

SIMULATION

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Guidelines

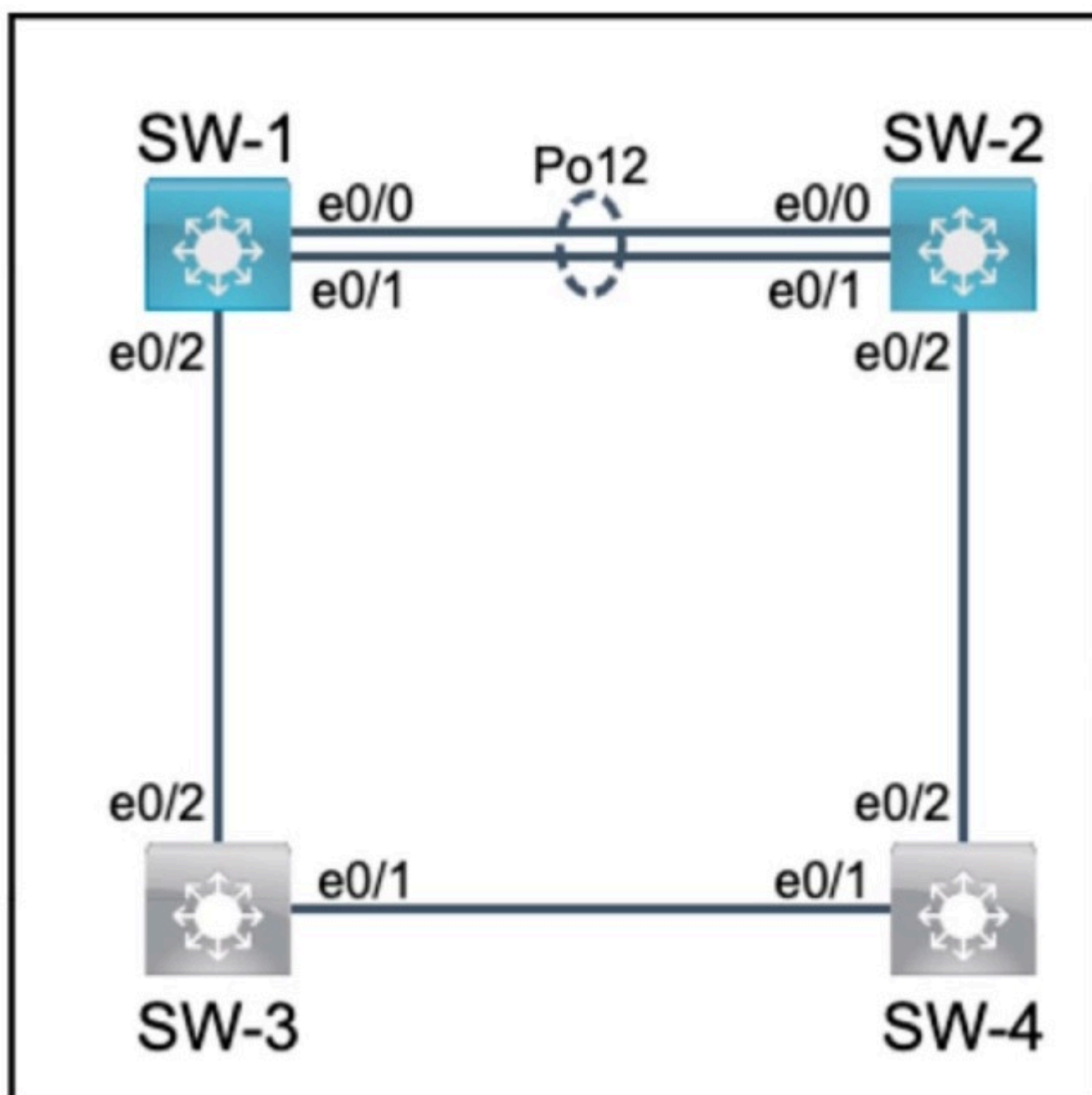
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Topology

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Tasks

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SW-3 and SW-4 are preconfigured with all necessary commands. All physical cabling is in place and verified. All connectivity must be operational.

1. Configure both SW-1 and SW-2 switch ports e0/0 and e0/1 for 802.1q trunking with only VLANs 1, 12, and 22 permitted.

2. Configure SW-1 port e0/2 for 802.1q trunking and include only VLANS 12 and 22.
3. Configure both SW-1 and SW-2 switch ports e0/0 and e0/1 for link aggregation using the industry standard protocol. All ports must be configured so that they immediately negotiate the link.

Step 1:

SW-1:

```
interface e0/0
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 1,12,22
interface e0/1
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 1,12,22
```

SW-2:

```
interface e0/0
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 1,12,22
interface e0/1
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 1,12,22
```

Correct Answer:

Step 2:

SW-1:

```
interface e0/2
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 12,22
```

Step 3:

SW-1:

```
interface range e0/0 - e0/1
channel-group 1 mode active
```

SW-2:

```
interface range e0/0 - e0/1
channel-group 1 mode active
```

SIMULATION

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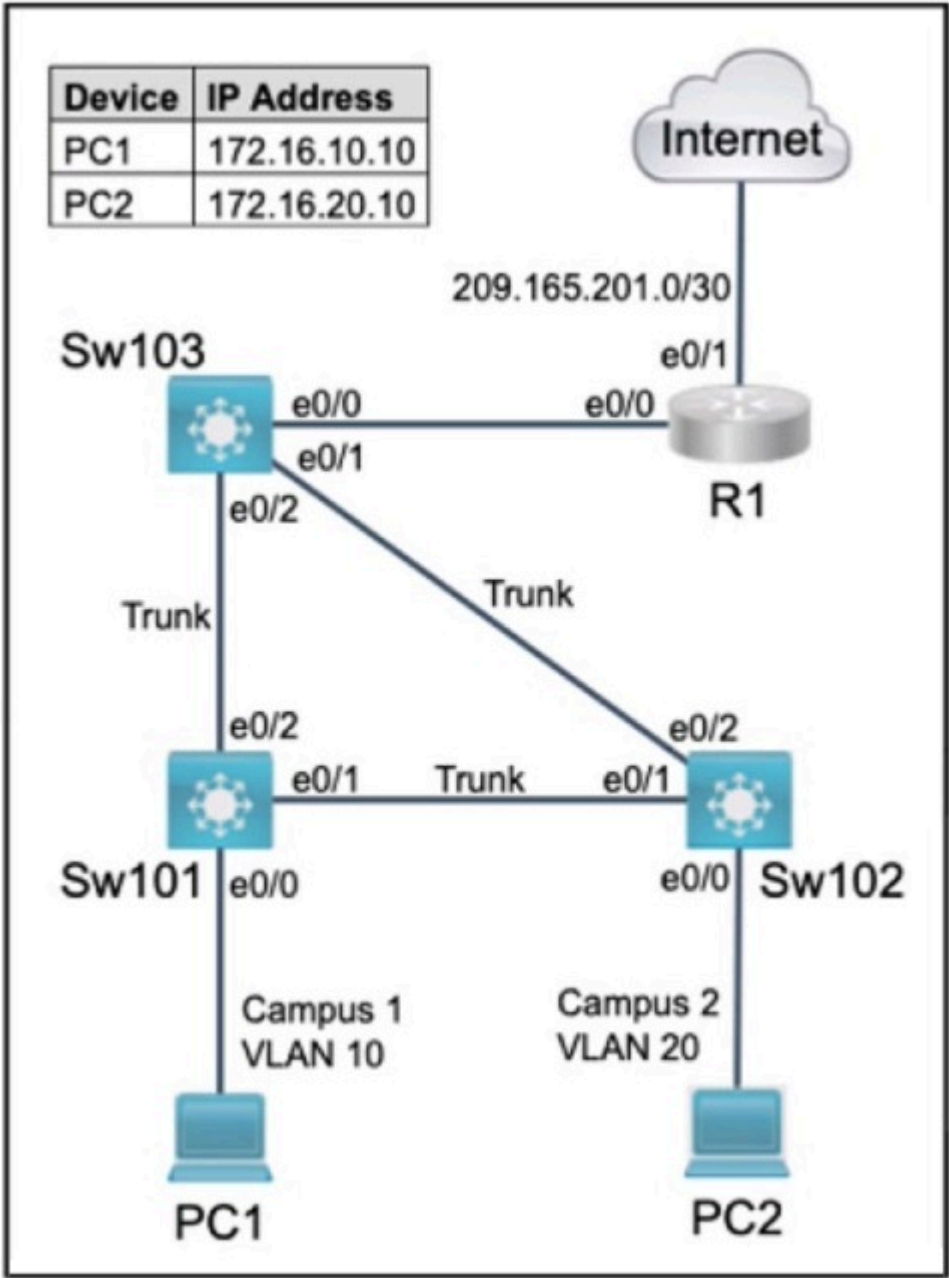
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Tasks

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Refer to the topology. All physical cabling is in place. Configure a local user account, a Named ACL (NACL) and security.

1. Configure a local account on Sw101 with telnet access only on virtual ports 0-4. Use the following information:

- o Username: netops
- o Password: ipsec4all
- o Algorithm: "Vigenere"
- o Privilege level: Exec mode

2. Configure and apply a single NACL on Sw103 using the following:

- o name: ENT_ACL
- o Restrict only PC1 on VLAN 10 from pinging PC2
- o Allow only PC1 on VLAN 10 to telnet to R1 (172.16.30.2)
- o Prevent all other devices from telnetting from VLAN 10
- o Allow all other network traffic from VLAN 10

3. Configure security on interface Ethernet 0/0 of Sw102:

- o Set the maximum number of secure MAC addresses to two
- o Ensure that the port discards the packet, counts the number of violations and sends a syslog message
- o Allow secure mac addresses to be learned dynamically

Task 1:

```
SW101(config)# username netops password ipsec4all
SW101(config)# service password-encryption
SW101(config)# line vty 0 4
SW101(config-line)# login local
SW101(config-line)# transport input telnet
SW101(config-line)# exit
SW101(config)# end
SW101# write memory
```

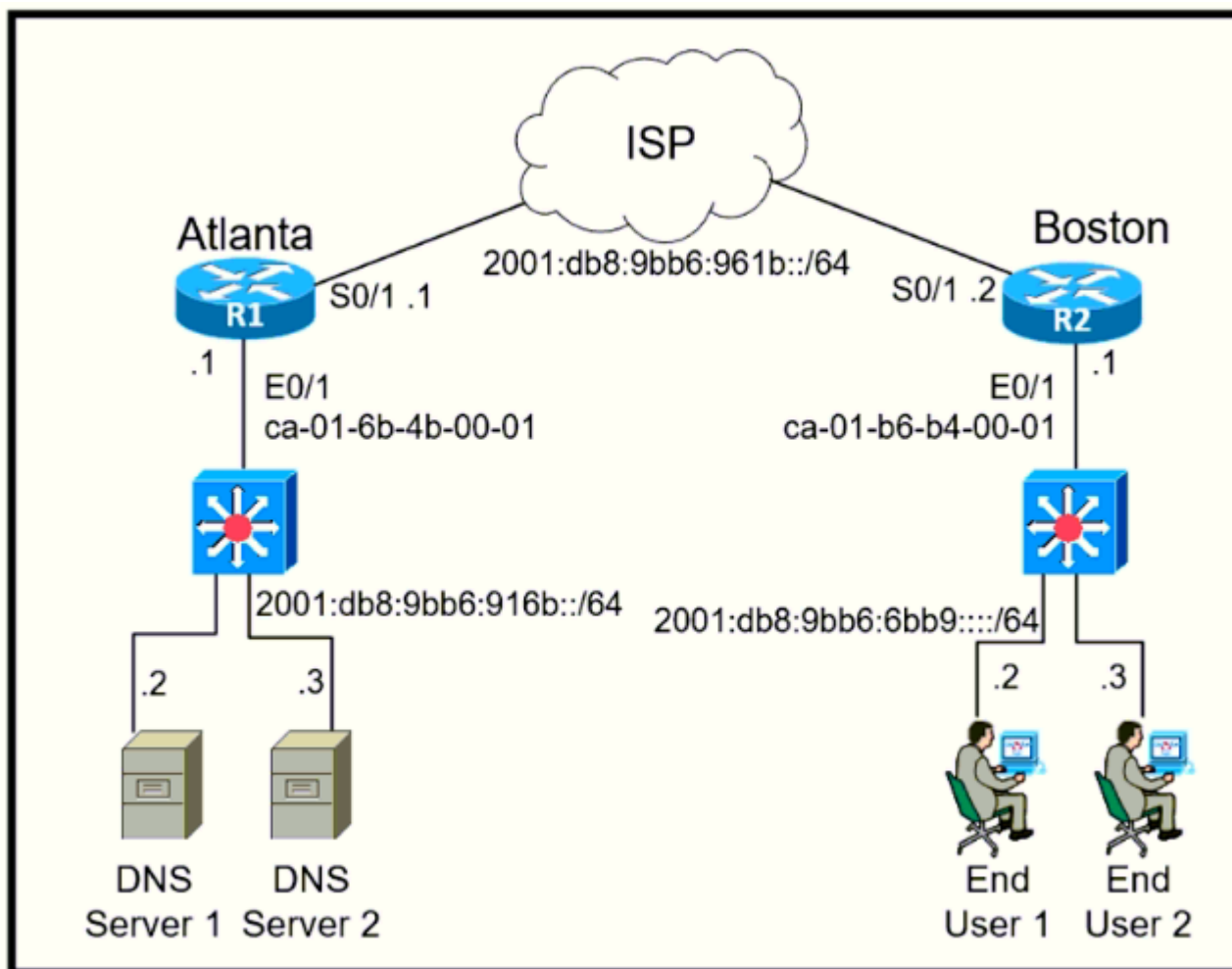
Task 2:

```
SW103(config)# ip access-list extended ENT_ACL
SW103(config-ext-acl)# permit icmp host 172.16.10.10 host 172.16.20.10
SW103(config-ext-acl)# deny icmp any any
SW103(config-ext-acl)# permit tcp host 172.16.10.10 host 172.16.30.2 eq telnet
SW103(config-ext-acl)# deny tcp any any eq telnet
SW103(config-ext-acl)# permit ip any any
SW103(config-ext-acl)# exit
SW103(config)# interface vlan 10
SW103(config-if)# ip access-group ENT_ACL in
SW103(config-if)# exit
SW103(config)# end
SW103# write memory
```

Task 3:

```
SW102(config)# interface Ethernet0/0
SW102(config-if)# switchport port-security
SW102(config-if)# switchport port-security maximum 2
SW102(config-if)# switchport port-security violation restrict
SW102(config-if)# exit
SW102(config)# end
SW102# write memory
```

Correct Answer:



Refer to the exhibit. The IPv6 address for the LAN segment on router R2 must be configured using the EUI-64 format. When configured which ipv6 address is produced by the router?

- A. 2001:db8:9bb6:6bb9:C801:B6FF:FEB4:1 Most Voted
- B. 2001:db8:9bb6:6bb9:C001:6BFE:FF01:1
- C. 2001:db8:9bb6:6bb9:C081:B6FF:FF4B:1
- D. 2001:db8:9bb6:6bb9:4736:931F:FE37:1

Correct Answer: A

Community vote distribution

A (100%)

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

Refer to the exhibit. What is the metric for the route to the 192.168.10.33 host?

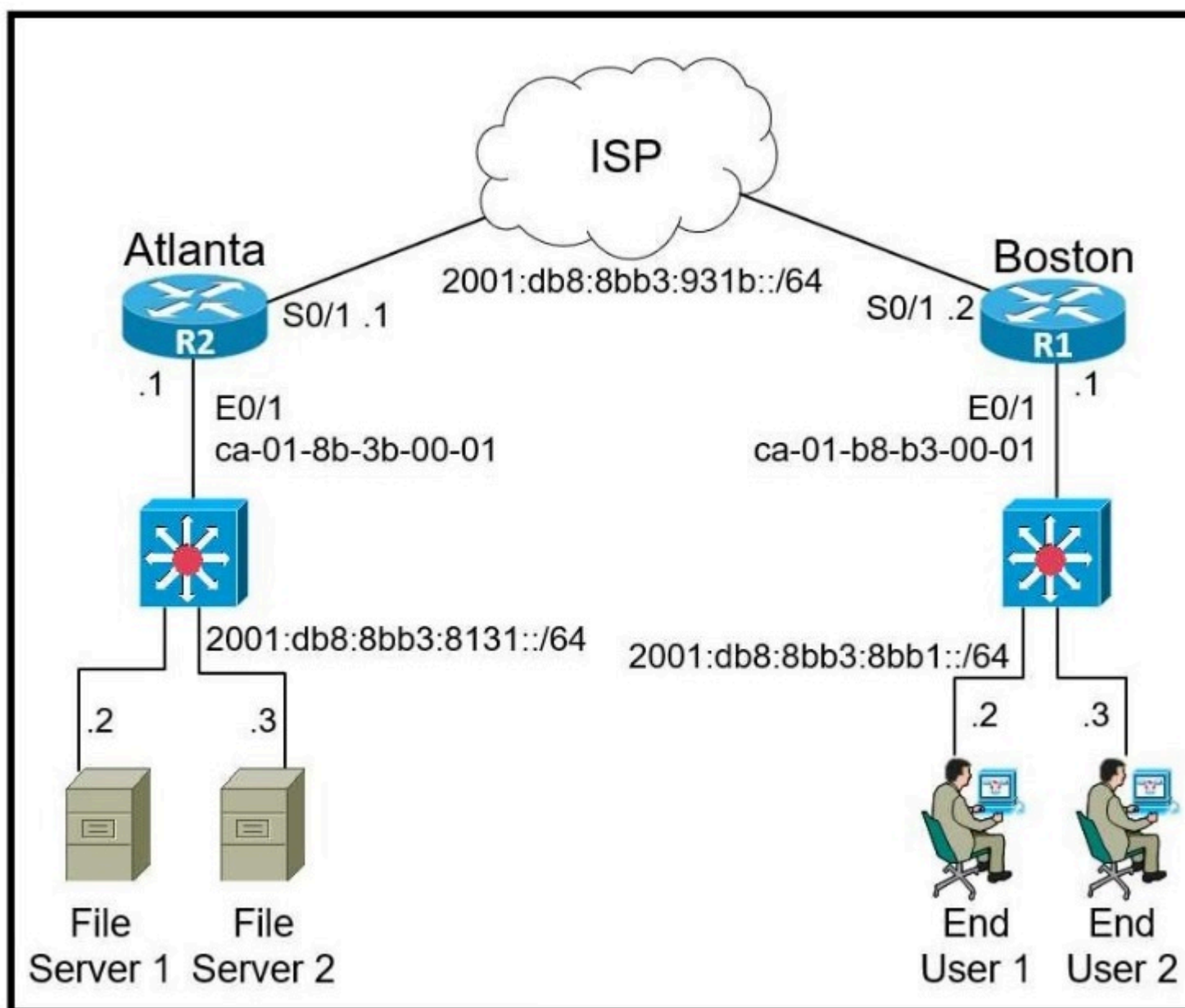
- A. 84
- B. 110
- C. 192

D. 193 Most Voted

Correct Answer: D

Community vote distribution

D (100%)



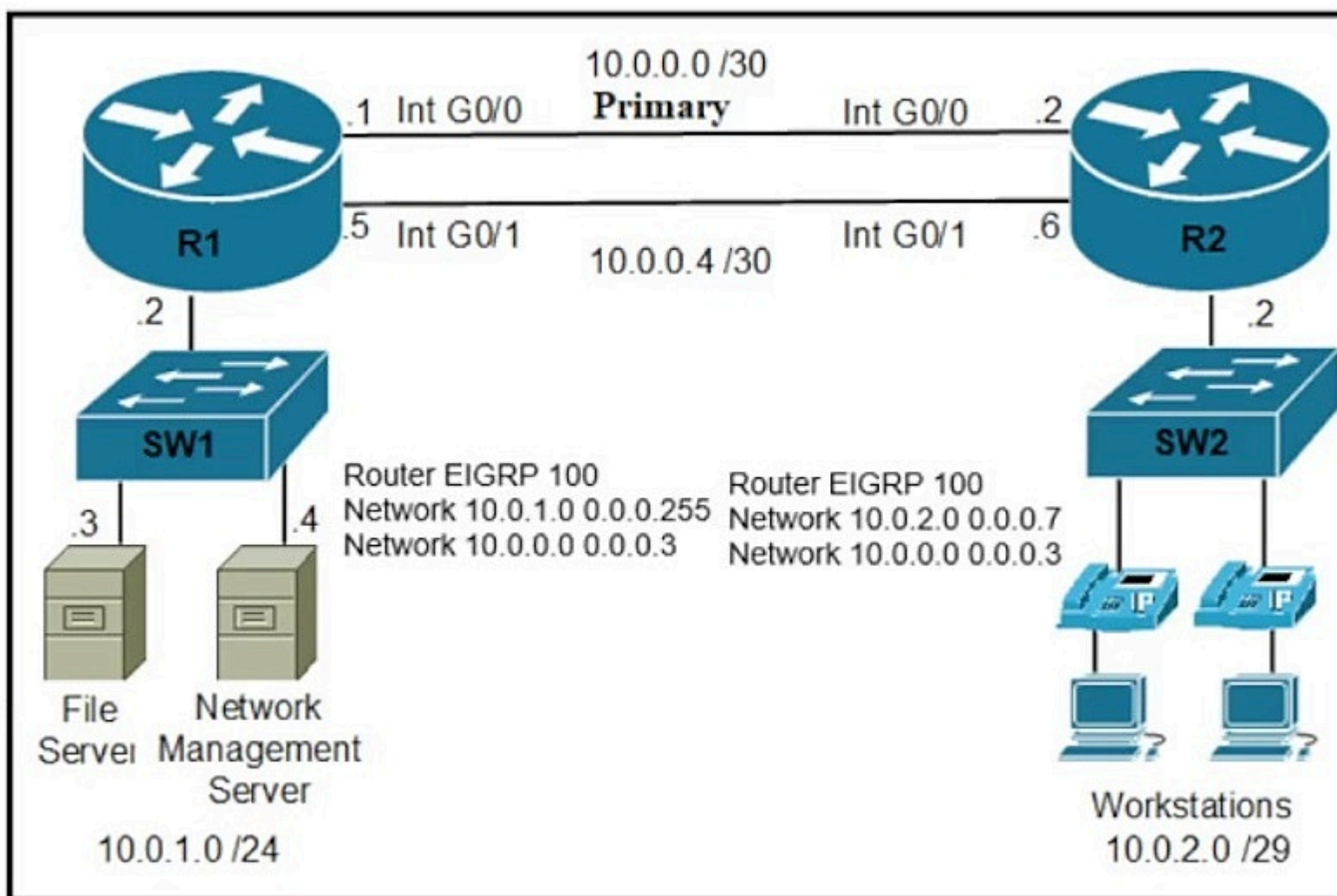
Refer to the exhibit. The IPv6 address for the LAN segment on router R1 must be configured using the EUI-64 format. When configured which ipv6 address is produced by the router?

- A. 2001:db8:8bb3:8bb1:C001:8BFE:FF31:1
- B. 2001:db8:8bb3:8bb1:C081:B8FF:FF3B:1
- C. 2001:db8:8bb3:8bb1:C801:B8FF:FEB3:1 Most Voted
- D. 2001:db8:8bb3:8bb4:7397:79FF:EF41:1

Correct Answer: C

Community vote distribution

C (100%)



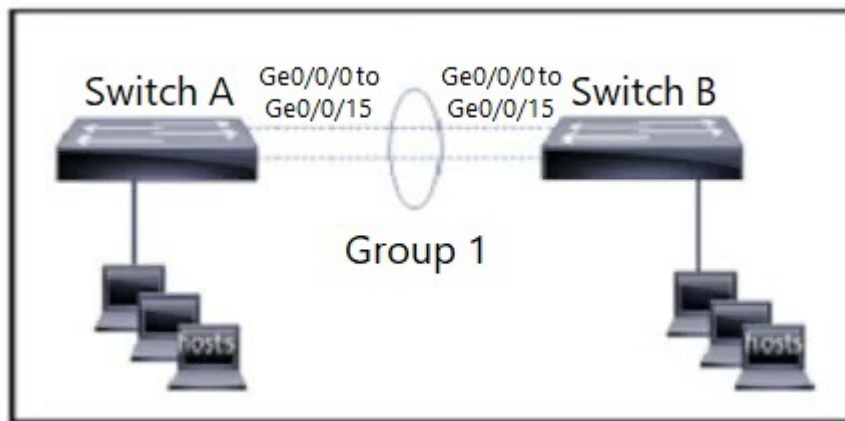
Refer to the exhibit. A secondary route is required on router R1 to pass traffic to the LAN network on R2 if the primary link fails. Which command must be entered to configure the router?

- A. `ip route 10.0.2.0 255.255.255.240 10.0.0.7 92`
- B. `ip route 10.0.2.0 255.255.255.240 10.0.0.6 91`
- C. `ip route 10.0.2.0 255.255.255.248 null0 93`
- D. `ip route 10.0.2.0 255.255.255.248 10.0.0.6 91` Most Voted

Correct Answer: D

Community vote distribution

D (100%)



Refer to the exhibit. The LACP EtherChannel is configured, and the last change is to modify the interfaces on SwitchA to respond to packets received, but not to initiate negotiation. The interface range `gigabitethernet0/0/0-15` command is entered. What must be configured next?

- A. `SwitchA(config-if-range)#channel-group 1 mode auto`
- B. `SwitchA(config-if-range)#channel-group 1 mode active`
- C. `SwitchA(config-if-range)#channel-group 1 mode desirable`

D. `SwitchA(config-if-range)#channel-group 1 mode passive` **Most Voted**

Correct Answer: D

Community vote distribution

D (100%)

SIMULATION

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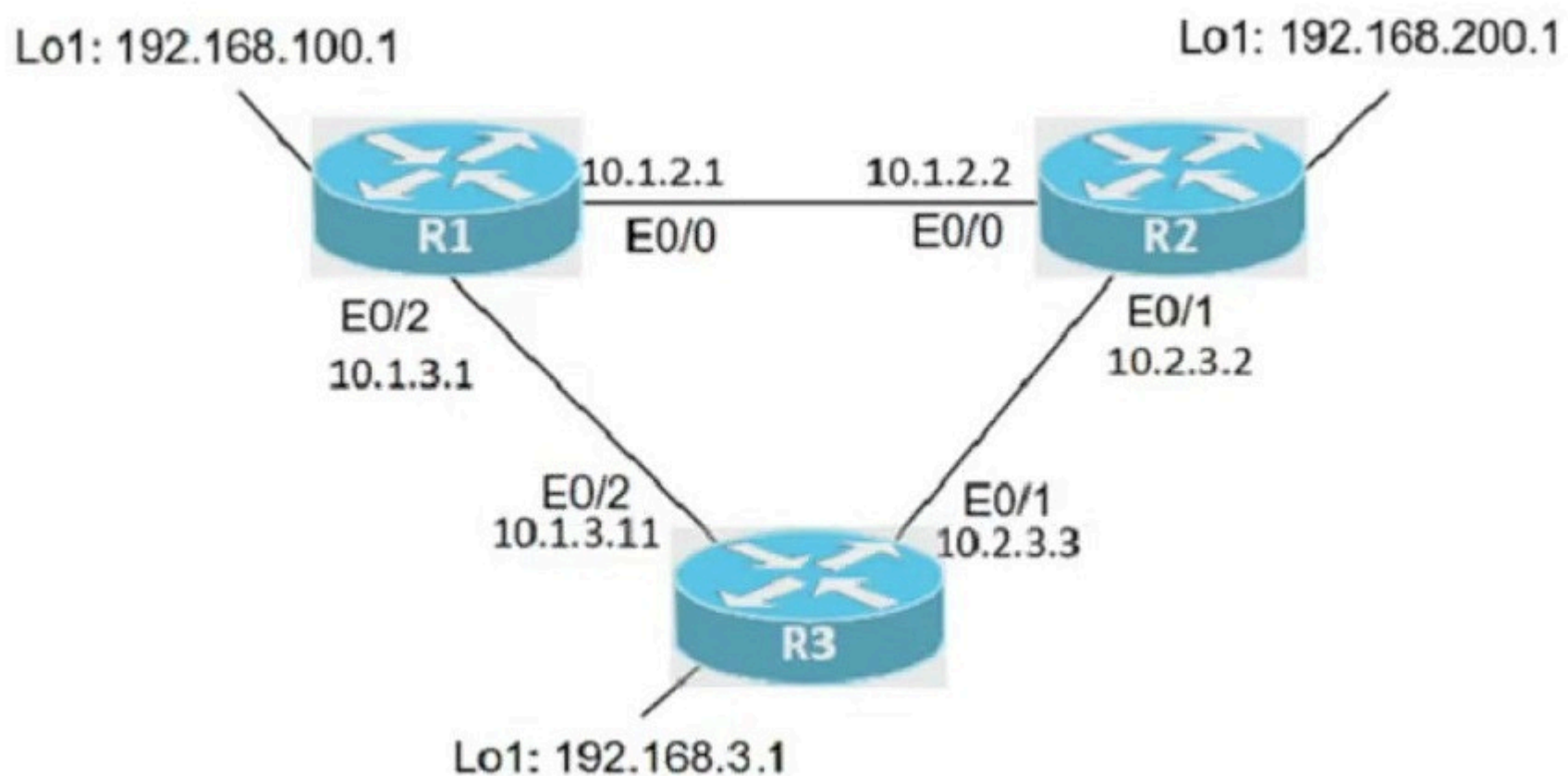
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Topology

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Tasks

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IP connectivity between the three routers is established. IP Services must be configured in the order presented to complete the implementation.

1. Configure dynamic one-to-one address mapping on R2 using a standard list named XLATE, which allows all traffic to translate the source address of R3 to a pool named test_pool using the 10.10.10.0/24 network for traffic sent from R3 to R1. Avoid using an NVT configuration. Verify reachability by sending a ping to 192.168.100.1 from R3.
2. Configure R3 to dynamically receive an IP address on Ethernet0/2 from the DHCP server.
3. Configure R1 as an NTP server and R2 as a client, not as a peer, using the IP address 10.1.2.1.
4. Configure SSH access from R1 to R3, while excluding access via other remote connection protocols using the user root and password s3cret on router R3 using RSA. Verify connectivity from router R1 to R3 using a destination address assigned to interface E0/2 on R3.

```
R2#conf t
R2(config)# ip access-list standard XLATE
R2(config-std-nacl)#permit 10.2.3.3
R2(config-std-nacl)#permit 192.168.3.1
R2(config-std-nacl)#permit 10.1.3.11
R2(config-std-nacl)#exit
R2(config)# interface G0/1
R2(config-if)#ip nat inside
R2(config-if)#exit
R2(config)#interface G0/0
R2(config-if)#ip nat outside
R2(config-if)#exit
R2(config)#ip nat pool test_pool 10.10.10.1 10.10.10.254 netmask 255.255.255.0
R2(config)#ip nat inside source list XLATE pool test_pool
R2(config)#exit
R2(config)#ntp server 10.1.2.1
R2#wr
```

Correct Answer:

```
R3(config)#interface G0/2
R3(config-if)#ip address dhcp
R3(config-if)#exit
```

```
R1#config t
R1(config)#ntp master 1
R1(config)#exit
R1#wr
```

```
R3(config)#ip domain name cisco.com
R3(config)#line vty 0 4
R3(config-line)#transport input ssh
R3(config-line)#login local
R3(config-line)#exit
R3(config)#username root password s3cret
R3(config)#crypto key generate rsa
R3(config)#exit
R3#wr
```

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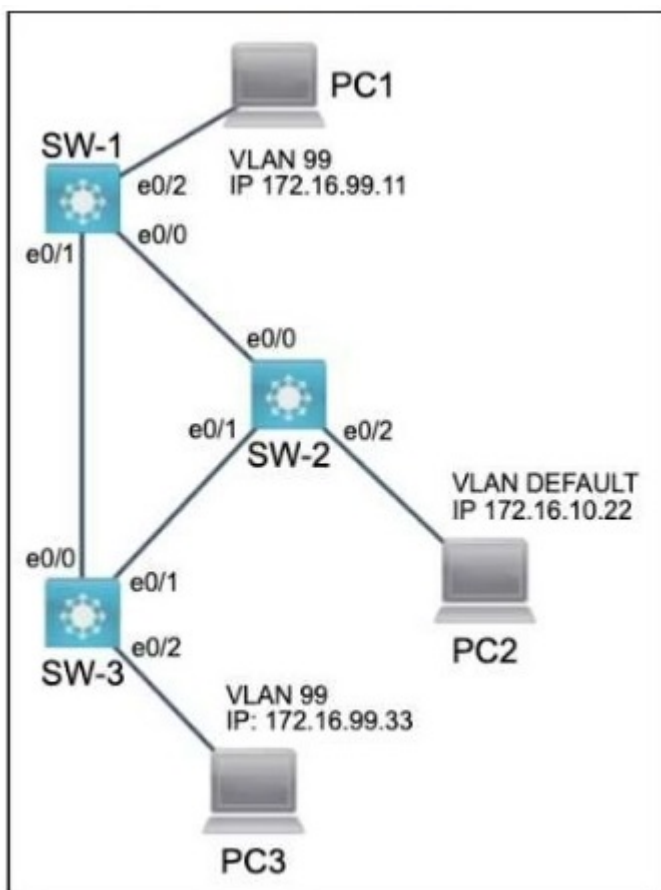
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Topology

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Tasks

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All physical cabling is in place and verified. Connectivity for PC1, PC2 and PC3 must be established to the switches. Each port connecting to the PCs must be configured as an end-user port and only allow the designated VLAN.

1. Configure VLAN 99 on all three switches and label it exactly as FINANCIAL
2. Configure the switch ports connecting to PC1, PC2 and PC3
3. Cisco's neighbor discovery protocol has been disabled on SW-1 and must be re-enabled
4. PC1 must not be able to discover SW-1

Task 1:

```
SW-1(config)# vlan 99
SW-1(config-vlan)# name FINANCIAL
SW-1(config-vlan)# exit
```

```
SW-2(config)# vlan 99
SW-2(config-vlan)# name FINANCIAL
SW-2(config-vlan)# exit
```

```
SW-3(config)# vlan 99
SW-3(config-vlan)# name FINANCIAL
SW-3(config-vlan)# exit
```

Task 2:

```
SW-1(config)# interface e0/2
SW-1(config-if)# switchport mode access
SW-1(config-if)# switchport access vlan 99
SW-1(config-if)# exit
```

Correct Answer:

```
SW-2(config)# interface e0/2
SW-2(config-if)# switchport mode access
SW-2(config-if)# switchport access vlan 99
SW-2(config-if)# exit
```

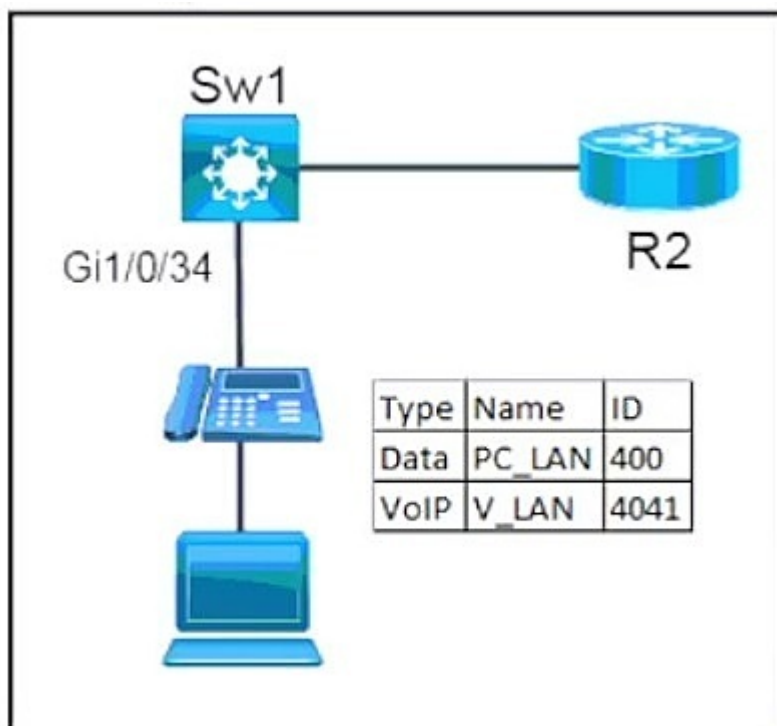
```
SW-3(config)# interface e0/2
SW-3(config-if)# switchport mode access
SW-3(config-if)# switchport access vlan 99
SW-3(config-if)# exit
```

Task 3:

```
SW-1(config)# cdp run
```

Task 4:

```
SW-1(config)# interface e0/2
SW-1(config-if)# no cdp enable
```

Refer to the exhibit. Network services must be enabled on interface Gi1/0/34. Which configuration meets the needs for this implementation?

A. interface Gi1/0/34
switchport mode trunk
switchport
trunk allowed native vlan 400
switchport
voice vlan 4041

B. interface Gi1/0/34
switchport mode trunk
switchport
trunk allowed vlan 400, 4041
switchport voice vlan 4041

C. interface Gi1/0/34
switchport mode access
switchport
access vlan 400
switchport voice vlan 4041

D. interface Gi1/0/34
switchport mode access
switchport
access vlan 4041
switchport voice vlan 400

Correct Answer: C

Community vote distribution

C (100%)


```
100.0.0.0/8 is variably subnetted, 4 subnets, 4 masks
R      100.0.0.0/8 [120/2] via 192.168.3.1, 00:00:13, Ethernet0/3
S      100.100.0.0/16 [1/0] via 192.168.4.1
D      100.100.100.0/24 [90/435200] via 192.168.2.1, 00:00:13, Ethernet0/2
O      100.100.100.100/32 [110/21] via 192.168.1.1, 00:05:57, Ethernet0/1
```

Refer to the exhibit. How will the device handle a packet destined to IP address 100.100.100.100?

A. It will always prefer the static route over dynamic routes and choose the route
S 100.100.0.0/16 [1/0] via 192.168.4.1.

B. It will choose the route with the lowest metric,
R 100.0.0.0/8 [120/2] via 192.168.3.1, 00:00:13, Ethernet0/3.

C. It will choose the route with the highest metric,
D 100.100.100.0/24 [90/435200] via 192.168.2.1, 00:00:13, Ethernet0/2.

D. It will choose the route with the longest match,
O 100.100.100.100/32 [110/21] via 192.168.1.1, 00:05:57, Ethernet0/1. Most Voted

Correct Answer: *D*

Community vote distribution

D (100%)

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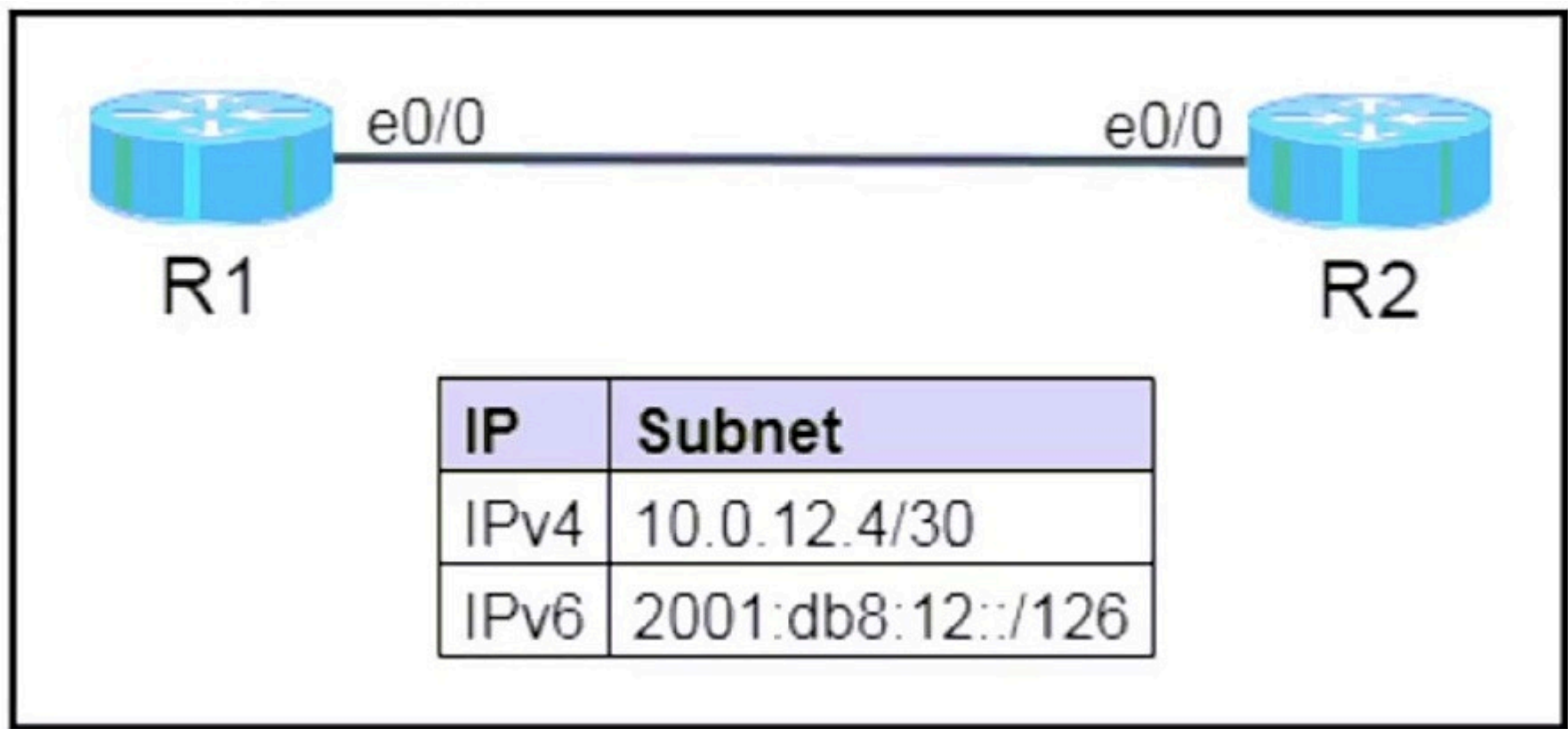
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Topology

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Tasks

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Reference Topology Diagram and table. Configure IPv4 and IPv6 between the two routers.

Task 1:

- Configure R1 with the first usable host IP address in the IPv4 network.
- Configure R2 with the last usable host IP address in the IPv4 network.
- Verify connectivity using ping.

Task 2:

- Do not assign the subnet router anycast address to either router.
- Configure R1 with the first usable host IP address in the IPv6 network.
- Configure R2 with the last usable host IP address in the IPv6 network.
- Verify connectivity using ping.

Task 1:

R1:

```
interface e0/0  
ip address 10.0.12.5 255.255.255.254
```

R2:

```
interface e0/0  
ip address 10.0.12.6 255.255.255.254
```

Verification

To verify connectivity, ping between R1 and R2:

On R1:

```
ping 10.0.12.6
```

On R2:

```
ping 10.0.12.5
```

Correct Answer:

Task 2:

R1:

```
interface e0/0  
ipv6 address 2001:db8:12::1/126
```

R2:

```
interface e0/0  
ipv6 address 2001:db8:12::2/126
```

Verification:

R1:

```
ping 2001:db8:12::2
```

R2:

```
ping 2001:db8:12::1
```

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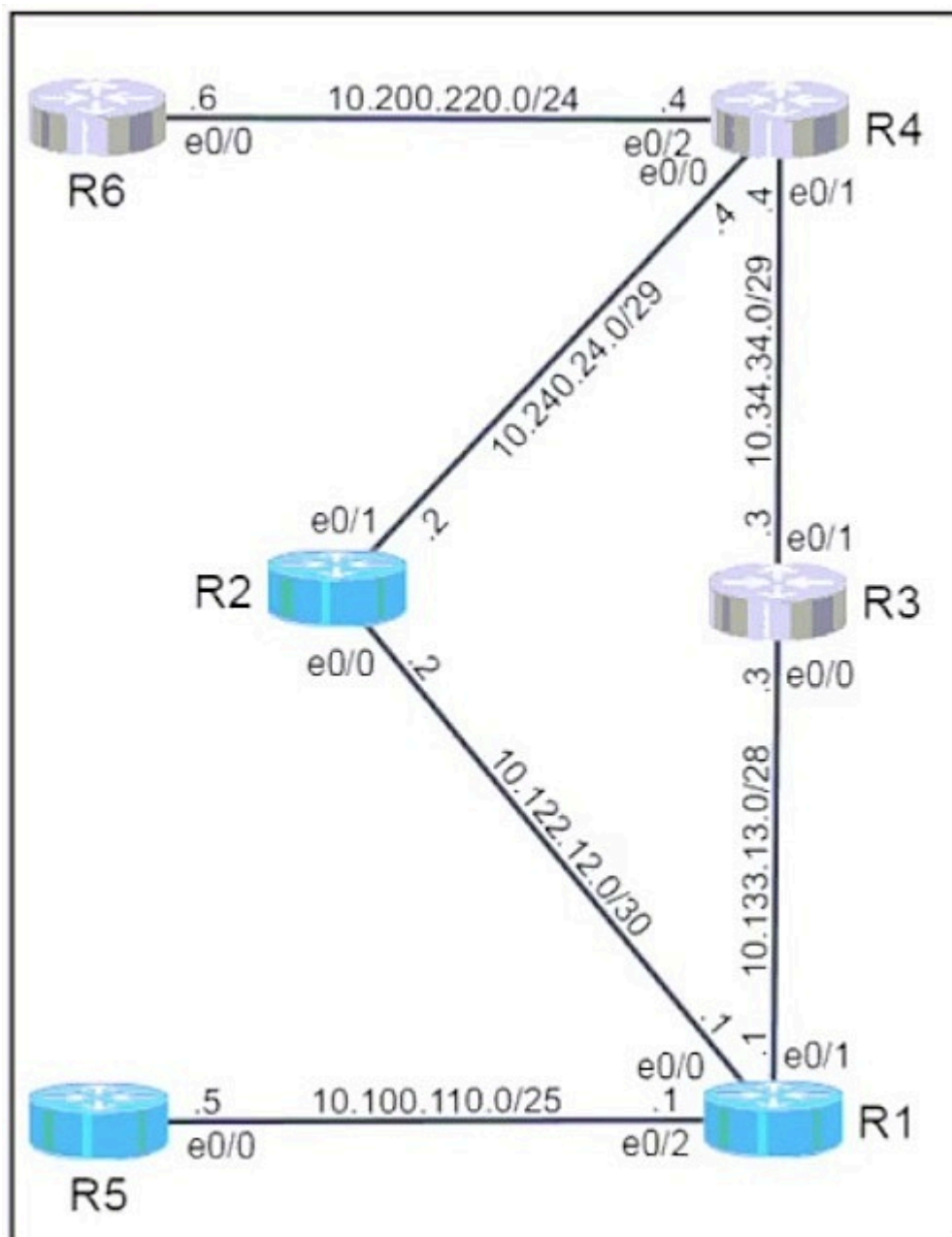
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Tasks

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Task 1

-

- Configure a host route on R5 for the destination of 10.200.220.6.
- Configure a static default route on R1 preferring the path through R3 towards R6.
- From R5, use traceroute and ping to verify the path towards and reachability of R6.

Task 2

-

- Configure a floating static default route on R1, preferring the path through R2 towards R6 if the link to R3 should fail.
- Configure the administrative distance for 225.
- Configure a static route on R2 to forward the return traffic towards 10.100.110.0/25.
- After shutting interface e0/1 on R1, use traceroute and ping from R5 to verify path towards and reachability of R6.

Task 1:

```
R5(config)# ip route 10.200.220.6 255.255.255.255 10.100.110.1
R1(config)# ip route 0.0.0.0 0.0.0.0 10.133.13.2
R5# traceroute 10.200.220.6
R5# ping 10.200.220.6
```

Correct Answer: Task 2:

```
R1(config)# ip route 0.0.0.0 0.0.0.0 10.122.12.2 225
R2(config)# ip route 10.100.110.0 255.255.255.128 10.122.12.1
R1(config)# interface e0/1
R1(config-if)# shutdown
R5# traceroute 10.200.220.6
R5# ping 10.200.220.6
```

Question #1363

Topic 1

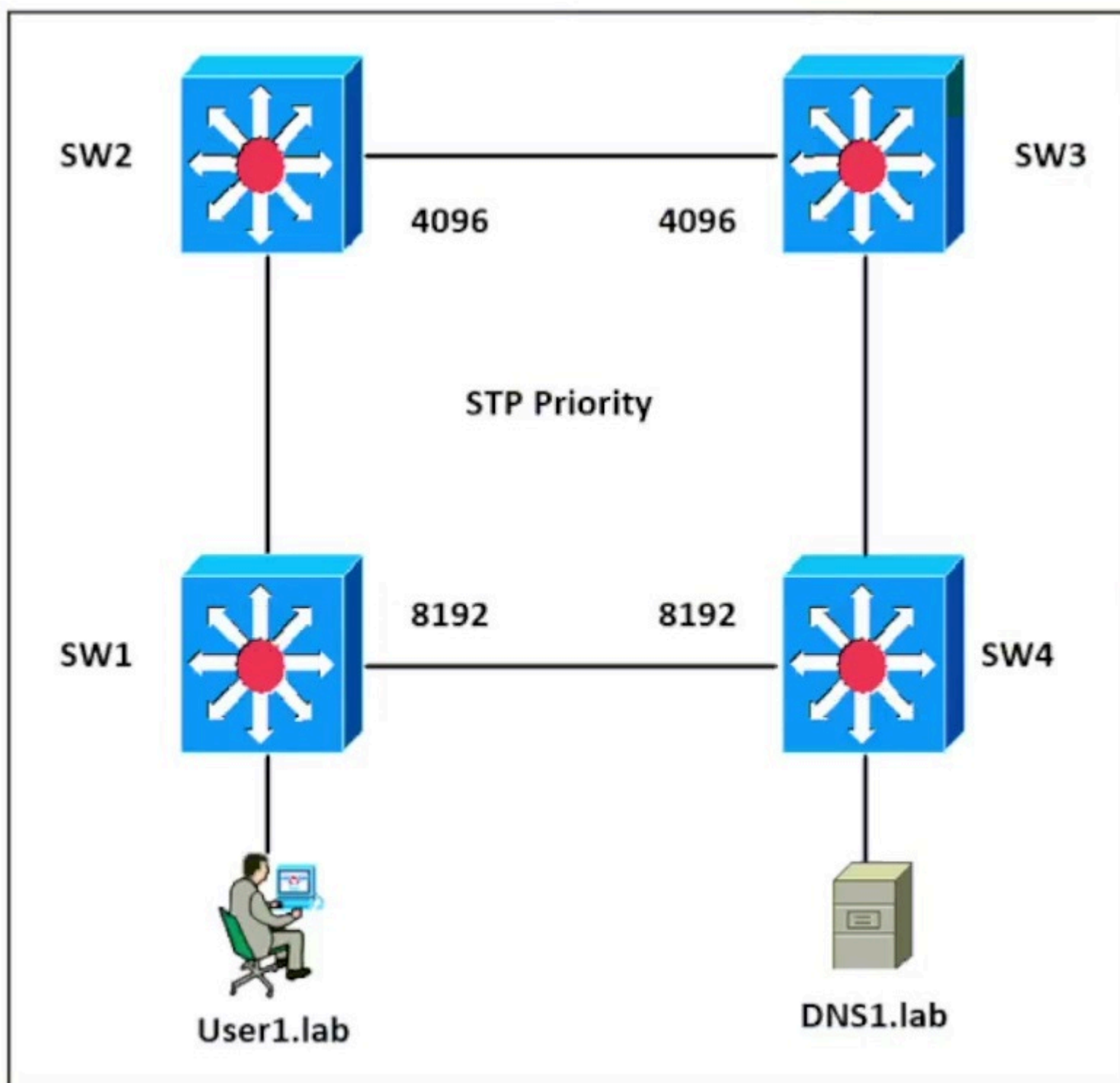
Which two statements distinguish authentication from accounting? (Choose two.)

- A. Only authentication supports user-activity audits.
- B. Only authentication challenges users for their credentials and returns a response. Most Voted
- C. Only authentication validates "who you are." Most Voted
- D. Only authentication records the duration of a user's connection.
- E. Only authentication provides supporting information for billing users.

Correct Answer: BC

Community vote distribution

BC (100%)



Refer to the exhibit. Which switch in this configuration will be elected as the root bridge?

SW1: 0C:E4:82:33:62:23 -

SW2: 0C:0E:16:11:05:97 -

SW3: 0C:E0:16:1A:3C:9D -

SW4: 0C:00:18:A1:B3:19

A. SW1

B. SW2 **Most Voted**

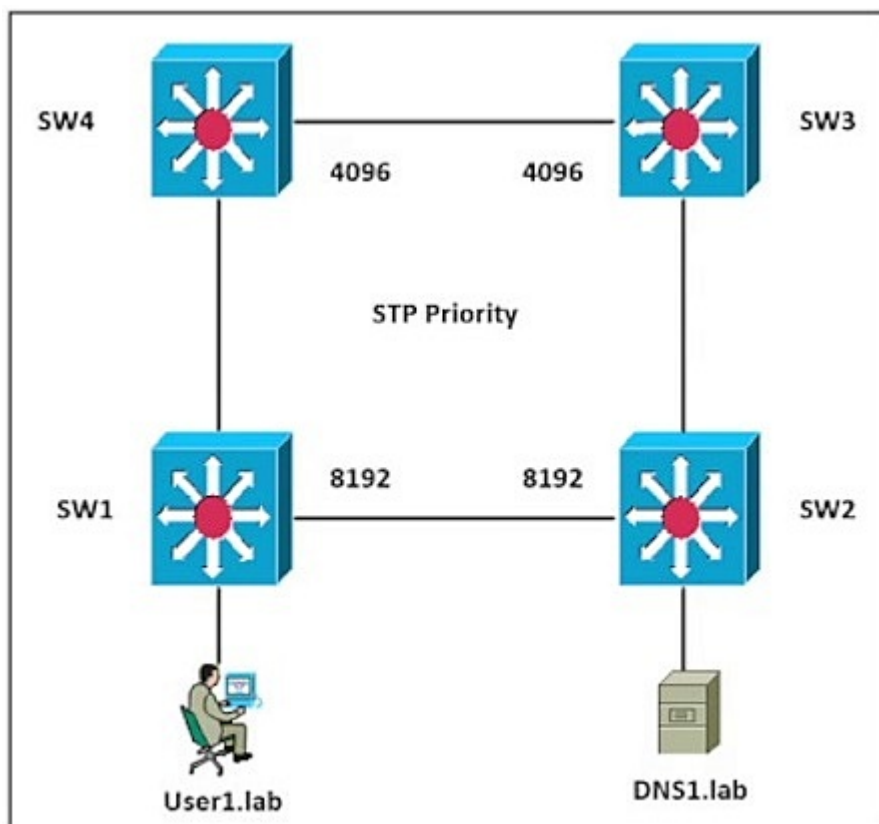
C. SW3

D. SW4

Correct Answer: B

Community vote distribution

B (100%)



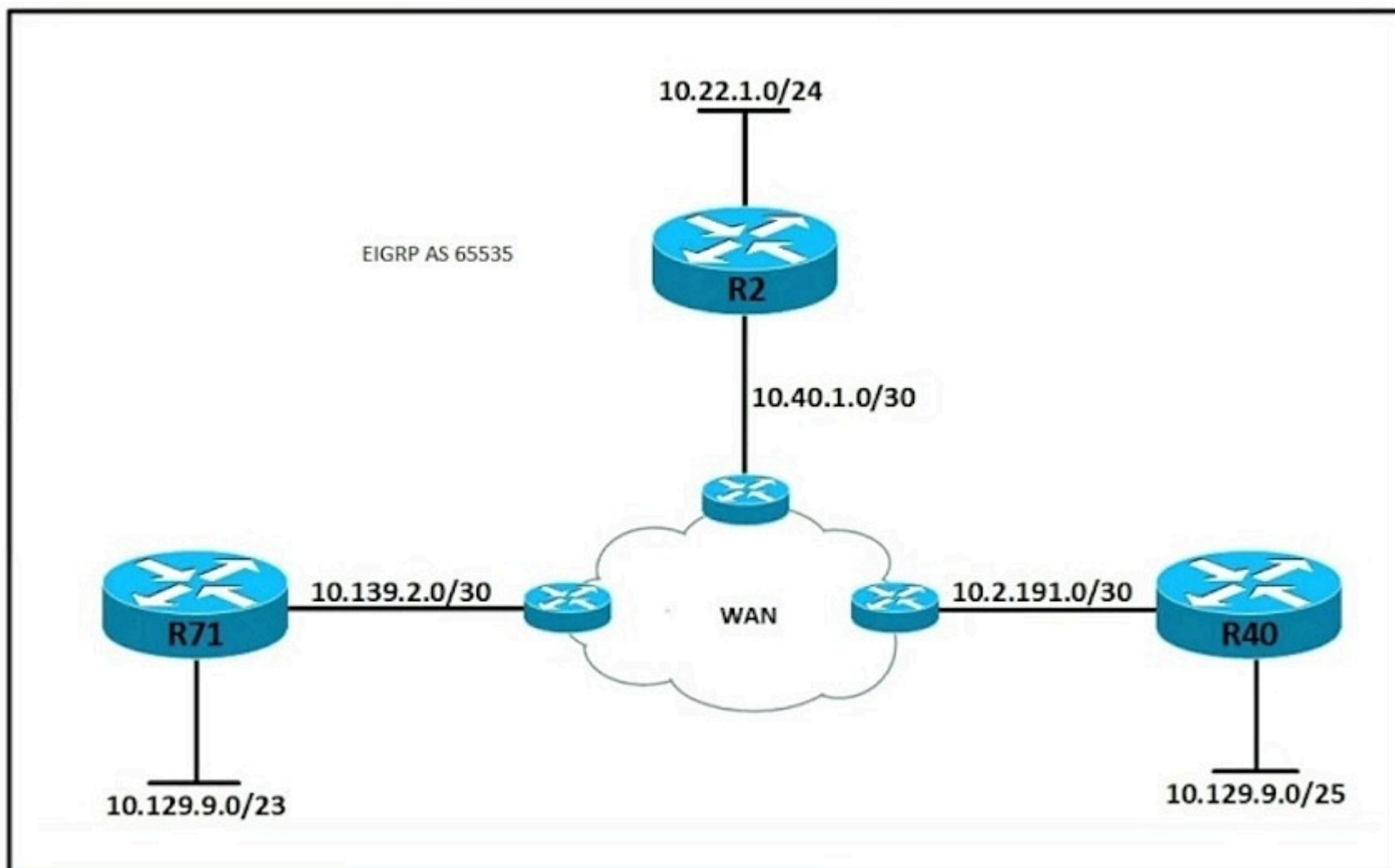
Refer to the exhibit. Which switch in this configuration will be elected as the root bridge?

- A. SW1: 0C:4A:82.:65:62:72
- B. SW2: 0C:0A:A8:1A:3C:9D
- C. SW3: 0C:0A:18:81:B3:19
- D. SW4: 0C:0A:05:22:05:97

Correct Answer: D

Community vote distribution

D (100%)



Refer to the exhibit. All routers in the network are configured correctly, and the expected routes are being exchanged among the routers. Which set of routes are learned from neighbors and installed on router 2?

- A. 10.129.9.0/23
- 10.139.2.0/30
- 10.2.191.0/30
- 10.129.9.0/25

Most Voted

- B. 10.129.9.0/23
- 10.40.1.0/30
- 10.2.191.0/30
- 10.129.9.0/25
- C. 10.40.1.0/30
- 10.139.2.0/30
- 10.2.191.0/30
- 10.129.9.0/25
- D. 10.129.9.0/23
- 10.139.2.0/30
- 10.129.9.0/25
- 10.22.1.0/24

Correct Answer: A

Community vote distribution

A (100%)

```
Router-WAN1#show interface g0/0
GigabitEthernet0/0 is up, line protocol is up
  Hardware is CSR NIC, address is 5000.0001.0000 (bia 5000.0001.0000)
  Internet address is 192.168.0.0/31
  MTU 1500 bytes, BW 1000000 Kbit/sec, DLY 10 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full Duplex, 1000Mbps, link type is auto, media type is NIC
  output flow-control is unsupported, input flow-control is unsupported
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 00:00:03, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/375/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size /max)
  5 minute input rate 1000 bits/sec, 0 packets/sec
  5 minute output rate 2000 bits/sec, 1 packets/sec
    0 packets input, 0 bytes, 0 no buffer
    Received 110 broadcasts (0 IP multicasts)
    0 runts, 0 giants, 0 throttles
    100 input errors, 100 CRC, 100 frame, 0 overrun, 0 ignored
    0 watchdog, 0 multicast, 0 pause input
    260 packets output, 89070 bytes, 0 underruns
    Output 0 broadcasts (0 IP multicasts)
    0 output errors, 100 collisions, 0 interface resets
    0 unknown protocol drops
    0 babbles, 0 late collision, 0 deferred
    1 lost carrier, 0 no carrier, 0 pause output
```

Refer to the exhibit. Router-WAN1 has a new connection via Gi0/0 to the ISP. Users running the web applications indicate that connectivity is unstable to the internet. What is causing the interface issue?

- A. The receive buffer is full due to a broadcast storm.
- B. Frames are discarded due to a half-duplex negotiation. Most Voted
- C. Broadcast packets are rejected because ARP timeout is enabled.
- D. Small frames less than 64 bytes are rejected due to size.

Correct Answer: B

Community vote distribution

B (63%)

A (38%)

A network engineer is configuring a new router at a branch office. The router is connected to an upstream WAN network that allows the branch to communicate with the head office. The central time server with IP address 172.24.54.8 is located behind a firewall at the head office. Which command must the engineer configure so that the software clock of the new router synchronizes with the time server?

- A. ntp server 172.24.54.8 Most Voted
- B. ntp master 172.24.54.8
- C. ntp peer 172.24.54.8
- D. ntp client 172.24.54.8

Correct Answer: A

Community vote distribution

A (100%)

SIMULATION

-

Guidelines

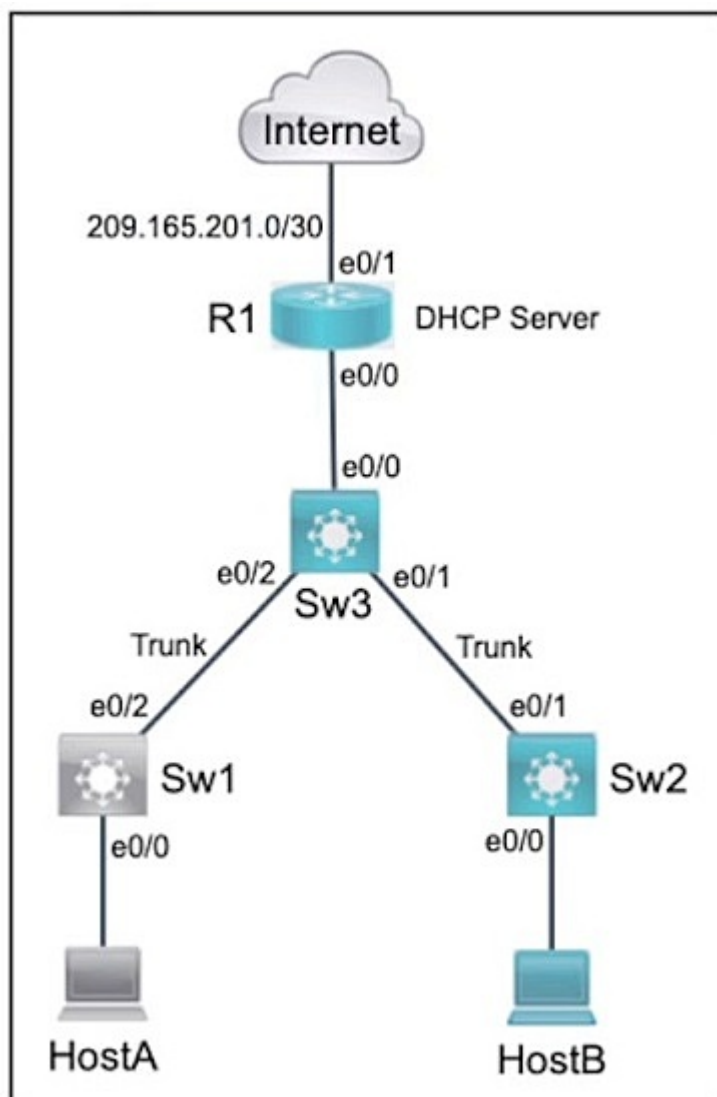
-

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Topology

-



Tasks

-

Refer to the topology. All physical cabling is in place. Configure local user account, configure a Named ACL (NACL), and Dynamic Arp Inspection.

1. Configure a local account on Sw3 with telnet access only on virtual ports 0-4. Use the following information:

- o Username: tech12
- o Password: load1key
- o Algorithm type: md5

o Privilege level: Exec mode

2. Configure and apply a NACL on R1 to control network traffic towards ISP:

o Name: ISP_ACL

o Restrict RFC 1918 class A and B addresses

o Allow all other addresses

3. A DHCP IP Pool is preconfigured on R1 for VLAN 5, and DHCP Snooping is configured on Sw2. Configure on Sw2:

o Dynamic Arp Inspection for VLAN 5

o Enable validation of the ARP packet destination MAC address

o Enable validation of the ARP packet source MAC address

o Enable validation of the ARP Packet IP address

Task 1:

```
Sw3(config)# username tech12 secret load1key
Sw3(config)# service password-encryption
Sw3(config)# line vty 0 4
Sw3(config-line)# login local
Sw3(config-line)# transport input telnet
Sw3(config-line)# exit
Sw3(config)# end
```

Task 2:

Correct Answer:

```
R1(config)# ip access-list extended ISP_ACL
R1(config-ext-acl)# deny ip 10.0.0.0 0.255.255.255 any
R1(config-ext-acl)# deny ip 172.16.0.0 0.255.255.255 any
R1(config-ext-acl)# permit ip any any
R1(config-ext-acl)# exit
R1(config)# interface e0/1
R1(config-if)# ip access-group ISP_ACL out
R1(config-if)# exit
```

Task 3:

```
Sw2(config)# ip arp inspection vlan 5
Sw2(config)# ip arp inspection validate dst-mac
Sw2(config)# ip arp inspection validate src-mac
Sw2(config)# ip arp inspection validate ip
```

Question #1370

Topic 1

["red", "one"]

Refer to the exhibit. Which type of JSON data is represented?

A. number

B. array **Most Voted**

C. object

D. string

Correct Answer: B

Community vote distribution

B (100%)

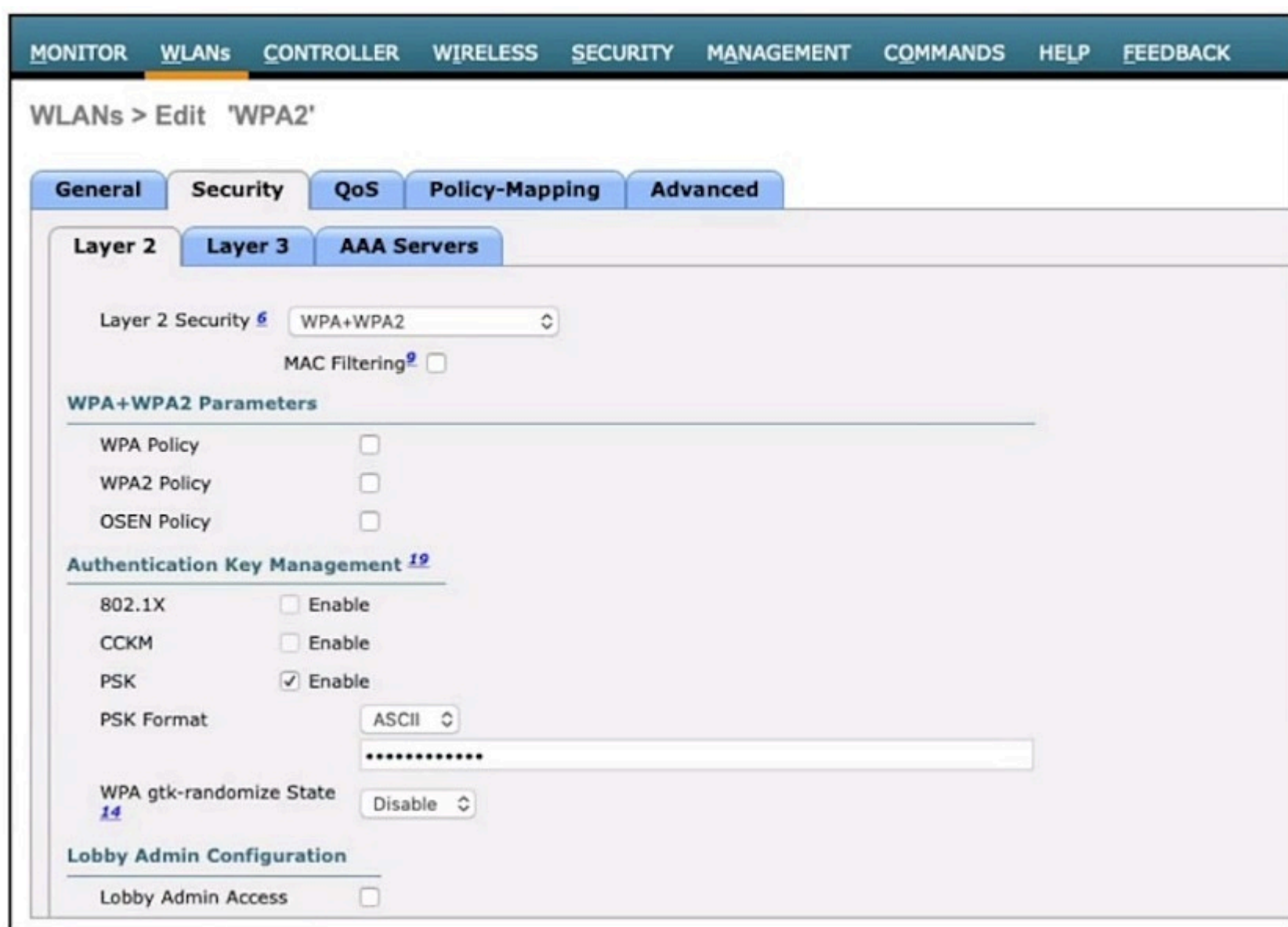
What is the RFC 4627 default encoding for JSON text?

- A. UCS-2
- B. GB18030
- C. UTF-8 Most Voted
- D. Hex

Correct Answer: C

Community vote distribution

C (100%)



Refer to the exhibit. A network engineer is configuring a WLAN to use a WPA2 PSK and allow only specific clients to join. Which two actions must be taken to complete the process? (Choose two.)

- A. Enable the OSEN Policy option.
- B. Enable the 802.1X option for Authentication Key Management.
- C. Enable the WPA2 Policy option. Most Voted
- D. Enable the MAC Filtering option. Most Voted
- E. Enable the CCKM option for Authentication Key Management.

Correct Answer: CD

Community vote distribution

CD (67%)

BC (33%)

SIMULATION

-

Guidelines

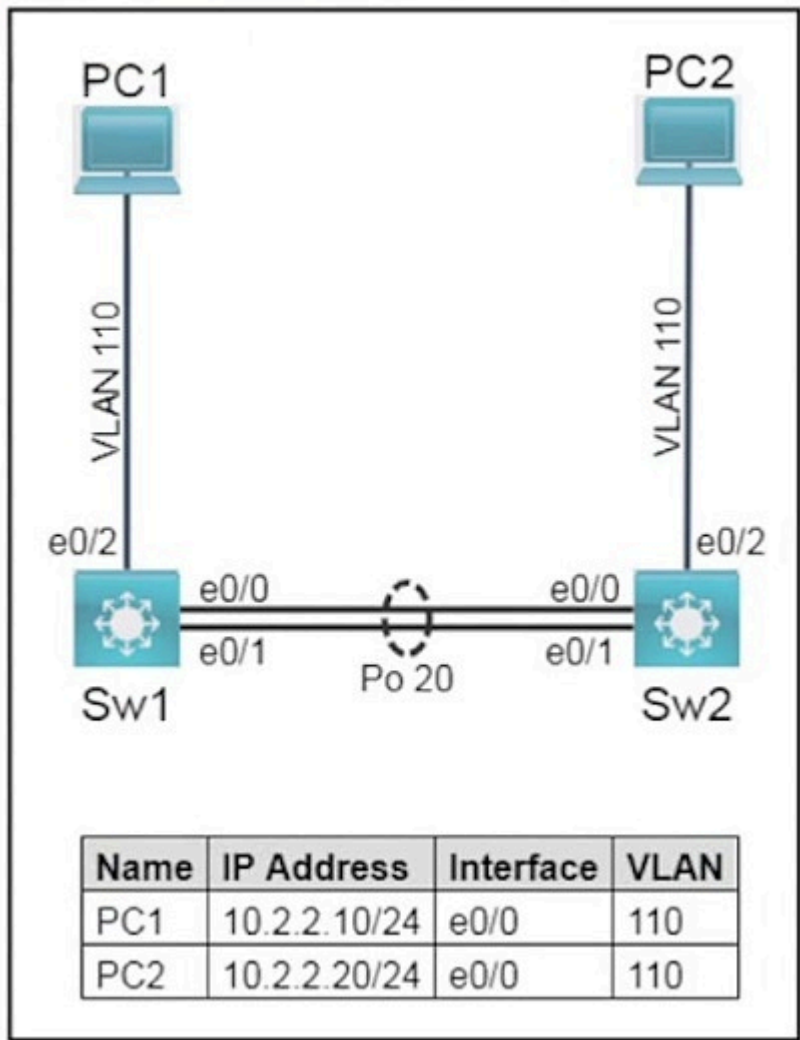
-

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- Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
- All necessary pre-configurations have been applied.
- Do not remove any existing configurations from the devices, only those necessary to make the appropriate changes required to fulfill the listed tasks.
- Do not change the enable password or hostname for any device.
- Save your configurations to NVRAM before moving to the next item.
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Topology

-



Tasks

-

Task 1

-

Configure trunks between Sw1 and Sw2 on ports E0/0 and E0/1 using the IEEE standard frame tagging method.

- Add VLAN 99 as untagged on the trunk ports.
- Only extend VLAN 110 and the untagged VLAN across the trunk.
- Verify that PC1 is capable of pinging PC2.

Task 2

-

On Sw1 and Sw2, use IEEE 802.3ad link aggregation.

- Combine E0/0 and E0/1 into a single logical link while leaving the trunk configurations intact.
- Assign number 20 to the link.
- Both links must negotiate aggregation.

Task 1:

Sw1:

```
interface e0/0
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 110,99
switchport trunk native vlan 99
```

```
interface e0/1
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 110,99
switchport trunk native vlan 99
```

Sw2:

```
interface e0/0
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 110,99
switchport trunk native vlan 99
```

Correct Answer:

```
interface e0/1
switchport mode trunk
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 110,99
switchport trunk native vlan 99
```

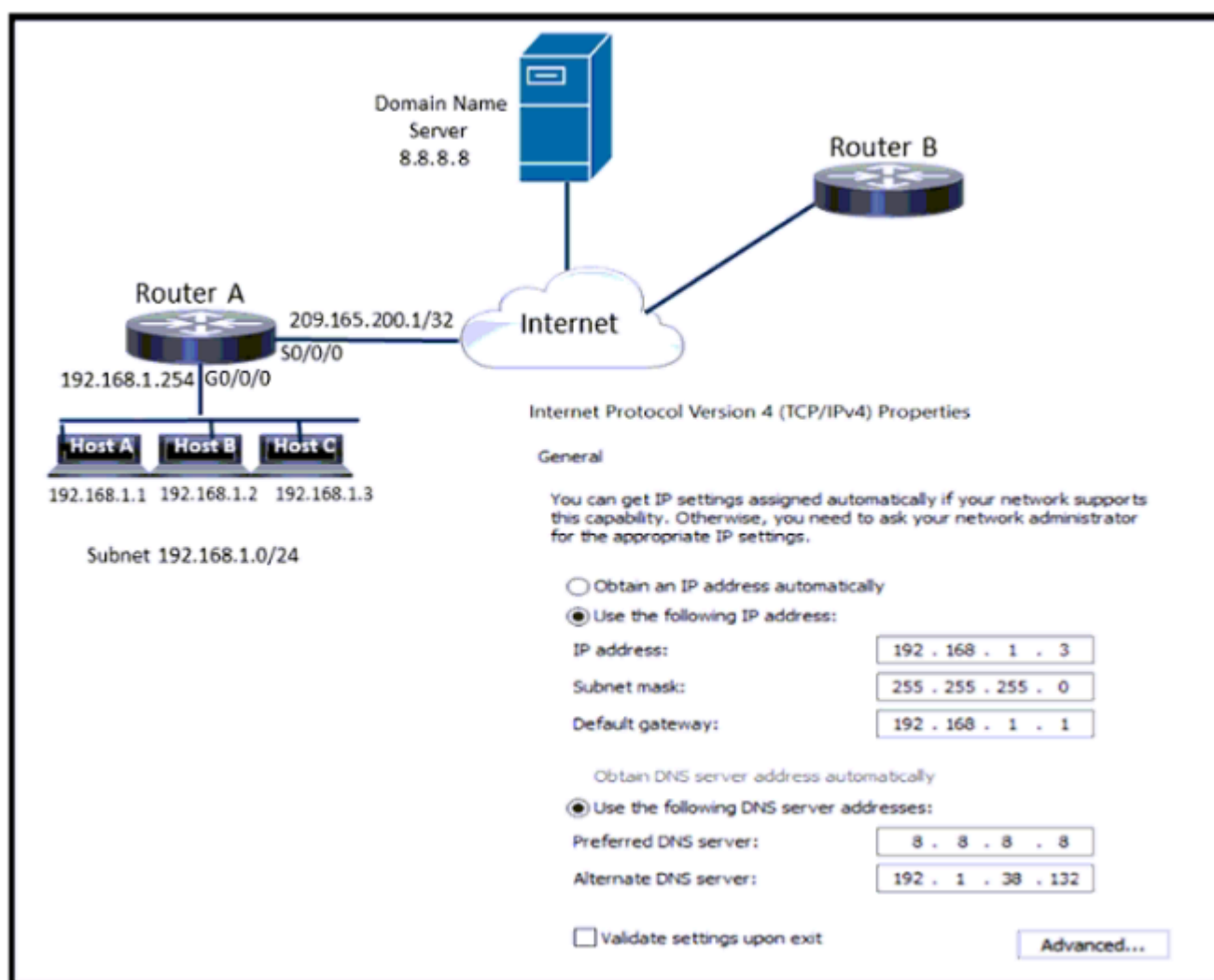
Task 2:

Sw1:

```
interface range e0/0 - e0/1
channel-group 1 mode active
interface Port-channel1
no shutdown
```

Sw2:

```
interface range e0/0 - e0/1
channel-group 1 mode active
interface Port-channel1
no shutdown
```

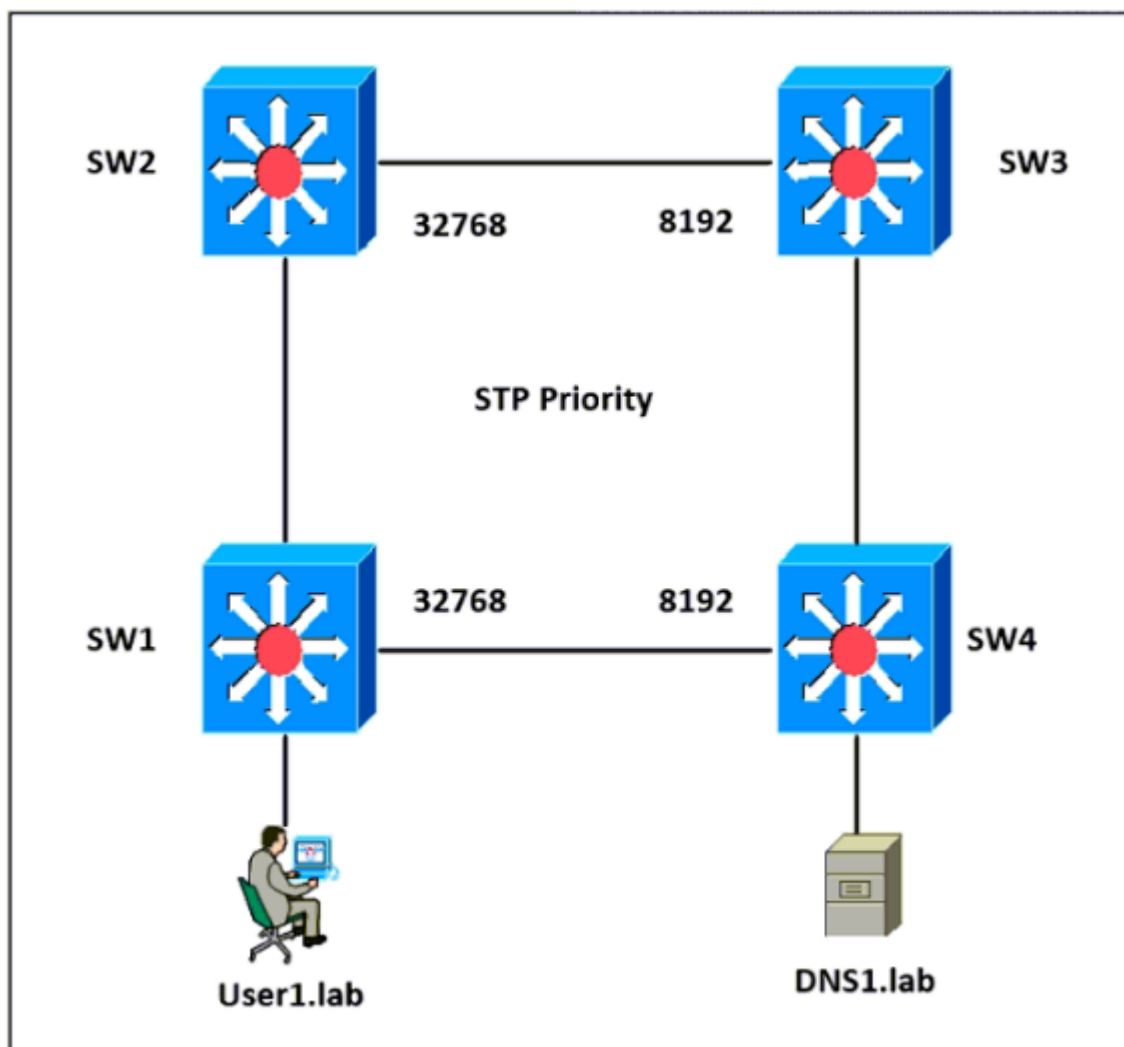
Refer to the exhibit. Which configuration parameter is preventing host C from reaching the internet?

- A. IP address assignment
- B. IP network mask
- C. default gateway Most Voted
- D. automatic DNS

Correct Answer: C

Community vote distribution

C (100%)



Refer to the exhibit. Which switch in this configuration will be elected as the root bridge?

SW1 0C:0A:05:22:05:97 -

SW2 0C:4A:82:07:57:58 -

SW3 0C:0A:A8:1A:3C:9D -

SW4 0C:0A:18:A1:B3:19

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

D. SW4 **Most Voted**

Correct Answer: D

Community vote distribution

D (71%)

C (29%)

SIMULATION

-

Guidelines

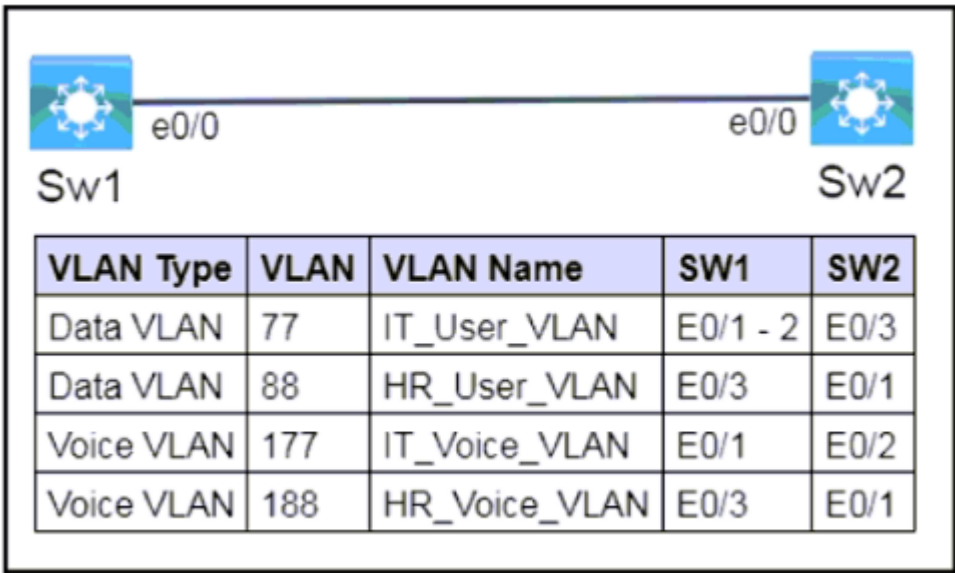
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Topology

-



Tasks

-

All physical cabling is in place and verified. Connectivity for the Switches on ports E0/1, E0/2, and E0/3 must be configured and available for voice and data capabilities.

1. Configure Sw1 and Sw2 with the VLAN naming as indicated.
2. Assign the VLANs to the appropriate interfaces and set a non-trunking, non-tagged, single-VLAN for each interface according to the topology.
3. Configure both switches to use the L2 vendor-neutral discovery protocol to broadcast device information, including the native VLAN across the e0/0 interfaces.

Task 1. Configure Sw1 and Sw2 with the VLAN naming as indicated.

```
SW-1(config)#vlan 77
SW-1(config-vlan)#name IT_User_VLAN
SW-1(config-vlan)#exit
SW-1(config)#vlan 88
SW-1(config-vlan)#name HR_User_VLAN
SW-1(config-vlan)#exit
SW-1(config)#vlan 177
SW-1(config-vlan)#name IT+Voice_VLAN
SW-1(config-vlan)#exit
SW-1(config)#vlan 188
SW-1(config-vlan)#name HR_User_VLAN
SW-1(config-vlan)#exit
```

```
SW-2(config)#vlan 77
SW-2(config-vlan)#name IT_User_VLAN
SW-2(config-vlan)#exit
SW-2(config)#vlan 88
SW-2(config-vlan)#name HR_User_VLAN
SW-2(config-vlan)#exit
SW-2(config)#vlan 177
SW-2(config-vlan)#name IT+Voice_VLAN
SW-2(config-vlan)#exit
SW-2(config)#vlan 188
SW-2(config-vlan)#name HR_User_VLAN
SW-2(config-vlan)#exit
```

Task 2. Assign the VLANs to the appropriate interfaces and set a non-trunking, non-tagged, single-VLAN for each interface according to the topology.

Correct Answer:

```
SW-1(config)#interface range E0/1-2
SW-1(config-if)#switchport mode access
SW-1(config-if)#switchport access vlan 77
SW-1(config)#interface range E0/3
SW-1(config-if)#switchport mode access
SW-1(config-if)#switchport access vlan 88
SW-1(config)#interface range E0/1
SW-1(config-if)#switchport mode access
SW-1(config-if)#switchport access vlan 177
SW-1(config)#interface range E0/3
SW-1(config-if)#switchport mode access
SW-1(config-if)#switchport access vlan 188
```

```
SW-2(config)#interface range E0/3
SW-2(config-if)#switchport mode access
SW-2(config-if)#switchport access vlan 77
```

```
SW-2(config)#interface range E0/1
SW-2(config-if)#switchport mode access
SW-2(config-if)#switchport access vlan 88
```

```
SW-2(config)#interface range E0/2
SW-2(config-if)#switchport mode access
SW-2(config-if)#switchport access vlan 177
```

```
SW-2(config)#interface range E0/1
SW-2(config-if)#switchport mode access
SW-2(config-if)#switchport access vlan 178
```

Task 3. Configure Sw1 and Sw2 to allow neighbor discovery via the vendor-neutral protocol on e0/0.

```
SW-1(config)#lldp run
SW-2(config)#lldp run
```


SIMULATION

-

Guidelines

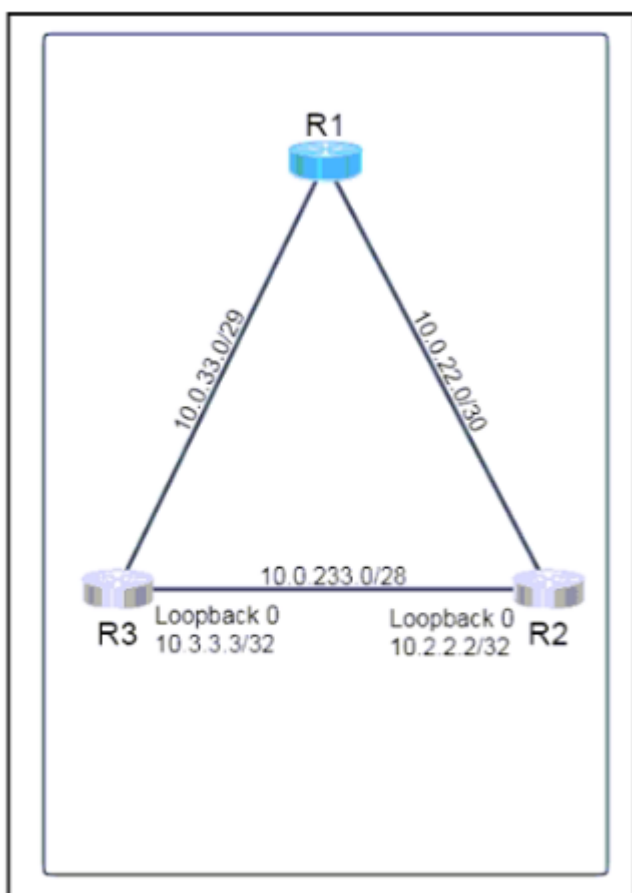
-

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Topology

-



Tasks

-

Refer to the topology. All physical cabling is in place. Routers 2 and 3 are inaccessible. Configure OSPF routing for the network and ensure R1 has joined Area 0 without using network statements.

Task 1

-

- Configure OSPF on R1 with a process ID and router- ID only as follows:
 - o use process ID 33
 - o use E0/1 IP as the router ID

Task 2

-

- Configure R1 to establish neighbor adjacencies with R2 and R3. The network statement under the OSPF process must not be used.
- Configure R1 to always become the DR for Area 0

```
R1# configure terminal
R1(config)# interface e0/1
R1(config-if)# ip address 10.0.22.1 255.255.255.252
R1(config-if)# exit
R1(config)# interface e0/2
R1(config-if)# ip address 10.0.33.1 255.255.255.252
R1(config-if)# exit
R1(config)# interface e0/0
R1(config-if)# ip address 10.0.233.1 255.255.255.240
R1(config-if)# exit
R1(config)# router ospf 33
R1(config-router)# router-id 10.0.22.1
```

Correct Answer: R1(config-router)# interface e0/0
R1(config-if)# ip ospf 33 area 0
R1(config-if)# ip ospf priority 255
R1(config-if)# exit

```
R1(config-router)# interface e0/1
R1(config-if)# ip ospf 33 area 0
R1(config-if)# ip ospf priority 255
R1(config-if)# exit
```

```
R1(config-router)# interface e0/2
R1(config-if)# ip ospf 33 area 0
R1(config-if)# ip ospf priority 255
R1(config-if)# exit
```

WPA2 Policy	<input checked="" type="checkbox"/>	
WPA3 Policy	<input type="checkbox"/>	
WPA2/WPA3 Encryption	AES(CCMP128)	<input type="checkbox"/>
	CCMP256	<input type="checkbox"/>
	GCMP128	<input type="checkbox"/>
	GCMP256	<input type="checkbox"/>
MPSK	<input type="checkbox"/>	
Auth Key Mgmt	802.1x	<input type="checkbox"/>
	PSK	<input type="checkbox"/>
	CCKM	<input type="checkbox"/>
	SAE	<input type="checkbox"/>
	OWE	<input type="checkbox"/>
	FT + 802.1x	<input type="checkbox"/>
	FT + PSK	<input type="checkbox"/>

Refer to the exhibit. An engineer is creating a secure preshared key based SSID using WPA2 for a wireless network running on 2.4 GHz and 5 GHz. Which two tasks must the engineer perform to complete the process? (Choose two.)

A. Select the 802.1x option for Auth Key Management

B. Select the AES (CCMP128) option for WPA2 WPA3 Encryption

C. Select the AES option for Auth Key Management

D. Select the PSK option for Auth Key Management

E. Select the WPA Policy option.

Correct Answer: *BD*

Which Rapid PVST+ port state does a port operate in without receiving BPDUs from neighbors or updating the address database?

A. listening

B. forwarding

C. disabled Most Voted

D. blocking

Correct Answer: *C*

Community vote distribution

C (60%)	D (40%)
---------	---------

Which protocol should be used to transfer large files on a company intranet that allows TCP 20 and 21 through the firewall?

- A. SMTP
- B. REST API
- C. TFTP

D. FTP Most Voted

Correct Answer: *D*

Community vote distribution

D (100%)

```
R19#sh int fa0/0
FastEthernet0/0 is up, line protocol is up
Hardware is DEC21140, address is ca02.7788.0000 (bia ca02.7788.0000)
Description: SALES_SUBNET
Internet address is 10.32.102.2/30
MTU 1500 bytes, BW 100000 Kbit/sec, DLY 100 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive set (60 sec)
Full-duplex, 100Mb/s, 100BaseTX/FX
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:01, output 00:00:00, output hang never
Last clearing of "show interface" counters never
Input queue: 0/300/0/0 (size/max/drops/flushes); Total output drops:
135298429
Queueing strategy: fifo
Output queue: 0/300 (size/max)
30 second input rate 0 bits/sec, 0 packets/sec
30 second output rate 0 bits/sec, 0 packets/sec
73310 packets input, 7101162 bytes
Received 73115 broadcasts (0 IP multicasts)
0 runs, 0 giants, 0 throttles
0 input errors, 4 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog
0 input packets with dribble condition detected
3927513096455 packets output, 14404034810952 bytes, 0 underruns
0 output errors, 11 collisions, 0 interface resets
0 unknown protocol drops
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier
0 output buffer failures, 0 output buffers swapped out
```

Refer to the exhibit. What is the cause of poor performance on router R19?

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

Correct Answer: C

Community vote distribution

C (83%)

D (17%)

Why is UDP more suitable than TCP for applications that require low latency, such as VoIP?

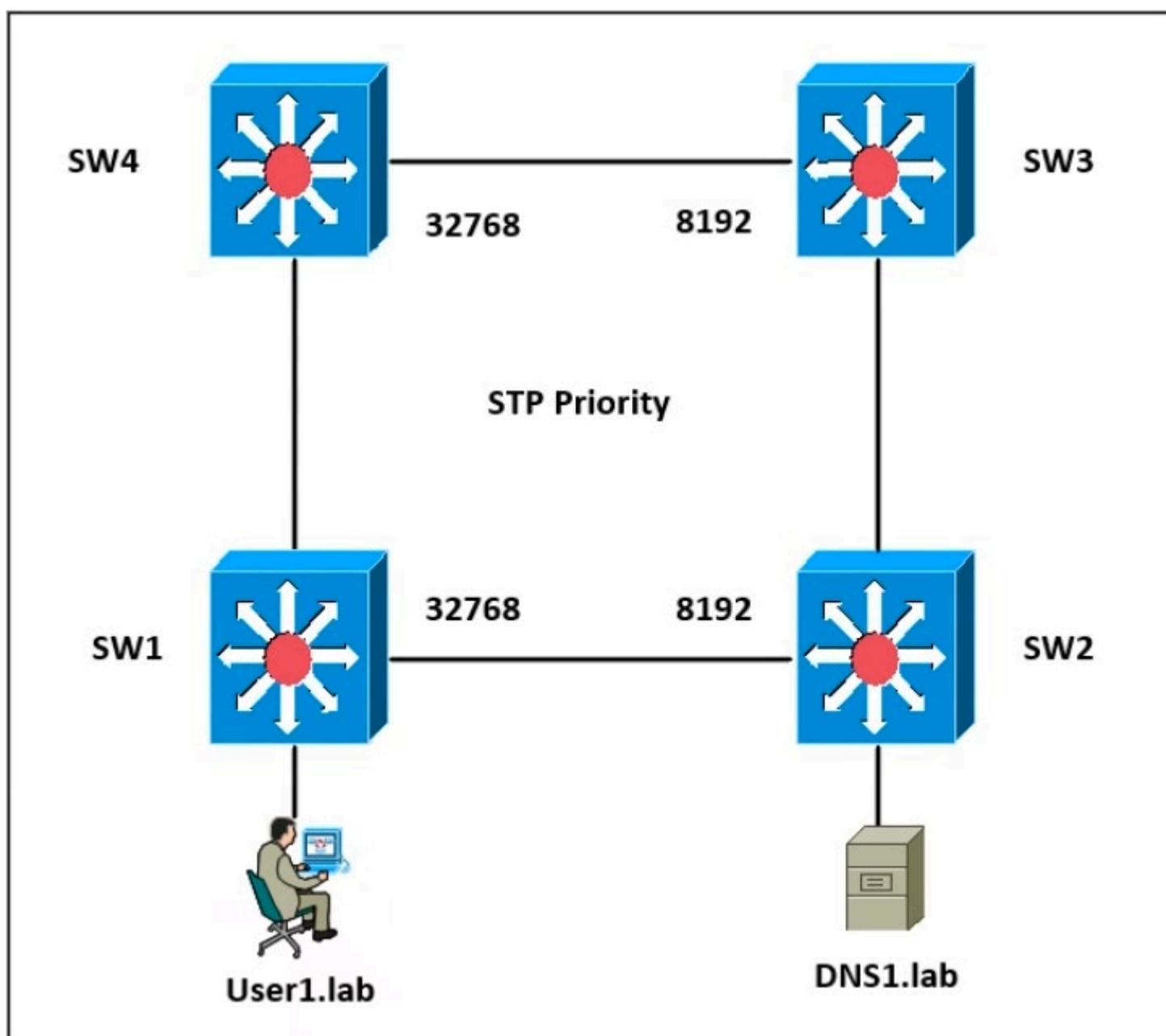
- A. UDP uses sequencing data for packets to arrive in order, and TCP offers the capability to receive packets in random order.
- B. TCP uses congestion control for efficient packet delivery, and UDP uses flow control mechanisms for the delivery of packets
- C. UDP reliably guarantees delivery of all packets, and TCP drops packets under heavy load.

D. TCP sends an acknowledgment for every packet that is received, and UDP operates without acknowledgments. Most Voted

Correct Answer: *D*

Community vote distribution

D (100%)



Refer to the exhibit. Which switch in this configuration will be elected as the root bridge?

SW1: 0C:0A:05:22:05:97 -

SW2: 0C:0A:A8:1A:3C:9D -

SW3: 0C:0A:18:81:B3:19 -

SW4: 0C:4A:82:56:35:78

A. SW1

B. SW2

C. SW3 **Most Voted**

D. SW4

Correct Answer: C

Community vote distribution

C (100%)

Which alternative to password authentication is implemented to allow enterprise devices to log in to the corporate network?

- A. 90-day renewal policies
- B. magic links
- C. one-time passwords

D. digital certificates **Most Voted**

Correct Answer: D

Community vote distribution

D (100%)

The screenshot shows the Cisco WLC GUI for configuring a WLAN. The 'WLAN > Edit' page has tabs for General, Security, QOS, and Advanced. Under the Security tab, there are sub-tabs for Layer2, Layer3, and AAA Server. The Layer2 sub-tab is selected. In the Layer 2 Security section, the dropdown menu is set to 'WPA + WPA2'. Below this, the 'WPA2 Policy' checkbox is checked. In the 'WPA2 Encryption' section, the 'AES' checkbox is selected. The 'Auth Key Mgmt' dropdown is set to 'PSK'. The 'PSK Format' dropdown is set to 'Hex'. A large text field for the PSK key is visible at the bottom.

Refer to the exhibit. An engineer is using the Cisco WLC GUI to configure a WLAN for WPA2 encryption with AES and preshared key Cisc0123456. After the engineer selects the WPA + WPA2 option from the Layer 2 Security drop-down list, which two tasks must they perform to complete the process? (Choose two.)

- A. Select CCKM from the Auth Key Mgmt drop-down list, set the PSK Format to Hex, and enter the key
- B. Select PSK from the Auth Key Mgmt drop-down list, set the PSK Format to ASCII, and enter the key.
- C. Select ASCII from the PSK Format drop-down list, enter the key, and leave the Auth Key Mgmt setting blank
- D. Select the WPA2 Policy and AES check boxes.
- E. Select the WPA2 Policy, AES, and TKIP check boxes

Correct Answer: BD

Community vote distribution

BD (100%)

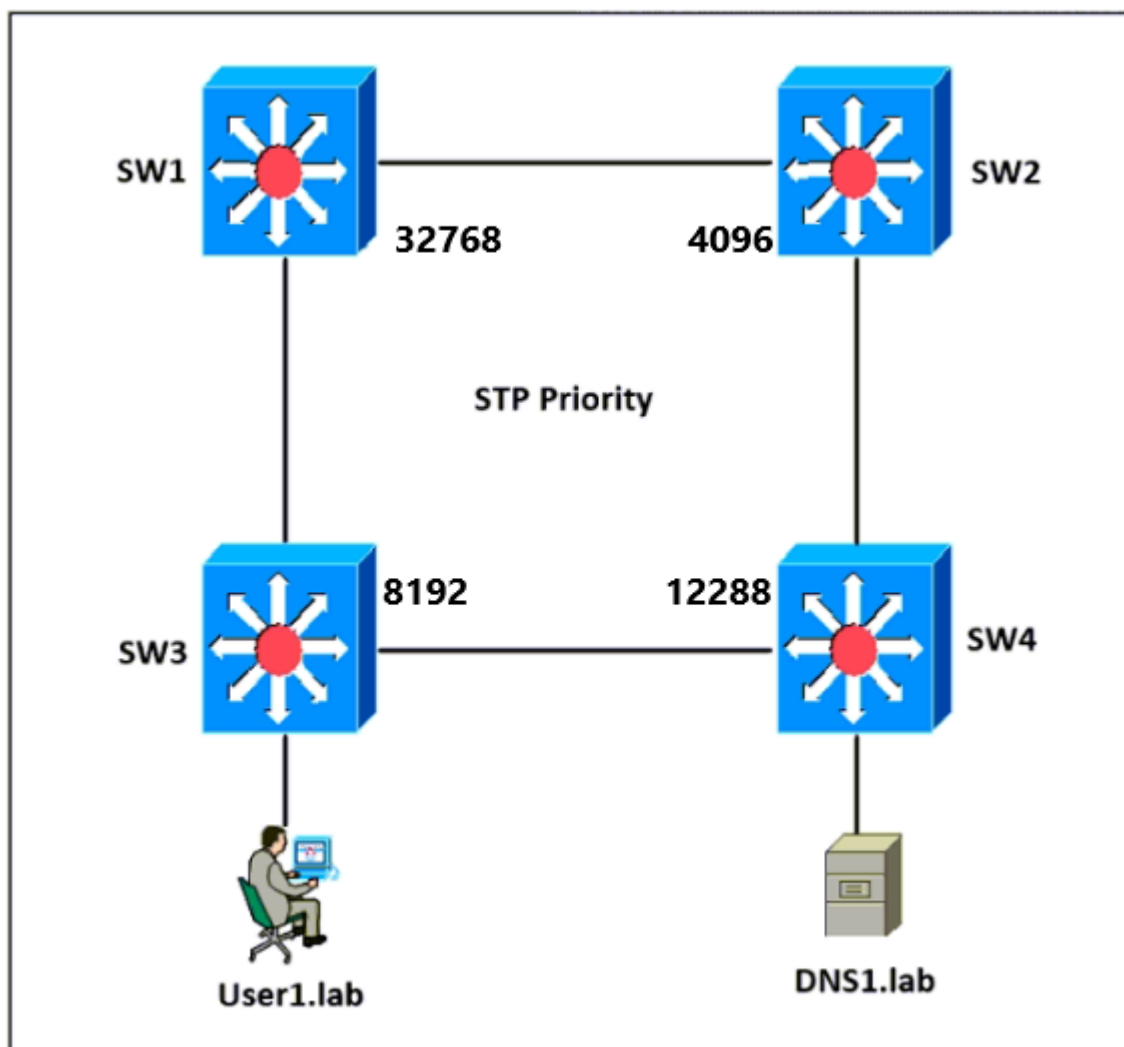
Which authentication method requires the user to provide a physical attribute to authenticate successfully?

- A. biometric Most Voted
- B. password
- C. multifactor
- D. certificate

Correct Answer: A

Community vote distribution

A (100%)



Refer to the exhibit. Which switch in this configuration will be elected as the root bridge?

SW1 0C:E4:85:71:03:80 -

SW2 0C:0E:1A:22:05:97 -

SW3 0C:E0:A1:1A:3C:9D -

SW4 0C:00:18:A1:B3:19

A. SW1

B. SW2 **Most Voted**

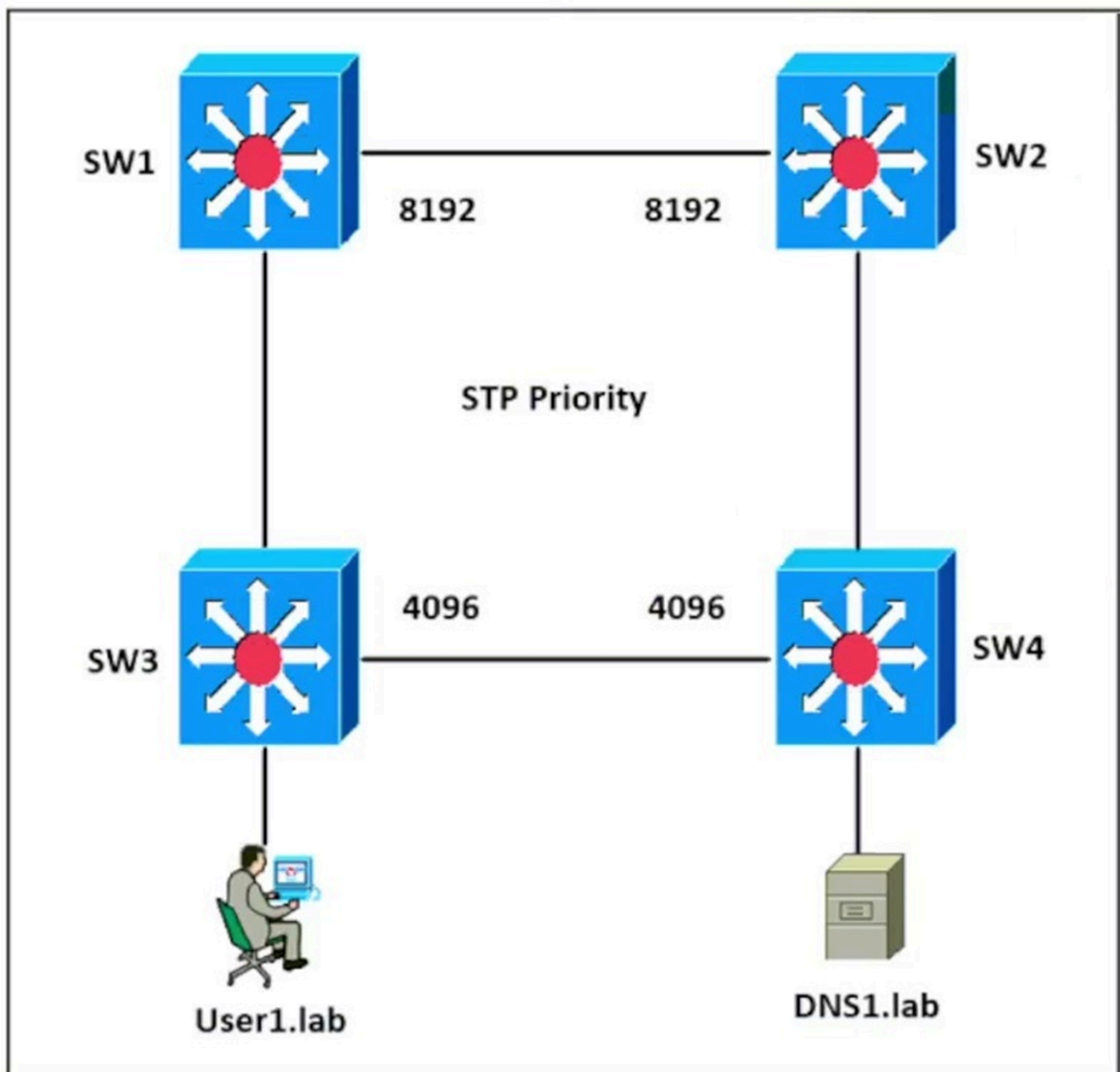
C. SW3

D. SW4

Correct Answer: B

Community vote distribution

B (100%)



Refer to the exhibit. Which switch in this configuration will be elected as the root bridge?

SW1 0C:B4:86:22:42:37 -

SW2 0C:0B:15:22:05:97 -

SW3 0C:0B:15:1A:3C:9D -

SW4 0C:B0:18:A1:B3:19

A. SW1

B. SW2

C. SW3

D. SW4

Correct Answer: C

Community vote distribution

C (100%)

Question #1389

Topic 1

Which mechanism allows WPA3 to provide a higher degree of security than its predecessors?

A. automatic device pairing

B. SAE password-based key exchange

C. certificate-based authentication

D. special-character support in preshared keys

Correct Answer: B

Community vote distribution

B (100%)

Question #1390

Topic 1

Which protocol does Ansible use to push modules to nodes in a network?

A. Telnet

B. Kerberos

C. SNMP

D. SSH

Correct Answer: D

Community vote distribution

D (100%)

Question #1391

Topic 1

Which function does an iterative DNS query serve in the domain name resolution process?

A. Obtain information directly from all root DNS servers configured within the scope.

B. Encrypt communication automatically between DNS clients and servers.

C. Allow a DNS client to contact several DNS servers until the correct information is found. **Most Voted**

D. Update records dynamically across multiple DNS servers at the same time.

Correct Answer: C

Community vote distribution

C (100%)

What is the difference between controller-based networks and traditional networks as they relate to control-plane and/or data-plane functions?

- A. Controller-based networks centralize all important data-plane functions, and traditional networks distribute data-plane functions.
- B. Traditional networks centralize all important control-plane functions, and controller-based networks distribute control-plane functions.
- C. Traditional networks centralize all important data-plane functions, and controller-based networks distribute data-plane functions.
- D. Controller-based networks centralize all important control-plane functions, and traditional networks distribute control-plane functions.

Most Voted

Correct Answer: D

Community vote distribution

D (100%)

Why choose Cisco DNA Center for automated lifecycle management?

- A. to allow SSH access to all nodes in the network
- B. to provide software redundancy in the network
- C. to perform upgrades without service interruption
- D. to provide fast and accurate deployment of patches and updates

Correct Answer: D

Community vote distribution

D (100%)

What is the default interface for in-band wireless network management on a WLC?

- A. out-of-band
- B. redundant port
- C. service port
- D. wireless management

Correct Answer: D

Community vote distribution

D (100%)


Which factor must be considered during the implementation of an IPsec VPN?

- A. In IPsec tunnel mode, the entire original IP datagram is encrypted. Most Voted
- B. IPsec transport mode increases GRE tunnel security over tunnel mode.
- C. In IPsec tunnel mode, only the IP payload is encrypted.
- D. IPsec transport mode leaves the Layer 4 header unencrypted for inspection.

Correct Answer: A

Community vote distribution

A (100%)

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