



Cisco

Exam Questions 200-301

Cisco Certified Network Associate

NEW QUESTION 1

- (Exam Topic 2)

Refer to the exhibit.

```
Designated Router (ID) 10.11.11.11, Interface address 10.10.10.1
Backup Designated router (ID) 10.3.3.3, Interface address 10.10.10.3
Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
oob-resync timeout 40
Hello due in 00:00:08
Supports Link-local Signaling (LLS)
Cisco NSF helper support enabled
IETF NSF helper support enabled
Index 1/1/1, flood queue length 0
Next 0x0(0)/0x0(0)/0x0(0)
Last flood scan length is 1, maximum is 6
Last flood scan time is 0 msec, maximum is 1 msec
Neighbor Count is 3, Adjacent neighbor count is 3
Adjacent with neighbor 10.1.1.4
Adjacent with neighbor 10.2.2.2
Adjacent with neighbor 10.3.3.3 (Backup Designated Router)
Suppress hello for 0 neighbor(s)
```

The show ip ospf interface command has been executed on R1. How is OSPF configured?

- A. The interface is not participating in OSPF
- B. A point-to-point network type is configured
- C. The default Hello and Dead timers are in use
- D. There are six OSPF neighbors on this interface

Answer: C**Explanation:**<https://www.cisco.com/c/en/us/support/docs/ip/open-shortest-path-first-ospf/13689-17.html>**NEW QUESTION 2**

- (Exam Topic 2)

Refer to the exhibit.

```
R1# sh ip ospf int gig0/0
Gig0/0 is up, line protocol is up
  Internet Address 10.201.24.8/28, Area 1, Attached via Network Statement
  Process ID 100, Router ID 192.168.1.1, Network Type BROADCAST, Cost: 1
  Topology-MTID      Cost      Disabled      Shutdown      Topology Name
    0                1         no           no           Base
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 192.168.1.1, Interface address 10.201.24.8
  No backup designated router on this network
  Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
    oob-resync timeout 40
    Hello due in 00:00:07

R2#sh ip ospf int gig0/0
gig0/0 is up, line protocol is up
  Internet Address 10.201.24.1/28, Area 1
  Process ID 100, Router ID 172.16.1.1, Network Type BROADCAST, Cost: 1
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 172.16.1.1, Interface address 10.201.24.1
  No backup designated router on this network
  Timer intervals configured, Hello 20, Dead 80, Wait 80, Retransmit 5
```

What action establishes the OSPF neighbor relationship without forming an adjacency?

- A. modify hello interval
- B. modify process ID
- C. modify priority
- D. modify network type

Answer: A**NEW QUESTION 3**

- (Exam Topic 2)

Refer to the exhibit.

```
Switch(config)#hostname R1
R1(config)#interface FastEthernet0/1
R1(config-if)#no switchport
R1(config-if)#ip address 10.100.20.42 255.255.255.0
R1(config-if)#line vty 0 4
R1(config-line)#login
```

An engineer booted a new switch and applied this configuration via the console port. Which additional configuration must be applied to allow administrators to authenticate directly to enable privilege mode via Telnet using a local username and password?

```
R1(config)#username admin privilege 15 secret p@ss1234
R1(config-if)#line vty 0 4
R1(config-line)#login local
```

```
R1(config)#username admin secret p@ss1234
R1(config-if)#line vty 0 4
R1(config-line)#login local
R1(config)#enable secret p@ss1234
```

```
R1(config)#username admin
R1(config-if)#line vty 0 4
R1(config-line)#password p@ss1234
R1(config-line)#transport input telnet
```

```
R1(config)#username admin
R1(config-if)#line vty 0 4
R1(config-line)#password p@ss1234
```

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

Answer: A

NEW QUESTION 4

- (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 5

- (Exam Topic 2)

Router A learns the same route from two different neighbors, one of the neighbor routers is an OSPF neighbor and the other is an EIGRP neighbor. What is the administrative distance of the route that will be installed in the routing table?

- A. 20
- B. 90
- C. 110
- D. 115

Answer: B

Explanation:

The Administrative distance (AD) of EIGRP is 90 while the AD of OSPF is 110 so EIGRP route will be chosen to install into the routing table.

NEW QUESTION 6

- (Exam Topic 2)

Which set of action satisfy the requirement for multifactor authentication?

- A. The user swipes a key fob, then clicks through an email link
- B. The user enters a user name and password, and then clicks a notification in an authentication app on a mobile device
- C. The user enters a PIN into an RSA token, and then enters the displayed RSA key on a login screen
- D. The user enters a user name and password and then re-enters the credentials on a second screen

Answer: B

Explanation:

This is an example of how two-factor authentication (2FA) works:1. The user logs in to the website or service with their username and password.2. The password is validated by an authentication server and, if correct, the user becomes eligible for the second factor.3. The authentication server sends a unique code to the user's second-factor method (such as a smartphone app).4. The user confirms their identity by providing the additional authentication for their second-factor method.

NEW QUESTION 7

- (Exam Topic 2)

An engineer is configuring NAT to translate the source subnet of 10.10.0.0/24 to any of three addresses 192.168.30.1, 192.168.3.2, 192.168.3.3 Which configuration should be used?

- ☒ enable
configure terminal
ip nat pool mypool 192.168.3.1 192.168.3.3 prefix-length 30
route-map permit 10.10.0.0 255.255.255.0
ip nat outside destination list 1 pool mypool
interface g1/1
ip nat inside
interface g1/2
ip nat outside
- ☐ enable
configure terminal
ip nat pool mypool 192.168.3.1 192.168.3.3 prefix-length 30
access-list 1 permit 10.10.0.0 0.0.0.255
ip nat inside source list 1 pool mypool
interface g1/1
ip nat inside
interface g1/2
ip nat outside
- ☐ enable
configure terminal
ip nat pool mypool 192.168.3.1 192.168.3.3 prefix-length 30
access-list 1 permit 10.10.0.0 0.0.0.255
ip nat outside destination list 1 pool mypool
interface g1/1
ip nat inside
interface g1/2
ip nat outside
- ☐ enable
configure terminal
ip nat pool mypool 192.168.3.1 192.168.3.3 prefix-length 30
access-list 1 permit 10.10.0.0 0.0.0.254
ip nat inside source list 1 pool mypool
interface g1/1
ip nat inside
interface g1/2
ip nat outside

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

Answer: C

NEW QUESTION 8

- (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 9

- (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 10

- (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 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 15

- (Exam Topic 2)

Which configuration management mechanism uses TCP port 22 by default when communicating with managed nodes?

- A. Ansible
- B. Python
- C. Puppet
- D. Chef

Answer: A

NEW QUESTION 17

- (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 20

- (Exam Topic 2)
Which two primary drivers support the need for network automation? (Choose two.)

- A. Eliminating training needs
- B. Increasing reliance on self-diagnostic and self-healing
- C. Policy-derived provisioning of resources
- D. Providing a ship entry point for resource provisioning
- E. Reducing hardware footprint

Answer: CD

NEW QUESTION 22

- (Exam Topic 2)
A user configured OSPF in a single area between two routers A serial interface connecting R1 and R2 is running encapsulation PPP By default which OSPF network type is seen on this interface when the user types show ip ospf interface on R1 or R2?

- A. port-to-multipoint
- B. broadcast
- C. point-to-point
- D. nonbroadcast

Answer: C

Explanation:

The default OSPF network type for HDLC and PPP on Serial link is point-to-point (while the default OSPF network type for Ethernet link is Broadcast).

NEW QUESTION 23

- (Exam Topic 1)

Which MAC address is recognized as a VRRP virtual address?

- A. 0000.5E00.010a
- B. 0005.3711.0975
- C. 0000.0C07.AC99
- D. 0007.C070/AB01

Answer: A

Explanation:

With VRRP, the virtual router's MAC address is 0000.5E00.01xx, in which xx is the VRRP group.

NEW QUESTION 26

- (Exam Topic 1)

What are two characteristics of the distribution layer in a three-tier network architecture? (Choose two.)

- A. serves as the network aggregation point
- B. provides a boundary between Layer 2 and Layer 3 communications
- C. designed to meet continuous, redundant uptime requirements
- D. is the backbone for the network topology
- E. physical connection point for a LAN printer

Answer: BC

NEW QUESTION 29

- (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 34

- (Exam Topic 1)

Which device controls the forwarding of authentication requests for users when connecting to the network using a lightweight access point?

- A. TACACS server
- B. wireless access point
- C. RADIUS server
- D. wireless LAN controller

Answer: B

NEW QUESTION 39

- (Exam Topic 1)

What uses HTTP messages to transfer data to applications residing on different hosts?

- A. OpenFlow
- B. OpenStack
- C. OpFlex
- D. REST

Answer: D

NEW QUESTION 41

- (Exam Topic 1)

Which virtual MAC address is used by VRRP group 1?

- A. 0050.0c05.ad81
- B. 0007.c061.bc01
- C. 0000.5E00.0101
- D. 0500.3976.6401

Answer: C

Explanation:

The virtual router MAC address associated with a virtual router is an IEEE 802 MAC Address in the following format:
00-00-5E-00-01-{VRID} (in hex in internet standard bit-order)

NEW QUESTION 44

- (Exam Topic 1)
What is the benefit of using FHRP?

- A. reduced management overhead on network routers
- B. balancing traffic across multiple gateways in proportion to their loads
- C. higher degree of availability
- D. reduced ARP traffic on the network

Answer: C

NEW QUESTION 48

- (Exam Topic 1)
What criteria is used first during me 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)
Drag and drop the IPv6 address type characteristics from the left to the right.

attached to a single subnet

addresses with prefix FC00::/7

configured only once per interface

addressing for exclusive use internally without Internet routing

Link-Local Address

Unique Local Address

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
Graphical user interface, application Description automatically generated

NEW QUESTION 51

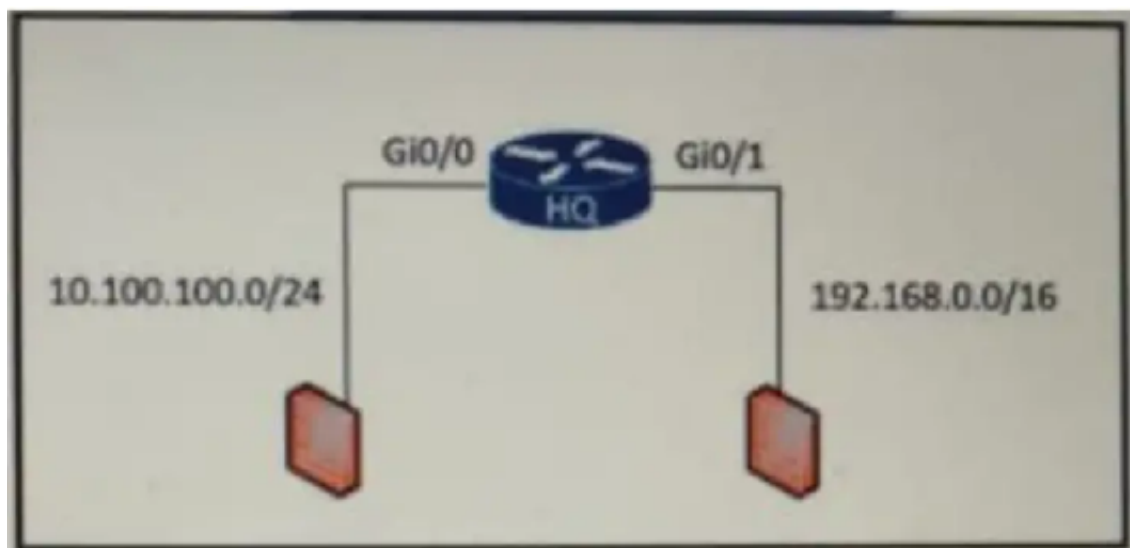
- (Exam Topic 1)
What are network endpoints?

- A. act as routers to connect a user to the service prowler 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

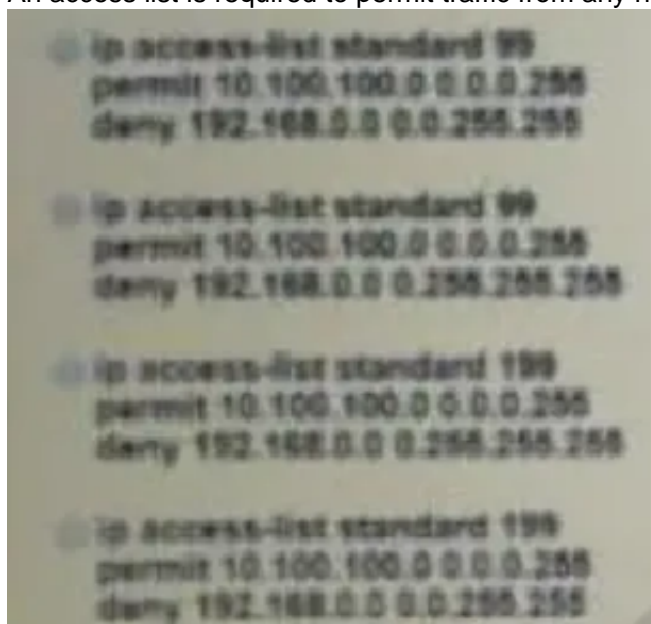
Answer: B

NEW QUESTION 56

- (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 59

- (Exam Topic 1)

Which device performs stateful inspection of traffic?

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

Answer: A

NEW QUESTION 62

- (Exam Topic 1)

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

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

Answer: DE

Explanation:

Whenever the physical transmission has problems, the receiving device might receive a frame whose bits have changed values. These frames do not pass the error detection logic as implemented in the FCS field in the Ethernet trailer. The receiving device discards the frame and counts it as some kind of input error.

Cisco switches list this error as a CRC error. Cyclic redundancy check (CRC) is a term related to how the FCS math detects an error.

The "input errors" includes runs, giants, no buffer, CRC, frame, overrun, and ignored counts. The output below show the interface counters with the "show interface s0/0/0" command:

```
Router#show interface s0/0/0
Serial0/0/0 is up, line protocol is up
  Hardware is M4T
  Description: Link to R2
  Internet address is 10.1.1.1/30
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  --output omitted--
  5 minute output rate 0 bits/sec, 0 packets/sec
    268 packets input, 24889 bytes, 0 no buffer
  Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
  0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
  251 packets output, 23498 bytes, 0 underruns
  0 output errors, 0 collisions, 0 interface resets
  0 output buffer failures, 0 output buffers swapped out
  0 carrier transitions      DCD=up   DSR=up   DTR=up   RTS=up   CTS=up
```

NEW QUESTION 65

- (Exam Topic 1)

An engineer is asked to protect unused ports that are configured in the default VLAN on a switch.
Which two steps will fulfill the request? (Choose two)

- A. Configure the ports in an EtherChannel.
- B. Administratively shut down the ports
- C. Configure the port type as access and place in VLAN 99
- D. Configure the ports as trunk ports
- E. Enable the Cisco Discovery Protocol

Answer: BC

NEW QUESTION 68

- (Exam Topic 1)

Which implementation provides the strongest encryption combination for the wireless environment?

- A. WPA2 + AES
- B. WPA + AES
- C. WEP
- D. WPA + TKIP

Answer: A

NEW QUESTION 71

- (Exam Topic 1)

Refer to the exhibit.

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

What is the result if Gig1/11 receives an STP BPDU?

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

Answer: D

NEW QUESTION 76

- (Exam Topic 1)

What is a function of the Cisco DNA Center Overall Health Dashboard?

- A. It provides a summary of the top 10 global issues.
- B. It provides detailed activity logging for the 10 devices and users on the network.
- C. It summarizes the operational status of each wireless device on the network.

D. It summarizes daily and weekly CPU usage for servers and workstations in the network.

Answer: A

NEW QUESTION 81

- (Exam Topic 1)

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

provides reliability when loading an IOS image upon boot up

does not require user authentication

uses port 69

uses ports 20 and 21

uses TCP

uses UDP

FTP

TFTP

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

provides reliability when loading an IOS image upon boot up

does not require user authentication

uses port 69

uses ports 20 and 21

uses TCP

uses UDP

FTP

provides reliability when loading an IOS image upon boot up

uses ports 20 and 21

uses TCP

TFTP

does not require user authentication

uses port 69

uses UDP

NEW QUESTION 84

- (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:

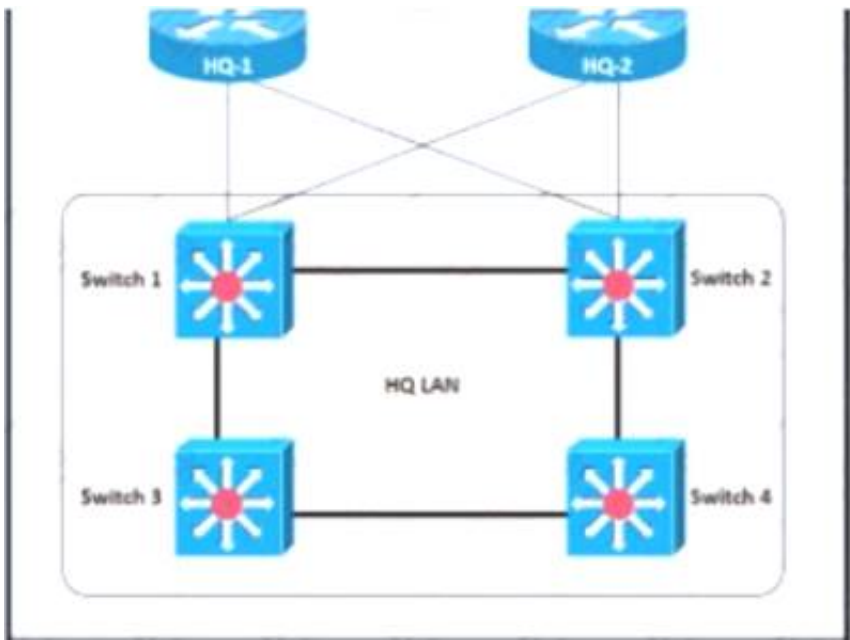
<https://www.cisco.com/c/en/us/support/docs/wireless/aironet-1200-series/70278-lap-faq.html>

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 89

- (Exam Topic 1)

Refer to the exhibit.



After the election process what is the root bridge in the HQ LAN?

Switch 1: 0C:E0:38:58:15:77
Switch 2: 0C:0E:15:22:1A:61
Switch 3: 0C:0E:15:1D:3C:9A
Switch 4: 0C:E0:19:A1:4D:16

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

Answer: C

Explanation:

The root bridge is determined by the lowest bridge ID, which consists of the priority value and the MAC address. Because the priority values of all of the switches are not available, the MAC address is used to determine the root bridge. Because S3 has the lowest MAC address, S3 becomes the root bridge.

NEW QUESTION 90

- (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 92

- (Exam Topic 1)

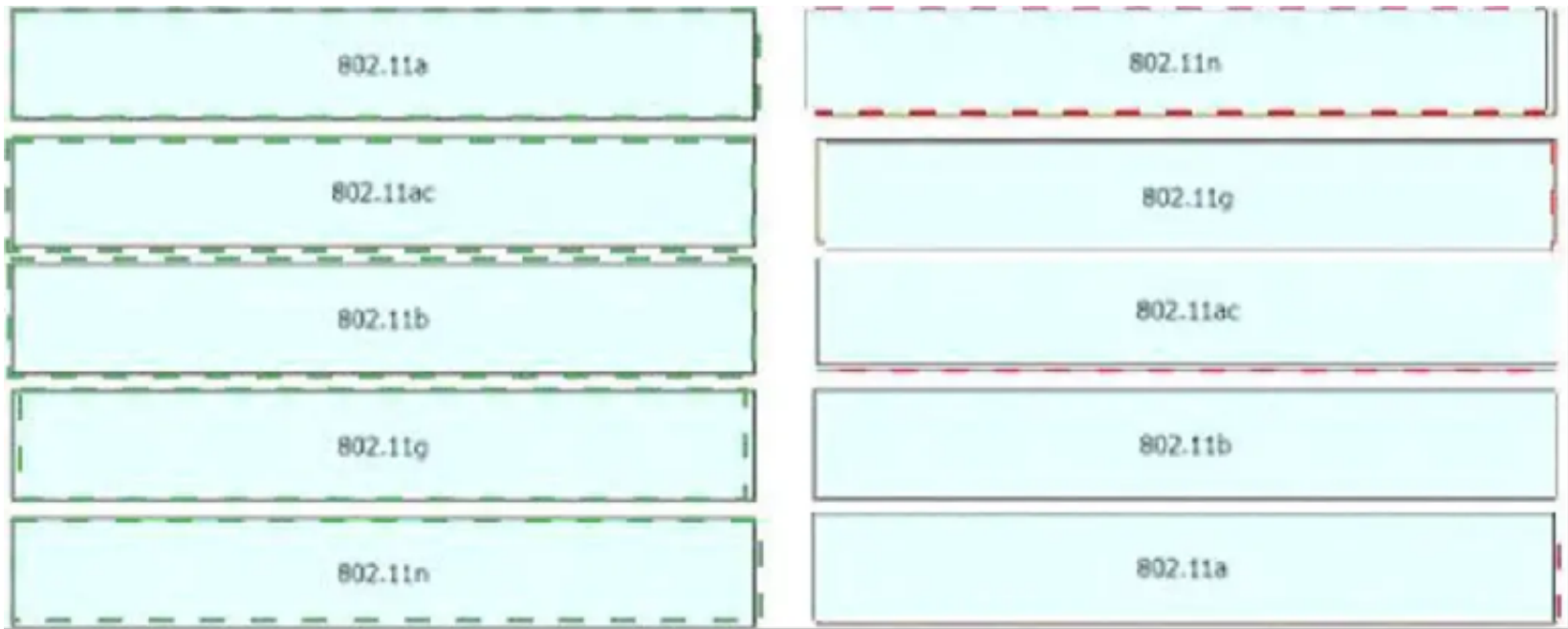
Drag and drop the 802.11 wireless standards from the left onto the matching statements on the right

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

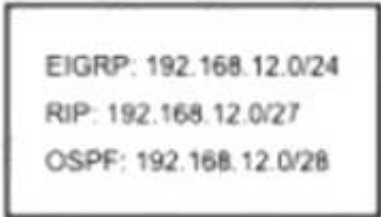
Answer: A

Explanation:



NEW QUESTION 96

- (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 98

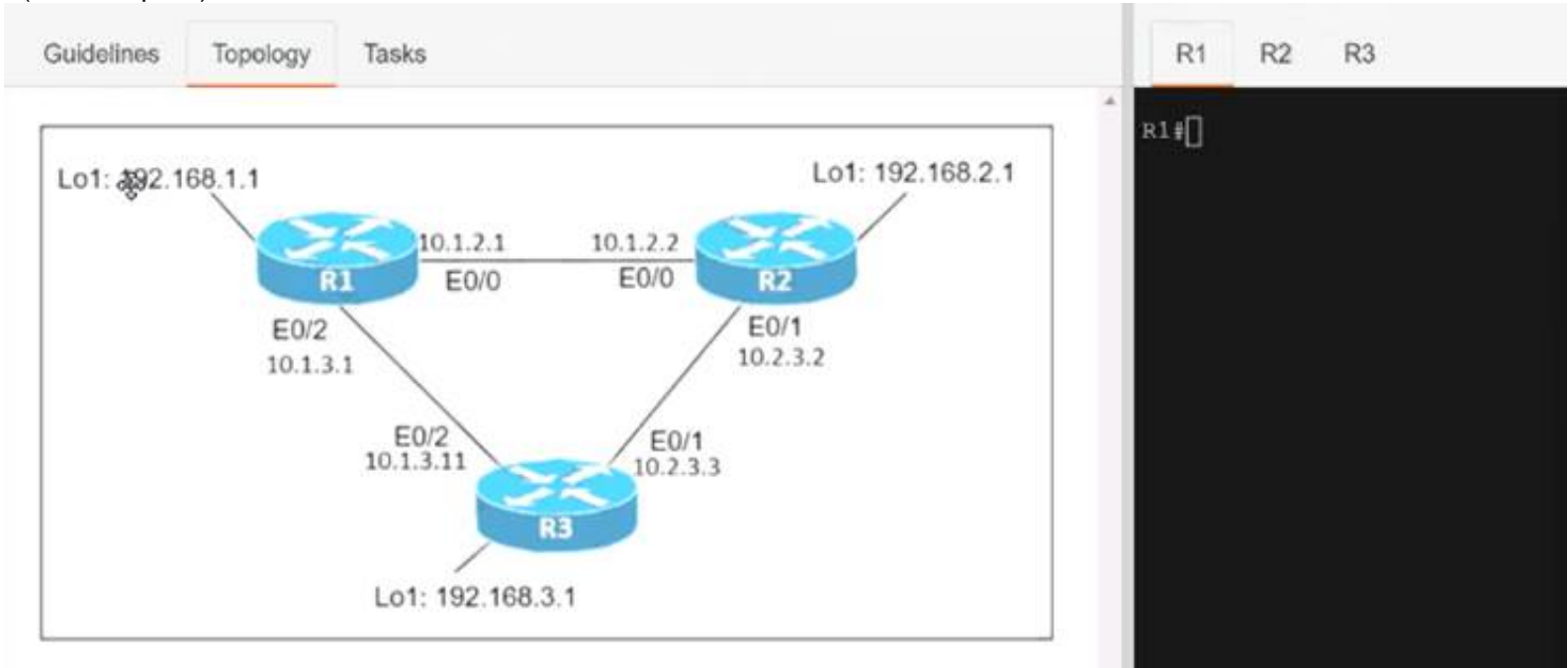
- (Exam Topic 1)
What is a network appliance that checks the state of a packet to determine whether the packet is legitimate?

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

Answer: C

NEW QUESTION 102

- (Exam Topic 5)



Guidelines
Topology
Tasks

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.

R1
R2
R3

R1#

Connectivity between three routers has been established, and IP services must be configured in the order presented to complete the implementation Tasks assigned include configuration of NAT, NTP, DHCP, and SSH services.

- * 1. All traffic sent from R3 to the R1 Loopback address must be configured for NAT on R2. All source addresses must be translated from R3 to the IP address of Ethernet0/0 on R2, while using only a standard access list named NAT To verify, a ping must be successful to the R1 Loopback address sourced from R3. Do not use NVI NAT configuration.
- * 2. Configure R1 as an NTP server and R2 as a client, not as a peer, using the IP address of the R1 Ethernet0/2 interface. Set the clock on the NTP server for midnight on January 1, 2019.
- * 3. Configure R1 as a DHCP server for the network 10.1.3.0/24 in a pool named TEST. Using a single command, exclude addresses 1-10 from the range. Interface Ethernet0/2 on R3 must be issued the IP address of 10.1.3.11 via DHCP.
- * 4. Configure SSH connectivity from R1 to R3, while excluding access via other remote connection protocols. Access for user root and password Cisco must be set on router R3 using RSA and 1024 bits. Verify connectivity using an SSH session from router R1 using a destination address of 10.1.3.11. Do NOT modify console access or line numbers to accomplish this task.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer as below configuration:

```
conf t
R1(config)#ntp master 1
R2(config)#ntp server 10.1.2.1 Exit
Router#clock set 00:00:00 jan 1 2019 ip dhcp pool TEST
network 10.1.3.0 255.255.255.0
ip dhcp exluded-address 10.1.3.1 10.1.3.10 R3(config)#int e0/3
R3(config)#int e0/2 ip address dhcp
no shut
crypto key generate RSA 1024
Copy run start
```

NEW QUESTION 105

- (Exam Topic 4)

What must a network administrator consider when deciding whether to configure a new wireless network with APs in autonomous mode or APs running in cloud-based mode?

- A. Autonomous mode APs are less dependent on an underlay but more complex to maintain than APs in cloud-based mode.
- B. Cloud-based mode APs relay on underlays and are more complex to maintain than APs in autonomous mode.
- C. Cloud-based mode APs are easy to deploy but harder to automate than APs in autonomous mode.
- D. Autonomous mode APs are easy to deploy and automate than APs in cloud-based mode.

Answer: A

NEW QUESTION 110

- (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 114

- (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 vital machine.

- A. Mastered
 B. Not Mastered

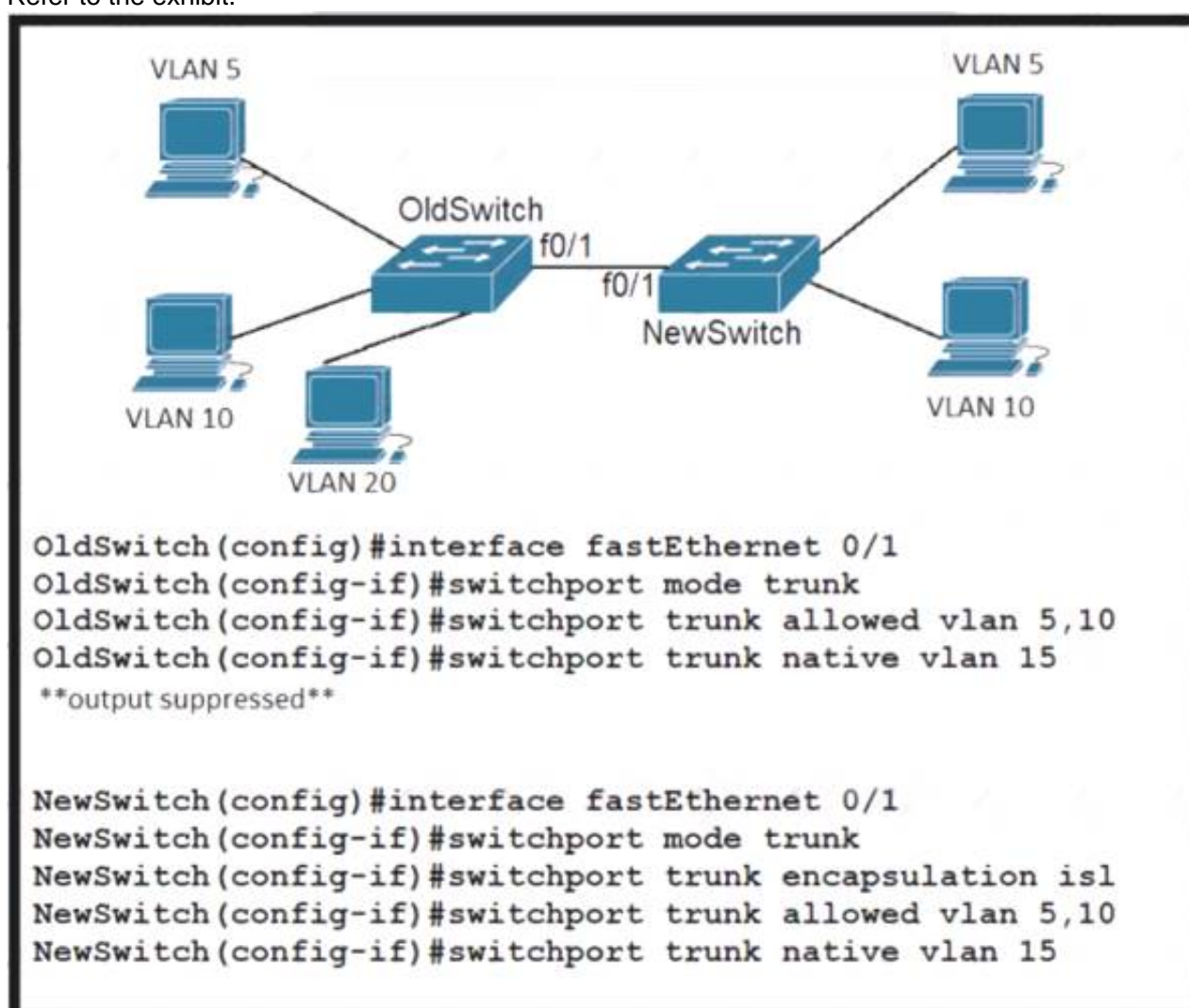
Answer: A

Explanation:

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

NEW QUESTION 116

- (Exam Topic 4)
 Refer to the exhibit.



A new VLAN and switch are added to the network. A remote engineer configures OldSwitch and must ensure that the configuration meets these requirements:

- accommodates current configured VLANs
- expands the range to include VLAN 20
- allows for IEEE standard support for virtual LANs

Which configuration on the NewSwitch side of the link meets these requirements?

A)

```
no switchport trunk encapsulation isl
switchport trunk encapsulation dot1q
switchport trunk allowed vlan add 20
```

B)

```
switchport nonegotiate
no switchport trunk allowed vlan 5,10
switchport trunk allowed vlan 5,10,15,20
```

C)

```
no switchport mode trunk
switchport trunk encapsulation isl
switchport mode access vlan 20
```

D)

```
switchport mode dynamic
channel-group 1 mode active
switchport trunk allowed vlan 5,10,15, 20
```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

NEW QUESTION 120

- (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 124

- (Exam Topic 4)

After a recent security breach and a RADIUS failure, an engineer must secure the console port of each enterprise router with a local username and password.

Which configuration must the engineer apply to accomplish this task?

☐ aaa new-model

```
line con 0
password plaintextpassword
privilege level 15
```

☐ username localuser secret plaintextpassword

```
line con 0
login authentication default
privilege level 15
```

☐ username localuser secret plaintextpassword

```
line con 0
no login local
privilege level 15
```

☐ aaa new-model

```
aaa authorization exec default local
aaa authentication login default radius
username localuser privilege 15 secret plaintextpassword
```

A. Option A

B. Option B

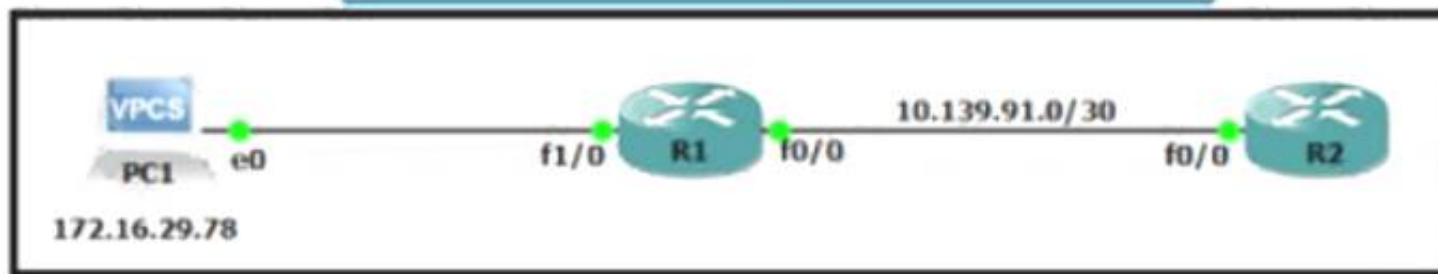
C. Option C

D. Option D

Answer: B

NEW QUESTION 126

- (Exam Topic 4)



Refer to the exhibit. An engineer must translate the PC1 IP address to 10.199.77.100 and permit PC1 to ping the loopback 0 on router R2. What command set must be used?

A)

```

R1#
!
interface Loopback0
ip address 10.1.1.1 255.255.255.255
!
interface FastEthernet0/0
ip address 10.139.91.1 255.255.255.252
ip nat inside
ip virtual-reassembly in
!
interface FastEthernet1/0
ip address 172.16.29.1 255.255.255.0
ip nat outside
ip virtual-reassembly in
!
router eigrp 100
network 10.1.1.1 0.0.0.0
network 10.139.91.0 0.0.0.3
!
ip nat inside source static 10.199.77.100 172.16.29.78

R2#
ip route 10.199.77.100 255.255.255.255 10.139.91.1
    
```

B)

```

R1#
!
interface Loopback0
ip address 10.1.1.1 255.255.255.255
!
interface FastEthernet0/0
ip address 10.139.91.1 255.255.255.252
ip nat outside
ip virtual-reassembly in
!
interface FastEthernet1/0
ip address 172.16.29.1 255.255.255.0
ip nat inside
ip virtual-reassembly in
!
router eigrp 100
network 10.1.1.1 0.0.0.0
network 10.139.91.0 0.0.0.3
!
ip nat inside source static 172.16.29.78 10.199.77.100

R2#
ip route 10.199.77.100 255.255.255.255 10.139.91.1
    
```

C)

```
○ R1#  
!  
interface Loopback0  
ip address 10.1.1.1 255.255.255.255  
!  
interface FastEthernet0/0  
ip address 10.139.91.1 255.255.255.252  
ip nat outside  
ip virtual-reassembly in  
!  
interface FastEthernet1/0  
ip address 172.16.29.1 255.255.255.0  
ip nat inside  
ip virtual-reassembly in  
!  
router eigrp 100  
network 10.1.1.1 0.0.0.0  
network 10.139.91.0 0.0.0.3  
!  
ip nat inside source static 172.16.29.78 10.199.77.100  
  
R2#  
ip route 172.16.29.78 255.255.255.255 10.139.91.1
```

D)

```
○ R1#  
!  
interface Loopback0  
ip address 10.1.1.1 255.255.255.255  
!  
interface FastEthernet0/0  
ip address 10.139.91.1 255.255.255.252  
ip nat outside  
ip virtual-reassembly in  
!  
interface FastEthernet1/0  
ip address 172.16.29.1 255.255.255.0  
ip nat inside  
ip virtual-reassembly in  
!  
router eigrp 100  
network 10.1.1.1 0.0.0.0  
network 10.139.91.0 0.0.0.3  
!  
ip nat inside source static 172.16.29.78 10.199.77.100  
R2#  
ip route 172.16.29.78 255.255.255.255 10.139.91.1
```

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

Answer: B**NEW QUESTION 128**

- (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 132

- (Exam Topic 4)
Drag and drop the IPv6 address details from the left onto the corresponding types on the right.

identifies an interface on an IPv6 device

includes link-local and loopback addresses

provides one-to-many communications

used exclusively by a non-host device

assigned to more than one interface

derived from the FF00::/8 address range

Anycast

Multicast

Unicast

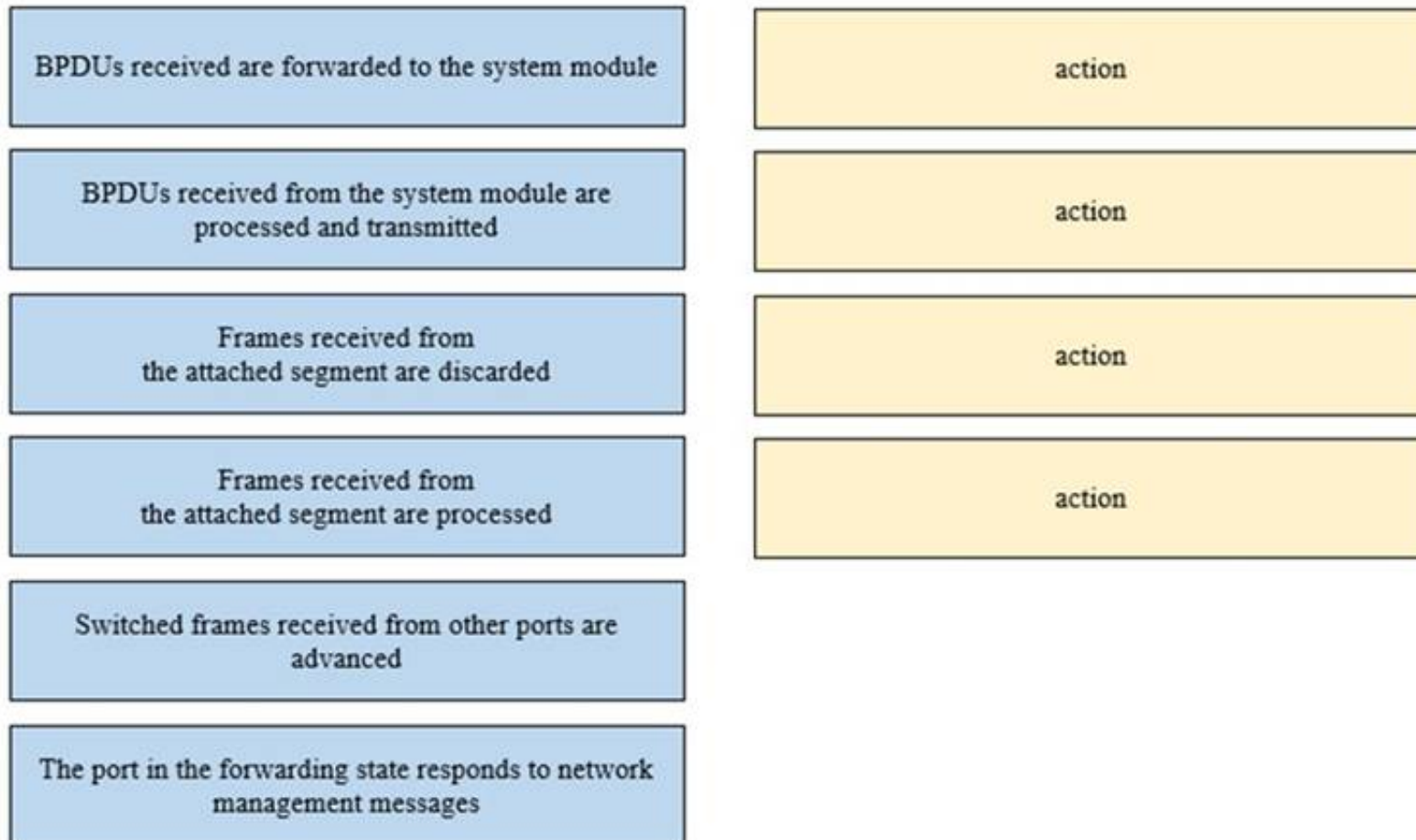
- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
Graphical user interface, diagram Description automatically generated

NEW QUESTION 137

- (Exam Topic 4)
Drag and drop the Rapid PVST+ forwarding state actions from the left to the right. Not all actions are used.



- 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 140

- (Exam Topic 4)

What is a characteristics of a collapsed-core network topology?

- A. It allows the core and distribution layers to run as a single combined layer.
- B. It enables the core and access layers to connect to one logical distribution device over an EtherChannel.
- C. It enables all workstations in a SOHO environment to connect on a single switch with internet access.
- D. It allows wireless devices to connect directly to the core layer, which enables faster data transmission.

Answer: B

NEW QUESTION 141

- (Exam Topic 4)

Which is a fact related to FTP?

- A. It uses block numbers to identify and mitigate data-transfer errors
- B. It always operates without user authentication
- C. It relies on the well-known UDP port 69.
- D. It uses two separate connections for control and data traffic

Answer: D

NEW QUESTION 142

- (Exam Topic 4)

Which 802.11 frame type is Association Response?

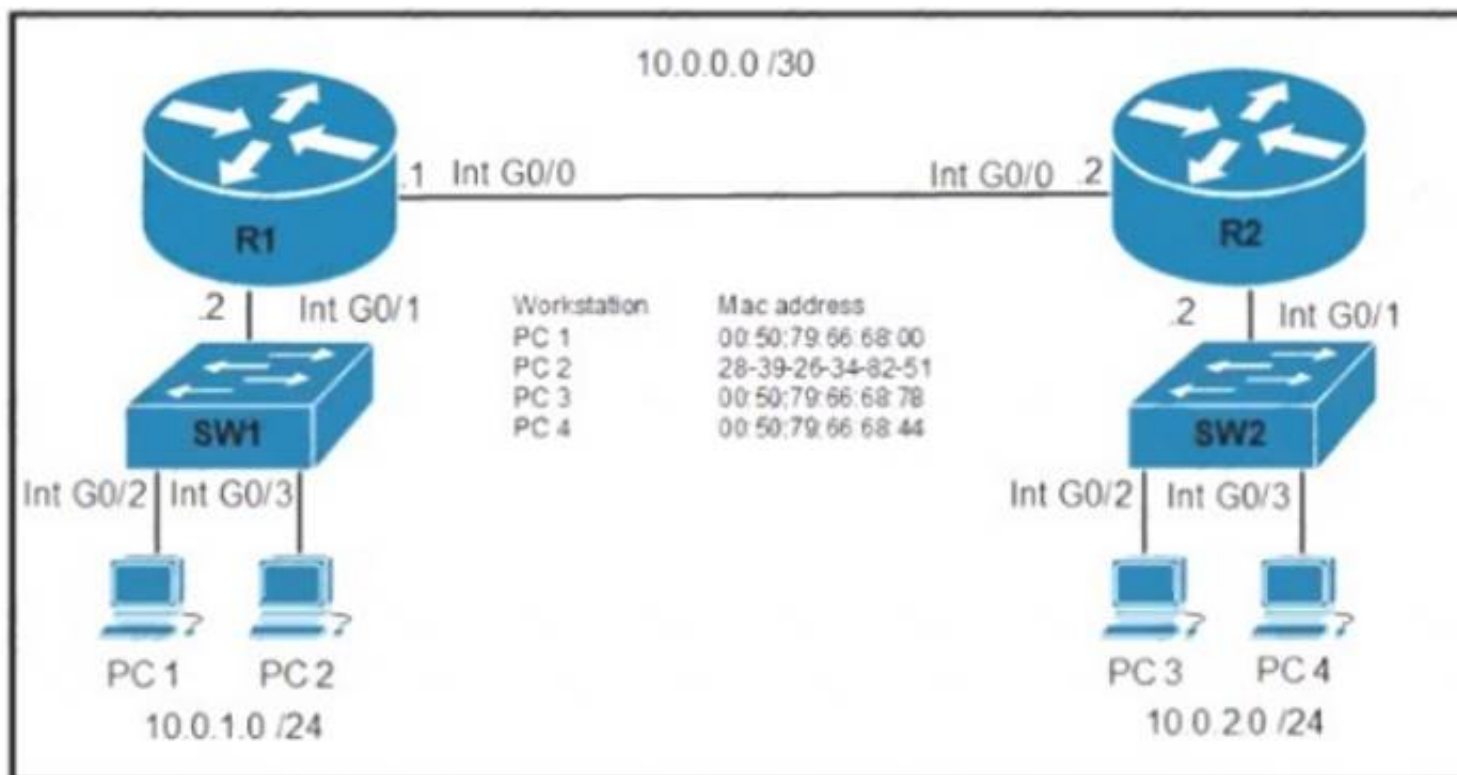
- A. management
- B. control
- C. action
- D. protected frame

Answer: A

NEW QUESTION 146

- (Exam Topic 4)

Refer to the exhibit.



An engineer must configure the interface that connects to PC 1 and secure it in a way that only PC1 is allowed to use the port No VLAN tagging can be used except for a voice VLAN. Which command sequence must be entered to configure the switch?

A)

```
SW1(config-if)#switchport mode nonegotiate
SW1(config-if)#switchport port-security
SW1(config-if)#switchport port-security maximum 1
```

B)

```
SW1(config-if)#switchport mode access
SW1(config-if)#switchport port-security
SW1(config-if)#switchport port-security mac-address 0050.7966.6800
```

C)

```
SW1(config-if)#switchport mode dynamic auto
SW1(config-if)#switchport port-security
SW1(config-if)#switchport port-security violation restrict
```

D)

```
SW1(config-if)#switchport mode dynamic desirable
SW1(config-if)#switchport port-security mac-address 0050.7966.6800
SW1(config-if)#switchport port-security mac-address sticky
```

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

Answer: B

NEW QUESTION 151

- (Exam Topic 4)

Why is TCP desired over UDP for application that require extensive error checking, such as HTTPS?

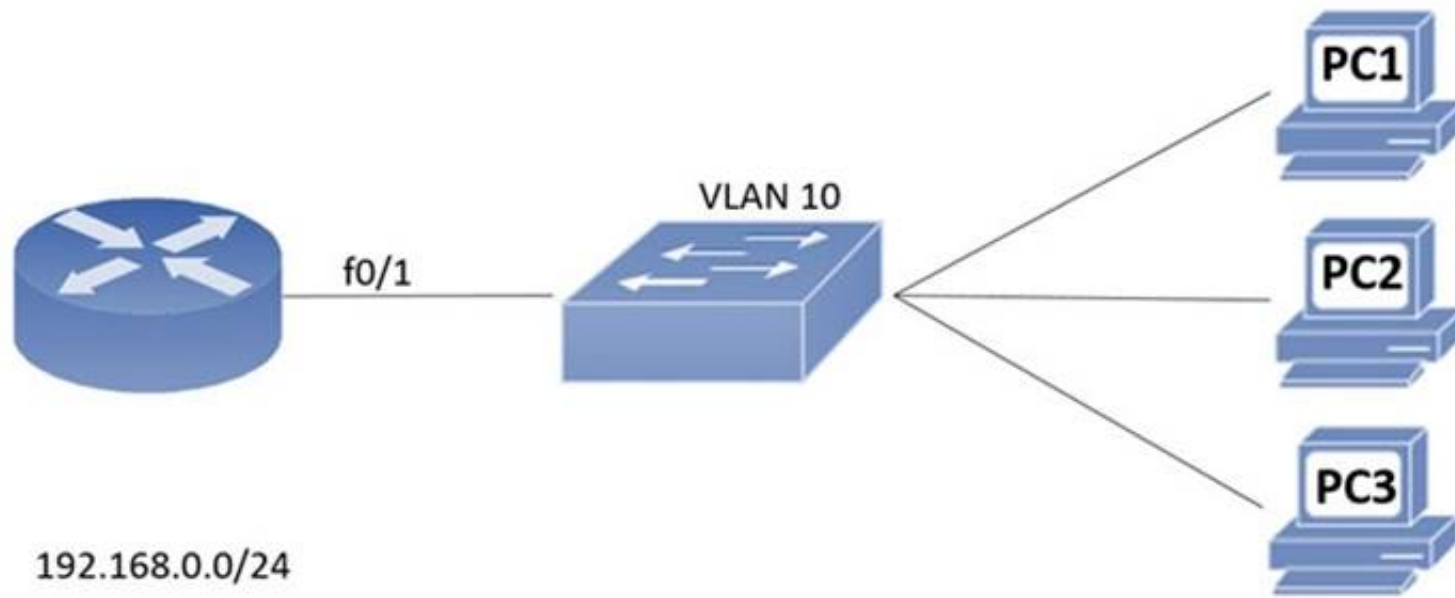
- A. UDP operates without acknowledgments, and TCP sends an acknowledgment for every packet received.
- B. UDP reliably guarantees delivery of all packets, and TCP drops packets under heavy load.
- C. UDP uses flow control mechanisms for the delivery of packets, and TCP uses congestion control for efficient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

Answer: A

NEW QUESTION 152

- (Exam Topic 4)

Refer to the exhibit.



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

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

Answer: B

NEW QUESTION 157

- (Exam Topic 4)

By default, how long will the switch continue to know a workstation MAC address after the workstation stops sending traffic?

- A. 200 seconds
- B. 300 seconds
- C. 600 seconds
- D. 900 seconds

Answer: B

NEW QUESTION 159

- (Exam Topic 4)

Drag and drop the wireless architecture benefits from the left onto the architecture types on the right.

Drag and drop the wireless architecture benefits from the left onto the architecture types on the right.

Appropriate for a small-business environment.	Split-MAC
Work is divided between the access point and the controller.	
The access points transmit beacon frames.	
Supports per device configuration and management.	
Uses the CAPWAP tunneling protocol.	Autonomous

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

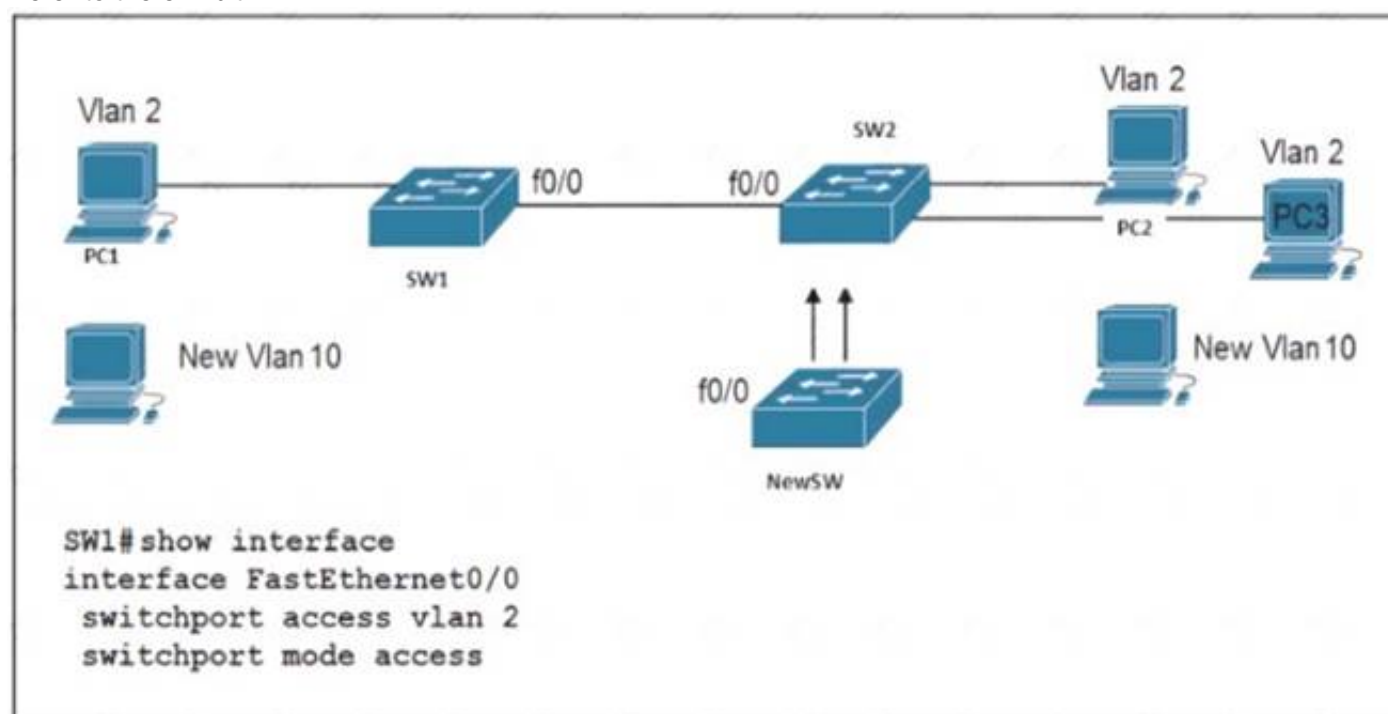
Drag and drop the wireless architecture benefits from the left onto the architecture types on the right.

Appropriate for a small-business environment.	Split-MAC Work is divided between the access point and the controller. Supports per device configuration and management. Uses the CAPWAP tunneling protocol.
Work is divided between the access point and the controller.	
The access points transmit beacon frames.	
Supports per device configuration and management.	
Uses the CAPWAP tunneling protocol.	Autonomous The access points transmit beacon frames. Appropriate for a small-business environment.

NEW QUESTION 160

- (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)

```

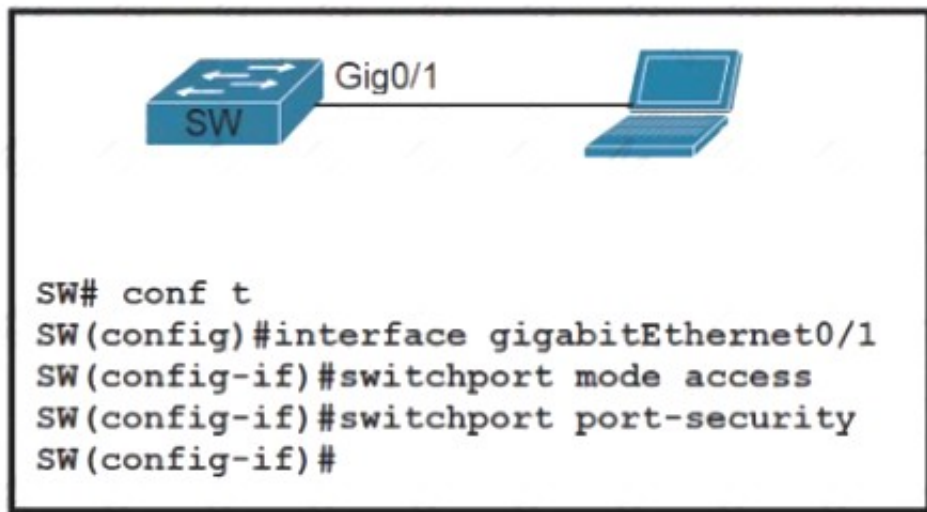
NewSW(config)#interface f0/0
NewSW(config-if)#switchport mode access
NewSW(config-if)#switchport trunk allowed vlan 2,10
NewSW(config-if)#switchport trunk native vlan 2
  
```

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

Answer: B

NEW QUESTION 164

- (Exam Topic 4)
Refer to ltiie exhibit



A network engineer started to configure port security on a new switch. These requirements must be met:

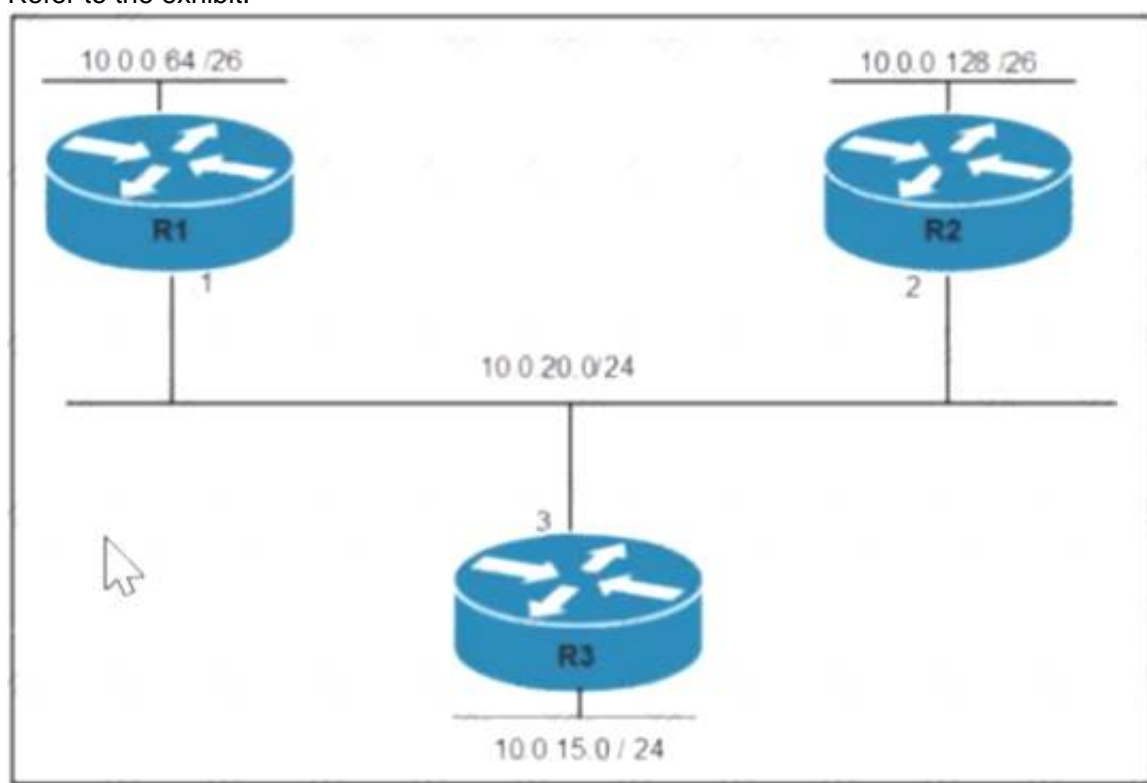
* MAC addresses must be learned dynamically
* Log messages must be generated without disabling the interface when unwanted traffic is seen Which two commands must be configured to complete this task"?
(Choose two)

- A. SW(ccnfig-if)=switchport port-security mac-address sticky
- B. SW(confKj-if)=switchport port-security violation restrict
- C. SW(config.if)sswitchport port-security mac-address 0010.7B84.45E6
- D. SW(config-if)aswitchport port-security maximum 2
- E. SW(ccnfig-if)=switchport port-security violation shutdown

Answer: C

NEW QUESTION 169

- (Exam Topic 4)
Refer to the exhibit.



Router R1 is added to the network and configured with tie 10.0.0.64/26 and 10.0.20.0/24 subnets However traffic destined for the LAN on R3 is not access. Which command when executed on R1 defines a tunic route to reach the R3 LAN?

- A)
ip route 10.0.15.0 255.255.255.192 10.0.20.1
- B)
ip route 10.0.15.0 255.255.255.0 10.0.20.1
- C)
ip route 10.0.0.64 255.255.255.192 10.0.20.3

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

Answer: C

NEW QUESTION 173

- (Exam Topic 4)
Refer to the exhibit.

```
SW1#show run
Building configuration...
!
hostname SW1
!
ip domain-name CCNA-test
!
username CCNA privilege 1 password 0 cisco123
!
interface FastEthernet0/1
  switchport access vlan 10
!
interface Vlan10
  ip address 192.168.1.2 255.255.255.0
!
line vty 0 4
  login local
  transport input telnet
line vty 5 15
  login local
  transport input telnet

SW1#show crypto key mypubkey rsa
% Key pair was generated at: 0:1:23 UTC Mar 1 2020
Key name: SW1.CCNA-test
```

An engineer is updating the management access configuration of switch SW1 to allow secured, encrypted remote configuration. Which two commands or command sequences must the engineer apply to the switch? (Choose two.)

- A. SW1(config)#enable secret cnaTest123
- B. SW1(config)#username NEW secret R3mote123
- C. SW1(config)#line vty 0 15 SW1(config-line)#transport input ssh
- D. SW1(config)# crypto key generate rsa
- E. SW1(config)# interface f0/1 SW1(config-if)# switchport mode trunk

Answer: CD

NEW QUESTION 174

- (Exam Topic 4)

Refer to the exhibit.

How does router R1 handle traffic to the 172.16.1.4/30 subnet?

- A. It sends all traffic over the path via 172.16.9.5 using 172.16.4.4 as a backup.
- B. It sends all traffic over the path via 10.0.1.100.
- C. It load-balances traffic over 172.16.9.5 and 172.16.4.4.
- D. It sends all traffic over the path via 172.16.4.4.

Answer: C

NEW QUESTION 177

- (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 178

- (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 180

- (Exam Topic 4)
Refer to the exhibit.

```
Known via "connected", distance 0, metric 0 (connected, via interface)
Routing Descriptor Blocks:
* directly connected, via Ethernet0/1
  Route metric is 0, traffic share count is 1

CPE# ping 203.0.113.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 203.0.113.1, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms

CPE# show ip route
Gateway of last resort is 198.51.100.1 to network 0.0.0.0
B* 0.0.0.0/0 [20/0] via 198.51.100.1, 00:02:07
   198.51.100.0/24 is variably subnetted, 2 subnets, 2 masks
C    198.51.100.0/30 is directly connected, Ethernet0/0
L    198.51.100.2/32 is directly connected, Ethernet0/0
   203.0.113.0/24 is variably subnetted, 2 subnets, 2 masks
C    203.0.113.0/30 is directly connected, Ethernet0/1
L    203.0.113.2/32 is directly connected, Ethernet0/1
```

After configuring a new static route on the CPE, the engineer entered this series of commands to verify that the new configuration is operating normally When is the static default route installed into the routing table?

- A. when 203 0 113.1 is no longer reachable as a next hop
- B. when the default route learned over external BGP becomes invalid
- C. when a route to 203.0 113 1 is learned via BGP
- D. when the default route over external BGP changes its next hop

Answer: A

NEW QUESTION 184

- (Exam Topic 4)
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

enables aggregation of routing prefixes

provides for one-to-one communication

provides one-to-many communications

sends packets to a group address rather than a single address

Global Unicast Address

Multicast

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
Graphical user interface, application Description automatically generated

NEW QUESTION 189

- (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, 5 subnets, 5 masks
O   172.16.2.128/25 [110/3184437] via 207.165.200.250, 00:00:25, Serial0/0/0
O   172.16.3.64/27 [110/3184437] via 207.165.200.250, 00:00:25, Serial0/0/0
O   172.16.3.128/28 [110/3184437] via 207.165.200.250, 00:00:25, Serial0/0/0
O   172.16.3.192/29 [110/3184437] via 207.165.200.250, 00:00:25, Serial0/0/0
O   172.16.4.0/23 [110/3184437] via 207.165.200.250, 00:00:25, Serial0/0/0
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
```

Drag and drop the learned prefixes from the left onto the subnet masks on the right

172.16.3.128	255.255.254.0
172.16.3.64	255.255.255.128
172.16.2.128	255.255.255.224
172.16.3.192	255.255.255.240
172.16.4.0	255.255.255.248

- A. Mastered
 B. Not Mastered

Answer: A

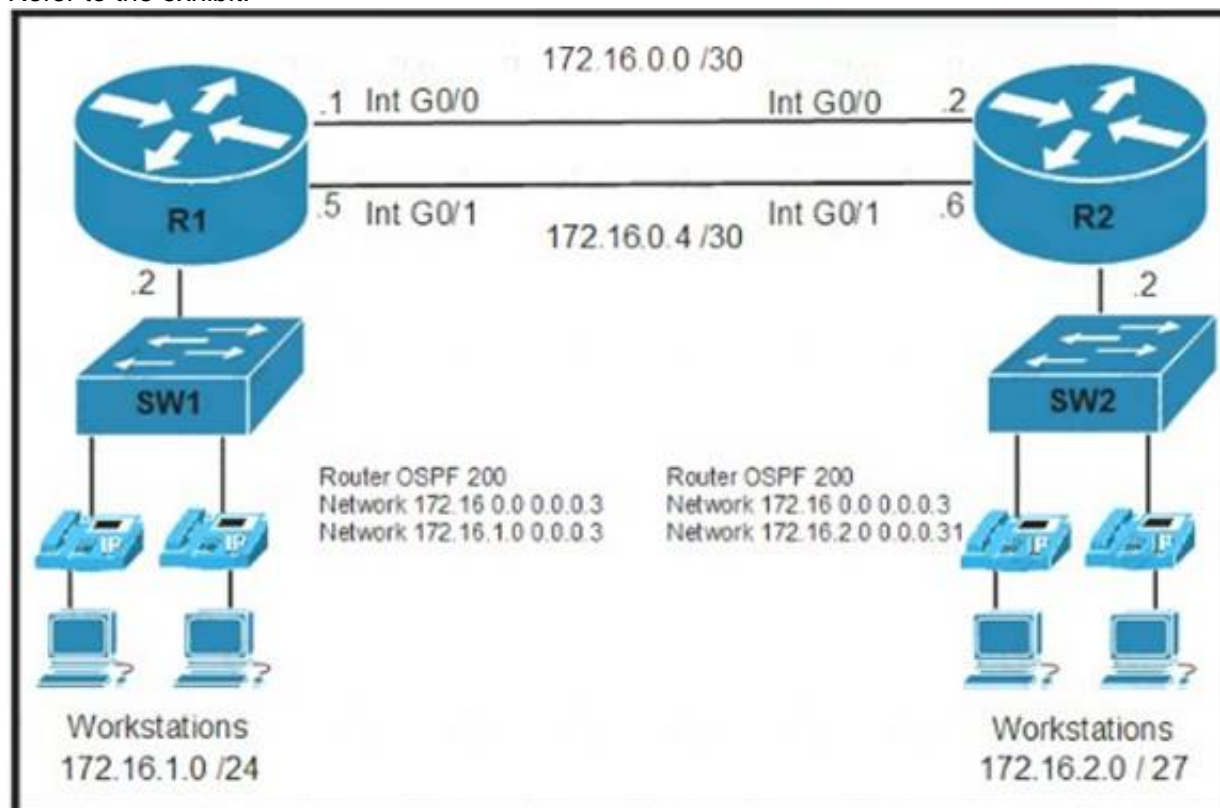
Explanation:

172.16.3.128	172.16.4.0
172.16.3.64	172.16.2.128
172.16.2.128	172.16.3.64
172.16.3.192	172.16.3.128
172.16.4.0	172.16.3.192

NEW QUESTION 194

- (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

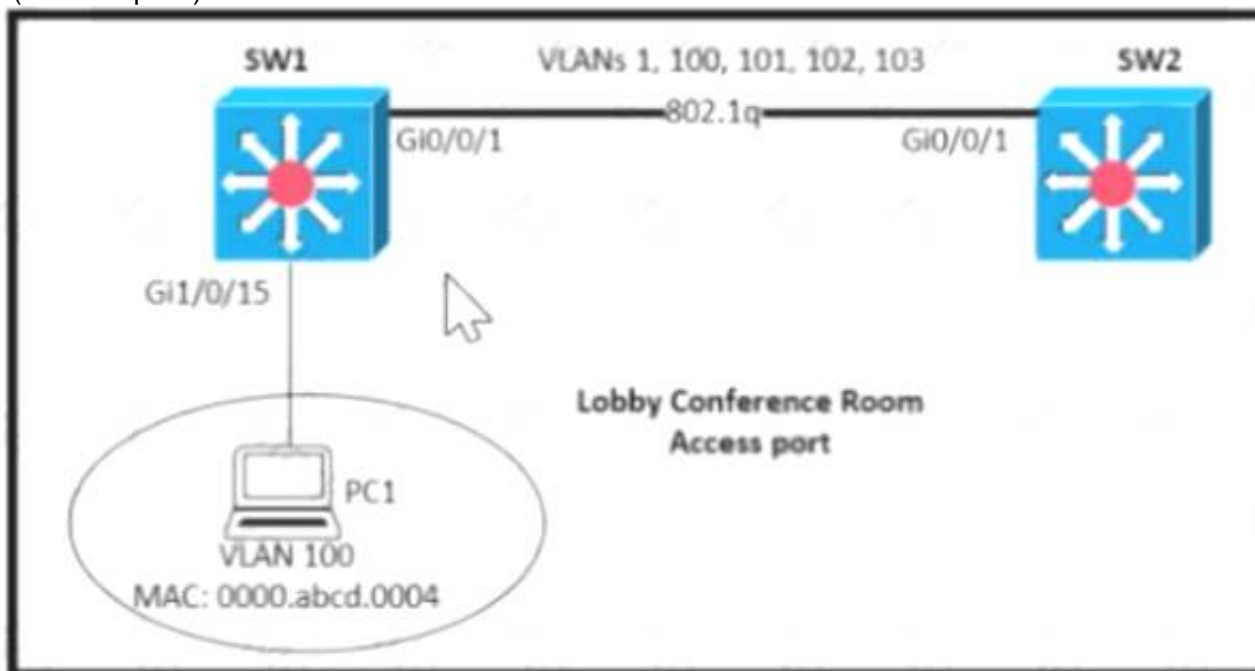
C. Option C

D. Option D

Answer: D

NEW QUESTION 197

- (Exam Topic 4)



SW1 supports connectivity for a lobby conference room and must be secured. The engineer must limit the connectivity from PC1 to the SW1 and SW2 network. The MAC addresses allowed must be limited to two. Which configuration secures the conference room connectivity?

A)

```
> interface gi1/0/15
  switchport port-security mac-address 0000.abcd.0004 vlan 100
```

B)

```
> interface gi1/0/15
  switchport port-security
  switchport port-security maximum 2
```

C)

```
> interface gi1/0/15
  switchport port-security mac-address 0000.abcd.0004 vlan 100
  interface switchport secure-mac limit 2
```

D)

```
> interface gi1/0/15
  switchport port-security
  switchport port-security mac-address 0000.abcd.0004 vlan 100
```

A. Option A

B. Option B

C. Option C

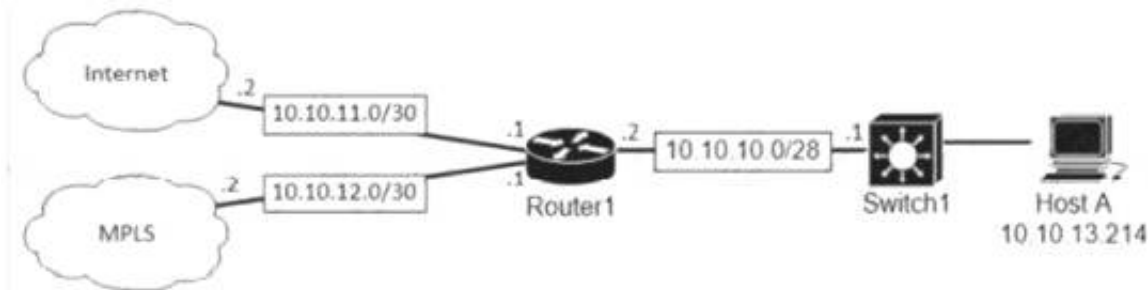
D. Option D

Answer: B

NEW QUESTION 199

- (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 prefix length for the route that router1 will use to reach host A?

- A. /25
- B. /27
- C. /28
- D. /29

Answer: D

NEW QUESTION 204

- (Exam Topic 4)

What describes a northbound REST API for SON?

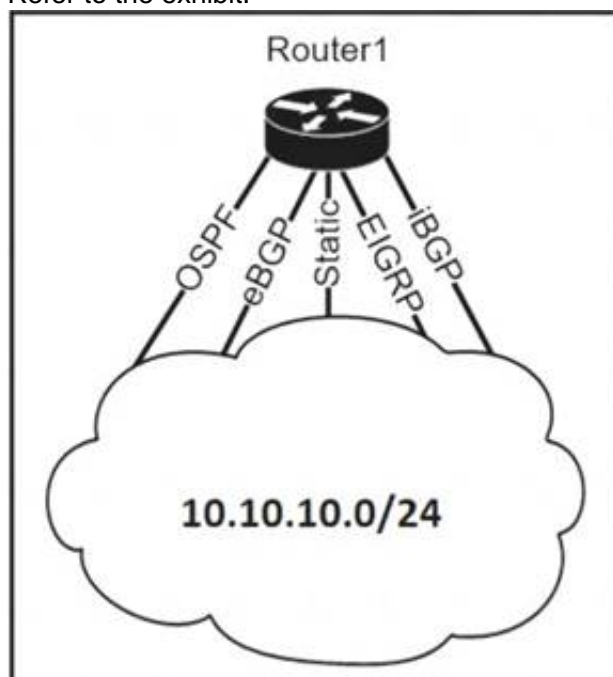
- A. application-facing interface for SNMP GET requests
- B. network-element-facing interface for GET POST PUT and DELETE methods
- C. network-element-facing interface for the control and data planes
- D. application-facing interface far GET, POST, PUT, and DELETE methods

Answer: D

NEW QUESTION 207

- (Exam Topic 4)

Refer to the exhibit.



The Router1 routing table has multiple methods to reach 10.10.10.0/24 as shown. The default Administrative Distance is used. Drag and drop the network conditions from the left onto the routing methods that Router1 uses on the right.

All protocols are up.

OSPF and eBGP are down.

The static route and eBGP are down.

The static route and EIGRP are down.

The static route and OSPF are down.

eBGP

EIGRP

Static

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

All protocols are up.

OSPF and eBGP are down.

The static route and eBGP are down.

The static route and EIGRP are down.

The static route and OSPF are down.

eBGP

All protocols are up.

OSPF and eBGP are down.

EIGRP

The static route and EIGRP are down.

Static

The static route and OSPF are down.

The static route and eBGP are down.

NEW QUESTION 210

- (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 211

- (Exam Topic 4)
What is a feature of WPA?

- A. 802.1x authentication
- B. preshared key
- C. TKIP/MIC encryption
- D. small Wi-Fi application

Answer: A

NEW QUESTION 216

- (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 218

- (Exam Topic 4)

Which protocol is used in Software Defined Access (SDA) to provide a tunnel between two edge nodes in different fabrics?

- A. Generic Router Encapsulation (GRE)
- B. Virtual Local Area Network (VLAN)
- C. Virtual Extensible LAN (VXLAN)
- D. Point-to-Point Protocol

Answer: C

NEW QUESTION 221

- (Exam Topic 4)

Drag and drop the device behaviors from the left onto the matching HSRP slate on the right.

has heard from the neighbor device and is receiving hello packets	Active
is forwarding packets	Learn
is ready to forward packets if the device that is currently forwarding packets fails	Listen
is transmitting and receiving hello packets	Speak
is waiting to hear from the neighbor device	Standby

- A. Mastered
- B. Not Mastered

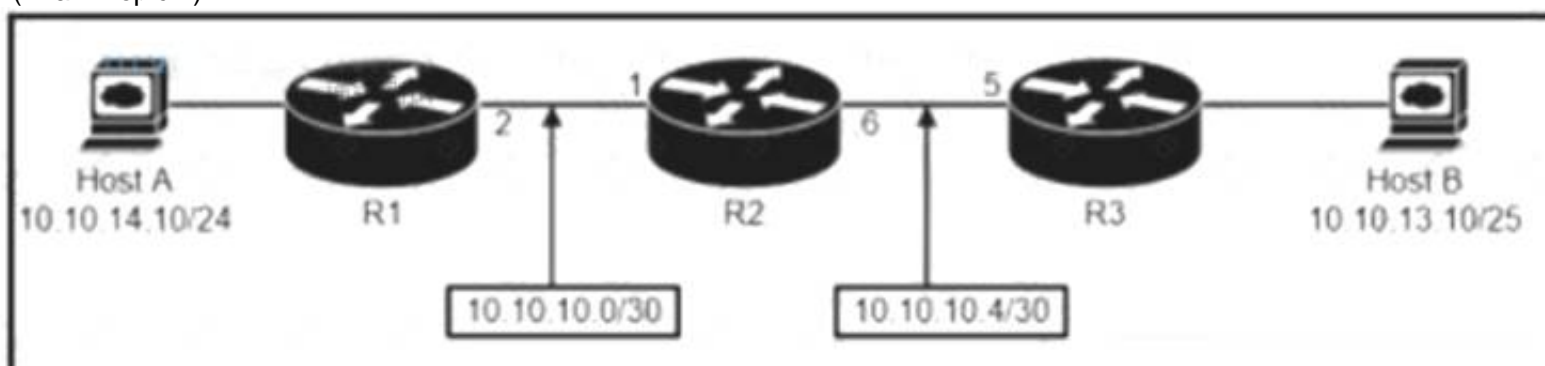
Answer: A

Explanation:

has heard from the neighbor device and is receiving hello packets	is forwarding packets
is forwarding packets	has heard from the neighbor device and is receiving hello packets
is ready to forward packets if the device that is currently forwarding packets fails	is waiting to hear from the neighbor device
is transmitting and receiving hello packets	is transmitting and receiving hello packets
is waiting to hear from the neighbor device	is ready to forward packets if the device that is currently forwarding packets fails

NEW QUESTION 223

- (Exam Topic 4)



Refer to the exhibit. An engineer must configure a static network route between two networks so that host A communicates with host B. Drag and drop the commands from the left onto the routers where they must be configured on the right. Not all commands are used.

ip route 10.10.13.0 255.255.255.128 10.10.10.1

ip route 10.10.13.0 255.255.255.128 10.10.10.5

ip route 10.10.13.10 255.255.255.255 10.10.10.1

ip route 10.10.14.0 255.255.255.0 10.10.10.2

ip route 10.10.14.0 255.255.255.0 10.10.10.6

ip route 10.10.14.10 255.255.255.255 10.10.10.6

R1

R2

R3

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
3 - R1
2 &4 – R2
5 – R3

NEW QUESTION 224

- (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.

It enables the device to allow user- or group-based access.

It leverages a RADIUS server to grant user access to a reverse Telnet session.

It records the amount of time for which a user accesses the network on a remote server.

It restricts the CLI commands that a user can perform.

It uses TACACS+ to log the configuration commands entered by a network administrator.

It verifies the user and password before granting access to the device.

Accounting

Authorization

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

It enables the device to allow user- or group-based access.	Accounting It records the amount of time for which a user accesses the network on a remote server. It uses TACACS+ to log the configuration commands entered by a network administrator.
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 It leverages a RADIUS server to grant user access to a reverse Telnet session. It restricts the CLI commands that a user can perform.
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 225

- (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.
- 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 230

- (Exam Topic 4)

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

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

- A. Mastered
- B. Not Mastered

Answer: A

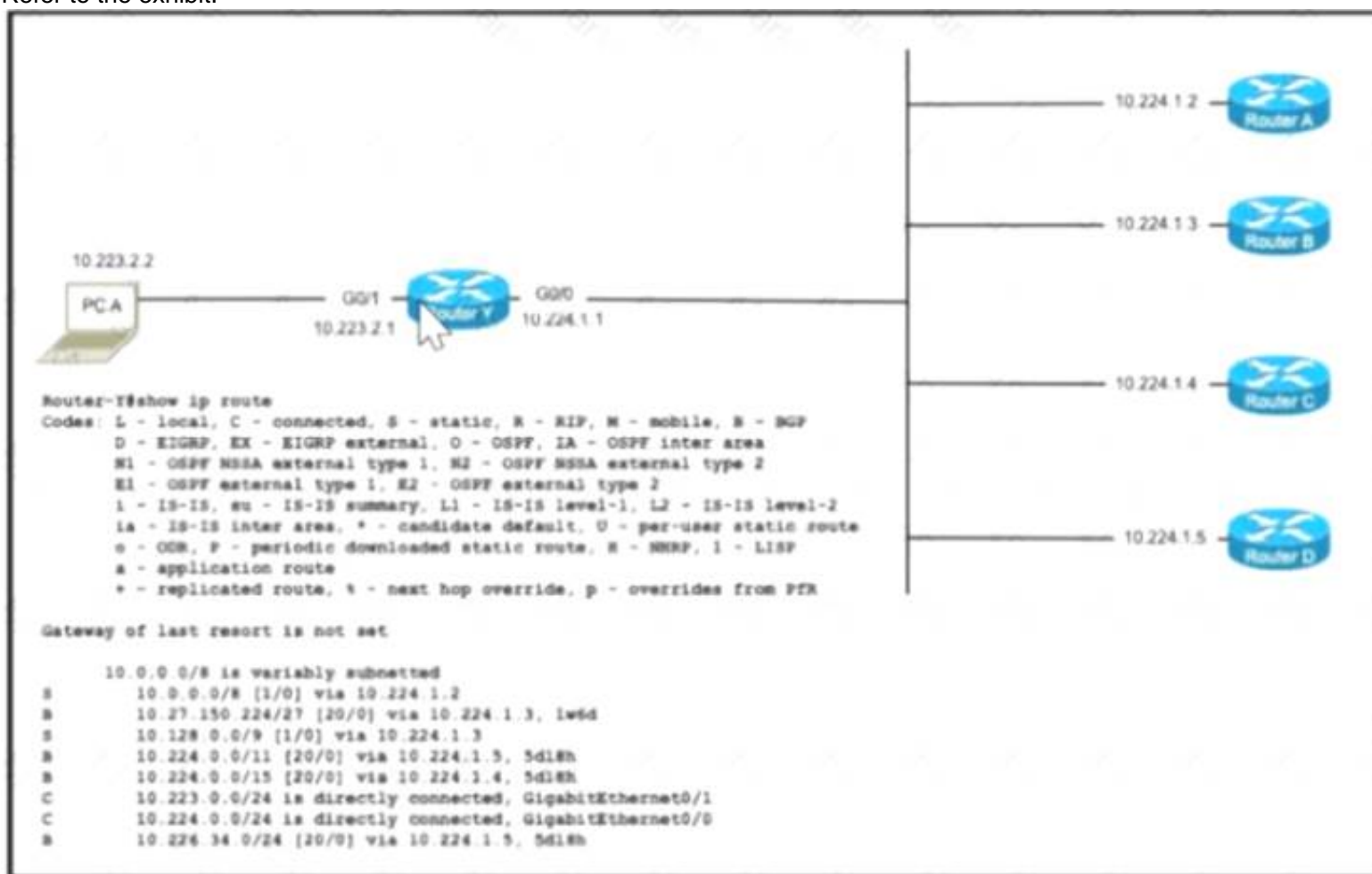
Explanation:



NEW QUESTION 233

- (Exam Topic 4)

Refer to the exhibit.



PC A is communicating with another device at IP address 10.227.225.255. Through which router does router Y route the traffic?

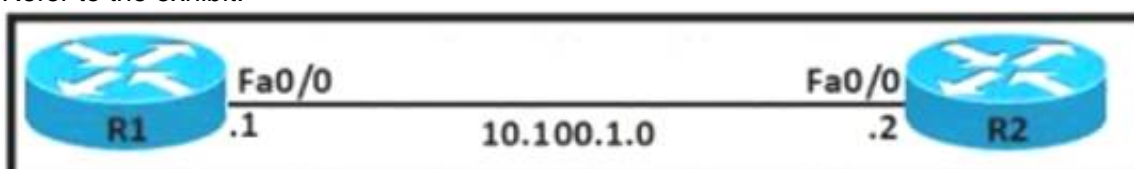
- A. router A
- B. router B
- C. router C
- D. router D

Answer: C

NEW QUESTION 236

- (Exam Topic 4)

Refer to the exhibit.



An OSPF neighbor relationship must be configured using these guidelines:

- R1 is only permitted to establish a neighbor with R2
- R1 will never participate in DR elections
- R1 will use a router-id of 101.1.1. Which configuration must be used?

A)

```
interface Loopback0
 ip address 10.1.1.1 255.255.255.255

interface FastEthernet0/0
 ip address 10.100.1.1 255.255.255.252
 ip ospf priority 100
 ip access-group 102 in

router ospf 10
 log-adjacency-changes
 network 10.1.1.1 0.0.0.0 area 0
 network 10.100.1.0 0.0.0.3 area 0
 ospf router-id 10.1.1.1

access-list 102 permit 88 host 10.100.1.2 host 224.0.0.5
access-list 102 deny 88 any any
access-list 102 permit ip any any
```

B)

```
interface Loopback0
 ip address 10.1.1.1 255.255.255.255

interface FastEthernet0/0
 ip address 10.100.1.1 255.255.255.252
 ip ospf priority 0
 ip access-group 102 in

router ospf 10
 log-adjacency-changes
 network 10.1.1.1 0.0.0.0 area 0
 network 10.100.1.0 0.0.0.3 area 0
 router-id 10.1.1.1

access-list 102 permit 88 host 10.100.1.2 host 224.0.0.5
access-list 102 deny 88 any any
access-list 102 permit ip any any
```

C)

```
interface FastEthernet0/0
 ip address 10.100.1.1 255.255.255.252
 ip ospf priority 100
 ip access-group 102 in

router ospf 10
 log-adjacency-changes
 network 10.1.1.1 0.0.0.0 area 0
 network 10.100.1.0 0.0.0.3 area 0
 ospf router-id 10.1.1.1

access-list 102 permit 89 host 10.100.1.2 host 224.0.0.5
access-list 102 deny 89 any any
access-list 102 permit ip any any
```

D)

```
interface FastEthernet0/0
 ip address 10.100.1.1 255.255.255.252
 ip ospf priority 0
 ip access-group 102 in

router ospf 10
 log-adjacency-changes
 network 10.1.1.1 0.0.0.0 area 0
 network 10.100.1.0 0.0.0.3 area 0
 router-id 10.1.1.1

access-list 102 permit 89 host 10.100.1.2 host 224.0.0.5
access-list 102 deny 89 any any
access-list 102 permit ip any any
```

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

Answer: C

NEW QUESTION 237

- (Exam Topic 4)

Which remote access protocol provides unsecured remote CLI access?

- A. console
- B. Telnet
- C. Bash
- D. SSH

Answer: B

NEW QUESTION 239

- (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 243

- (Exam Topic 4)

What are two disadvantages of a full-mesh topology? (Choose two.)

- A. It needs a high MTU between sites.
- B. It has a high implementation cost.
- C. It must have point-to-point communication.
- D. It requires complex configuration.
- E. It works only with BGP between sites.

Answer: BD

NEW QUESTION 246

- (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 250

- (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?

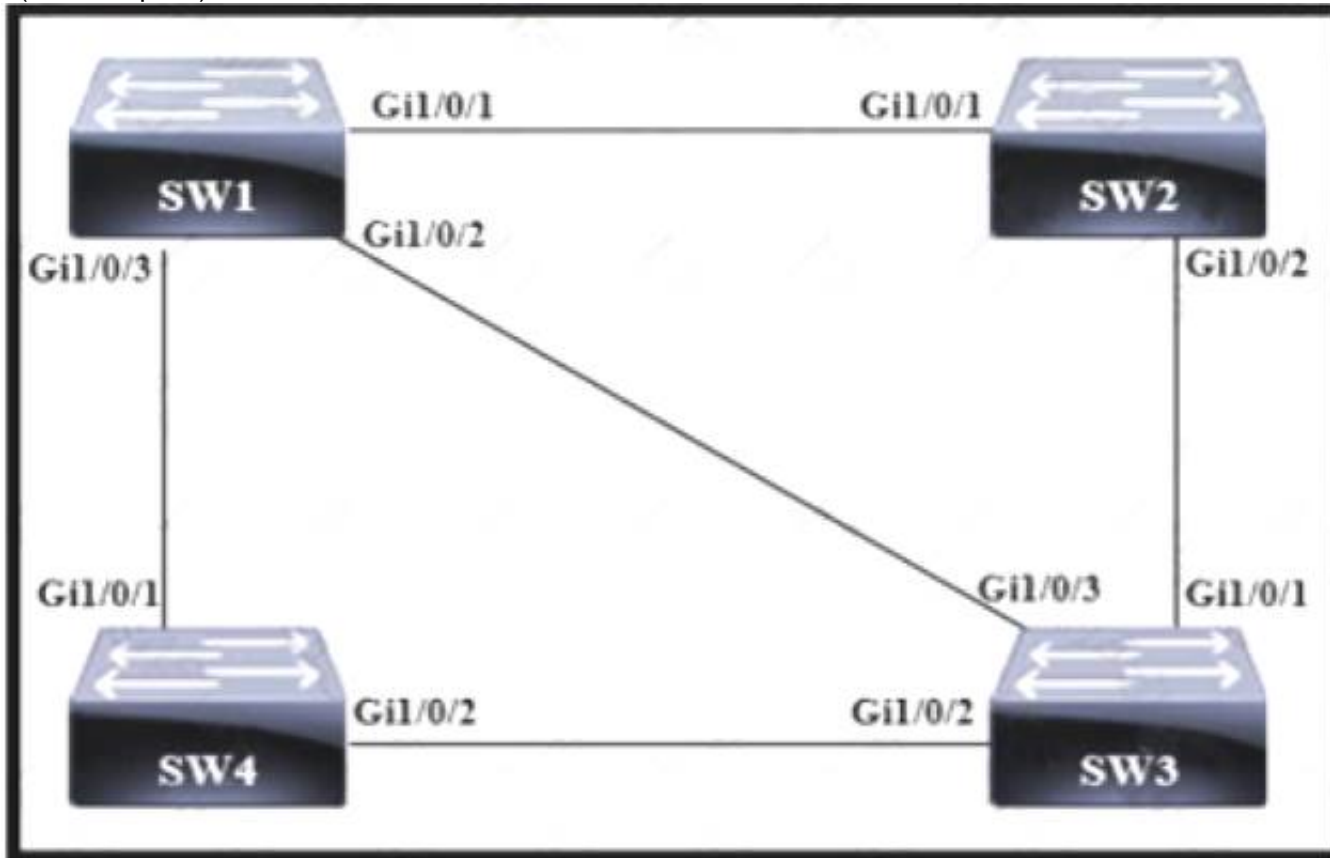
- A. user training

- B. user awareness
- C. vulnerability verification
- D. physical access control

Answer: D

NEW QUESTION 251

- (Exam Topic 4)



- A)
SW 1
Bridge Priority - 32768
mac-address 0d:ca:8e:7f:a0:24
- B)
SW 2
Bridge Priority - 53248
mac-address 02:3e:ee:61:5b:21
- C)
SW 4
Bridge Priority - 32768
mac-address 07:c1:b7:27:dd:73
- D)
SW 3
Bridge Priority - 53248
mac-address 02:aa:03:d3:05:87

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

Answer: D

NEW QUESTION 255

- (Exam Topic 4)

What differentiates device management enabled by Cisco DNA Center from traditional campus device management?

- A. per-device
- B. centralized
- C. device-by-device hands-on
- D. CLI-oriented device

Answer: B

NEW QUESTION 260

- (Exam Topic 4)

Drag and drop the HTTP methods used with REST-Based APIs from the left onto the descriptions on the right.

DELETE	creates a resource and returns its URI in the response header
GET	creates or replaces a previously modified resource using information in the request body
POST	removes a resource
PATCH	retrieves a list of a resource's URIs
PUT	updates a resource using instructions included in the request body

- A. Mastered
 B. Not Mastered

Answer: A

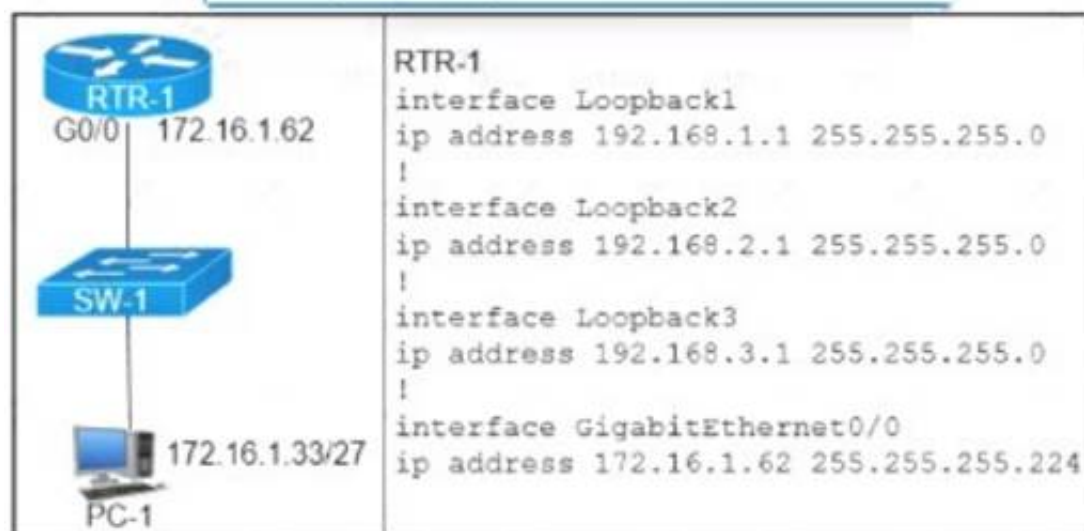
Explanation:

Table Description automatically generated

NEW QUESTION 262

- (Exam Topic 4)

Refer to the exhibit.



Which configuration for RTR-1 denies SSH access from PC-1 to any RTR-1 interface and allows all other traffic?

A)

```
access-list 100 deny tcp host 172.16.1.33 any eq 22
access-list 100 permit ip any any
```

```
interface GigabitEthernet0/0
ip access-group 100 in
```

B)

```
access-list 100 deny tcp host 172.16.1.33 any eq 22
access-list 100 permit ip any any
```

```
line vty 0 15
access-class 100 in
```

C)

```
access-list 100 deny tcp host 172.16.1.33 any eq 23
access-list 100 permit ip any any
```

```
interface GigabitEthernet0/0
ip access-group 100 in
```

D)

```
access-list 100 deny tcp host 172.16.1.33 any eq 23
access-list 100 permit ip any any
```

```
line vty 0 15
access-class 100 in
```

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

D. Option D

Answer: B

NEW QUESTION 265

- (Exam Topic 4)

Which QoS queuing method discards or marks packets that exceed the desired bit rate of traffic flow?

- A. shaping
- B. policing
- C. CBWFQ
- D. LLQ

Answer: B

NEW QUESTION 267

- (Exam Topic 4)

What is a function of MAC address learning?

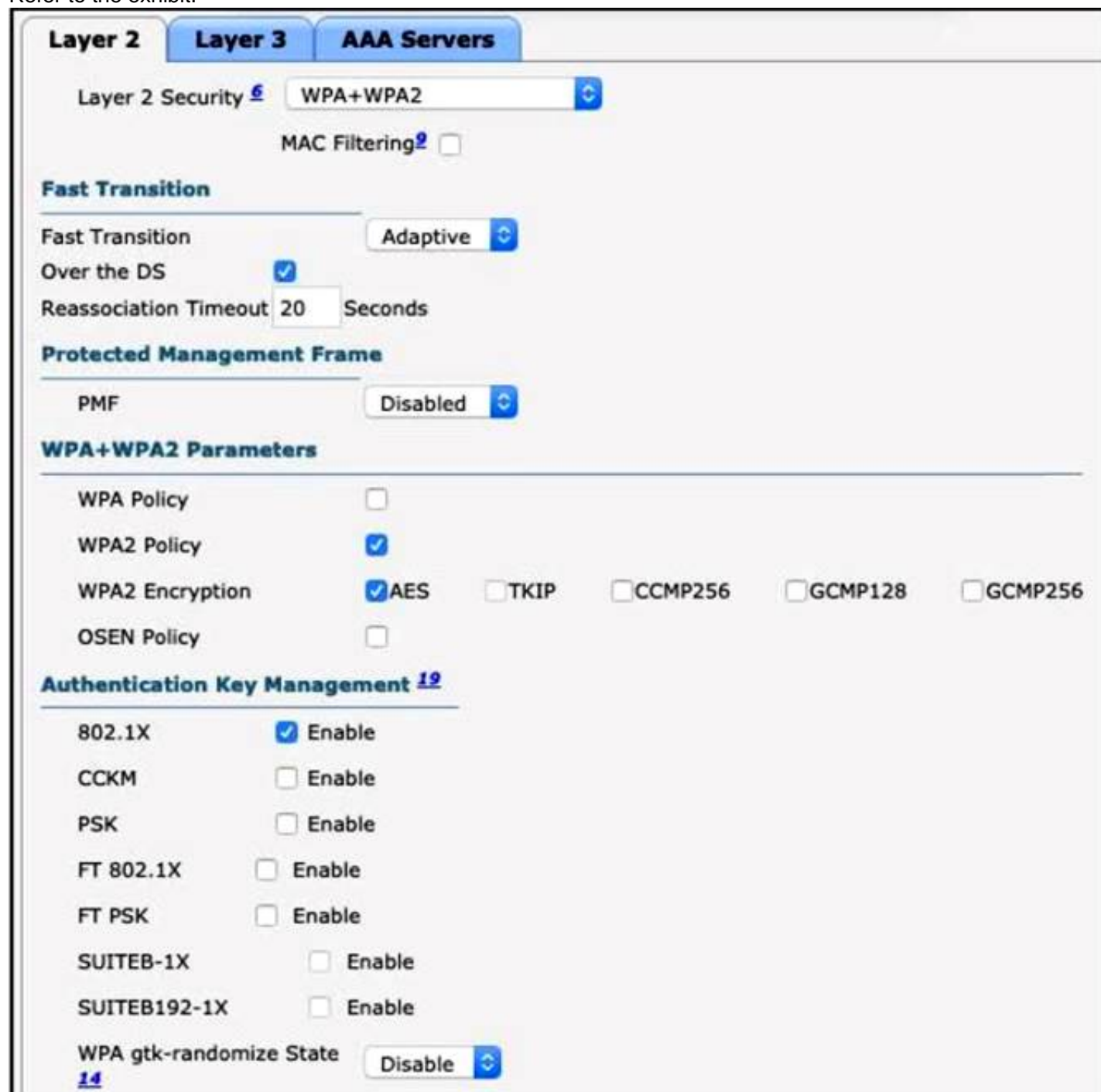
- A. It is enabled by default on all VLANs and interfaces
- B. It increases the potential for MAC address flooding.
- C. It is disabled by default on all interfaces connected to trunks
- D. It increases security on the management VLAN

Answer: A

NEW QUESTION 271

- (Exam Topic 4)

Refer to the exhibit.



Layer 2 **Layer 3** **AAA Servers**

Layer 2 Security [6](#) WPA+WPA2 [C](#)

MAC Filtering [9](#) ☐

Fast Transition

Fast Transition [Adaptive](#) [C](#)

Over the DS ☒

Reassociation Timeout 20 Seconds

Protected Management Frame

PMF [Disabled](#) [C](#)

WPA+WPA2 Parameters

WPA Policy ☐

WPA2 Policy ☒

WPA2 Encryption ☒ AES ☐ TKIP ☐ CCMP256 ☐ GCMP128 ☐ GCMP256

OSN Policy ☐

Authentication Key Management [19](#)

802.1X ☒ Enable

CCKM ☐ Enable

PSK ☐ Enable

FT 802.1X ☐ Enable

FT PSK ☐ Enable

SUITEB-1X ☐ Enable

SUITEB192-1X ☐ Enable

WPA gtk-randomize State [14](#) [Disable](#) [C](#)

Clients on the WLAN are required to use 802.11r. What action must be taken to meet the requirement?

- A. Under Protected Management Frames, set the PMF option to Required.
- B. Enable CCKM under Authentication Key Management.
- C. Set the Fast Transition option and the WPA gtk-randomize State to disable.
- D. Set the Fast Transition option to Enable and enable FT 802.1X under Authentication Key Management.

Answer: D

NEW QUESTION 275

- (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 for data and voice traffic.

Answer: DE

NEW QUESTION 276

- (Exam Topic 4)

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

guarantees packet delivery	TCP <div></div> <div></div> <div></div>
uses a 32-bit sequence number	
ideal for voice traffic	
provides support for retransmission of lost packets	UDP <div></div> <div></div> <div></div>
offers minimal overhead within a packet	
requires less computer resources	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

guarantees packet delivery	TCP <div>provides support for retransmission of lost packets</div> <div>guarantees packet delivery</div> <div>uses a 32-bit sequence number</div>
uses a 32-bit sequence number	
ideal for voice traffic	
provides support for retransmission of lost packets	UDP <div>ideal for voice traffic</div> <div>requires less computer resources</div> <div>offers minimal overhead within a packet</div>
offers minimal overhead within a packet	
requires less computer resources	

NEW QUESTION 280

- (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 283

- (Exam Topic 4)

```
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 100,200,300
channel-group 1 mode active

SW1#show run interface fastEthernet 0/2
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 100,200
channel-group 1 mode active

SW2#show run interface fastEthernet 0/1
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 100,200,300
channel-group 1 mode active

SW2#show run interface fastEthernet 0/2
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 100,200,300
channel-group 1 mode active
```

Refer to the exhibit. An engineer is building a new Layer 2 LACP EtherChannel between SW1 and SW2. and they executed the given show commands to verify the work Which additional task must be performed so that the switches successfully bundle the second member in the LACP port-channel?

- A. Configure the switchport trunk allowed vlan 300 command on SW1 port-channel 1
- B. Configure the switchport trunk allowed vlan 300 command on interface Fa0/2 on SW1.
- C. Configure the switchport trunk allowed vlan add 300 command on interface Fa0 2 on SW2.
- D. Configure the switchport trunk allowed vlan add 300 command on SW1 port-channel 1

Answer: B

NEW QUESTION 286

- (Exam Topic 4)

Refer to the exhibit.

```
MacOs$ ifconfig

en0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
options=400<CHANNEL_IO>
ether f0:18:98:64:60:32
inet6 fe80::492:c09f:57cf:8c36%en0 prefixlen 64 secured scopeid 0x6
inet 10.8.138.14 netmask 0xfffffe000 broadcast 10.8.159.255
nd6 options=201<PERFORMNUD,DAD>
media: autoselect
status: active
```

A network engineer must provide configured IP addressing details to investigate a firewall rule Issue. Which subnet and mask Identify what is configured on the en0 interface?

- A. 10.8.0.0/16
- B. 10.8.64.0/18
- C. 10.8.128.0/19
- D. 10.8.138.0/24

Answer: D

NEW QUESTION 289

- (Exam Topic 4)

An engineer is configuring switch SW1 to act an NTP server when all upstream NTP server connectivity fails. Which configuration must be used?

A)
 SW1# config t
 SW1(config)#ntp peer 192.168.1.1
 SW1(config)#ntp access-group peer accesslist1

B)
 SW1# config t
 SW1(config)#ntp master
 SW1(config)#ntp server 192.168.1.1

C)


```
SW1# config t
SW1(config)#ntp server 192.168.1.1
SW1(config)#ntp access-group server accesslist1
```

D)

```
SW1# config t
SW1(config)#ntp backup
SW1(config)#ntp server 192.168.1.1
```

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

Answer: B

NEW QUESTION 290

- (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 291

- (Exam Topic 4)

What is used as a solution for protecting an individual network endpoint from attack?

- A. Router
- B. Wireless controller
- C. Anti software
- D. Cisco DNA Center

Answer: C

NEW QUESTION 294

- (Exam Topic 4)

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

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

Answer: B

NEW QUESTION 297

- (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 299

- (Exam Topic 4)

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

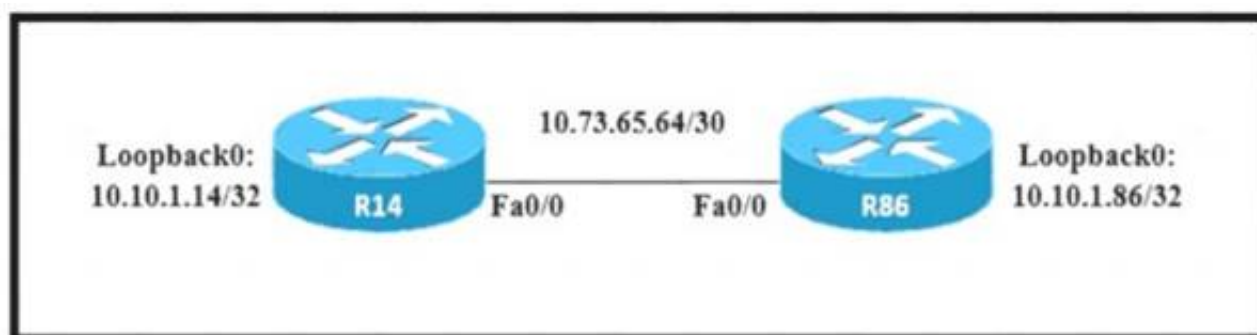
- A. TCP establishes a connection prior to sending data, and UDP sends immediately.
- B. TCP uses error detection for packets, and UDP uses error recovery.
- C. TCP avoids using sequencing, and UDP avoids using acknowledgments.
- D. TCP encourages out-of-order packet delivery, and UDP prevents re-ordering.

Answer: A

NEW QUESTION 303

- (Exam Topic 4)

Refer to the exhibit.



All interfaces are configured with duplex auto and ip ospf network broadcast. Which configuration allows routers R14 and R86 to form an OSPFv2 adjacency and act as a central point for exchanging OSPF information between routers?

☐ R14#

```

interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf priority 0
ip mtu 1500
  
```

```

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
  
```

R86#

```

interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip mtu 1500
  
```

```

router ospf 10
router-id 10.10.1.86
network 10.10.1.86 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
  
```

☒ R14#

```

interface Loopback0
ip ospf 10 area 0
  
```

```

interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf priority 255
ip ospf 10 area 0
ip mtu 1500
  
```

```

router ospf 10
router-id 10.10.1.14
  
```

R86#

```

interface Loopback0
ip ospf 10 area 0
  
```

```

interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip ospf 10 area 0
ip mtu 1500
  
```

```

router ospf 10
router-id 10.10.1.86
  
```

☐ R14#
interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf priority 255
ip mtu 1500

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
R86#
interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip mtu 1400

router ospf 10
router-id 10.10.1.86
network 10.10.1.86 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0

☐ R14#
interface Loopback0
ip ospf 10 area 0

interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf 10 area 0
ip mtu 1500

router ospf 10
ip ospf priority 255
router-id 10.10.1.14
R86#
interface Loopback0
ip ospf 10 area 0

interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip ospf 10 area 0
ip mtu 1500

router ospf 10
router-id 10.10.1.86

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

Answer: B

NEW QUESTION 305

- (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 307

- (Exam Topic 4)

Refer to the exhibit.

Entry #	
1	192.168.10.0 255.255.254.0
2	192.168.10.0 255.255.255.192
3	192.168.10.0 255.255.0.0
4	192.168.10.0 255.255.224.0

Which entry is the longest prefix match for host IP address 192.168.10.5?

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

Answer: B

NEW QUESTION 312

- (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 314

- (Exam Topic 4)

Which component controls and distributes physical resources for each virtual machine?

- A. OS
- B. hypervisor
- C. CPU
- D. physical enclosure

Answer: B

NEW QUESTION 316

- (Exam Topic 4)

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

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

Which configuration must be applied to the interface?

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

no switchport
ip address 192.168.32.30 255.255.255.224

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

Answer: D

NEW QUESTION 319

- (Exam Topic 4)

Refer to the exhibit.

Current Neighbor Relationship					
Neighbor ID	Pri	State	Dead Time	Address	Interface
192.168.1.1	1	FULL/DR	00:00:33	192.168.1.1	GigabitEthernet0/0
Desired Neighbor Relationship					
Neighbor ID	Pri	State	Dead Time	Address	Interface
192.168.1.1	0	FULL/ -	00:00:31	192.168.1.1	GigabitEthernet0/0

How must OSPF be configured on the GigabitEthernet0/0 interface of the neighbor device to achieve.

A)

```
Router(config)#interface GigabitEthernet 0/0
Router(config-if)#ip ospf priority 1
```

B)

```
Router(config)#interface GigabitEthernet 0/0
Router(config-if)#ip ospf 1 area 2
```

C)

```
Router(config)#interface GigabitEthernet 0/0
Router(config-if)#ip ospf cost 5
```

D)

```
Router(config)#interface GigabitEthernet 0/0
Router(config-if)#ip ospf network point-to-point
```

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

Answer: A

NEW QUESTION 321

- (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 322

- (Exam Topic 4)

Drag and drop the REST API call method for HTTP from the left onto the action they perform on the right.

DELETE	creates a resource on the server
GET	reads data from the server
POST	removes a resource from the server
PUT	updates an entry in the database
PATCH	

- A. Mastered
- B. Not Mastered

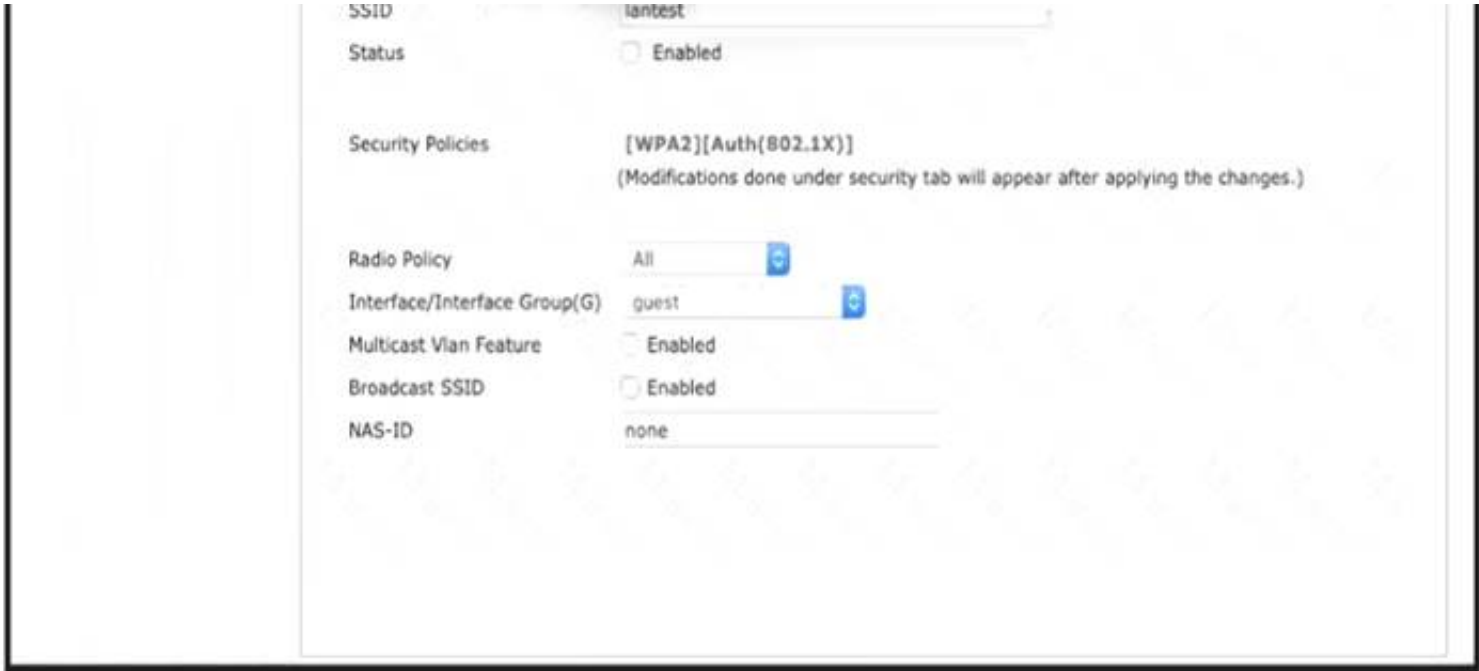
Answer: A

Explanation:

DELETE	POST
GET	GET
POST	DELETE
PUT	PUT
PATCH	

NEW QUESTION 324

- (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 328

- (Exam Topic 4)
Which properly is shared by 10GBase-SR and 10GBase-LR interfaces?

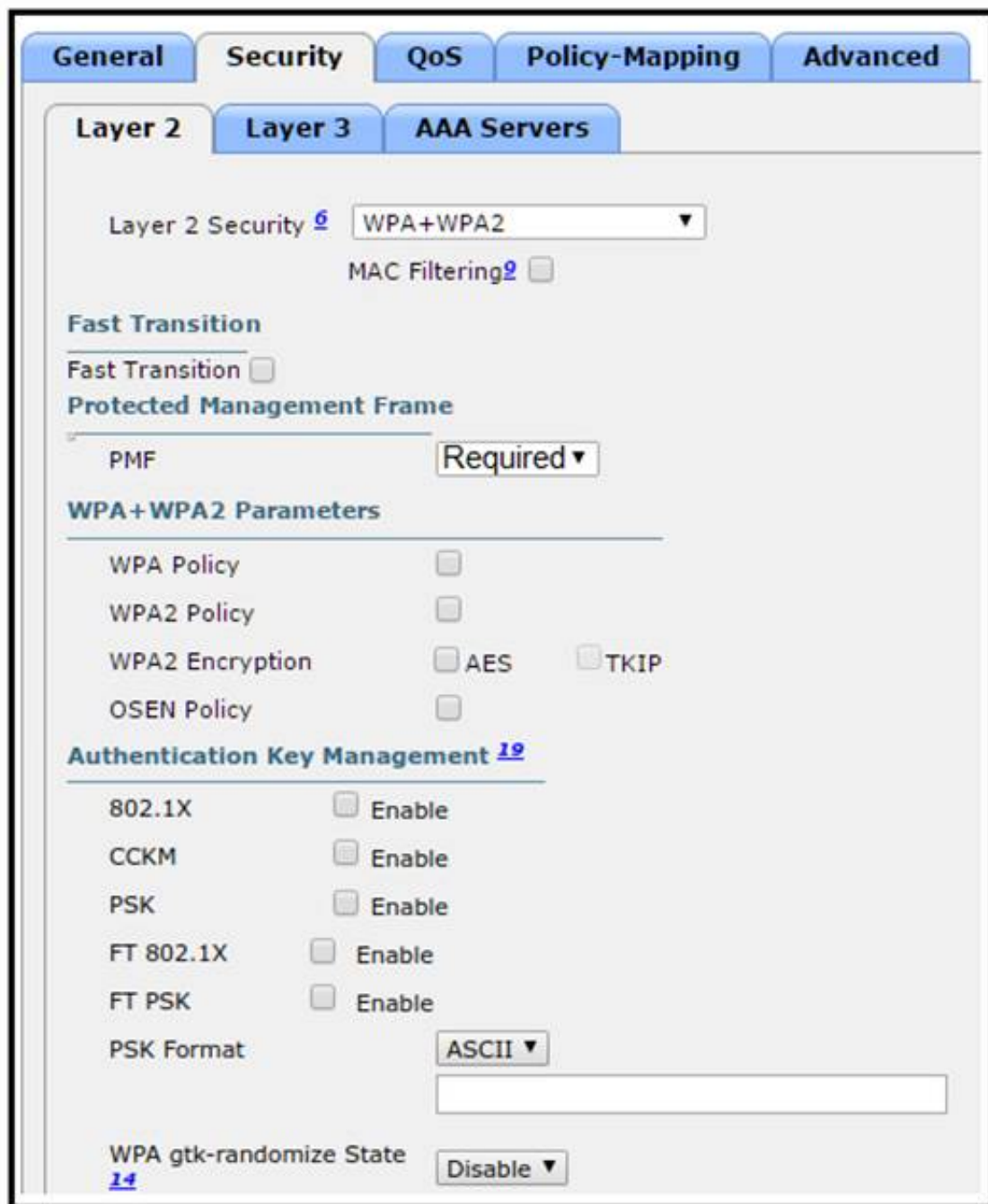
- A. Both require fiber cable media for transmission.
- B. Both require UTP cable media for transmission.
- C. Both use the single-mode fiber type.
- D. Both use the multimode fiber type.

Answer: A

NEW QUESTION 330

- (Exam Topic 4)

Refer to the exhibit.



General Security QoS Policy-Mapping Advanced

Layer 2 Layer 3 AAA Servers

Layer 2 Security [6](#) WPA+WPA2 ▼

MAC Filtering [9](#) ☐

Fast Transition

Fast Transition ☐

Protected Management Frame

PMF Required ▼

WPA+WPA2 Parameters

WPA Policy ☐

WPA2 Policy ☐

WPA2 Encryption ☐ AES ☐ TKIP

OSEN Policy ☐

Authentication Key Management [19](#)

802.1X ☐ Enable

CCKM ☐ Enable

PSK ☐ Enable

FT 802.1X ☐ Enable

FT PSK ☐ Enable

PSK Format ASCII ▼

WPA gtk-randomize State [14](#) Disable ▼

The network engineer is configuring a new WLAN and is told to use a setup password for authentication instead of the RADIUS servers. Which additional set of tasks must the engineer perform to complete the configuration?

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

Answer: D

NEW QUESTION 334

- (Exam Topic 4)

What is a purpose of traffic shaping?

- A. It enables dynamic flow identification.
- B. It enables policy-based routing.
- C. It provides best-effort service.
- D. It limits bandwidth usage.

Answer: A

NEW QUESTION 335

- (Exam Topic 4)

Refer to the exhibit.

```
interface g2/0/0
  channel-group 1 mode active
interface g4/0/0
  channel-group 1 mode active
interface Port-channel1
  ip address 203.0.113.65 255.255.255.252

%LINEPROTO-5-UPDOWN: Line protocol on Interface Port-channel1, changed state to down
```

An engineer is configuring a Layer 3 port-channel interface with LACP. The configuration on the first device is complete, and it is verified that both interfaces have registered the neighbor device in the CDP table. Which task on the neighbor device enables the new port channel to come up without negotiating the channel?

- A. Change the EtherChannel mode on the neighboring interfaces to auto.
- B. Configure the IP address of the neighboring device.
- C. Bring up the neighboring interfaces using the no shutdown command.
- D. Modify the static EtherChannel configuration of the device to passive mode.

Answer: D

NEW QUESTION 336

- (Exam Topic 4)

What differentiates device management enabled by cisco DNA center from traditional campus device management?

- A. CLI-oriented device
- B. device-by-device hands-on
- C. centralized
- D. per-device

Answer: C

NEW QUESTION 341

- (Exam Topic 4)

Refer to the exhibit.

```
R1# show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate
default
       U - per-user static route, o - ODR
Gateway of last resort is not set
C    10.0.0.0/8 is directly connected, Loopback0
     10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
O    10.0.1.3/32 [110/100] via 10.0.1.100, 00:39:08, Serial0
C    10.0.1.0/24 is directly connected, Serial0
O    10.0.1.5/32 [110/5] via 10.0.1.50, 00:39:08, Gigabit Ethernet 0/0
D    10.0.1.4/32 [110/10] via 10.0.1.4, 00:39:08, Gigabit Ethernet 0/0
```

What does route 10.0.1.3/32 represent in the routing table?

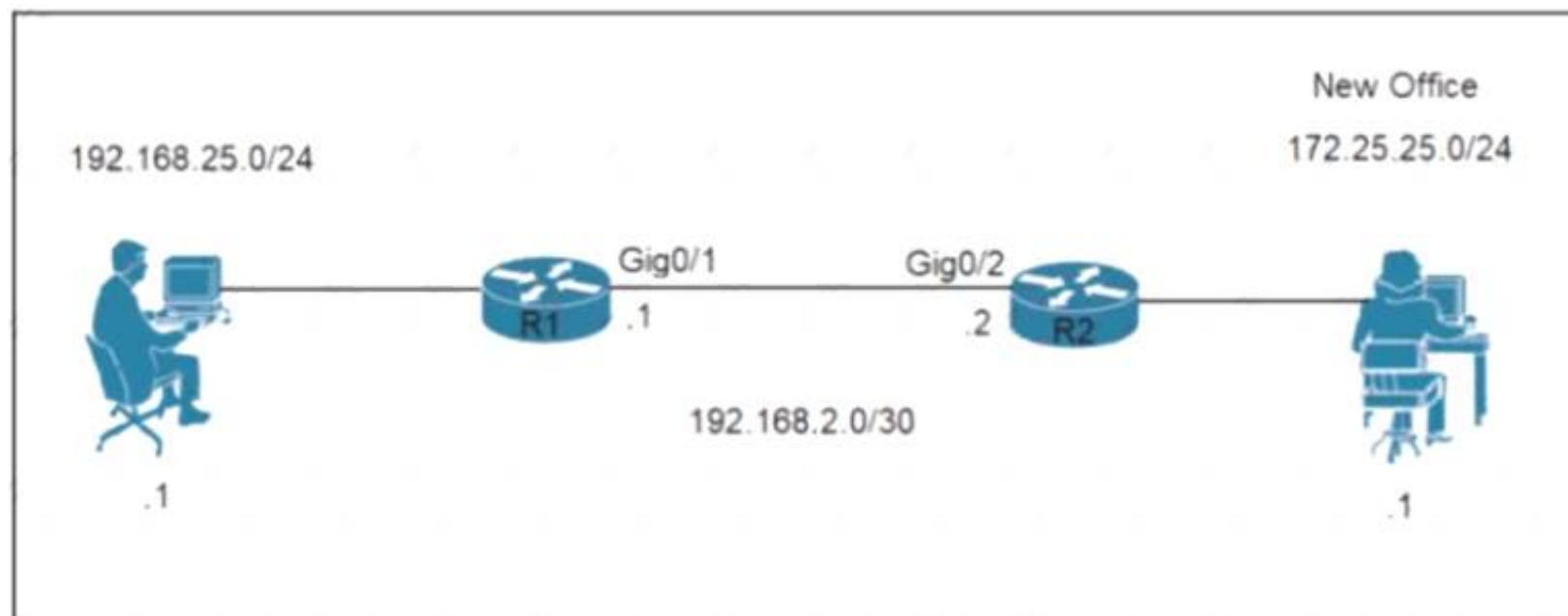
- A. the 10.0.0.0 network
- B. a single destination address
- C. the source 10.0.1.100
- D. all hosts in the 10.0.1.0 subnet

Answer: A

NEW QUESTION 346

- (Exam Topic 4)

Refer to the exhibit.



A network engineer is updating the configuration on router R1 to connect a new branch office to the company network R2 has been configured correctly. Which command must the engineer configure so that devices at the new site communicate with the main office?

- A. ip route 172.25.25 0 255 255 255.0 192.168.2.1
- B. ip route 172.25.25 1 255 255 255 255 g0/1
- C. ip route 172.25.25.0.255.255.255.0.192.168.2.2

Answer: C

NEW QUESTION 351

- (Exam Topic 4)

Which enhancement is implemented in WPA3?

- A. applies 802.1x authentication
- B. uses TKIP
- C. employs PKI to identify access points
- D. protects against brute force attacks

Answer: D

NEW QUESTION 352

- (Exam Topic 4)

Which command implies the use of SNMPv3?

- A. snmp-server host
- B. snmp-server community
- C. snmp-server enable traps
- D. snmp-server user

Answer: B

NEW QUESTION 356

- (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 presented?

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

Answer: D

NEW QUESTION 359

- (Exam Topic 4)

What is a reason to configure a trunk port that connects to a WLC distribution port?

- A. Eliminate redundancy with a link failure in the data path.
- B. Allow multiple VLAN to be used in the data path.
- C. Provide redundancy if there is a link failure for out-of-band management.

D. Permit multiple VLANs to provide out-of-band management.

Answer: D

NEW QUESTION 361

- (Exam Topic 4)

Refer to the exhibit. A multivendor network exists and the company is implementing VoIP over the network for the first time.

A)

```
SW1(config)#no cdp enable
SW1(config)#interface gigabitethernet1/0/1
SW1(config-if)#cdp run
```

B)

```
SW1(config)#lldp enable
SW1(config)#interface gigabitethernet1/0/1
SW1(config-if)#lldp run
```

C)

```
SW1(config)#lldp run
SW1(config)#interface gigabitethernet1/0/1
SW1(config-if)#lldp enable
```

D)

```
SW1(config)#no cdp run
SW1(config)#interface gigabitethernet1/0/1
SW1(config-if)#lldp transmit
SW1(config-if)#lldp receive
```

A. Option A

B. Option B

C. Option C

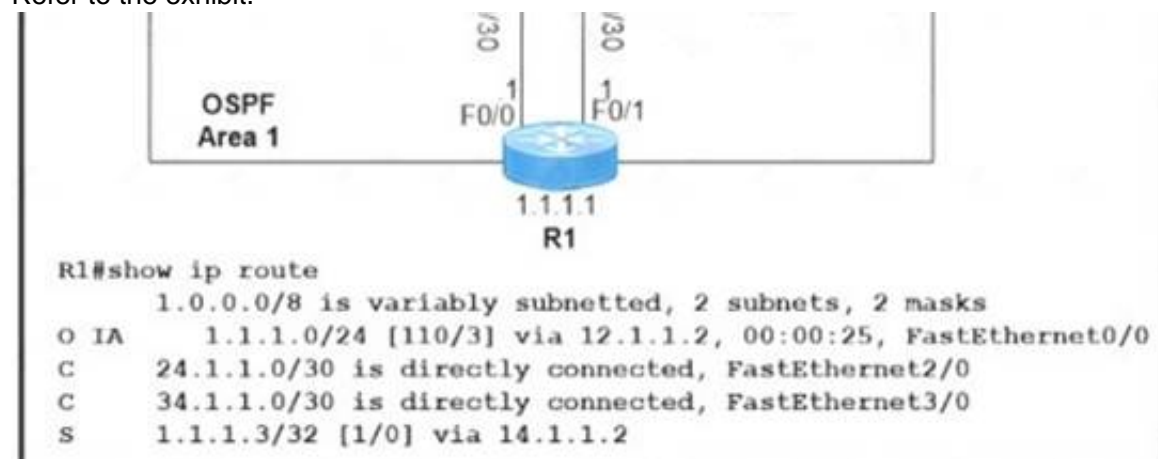
D. Option D

Answer: B

NEW QUESTION 364

- (Exam Topic 4)

Refer to the exhibit.



Which two values does router R1 use to determine the best path to reach destinations in network 1,0.0.0/8? (Choose two.)

A. longest prefix match

B. highest administrative distance

C. highest metric

D. lowest metric

E. lowest cost to reach the next hop

Answer: AD

NEW QUESTION 366

- (Exam Topic 4)

What provides connection redundancy increased bandwidth and load sharing between a wireless LAN controller and a Layer 2 switch?

A. VLAN trunking

B. tunneling

C. first hop redundancy

D. link aggregation

Answer: D

NEW QUESTION 368

- (Exam Topic 4)

Which IPv6 address range is suitable for anycast addresses for distributed services such as DHCP or DNS?

- A. FF00:1/12
- B. 2001:db8:0234:ca3e::1/128
- C. 2002:db84:3f37:ca98:be05:8/64
- D. FE80::1/10

Answer: A

NEW QUESTION 369

- (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 Serial0. What is the effect of the configuration as the administrator applies the command?

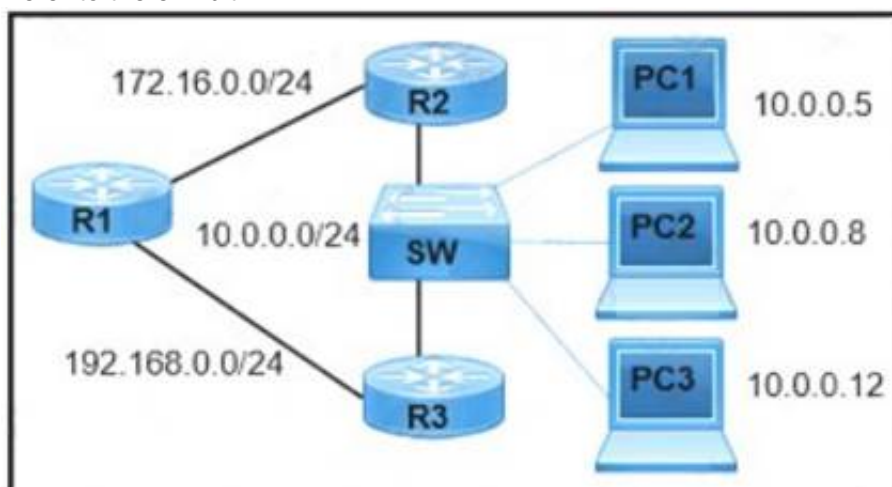
- A. The permit command fails and returns an error code.
- B. The router accepts all incoming traffic to Serial0 with the last octet of the source IP set to 0.
- C. The sourced traffic from IP range 10.0.0.0 -10.0.0.255 is allowed on Serial0.
- D. The router fails to apply the access list to the interface.

Answer: C

NEW QUESTION 373

- (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 377

- (Exam Topic 4)

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

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

Answer: B

NEW QUESTION 379

- (Exam Topic 4)

Refer to the exhibit.

```
R1
interface GigabitEthernet0/1
 ip address 192.168.12.1 255.255.255.128
 no shutdown
router ospf 1
 network 192.168.12.1 0.0.0.0 area 1

R2
interface GigabitEthernet0/1
 ip address 192.168.12.2 255.255.255.128
 no shutdown
```

A network engineer started to configure two directly-connected routers as shown. Which command sequence must the engineer configure on R2 so that the two routers become OSPF neighbors?

- A)
router ospf 1
network 192.168.12.1 0.0.0.0 area 1
- B)
interface GigabitEthernet0/1
ip ospf 1 area 1
- C)
interface GigabitEthernet0/1
ip ospf 1 area 0
- D)
router ospf 1
network 192.168.12.0 0.0.0.127 area 0

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

Answer: D

NEW QUESTION 384

- (Exam Topic 4)

Which REST method updates an object in the Cisco DNA Center Intent API?

- A. CHANGE
- B. UPDATE
- C. POST
- D. PUT

Answer: D

Explanation:

PUT is most-often utilized for **update** capabilities, PUT-ing to a known resource URI with the request body containing the newly-updated representation of the original resource. However, PUT can also be used to create a resource in the case where the resource ID is chosen by the client instead of by the server. In other words, if the PUT is to a URI that contains the value of a non-existent resource ID. Again, the request body contains a resource representation. Many feel this is convoluted and confusing. Consequently, this method of creation should be used sparingly, if at all. Alternatively, use POST to create new resources and provide the client-defined ID in the body representation—presumably to a URI that doesn't include the ID of the resource (see POST below). On successful update, return 200 (or 204 if not returning any content in the body) from a PUT. If using PUT for create, return HTTP status 201 on successful creation. A body in the response is optional—providing one consumes more bandwidth. It is not necessary to return a link via a Location header in the creation case since the client already set the resource ID. PUT is not a safe operation, in that it modifies (or creates) state on the server, but it is idempotent. In other words, if you create or update a resource using PUT and then make that same call again, the resource is still there and still has the same state as it did with the first call. If, for instance, calling PUT on a resource increments a counter within the resource, the call is no longer idempotent. Sometimes that happens and it may be enough to document that the call is not idempotent. However, it's recommended to keep PUT requests idempotent. It is strongly recommended to use POST for non-idempotent requests. Examples:
<https://www.restapitutorial.com/lessons/httpmethods.html>

NEW QUESTION 389

- (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 390

- (Exam Topic 4)

```
Cat9300-1# show interface gi1/0/1 switchport
Name: Gi1/0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 321 (VLAN0321)
Administrative Native VLAN tagging: enabled
Trunking VLANs Enabled: 100,200,300
Pruning VLANs Enabled: 2-1001
```

Refer to the exhibit.

A network administrator configures an interface on a new switch so that it connects to interface Gi1/0/1 on switch Cat9300-1. Which configuration must be applied to the new interface?

A)

```
switchport mode trunk
switchport trunk native vian 321
switchport trunk allowed vian 100,200,300
```

B)

```
switchport trunk encapsulation dot1q
switchport trunk native vian 321
switchport trunk allowed vian 100-300
```

C)

```
switchport mode dynamic desirable
switchport trunk native vian 321
switchport trunk allowed vian 100,200,300
```

D)

```
switchport nonegotiate
switchport access vian 321
switchport trunk allowed vian except 2-1001
```

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

Answer: A

NEW QUESTION 391

- (Exam Topic 4)

When an access point is seeking to join wireless LAN controller, which message is sent to the AP- Manager interface?

- A. Discovery response
- B. DHCP request
- C. DHCP discover
- D. Discovery request

Answer: D

NEW QUESTION 393

- (Exam Topic 4)

A router has two static routes to the same destination network under the same OSPF process. How does the router forward packets to the destination if the next-hop devices are different?

- A. The router chooses the route with the oldest age.
- B. The router load-balances traffic over all routes to the destination.
- C. The router chooses the next hop with the lowest MAC address.
- D. The router chooses the next hop with the lowest IP address.

Answer: B

NEW QUESTION 397

- (Exam Topic 4)

Which cable type must be used to interconnect one switch using 1000 BASE-SX GBiC modules and another switch using 1000 BASE-SX SFP modules?

- A. LC to SC
- B. SC to ST
- C. SC to SC
- D. LC to LC

Answer: D

NEW QUESTION 398

- (Exam Topic 4)

Refer to the exhibit.

```
router# show ip route
....
D 172.18.32.0/26 [90/25789217] via 10.1.1.1
R 172.18.32.0/24 [120/4] via 10.1.1.2
O 172.18.32.0/19 [110/229840] via 10.1.1.3
C 172.18.32.32/32 is directly connected, Loopback0
C 172.18.32.36/30 is directly connected, GigabitEthernet0/0
L 172.18.32.37/32 is directly connected, GigabitEthernet0/0
```

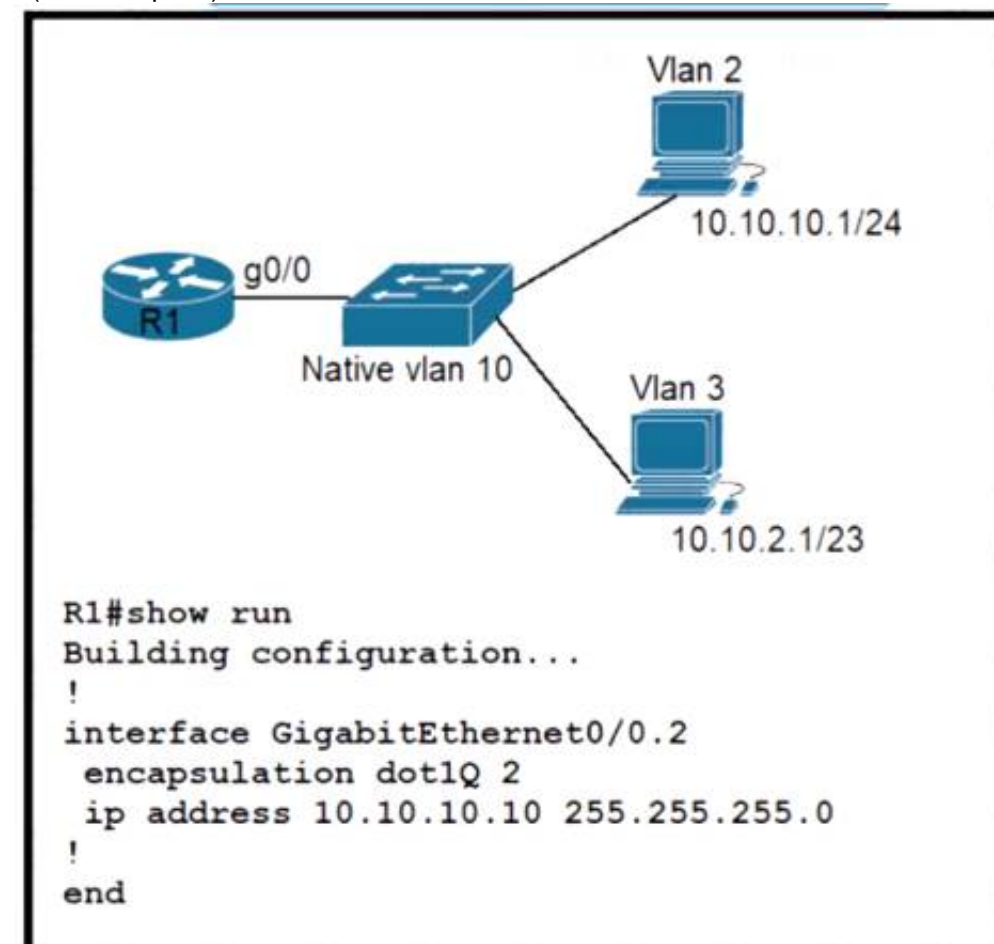
A packet sourced from 172.18.32.2 is destined for 172.18.32.38. Where does the router forward the packet?

- A. GigabitEthernet0/0
- B. Loopback0
- C. 10.1.1.1
- D. 10.1.1.3

Answer: B

NEW QUESTION 401

- (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 403

- (Exam Topic 4)

What is the collapsed layer in collapsed core architectures?

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

Answer: D

NEW QUESTION 407

- (Exam Topic 4)

Refer to the exhibit.

```
R1# show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set
10.0.0.0/24 is subnetted, 5 subnets
D    10.1.2.0/24 [90/2170112] via 10.165.20.226, 00:01:30, Serial0/0
D    10.1.3.0/24 [90/2170112] via 10.165.20.226, 00:01:30, Serial0/0
D    10.1.2.0/25 [90/2170112] via 10.165.20.126, 00:01:30, Serial0/0
D    10.1.3.0/25 [90/2170112] via 10.165.20.146, 00:01:30, Serial0/0
D    10.1.4.0/25 [90/2170112] via 10.165.20.156, 00:01:30, Serial0/0
192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.18.10.0/24 is directly connected, GigabitEthernet0/0
192.168.21.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.11.0/24 is directly connected, GigabitEthernet0/1
10.165.20.0/24 is variably subnetted, 2 subnets, 2 masks
C    10.165.20.224/24 is directly connected, Serial0/0
S    10.1.2.112/28 [1/0] via 10.165.20.166
```

What is the next hop for traffic entering R1 with a destination of 10.1.2 126?

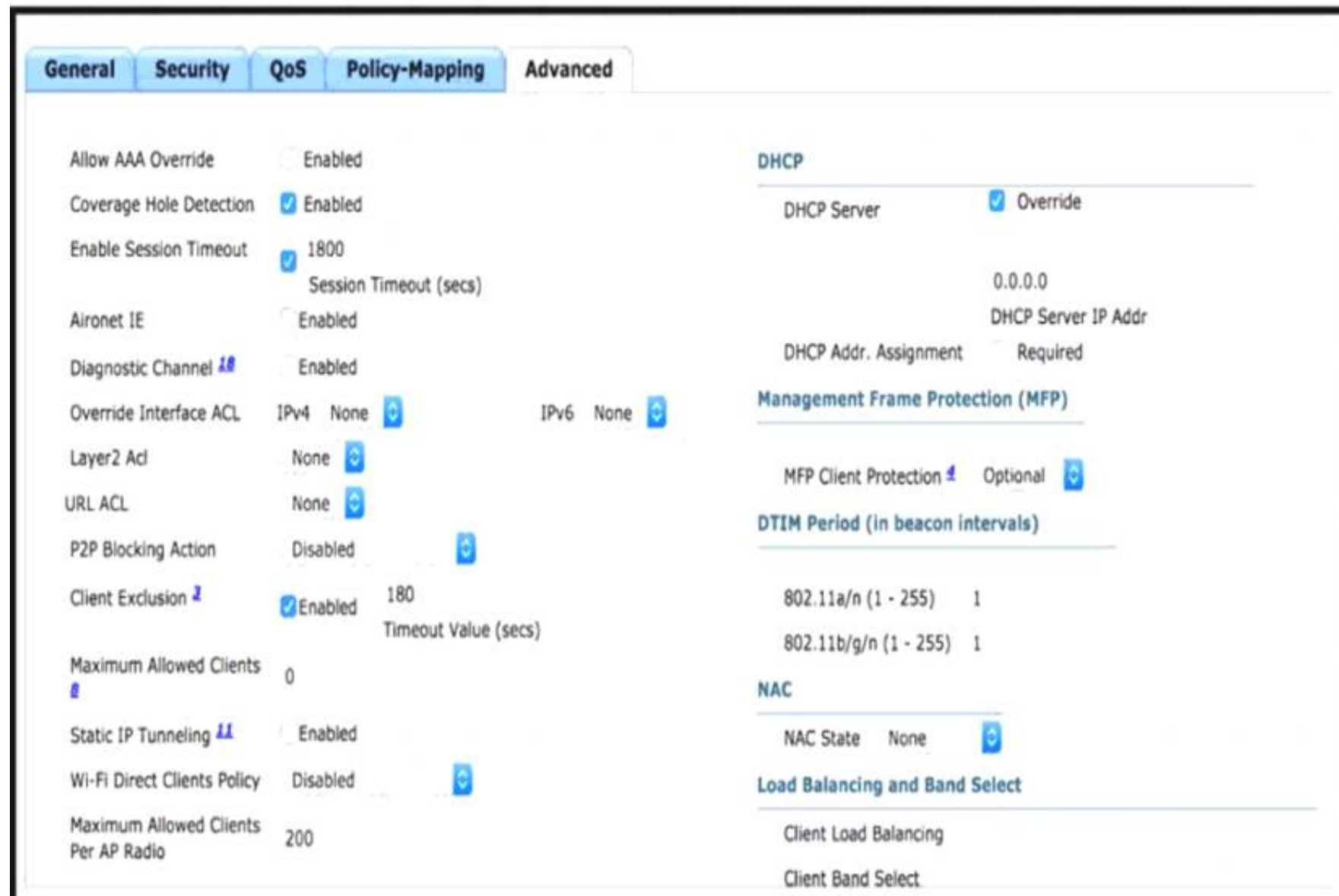
- A. 10.165 20.126
B. 10.165.20.146
C. 10.165.20.166
D. 10.165 20.226

Answer: D

NEW QUESTION 412

- (Exam Topic 4)

Refer to the exhibit.



The screenshot shows the Cisco WLC configuration page with the following settings:

- General:** Allow AAA Override (Enabled), Coverage Hole Detection (Enabled), Enable Session Timeout (1800), Aironet IE (Enabled), Diagnostic Channel (18), Override Interface ACL (IPv4: None, IPv6: None), Layer2 Ad (None), URL ACL (None), P2P Blocking Action (Disabled), Client Exclusion (Enabled, 180), Maximum Allowed Clients (0), Static IP Tunneling (Enabled), Wi-Fi Direct Clients Policy (Disabled), Maximum Allowed Clients Per AP Radio (200).
- Security:** DHCP (DHCP Server: Override, DHCP Server IP Addr: 0.0.0.0, DHCP Addr. Assignment: Required), Management Frame Protection (MFP) (MFP Client Protection: Optional), DTIM Period (in beacon intervals) (802.11a/n (1 - 255): 1, 802.11b/g/n (1 - 255): 1), NAC (NAC State: None), Load Balancing and Band Select (Client Load Balancing, Client Band Select).

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 416

- (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 419

- (Exam Topic 4)

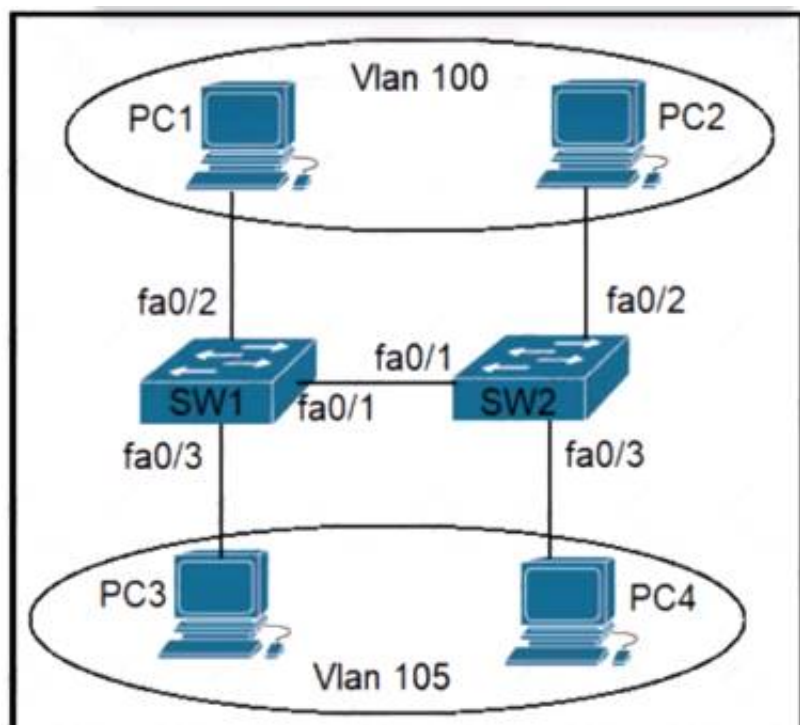
What is the purpose of the Cisco DNA Center controller?

- A. to secure physical access to a data center
- B. to scan a network and generate a Layer 2 network diagram
- C. to securely manage and deploy network devices
- D. to provide Layer 3 services to autonomous access points

Answer: C

NEW QUESTION 420

- (Exam Topic 4)



A)

```
Switch(config-if)#switchport mode dynamic
Switch(config-if)#switchport access vlan 100,105
Switch(config-if)#switchport trunk native vlan 1
```

B)

```
Switch(config-if)#switchport mode access
Switch(config-if)#switchport trunk encapsulation dot1q
Switch(config-if)#switchport access vlan 100,105
Switch(config-if)#switchport trunk native vlan 3
```

C)

```
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk encapsulation isl
Switch(config-if)#switchport trunk allowed vlan 100,105
Switch(config-if)#switchport trunk native vlan 1
```

D)

```
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk encapsulation dot1q
Switch(config-if)#switchport trunk allowed vlan 100,105
Switch(config-if)#switchport trunk native vlan 3
```

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

Answer: B

NEW QUESTION 422

- (Exam Topic 4)

Refer to the exhibit.

```
Last clearing of "show interface" counters never
Input queue: 1/75/1/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: random early detection (RED)
Output queue : 0/40 (size/max)
5 minute input rate 1000 bits/sec, 2 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
 7558065 packets input, 783768942 bytes, 1 no buffer
Received 8280963 broadcasts, 0 runts, 0 giants, 1 throttles
15 input errors, 14278 CRC, 0 frame, 0 overrun, 3 ignored
0 input packets with dribble condition detected
798092 packets output, 50280266 bytes, 0 underruns
0 output errors, 15000 collisions, 0 interface resets
0 babbles, 0 late collision, 179 deferred
0 lost carrier, 0 no carrier
0 output buffer failures, 0 output buffers swapped out
```

An administrator received a call from a branch office regarding poor application performance hosted at the headquarters. Ethernet 1 is connected between Router1 and the LAN switch. What identifies the issue?

- A. The QoS policy is dropping traffic.
- B. There is a duplex mismatch.
- C. The link is over utilized.
- D. The MTU is not set to the default value.

Answer: C

NEW QUESTION 427

- (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	Multicast
sends packets to a group address rather than a single address	
confined to a single link	Link-Local Address
required on all IPv6 devices	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 428

- (Exam Topic 4)

What is a function of an endpoint?

- A. It is used directly by an individual user to access network services
- B. It passes unicast communication between hosts in a network
- C. It transmits broadcast traffic between devices in the same VLAN
- D. It provides security between trusted and untrusted sections of the network.

Answer: A

NEW QUESTION 433

- (Exam Topic 4)

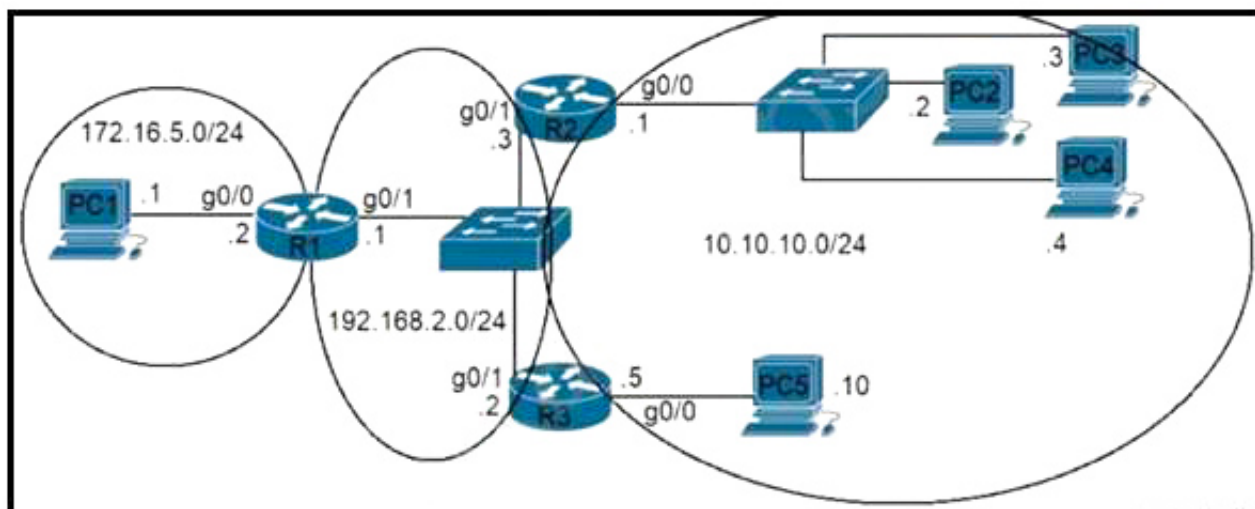
Which two VPN technologies are recommended by Cisco for multiple branch offices and large-scale deployments? (Choose two.)

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

Answer: BE

NEW QUESTION 436

- (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.)

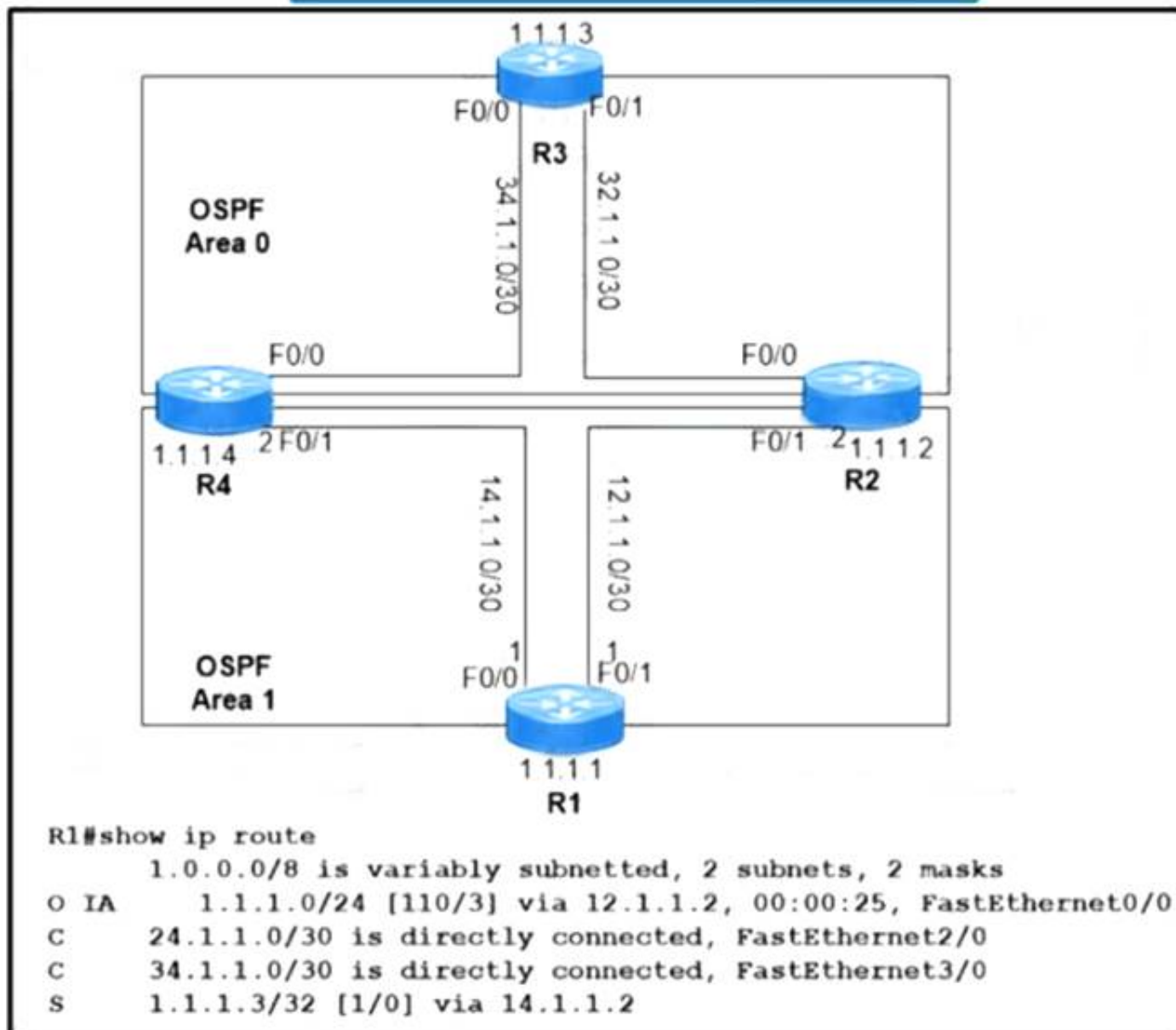
- A. ip route 10.10.10.0 255.255.255.0 192.168.2.3
- B. ip route 10.10.10.10 255.255.255.255 192.168.2.2
- C. ip route 10.10.10.10 255.255.255.255 g0/1
- D. ip route 10.10.10.8 255.255.255.248 g0/1
- E. ip route 10.10.10.0 255.255.255.248 192.168.2.2

Answer: AE

NEW QUESTION 441

- (Exam Topic 4)

Refer to the exhibit.



Which two values does router R1 use to identify valid routes for the R3 loopback address 1.1.1.3/32? (Choose two.)

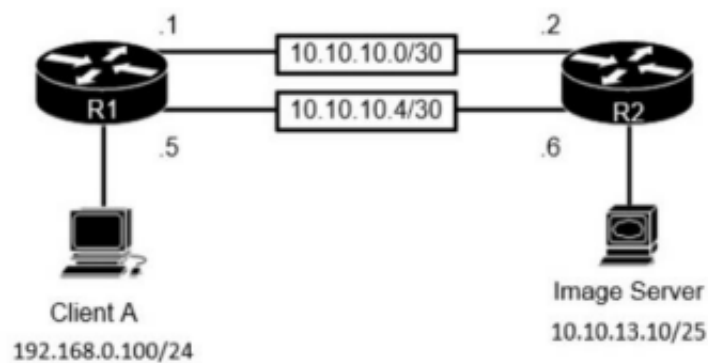
- A. lowest cost to reach the next hop
- B. highest metric
- C. highest administrative distance
- D. lowest metric
- E. lowest administrative distance

Answer: DE

NEW QUESTION 443

- (Exam Topic 4)

Refer to the exhibit.



```

R1#show ip route
Gateway of last resort is 10.10.10.2 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 10.10.10.2

R2#show ip route
Gateway of last resort is 10.10.10.1 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 10.10.10.1
  
```

The image server and client A are running an application that transfers an extremely high volume of data between the two. An engineer is configuring a dedicated circuit between R1 and R2. Which set of commands must the engineer apply to the routers so that only traffic between the image server and client A is forced to

use the new circuit?

- A. R1(config)#ip route 10.10.13.10 255.255.255.255 10.10.10.6R2(config)#ip route 192.168.0.100 255.255.255.255 10.10.10.5
- B. R1(config)#ip route 10.10.13.10 255.255.255.128 10.10.10.6R2(config)#ip route 192.168.0.100 255.255.255.0 10.10.10.5
- C. R1(config)#ip route 10.10.13.10 255.255.255.252 10.10.10.6R2(config)#tp route 192.168.0.100 255.255.255.252 10.10.10.5
- D. R1(config)#ip route 10.10.13.10 255.255.255.255 10.10.10.2R2(config)#ip route 192.168.0.100 255.255.255.255 10.10.10.1

Answer: D

NEW QUESTION 445

- (Exam Topic 4)

Which two protocols are used by an administrator for authentication and configuration on access points?

- A. Kerberos
- B. 802.1Q
- C. 802.1x
- D. TACACS+
- E. RADIUS

Answer: DE

NEW QUESTION 448

- (Exam Topic 4)

An engineer is installing a new wireless printer with a static IP address on the Wi-Fi network. Which feature must be enabled and configured to prevent connection issues with the printer?

- A. client exclusion
- B. passive client
- C. DHCP address assignment
- D. static IP tunneling

Answer: C

NEW QUESTION 453

- (Exam Topic 4)

Drag and drop the QoS terms from the left onto the descriptions on the right.

class-based weighted fair queueing	categorizes packets based on the value of a traffic descriptor
classification	guarantees minimum bandwidth to specific traffic classes when an interface is congested
congestion	prevents congestion by reducing the flow of outbound traffic
policing	outcome of overutilization
shaping	uses defined criteria to limit the transmission of one or more classes of traffic

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Table Description automatically generated

NEW QUESTION 457

- (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 460

- (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

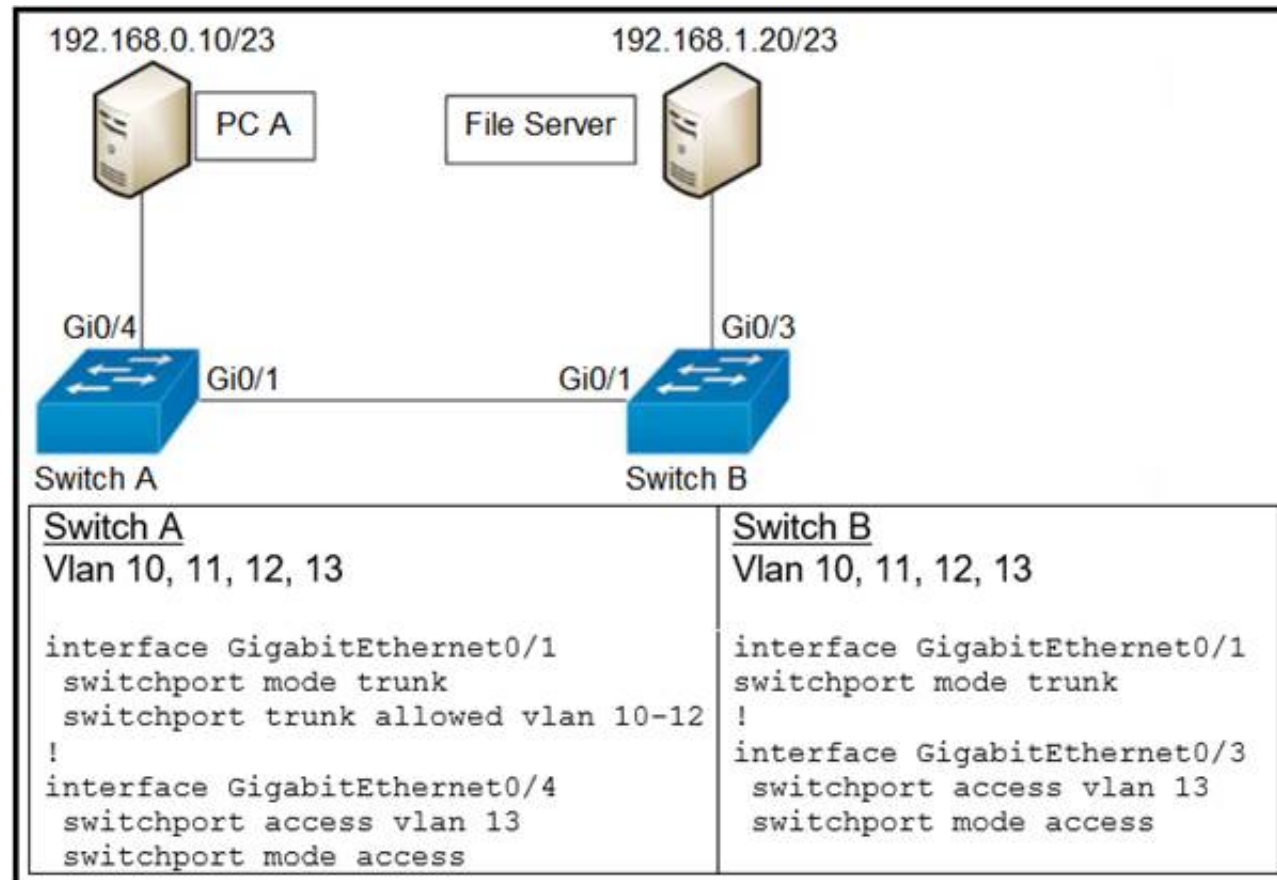
Answer: B

NEW QUESTION 465

- (Exam Topic 4)

Refer to the exhibit.

A network engineer must configure communication between PC A and the file server. Which command must be configured on switch A to prevent interruption of other communications?



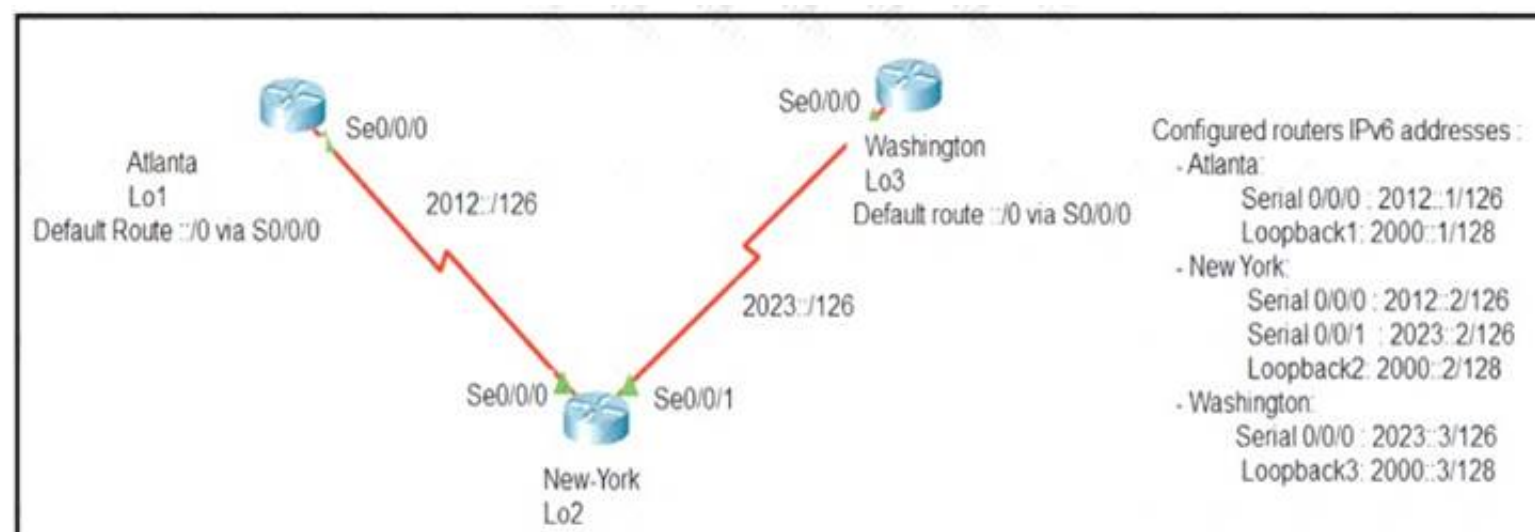
- A. switch port trunk allowed vlan 12
- B. switchport trunk allowed vlan none
- C. switchport trunk allowed vlan add 13
- D. switch port trunk allowed vlan remove 10-11

Answer: C

NEW QUESTION 467

- (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 470

- (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 472

- (Exam Topic 4)

Refer to the exhibit.

```
Cat9K-1# show lldp entry Cat9K-2

Local Intf: Gi1/0/21
Chassis id: 308b.b2b3.2880
Port id: Gi1/0/21
Port Description: GigabitEthernet1/0/21
System Name: Cat9K-2

Management Addresses:
  IP: 10.5.110.2
```

The network administrator must prevent the switch Cat9K-2 IP address from being visible in LLDP without disabling the protocol. Which action must be taken must be taken to complete the task?

- A. Configure the no lldp tlv-select-management-address command globally on Cat9K-2
- B. Configure the no lldp transmit command on interface G1/0/21 in Cat9K-1
- C. Configure the no lldp receive command on interface G1/0/21 on Cat9K-1
- D. Configure the no lldp mac-phy-cfg command globally on Cat9K-2

Answer: A

NEW QUESTION 475

- (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

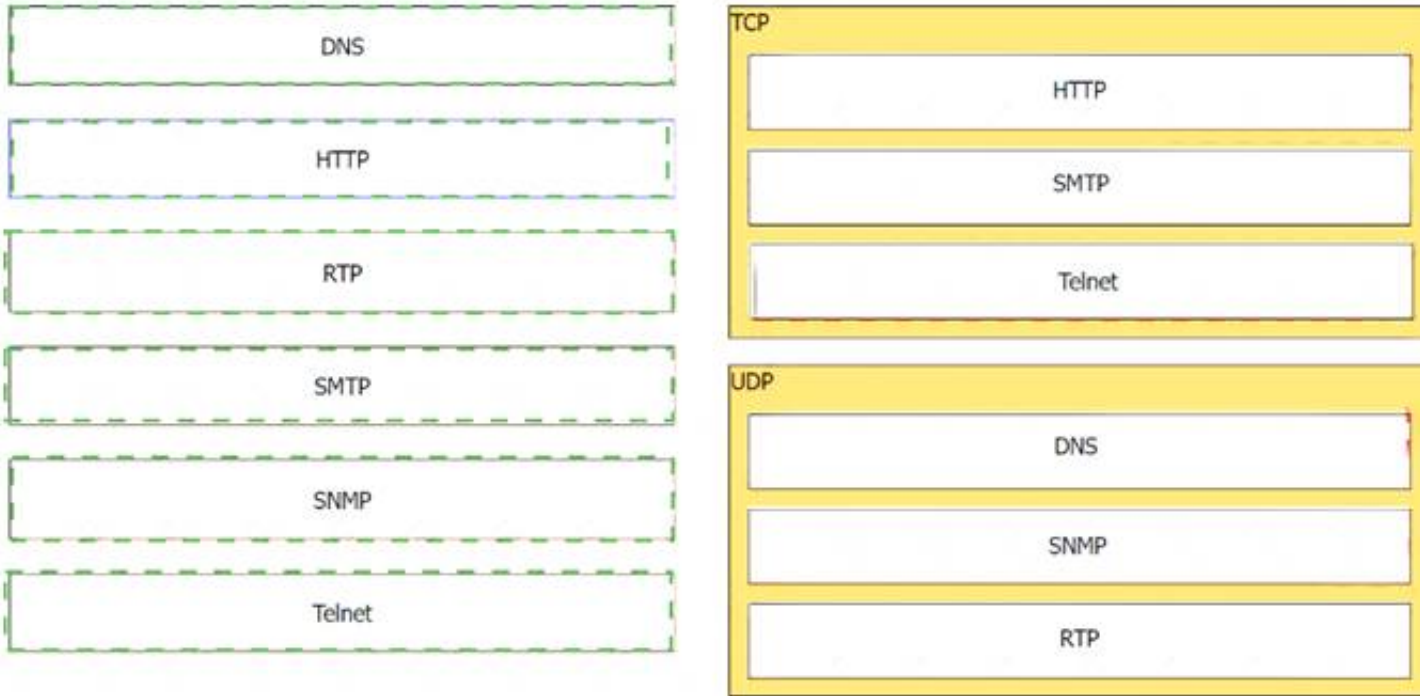
TCP

UDP

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 478

- (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 483

- (Exam Topic 4)

What must be considered for a locally switched FlexConnect AP if the VLANs that are used by the AP and client access are different?

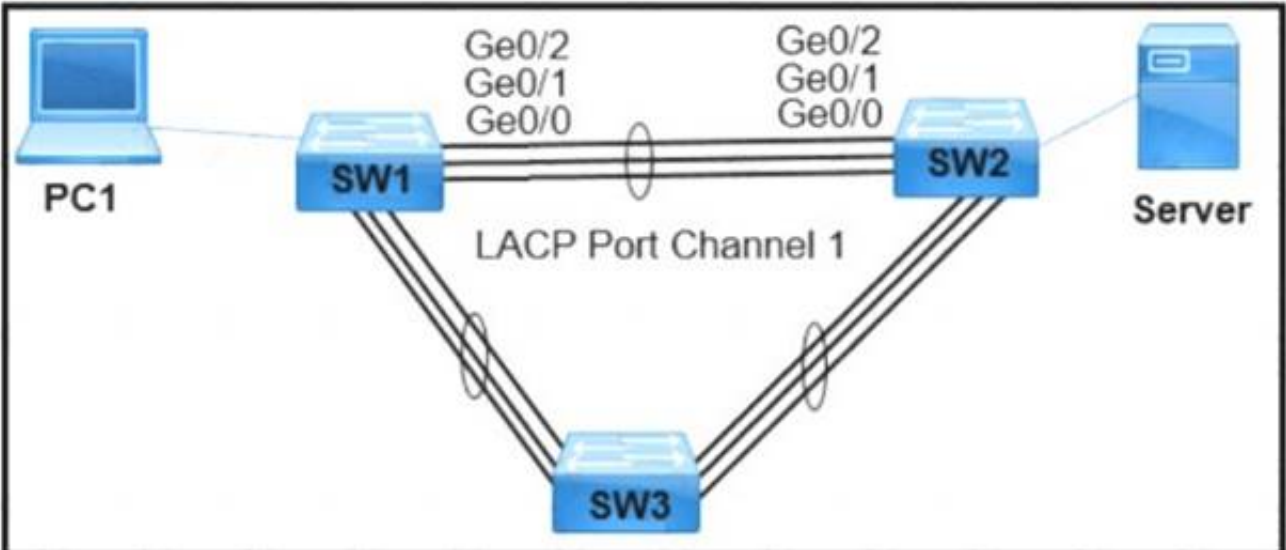
- A. The APs must be connected to the switch with multiple links in LAG mode
- B. The switch port mode must be set to trunk
- C. The native VLAN must match the management VLAN of the AP
- D. IEEE 802.10 trunking must be disabled on the switch port.

Answer: C

NEW QUESTION 486

- (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 488

- (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:

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

NEW QUESTION 491

- (Exam Topic 4)

Which two features introduced in SNMPv2 provides the ability to retrieve large amounts of data in one request

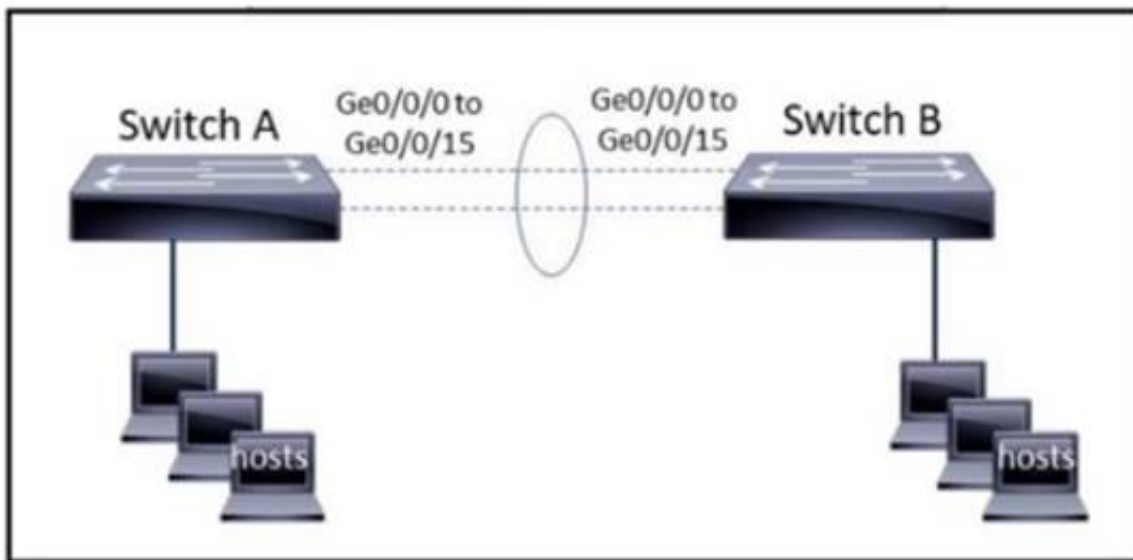
- A. Get
B. GetNext
C. Set
D. GetBulk
E. Inform

Answer: AD

NEW QUESTION 492

- (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 494

- (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 497

- (Exam Topic 4)

Which two wireless security stewards use Counter Mode Cipher Block Chaining Message Authentication Code Protocol for encryption and data integrity'? (Choose two.)

- A. WPA2
- B. WPA3
- C. Wi-Fi 6
- D. WEP
- E. WPA

Answer: BD

NEW QUESTION 501

- (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 502

- (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 503

- (Exam Topic 4)

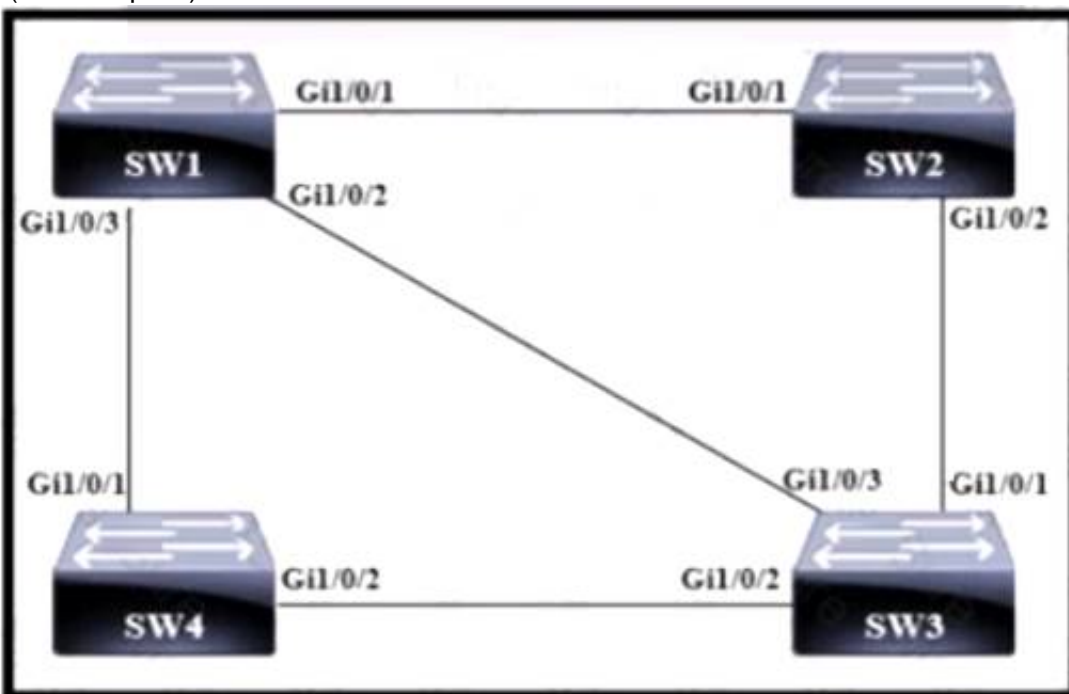
Which cipher is supported for wireless encryption only with the WPA2 standard?

- A. AES256
- B. AES
- C. RC4
- D. SHA

Answer: B

NEW QUESTION 504

- (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 508

- (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

confined to a single link

Global Unicast Address

serves as the next-hop addresses

is routable and reachable via the Internet

Link-Local Address

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
Graphical user interface, application Description automatically generated

NEW QUESTION 511

- (Exam Topic 4)
Drag and drop the WLAN components from the left onto the component details on the right.

access point	manages access points
virtual interface	provides Wi-Fi devices with a connection to a wired network
dynamic interface	used for out-of-band management
service port	used for guest authentication
wireless LAN controller	applied to the WLAN for wireless client communication

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

access point	wireless LAN controller
virtual interface	access point
dynamic interface	service port
service port	virtual interface
wireless LAN controller	dynamic interface

NEW QUESTION 514

- (Exam Topic 4)
What is the primary purpose of a console port on a Cisco WLC?

- A. In-band management via an asynchronous transport
- B. out-of-band management via an IP transport
- C. in-band management via an IP transport
- D. out-of-band management via an asynchronous transport

Answer: D

NEW QUESTION 517

- (Exam Topic 4)
Refer to the exhibit.


```
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
a - application route
+ - replicated route, ! - next hop override, p - overrides from PfR
Gateway of last resort is 0.0.0.0 to network 0.0.0.0
S* 0.0.0.0/0 is directly connected, Null0
    10.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
C    10.0.12.0/24 is directly connected, GigabitEthernet0/1
L    10.0.12.1/32 is directly connected, GigabitEthernet0/1
C    10.0.13.0/24 is directly connected, GigabitEthernet0/2
L    10.0.13.1/32 is directly connected, GigabitEthernet0/2
C    10.0.14.0/24 is directly connected, GigabitEthernet0/3
L    10.0.14.1/32 is directly connected, GigabitEthernet0/3
D    192.168.0.0/16 [90/130816] via 10.0.13.3, 00:10:09, GigabitEthernet0/2
O    192.168.0.0/23 [110/2] via 10.0.14.4, 00:00:46, GigabitEthernet0/3
S    192.168.0.0/24 [100/0] via 10.0.12.2
```

Which interface is chosen to forward traffic to the host at 192.168.0.55?

- A. GigabitEthernet0
- B. GigabitEthernet0/1
- C. Null0
- D. GigabitEthernet0/3

Answer: B

NEW QUESTION 521

- (Exam Topic 4)

Which Cisco proprietary protocol ensures traffic recovers immediately, transparently, and automatically when edge devices or access circuits fail?

- A. SLB
- B. FHRP
- C. VRRP
- D. HSRP

Answer: D

NEW QUESTION 526

- (Exam Topic 4)

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

orchestrates background device configuration

provides greater flexibility for custom and non-standard configurations

relies on per-device management

supports centralized software management

supports open APIs

uses individual software management

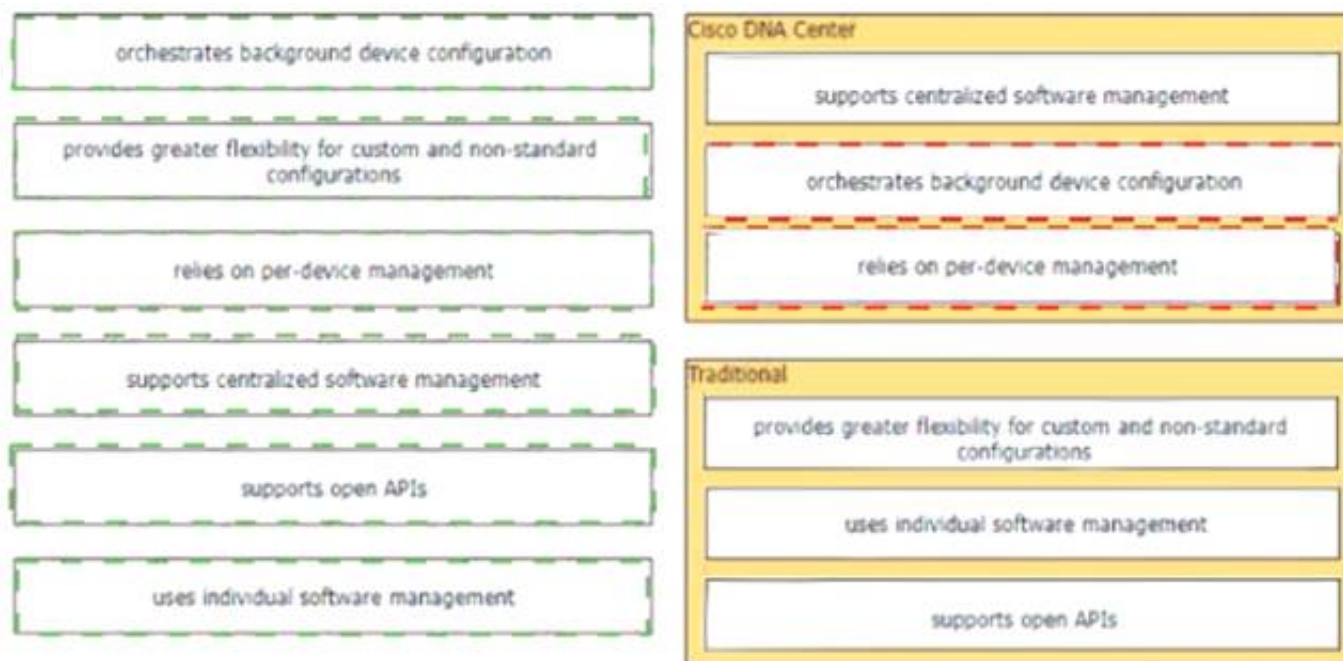
Cisco DNA Center

Traditional

- A. Mastered
- B. Not Mastered

Answer: A

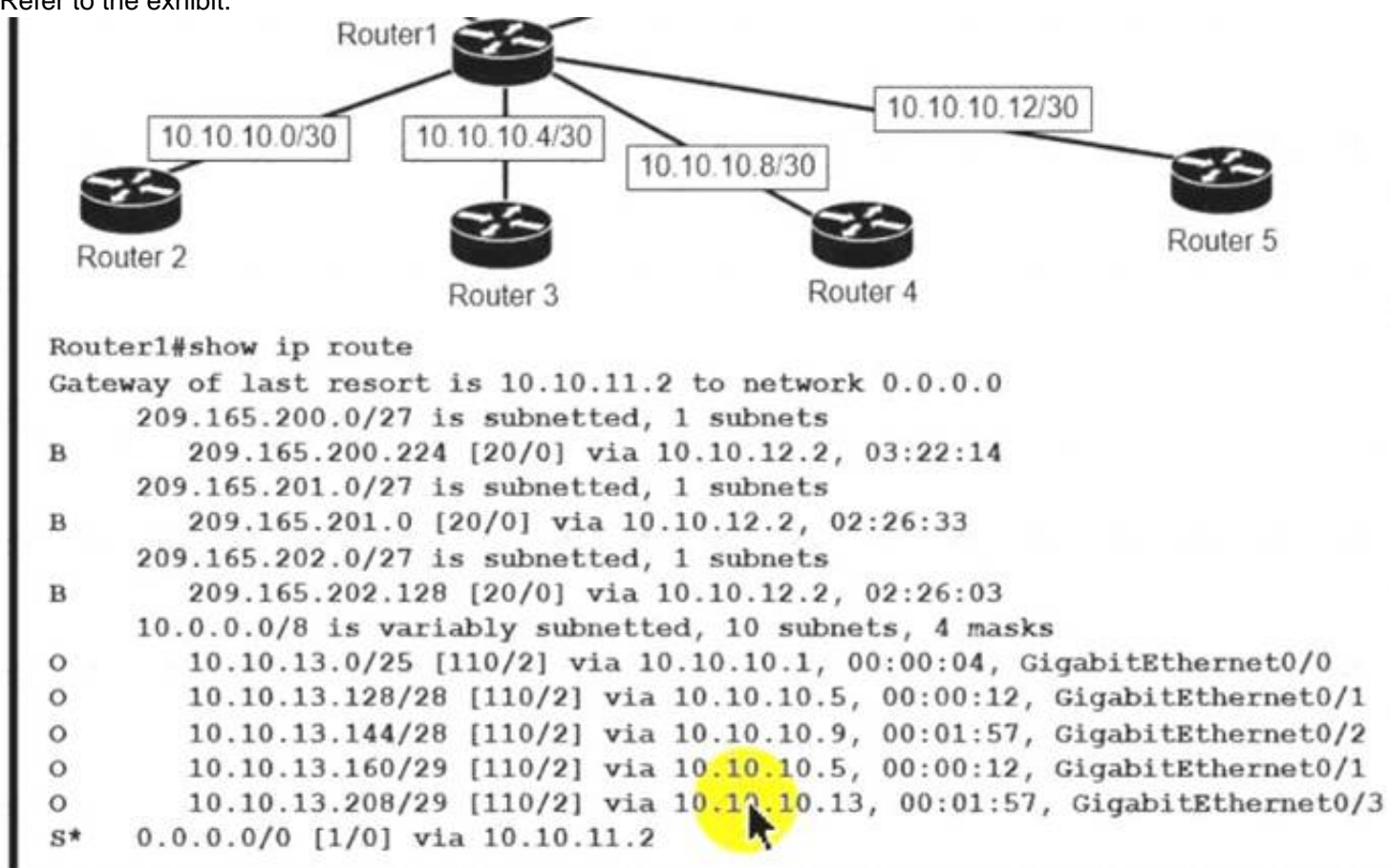
Explanation:



NEW QUESTION 527

- (Exam Topic 3)

Refer to the exhibit.



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 530

- (Exam Topic 4)

Which advantage does the network assurance capability of Cisco DNA Center provide over traditional campus management?

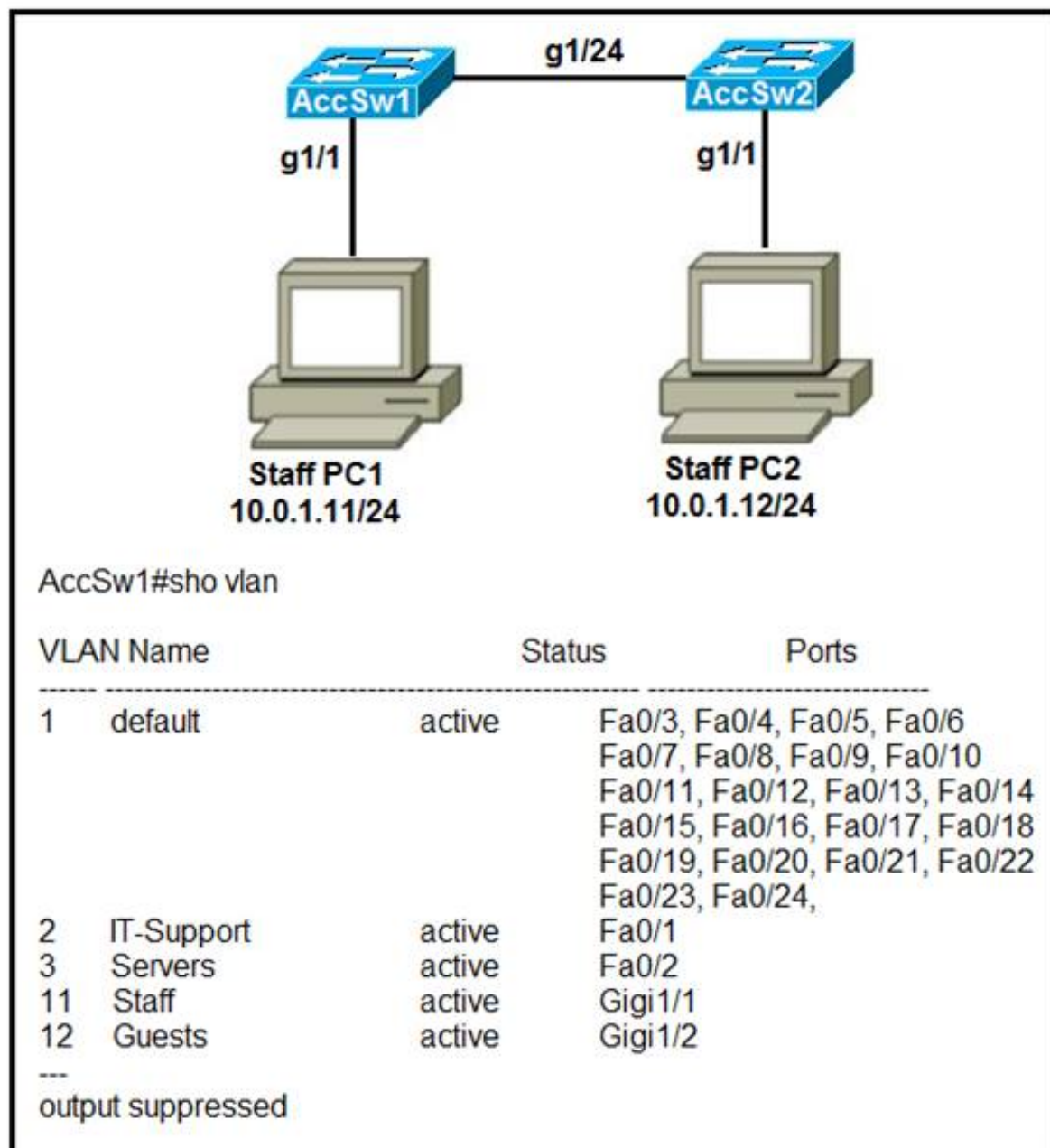
- A. Cisco DNA Center correlates information from different management protocols to obtain insights, and traditional campus management requires manual analysis.
- B. Cisco DNA Center handles management tasks at the controller to reduce the load on infrastructure devices, and traditional campus management uses the data backbone.
- C. Cisco DNA Center leverages YANG and NETCONF to assess the status of fabric and nonfabric devices, and traditional campus management uses CLI exclusively.
- D. Cisco DNA Center automatically compares security postures among network devices, and traditional campus management needs manual comparisons.

Answer: C

NEW QUESTION 531

- (Exam Topic 4)

Refer to the exhibit.



Switch AccSw2 has just been added to the network along with PC2. All VLANs have been implemented on AccSw2. How must the ports on AccSw2 be configured to establish Layer 2 connectivity between PC1 and PC2?

- A. Text Description automatically generated
- ☐ interface GigabitEthernet1/1
 switchport mode access
 switchport access vlan 11
 !
 interface GigabitEthernet1/24
 switchport mode trunk
- B. Text Description automatically generated
- ☐ interface GigabitEthernet1/2
 switchport mode access
 switchport access vlan 12
 !
 interface GigabitEthernet1/24
 switchport mode trunk
 switchport trunk allowed vlan 11,12
- C. Text Description automatically generated
- ☐ interface GigabitEthernet1/24
 switchport mode trunk
 switchport trunk allowed vlan 11,12
 !
 interface GigabitEthernet1/1
 switchport access vlan 11
- D. Text Description automatically generated
- ☐ interface GigabitEthernet1/2
 switchport mode access
 switchport access vlan 2
 !
 interface GigabitEthernet1/24
 switchport mode trunk

Answer: A

NEW QUESTION 533
 - (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 534

- (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 538

- (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 542

- (Exam Topic 4)

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

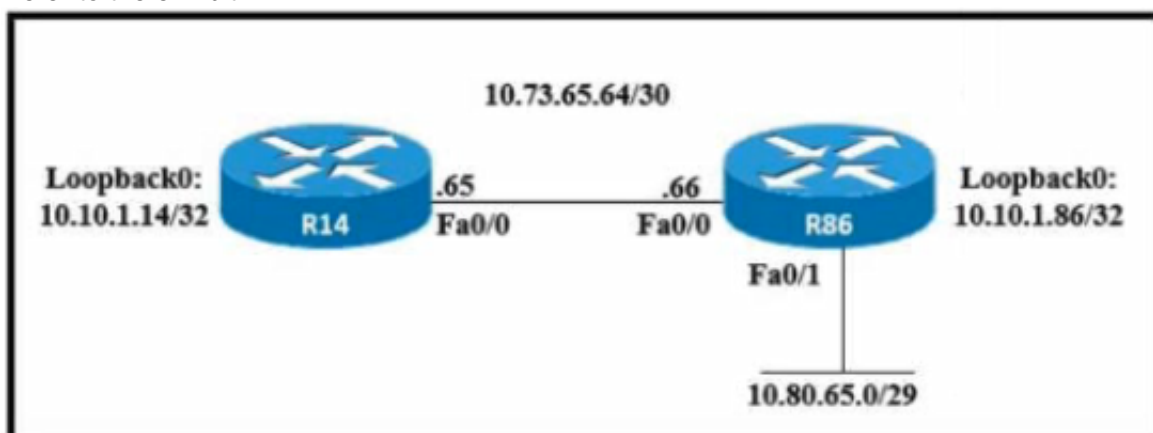
- A. ff02:0:0:0:0:0:0:1
- B. 2004:31c:73d9:683e:255::
- C. fffe:034:0dd:45d6:789e::
- D. fe80:4433:034:0dd::2

Answer: D

NEW QUESTION 543

- (Exam Topic 4)

Refer to the exhibit.



An engineer must configure a floating static route on an external EIGRP network. The destination subnet is the /29 on the LAN Interface of R86. Which command must be executed on R14?

- A. ip route 10.80.65.0.255.255.248.0.10.73.65.66.1
- B. ip route 10.80.65.0.255.255.255..240 fa0/1 89
- C. ip route 10.80.65.0.255.255.248.0.10.73.65.66.171
- D. ip route 10.80.65.0.0.0.224.10.80.65.0. 255

Answer: C

NEW QUESTION 546

- (Exam Topic 3)

Drag and drop the descriptions of AAA services from the left onto the corresponding services on the right.

allows the user to change to enable mode

limits the user's access permissions

logs session statistics

records user commands

secures access to routers

validates user credentials

Accounting

Authentication

Authorization

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Accounting

records user commands

logs session statistics

Authentication

validates user credentials

allows the user to change to enable mode

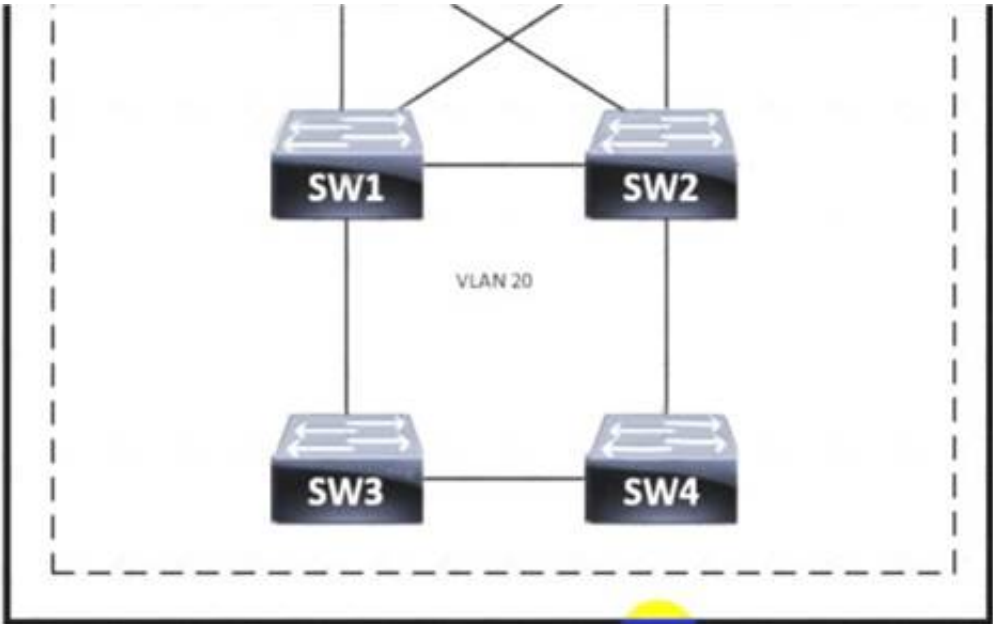
Authorization

limits the user's access permissions

secures access to routers

NEW QUESTION 550

- (Exam Topic 3)
Refer to the exhibit.



Which switch becomes the root of a spanning tree for VLAN 20 if all li links are of equal speed?

- SW1 = 24596 0018.184e.3c00
- SW2 = 28692 004a.14e5.4077
- SW3 = 32788 0022.55cf.dd00
- SW4 = 64000 0041.454d.407f

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

Answer: C

NEW QUESTION 554

- (Exam Topic 3)

What is a function of a Next-Generation IPS?

- A. makes forwarding decisions based on learned MAC addresses
- B. serves as a controller within a controller-based network
- C. integrates with a RADIUS server to enforce Layer 2 device authentication rules
- D. correlates user activity with network events

Answer: D

NEW QUESTION 556

- (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 561

- (Exam Topic 3)

An engineer must configure R1 for a new user account. The account must meet these requirements:

- * It must be configured in the local database.
- * The username is engineer.
- * It must use the strongest password configurable. Which command must the engineer configure on the router?

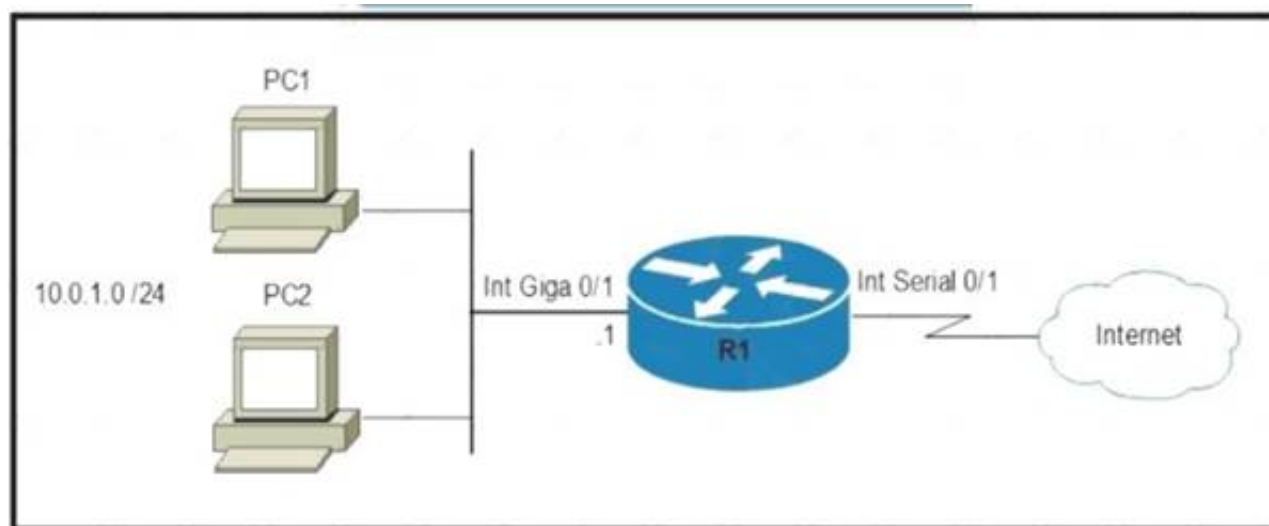
- A. R1 (config)# username engineer2 algorithm-type scrypt secret test2021
- B. R1(config)# username engineer2 secret 5 .password S1\$b1Ju\$kZbBS1Pyh4QzwXyZ
- C. R1(config)# username engineer2 privilege 1 password 7 test2021
- D. R1(config)# username englneer2 secret 4 S1Sb1Ju\$kZbBS1Pyh4QzwXyZ

Answer: B

NEW QUESTION 563

- (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 568

- (Exam Topic 3)

Drag and drop the statements about networking from the left onto the corresponding networking types on the right.

This type allows better control over how networks work and how networks are configured.	Traditional Networking
This type enables networks to integrate with applications through APIs.	
New devices are configured using the physical infrastructure.	
This type provisions resources from a centralized location.	Controller-Based Networking
This type requires a distributed control plane.	

- A. Mastered

B. Not Mastered

Answer: A

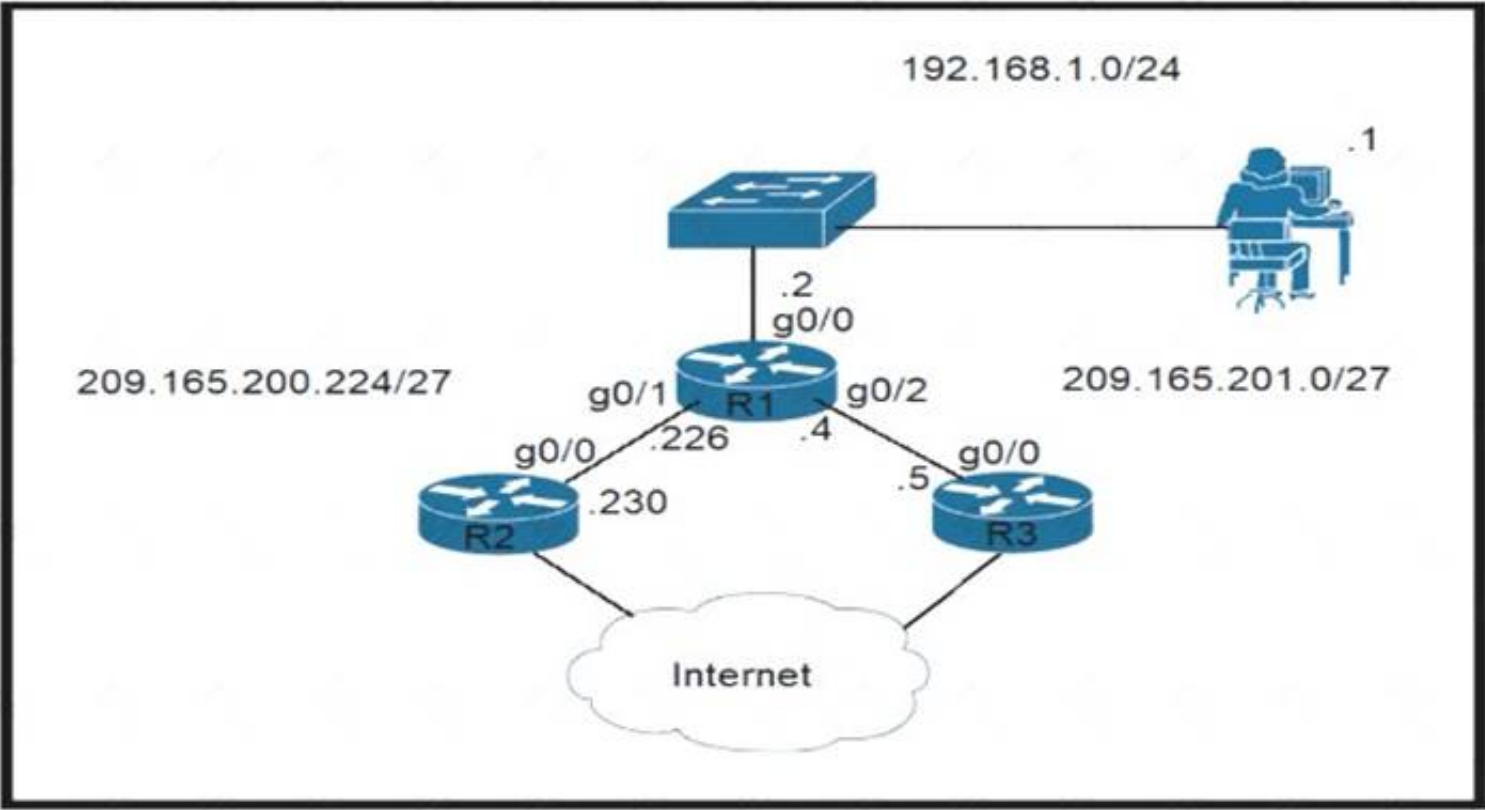
Explanation:

A picture containing table Description automatically generated

NEW QUESTION 569

- (Exam Topic 3)

Refer to the exhibit.



Router R1 currently is configured to use R3 as the primary route to the Internet, and the route uses the default administrative distance settings. A network engineer must configure R1 so that it uses R2 as a backup, but only if R3 goes down. Which command must the engineer configure on R1 so that it correctly uses R2 as a backup route, without changing the administrative distance configuration on the link to R3?

- A. ip route 0.0.0.0 0.0.0.0 g0/1 1

B. ip route 0.0.0.0 0.0.0.0 209.165.201.5 10

C. ip route 0.0.0.0 0.0.0.0 209.165.200.226 1

D. ip route 0,0.0.0 0.0.0.0 g0/1 6

Answer: C

NEW QUESTION 573

- (Exam Topic 3)

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

BPDUs received are forwarded to the system module.

BPDUs received from the system module are processed and transmitted.

Frames received from the attached segment are discarded.

Frames received from the attached segment are processed.

Switched frames received from other ports are advanced.

The port in the forwarding state responds to network management messages.

action

action

action

action

4/

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

BPDUs received are forwarded to the system module.

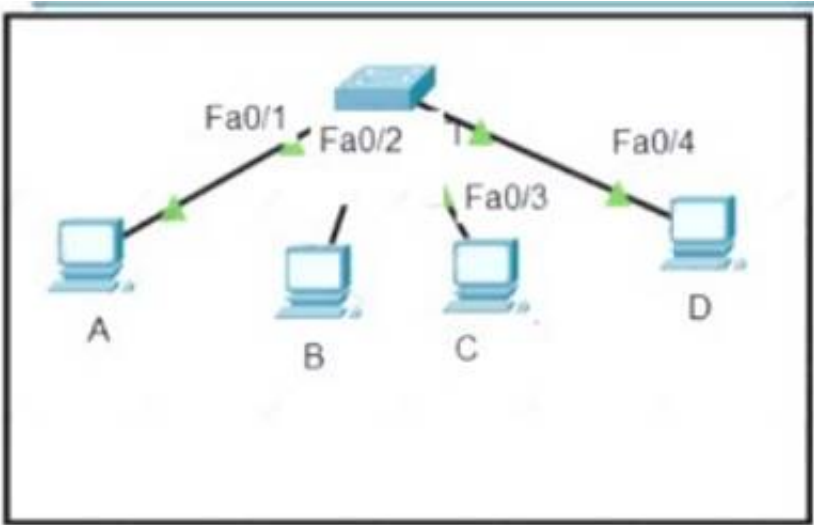
BPDUs received from the system module are processed and transmitted.

Frames received from the attached segment are discarded.

The port in the forwarding state responds to network management messages.

NEW QUESTION 575

- (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#
```

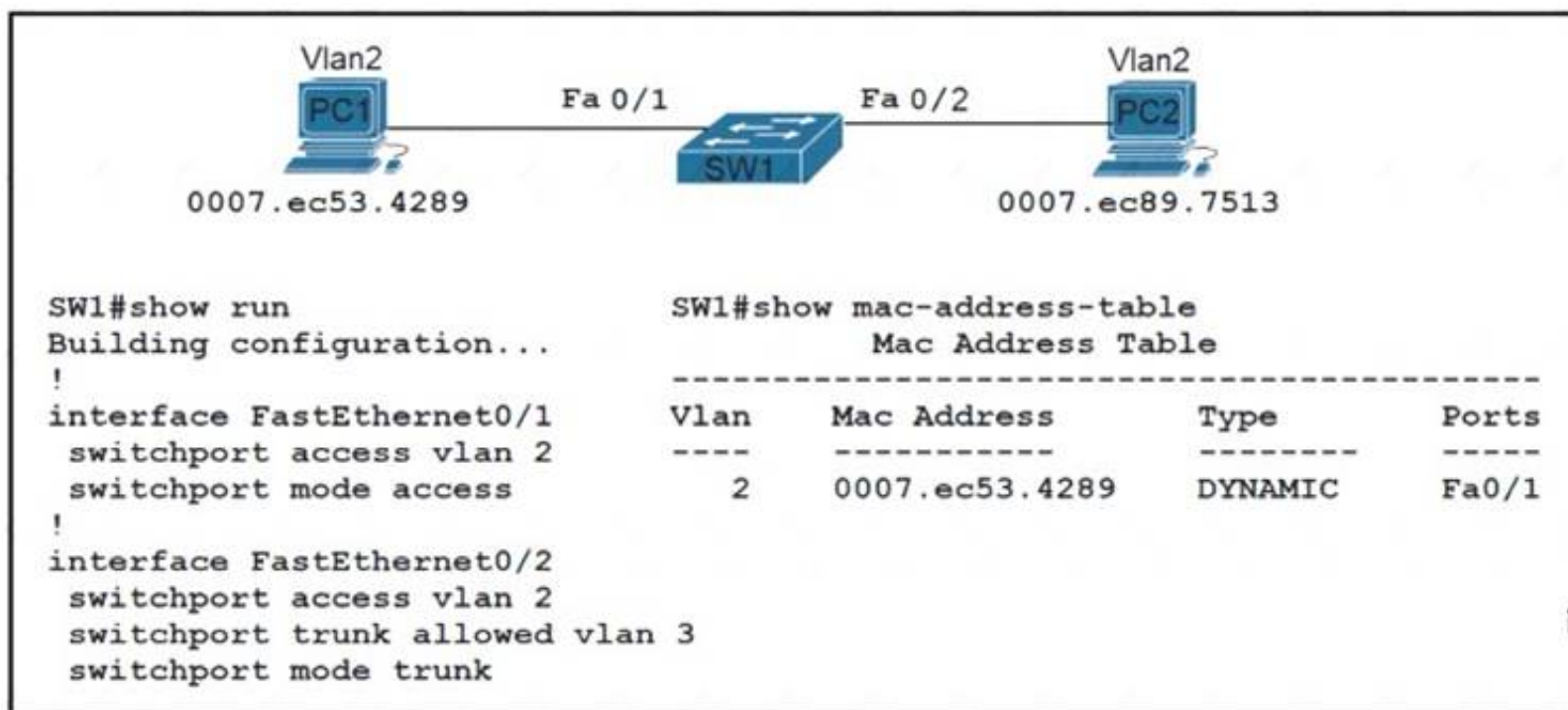
What does the switch do when it receives the frame from host A?

- 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 579

- (Exam Topic 3)
Refer to the exhibit.



An engineer has started to configure replacement switch SW1. To verify part of the configuration, the engineer issued the commands as shown and noticed that the entry for PC2 is missing. Which change must be applied to SW1 so that PC1 and PC2 communicate normally?

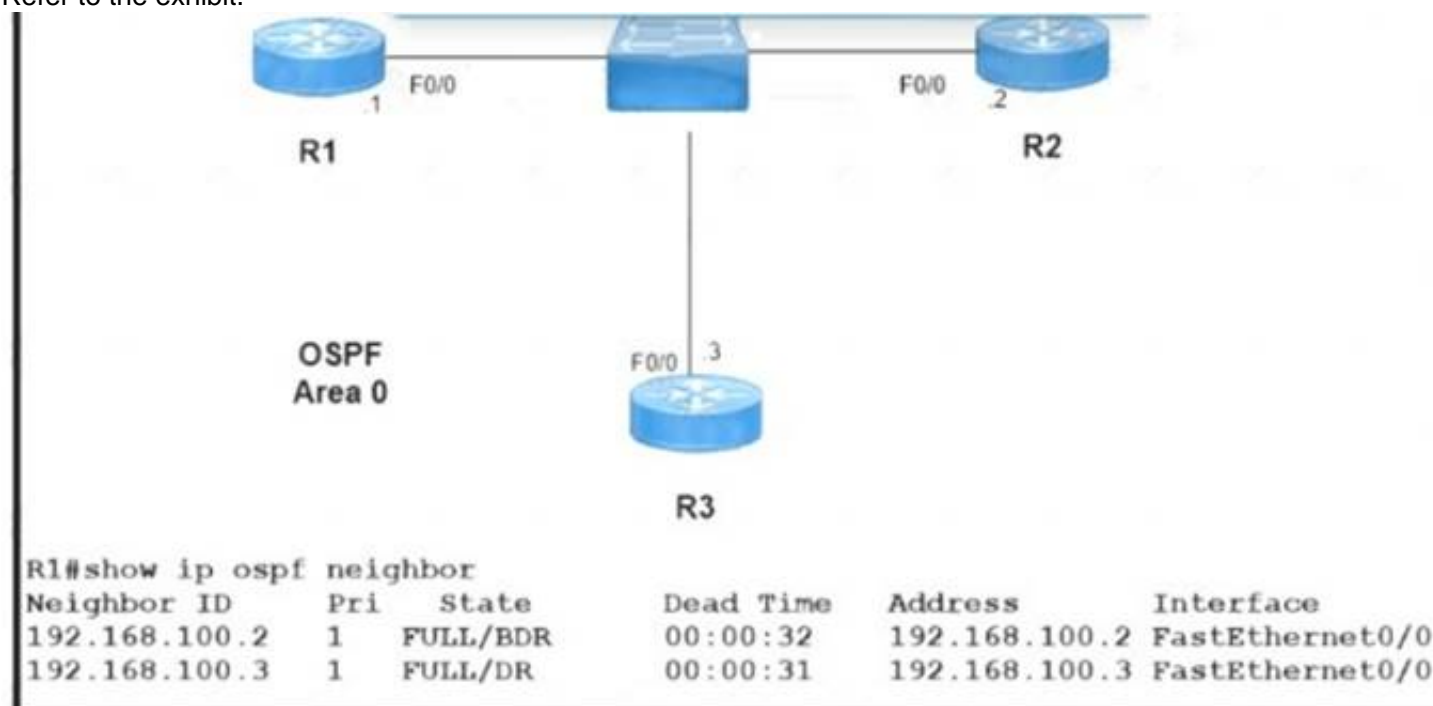
- A)
SW1(config)#interface fa0/2
SW1(config-if)#no switchport mode trunk
SW1(config-if)#no switchport trunk allowed vlan 3
SW1(config-if)#switchport mode access
- B)
SW1(config)#interface fa0/1
SW1(config-if)#no switchport access vlan 2
SW1(config-if)#switchport trunk native vlan 2
SW1(config-if)#switchport trunk allowed vlan 3
- C)
SW1(config)#interface fa0/1
SW1(config-if)#no switchport access vlan 2
SW1(config-if)#switchport access vlan 3
SW1(config-if)#switchport trunk allowed vlan 2
- D)
SW1(config)#interface fa0/2
SW1(config-if)#no switchport access vlan 2
SW1(config-if)#no switchport trunk allowed vlan 3
SW1(config-if)#switchport trunk allowed vlan 2

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

Answer: A

NEW QUESTION 580

- (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 581

- (Exam Topic 3)

A network engineer must configure two new subnets using the address block 10.70.128.0/19 to meet these requirements:

- The first subnet must support 24 hosts
- The second subnet must support 472 hosts
- Both subnets must use the longest subnet mask possible from the address block

Which two configurations must be used to configure the new subnets and meet a requirement to use the first available address in each subnet for the router interfaces? (Choose two)

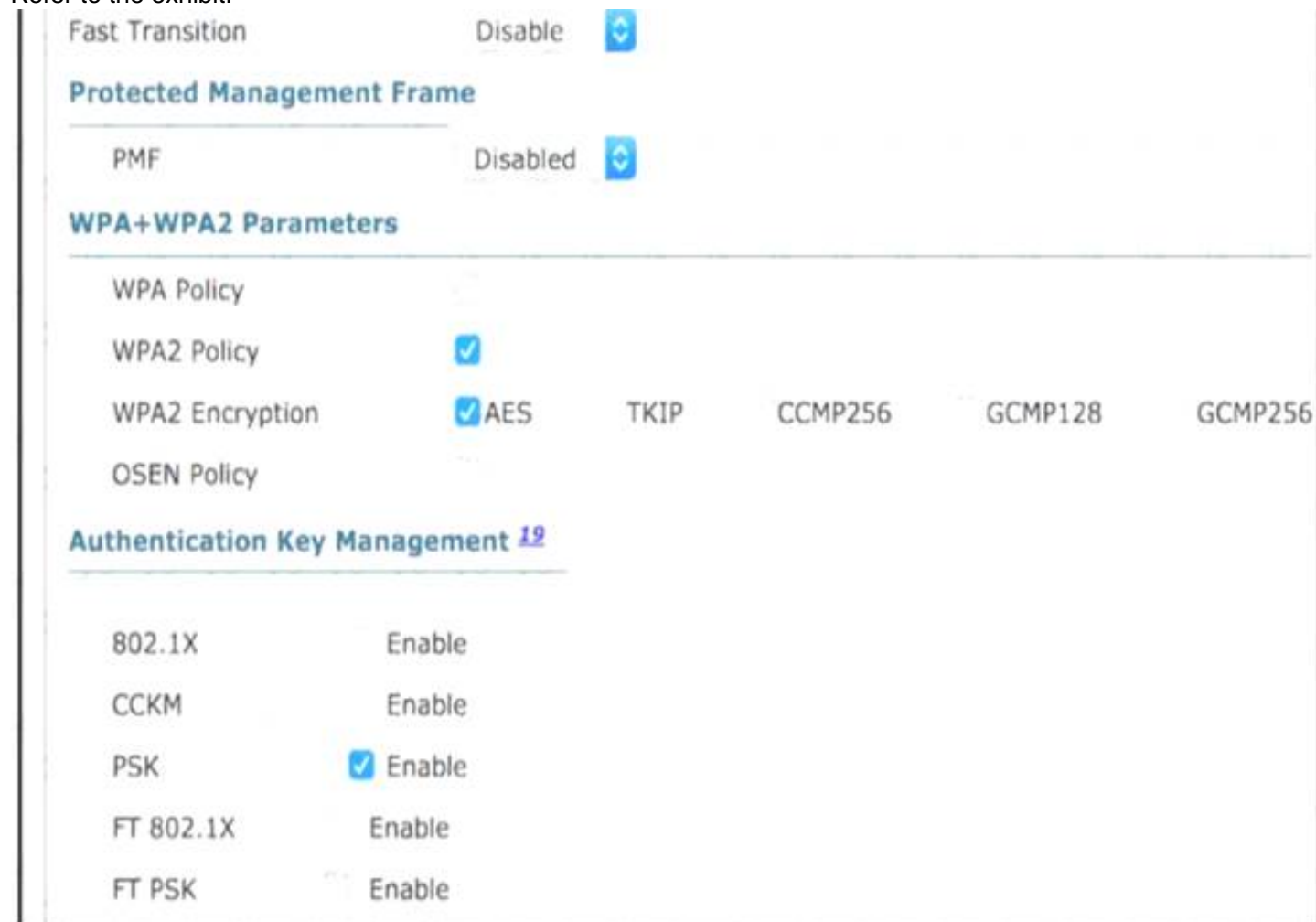
- A. interface vlan 1234ip address 10.70.159.1 255.255.254.0
B. interface vlan 1148ip address 10.70.148.1 255.255.254.0
C. interface vlan 4722ip address 10.70.133.17 255.255.255.192
D. interface vlan 3002ip address 10.70.147.17 255.255.255.224
E. interface vlan 155ip address 10.70.155.65 255.255.255.224

Answer: BD

NEW QUESTION 586

- (Exam Topic 3)

Refer to the exhibit.



The screenshot shows a configuration page with the following sections:

- Fast Transition:** Disable (dropdown arrow)
- Protected Management Frame:**
 - PMF: Disabled (dropdown arrow)
- WPA+WPA2 Parameters:**
 - WPA Policy: (dropdown arrow)
 - WPA2 Policy: ☒
 - WPA2 Encryption: ☒ AES, TKIP, CCMP256, GCMP128, GCMP256
 - OSN Policy: (dropdown arrow)
- Authentication Key Management ¹⁹:**
 - 802.1X: Enable
 - CCKM: Enable
 - PSK: ☒ Enable
 - FT 802.1X: Enable
 - FT PSK: Enable

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 589

- (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 591

- (Exam Topic 3)

R1 as an NTP server must have:

- NTP authentication enabled
- NTP packets sourced from Interface loopback 0
- NTP stratum 2
- NTP packets only permitted to client IP 209.165.200.225

How should R1 be configured?

A)

```
ntp authenticate
ntp authentication-key 2 md5 CISCO123
ntp source Loopback0
nntp access-group server-only 10
ntp master 2
!
access-list 10 permit 209.165.200.225
```

B)

```
ntp authenticate
ntp authentication-key 2 md5 CISCO123
ntp source Loopback0
ntp access-group server-only 10
ntp stratum 2
!
access-list 10 permit udp host 209.165.200.225 any eq 123
```

C)

```
ntp authenticate
ntp authentication-key 2 sha1 CISCO123
ntp source Loopback0
ntp access-group server-only 10
ntp master 2
!
access-list 10 permit udp host 209.165.200.225 any eq 123
```

D)

```
ntp authenticate
ntp authentication-key 2 md5 CISCO123
ntp interface Loopback0
ntp access-group server-only 10
```

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

Answer: B

NEW QUESTION 593

- (Exam Topic 3)

Drag and drop the functions of SNMP fault-management from the left onto the definitions on the right.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Table Description automatically generated

event correlation and aggregation
fault detection
fault diagnosis and isolation
problem resolution
restoration of service

NEW QUESTION 595

- (Exam Topic 3)

Refer to the exhibit.

```
R1# show ip route
Codes:
C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP, D -
EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area N1 - OSPF NSSA
external type 1, N2 - OSPF NSSA external type 2, E1 - OSPF external type
1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate default,
U - per-user static route, o - ODR
Gateway of last resort is not set
C 10.0.0.0/8 is directly connected, Loopback0
10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
O 10.0.1.3/32 [110/100] via 10.0.1.100, 00:39:08, Serial0
C 10.0.1.0/24 is directly connected, Serial0
O 10.0.1.5/32 [110/5] via 10.0.1.50, 00:39:08, Serial0
O 10.0.10.0/24 [110/10] via 10.0.1.4, 00:39:08, Gigabit Ethernet 0/0
D 10.0.10.0/24 [90/10] via 10.0.1.5, 00:39:08, Gigabit Ethernet 0/1
```

Web traffic is coming in from the WAN interface. Which route takes precedence when the router is processing traffic destined for the LAN network at 10.0.10.0/24?

- A. via next-hop 10.0.1.5
- B. via next-hop 10.0.1.4
- C. via next-hop 10.0.1.50
- D. via next-hop 10.0.1.100

Answer: A

NEW QUESTION 599

- (Exam Topic 3)

Which wireless security protocol relies on Perfect Forward Secrecy?

- A. WPA3

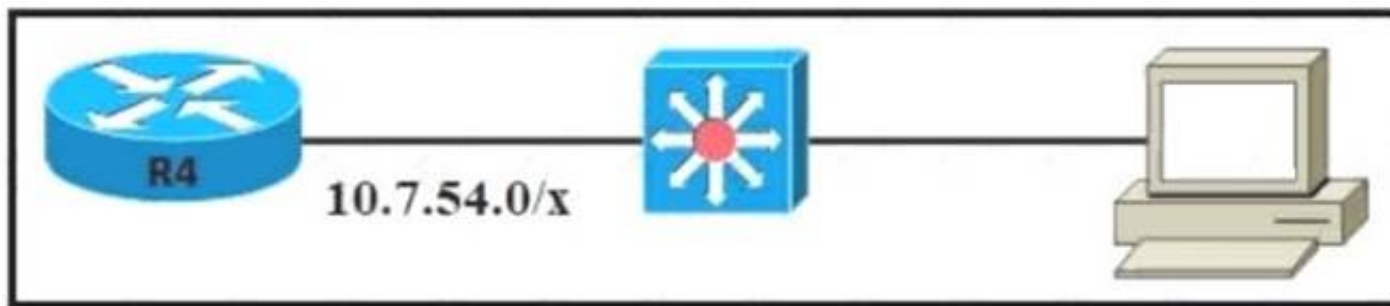
- B. WPA
- C. WEP
- D. WPA2

Answer: A

NEW QUESTION 600

- (Exam Topic 3)

Refer to the exhibit.



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

A)

Subnet: 10.7.54.0
Subnet mask: 255.255.254.0
Broadcast address: 10.7.54.255
Usable IP address range: 10.7.54.1 - 10.7.55.254

B)

Subnet: 10.7.54.0
Subnet mask: 255.255.254.0
Broadcast address: 10.7.55.255
Usable IP address range: 10.7.54.1 - 10.7.55.254

C)

Subnet: 10.7.54.0
Subnet mask: 255.255.128.0
Broadcast address: 10.7.55.255
Usable IP address range: 10.7.54.1 - 10.7.55.254

D)

Subnet: 10.7.54.0
Subnet mask: 255.255.255.0
Broadcast address: 10.7.54.255
Usable IP address range: 10.7.54.1 - 10.7.55.254

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

Answer: B

NEW QUESTION 604

- (Exam Topic 3)

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

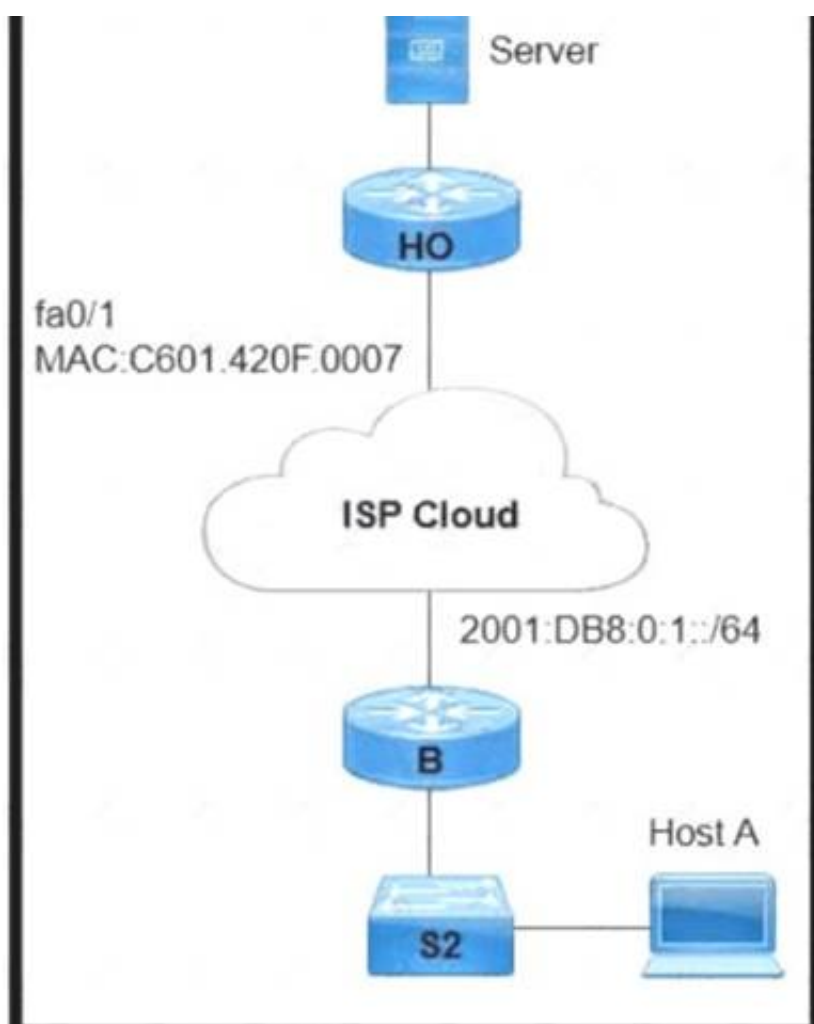
- A. global unicast address
- B. anycast address
- C. multicast address
- D. link-local address

Answer: B

NEW QUESTION 609

- (Exam Topic 3)

Refer to the exhibit.



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

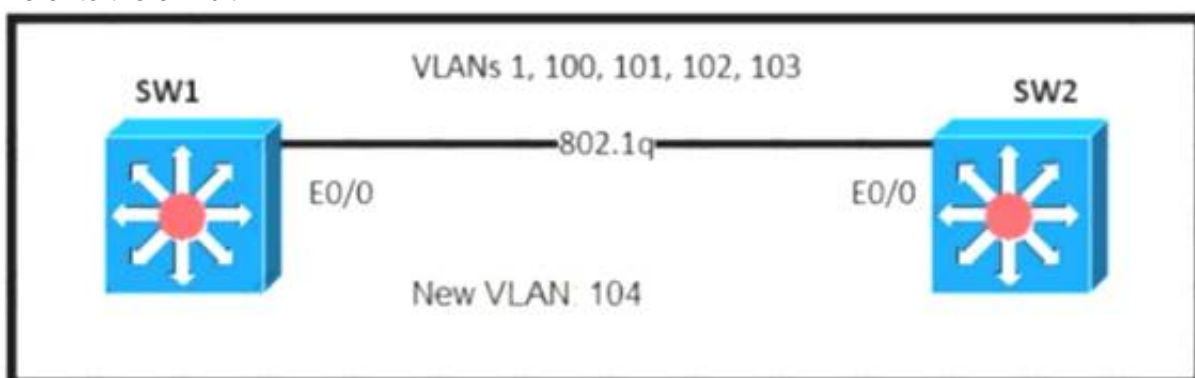
- A. ipv6 address 2001:DB8:0:1:C601:42FF:FE0F:7/64
- B. ipv6 address 2001:DB8:0:1:C601:42FE:800F:7/64
- C. ipv6 address 2001 :DB8:0:1:FFFF:C601:420F:7/64
- D. iov6 address 2001 :DB8:0:1:FE80:C601:420F:7/64

Answer: A

NEW QUESTION 613

- (Exam Topic 3)

Refer to the exhibit.



An engineer is asked to insert the new VLAN into the existing trunk without modifying anything previously configured. Which command accomplishes this task?

- A. switchport trunk allowed vlan 100-104
- B. switchport trunk allowed vlan add 104
- C. switchport trunk allowed vlan all
- D. switchport trunk allowed vlan 104

Answer: D

NEW QUESTION 616

- (Exam Topic 3)

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

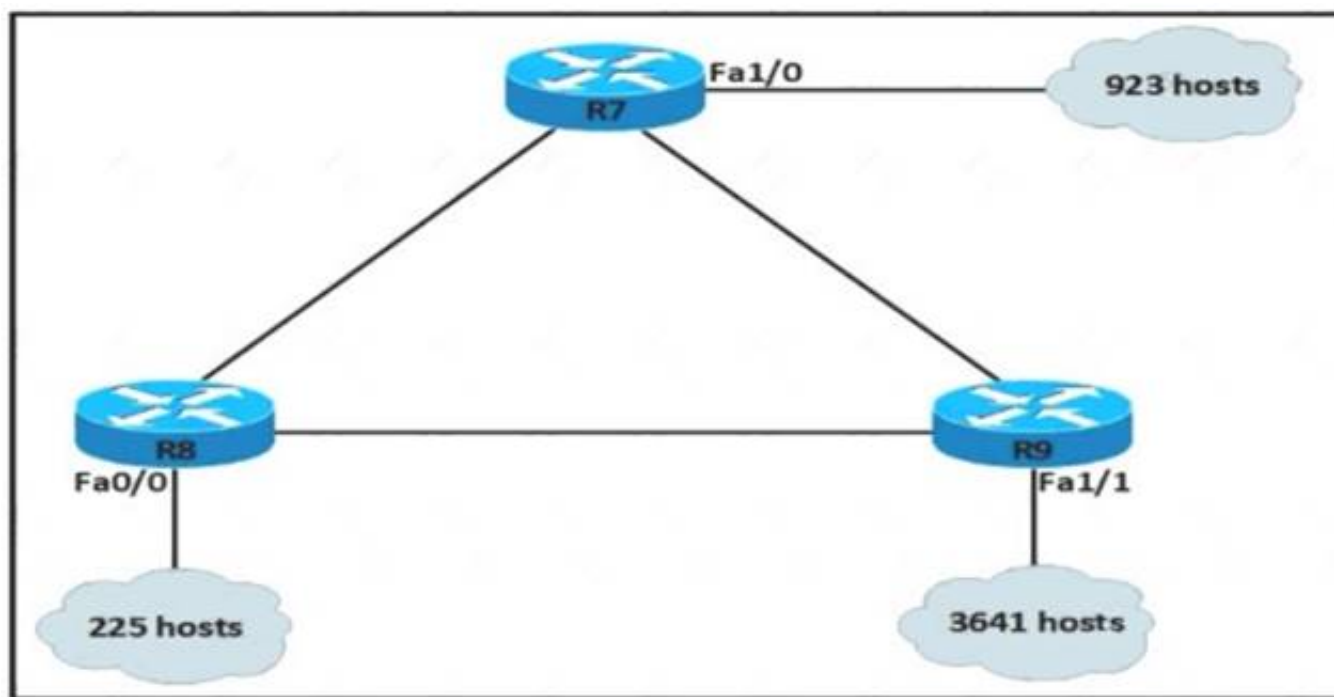
- A. nothing plugged into the port
- B. link flapping
- C. shutdown command issued on the port
- D. latency

Answer: B

NEW QUESTION 620

- (Exam Topic 3)

Refer to the exhibit.



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

A)

```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.252.0
no shutdown
```

```
R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.255.0
no shutdown
```

```
R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.240.0
no shutdown
```

B)

```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.248.0
no shutdown
```

```
R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.254.0
no shutdown
```

```
R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.248.0
no shutdown
```

C)

```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.240.0
no shutdown
```

```
R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.224.0
no shutdown
```

```
R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.192.0
no shutdown
```

D)

```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.192.0
no shutdown
```

```
R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.224.0
no shutdown
```

```
R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.128.0
no shutdown
```

A. Option A

B. Option B

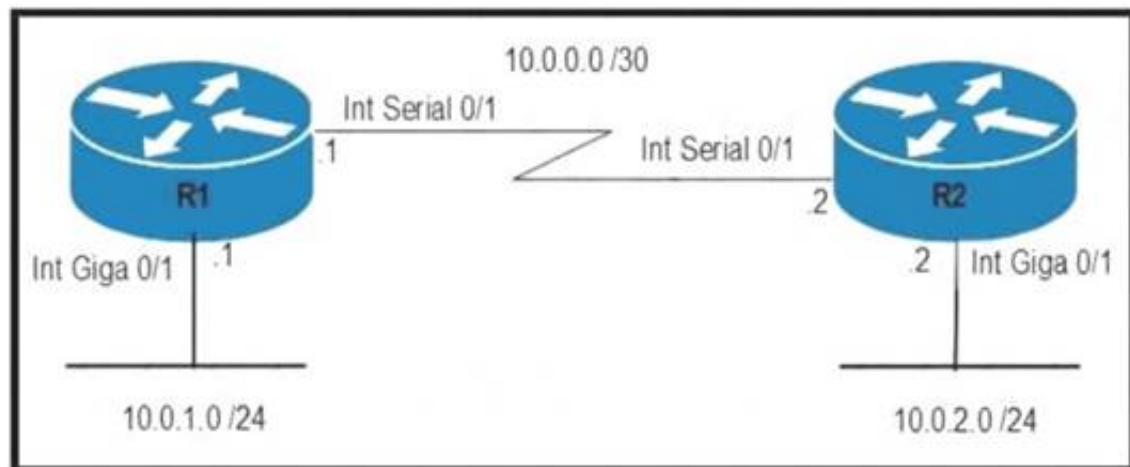
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 625

- (Exam Topic 3)

Refer to the exhibit.



Which command configures OSPF on the point-to-point link between routers R1 and R2?

- A. router-id 10.0.0.15
- B. neighbor 10.1.2.0 cost 180
- C. ipospf priority 100
- D. network 10.0.0.0 0.0.0.255 area 0

Answer: D

NEW QUESTION 629

- (Exam Topic 3)

An engineer is configuring remote access to a router from IP subnet 10.139.58.0/28. The domain name, crypto keys, and SSH have been configured. Which configuration enables the traffic on the destination router?

A)

```
interface FastEthernet0/0
 ip address 10.122.49.1 255.255.255.240
 access-group 120 in

ip access-list extended 120
 permit tcp 10.139.58.0 255.255.255.248 any eq 22
```

B)

```
interface FastEthernet0/0
 ip address 10.122.49.1 255.255.255.252
 ip access-group 110 in

ip access-list extended 110
 permit tcp 10.139.58.0 0.0.0.15 host 10.122.49.1 eq 22
```

C)

```
interface FastEthernet0/0
 ip address 10.122.49.1 255.255.255.248
 ip access-group 10 in

ip access-list standard 10
 permit udp 10.139.58.0 0.0.0.7 host 10.122.49.1 eq 22
```

D)

```
interface FastEthernet0/0
 ip address 10.122.49.1 255.255.255.252
 ip access-group 105 in

ip access-list standard 105
 permit tcp 10.139.58.0 0.0.0.7 eq 22 host 10.122.49.1
```

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

Answer: B

NEW QUESTION 630

- (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 633

- (Exam Topic 3)

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

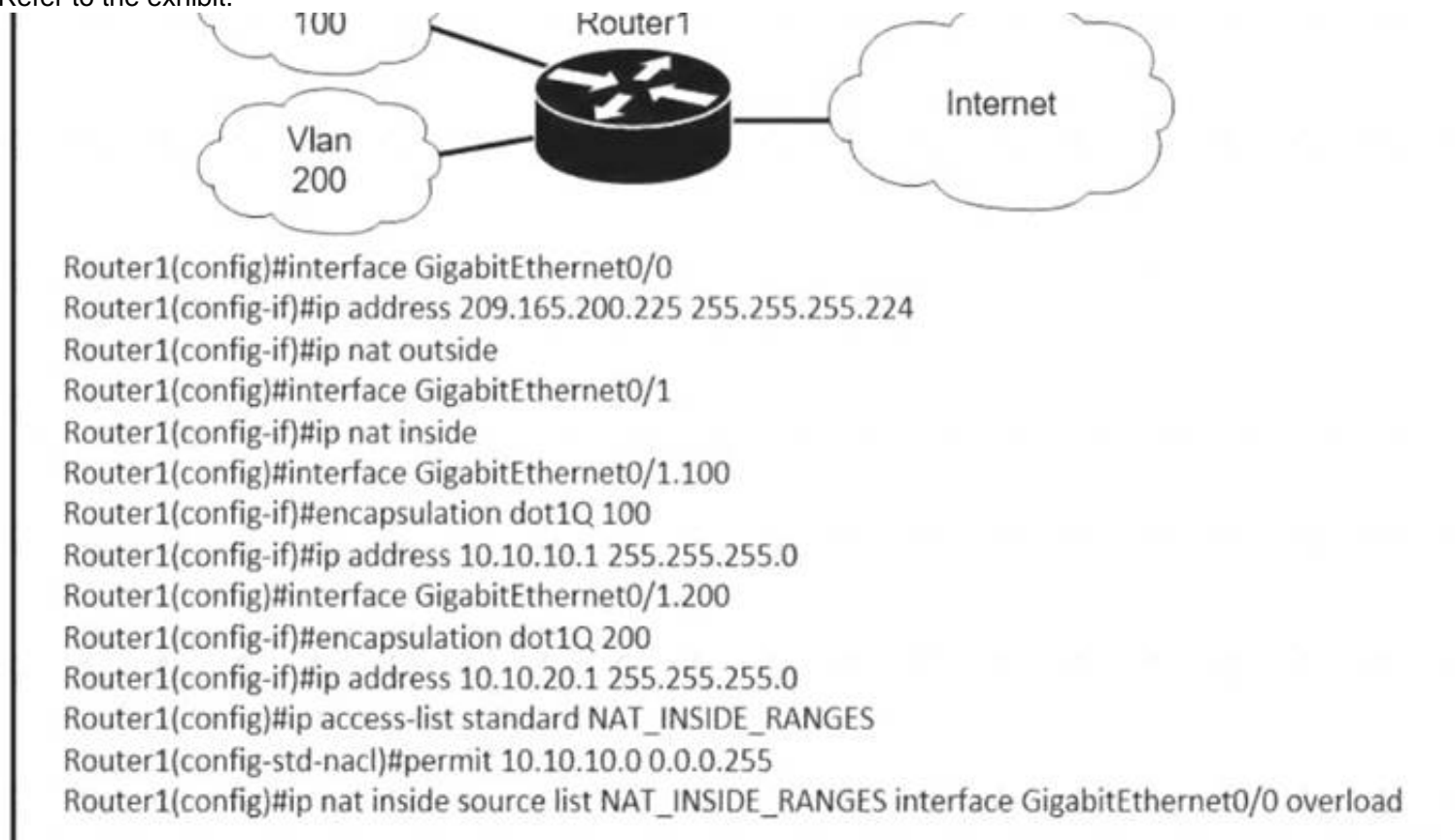
- A. to increase security and encrypt management frames
- B. to provide link redundancy and load balancing
- C. to allow for stateful and link-state failover
- D. to enable connected switch ports to failover and use different VLANs

Answer: B

NEW QUESTION 634

- (Exam Topic 3)

Refer to the exhibit.



Users on existing VLAN 100 can reach sites on the Internet. Which action must the administrator take to establish connectivity to the Internet for users in VLAN 200?

- A. Define a NAT pool on the router.
- B. Configure static NAT translations for VLAN 200.
- C. Configure the ip nat outside command on another interface for VLAN 200.
- D. Update the NAT INSIDE RANGES ACL

Answer: B

NEW QUESTION 636

- (Exam Topic 3)

Which type of network attack overwhelms the target server by sending multiple packets to a port until the half-open TCP resources of the target are exhausted?

- A. SYIM flood
- B. reflection
- C. teardrop
- D. amplification

Answer: A

NEW QUESTION 637

- (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 638

- (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 642

- (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

255.255.255.128

255.255.255.240

255.255.255.248

255.255.255.224

255.255.255.252

NEW QUESTION 647

- (Exam Topic 3)

A network engineer is configuring a switch so that it is remotely reachable via SSH. The engineer has already configured the host name on the router. Which additional command must the engineer configure before entering the command to generate the RSA key?

- A. password password
- B. crypto key generate rsa modulus 1024
- C. ip domain-name domain
- D. ip ssh authentication-retries 2

Answer: C

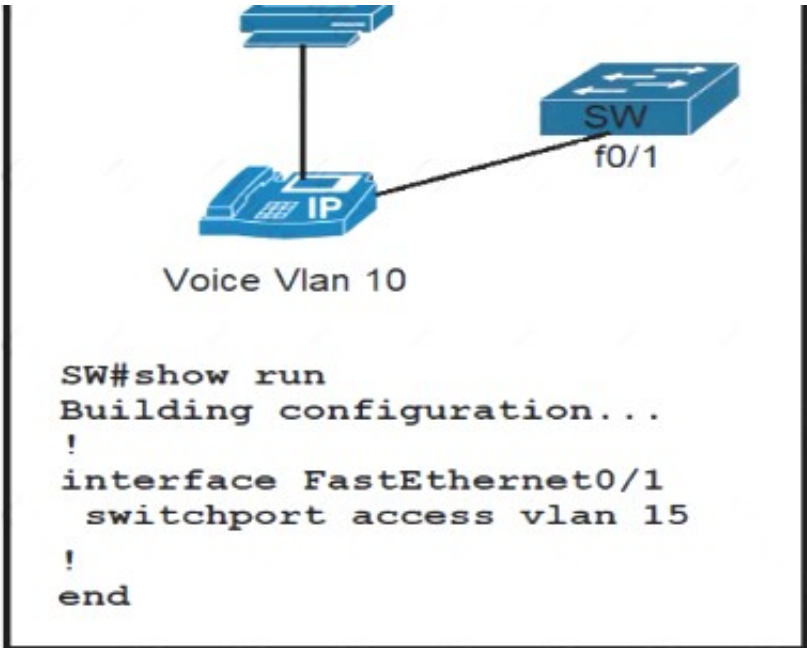
Explanation:

<https://www.cisco.com/c/en/us/solutions/small-business/resource-center/networking/how-to-setup-network-swit>

NEW QUESTION 649

- (Exam Topic 3)

Refer to the exhibit.



All VLANs are present in the VLAN database. Which command sequence must be applied to complete the configuration?

- A. Interface FastEthernet0/1 switchport trunk native vlan 10 switchport trunk allowed vlan 10,15
- B. Interface FastEthernet0/1 switchport mode trunk switchport trunk allowed vlan 10,15
- C. interface FastEthernet0/1 switchport mode access switchport voice vlan 10
- D. Interface FastEthernet0/1 switchport trunk allowed vlan add 10 vlan 10 private-vlan isolated

Answer: C

NEW QUESTION 650

- (Exam Topic 3)

An engineer is tasked to configure a switch with port security to ensure devices that forward unicasts multicasts and broadcasts are unable to flood the port The port must be configured to permit only two random MAC addresses at a time Drag and drop the required configuration commands from the left onto the sequence on the right Not all commands are used.

switchport mode access

switchport port-security

switchport port-security mac-address 0060.3EDD.77AB

switchport port-security mac-address 00D0.D3ED.622A

switchport port-security mac-address sticky

switchport port-security maximum 2

switchport port-security violation shutdown

1

2

3

4

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Diagram Description automatically generated

NEW QUESTION 651

- (Exam Topic 3)

Which two spanning-tree states are bypassed on an interface running PortFast? (Choose two.)

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

Answer: BD

NEW QUESTION 655

- (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 660

- (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 661

- (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 662

- (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 667

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

Answer: B

NEW QUESTION 670

- (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 672

- (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 677

- (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 678

- (Exam Topic 2)

What is a characteristic of private IPv4 addressing?

- A. traverse the Internet when an outbound ACL is applied
- B. issued by IANA in conjunction with an autonomous system number
- C. composed of up to 65.536 available addresses
- D. used without tracking or registration

Answer: D

NEW QUESTION 681

- (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 682

- (Exam Topic 2)

Which plane is centralized by an SDN controller?

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

Answer: B

NEW QUESTION 684

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