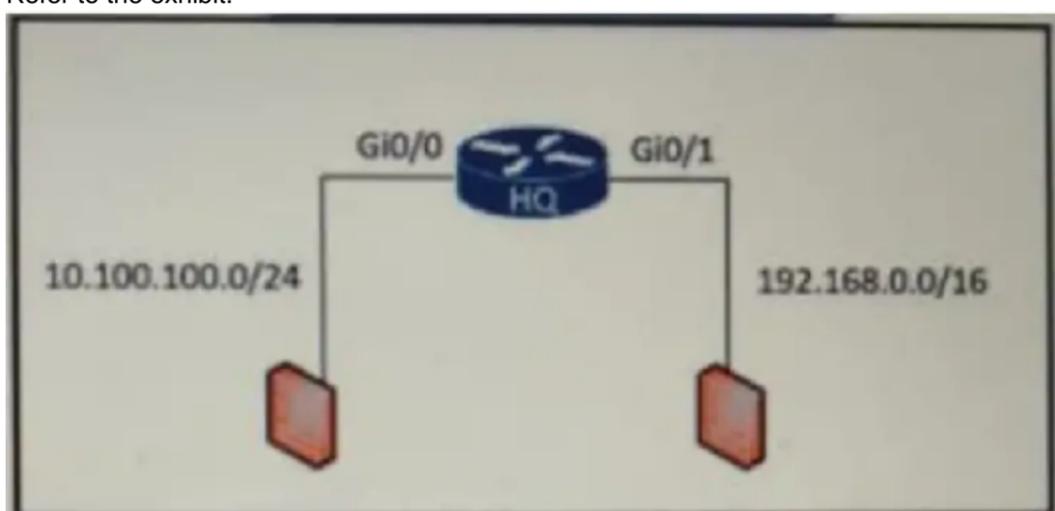
- A. act as routers to connect a user to the service provider network
- B. a threat to the network if they are compromised
- C. support inter-VLAN connectivity
- D. enforce policies for campus-wide traffic going to the internet

Answer: B

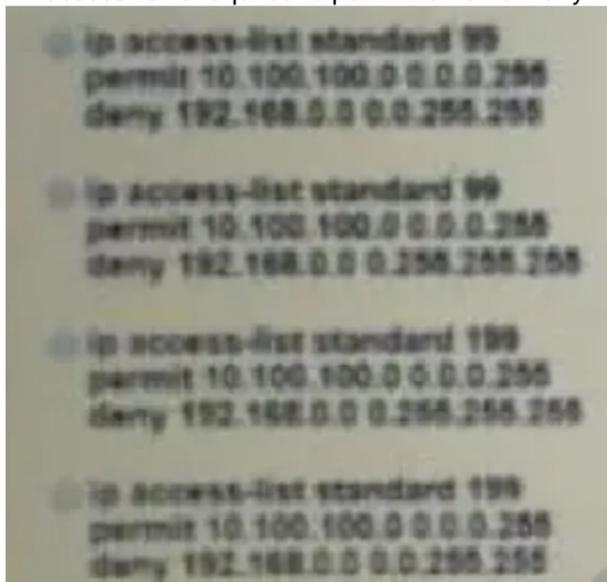
NEW QUESTION 25

- (Exam Topic 1)

Refer to the exhibit.



An access list is required to permit traffic from any host on interface G0/0 and deny traffic from interface G/0/1. Which access list must be applied?



- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

NEW QUESTION 28

- (Exam Topic 1)

Refer to the exhibit.

```

R1#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route
Gateway of last resort is 192.168.30.10 to network 0.0.0.0
 192.168.30.0/29 is subnetted, 2 subnets
 C    192.168.30.0 is directly connected, FastEthernet0/0
 C    192.168.30.8 is directly connected, Serial0/0.1
 192.168.10.0/24 is variably subnetted, 2 subnets, 2 masks
 O IA 192.168.10.32/28 [110/193] via 192.168.30.10, 00:18:49, Serial0/0.1
 O IA 192.168.10.0/27 [110/192] via 192.168.30.10, 00:18:49, Serial0/0.1
 192.168.20.0/30 is subnetted, 1 subnets
 O IA 192.168.20.0 [110/128] via 192.168.30.10, 00:18:49, Serial0/0.1
 192.168.50.0/32 is subnetted, 1 subnets
 C    192.168.50.1 is directly connected, Loopback0
 O*IA 0.0.0.0/0 [110/84] via 192.168.30.10, 00:10:36, Serial0/0.1
    
```

What is the metric of the route to the 192.168.10.33/28 subnet?

- A. 84
- B. 110
- C. 128
- D. 192
- E. 193

Answer: E

NEW QUESTION 29

- (Exam Topic 1)

What is a practice that protects a network from VLAN hopping attacks?

- A. Enable dynamic ARP inspection
- B. Configure an ACL to prevent traffic from changing VLANs
- C. Change native VLAN to an unused VLAN ID
- D. Implement port security on internet-facing VLANs

Answer: C

NEW QUESTION 33

- (Exam Topic 1)

How does HSRP provide first hop redundancy?

- A. It load-balances traffic by assigning the same metric value to more than one route to the same destination in the IP routing table.
- B. It load-balances Layer 2 traffic along the path by flooding traffic out all interfaces configured with the same VLAN.
- C. It forwards multiple packets to the same destination over different routed links in the data path
- D. It uses a shared virtual MAC and a virtual IP address to a group of routers that serve as the default gateway for hosts on a LAN

Answer: D

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipapp_fhrp/configuration/xr-16/fhrp-xr-16-book/fhrp-hsrp-mg

NEW QUESTION 38

- (Exam Topic 1)

Drag and drop the attack-mitigation techniques from the left onto the Types of attack that they mitigate on the right.

Answer Area

- configure 802.1x authenticate
- configure DHCP snooping
- configure the native VLAN with a nondefault VLAN ID
- disable DTP

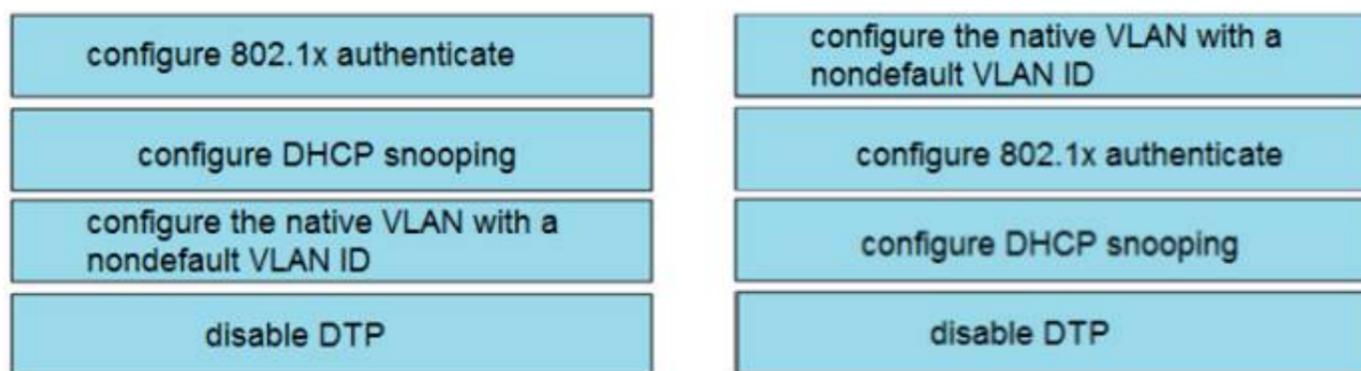
- 802.1q double-tagging VLAN-hopping attack
- MAC flooding attack
- man-in-the-middle spoofing attack
- switch-spoofing VLAN-hopping attack

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area



NEW QUESTION 40

- (Exam Topic 1)

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

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

Answer: A

NEW QUESTION 45

- (Exam Topic 1)

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

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

Answer: B

NEW QUESTION 49

- (Exam Topic 1)

which purpose does a northbound API serve in a controller-based networking architecture?

- A. communicates between the controller and the physical network hardware
- B. reports device errors to a controller
- C. generates statistics for network hardware and traffic
- D. facilitates communication between the controller and the applications

Answer: D

NEW QUESTION 54

- (Exam Topic 1)

Which two events occur automatically when a device is added to Cisco DNA Center? (Choose two.)

- A. The device is assigned to the Global site.
- B. The device is placed into the Unmanaged state.
- C. The device is placed into the Provisioned state.
- D. The device is placed into the Managed state.
- E. The device is assigned to the Local site.

Answer: AB

NEW QUESTION 58

- (Exam Topic 1)

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

Answer Area

cache	local database of address mappings that improves name-resolution performance
DNS	service that maps hostnames to IP addresses
domain	disable DNS services on a Cisco device
name resolver	in response to client requests, queries a name server for IP address information
no ip domain lookup	component of a URL that indicates the location or organization type, such as .com or .edu

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Diagram Description automatically generated

NEW QUESTION 61

- (Exam Topic 1)

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

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

Answer: B

Explanation:

<https://www.cisco.com/c/en/us/support/docs/wireless/aironet-1200-series/70278-lap-faq.html>

A Lightweight Access Point (LAP) is an AP that is designed to be connected to a wireless LAN (WLAN) controller (WLC). APs are "lightweight," which means that they cannot act independently of a wireless LAN controller (WLC). The WLC manages the AP configurations and firmware. The APs are "zero touch" deployed, and individual configuration of APs is not necessary.

NEW QUESTION 64

- (Exam Topic 1)

Refer to the exhibit.

```
interface GigabitEthernet0/1
ip address 192.168.1.2 255.255.255.0
ip access-group 2699 in
!
access-list 2699 deny icmp any 10.10.1.0 0.0.0.255 echo
access-list 2699 deny ip any 10.20.1.0 0.0.0.255
access-list 2699 permit ip any 10.10.1.0 0.0.0.255
access-list 2699 permit tcp any 10.20.1.0 0.0.0.127 eq 22
```

A network administrator must permit SSH access to remotely manage routers in a network. The operations team resides on the 10.20.1.0/25 network. Which command will accomplish this task?

- A. access-list 2699 permit udp 10.20.1.0 0.0.0.255
- B. no access-list 2699 deny tcp any 10.20.1.0 0.0.0.127 eq 22
- C. access-list 2699 permit tcp any 10.20.1.0 0.0.0.255 eq 22
- D. no access-list 2699 deny ip any 10.20.1.0 0.0.0.255

Answer: D

Explanation:

Note : Already a statement is there in last to allow SSH Traffic for network 10.20.1.0 0.0.0.127, but Second statement says deny ip any 10.20.1.0 0.0.0.255, so how it will work once it is denied. So the right answer is remove the --- no access-list 2699 deny ip any 10.20.1.0 0.0.0.255.

NEW QUESTION 68

- (Exam Topic 1)

Drag and drop the functions of DHCP from the left onto any of the positions on the right Not all functions are used

provides local control for network segments using a client-server scheme	1
reduces the administrative burden for onboarding end users	2
associates hostnames to IP addresses	3
maintains an address pool	4
assigns IP addresses to local hosts for a configurable lease time	
offers domain name server configuration	
uses authoritative servers for record keeping	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, email Description automatically generated

NEW QUESTION 69

- (Exam Topic 1)

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

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

Answer: A

NEW QUESTION 73

- (Exam Topic 1)

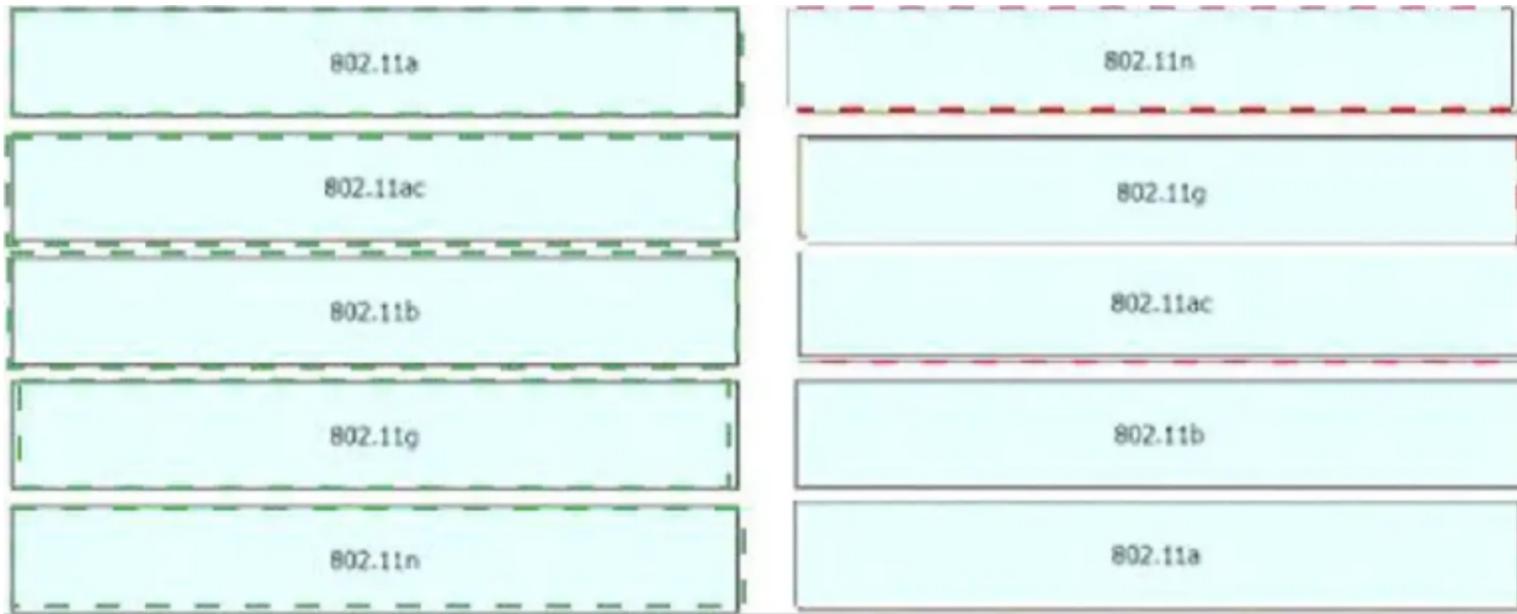
Drag and drop the 802.11 wireless standards from the left onto the matching statements on the right

802.11a	Operates in the 2.4 GHz and 5 GHz bands.
802.11ac	Operates in the 2.4 GHz band only and supports a maximum data rate of 54 Mbps.
802.11b	Operates in the 5 GHz band only and supports a maximum data rate that can exceed 100 Mbps.
802.11g	Supports a maximum data rate of 11 Mbps.
802.11n	Operates in the 5 GHz band only and supports a maximum data rate of 54 Mbps.

- A. Mastered
- B. Not Mastered

Answer: A

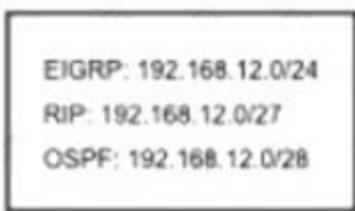
Explanation:



NEW QUESTION 74

- (Exam Topic 1)

Refer to the exhibit.



How does the router manage traffic to 192.168.12.16?

- A. It selects the RIP route because it has the longest prefix inclusive of the destination address.
- B. It chooses the OSPF route because it has the longest prefix inclusive of the destination address.
- C. it load-balances traffic between all three routes
- D. It chooses the EIGRP route because it has the lowest administrative distance

Answer: A

NEW QUESTION 76

- (Exam Topic 1)

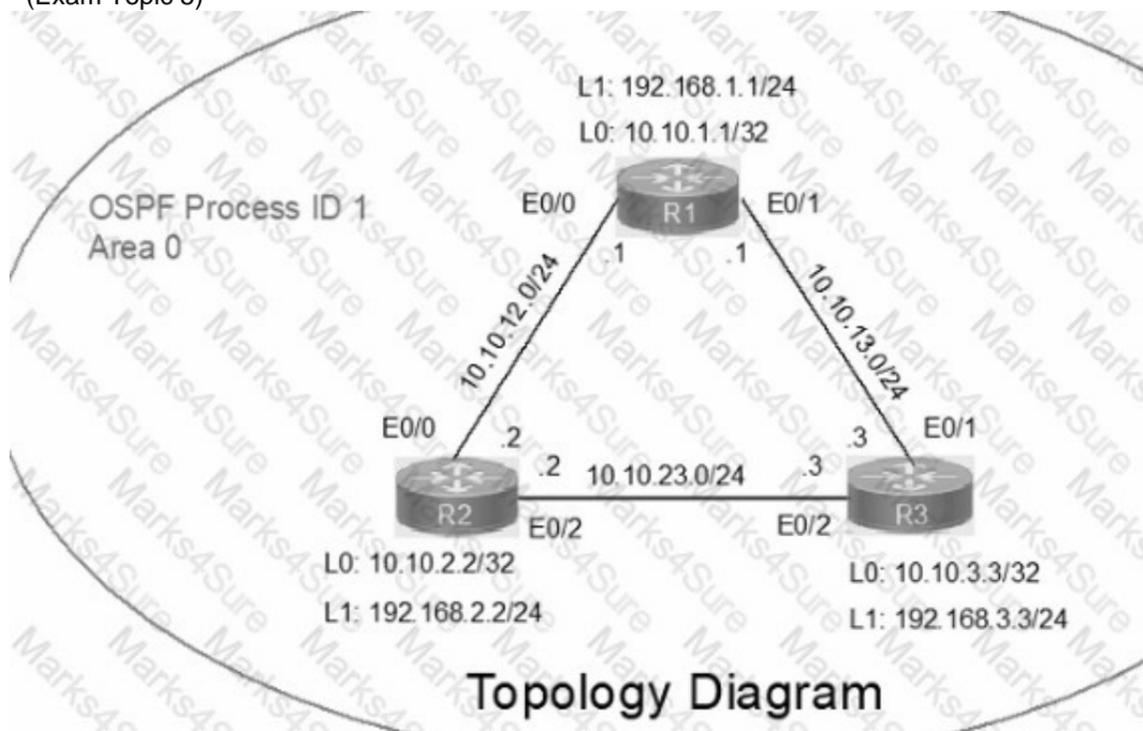
What is a network appliance that checks the state of a packet to determine whether the packet is legitimate?

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

Answer: C

NEW QUESTION 80

- (Exam Topic 5)



Topology Diagram

Guidelines

This is a lab item in which tasks will be performed on virtual devices.

- Refer to the **Tasks** tab to view the tasks for this lab item.
- Refer to the **Topology** tab to access the device console(s) and perform the tasks.
- Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
- All necessary preconfigurations have been applied.
- Do not change the enable password or hostname for any device.
- **Save your configurations** to NVRAM before moving to the next item.
- Click **Next** at the bottom of the screen to submit this lab and move to the next question.
- When **Next** is clicked, the lab closes and cannot be reopened.

IP connectivity between the three routers is configured. OSPF adjacencies must be established.

* 1. Configure R1 and R2 Router IDs using the interface IP addresses from the link that is shared between them.

* 2. Configure the R2 links with a max value facing R1 and R3. R2 must become the DR. R1 and R3 links facing R2 must remain with the default OSPF configuration for DR election. Verify the configuration after clearing the OSPF process.

* 3. Using a host wildcard mask, configure all three routers to advertise their respective Loopback1 networks.

* 4. Configure the link between R1 and R3 to disable their ability to add other OSPF routers.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer as below configuration:

on R1

```
conf terminal interface Loopback0
ip address 10.10.1.1 255.255.255.255
!
interface Loopback1
ip address 192.168.1.1 255.255.255.0
!
interface Ethernet0/0 no shut
ip address 10.10.12.1 255.255.255.0
ip ospf 1 area 0 duplex auto
!
interface Ethernet0/1 no shut
ip address 10.10.13.1 255.255.255.0
ip ospf 1 area 0 duplex auto
!
router ospf 1
router-id 10.10.12.1
network 10.10.1.1 0.0.0.0 area 0
network 192.168.1.0 0.0.0.255 area 0
!
copy run star
```

On R2

```
conf terminal interface Loopback0
ip address 10.10.2.2 255.255.255.255
!
interface Loopback1
ip address 192.168.2.2 255.255.255.0
!
interface Ethernet0/0 no shut
ip address 10.10.12.2 255.255.255.0
ip ospf priority 255 ip ospf 1 area 0 duplex auto
!
interface Ethernet0/2 no shut
ip address 10.10.23.2 255.255.255.0
ip ospf priority 255 ip ospf 1 area 0
duplex auto
!
router ospf 1
network 10.10.2.2 0.0.0.0 area 0
network 192.168.2.0 0.0.0.255 area 0
!
copy runs start
```

On R3

```

conf ter
interface Loopback0
ip address 10.10.3.3 255.255.255.255
!
interface Loopback1
ip address 192.168.3.3 255.255.255.0
!
interface Ethernet0/1 no shut
ip address 10.10.13.3 255.255.255.0
ip ospf 1 area 0 duplex auto
!
interface Ethernet0/2 no shut
ip address 10.10.23.3 255.255.255.0
ip ospf 1 area 0
duplex auto
!
router ospf 1
network 10.10.3.3 0.0.0.0 area 0
network 192.168.3.0 0.0.0.255 area 0
!
copy run start
!
    
```

NEW QUESTION 83

- (Exam Topic 5)

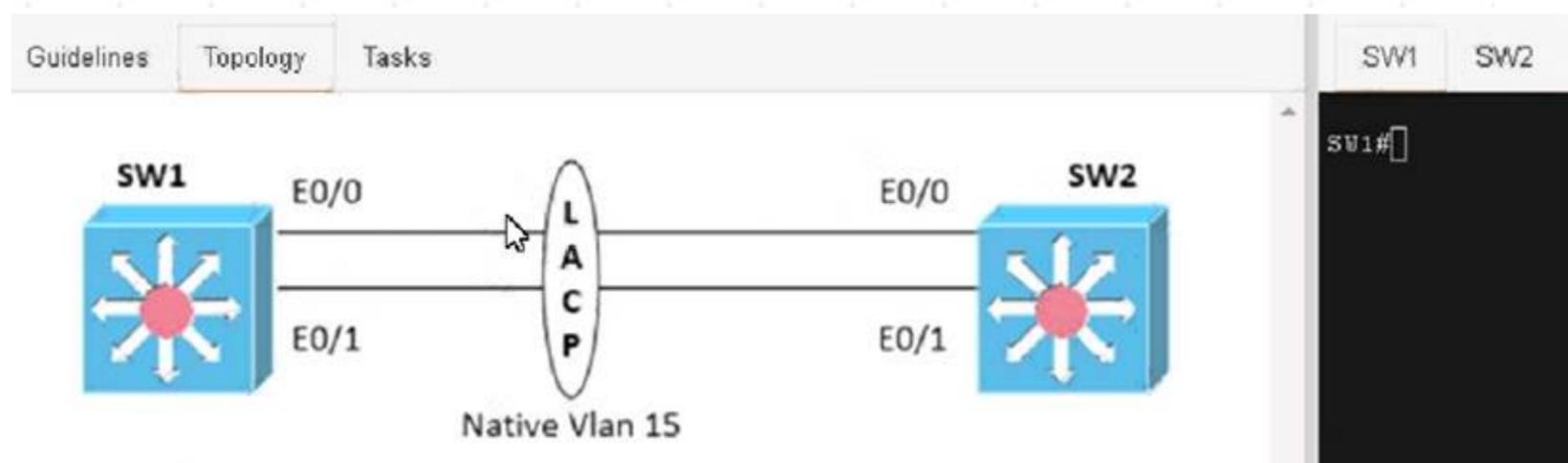
Physical connectivity is implemented between the two Layer 2 switches, and the network connectivity between them must be configured

- * 1. Configure an LACP EtherChannel and number it as 1; configure it between switches SW1 and SVV2 using interfaces Ethernet0/0 and Ethernet0/1 on both sides. The LACP mode must match on both ends
- * 2. Configure the EtherChannel as a trunk link.
- * 3. Configure the trunk link with 802.1 q tags.
- * 4. Configure the native VLAN of the EtherChannel as VLAN 15.

Guidelines

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- Click **Next** at the bottom of the screen to submit this lab and move to the next question.
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- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer as below configuration:

On SW1:

```

conf terminal vlan 15
exit
    
```

```
interface range eth0/0 - 1 channel-group 1 mode active exit
interface port-channel 1
switchport trunk encapsulation dot1q switchport mode trunk
switchport trunk native vlan 15 end
copy run start on SW2: conf terminal vlan 15
exit
interface range eth0/0 - 1 channel-group 1 mode active exit
interface port-channel 1
switchport trunk encapsulation dot1q switchport mode trunk
switchport trunk native vlan 15 end
copy run start
```

NEW QUESTION 84

- (Exam Topic 4)

PC1 tries to send traffic to newly installed PC2. The PC2 MAC address is not listed in the MAC address table of the switch, so the switch sends the packet to all ports in the same VLAN Which switching concept does this describe?

- A. MAC address aging
- B. MAC address table
- C. frame flooding
- D. spanning-tree protocol

Answer: A

NEW QUESTION 86

- (Exam Topic 4)

Drag and drop the virtualization concepts from the left onto the matching statements on the right.

guest operating system	An operating system instance that is decoupled from the server hardware.
host operating system	Each core can run more than one process simultaneously.
hypervisor	Runs on a physical server, manages, and allocates the physical resources.
multithreading	The software that manages the basic functions of the physical hardware.
virtual machine	The software that manages the basic functions of the virtual machine.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

guest operating system	virtual machine
host operating system	multithreading
hypervisor	hypervisor
multithreading	guest operating system
virtual machine	host operating system

NEW QUESTION 91

- (Exam Topic 4)

Which two transport layer protocols carry syslog messages? (Choose two.)

- A. TCP
- B. IP
- C. RTP
- D. UDP
- E. ARP

Answer: AD

NEW QUESTION 96

- (Exam Topic 4)

Refer to the exhibit.

```

CPE1# show protocols e0/1
Ethernet0/1 is up, line protocol is up
Internet address is 10.0.12.2/24

CPE1# show ip access-list LAN
Standard IP access list LAN
10 permit 10.0.12.0, wildcard bits 0.0.0.255

CPE1# show ip nat translations

CPE1# show ip nat statistics
Total active translations: 0 (0 static, 0 dynamic; 0 extended)
Peak translations: 0
Outside interfaces:
Inside interfaces:
Ethernet0/1
Hits: 0 Misses: 0
CEF Translated packets: 0, CEF Punted packets: 0
Expired translations: 0
Dynamic mappings:
-- Inside Source
[Id: 1] access-list LAN pool NATPOOL refcount 0
pool NATPOOL: netmask 255.255.255.0
start 198.51.100.11 end 198.51.100.20
type generic, total addresses 10, allocated 0 (0%), misses 0

Total doors: 0
Appl doors: 0
Normal doors: 0
Queued Packets: 0
    
```

What is the next step to complete the implementation for the partial NAT configuration shown?

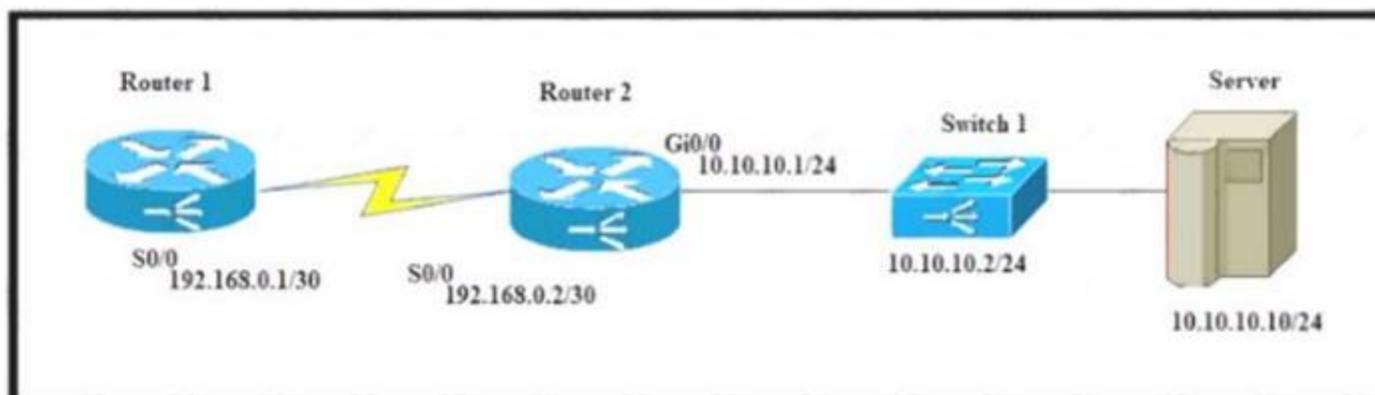
- A. Reconfigure the static NAT entries that overlap the NAT pool
- B. Configure the NAT outside interface
- C. Modify the access list for the internal network on e0/1
- D. Apply the ACL to the pool configuration

Answer: A

NEW QUESTION 99

- (Exam Topic 4)

Refer to the exhibit.



A network engineer must configure router R1 with a host route to the server. Which command must the engineer configure?

- A. R1(config)#ip route 10.10.10.0 255.255.255.0 192.168.0.2
- B. R1(Config)#ip route 10.10.10.10 265.255.255.255 192 168.0.2
- C. R1(config)#ip route 192.168.0.2 255.255.255.255 10.10.10.10
- D. R1(config)#ip route 0.0.0.0 0.0 0.0 192 168.0.2

Answer: B

NEW QUESTION 100

- (Exam Topic 4)

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

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

Answer: D

NEW QUESTION 104

- (Exam Topic 4)

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

BPDUs received are forwarded to the system module	action
BPDUs received from the system module are processed and transmitted	action
Frames received from the attached segment are discarded	action
Frames received from the attached segment are processed	action
Switched frames received from other ports are advanced	
The port in the forwarding state responds to network management messages	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

- * 1. BPDUs received are forwarded to the system module.
 - * 2. Frames received from the attached segment are processed.
 - * 3. Switched frames received from other ports are advanced.
 - * 4. The port in the forwarding state responds to network management messages.
- https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/layer2/503_n1_1/Cisco_n5k_layer2_c

NEW QUESTION 108

- (Exam Topic 4)

Which 802.11 frame type is Association Response?

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

Answer: A

NEW QUESTION 111

- (Exam Topic 4)

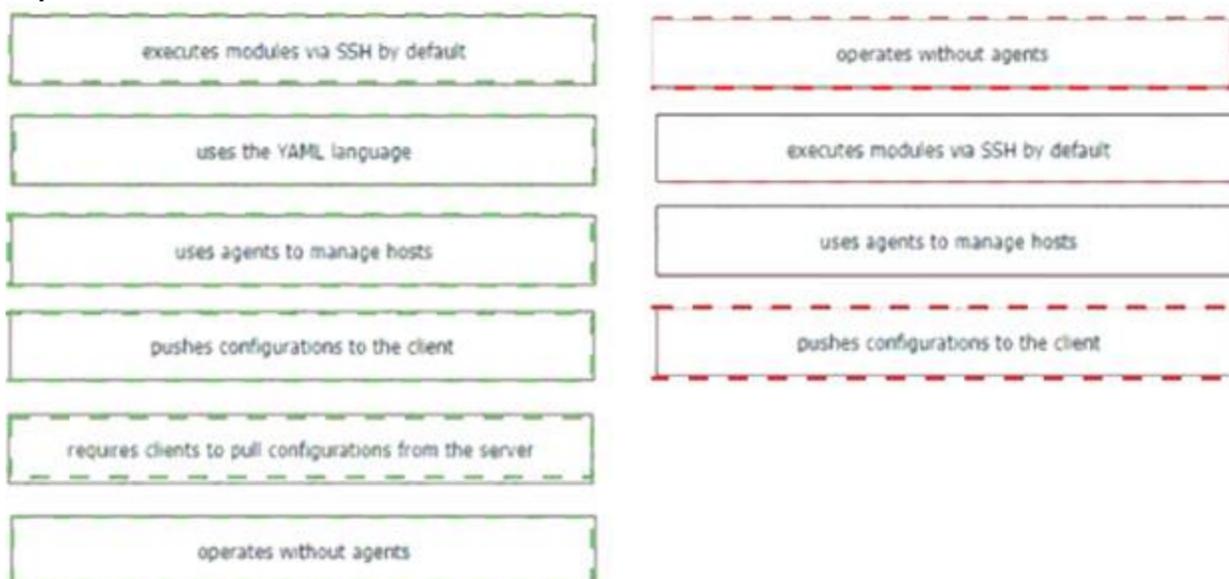
Drag and drop the Ansible features from the left to the right Not all features are used.

executes modules via SSH by default	feature
uses the YAML language	feature
uses agents to manage hosts	feature
pushes configurations to the client	feature
requires clients to pull configurations from the server	
operates without agents	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 114

- (Exam Topic 4)

Refer the exhibit.

```
R19#sh int fa0/0
FastEthernet0/0 is up, line protocol is up
Hardware is DEC21140, address is ca02.7788.0000 (bia ca02.7788.0000)
Description: SALES_SUBNET
Internet address is 10.32.102.2/30
MTU 1500 bytes, BW 100000 Kbit/sec, DLY 100 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (60 sec)
Full-duplex, 100Mb/s, 100BaseTX/FX
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:01, output 00:00:00, output hang never
Last clearing of "show interface" counters never
Input queue: 0/300/0/0 (size/max/drops/flushes); Total output drops:
135298429
Queueing strategy: fifo
Output queue: 0/300 (size/max)
30 second input rate 0 bits/sec, 0 packets/sec
30 second output rate 0 bits/sec, 0 packets/sec
73310 packets input, 7101162 bytes
Received 73115 broadcasts (0 IP multicasts)
0 runs, 0 giants, 0 throttles
0 input errors, 4 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog
0 input packets with dribble condition detected
3927513096455 packets output, 14404034810952 bytes, 0 underruns
0 output errors. 11 collisions. 0 interface resets
```

What is the cause of poor performance on router R19?

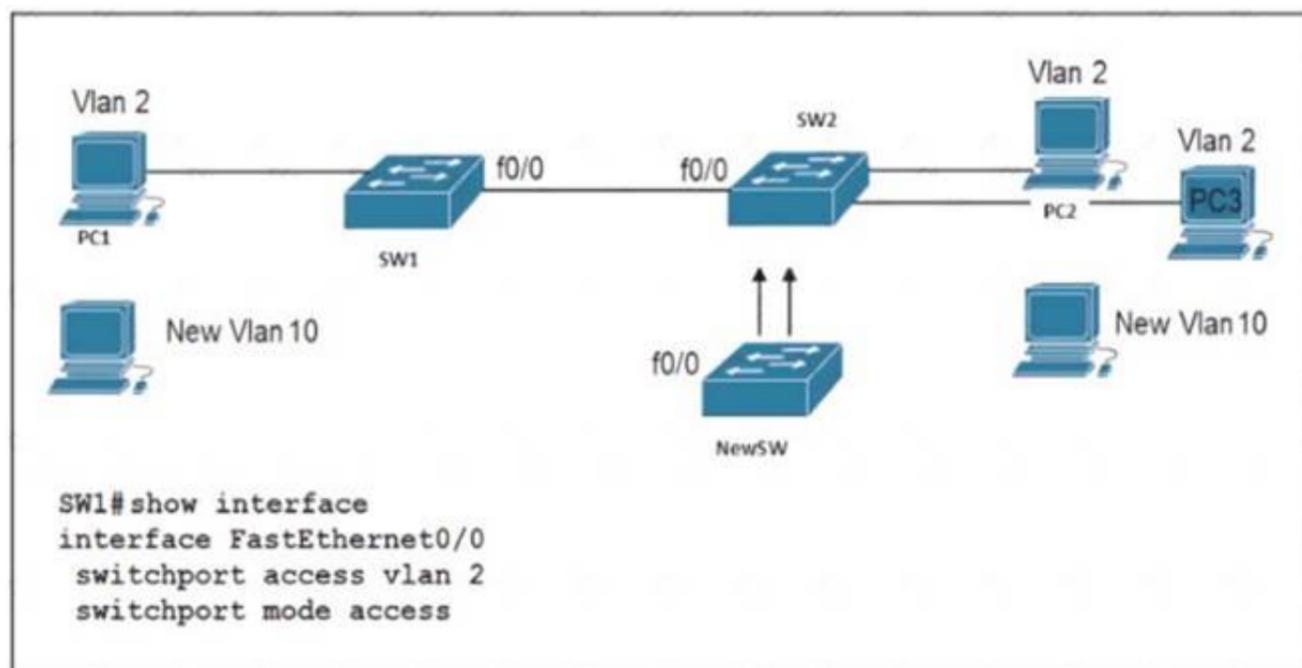
- A. excessive collisions
- B. speed and duplex mismatch
- C. port oversubscription
- D. excessive CRC errors

Answer: A

NEW QUESTION 115

- (Exam Topic 4)

Refer to the exhibit.



An engineer is configuring a new Cisco switch NewSW, to replace SW2. The details have been provided

- Switches SW1 and SW2 are third-party devices without support for trunk ports
- The existing connections must be maintained between PC1, PC2, and PC3
- Allow the switch to pass traffic from future VLAN 10. Which configuration must be applied?

A)

```

NewSW(config)#interface f0/0
NewSW(config-if)#switchport mode access
NewSW(config-if)#switchport trunk allowed vlan 2,10
NewSW(config-if)#switchport trunk native vlan 10
    
```

B)

```

NewSW(config)#interface f0/0
NewSW(config-if)#switchport mode trunk
NewSW(config-if)#switchport trunk allowed vlan 2,10
NewSW(config-if)#switchport trunk native vlan 2
    
```

C)

```

NewSW(config)#interface f0/0
NewSW(config-if)#switchport mode trunk
NewSW(config-if)#switchport trunk allowed vlan 10
NewSW(config-if)#switchport trunk native vlan 10
    
```

D)

```

NewSW(config)#interface f0/0
NewSW(config-if)#switchport mode access
NewSW(config-if)#switchport trunk allowed vlan 2,10
NewSW(config-if)#switchport trunk native vlan 2
    
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

NEW QUESTION 120

- (Exam Topic 4)

What are two reasons a switch experiences frame flooding? (Choose two.)

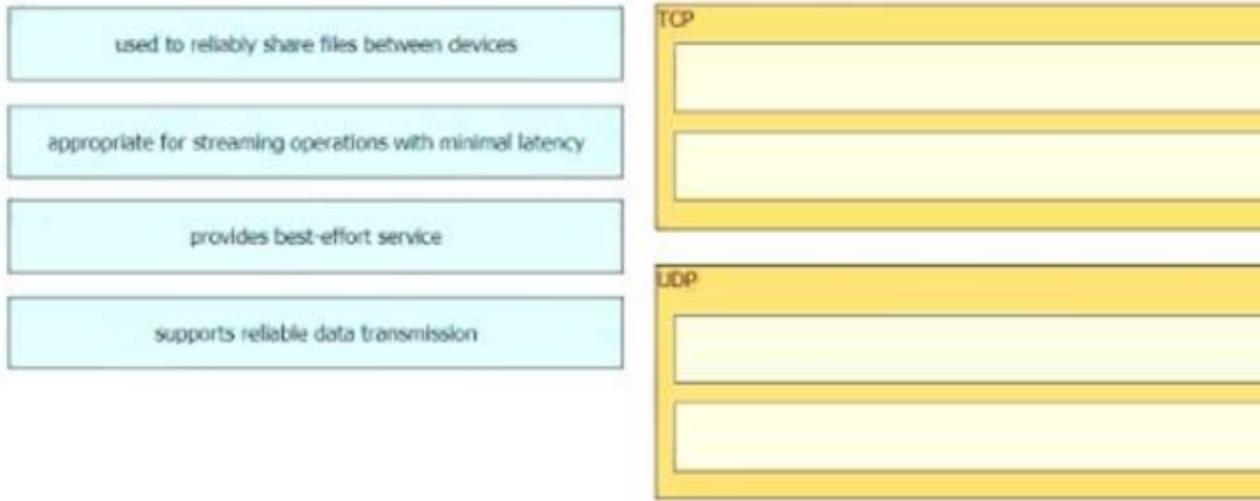
- A. A defective patch cable is connected to the switch port
- B. Topology changes are occurring within spanning-tree
- C. An aged MAC (able entry is causing excessive updates
- D. Port-security is configured globally
- E. The forwarding table has overflowed

Answer: AB

NEW QUESTION 122

- (Exam Topic 4)

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



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 127

- (Exam Topic 4)

When is the PUT method used within HTTP?

- A. when a nonidempotent operation is needed
- B. to update a DNS server
- C. to display a web site
- D. when a read-only operation it required

Answer: B

NEW QUESTION 128

- (Exam Topic 4)

Which two IPv6 addresses are used to provide connectivity between two routers on a shared link? (Choose two)

- A. ::ffff:1014:1011/96
- B. 2001:7011:046:1111:1/64
- C. jff06bb43cd4dd111bbff02:4545234d
- D. 2002:5121:204b:1111:1/64
- E. FF02::0WIFF00:0I)00/104

Answer: B

NEW QUESTION 133

- (Exam Topic 4)

Drag and drop the elements of a security program from the left onto the corresponding descriptions on the right.

awareness	document that outlines an organization's security goals and practices and the roles and responsibilities of the organization's personnel
education	tactical document that sets out specific tasks and methods to maintain security
security policy	user-awareness learning level that focuses on learning about topics and practices beyond what is typically required by the user's job
security standard	user-awareness learning level that focuses on security practices that all employees must understand and enforce
training	user-awareness learning level that focuses on teaching employees how to perform tasks specifically required by their jobs

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Diagram Description automatically generated
<https://www.ciscopress.com/articles/article.asp?p=1998559&seqNum=3>

NEW QUESTION 137

- (Exam Topic 4)
Refer to the exhibit.

```
Codes: C - Connected, L - Local, S - Static, U - Per-user Static route
B - BGP, R - RIP, H - NHRP, I1 - ISIS L1
I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary, D - EIGRP
EX - EIGRP external, ND - ND Default, NDp - ND Prefix, DCE - Destination
NDR - Redirect, O - OSPF Intra, OI - OSPF Inter, OE1 - OSPF ext 1
OE2 - OSPF ext 2, ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
la - LISP alt, lr - LISP site-registrations, ld - LISP dyn-eid
lA - LISP away, le - LISP extranet-policy, lp - LISP publications

ND ::/0 [2/0]
  via FE80::A8BB:CCFF:FE00:200, Ethernet0/0
NDp 2001:DB8:1234:1::/64 [2/0]
  via Ethernet0/0, directly connected
L 2001:DB8:1234:1:A8BB:CCFF:FE00:100/128 [0/0]
  via Ethernet0/0, receive
C 2001:DB8:1234:2::/64 [0/0]
  via Ethernet0/1, directly connected
L 2001:DB8:1234:2:A8BB:CCFF:FE00:110/128 [0/0]
  via Ethernet0/1, receive
L FF00::/8 [0/0]
  via Null0, receive
```

The administrator must configure a floating static default route that points to 2001:db8:1234:2::1 and replaces the current default route only if it fails. Which command must the engineer configure on the CPE?

- A. ipv6 route ::/0 2001:db8:1234:2::1 3
- B. ipv6 route ::/128 2001:db8:1234:2::1 3
- C. ipv6 route ::/0 2001:db8:1234:2::1 1
- D. ipv6 route ::/0 2001:db8:1234:2::1 2

Answer: B

NEW QUESTION 141

- (Exam Topic 4)

A network engineer must migrate a router loopback interface to the IPv6 address space. If the current IPv4 address of the interface is 10.54.73.1/32, and the engineer configures IPv6 address 0.0.0.0:ffff:a36:4901, which prefix length must be used?

- A. /64

- B. /96
- C. /124
- D. /128

Answer: D

NEW QUESTION 146

- (Exam Topic 4)

What is the purpose of configuring different levels of syslog for different devices on the network?

- A. to rate-limit messages for different severity levels from each device
- B. to set the severity of syslog messages from each device
- C. to identify the source from which each syslog message originated
- D. to control the number of syslog messages from different devices that are stored locally

Answer: B

NEW QUESTION 148

- (Exam Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

enables aggregation of routing prefixes	Global Unicast Address
provides for one-to-one communication	
provides one-to-many communications	
sends packets to a group address rather than a single address	
Multicast	

- A. Mastered
- B. Not Mastered

Answer: A

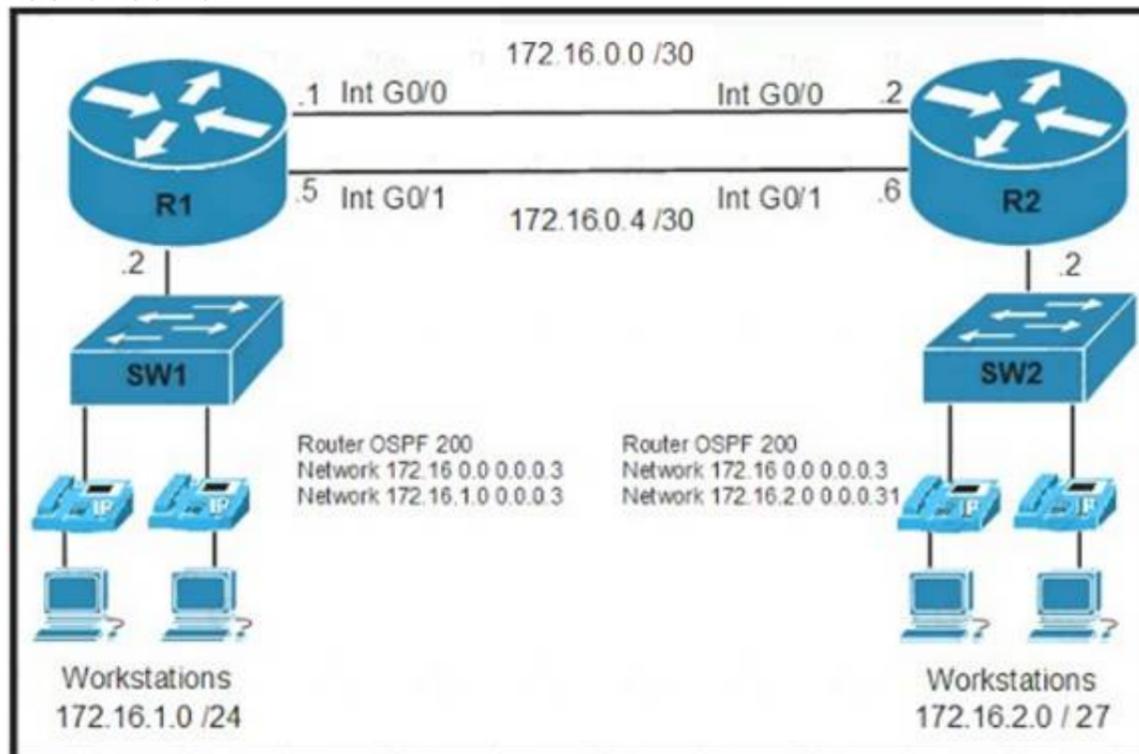
Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 151

- (Exam Topic 4)

Refer to the exhibit.



The primary route across Gi0/0 is configured on both routers. A secondary route must be configured to establish connectivity between the workstation networks. Which command set must be configured to complete this task?

A)

R1
ip route 172.16.2.0 255.255.255.240 172.16.0.2 113

R2
ip route 172.16.1.0 255.255.255.0 172.16.0.1 114

B)

R1
ip route 172.16.2.0 255.255.255.240 172.16.0.5 89

R2
ip route 172.16.1.0 255.255.255.0 172.16.0.6 89

C)

R1
ip route 172.16.2.0 255.255.255.248 172.16.0.5 110

R2
ip route 172.16.1.0 255.255.255.0 172.16.0.6 110

D)

R1
ip route 172.16.2.0 255.255.255.224 172.16.0.6 111

R2
ip route 172.16.1.0 255.255.255.0 172.16.0.5 112

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 156

- (Exam Topic 4)

What is a characteristic of RSA?

- A. It uses preshared keys for encryption
- B. It requires both sides to have identical keys
- C. It is a private-key encryption algorithm
- D. It is a public-key cryptosystem

Answer: D

NEW QUESTION 160

- (Exam Topic 4)

What is a reason to implement IPv4 private addressing?

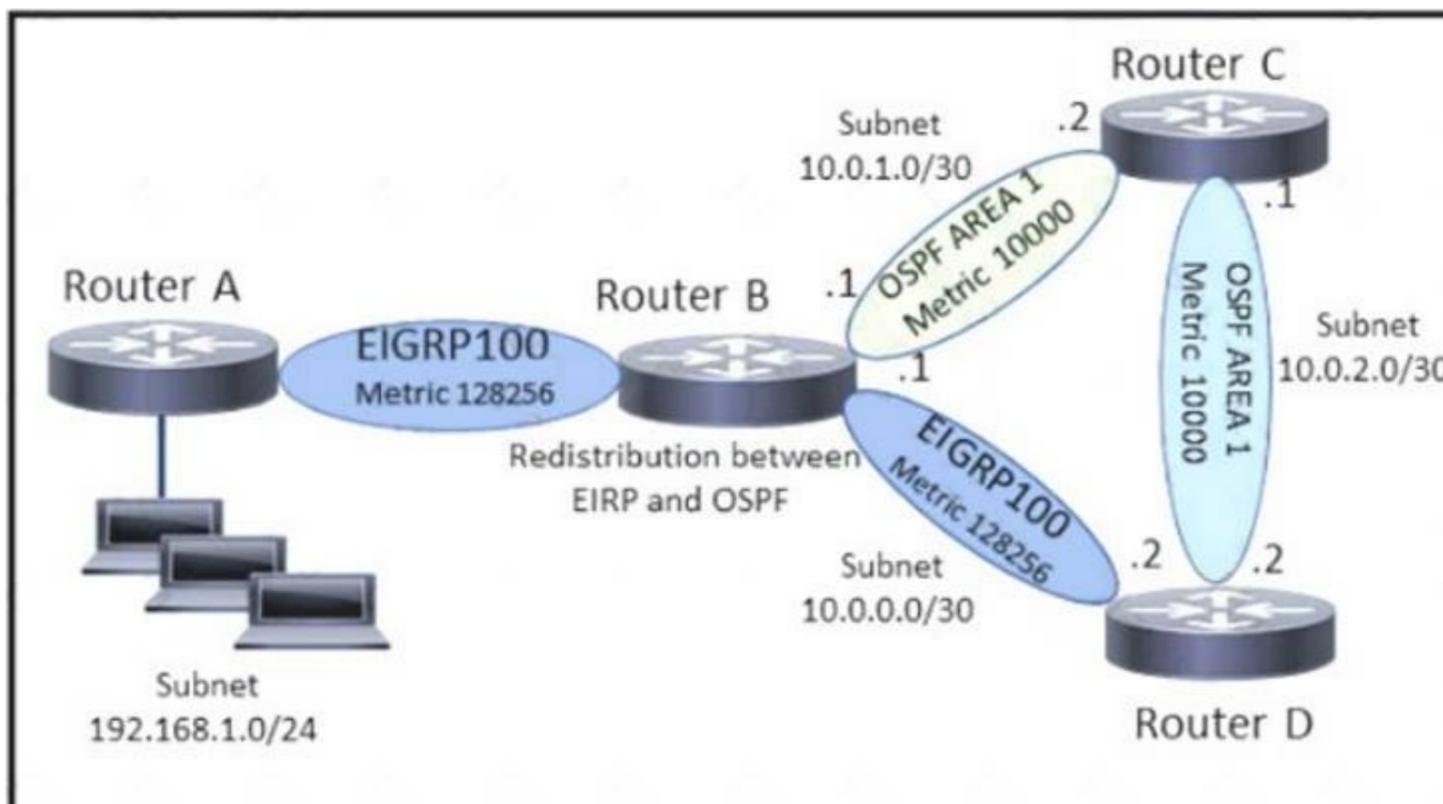
- A. Reduce the risk of a network security breach
- B. Comply with PCI regulations
- C. Comply with local law
- D. Reduce the size of the forwarding table on network routers

Answer: D

NEW QUESTION 161

- (Exam Topic 4)

Refer to the exhibit.



A network engineer executes the show ip route command on router D. What is the next hop to network n192.168 1 0/24 and why?

- A. The next hop is 10.0.2.1 because it uses distance vector routing
- B. The next hop is 10.0.2.1 because it is a link-state routing protocol
- C. The next hop is 10.0.0.1 because it has a better administrative distance
- D. The next hop is 10.0.0.1 because it has a higher metric.

Answer: B

NEW QUESTION 162

- (Exam Topic 4)

How do UTP and STP cables compare?

- A. STP cables are cheaper to procure and easier to install and UTP cables are more expensive and harder to install.
- B. UTP cables are less prone to crosstalk and interference and STP cables are more prone to crosstalk and interference.
- C. UTP cables provide taster and more reliable data transfer rates and STP cables are slower and less reliable.
- D. STP cables are shielded and protect against electromagnetic interference and UTP lacks the same protection against electromagnetic interference.

Answer: D

NEW QUESTION 163

- (Exam Topic 4)

Which type of port is used to connect lo the wired network when an autonomous AP maps two VLANs to its WLANs?

- A. LAG
- B. EtherChannel
- C. trunk
- D. access

Answer: C

NEW QUESTION 168

- (Exam Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

confined to a single link

required on all IPv6 devices

is publicly routable in the same way as IPv4 addresses

provides for one-to-one communication

Global Unicast Address

Link-Local Address

A. Mastered

B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 173

- (Exam Topic 4)

Drag and drop the AAA features from the left onto the corresponding AAA security services on the right. Not all options are used.

Answer Area

It enables the device to allow user- or group-based access.	Accounting <div style="background-color: #FFFF00; height: 20px; width: 100%;"></div> <div style="background-color: #FFFF00; height: 20px; width: 100%;"></div>
It leverages a RADIUS server to grant user access to a reverse Telnet session.	
It records the amount of time for which a user accesses the network on a remote server.	Authorization <div style="background-color: #FFFF00; height: 20px; width: 100%;"></div> <div style="background-color: #FFFF00; height: 20px; width: 100%;"></div>
It restricts the CLI commands that a user can perform.	
It uses TACACS+ to log the configuration commands entered by a network administrator.	
It verifies the user and password before granting access to the device.	

A. Mastered

B. Not Mastered

Answer: A

Explanation:

Answer Area

It enables the device to allow user- or group-based access.	Accounting <div style="background-color: #ADD8E6; padding: 5px;">It records the amount of time for which a user accesses the network on a remote server.</div> <div style="background-color: #ADD8E6; padding: 5px;">It uses TACACS+ to log the configuration commands entered by a network administrator.</div>
It leverages a RADIUS server to grant user access to a reverse Telnet session.	
It records the amount of time for which a user accesses the network on a remote server.	Authorization <div style="background-color: #ADD8E6; padding: 5px;">It leverages a RADIUS server to grant user access to a reverse Telnet session.</div> <div style="background-color: #ADD8E6; padding: 5px;">It restricts the CLI commands that a user can perform.</div>
It restricts the CLI commands that a user can perform.	
It uses TACACS+ to log the configuration commands entered by a network administrator.	
It verifies the user and password before granting access to the device.	

NEW QUESTION 178

- (Exam Topic 4)

A packet from a company's branch office is destined to host 172.31.0.1 at headquarters. The sending router has three possible matches in its routing table for the packet prefixes: 172.31.0.0/16, 172.31.0.0/24, and 172.31.0.0/25. How does the router handle the packet?

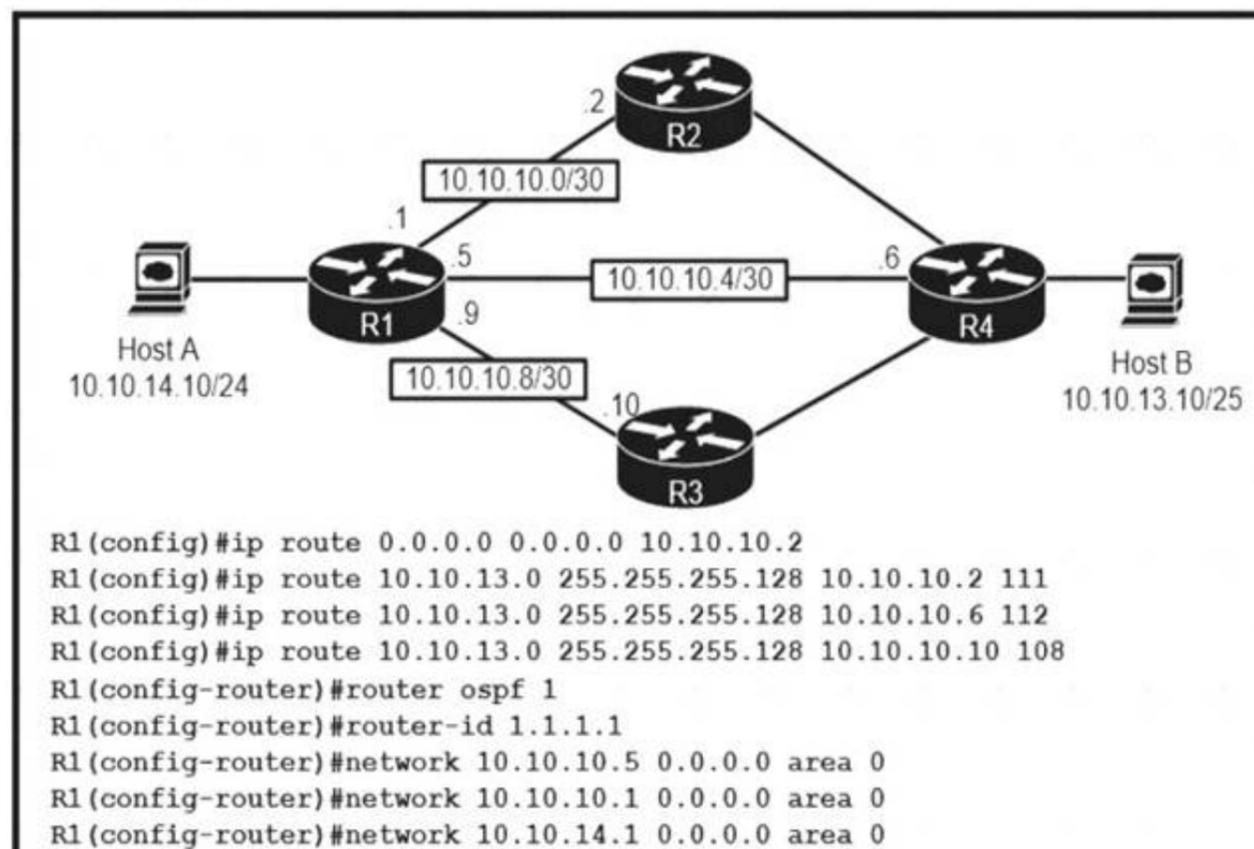
- A. It sends the traffic via prefix 172.31.0.0/16
- B. It sends the traffic via the default gateway 0.0.0.0/0.
- C. It sends the traffic via prefix 172.31.0.0/24
- D. It sends the traffic via prefix 172.31.0.0/25

Answer: D

NEW QUESTION 181

- (Exam Topic 4)

Refer to the exhibit.



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

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

Answer: D

NEW QUESTION 186

- (Exam Topic 4)

A network analyst is tasked with configuring the date and time on a router using EXEC mode. The date must be set to January 1, 2020 and the time must be set to 12:00 am. Which command should be used?

- A. clock summer-time recurring
- B. clock timezone
- C. clock summer-time date
- D. clock set

Answer: D

NEW QUESTION 190

- (Exam Topic 4)

Drag and drop the Cisco IOS attack mitigation features from the left onto the types of network attack they mitigate on the right.

DHCP snooping	rogue server that spoofs IP configuration
Dynamic ARP Inspection	cache poisoning
IP Source Guard	flood attacks
storm control	rogue clients on the network

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Application Description automatically generated with medium confidence

NEW QUESTION 194

- (Exam Topic 4)

Which functionality is provided by the console connection on a Cisco WLC?

- A. out-of-band management
- B. secure in-band connectivity for device administration
- C. unencrypted in-band connectivity for file transfers
- D. HTTP-based GUI connectivity

Answer: B

NEW QUESTION 196

- (Exam Topic 4)

Refer to the exhibit.

```

R1# show ip route | begin gateway
Gateway of last resort is not set
 172.16.0.0/16 is variably subnetted, 3 subnets, 2 masks
C   172.16.1.0/24 is directly connected, FastEthernet0/0
L   172.16.1.1/32 is directly connected, FastEthernet0/0
EX  172.16.2.0/24 [170/2] via 207.165.200.250, 00:00:25, Serial0/0/0
O   192.168.1.0/24 [110/84437] via 207.165.200.254, 00:00:17, Serial0/0/1
D   192.168.2.0/24 [90/184437] via 207.165.200.254, 00:00:15, Serial0/0/1
E1  192.168.3.0/24 [110/1851437] via 207.165.200.254, 00:00:19, Serial0/0/1
    207.165.200.0/24 is variably subnetted, 4 subnets, 2 masks
C   207.165.200.248/30 is directly connected, Serial0/0/0
L   207.165.200.249/32 is directly connected, Serial0/0/0
C   207.165.200.252/30 is directly connected, Serial0/0/1
L   207.165.200.253/32 is directly connected, Serial0/0/1
    
```

Which prefix did router R1 learn from internal EIGRP?

- A. 192.168.10/24
- B. 192.168.3.0/24
- C. 192.168.2.0/24
- D. 172.16.1.0/24

Answer: C

NEW QUESTION 201

- (Exam Topic 4)

Drag and drop each characteristic of device-management technologies from the left onto the deployment type on the right.

relies on per-device management	Cisco DNA Center
uses individual software management	
orchestrates background device configuration	
supports open APIs	Traditional
provides greater flexibility for custom and non-standard configurations	
supports centralized software management	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

A picture containing diagram Description automatically generated

NEW QUESTION 206

- (Exam Topic 4)

To improve corporate security, an organization is planning to implement badge authentication to limit access to the data center. Which element of a security program is being deployed?

- A. user training
- B. user awareness
- C. vulnerability verification

D. physical access control

Answer: D

NEW QUESTION 209

- (Exam Topic 4)

An engineer is configuring router R1 with an IPv6 static route for prefix 2019:C15C:0CAF:E001::/64. The next hop must be 2019:C15C:0CAF:E002::1 The route must be reachable via the R1 Gigabit 0/0 interface. Which command configures the designated route?

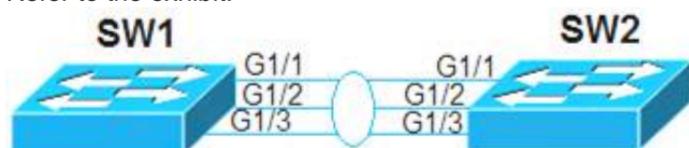
- A. R1(config)#ipv6 route 2019:C15C:0CAF:E001::/64 2019:C15C:0CAF:E002::1
- B. R1(config-if)#ipv6 route 2019:C15C:0CAF:E001::/64 2019:C15C:0CAF:E002::1
- C. R1(config-if)#ip route 2019:C15C:0CAF:E001::/64 GigabitEthernet0/0
- D. R1(config)#ip route 2019:C15C:0CAF:E001::/64 GigabitEthernet0/0

Answer: C

NEW QUESTION 213

- (Exam Topic 4)

Refer to the exhibit.



Which configuration establishes a Layer 2 LACP EtherChannel when applied to both switches?

- A. Interface range G1/1 – 1/3 switchport mode trunk channel-group 1 mode active no shutdown
- B. Interface range G1/1 – 1/3 switchport mode access channel-group 1 mode passive no shutdown
- C. Interface range G1/1 – 1/3 switchport mode trunk channel-group 1 mode desirable no shutdown
- D. Interface range G1/1 – 1/3 switchport mode access channel-group 1 mode on no shutdown

Answer: A

NEW QUESTION 218

- (Exam Topic 4)

What are two characteristics of a small office / home office connection environment? (Choose two.)

- A. It requires 10Gb ports on all uplinks.
- B. It supports between 50 and 100 users.
- C. It supports between 1 and 50 users.
- D. It requires a core, distribution, and access layer architecture.
- E. A router port connects to a broadband connection.

Answer: CE

NEW QUESTION 219

- (Exam Topic 4)

Drag and drop the statements about access-point modes from the left onto the corresponding modes on the right.

Monitor	
Sensor	
Sniffer	

It provides air-quality data and interference detection across all enabled channels.
It enables enhanced RFID-tag location tracking.
It supports analytics for wireless performance testing.
It supports real-time Wi-Fi client troubleshooting when network engineers are offsite.
It supports software that analyzes wireless frames on a remote device.
It captures and forwards packets on a specific wireless channel.

- A. Mastered
- B. Not Mastered

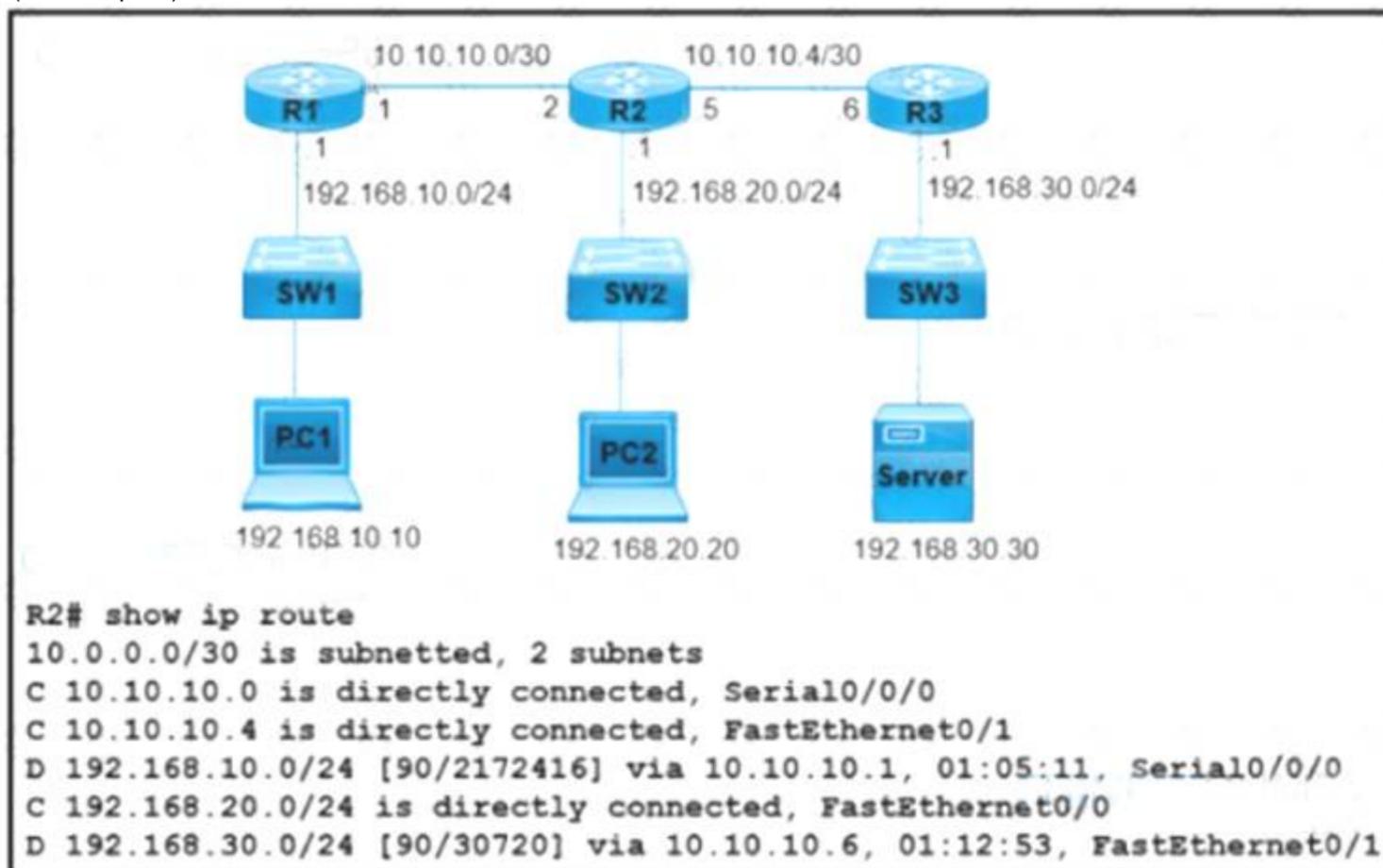
Answer: A

Explanation:

A picture containing diagram Description automatically generated

NEW QUESTION 222

- (Exam Topic 4)



Refer to the exhibit. What is the next-hop P address for R2 so that PC2 reaches the application server via EIGRP?

- A. 192.168.30.1
- B. 10.10.10.5
- C. 10.10.10.6
- D. 192.168.20.1

Answer: D

NEW QUESTION 223

- (Exam Topic 4)

What is a function of MAC address learning?

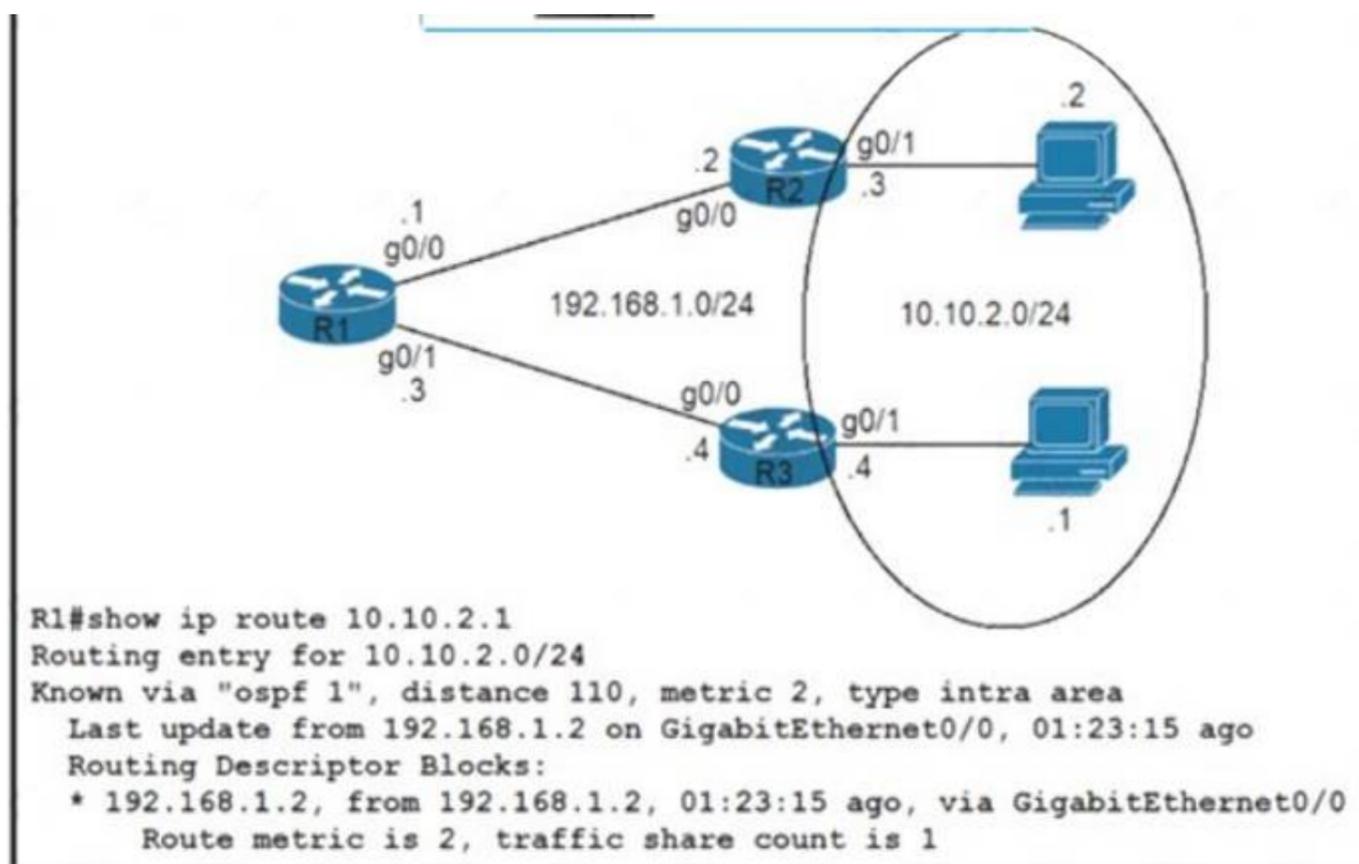
- A. It is enabled by default on all VLANs and interfaces
- B. It increases the potential for MAC address flooding.
- C. It is disabled by default on all interfaces connected to trunks
- D. It increases security on the management VLAN

Answer: A

NEW QUESTION 225

- (Exam Topic 4)

Refer to the exhibit.



Traffic from R1 to the 10.10.2.0/24 subnet uses 192.168.1.2 as its next hop. An network engineer wants to update the R1 configuration so that traffic with destination 10.10.2.1 passes through router R3, and all other traffic to the 10.10.20/24 subnet passes through r2. Which command must be used?

- A. Ip route 10.10.2.1 255.255.255.255 192.168.1.4 115
- B. Ip route 10.10.2.0 255.255.255.0 192.168.1.4 100
- C. Ip route 10.10.2.0 255.255.255.0 192.168.1.4 115
- D. Ip route 10.10.2.1 255.255.255.255 192.168.1.4 100

Answer: D

NEW QUESTION 229

- (Exam Topic 4)

SIP-based Call Admission Control must be configured in the Cisco WLC GUI. SIP call-snooping ports are configured. Which two actions must be completed next? (Choose two.)

- A. Set the QoS level to silver or greater for voice traffic.
- B. Set the QoS level to platinum for voice traffic.
- C. Enable Media Session Snooping on re WLAN.
- D. Enable traffic shaping for the LAN interlace of the WLC.
- E. Configure two different QoS rotes tor data and voice traffic.

Answer: DE

NEW QUESTION 230

- (Exam Topic 4)

A Cisco engineer at a new branch office is configuring a wireless network with access points that connect to a controller that is based at corporate headquarters. Wireless client traffic must terminate at the branch office and access-point survivability is required in the event of a WAN outage. Which access point mode must be selected?

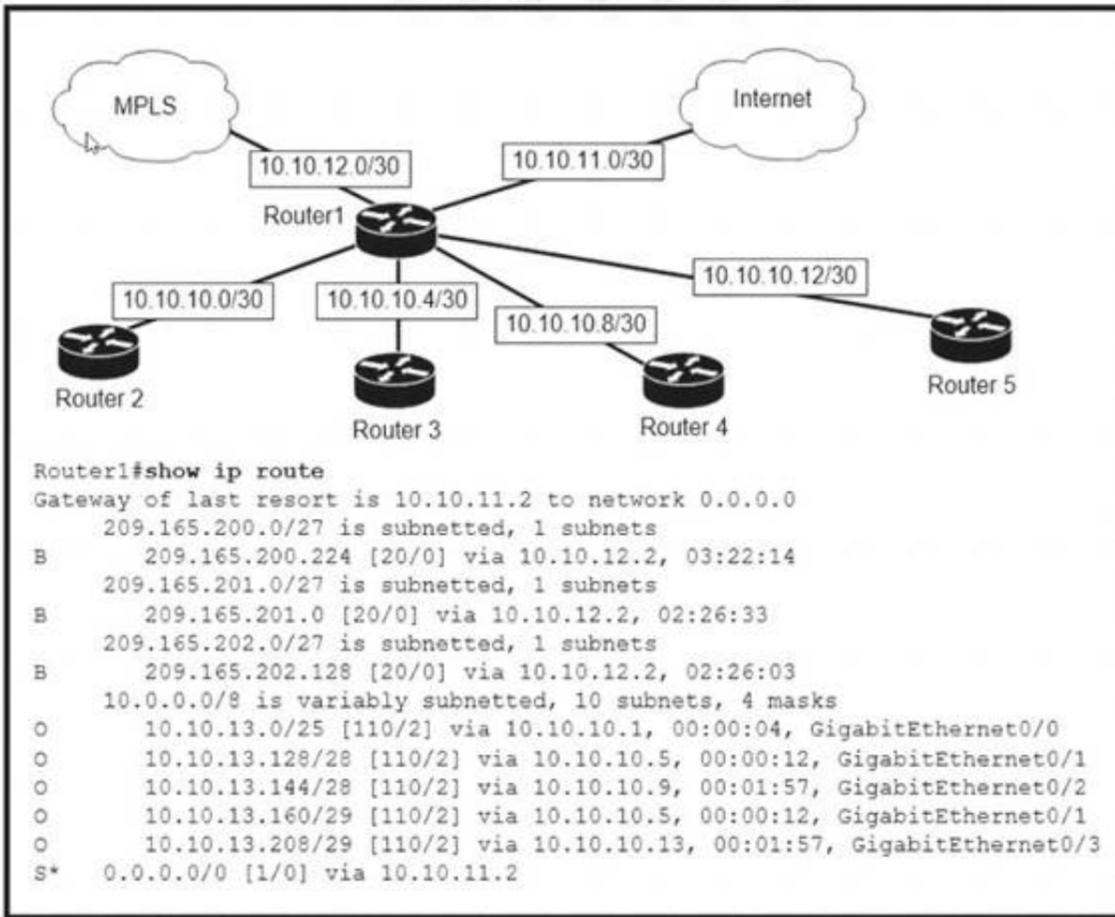
- A. Lightweight with local switching disabled
- B. Local with AP fallback enabled
- C. OfficeExtend with high availability disabled
- D. FlexConnect with local switching enabled

Answer: C

NEW QUESTION 234

- (Exam Topic 4)

Refer to the exhibit.



Drag and drop the destination IPs from the left onto the paths to reach those destinations on the right.

1.1.1.1	Router2
10.10.13.126	Router3
10.10.13.129	Router4
10.10.13.150	Router5
10.10.13.209	Internet cloud
209.165.200.30	MPLS cloud

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

1.1.1.1	10.10.13.126
10.10.13.126	10.10.13.129
10.10.13.129	10.10.13.150
10.10.13.150	10.10.13.209
10.10.13.209	209.165.200.30
209.165.200.30	1.1.1.1

NEW QUESTION 239

- (Exam Topic 4)

Which WLC interface provides out-of-band management in the Cisco Unified Wireless Network Architecture?

- A. service port
- B. virtual
- C. AP-Manager
- D. dynamic

Answer: A

NEW QUESTION 242

- (Exam Topic 4)

Which two HTTP methods are suitable for actions performed by REST-based APIs? (Choose two.)

- A. REMOVE
- B. REDIRECT
- C. OPOST
- D. GET
- E. UPOP

Answer: CD

NEW QUESTION 243

- (Exam Topic 4)

What is a benefit of using private IPv4 addressing?

- A. Multiple companies can use the same addresses without conflicts.
- B. Direct connectivity is provided to internal hosts from outside an enterprise network.
- C. Communication to the internet is reachable without the use of NAT.
- D. All external hosts are provided with secure communication to the Internet.

Answer: A

NEW QUESTION 248

- (Exam Topic 4)

What is the primary purpose of private address space?

- A. conserve globally unique address space
- B. simplify the addressing in the network
- C. limit the number of nodes reachable via the Internet
- D. reduce network complexity

Answer: A

NEW QUESTION 249

- (Exam Topic 4)

Refer to the exhibit.

```
Gateway of last resort is not set

  10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    10.1.1.0/30 is directly connected, GigabitEthernet0/0
L    10.1.1.2/32 is directly connected, GigabitEthernet0/0
S    192.168.0.0/20 [1/0] via 10.1.1.1
     192.168.1.0/30 is subnetted, 1 subnets
S    192.168.1.0/30 [1/0] via 10.1.1.1
     192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
S    192.168.2.0/28 [1/0] via 10.1.1.1
S    192.168.2.0/29 [1/0] via 10.1.1.1
```

An engineer is checking the routing table in the main router to identify the path to a server on the network. Which route does the router use to reach the server at 192.168.2.2?

- A. S 192.168.0.0/20 [1/0] via 10.1.1.1
- B. S 192.168.2.0/29 [1/0] via 10.1.1.1
- C. S 192.168.2.0/28 [1/0] via 10.1.1.1
- D. S 192.168.1.0/30 [1/0] via 10.1.1.1

Answer: B

NEW QUESTION 254

- (Exam Topic 4)

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

- A. implemented over a dedicated WAN
- B. located in the same data center as the users
- C. all hosted on physical servers
- D. accessed over the Internet

Answer: D

NEW QUESTION 255

- (Exam Topic 4)

Refer to the exhibit.

```
GigabitEthernet1 is up, line protocol is up
Hardware is CSR vNIC, address is 5000.0004.0000 (bia 5000.0004.0000)
Internet address is 192.168.1.1/24
MTU 1500 bytes, BW 1000000 Kbit/sec, DLY 10 usec,
  reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (10 sec)
Full Duplex, 1000Mbps, link type is auto, media type is RJ45
```

Which format matches the Modified EUI-64 IPv6 interface address for the network 2001:db8::/64?

- A. 2001 :db8::5000:0004:5678:0090/64
- B. 2001 :db8:4425:5400:77ft:fe07:/64
- C. 2001 :db8::5000:00ff:fe04 0000/64
- D. 2001 :db8::5200:00ff:fe04:0000/64

Answer: C

NEW QUESTION 260

- (Exam Topic 4)

Which interface enables communication between a program on the controller and a program on the networking devices?

- A. northbound interface
- B. software virtual interface
- C. southbound interface
- D. tunnel Interface

Answer: B

NEW QUESTION 263

- (Exam Topic 4)

Which syslog severity level is considered the most severe and results in the system being considered unusable?

- A. Alert
- B. Error
- C. Emergency
- D. Critical

Answer: C

NEW QUESTION 265

- (Exam Topic 4)

What is the MAC address used with VRRP as a virtual address?

- A. 00-00-0C-07-AD-89
- B. 00-00-5E-00-01-0a
- C. 00-07-C0-70-AB-01
- D. 00-C6-41-93-90-91

Answer: B

NEW QUESTION 268

- (Exam Topic 4)

Refer to the exhibit.

```
Switch2# show lldp
Global LLDP Information
  Status: ACTIVE
  LLDP advertisements are sent every 30 seconds
  LLDP hold time advertised is 120 seconds
  LLDP interface reinitialization delay is 2 seconds
```

A network engineer must update the configuring on switch2 so that it sends LLDP packets.

- A)
 - Switch2(config)#lldp timer 1
 - Switch2(config)#lldp tlv-select 3
- B)
 - Switch2(config)#lldp timer 1
 - Switch2(config)#lldp holdtime 3
- C)

Switch2(config)#lldp timer 60
Switch2(config)#lldp holdtime 180

D)

) Switch2(config)#lldp timer 60
Switch2(config)#lldp tlv-select 180

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 269

- (Exam Topic 4)

How does authentication differ from authorization?

- A. Authentication verifies the identity of a person accessing a network, and authorization determines what resource a user can access.
- B. Authentication is used to record what resource a user accesses, and authorization is used to determine what resources a user can access
- C. Authentication is used to determine what resources a user is allowed to access, and authorization is used to track what equipment is allowed access to the network
- D. Authentication is used to verify a person's identity, and authorization is used to create syslog messages for logins.

Answer: A

NEW QUESTION 273

- (Exam Topic 4)

An engineer has configured the domain name, user name, and password on the local router. What is the next step to complete the configuration for a Secure Shell access RSA key?

- A. crypto key Import rsa pem
- B. crypto key pubkey-chain rsa
- C. crypto key generate rsa
- D. crypto key zeroize rsa

Answer: C

NEW QUESTION 277

- (Exam Topic 4)

Refer to the exhibit.



A Cisco engineer creates a new WLAN called lantest. Which two actions must be performed so that only high-speed 2.4-Ghz clients connect? (Choose two.)

- A. Enable the Broadcast SSID option
- B. Enable the Status option.
- C. Set the Radio Policy option to 802.11g Only.
- D. Set the Radio Policy option to 802.11a Only.
- E. Set the Interface/Interface Group(G) to an interface other than guest

Answer: AB

NEW QUESTION 278

- (Exam Topic 4)

What is an enhancement implemented in WPA3?

- A. employs PKI and RADIUS to identify access points
- B. applies 802.1x authentication and AES-128 encryption

- C. uses TKIP and per-packet keying
- D. defends against deauthentication and disassociation attacks

Answer: D

NEW QUESTION 280

- (Exam Topic 4)

Refer to the exhibit.

```
Gateway of last resort is 172.16.2.2 to network 0.0.0.0

  10.0.0.0/8 is variably subnetted, 3 subnets, 3 masks
    10.10.100.0/26 is directly connected, GigabitEthernet0/0/6
C    10.10.10.0/24 is directly connected, GigabitEthernet0/0/0
L    10.10.10.3/32 is directly connected, GigabitEthernet0/0/0
    172.16.0.0/16 is variably subnetted, 3 subnets, 2 masks
S    172.16.1.33/32 is directly connected, GigabitEthernet0/0/1
C    172.16.2.0/23 is directly connected, GigabitEthernet0/0/1
L    172.16.2.1/32 is directly connected, GigabitEthernet0/0/1
S*  0.0.0.0/0 [1/0] via 172.16.2.2
```

A packet sourced from 10.10.10.32 is destined for the internet.

- A. 1
- B. 2
- C. 32

Answer: B

NEW QUESTION 282

- (Exam Topic 4)

What determines the sequence in which materials are planned during the material requirements planning (MRP) run?

- A. The control parameters of the MRP run
- B. The creation date of the materials
- C. The low-level code of the materials
- D. The replenishment lead time of the materials

Answer: C

NEW QUESTION 286

- (Exam Topic 4)

What does the implementation of a first-hop redundancy protocol protect against on a network?

- A. root-bridge loss
- B. spanning-tree loops
- C. default gateway failure
- D. BGP neighbor flapping

Answer: C

NEW QUESTION 291

- (Exam Topic 4)

Refer to the exhibit.

```
Router1#show ip route
Gateway of last resort is 10.10.11.2 to network 0.0.0.0

 209.165.200.0/27 is subnetted, 1 subnets
B   209.165.200.224 [20/0] via 10.10.12.2, 03:22:14
 209.165.201.0/27 is subnetted, 1 subnets
B   209.165.201.0 [20/0] via 10.10.12.2, 02:26:33
 209.165.202.0/27 is subnetted, 1 subnets
B   209.165.202.128 [20/0] via 10.10.12.2, 02:26:03
10.0.0.0/8 is variably subnetted, 8 subnets, 4 masks
C   10.10.10.0/28 is directly connected, GigabitEthernet0/0
C   10.10.11.0/30 is directly connected, FastEthernet2/0
C   10.10.12.0/30 is directly connected, GigabitEthernet0/1
O   10.10.13.0/25 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O   10.10.13.128/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O   10.10.13.144/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O   10.10.13.160/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O   10.10.13.208/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
S*  0.0.0.0/0 [1/0] via 10.10.11.2
```

What is the subnet mask of the route to the 10.10.13.160 prefix?

- A. 255.255.255.240
- B. 255.255.255.128
- C. 255.255.248.
- D. 255.255.255.248

Answer: D

NEW QUESTION 296

- (Exam Topic 4)

Which command enables HTTP access to the Cisco WLC?

- A. config network secureweb enable
- B. config certificate generate web admin
- C. config network webmode enable
- D. config network telnet enable

Answer: C

NEW QUESTION 299

- (Exam Topic 4)

Which two practices are recommended for an acceptable security posture in a network? (Choose two)

- A. Backup device configurations to encrypted USB drives for secure retrieval
- B. maintain network equipment in a secure location
- C. Use a cryptographic keychain to authenticate to network devices
- D. Place internal email and file servers in a designated DMZ
- E. Disable unused or unnecessary ports, interfaces and services

Answer: CE

NEW QUESTION 303

- (Exam Topic 4)

Refer to the exhibit.

```
Router1#show ip route
Gateway of last resort is not set
 209.165.200.0/27 is subnetted, 1 subnets
B   209.165.200.224 [20/0] via 10.10.12.2, 00:09:57
10.0.0.0/8 is variably subnetted, 4 subnets, 3 masks
C   10.10.10.0/28 is directly connected, GigabitEthernet0/0
C   10.10.11.0/30 is directly connected, FastEthernet2/0
O   10.10.13.0/24 [110/2] via 10.10.10.1, 00:08:34, GigabitEthernet0/0
C   10.10.12.0/30 is directly connected, GigabitEthernet0/1
```

Which action by the router when a packet is sourced from 10.10.10.2 and destined 10.10.10.16?

- A. It queues the packets waiting for the route to be learned.
- B. It floods packets to all learned next hops.
- C. It discards the packets.
- D. It uses a route that is similar to the destination address.

Answer: D

NEW QUESTION 307

- (Exam Topic 4)

A WLC sends alarms about a rogue AP, and the network administrator verifies that the alarms are caused by a legitimate autonomous AP.

- A. Place the AP into manual containment.
- B. Remove the AP from WLC management.
- C. Manually remove the AP from Pending state.
- D. Set the AP Class Type to Friendly.

Answer: B

NEW QUESTION 309

- (Exam Topic 4)

What is the functionality of the Cisco DNA Center?

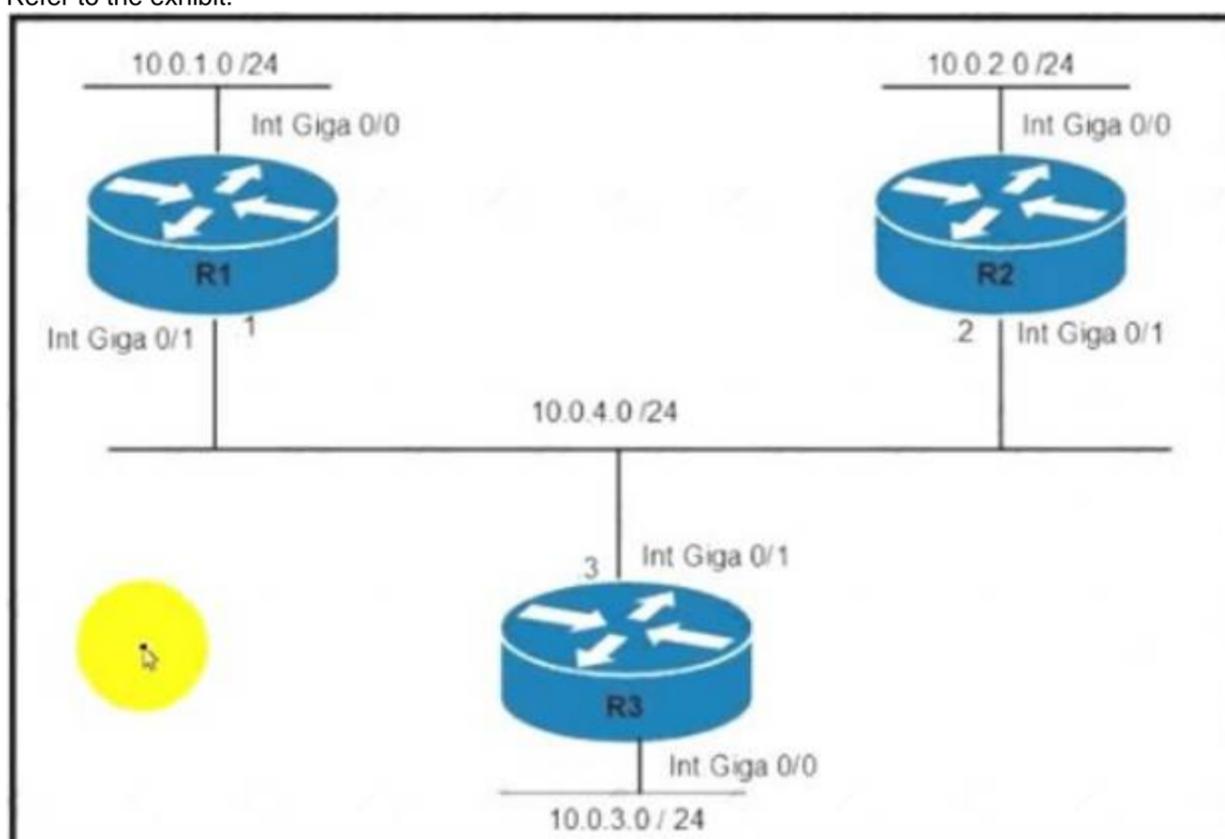
- A. data center network pokey con
- B. console server that permits secure access to all network devices
- C. IP address cool distribution scheduler
- D. software-defined controller for automaton of devices and services

Answer: D

NEW QUESTION 313

- (Exam Topic 4)

Refer to the exhibit.



Router R1 must be configured to reach the 10.0.3.0/24 network from the 10.0.1.0/24 segment. Which command must be used to configure the route?

- A. ip route 10.0.3.0 0.255.255.255 10.0.4.2
- B. route add 10.0.3.0 mask 255.255.255.0 10.0.4.3
- C. ip route 10.0.3.0 255.255.255.0 10.0.4.3
- D. route add 10.0.3.0 0.255.255.255 10.0.4.2

Answer: C

NEW QUESTION 315

- (Exam Topic 4)

Refer to the exhibit.

```
access-list 10 permit 10.0.0.0 0.0.0.255

interface Serial0

ip access-list 10 in
```

A network administrator must permit traffic from the 10.10.0.0/24 subnet to the WAN on interlace Seria10. What is the effect of the configuration as the administrator applies the command?

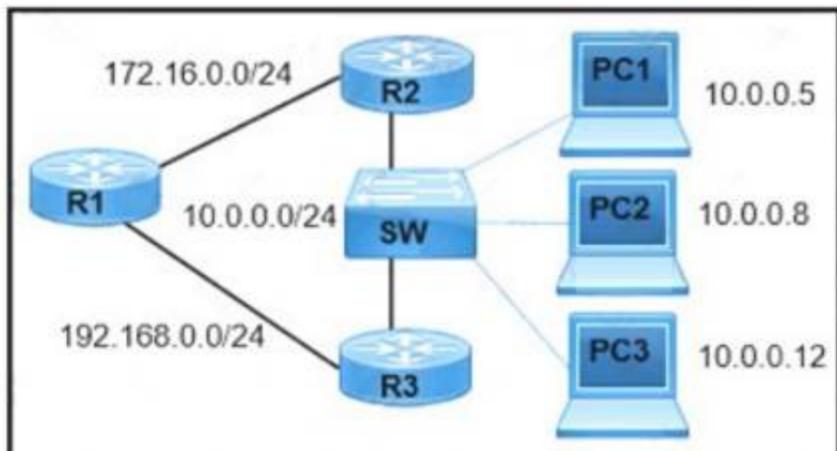
- A. The permit command fails and returns an error code.
- B. The router accepts all incoming traffic to Serial10 with the last octet of the source IP set to 0.
- C. The sourced traffic from IP range 10.0.0.0 -10.0.0.255 is allowed on Serial10.
- D. The router fails to apply the access list to the interface.

Answer: C

NEW QUESTION 318

- (Exam Topic 4)

Refer to the exhibit.



A network engineer must configure R1 so that it sends all packets destined to the 10.0.0.0/24 network to R3, and all packets destined to PC1 to R2. Which configuration must the engineer implement?

- A)


```
R1(config)#ip route 10.0.0.0 255.255.255.0 172.16.0.2
R1(config)#ip route 10.0.0.5 255.255.255.255 192.168.0.2
```
- B)


```
R1(config)#ip route 10.0.0.0 255.255.0.0 172.16.0.2
R1(config)#ip route 10.0.0.5 255.255.255.255 192.168.0.2
```
- C)


```
R1(config)#ip route 10.0.0.0 255.255.255.0 192.168.0.2
R1(config)#ip route 10.0.0.5 255.255.255.255 172.16.0.2
```
- D)


```
R1(config)#ip route 10.0.0.0 255.255.0.0 192.168.0.2
R1(config)#ip route 10.0.0.0 255.255.255.0 172.16.0.2
```

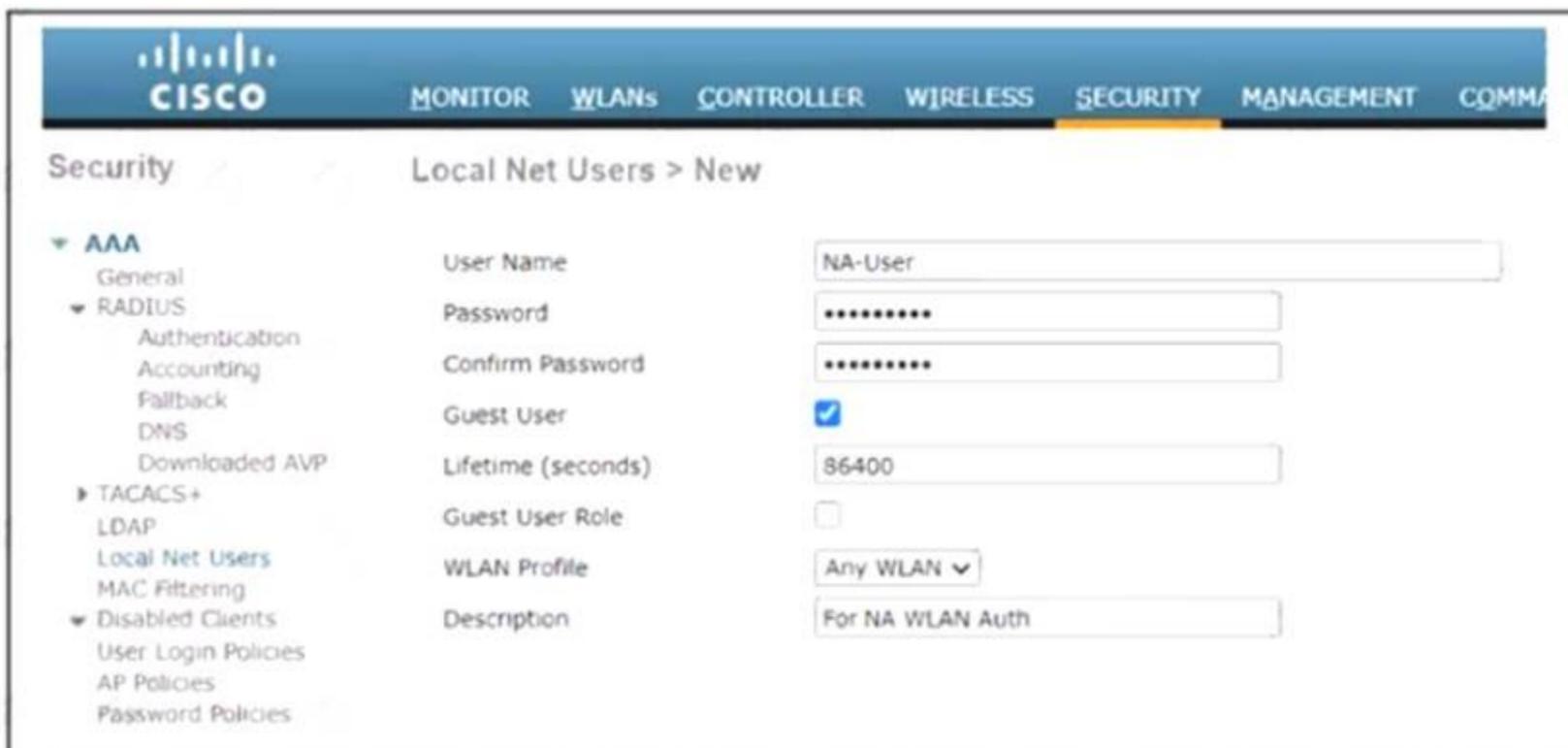
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 323

- (Exam Topic 4)

Refer to the exhibit.



Wireless LAN access must be set up to force all clients from the NA WLAN to authenticate against the local database. The WLAN is configured for local EAP authentication. The time that users access the network must not be limited. Which action completes this configuration?

- A. Uncheck the Guest User check box
- B. Check the Guest User Role check box
- C. Set the Lifetime (seconds) value to 0
- D. Clear the Lifetime (seconds) value

Answer: C

NEW QUESTION 326

- (Exam Topic 4)

What are two examples of multifactor authentication? (Choose two.)

- A. single sign-on
- B. unique user knowledge
- C. passwords that expire
- D. soft tokens
- E. shared password responsibility

Answer: BD

NEW QUESTION 329

- (Exam Topic 4)

Refer to the exhibit.

```
1 [
2   { "switch": "3750", "port": e2 },
3   { "router": "2951", "port": e20 },
4   { "switch": "3750", "port": e23 }
5 ]
```

What is represented by the word "switch" in line 2 of the JSON schema?

- A. array
- B. key
- C. value
- D. object

Answer: C

NEW QUESTION 330

- (Exam Topic 4)

What is a benefit of a point-to-point leased line?

- A. flexibility of design
- B. simplicity of configurator
- C. low cost
- D. full-mesh capability

Answer: B

NEW QUESTION 331

- (Exam Topic 4)

What is a specification for SSIDS?

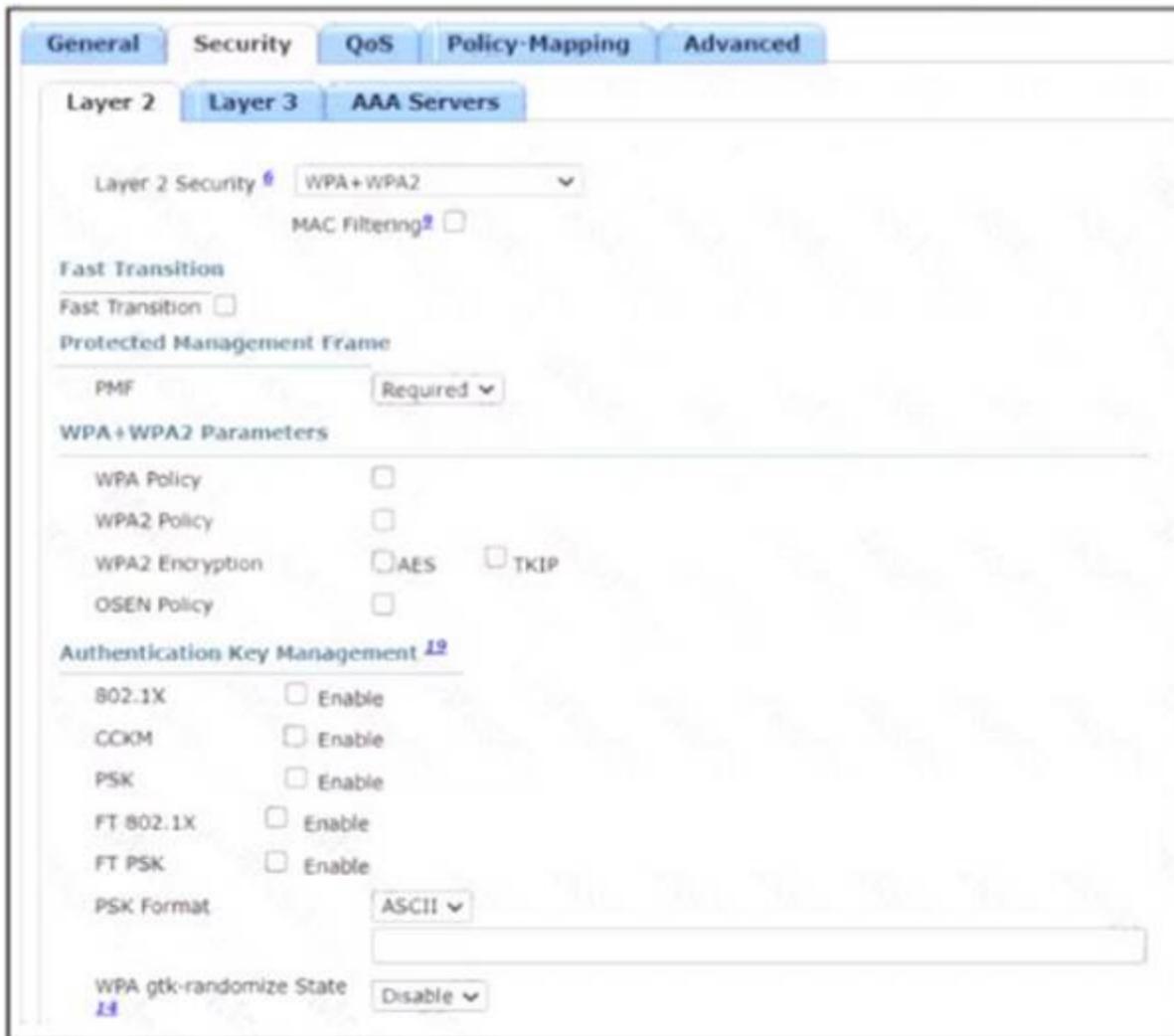
- A. They are a Cisco proprietary security feature.
- B. They must include one number and one letter.
- C. They define the VLAN on a switch.
- D. They are case sensitive.

Answer: B

NEW QUESTION 333

- (Exam Topic 4)

Refer to the exhibit.



- A) Select WPA Policy
Select WPA2 Policy
Enable FT PSK
- B) Select WPA2 Policy
Disable PMF
Enable PSK
- C) Select WPA Policy
Enable CCKM
Enable PSK
- D) Disable PMF
Enable PSK
Enable 802.1x

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 337

- (Exam Topic 4)

2001:db8:600d:cafe::123	Global Unicast
fcba:926a:e8e:7a25:b1:c6d2:1a76:8fde	
fe80::a00:27ff:feeb:89aa	Link-Local Unicast
ff05::1:3	Multicast
	Unique Local

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface Description automatically generated

NEW QUESTION 338

- (Exam Topic 4)

Refer to the exhibit.

```
{  
  "Routers": ["R1", "R2", "R3"],  
  "Switches": ["SW1", "SW2", "SW3"]  
}
```

What is represented by "R1" and "SW1" within the JSON output?

- A. key
- B. array
- C. value
- D. object

Answer: C

NEW QUESTION 343

- (Exam Topic 4)

What does a switch do when it receives a frame whose destination MAC address is missing from the MAC address table?

- A. It floods the frame unchanged across all remaining ports in the incoming VLAN.
- B. It appends the table with a static entry for the MAC and shuts down the port.
- C. It updates the CAM table with the destination MAC address of the frame.
- D. It changes the checksum of the frame to a value that indicates an invalid frame.

Answer: A

NEW QUESTION 346

- (Exam Topic 4)

A switch is forwarding a frame out of an interface except the interface that received the frame. What is the technical term for this process?

- A. ARP
- B. CDP
- C. flooding
- D. multicast

Answer: C

NEW QUESTION 350

- (Exam Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

provides for one-to-one communication

is a counterpart of private IPv4 addresses

is publicly routable in the same way as IPv4 addresses

allows sites to be combined without address conflicts

Global Unicast Address

Unique Local

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

provides for one-to-one communication

is a counterpart of private IPv4 addresses

is publicly routable in the same way as IPv4 addresses

allows sites to be combined without address conflicts

Global Unicast Address

is publicly routable in the same way as IPv4 addresses

allows sites to be combined without address conflicts

Unique Local

provides for one-to-one communication

is a counterpart of private IPv4 addresses

NEW QUESTION 352

- (Exam Topic 4)

Two switches have been implemented and all interfaces are at the default configuration level. A trunk link must be implemented between two switches with these requirements:

- using an industry-standard trunking protocol
- permitting VLANs 1 -10 and denying other VLANs How must the interconnecting ports be configured?

A)

```
switchport mode dynamic
channel-protocol lacp
switchport trunk allowed vlans 1-10
```

B)

```
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlans 1-10
```

C)

```
switchport mode trunk
switchport trunk allowed vlans 1-10
switchport trunk native vian 11
```

D)

```
switchport mode dynamic desirable
channel-group 1 mode desirable
switchport trunk encapsulation isl
switchport trunk allowed vian except 11-4094
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 356

- (Exam Topic 4)

Which port type does a lightweight AP use to connect to the wired network when it is configured in local mode?

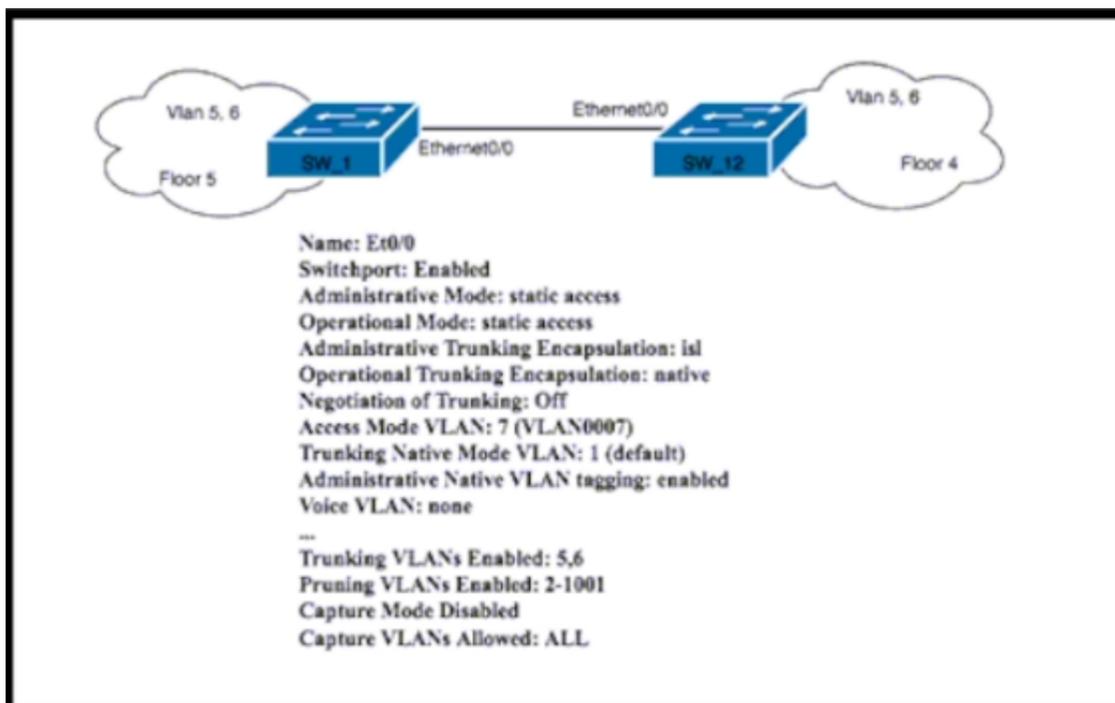
- A. EtherChannel
- B. LAG
- C. trunk
- D. access

Answer: D

NEW QUESTION 357

- (Exam Topic 4)

Refer to the exhibit.



SW_1 and SW_12 represent two companies that are merging. They use separate network vendors. The VLANs on both Sides have been migrated to share IP subnets. Which command sequence must be issued on both sides to join the two companies and pass all VLANs between the companies?

- A. switchport mode trunkswitchport trunk encapsulation dot1q
- B. switchport mode trunk switchport trunk allowed vlan all switchport dot1q ethertype 0800
- C. switchport mode dynamic desirable switchport trunk allowed vlan all switchport trunk native vlan 7
- D. switchport dynamic auto switchport nonegotiate

Answer: A

NEW QUESTION 361

- (Exam Topic 4)

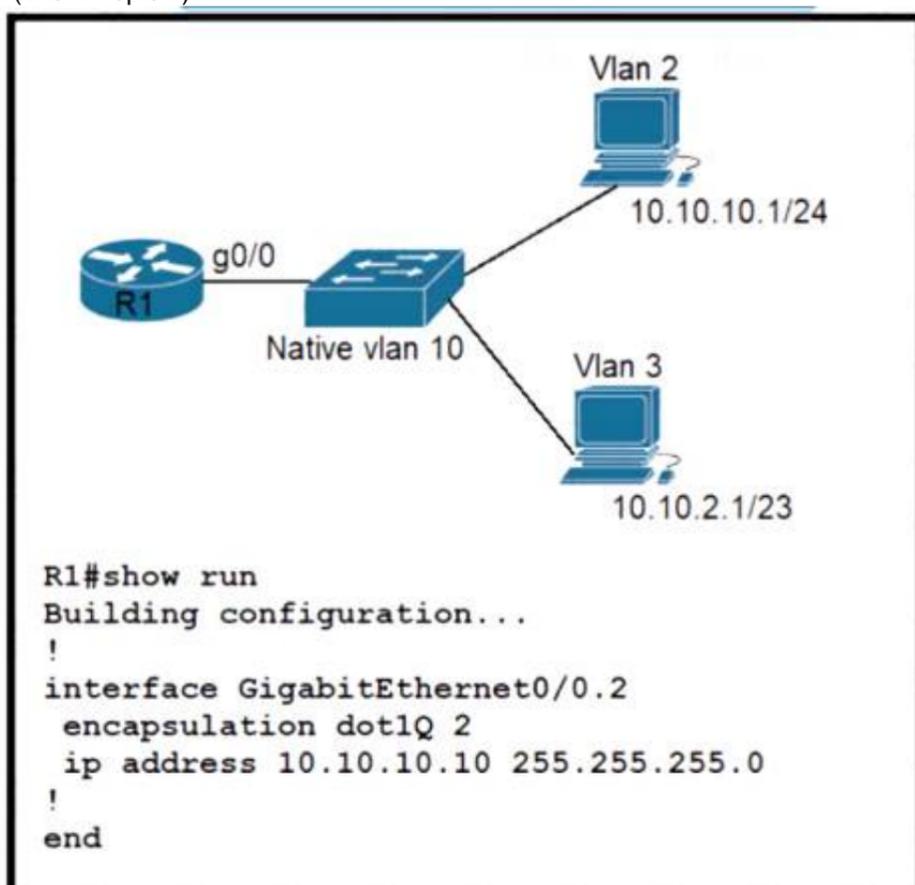
Refer to the exhibit. User traffic originating within site 0 is failing to reach an application hosted on IP address 192.168 0 10. Which is located within site A What is determined by the routing table?

- A. The default gateway for site B is configured incorrectly
- B. The lack of a default route prevents delivery of the traffic
- C. The traffic is blocked by an implicit deny in an ACL on router2
- D. The traffic to 192 168 010 requires a static route to be configured in router 1.

Answer: B

NEW QUESTION 364

- (Exam Topic 4)



A)

```
interface GigabitEthernet0/0  
ip address 10.10.2.10 255.255.252.0
```

B)

```
interface GigabitEthernet0/0.3  
encapsulation dot1Q 10  
ip address 10.10.2.10 255.255.255.252
```

C)

```
interface GigabitEthernet0/0.10  
encapsulation dot1Q 3  
ip address 10.10.2.10 255.255.254.0
```

D)

```
interface GigabitEthernet0/0.3  
encapsulation dot1Q 3 native  
ip address 10.10.2.10 255.255.252.0
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 365

- (Exam Topic 4)

Which WPA mode uses PSK authentication?

- A. Local
- B. Client
- C. Enterprise
- D. Personal

Answer: C

NEW QUESTION 367

- (Exam Topic 4)

When should an engineer implement a collapsed-core architecture?

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

Answer: C

NEW QUESTION 372

- (Exam Topic 4)

Refer to the exhibit.

The P2P blocking action option is disabled on the WLC.

- A. Enable the Static IP Tunneling option.
- B. Disable the Coverage Hole Detection option.
- C. Check the DHCP Add Assignment check box.
- D. Assignment check box.
- E. Set the P2P Blocking Action option to Forward-UpStream.

Answer: A

NEW QUESTION 374

- (Exam Topic 4)

Why would VRRP be implemented when configuring a new subnet in a multivendor environment?

- A. when a gateway protocol is required that support more than two Cisco devices for redundancy
- B. to enable normal operations to continue after a member failure without requiring a change in a host ARP cache
- C. to ensure that the spanning-tree forwarding path to the gateway is loop-free
- D. to interoperate normally with all vendors and provide additional security features for Cisco devices

Answer: A

NEW QUESTION 377

- (Exam Topic 4)

A network engineer must configure an interface with IP address 10.10.10.145 and a subnet mask equivalent to 11111111.11111111.11111111.1111000. Which subnet mask must the engineer use?

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

Answer: A

NEW QUESTION 379

- (Exam Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

cannot be used as a source address

sends packets to a group address rather than a single address

confined to a single link

required on all IPv6 devices

Multicast

Link-Local Address

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 383

- (Exam Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

provides for one-to-one communication

allows sites to be combined without address conflicts

is a counterpart of private IPv4 addresses

is publicly routable in the same way as IPv4 addresses

Global Unicast Address

Unique Local

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 384

- (Exam Topic 4)

Which two VPN technologies are recommended by Cisco for multiple branch offices and large-scale deployments? (Choose two.)

- A. site-to-site VPN
- B. IDMPVPN
- C. IGETVPN
- D. IPsec remote access
- E. clientless VPN

Answer: BE

NEW QUESTION 389

- (Exam Topic 4)

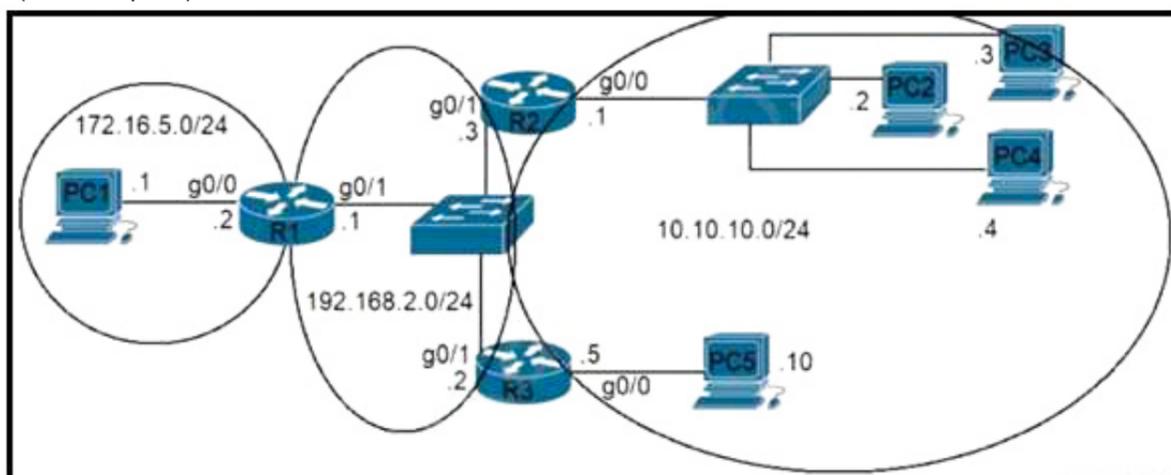
Which encryption method is used by WPA3?

- A. PSK
- B. TKIP
- C. SAE
- D. AES

Answer: D

NEW QUESTION 394

- (Exam Topic 4)



Refer to the exhibit. The router R1 is in the process of being configured. Routers R2 and R3 are configured correctly for the new environment. Which two commands must be configured on R1 for PC1 to communicate to all PCs on the 10.10.10.0/24 network? (Choose two.)

- A. ip route 10.10.10.0 255.255.255.0 192.168.2.3
- B. ip route 10.10.10.0 255.255.255.255 192.168.2.2
- C. ip route 10.10.10.0 255.255.255.255 g0/1
- D. ip route 10.10.10.0 255.255.255.248 g0/1
- E. ip route 10.10.10.0 255.255.255.248 192.168.2.2

Answer: AE

NEW QUESTION 396

- (Exam Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

is unable to route on the internet	Global Unicast Address
is a counterpart of private IPv4 addresses	
enables aggregation of routing prefixes	Unique Local
is routable and reachable via the Internet	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 400

- (Exam Topic 4)

Refer to the exhibit.

```
{
  "SW1" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],
  "SW2" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],
  "SW3" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],
  "SW4" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"]
}
```

How many JSON objects are represented?

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

Answer: D

NEW QUESTION 405

- (Exam Topic 4)

Refer to the exhibit.

When router R1 receives a packet with destination IP address 10.56.0 62. through which interface does it route the packet?

- A. Null0
- B. Vlan58
- C. Vlan60
- D. Vlan59

Answer: B

NEW QUESTION 409

- (Exam Topic 4)

Drag and drop the configuration management terms from the left onto the descriptions on the right. Not all terms are used.

agent	daemon that determines when the central authority has updates available
agentless	model in which the central server sends updates to nodes on an as-needed basis
provision	easy-to-manage deployment option that may lack scalability
pull	device hardware that runs without embedded management features
push	to automatically install or deploy a configuration or update
post	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

agent	pull
agentless	push
provision	agent
pull	agentless
push	provision
post	

NEW QUESTION 411

- (Exam Topic 4)

Why is a first-hop redundancy protocol implemented?

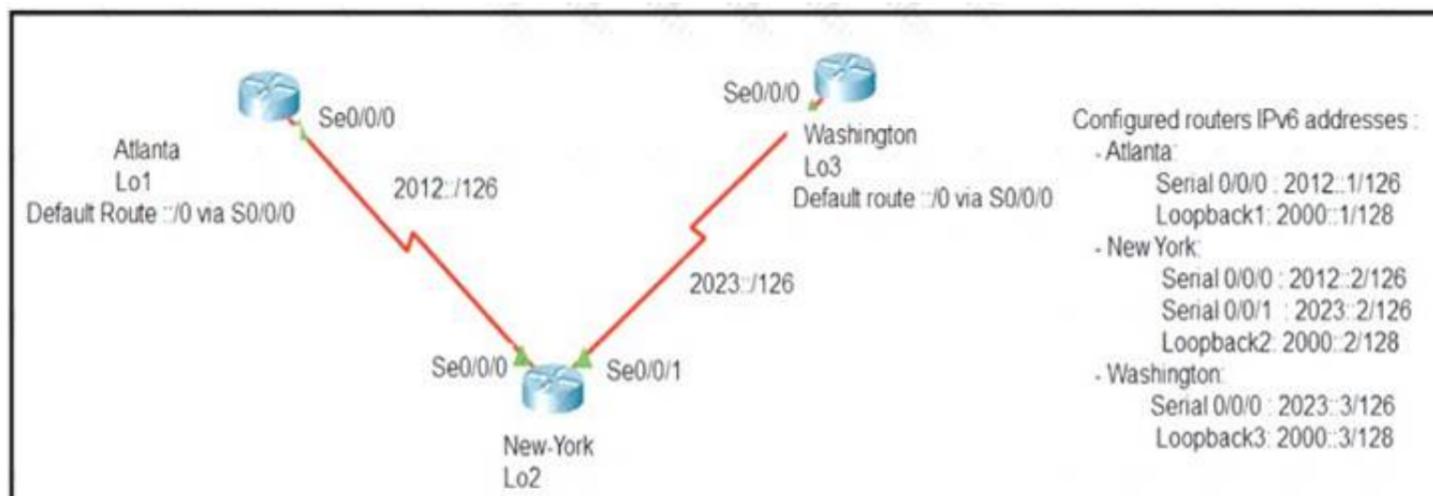
- A. to protect against default gateway failures
- B. to prevent loops in a network
- C. to enable multiple switches to operate as a single unit
- D. to provide load-sharing for a multilink segment

Answer: A

NEW QUESTION 416

- (Exam Topic 4)

Refer to the exhibit.



The loopback1 interface of the Atlanta router must reach the lookback3 interface of the Washington router.

- A. ipv6 route 2000::1/128 2012::2
- B. ipv6 route 2000::1/128 2012::1
- C. ipv6 route 2000::3 123 s0/0/0
- D. ipv6 route 2000::3/128 2023::3
- E. ipv6 route 2000::1/128 s0/0/1

Answer: BD

NEW QUESTION 418

- (Exam Topic 4)

Which IP header field is changed by a Cisco device when QoS marking is enabled?

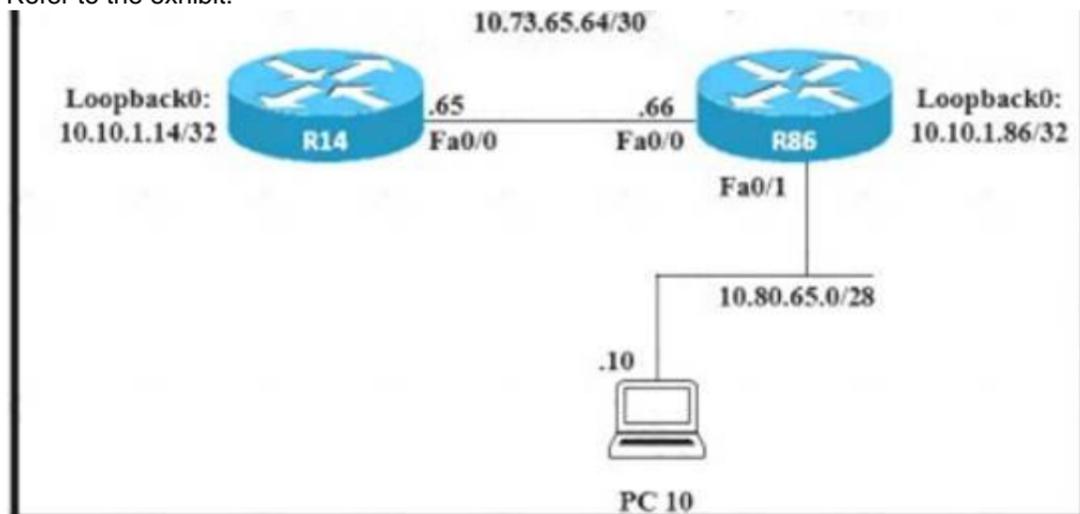
- A. Header Checksum
- B. Type of service
- C. DSCP
- D. ECN

Answer: B

NEW QUESTION 421

- (Exam Topic 4)

Refer to the exhibit.



Router R14 is in the process of being configured. Which configuration must be used to establish a host route to PC 10?

- A. ip route 10.80.65.10 255.255.255.254 10.80.65.1
- B. ip route 10.8065.10 255.255.255.255 10.73.65.66
- C. ip route 1073.65.65 255.0.0.0 10.80.65.10
- D. ip route 10.73.65.66 0.0.0.255 10.80.65.10

Answer: B

NEW QUESTION 424

- (Exam Topic 4)

An engineer must configure a core router with a floating static default route to the backup router at 10.200.0.2.

DNS
HTTP
RTP
SMTP
SNMP
Telnet

TCP
UDP

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

DNS
HTTP
RTP
SMTP
SNMP
Telnet

TCP
HTTP
SMTP
Telnet
UDP
DNS
SNMP
RTP

NEW QUESTION 427

- (Exam Topic 4)

What is the default port-security behavior on a trunk link?

- A. It causes a network loop when a violation occurs.
- B. It disables the native VLAN configuration as soon as port security is enabled.
- C. It places the port in the err-disabled state if it learns more than one MAC address.
- D. It places the port in the err-disabled slate after 10 MAC addresses are statically configured.

Answer: A

NEW QUESTION 430

- (Exam Topic 4)

```
{
  "Routers": ["R1", "R2", "R3"],
  "Switches": ["SW1", "SW2", "SW3"]
}
```

Refer to the exhibit. What is represented by "R1" and "SW1" within the JSON output?

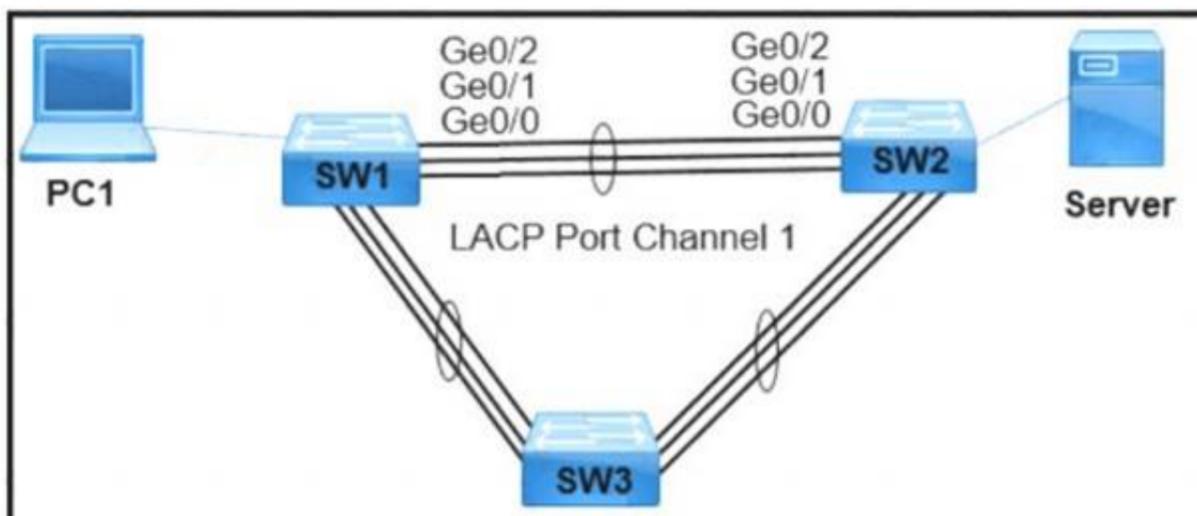
- A. object
- B. value
- C. key
- D. array

Answer: B

NEW QUESTION 434

- (Exam Topic 4)

Refer to the exhibit.



PC1 regularly sends 1800 Mbps of traffic to the server. A network engineer needs to configure the EtherChannel to disable Port Channel 1 between SW1 and SW2 when the Ge0/0 and Ge0/1 ports on SW2 go down. Which configuration must the engineer apply to the switch?

A)

```
SW2# configure terminal
SW2(config)# interface port-channel 1
SW2(config-if)# lacp port-priority 32000
```

B)

```
SW2# configure terminal
SW2(config)# interface port-channel 1
SW2(config-if)# lacp max-bundle 2
```

C)

```
SW2# configure terminal
SW2(config)# lacp system-priority 32000
```

D)

```
SW2# configure terminal
SW2(config)# interface port-channel 1
SW2(config-if)# port-channel min-links 2
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 435

- (Exam Topic 4)

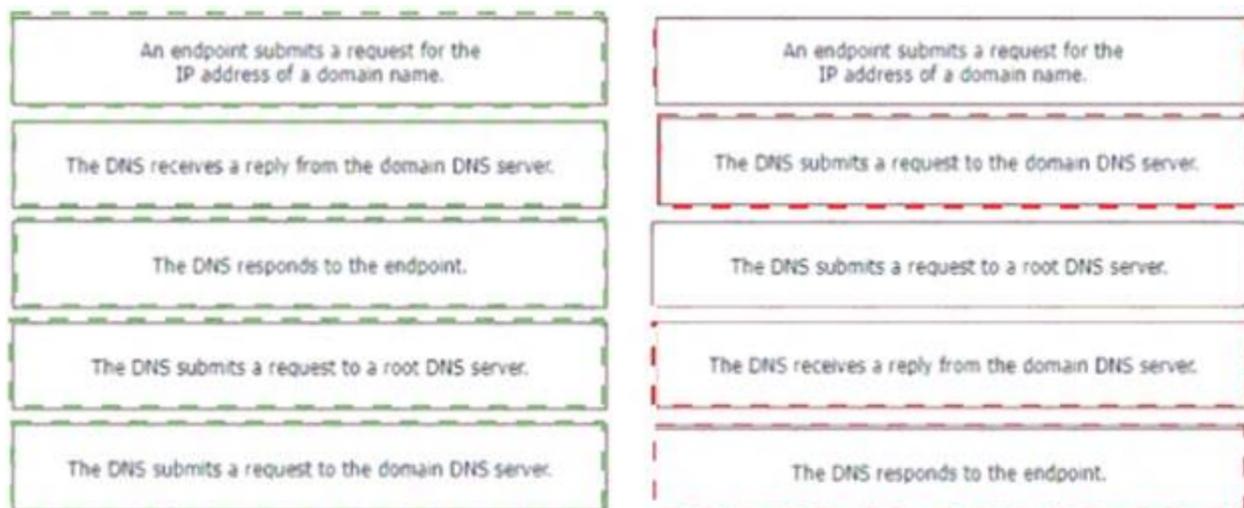
Drag and drop the steps in a standard DNS lookup operation from the left into the order on the right.

An endpoint submits a request for the IP address of a domain name.	1
The DNS receives a reply from the domain DNS server.	2
The DNS responds to the endpoint.	3
The DNS submits a request to a root DNS server.	4
The DNS submits a request to the domain DNS server.	5

- A. Mastered
- B. Not Mastered

Answer: A

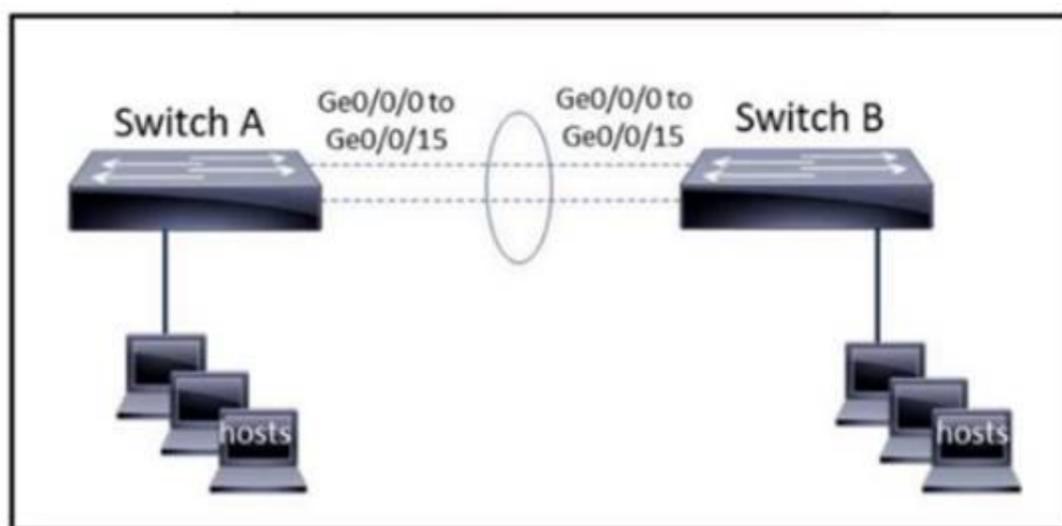
Explanation:



NEW QUESTION 437

- (Exam Topic 4)

Refer to the exhibit.



The EtherChannel is configured with a speed of 1000 and duplex as full on both ends of channel group 1. What is the next step to configure the channel on switch A to respond to but not initiate LACP communication?

- A. interface range gigabitethernet0/0/0-15 channel-group 1 mode on
- B. interface range gigabitethernet0/0/0-15 channel-group 1 mode desirable
- C. interface port-channel 1 channel-group 1 mode auto
- D. interface port-channel 1 channel-group 1 mode passive

Answer: D

NEW QUESTION 442

- (Exam Topic 4)

Refer to the exhibit.

```
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix : 
Description . . . . . : Realtek PCIe GBE Family
Controller
Physical Address. . . . . : 3C-52-82-33-F3-8F
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . : Yes

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

The given Windows PC is requesting the IP address of the host at www.cisco.com. To which IP address is the request sent?

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

Answer: D

NEW QUESTION 446

- (Exam Topic 4)
Why implement VRRP?

- A. to provide end users with a virtual gateway in a multivendor network
- B. to leverage a weighting scheme to provide uninterrupted service
- C. to detect link failures without the overhead of Bidirectional Forwarding Detection
- D. to hand over to end users the autodiscovery of virtual gateways

Answer: A

NEW QUESTION 449

- (Exam Topic 4)
Refer to the exhibit.

```
R1# show ip route
.....
D      172.16.32.0/27 [90/2888597172] via 20.1.1.1
O      172.16.32.0/19 [110/292094] via 20.1.1.10
R      172.16.32.0/24 [120/2] via 20.1.1.3
```

An engineer executed the script and added commands that were not necessary for SSH and now must remove the commands.

- A. metric
- B. cost
- C. longest prefix
- D. administrative distance

Answer: D

NEW QUESTION 453

- (Exam Topic 4)
Which action implements physical access control as part of the security program of an organization?

- A. backing up syslogs at a remote location
- B. configuring a password for the console port
- C. configuring enable passwords on network devices
- D. setting up IP cameras to monitor key infrastructure

Answer: B

NEW QUESTION 456

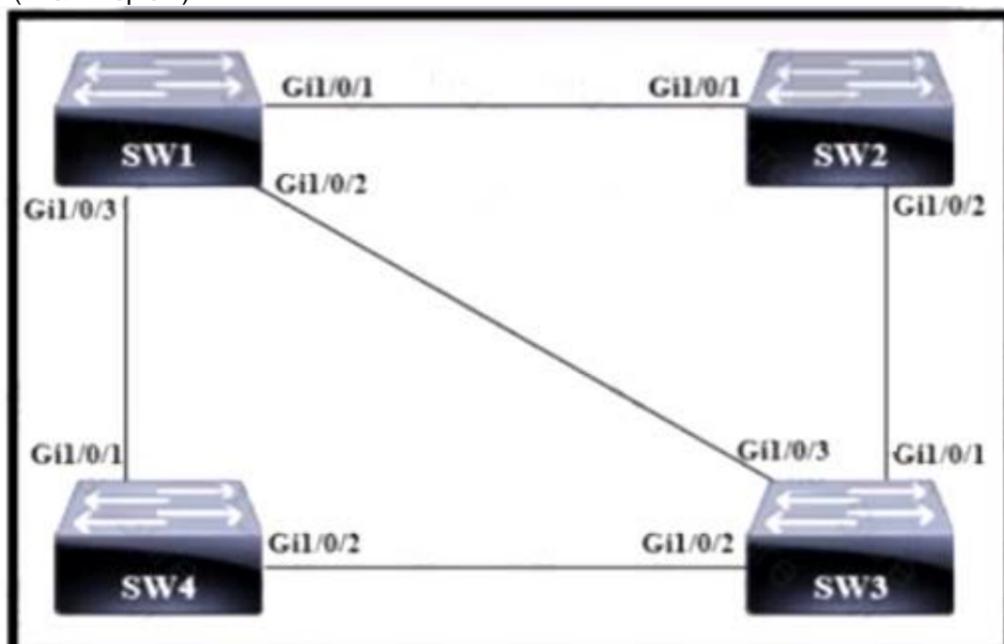
- (Exam Topic 4)
Which device segregates a network into separate zones that have their own security policies?

- A. IPS
- B. firewall
- C. access point
- D. switch

Answer: C

NEW QUESTION 459

- (Exam Topic 4)



A)

SW 4
Bridge Priority - 40960
mac-address 07:24:86:84:82:18

B)

SW 3
Bridge Priority - 40960
mac-address 08:71:50:67:61:38

C)

SW 2
Bridge Priority - 32768
mac-address 08:fd:b1:d7:78:39

D)

SW 1
Bridge Priority - 32768
mac-address 05:48:19:51:3e:49

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 461

- (Exam Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

provides for one-to-one communication	Global Unicast Address
confined to a single link	
serves as the next-hop addresses	Link-Local Address
is routable and reachable via the Internet	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 463

- (Exam Topic 4)

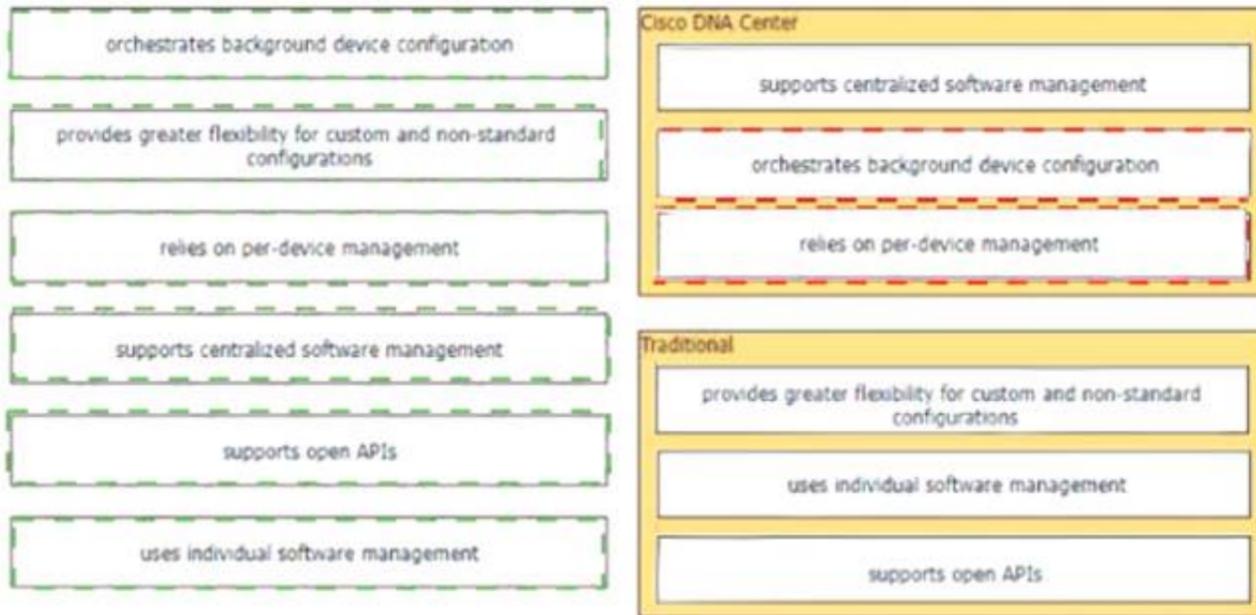
Drag and drop the characteristics of device-management technologies from the left onto the corresponding deployment types on the right.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 466

- (Exam Topic 3)
Refer to the exhibit.

```

Router1#show ip route
Gateway of last resort is 10.10.11.2 to network 0.0.0.0
 209.165.200.0/27 is subnetted, 1 subnets
 B    209.165.200.224 [20/0] via 10.10.12.2, 03:22:14
 209.165.201.0/27 is subnetted, 1 subnets
 B    209.165.201.0 [20/0] via 10.10.12.2, 02:26:33
 209.165.202.0/27 is subnetted, 1 subnets
 B    209.165.202.128 [20/0] via 10.10.12.2, 02:26:03
 10.0.0.0/8 is variably subnetted, 10 subnets, 4 masks
 O    10.10.13.0/25 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
 O    10.10.13.128/28 [110/2] via 10.10.10.5, 00:00:12, GigabitEthernet0/1
 O    10.10.13.144/28 [110/2] via 10.10.10.9, 00:01:57, GigabitEthernet0/2
 O    10.10.13.160/29 [110/2] via 10.10.10.5, 00:00:12, GigabitEthernet0/1
 O    10.10.13.208/29 [110/2] via 10.10.10.13, 00:01:57, GigabitEthernet0/3
 S*  0.0.0.0/0 [1/0] via 10.10.11.2
    
```

Which next-hop IP address does Routed use for packets destined to host 10 10.13.158?

- A. 10.10.10.5
- B. 10.10.11.2

- C. 10.10.12.2
- D. 10.10.10.9

Answer: A

NEW QUESTION 471

- (Exam Topic 3)

Which QoS traffic handling technique retains excess packets in a queue and reschedules these packets for later transmission when the configured maximum bandwidth has been surpassed?

- A. weighted random early detection
- B. traffic policing
- C. traffic shaping
- D. traffic prioritization

Answer: C

NEW QUESTION 476

- (Exam Topic 4)

What are two advantages of implementing a controller-based architecture instead of a traditional network architecture? (Choose two.)

- A. It allows for seamless connectivity to virtual machines.
- B. It supports complex and high-scale IP addressing schemes.
- C. It enables configuration task automation.
- D. It provides increased scalability and management options.
- E. It increases security against denial-of-service attacks.

Answer: CD

NEW QUESTION 478

- (Exam Topic 4)

Refer to the exhibit.

```
Device# configure terminal
Device(config)# netconf ssh acl 1
Device(config)# netconf lock-time 100
Device(config)# netconf max-sessions 1
Device(config)# netconf ma-message 10
```

A network engineer must configure NETCONF. After creating the configuration, the engineer gets output from the command show line but not from show running-config. Which command completes the configuration?

- A. Device(config)# netconf lock-time 500
- B. Device(config)# netconf max-message 1000
- C. Device(config)# no netconf ssh acl 1
- D. Device(config)# netconf max-sessions 100

Answer: B

NEW QUESTION 481

- (Exam Topic 4)

What is the purpose of using First Hop Redundancy Protocol on a specific subnet?

- A. ensures a loop-free physical topology
- B. filters traffic based on destination IP addressing
- C. sends the default route to the hosts on a network
- D. forwards multicast hello messages between routers

Answer: D

NEW QUESTION 486

- (Exam Topic 4)

How does encryption protect the wireless network?

- A. via integrity checks to identify wireless forgery attacks in the frame
- B. via specific ciphers to detect and prevent zero-day network attacks
- C. via an algorithm to change wireless data so that only the access point and client understand it
- D. via a policy to prevent unauthorized users from communicating on the wireless network

Answer: C

NEW QUESTION 488

- (Exam Topic 4)

Which channel-group mode must be configured when multiple distribution interfaces connected to a WLC are bundled?

- A. Channel-group mode passive.
- B. Channel-group mode on.

- C. Channel-group mode desirable.
- D. Channel-group mode active.

Answer: B

NEW QUESTION 490

- (Exam Topic 4)

What is a link-local all-nodes IPv6 multicast address?

- A. ff02:0:0:0:0:0:1
- B. 2004:31c:73d9:683e:255::
- C. ffe:034:0dd:45d6:789e::
- D. fe80:4433:034:0dd::2

Answer: D

NEW QUESTION 494

- (Exam Topic 4)

What is the function of "off-the-shell" switches in a controller-based network?

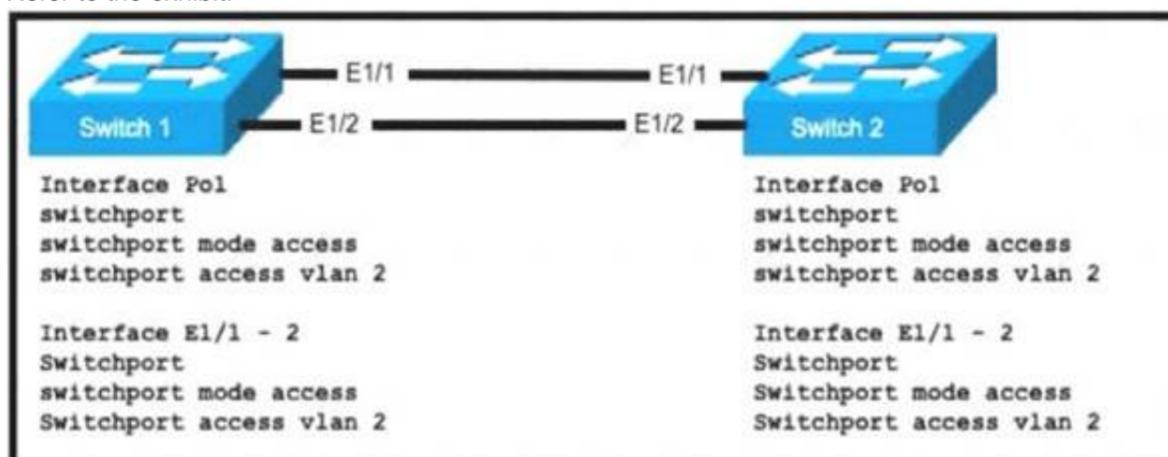
- A. providing a central view of the deployed network
- B. forwarding packets
- C. making routing decisions
- D. setting packet-handling policies

Answer: D

NEW QUESTION 497

- (Exam Topic 3)

Refer to the exhibit.



An engineer is configuring an EtherChannel using LACP between Switches 1 and 2 Which configuration must be applied so that only Switch 1 sends LACP initiation packets?

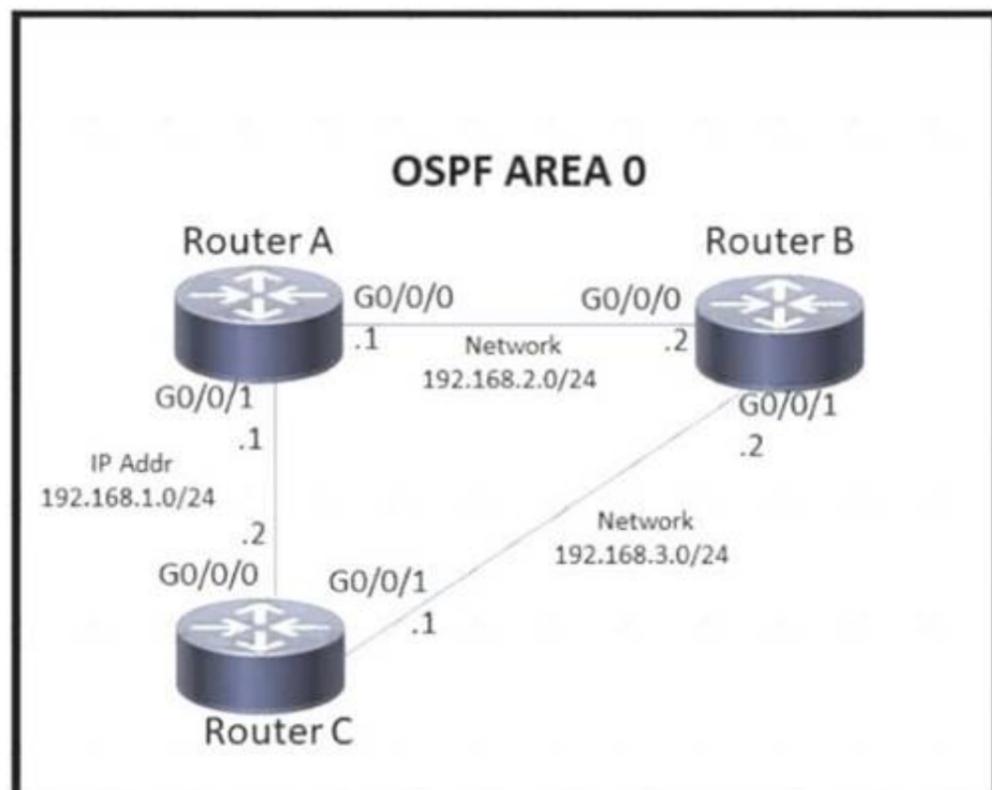
- A. Switch 1 (config-if)#channel-group 1 mode on Swrtch2(config-if)#channel-group 1 mode passive
- B. Switch1(config-if)#channel-group 1 mode passive Switch2(config-if)#channel-group 1 mode active
- C. Switch1{config-if)#channel-group 1 mode active Switch2(config-if)#channel-group 1 mode passive
- D. Switch1(config-if)#channel-group 1 mode on Switch2(config-if)#channel-group 1 mode active

Answer: C

NEW QUESTION 501

- (Exam Topic 3)

Refer to the exhibit.



Which action must be taken to ensure that router A is elected as the DR for OSPF area 0?

- A. Configure the OSPF priority on router A with the lowest value between the three routers.
- B. Configure router B and router C as OSPF neighbors of router A.
- C. Configure the router A interfaces with the highest OSPF priority value within the area.
- D. Configure router A with a fixed OSPF router ID

Answer: C

NEW QUESTION 505

- (Exam Topic 3)

Which field within the access-request packet is encrypted by RADIUS?

- A. authorized services
- B. authenticator
- C. username
- D. password

Answer: D

NEW QUESTION 509

- (Exam Topic 3)

Which QoS per-hop behavior changes the value of the ToS field in the IPv4 packet header?

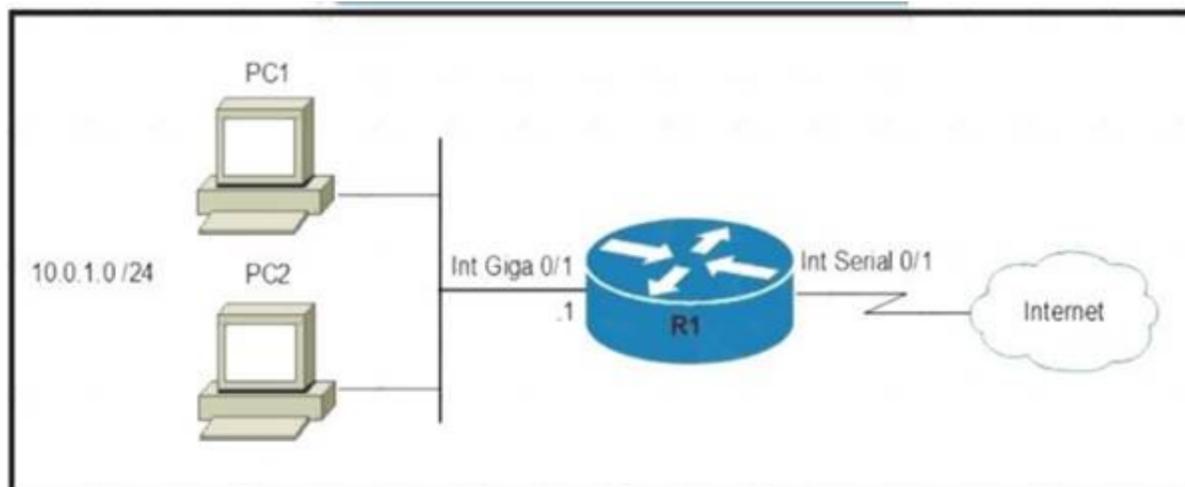
- A. shaping
- B. classification
- C. policing
- D. marking

Answer: D

NEW QUESTION 511

- (Exam Topic 3)

Refer to the exhibit.



Which two commands must be configured on router R1 to enable the router to accept secure remote-access connections? (Choose two)

- A. transport input telnet
- B. crypto key generate rsa
- C. ip ssh pubkey-chain

- D. login console
- E. username cisco password 0 Cisco

Answer: BE

NEW QUESTION 515

- (Exam Topic 3)

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

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

Answer: BD

NEW QUESTION 519

- (Exam Topic 3)

Refer to the exhibit.

```
CPE# show ip route
      192.168.1.0/24 is variably subnetted, 3 subnets, 3 masks
B    192.168.1.0/24 [20/1] via 192.168.12.2, 00:00:06
R    192.168.1.128/25 [120/5] via 192.168.13.3, 00:02:35, Ethernet0/1
O    192.168.1.192/26 [110/11] via 192.168.14.4, 00:02:23, Ethernet0/2
D    192.168.1.224/27 [90/1024640] via 192.168.15.5, 00:01:40, Ethernet0/3
```

All traffic enters the CPE router from interface Serial0/3 with an IP address of 192.168.50.1. Web traffic from the WAN is destined for a LAN network where servers are load-balanced. An IP packet with a destination address of the HTTP virtual IP of 192.168.1.250 must be forwarded. Which routing table entry does the router use?

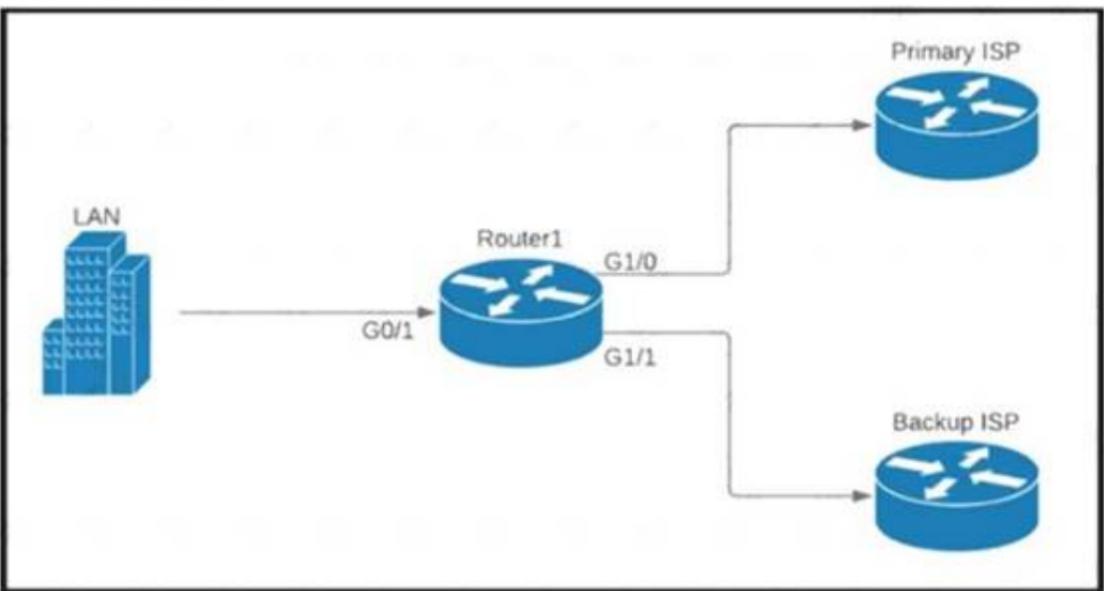
- A. 192.168.1.0/24 via 192.168.12.2
- B. 192.168.1.128/25 via 192.168.13.3
- C. 192.168.1.192/26 via 192.168.14.4
- D. 192.168.1.224/27 via 192.168.15.5

Answer: B

NEW QUESTION 520

- (Exam Topic 3)

Refer to the exhibit.



A company is configuring a failover plan and must implement the default routes in such a way that a floating static route will assume traffic forwarding when the primary link goes down. Which primary route configuration must be used?

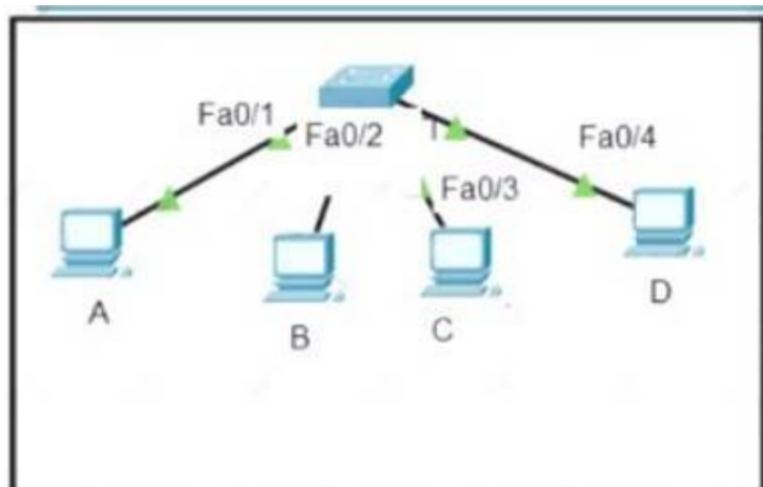
- A. ip route 0.0.0.0 0.0.0.0 192.168.0.2 GigabitEthernet1/0
- B. ip route 0.0.0.0 0.0.0.0 192.168.0.2 tracked
- C. ip route 0.0.0.0 0.0.0.0 192.168.0.2 floating
- D. ip route 0.0.0.0 0.0.0.0 192.168.0.2

Answer: B

NEW QUESTION 522

- (Exam Topic 3)

Refer to the exhibit.



Host A sent a data frame destined for host D

```
SwitchA#show mac-address table
Mac Address Table
-----
Vlan  Mac Address      Type      Ports
----  -
2     000c.859c.bb7b   DYNAMIC  Fa0/1
2     0010.11dc.3e91   DYNAMIC  Fa0/2
2     0041.45d7.c451   DYNAMIC  Fa0/3
SwitchA#
```

What does the switch do when it receives the frame from host A?

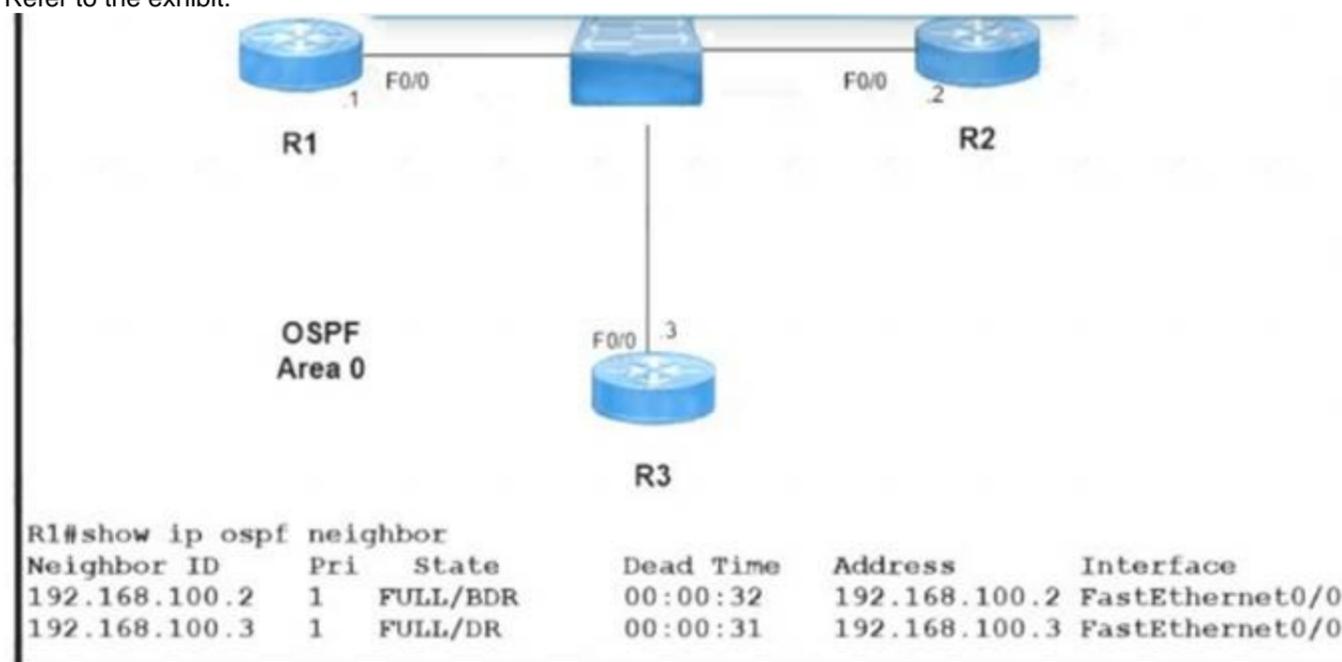
- A. It drops the frame from the switch CAM table.
- B. It floods the frame out of all ports except port Fa0/1.
- C. It shuts down the port Fa0/1 and places it in err-disable mode.
- D. It experiences a broadcast storm.

Answer: B

NEW QUESTION 523

- (Exam Topic 3)

Refer to the exhibit.



Which two configurations must the engineer apply on this network so that R1 becomes the DR? (Choose two.)

- A)


```
R1(config)#router ospf 1
R1(config-router)#router-id 192.168.100.1
```
- B)

```
R1(config)#interface fastethernet 0/0
R1(config-if)#ip ospf priority 200
```
- C)

```
R3(config)#interface fastethernet 0/0
R3(config-if)#ip ospf priority 0
```
- D)

```
R1(config)#interface fastethernet 0/0
R1(config-if)#ip ospf priority 0
```
- E)

```
R3(config)#interface fastethernet 0/0
R3(config-if)#ip ospf priority 200
```

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

Answer: BC

NEW QUESTION 527

- (Exam Topic 3)

What is a function of an endpoint on a network?

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

Answer: C

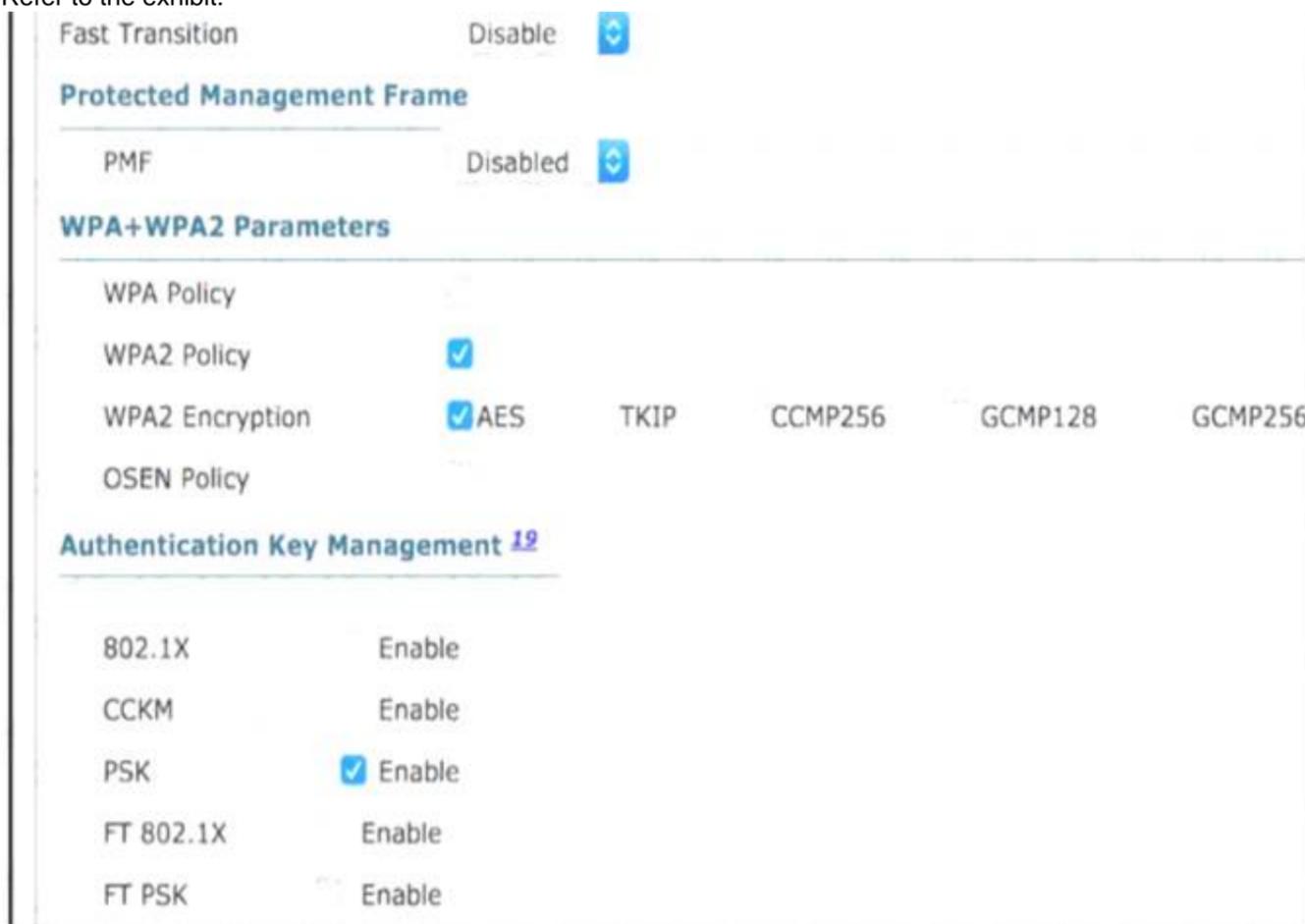
Explanation:

An endpoint is a host that acts as the source or destination of data traffic flowing through a network. When you are at your PC, editing your CV and uploading it to a file server, you are sitting at an endpoint.

NEW QUESTION 528

- (Exam Topic 3)

Refer to the exhibit.



Users need to connect to the wireless network with IEEE 802. 11r-compatible devices. The connection must be maintained as users travel between floors or to other areas in the building What must be the configuration of the connection?

- A. Select the WPA Policy option with the CCKM option.
- B. Disable AES encryption.
- C. Enable Fast Transition and select the FT 802.1x option.
- D. Enable Fast Transition and select the FT PSK option.

Answer: C

NEW QUESTION 532

- (Exam Topic 3)

Refer to the exhibit.

During outage

```
R1#show ip route 10.1.1.10
% Network not in table
```

Normal operation

```
R1#show ip route 10.1.1.10
Routing entry for 10.1.1.0/24
Known via "ospf 1", distance 110, metric 2, type intra area
Last update from 172.16.2.2 on GigabitEthernet0/0, 00:00:18 ago
Routing Descriptor Blocks:
* 172.16.2.2, from 10.1.1.10, 00:00:18 ago, via GigabitEthernet0/0
Route metric is 2, traffic share count is 1
```

Which route must be configured on R1 so that OSPF routing is used when OSPF is up, but the server is still reachable when OSPF goes down?

- A. ip route 10.1.1.10 255.255.255.255 172.16.2.2 100
- B. ip route 10.1.1.0 255.255.255.0 gi0/1 125
- C. ip route 10.1.1.0 255.255.255.0 172.16.2.2 100
- D. ip route 10.1.1.10 255.255.255.255 gi0/0 125

Answer: D

NEW QUESTION 534

- (Exam Topic 3)

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

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

Answer: C

NEW QUESTION 539

- (Exam Topic 3)

What is the difference between IPv6 unicast and anycast addressing?

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

Answer: C

NEW QUESTION 541

- (Exam Topic 3)

Which wireless security protocol relies on Perfect Forward Secrecy?

- A. WPA3
- B. WPA
- C. WEP
- D. WPA2

Answer: A

NEW QUESTION 546

- (Exam Topic 3)

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

transmitted based on data contained in the packet without the need for a data channel	TCP
requires the client and the server to establish a connection before sending the packet	
used to reliably share files between devices	UDP
appropriate for streaming operations with minimal latency	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

TCP	
requires the client and the server to establish a connection before sending the packet	
used to reliably share files between devices	
UDP	
transmitted based on data contained in the packet without the need for a data channel	
appropriate for streaming operations with minimal latency	

NEW QUESTION 548

- (Exam Topic 3)

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

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

Answer: C

NEW QUESTION 550

- (Exam Topic 3)

A Cisco engineer must configure a single switch interface to meet these requirements

- accept untagged frames and place them in VLAN 20
 - accept tagged frames in VLAN 30 when CDP detects a Cisco IP phone
- Which command set must the engineer apply?

- A)
 - switchport mode dynamic desirable
 - switchport access vlan 20
 - switchport trunk allowed vlan 30
 - switchport voice vlan 30
- B)
 - switchport mode dynamic auto
 - switchport trunk native vlan 20
 - switchport trunk allowed vlan 30
 - switchport voice vlan 30
- C)
 - switchport mode access
 - switchport access vlan 20
 - switchport voice vlan 30
- D)

switchport mode trunk
switchport access vlan 20
switchport voice vlan 30

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 555

- (Exam Topic 3)

Which two components comprise part of a PKI? (Choose two.)

- A. preshared key that authenticates connections
- B. RSA token
- C. CA that grants certificates
- D. clear-text password that authenticates connections
- E. one or more CRLs

Answer: BC

NEW QUESTION 560

- (Exam Topic 3)

OSPF must be configured between routers R1 and R2. Which OSPF configuration must be applied to router R1 to avoid a DR/BDR election?

- A. router ospf 1 network 192.168.1.1 0.0.0.0 area 0 interface e1/1 ip address 192.168.1.1 255.255.255.252 ip ospf network broadcast
- B. router ospf 1 network 192.168.1.1 0.0.0.0 area 0 interface e1/1 ip address 192.168.1.1 255.255.255.252 ip ospf network point-to-point
- C. router ospf 1 network 192.168.1.1 0.0.0.0 area 0 interface e1/1 ip address 192.168.1.1 255.255.255.252 ip ospf cost 0
- D. router ospf 1 network 192.168.1.1 0.0.0.0 area 0 hello interval 15 interface e1/1 ip address 192.168.1.1 255.255.255.252

Answer: B

NEW QUESTION 563

- (Exam Topic 3)

How does Rapid PVST+ create a fast loop-free network topology?

- A. It requires multiple links between core switches
- B. It generates one spanning-tree instance for each VLAN
- C. It maps multiple VLANs into the same spanning-tree instance
- D. It uses multiple active paths between end stations.

Answer: A

NEW QUESTION 567

- (Exam Topic 3)

What is one reason to implement LAG on a Cisco WLC?

- A. to increase security and encrypt management frames
- B. to provide link redundancy and load balancing
- C. to allow for stateful and link-state failover
- D. to enable connected switch ports to failover and use different VLANs

Answer: B

NEW QUESTION 571

- (Exam Topic 3)

Refer to the exhibit.

```

Hardware is ISR4331-3x1GE, address is 5486.bc25.1f70 (bia 5486.bc25.1f70)
Description: << WAN Link >>
Internet address is 192.0.2.2/30
MTU 1500 bytes, BW 1000000 Kbit/sec, DLY 10 usec,
    reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive not supported
Full Duplex, 1000Mbps, link type is auto, media type is RJ45
output flow-control is off, input flow-control is off
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:00, output 00:00:11, output hang never
Last clearing of "show interface" counters never
Input queue: 0/375/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 7000 bits/sec, 4 packets/sec
5 minute output rate 4000 bits/sec, 4 packets/sec
 22579370 packets input, 8825545968 bytes, 0 no buffer
  Received 67 broadcasts (0 IP multicasts)
   0 runs, 0 giants, 0 throttles
 3612699 input errors, 3612699 CRC, 0 frame, 0 overrun, 0 ignored
   0 watchdog, 10747057 multicast, 0 pause input
 12072167 packets output, 1697953637 bytes, 0 underruns
   0 output errors, 0 collisions, 1 interface resets
    6 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    5 lost carrier, 0 no carrier, 0 pause output
    0 output buffer failures, 0 output buffers swapped out
    
```

What is a reason for poor performance on the network interface?

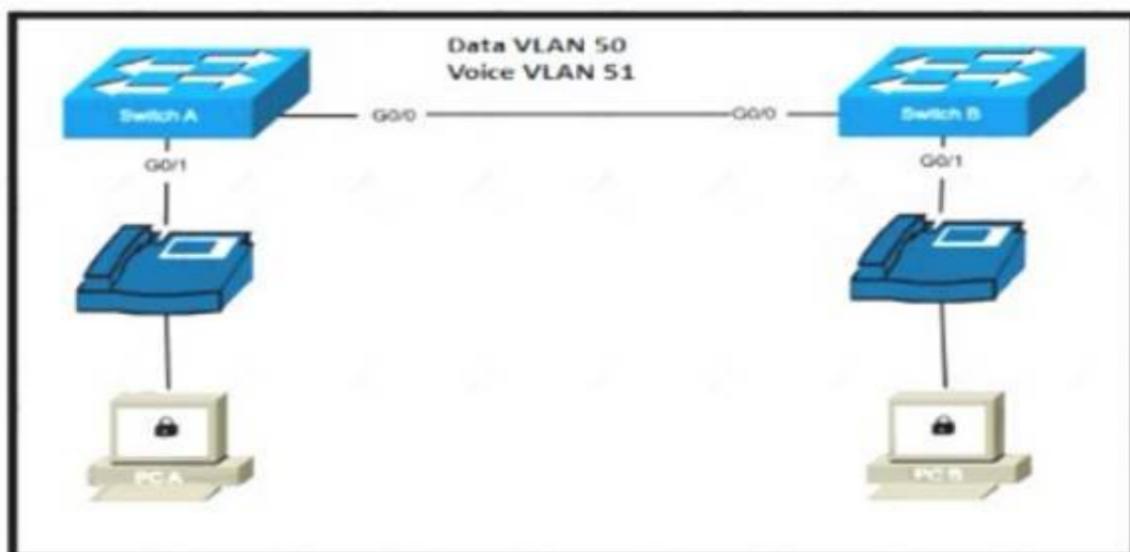
- A. The interface is receiving excessive broadcast traffic.
- B. The cable connection between the two devices is faulty.
- C. The interface is operating at a different speed than the connected device.
- D. The bandwidth setting of the interface is misconfigured

Answer: A

NEW QUESTION 573

- (Exam Topic 3)

Refer to the exhibit.



Switch A is newly configured. All VLANs are present in the VLAN database. The IP phone and PC A on Gi0/1 must be configured for the appropriate VLANs to establish connectivity between the PCs. Which command set fulfills the requirement?

- A)


```

SwitchA(config-if)#switchport mode access
SwitchA(config-if)#switchport access vlan 50
SwitchA(config-if)#switchport voice vlan 51
      
```
- B)


```

SwitchA(config-if)#switchport mode access
SwitchA(config-if)#switchport access vlan 50
SwitchA(config-if)#switchport voice vlan untagged
      
```
- C)


```

SwitchA(config-if)#switchport mode trunk
SwitchA(config-if)#switchport trunk allowed vlan add 50, 51
SwitchA(config-if)#switchport voice vlan dot1p
      
```
- D)


```

SwitchA(config-if)#switchport mode trunk
SwitchA(config-if)#switchport trunk allowed vlan 50, 51
SwitchA(config-if)#mls qos trust cos
      
```

- A. Option A
- B. Option B
- C. Option C

D. Option D

Answer: A

NEW QUESTION 578

- (Exam Topic 3)

Which characteristic differentiates the concept of authentication from authorization and accounting?

- A. user-activity logging
- B. service limitations
- C. consumption-based billing
- D. identity verification

Answer: D

NEW QUESTION 579

- (Exam Topic 3)

What is a requirement for nonoverlapping Wi-Fi channels?

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

Answer: B

NEW QUESTION 581

- (Exam Topic 3)

Refer to the exhibit.

```
A# show ip ospf neighbor
Neighbor ID Pri State Dead Time Address Interface
172.1.1.1 1 EXCHANGE/ - 00:00:36 172.16.32.1 Serial0.1
```

An engineer assumes a configuration task from a peer Router A must establish an OSPF neighbor relationship with neighbor 172.1.1.1. The output displays the status of the adjacency after 2 hours. What is the next step in the configuration process for the routers to establish an adjacency?

- A. Configure router A to use the same MTU size as router B.
- B. Set the router B OSPF ID to a nonhost address.
- C. Configure a point-to-point link between router A and router B.
- D. Set the router B OSPF ID to the same value as its IP address

Answer: B

NEW QUESTION 583

- (Exam Topic 3)

Drag and drop the REST API call methods for HTTP from the left onto the actions they perform on the right. Not all methods are used.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Chart, bar chart Description automatically generated

POST

GET

DELETE

PUT

PATCH

NEW QUESTION 587

- (Exam Topic 3)

Refer to the exhibit.

- 209.165.201.0/27 is subnetted, 1 subnets
- B 209.165.201.0 [20/0] via 10.10.12.2, 02:26:33
- 209.165.202.0/27 is subnetted, 1 subnets
- B 209.165.202.128 [20/0] via 10.10.12.2, 02:26:03
- 10.0.0.0/8 is variably subnetted, 8 subnets, 4 masks
- C 10.10.10.0/28 is directly connected, GigabitEthernet0/0
- C 10.10.11.0/30 is directly connected, FastEthernet2/0
- C 10.10.12.0/30 is directly connected, GigabitEthernet0/1
- O 10.10.13.0/25 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
- O 10.10.13.128/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
- O 10.10.13.144/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
- O 10.10.13.160/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
- O 10.10.13.208/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
- S* 0.0.0.0/0 [1/0] via 10.10.11.2

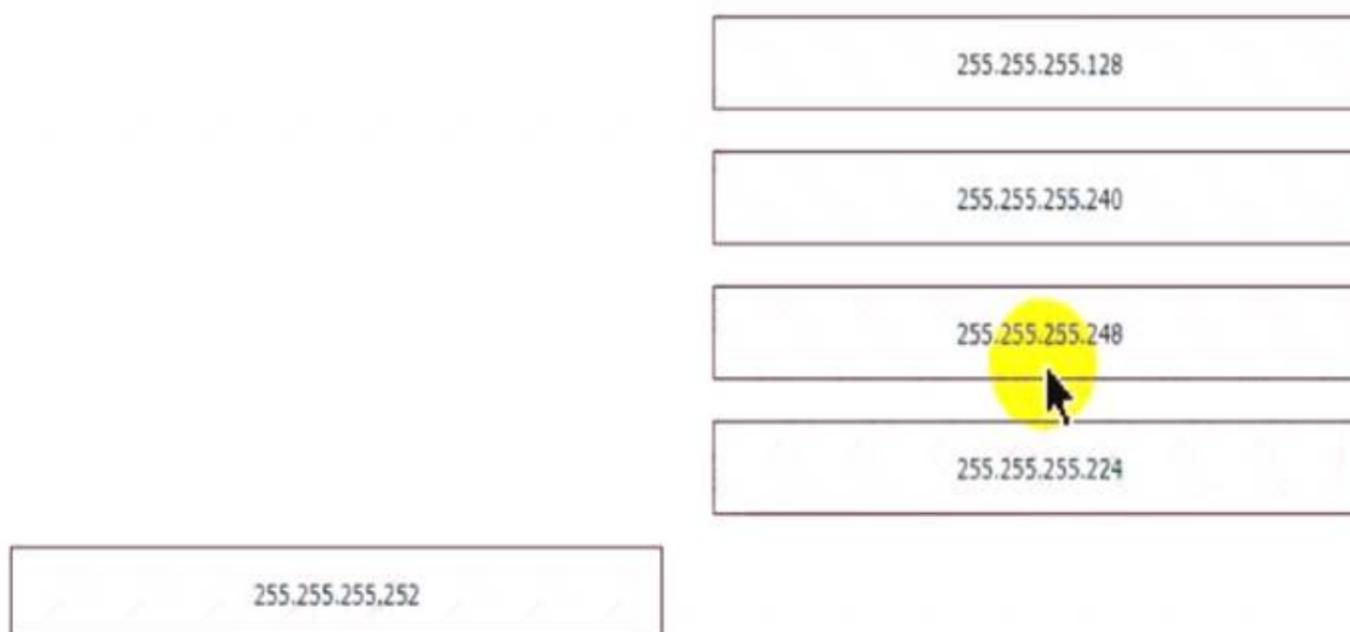
Drag and drop the prefix lengths from the left onto the corresponding prefixes on the right Not all prefixes are used

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Diagram Description automatically generated with low confidence



NEW QUESTION 589

- (Exam Topic 3)

Refer to the exhibit.

RIP	10.1.1.16/28 [120/5]	via	F0/0
OSPF	10.1.1.0/24 [110/30]	via	F0/1
OSPF	10.1.1.0/24 [110/40]	via	F0/2
EIGRP	10.1.0.0/26 [90/20]	via	F0/3
EIGRP	10.0.0.0/8 [90/133]	via	F0/4

Packets received by the router from BGP enter via a serial interface at 209.165.201.1 Each route is present within the routing table Which interface is used to forward traffic with a destination IP of 10.1.1.19?

- A. F0/4
- B. F0/0
- C. F0/1
- D. F0/3

Answer: B

NEW QUESTION 590

- (Exam Topic 3)

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

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

Answer: A

NEW QUESTION 591

- (Exam Topic 3)

What is the function of the controller in a software-defined network?

- A. multicast replication at the hardware level
- B. fragmenting and reassembling packets
- C. making routing decisions
- D. forwarding packets

Answer: C

NEW QUESTION 595

- (Exam Topic 3)

What is the purpose of the ip address dhcp command?

- A. to configure an Interface as a DHCP server
- B. to configure an interface as a DHCP helper
- C. to configure an interface as a DHCP relay
- D. to configure an interface as a DHCP client

Answer: D

NEW QUESTION 600

- (Exam Topic 3)

Refer to the exhibit.

```
Switch#show etherchannel summary
[output omitted]
```

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

Which two commands when used together create port channel 10? (Choose two.)

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

Answer: AC

NEW QUESTION 602

- (Exam Topic 3)

Which interface mode must be configured to connect the lightweight APs in a centralized architecture?

- A. WLAN dynamic
- B. management
- C. trunk
- D. access

Answer: D

NEW QUESTION 606

- (Exam Topic 3)

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

- A. interface vlan 2000 ipv6 address ffc0:0000:aaaa::1234:2343/64
- B. interface vlan 2000 ipv6 address fc00:0000:aaaa:a15d:1234:2343:8aca/64
- C. interface vlan 2000 ipv6 address fe80:0000:aaaa::1234:2343/64
- D. interface vlan 2000 ipv6 address fd00::1234:2343/64

Answer: B

NEW QUESTION 608

- (Exam Topic 3)

Refer to the exhibit.

EIGRP	10.10.10.0/24[90/1441]	via	F0/10
EIGRP	10.10.10.0/24[90/144]	via	F0/11
EIGRP	10.10.10.0/24[90/1441]	via	F0/12
OSPF	10.10.10.0/24[110/20]	via	F0/13
OSPF	10.10.10.0/24[110/30]	via	F0/14

Packets received by the router from BGP enter via a serial interface at 209.165.201.10. Each route is present within the routing table. Which interface is used to forward traffic with a destination IP of 10.10.10.24?

- A. F0/10
- B. F0/11
- C. F0/12
- D. F0/13

Answer: B

NEW QUESTION 612

- (Exam Topic 3)

Refer to the exhibit.

Switch#show ip dhcp snooping	Switch#show ip dhcp snooping statistics detail
Switch DHCP snooping is enabled	Packets Processed by DHCP Snooping = 34
Switch DHCP gleaning is disabled	Packets Dropped Because
DHCP snooping is configured on following VLANs:	IDB not known = 0
1	Queue full = 0
DHCP snooping is operational on following VLANs:	Interface is in errdisabled = 0
1	Rate limit exceeded = 0
DHCP snooping is configured on the following L3 Interfaces:	Received on untrusted ports = 32
Insertion of option 82 is disabled	Nonzero giaddr = 0
circuit-id default format: vlan-mod-port	Source mac not equal to chaddr = 0
remote-id: aabb.cc00.6500 (MAC)	No binding entry = 0
Option 82 on untrusted port is not allowed	Insertion of opt82 fail = 0
Verification of hwaddr field is enabled	Unknown packet = 0
Verification of giaddr field is enabled	Interface Down = 0
DHCP snooping trust/rate is configured on the following Interfaces:	Unknown output interface = 0
Interface Trusted Allow option Rate limit (pps)	Misdirected Packets = 0
	Packets with Invalid Size = 0
	Packets with Invalid Option = 0

The DHCP server and clients are connected to the same switch. What is the next step to complete the DHCP configuration to allow clients on VLAN 1 to receive addresses from the DHCP server?

- A. Configure the ip dhcp snooping trust command on the interlace that is connected to the DHCP client.
- B. Configure the ip dhcp relay information option command on the interface that is connected to the DHCP client.
- C. Configure the ip dhcp snooping trust command on the interface that is connected to the DHCP server.
- D. Configure the Ip dhcp relay information option command on the interface that is connected to the DHCP server.

Answer: C

NEW QUESTION 616

- (Exam Topic 3)

What is an expected outcome when network management automation is deployed?

- A. A distributed management plane must be used.
- B. Software upgrades are performed from a central controller
- C. Complexity increases when new device configurations are added
- D. Custom applications are needed to configure network devices

Answer: B

NEW QUESTION 617

- (Exam Topic 3)

What are two benefits of FHRPs? (Choose two.)

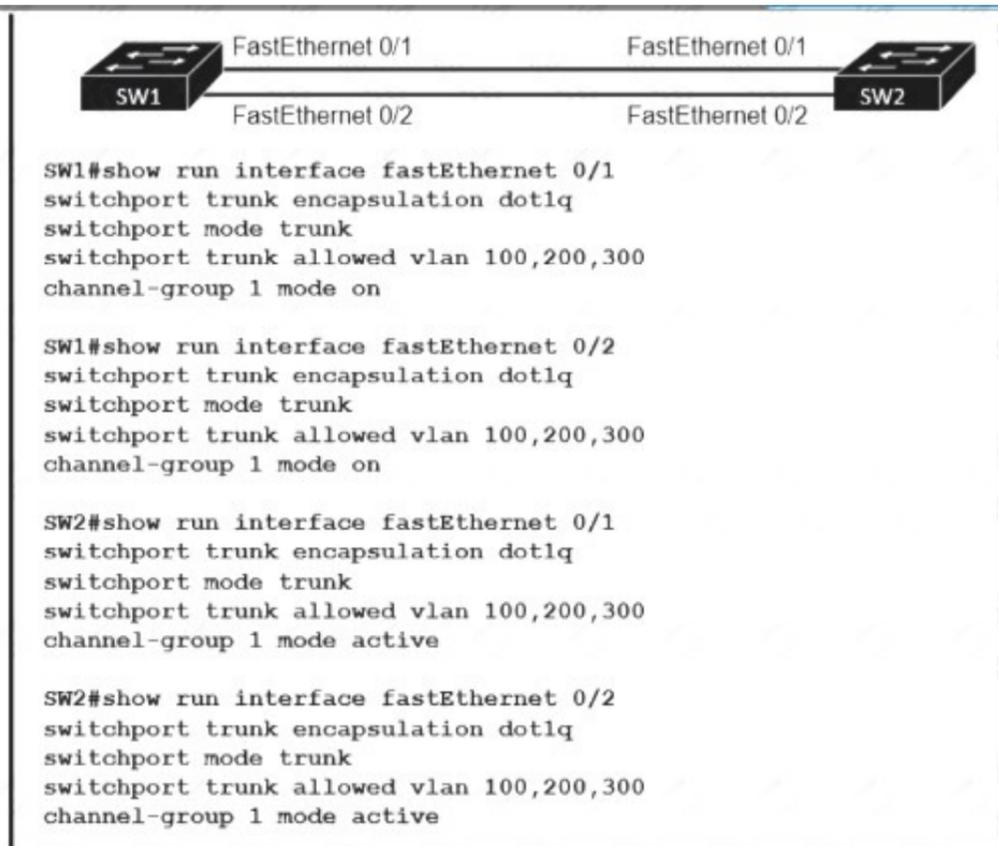
- A. They enable automatic failover of the default gateway.
- B. They allow multiple devices to serve as a single virtual gateway for clients in the network.
- C. They are able to bundle multiple ports to increase bandwidth.
- D. They prevent loops in the Layer 2 network.
- E. They allow encrypted traffic.

Answer: AB

NEW QUESTION 621

- (Exam Topic 3)

Refer to the exhibit.



An engineer built a new L2 LACP EtherChannel between SW1 and SW2 and executed these show commands to verify the work. Which additional task allows the two switches to establish an LACP port channel?

- A. Change the channel-group mode on SW2 to auto
- B. Change the channel-group mode on SW1 to desirable.
- C. Configure the interface port-channel 1 command on both switches.
- D. Change the channel-group mode on SW1 to active or passive.

Answer: D

NEW QUESTION 623

- (Exam Topic 2)

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

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

Answer: DE

NEW QUESTION 625

- (Exam Topic 2)

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

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

Answer: A

NEW QUESTION 627

- (Exam Topic 2)

Which two QoS tools provides congestion management? (Choose two)

- A. CAR
- B. CBWFQ
- C. PQ
- D. PBR
- E. FRTS

Answer: BC

Explanation:

Type of queuing methods are available:• First-In-First-Out (FIFO)• Priority Queuing (PQ)• Custom Queuing (CQ)• Weighted Fair Queuing (WFQ)• Class-Based Weighted Fair Queuing (CBWFQ)• Low-Latency Queuing (LLQ)

<https://www.orbit-computer-solutions.com/qos-congestion-management-tools/>

NEW QUESTION 632

- (Exam Topic 2)
Refer to the exhibit.

```

10.0.0.0/24 is subsetting, 1 subnets
C    10.0.0.0 is directly connected, FastEthernet0/1
C    172.160.0/16 is directly connected, FastEthernet0/0
D    192.168.0.0/24 [90/30720] via 172.16.0.2, 00:00:03, FastEthernet0/0
    
```

Which route type does the routing protocol Code D represent in the output?

- A. internal BGP route
- B. /24 route of a locally configured IP
- C. statically assigned route
- D. route learned through EIGRP

Answer: D

NEW QUESTION 634

- (Exam Topic 2)
Which type of traffic is sent with pure IPsec?

- A. broadcast packets from a switch that is attempting to locate a MAC address at one of several remote sites
- B. multicast traffic from a server at one site to hosts at another location
- C. spanning-tree updates between switches that are at two different sites
- D. unicast messages from a host at a remote site to a server at headquarters

Answer: D

Explanation:

"The original poster makes a correct observation that EIGRP does not work in a pure IPSEC environment. IPSEC was designed to process unicast traffic.

NEW QUESTION 638

- (Exam Topic 2)
Refer to the exhibit.

```

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

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

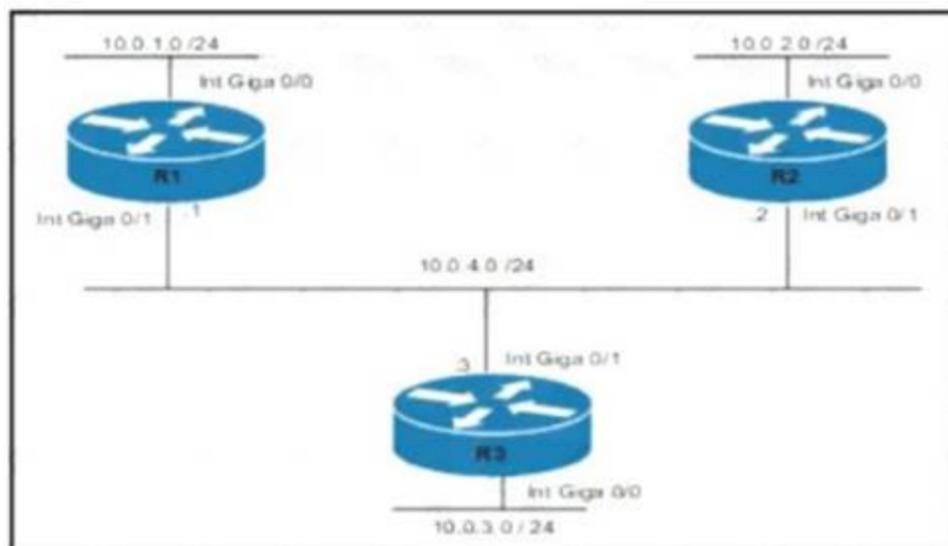
Shortly after SiteA was connected to SiteB over a new single-mode fiber path users at SiteA report intermittent connectivity issues with applications hosted at SiteB
What is the cause of the intermittent connectivity issue?

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

Answer: A

NEW QUESTION 639

- (Exam Topic 3)
Refer to the exhibit.



Routers R1 and R3 have the default configuration The router R2 priority is set to 99 Which commands on R3 configure it as the DR in the 10.0.4.0/24 network?

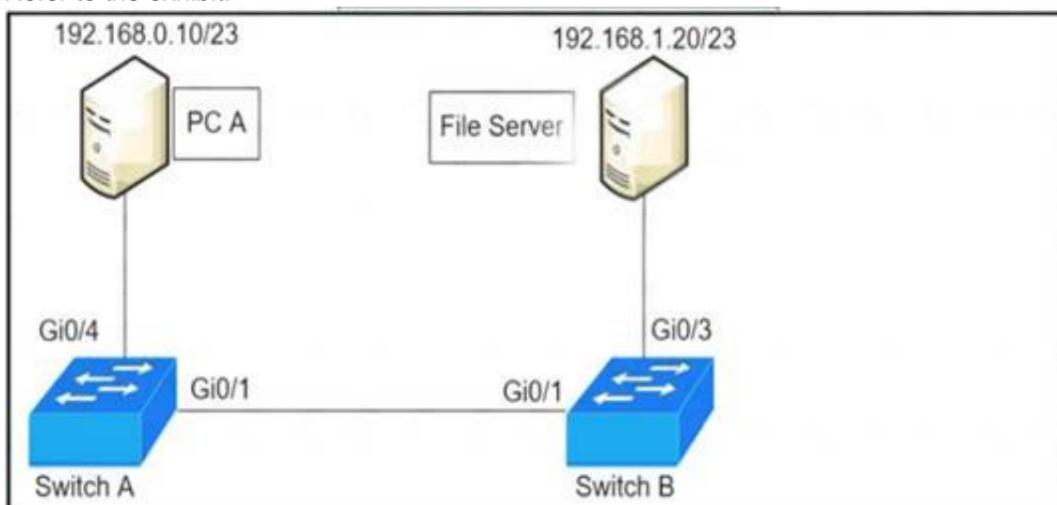
- A. R3(config)#interface Gig0/1 R3(config-if)#ip ospf priority 100
- B. R3(config)#interface Gig0/0 R3(config-if)#ip ospf priority 100
- C. R3(config)#interface Gig0/0 R3(config-if)#ip ospf priority 1
- D. R3(config)#interface Gig0/1 R3(config-if)#ip ospf priority 0

Answer: B

NEW QUESTION 643

- (Exam Topic 2)

Refer to the exhibit.



<p>Switch A Vlan 10,11,12,13</p> <pre>interface GigabitEthernet0/1 switchport mode trunk switchport trunk allowed vlan 10-12 ! interface GigabitEthernet0/4 switchport access vlan 13 switchport mode access</pre>	<p>Switch B Vlan 10,11,12,13</p> <pre>interface GigabitEthernet0/1 switchport mode trunk ! interface GigabitEthernet0/3 switchport access vlan 13 switchport mode access</pre>
---	---

A network administrator assumes a task to complete the connectivity between PC A and the File Server. Switch A and Switch B have been partially configured with VLAN 10, 11, 12, and 13. What is the next step in the configuration?

- A. Add PC A to VLAN 10 and the File Server to VLAN 11 for VLAN segmentation
- B. Add VLAN 13 to the trunk links on Switch A and Switch B for VLAN propagation
- C. Add a router on a stick between Switch A and Switch B allowing for Inter-VLAN routing.
- D. Add PC A to the same subnet as the File Server allowing for intra-VLAN communication.

Answer: B

NEW QUESTION 647

- (Exam Topic 2)

Refer to the exhibit.

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.246 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.246, Serial0/1/0
   is directly connected, Serial0/1/0
   172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
S   172.16.3.0/24 [1/0] via 207.165.200.250, Serial0/0/0
O   172.16.3.0/28 [110/84437] via 207.165.200.254, 00:00:28, Serial0/0/1
   207.165.200.0/24 is variably subnetted, 6 subnets, 2 masks
C   207.165.200.244/30 is directly connected, Serial0/1/0
L   207.165.200.245/32 is directly connected, Serial0/1/0
C   207.165.200.248/30 is directly connected, Serial0/0/0
L   207.165.200.249/32 is directly connected, Serial0/0/0
C   207.165.200.252/30 is directly connected, Serial0/0/1
L   207.165.200.253/32 is directly connected, Serial0/0/1
```

A packet is being sent across router R1 to host 172.163.3.14. To which destination does the router send the packet?

- A. 207.165.200.246 via Serial0/1/0
- B. 207.165.200.254 via Serial0/0/1
- C. 207.165.200.254 via Serial0/0/0
- D. 207.165.200.250 via Serial0/0/0

Answer: B

NEW QUESTION 650

- (Exam Topic 2)

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

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

Answer: BC

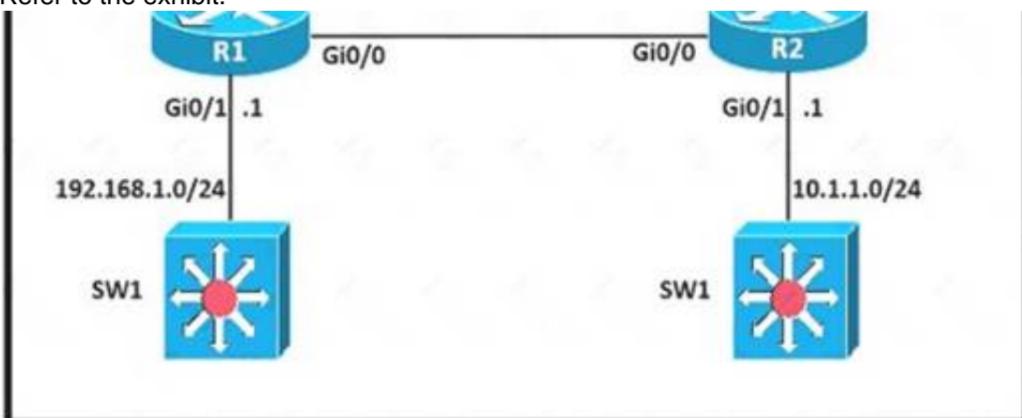
Explanation:

The usual possible causes are full-duplex/half-duplex mismatch, exceeded Ethernet cable length limits, or defective hardware such as incorrect cabling, non-compliant number of hubs in the network, or a bad NIC.

NEW QUESTION 652

- (Exam Topic 2)

Refer to the exhibit.



A network engineer is in the process of establishing IP connectivity between two sites. Routers R1 and R2 are partially configured with IP addressing. Both routers have the ability to access devices on their respective LANs. Which command set configures the IP connectivity between devices located on both LANs in each site?

- R1
ip route 192.168.1.0 255.255.255.0 GigabitEthernet0/0
R2
ip route 10.1.1.1 255.255.255.0 GigabitEthernet0/0
- R1
ip route 0.0.0.0 0.0.0.0 209.165.200.225
R2
ip route 0.0.0.0 0.0.0.0 209.165.200.226
- R1
ip route 192.168.1.1 255.255.255.0 GigabitEthernet0/1
R2
ip route 10.1.1.1 255.255.255.0 GigabitEthernet0/1
- R1
ip route 0.0.0.0 0.0.0.0 209.165.200.226
R2
ip route 0.0.0.0 0.0.0.0 209.165.200.225

A. Option A

- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 654

- (Exam Topic 2)

When a WPA2-PSK WLAN is configured in the wireless LAN Controller, what is the minimum number of characters that in ASCII format?

- A. 6
- B. 8
- C. 12
- D. 18

Answer: B

NEW QUESTION 658

- (Exam Topic 2)

Refer to the exhibit.

```
SW1(config-line)#line vty 0 15
SW1(config-line)#no login local
SW1(config-line)#password cisco

SW2(config)#username admin1 password abcd1234
SW2(config)#username admin2 password abcd1234
SW2(config-line)#line vty 0 15
SW2(config-line)#login local

SW3(config)#username admin1 secret abcd1234
SW3(config)#username admin2 secret abcd1234
SW3(config-line)#line vty 0 15
SW3(config-line)#login local

SW4(config)#username admin1 secret abcd1234
SW4(config)#username admin2 secret abcd1234
SW4(config-line)#line console 0
SW4(config-line)#login local
```

An administrator configures four switches for local authentication using passwords that are stored in a cryptographic hash. The four switches must also support SSH access for administrators to manage the network infrastructure. Which switch is configured correctly to meet these requirements?

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

Answer: C

NEW QUESTION 659

- (Exam Topic 2)

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

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

Answer: D

NEW QUESTION 662

- (Exam Topic 2)

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

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

Answer: A

NEW QUESTION 667

- (Exam Topic 2)

The service password-encryption command is entered on a router. What is the effect of this configuration?

- A. restricts unauthorized users from viewing clear-text passwords in the running configuration
- B. encrypts the password exchange when a VPN tunnel is established
- C. prevents network administrators from configuring clear-text passwords
- D. protects the VLAN database from unauthorized PC connections on the switch

Answer: A

NEW QUESTION 670

- (Exam Topic 2)

Which two outcomes are predictable behaviors for HSRP? (Choose two)

- A. The two routers share a virtual IP address that is used as the default gateway for devices on the LAN.
- B. The two routers negotiate one router as the active router and the other as the standby router
- C. Each router has a different IP address both routers act as the default gateway on the LAN, and traffic is load balanced between them.
- D. The two routers synchronize configurations to provide consistent packet forwarding
- D. The two routers share the same IP address, and default gateway traffic is load-balanced between them

Answer: AB

NEW QUESTION 674

- (Exam Topic 2)

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

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

Answer: D

NEW QUESTION 679

- (Exam Topic 2)

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

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

Answer: A

NEW QUESTION 680

- (Exam Topic 2)

Refer to the exhibit.

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

An administrator is tasked with configuring a voice VLAN. What is the expected outcome when a Cisco phone is connected to the GigabitEthernet3/1/4 port on a switch?

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

Answer: D

NEW QUESTION 682

- (Exam Topic 2)

Refer to the exhibit.

```
Switch#show etherchannel summary
[output omitted]

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

Which two commands were used to create port channel 10? (Choose two)

- int range g0/0-1
channel-group 10 mode active
- int range g0/0-1
channel-group 10 mode desirable
- int range g0/0-1
channel-group 10 mode passive
- int range g0/0-1
channel-group 10 mode auto
- int range g0/0-1
channel-group 10 mode on

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

Answer: AC

NEW QUESTION 683

- (Exam Topic 2)
Refer to the exhibit.

```
R2#show ip route
C 192.168.1.0/26 is directly connected, FastEthernet0/1
```

Which two prefixes are included in this routing table entry? (Choose two.)

- A. 192.168.1.17
- B. 192.168.1.61
- C. 192.168.1.64
- D. 192.168.1.127
- E. 192.168.1.254

Answer: BC

NEW QUESTION 685

- (Exam Topic 2)
What are two benefits of network automation? (Choose two)

- A. reduced operational costs
- B. reduced hardware footprint
- C. faster changes with more reliable results
- D. fewer network failures
- E. increased network security

Answer: AC

NEW QUESTION 687

- (Exam Topic 2)
How does CAPWAP communicate between an access point in local mode and a WLC?

- A. The access point must directly connect to the WLC using a copper cable
- B. The access point must not be connected to the wired network, as it would create a loop
- C. The access point must be connected to the same switch as the WLC

D. The access point has the ability to link to any switch in the network, assuming connectivity to the WLC

Answer: D

NEW QUESTION 690

- (Exam Topic 2)

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

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

Answer: A

NEW QUESTION 691

- (Exam Topic 2)

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

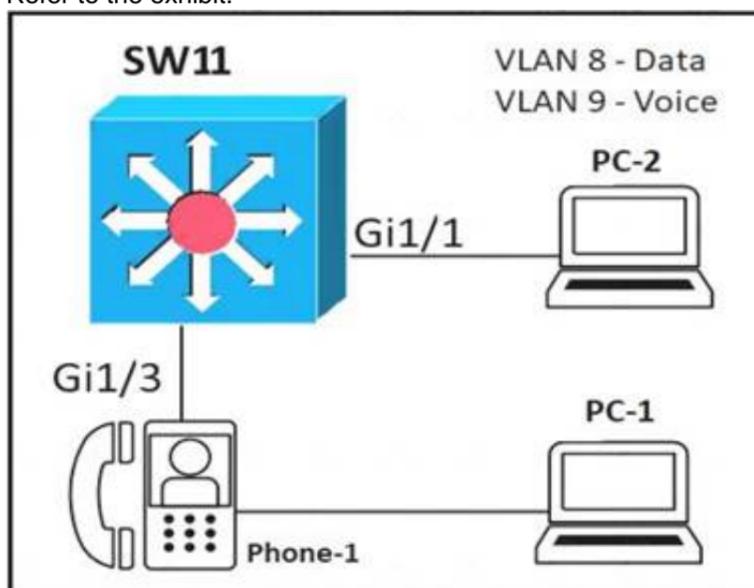
- A. The seventh bit of the original MAC address of the interface is inverted
- B. The interface ID is configured as a random 64-bit value
- C. The characters FE80 are inserted at the beginning of the MAC address of the interface
- D. The MAC address of the interface is used as the interface ID without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

Answer: A

NEW QUESTION 694

- (Exam Topic 2)

Refer to the exhibit.



An administrator must configure interfaces Gi1/1 and Gi1/3 on switch SW1 PC-1 and PC-2 must be placed in the Data VLAN and Phone-1 must be placed in the Voice VLAN Which configuration meets these requirements?

- interface gigabitethernet1/1
switchport mode access
switchport access vlan 8
!
interface gigabitethernet1/3
switchport mode access
switchport voice vlan 8
switchport access vlan 9
- interface gigabitethernet1/1
switchport mode access
switchport access vlan 9
!
interface gigabitethernet1/3
switchport mode trunk
switchport trunk vlan 8
switchport trunk vlan 9
- interface gigabitethernet1/1
switchport mode access
switchport access vlan 8
!
interface gigabitethernet1/3
switchport mode access
switchport access vlan 8
switchport voice vlan 9
- interface gigabitethernet1/1
switchport mode access
switchport access vlan 8
!
interface gigabitethernet1/3
switchport mode trunk
switchport trunk vlan 8
switchport voice vlan 9

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 695

- (Exam Topic 2)

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

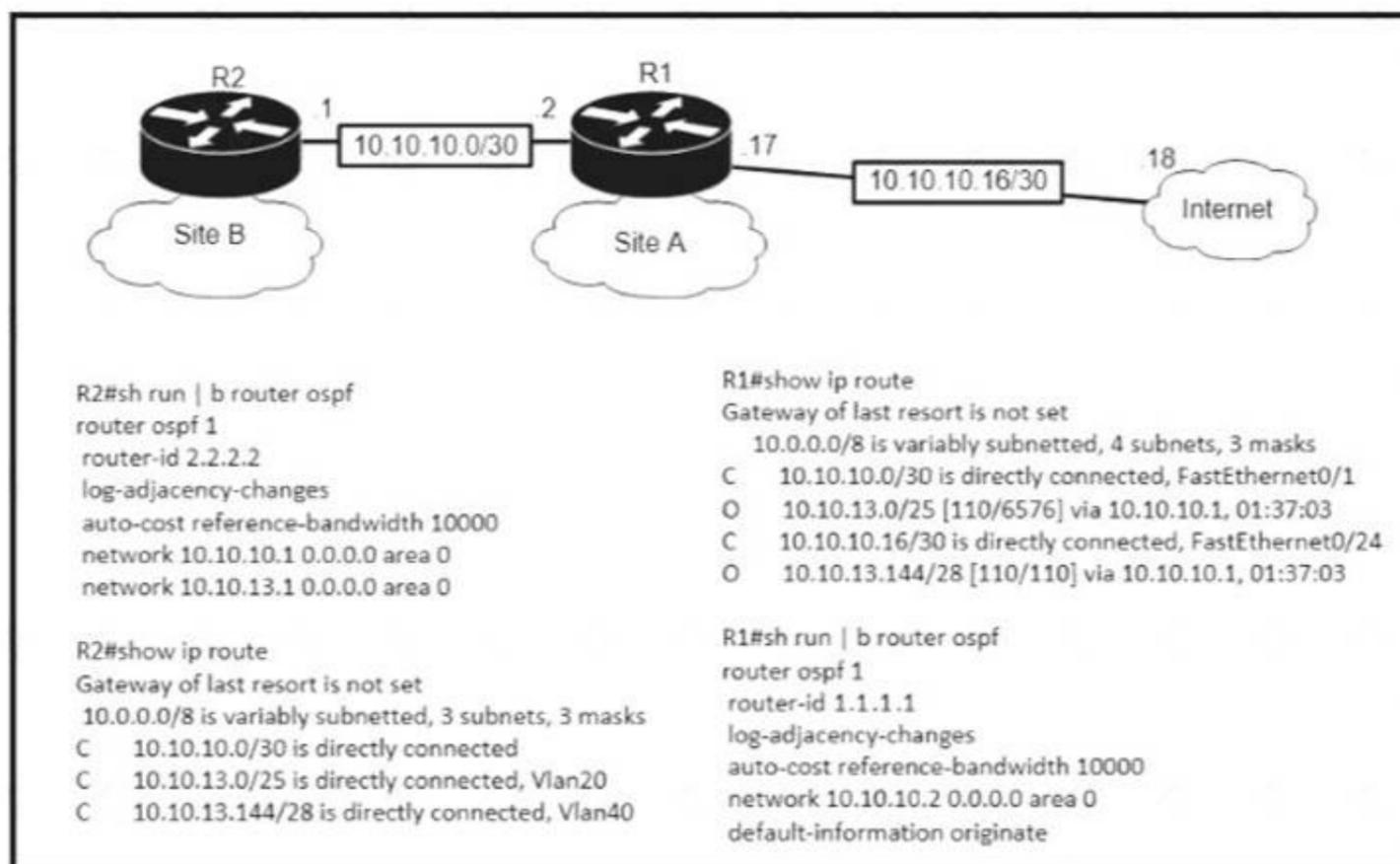
- A. switchport mode trunk
- B. switchport mode dynamic desirable
- C. switchport mode dynamic auto
- D. switchport nonegotiate

Answer: C

NEW QUESTION 699

- (Exam Topic 2)

Refer to the exhibit.



An engineer is bringing up a new circuit to the MPLS provider on the Gi0/1 interface of Router1. The new circuit uses eBGP and teams the route to VLAN25 from the BGP path. What is the expected behavior for the traffic flow for route 10.10.13.0/25?

- A. Traffic to 10.10.13.0/25 is load balanced out of multiple interfaces
- B. Route 10.10.13.0/25 is updated in the routing table as being learned from interface Gi0/1.
- C. Traffic to 10.10.13.0/25 is asymmetrical
- D. Route 10.10.13.0/25 learned via the Gi0/0 interface remains in the routing table

Answer: D

NEW QUESTION 702

- (Exam Topic 2)

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

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

Answer: B

NEW QUESTION 704

- (Exam Topic 2)

A packet is destined for 10.10.1.22. Which static route does the router choose to forward the packet?

- A. ip route 10.10.1.0 255.255.255.240 10.10.255.1
- B. ip route 10.10.1.16 255.255.255.252 10.10.255.1
- C. ip route 10.10.1.20 255.255.255.252 10.10.255.1
- D. ip route 10.10.1.20 255.255.255.254 10.10.255.1

Answer: C

NEW QUESTION 705

- (Exam Topic 2)

Which two protocols must be disabled to increase security for management connections to a Wireless LAN Controller? (Choose two)

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

Answer: AC

NEW QUESTION 710

- (Exam Topic 2)

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

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

D. 5,6,7

Answer: A

NEW QUESTION 711

- (Exam Topic 2)

An organization secures its network with multi-factor authentication using an authenticator app on employee smartphone. How is the application secured in the case of a user's smartphone being lost or stolen?

- A. The application requires an administrator password to reactivate after a configured Interval.
- B. The application requires the user to enter a PIN before it provides the second factor.
- C. The application challenges a user by requiring an administrator password to reactivate when the smartphone is rebooted.
- D. The application verifies that the user is in a specific location before it provides the second factor.

Answer: B

NEW QUESTION 714

- (Exam Topic 2)

R1 has learned route 10.10.10.0/24 via numerous routing protocols. Which route is installed?

- A. route with the lowest cost
- B. route with the next hop that has the highest IP
- C. route with the shortest prefix length
- D. route with the lowest administrative distance

Answer: D

NEW QUESTION 718

- (Exam Topic 2)

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

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

Answer: A

NEW QUESTION 723

- (Exam Topic 2)

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

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

Answer: A

NEW QUESTION 728

- (Exam Topic 2)

Refer to the exhibit.

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.246 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.246, Serial0/1/0
   is directly connected, Serial0/1/0
   172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
S   172.16.3.0/24 [1/0] via 209.165.200.250, Serial0/0/0
O   172.16.3.0/28 [110/1] via 209.165.200.254, 00:00:28, Serial0/0/1
   209.165.200.0/24 is variably subnetted, 6 subnets, 2 masks
C   209.165.200.244/30 is directly connected, Serial0/1/0
L   209.165.200.245/32 is directly connected, Serial0/1/0
C   209.165.200.248/30 is directly connected, Serial0/0/0
L   209.165.200.249/32 is directly connected, Serial0/0/0
C   209.165.200.252/30 is directly connected, Serial0/0/1
L   209.165.200.253/32 is directly connected, Serial0/0/1
```

A packet is being sent across router R1 to host 172.16.0.14. What is the destination route for the packet?

- A. 209.165.200.254 via Serial0/0/1
- B. 209.165.200.254 via Serial0/0/0
- C. 209.165.200.246 via Serial0/1/0
- D. 209.165.200.250 via Serial0/0/0

Answer: A

NEW QUESTION 730

- (Exam Topic 2)

Which network plane is centralized and manages routing decisions?

- A. policy plane
- B. management plane
- C. control plane
- D. data plane

Answer: C

NEW QUESTION 732

- (Exam Topic 2)

An engineer must configure an OSPF neighbor relationship between router R1 and R3. The authentication configuration has been configured and the connecting interfaces are in the same 192.168.1.0/30 subnet. What are the next two steps to complete the configuration? (Choose two.)

- A. configure the hello and dead timers to match on both sides
- B. configure the same process ID for the router OSPF process
- C. configure the same router ID on both routing processes
- D. Configure the interfaces as OSPF active on both sides.
- E. configure both interfaces with the same area ID

Answer: AE

NEW QUESTION 733

- (Exam Topic 2)

Drag the descriptions of device management from the left onto the types of device management on the right.

Implements changes via an SSH terminal	Cisco DNA Center Device Management <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
Manages device configuration on a per-device basis		
Monitor the cloud for software update		
Security is managed near the perimeter of the network with firewalls, VPNs, and IPS		
Uses CLI templates to apply a consistent configuration to multiple devices at an individual location		Traditional device management <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Uses NetFlow to analyse potential security threats throughout the network and take appropriate action on that traffic		

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Cisco DNA Center Device Management <div style="border: 1px solid black; background-color: #ADD8E6; padding: 5px; text-align: center;">Monitor the cloud for software update</div> <div style="border: 1px solid black; background-color: #ADD8E6; padding: 5px; text-align: center;">Uses CLI templates to apply a consistent configuration to multiple devices at an individual location</div> <div style="border: 1px solid black; background-color: #ADD8E6; padding: 5px; text-align: center;">Uses NetFlow to analyse potential security threats throughout the network and take appropriate action on that traffic</div>
Traditional device management <div style="border: 1px solid black; background-color: #ADD8E6; padding: 5px; text-align: center;">Manages device configuration on a per-device basis</div> <div style="border: 1px solid black; background-color: #ADD8E6; padding: 5px; text-align: center;">Security is managed near the perimeter of the network with firewalls, VPNs, and IPS</div> <div style="border: 1px solid black; background-color: #ADD8E6; padding: 5px; text-align: center;">Implements changes via an SSH terminal</div>

NEW QUESTION 734

- (Exam Topic 2)

Drag and drop the AAA terms from the left onto the description on the right.

accounting	tracks activity
authentication	updates session attributes
authorization	verifies access rights
CoA	verifies identity

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

* 1-1, 2-4, 3-3, 4-2

NEW QUESTION 735

- (Exam Topic 2)

Which goal is achieved by the implementation of private IPv4 addressing on a network?

- A. provides an added level of protection against Internet exposure
- B. provides a reduction in size of the forwarding table on network routers
- C. allows communication across the Internet to other private networks
- D. allows servers and workstations to communicate across public network boundaries

Answer: A

NEW QUESTION 737

- (Exam Topic 2)

When a WLAN with WPA2 PSK is configured in the Wireless LAN Controller GUI which format is supported?

- A. Unicode
- B. base64
- C. decimal
- D. ASCII

Answer: D

NEW QUESTION 740

- (Exam Topic 2)

What are two recommendations for protecting network ports from being exploited when located in an office space outside of an IT closer? (Choose two.)

- A. enable the PortFast feature on ports
- B. implement port-based authentication
- C. configure static ARP entries
- D. configure ports to a fixed speed
- E. shut down unused ports

Answer: BE

NEW QUESTION 741

- (Exam Topic 2)

What are two benefits of FHRPs? (Choose two.)

- A. They prevent (oops in the Layer 2 network.
- B. They allow encrypted traffic.
- C. They are able to bundle multiple ports to increase bandwidth
- D. They enable automatic failover of the default gateway.
- E. They allow multiple devices to serve as a single virtual gateway for clients in the network

Answer: DE

NEW QUESTION 744

- (Exam Topic 2)

What role does a hypervisor provide for each virtual machine in server virtualization?

- A. infrastructure-as-a-service.
- B. Software-as-a-service
- C. control and distribution of physical resources
- D. services as a hardware controller.

Answer: C

Explanation:

The hypervisor creates and manages virtual machines on a host computer and allocates physical system resources to them.

NEW QUESTION 747

- (Exam Topic 2)

Which networking function occurs on the data plane?

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

Answer: A

NEW QUESTION 752

- (Exam Topic 2)

A network administrator must to configure SSH for remote access to router R1. The requirement is to use a public and private key pair to encrypt management traffic to and from the connecting client.

Which configuration, when applied, meets the requirements?

```
R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key generate ec keysize 2048

R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key generate rsa modulus 1024

R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key generate ec keysize 1024

R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key encrypt rsa name myKey
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 754

- (Exam Topic 2)

Which two must be met before SSH can operate normally on a Cisco IOS switch? (Choose two)

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

Answer: AB

Explanation:

Reference: <https://www.cisco.com/c/en/us/support/docs/security-vpn/secure-shell-ssh/4145-ssh.html>

NEW QUESTION 759

- (Exam Topic 2)

Refer to the exhibit.

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

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

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

default gateway	00:0C:22
host IP address	00:0C:22:83:79:A3
NIC MAC address	192.168.1.193
NIC vendor OUI	192.168.1.200
subnet mask	255.255.255.192

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

NIC vendor OUI → 00:0C:22
NIC MAC address → 00:0C:22:83:79:A3
default gateway → 192.168.1.193
host IP address → 192.168.1.200
subnet mask → 255.255.255.192

The “ip route” and “ip addr show eth1” are Linux commands.+ “ip route”: display the routing table+ “ip addr show eth1”: get depth information (only on eth1 interface) about your network interfaces like IP Address, MAC Address information

NEW QUESTION 763

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