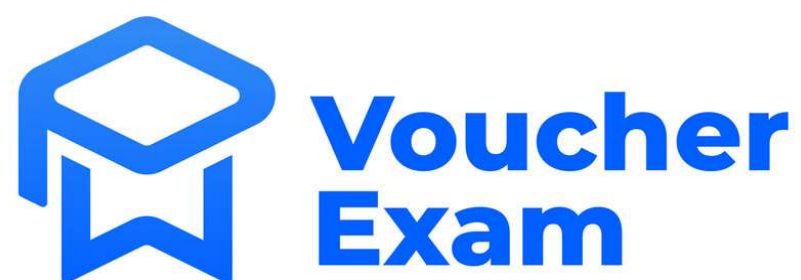


Cisco Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)

Number: 350-401
Passing Score: 800
Time Limit: 120 min
File Version: 4.9



Cisco Implementing and Operating Cisco Enterprise Network Core Technologies
350-401 (ENCOR)

Exam A

QUESTION 1

The login method is configured on the VTY lines of a router with these parameters.

1.The first method for authentication is TACACS

2.If TACACS is unavailable, login is allowed without any provided credentials

Which configuration accomplishes this task?

- A.
- ```
R1#sh run | include aaa
aaa new-model
aaa authentication login telnet group tacacs+ none
aaa session-id common

R1#sh run | section vty
line vty 0 4

R1#sh run | include username
R1#
```
- B.
- ```
R1#sh run | include aaa
aaa new-model
aaa authentication login VTY group tacacs+ none
aaa session-id common

R1#sh run | section vty
line vty 0 4
password 7 02050D400809

R1#sh run | include username
R1#
```
- C.
- ```
R1#sh run | include aaa
aaa new-model
aaa authentication login default group tacacs+
aaa session-id common

R1#sh run | section vty
line vty 0 4
transport input none
R1#
```
- D.
- ```
R1#sh run | include aaa
aaa new-model
aaa authentication login default group tacacs+ none
aaa session-id common

R1#sh run | section vty
line vty 0 4
password 7 02050D400809

R1#sh run | include username
R1#
```

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

```

PYTHON CODE
import requests
import json

url = http://YOURIP/ins
switchuser='USERID'
switchpassword='PASSWORD'

myheaders={'content-type':'application/json'}
payload={
    "ins_api": {
        "version": "1.0",
        "type": "cli_show",
        "sid": "0",
        "input": "show version",
        "output_format": "json"
    }
}

response = requests.post(url,data=json.dumps(payload), headers=myheaders,auth=(switchuser,switchpassword)) json()

print(response['ins_api']['outputs']['output']['body']['kickstart_ver_str'])

```

```

HTTP JSON Response
{
  "ins_api": {
    "type": "cli_show",
    "version": "1.0",
    "sid": "eoc",
    "outputs": {
      "output": {
        "input": "show version",
        "msg": "Success",
        "code": "200",
        "body": {
          "bios_ver_str": "07.61",
          "kickstart_ver_str": "7.0(3)I7(4)",
          "bios_cmpl_time": "04/06/2017",
          "kick_file_name": "bootflash:///nxos.7.0.3.I7.4.bin",
          "kick_cmpl_time": "6/14/1970 2:00:00",
          "kick_tmstamp": "06/14/1970 09:49:04",
          "chassis_id": "Nexus9000 93180YC-EX chassis",
          "cpu_name": "Intel(R) Xeon(R) CPU @ 1.80GHz",
          "memory": 24633488,
          "mem_type": "kB",
          "rr_usecs": 134703,
          "rr_ctime": "Sun Mar 15 15:41:46 2019",
          "rr_reason": "Reset Requested by CLI command reload",
          "rr_sys_ver": "7.0(3)I7(4)",
          "rr_service": "",
          "manufacturer": "Cisco Systems, Inc.",
          "TABLE_package_list": {
            "ROW_package_list": {
              "package_id": 0
            }
          }
        }
      }
    }
  }
}

```

Refer to the exhibit.Which HTTP JSON response does the Python code output give?

- A. 7.61
- B. NameError. name 'json' is not defined
- C. 7.0(3)I7(4)
- D. KeyError: 'kickstart_ver_str'

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 3

Which two steps are required for a complete Cisco DNA Center upgrade? (Choose two.)

- A. golden image selection
- B. system update
- C. proxy configuration
- D. application updates
- E. automation backup

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 4



Refer to the exhibit. Assuming that R1 is a CE router, which VRF is assigned to Gi0/0 on R1?

- A. VRF VPN_A
- B. VRF VPN_B
- C. management VRF
- D. default VRF

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 5

Which LISP device is responsible for publishing EID-to-RLOC mappings for a site?

- A. ETR
- B. MR
- C. ITR
- D. MS

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 6

Which JSON syntax is valid?

- A. `{'switch':('name': 'dist1', 'interfaces': ['gig1', 'gig2', 'gig3'])}`
- B. `{/"switch/": {/"name/": "dist1", /"interfaces/": ["gig1", "gig2", "gig3"]}}`
- C. `."switch": "name": "dist1", "interfaces": ["gig1", "gig2", "gig3"]}`
- D. `."switch": {"name": "dist1", "interfaces": ["gig1", "gig2", "gig3"]}`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 7



Refer to the exhibit. VLANs 50 and 60 exist on the trunk links between all switches. All access ports on SW3 are configured for VLAN 50 and SW1 is the VTP server. Which command ensures that SW3 receives frames only from VLAN 50?

- A. SW1(config)#vtp mode transparent
- B. SW3(config)#vtp mode transparent

- C. SW1(config)#vtp pruning
- D. SW2(config)#vtp pruning

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 8

What are two common sources of interference for Wi-Fi networks? (Choose two.)

- A. fire alarm
- B. conventional oven
- C. LED lights
- D. radar
- E. rogue AP

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 9

What is one fact about Cisco SD-Access wireless network deployments?

- A. The wireless client is part of the fabric overlay.
- B. The WLC is part of the fabric underlay.
- C. The access point is part of the fabric underlay.
- D. The access point is part of the fabric overlay.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10

What is a fact about Cisco EAP-FAST?

- A. It operates in transparent mode
- B. It is an IETF standard.
- C. It does not require a RADIUS server certificate.
- D. It requires a client certificate.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 11

Which two pieces of information are necessary to compute SNR? (Choose two.)

- A. noise floor
- B. RSSI
- C. antenna gain
- D. transmit power
- E. EIRP

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:

QUESTION 12

```

SwitchC#show vtp status
VTP Version : 2
Configuration Revision : 0
Maximum VLANs supported locally : 255
Number of existing VLANs : 3
VTP Operating Mode : transparent
VTP Domain Name : cisco.com
VTP Pruning Mode : Disabled
VTP V2 Mode : Disabled
VTP Traps Generation : Disabled
MD5 digest : 0xE5 0x28 0x5D 0x3E 0x2F 0xE5 0xAD 0x2B
Configuration last modified by 0.0.0.0 at 1-10-19 09:01:38

SwitchC#show vlan brief

```

VLAN	Name	Status	Ports
1	default	active	Fa0/3, Fa0/4, Fa0/5, Fa0/6 Fa0/7, Fa0/8, Fa0/9, Fa0/10 Fa0/11, Fa0/12, Fa0/13, Fa0/14 Fa0/15, Fa0/16, Fa0/17, Fa0/18 Fa0/19, Fa0/20, Fa0/21, Fa0/22 Fa0/23, Fa0/24, Po1
110	Finance	active	
210	HR	active	Fa0/1
310	Sales	active	Fa0/2

```

[Output omitted...]

SwitchC#show int trunk

```

Port	Mode	Encapsulation	Status	Native vlan
Gig1/1	on	802.1q	trunking	1
Gig1/2	on	802.1q	trunking	1

```

Port      Vlans allowed on trunk
Gig1/1    1-1005
Gig1/2    1-1005

Port      Vlans allowed and active in management domain
Gig1/1    1,110,210,310
Gig1/2    1,110,210,310

Port      Vlans in spanning tree forwarding state and not pruned
Gig1/1    1,110,210,310
Gig1/2    1,110,210,310

SwitchC#show run interface port-channel
interface Port-channel 1
description Uplink_to_Core
switchport mode trunk

```

Refer to the exhibit. SwitchC connects HR and Sales to the Core switch. However, business needs require that no traffic from the Finance VLAN traverse this switch. Which command meets this requirement?

- A. SwitchC(config)#interface port-channel 1
SwitchC(config-if)#switchport trunk allowed vlan remove 110
- B. SwitchC(config)#interface port-channel 1
SwitchC(config)#switchport trunk allowed vlan add 210,310
- C. SwitchC(config)#vtp pruning
- D. SwitchC(config)#vtp pruning vlan 110

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 13

An engineer is configuring local web authentication on a WLAN. The engineer chooses the Authentication radio button under the Layer 3 Security options for Web Policy. Which device presents the web authentication for the WLAN?

- A. Local WLC
- B. ISE server
- C. Anchor WLC
- D. RADIUS server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 14

When configuring WPA2 Enterprise on a WLAN, which additional security component configuration is required?

- A. RADIUS server
- B. PKI server
- C. TACACS server
- D. NTP server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 15

How does a fabric AP fit in the network?

- A. It is in local mode and must be connected directly to the fabric edge switch.
- B. It is in local mode and must be connected directly to the fabric border node.
- C. It is in FlexConnect mode and must be connected directly to the fabric border node.
- D. It is in FlexConnect mode and must be connected directly to the fabric edge switch.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 16

```
R1# sh run | begin line con
line con 0
  exec-timeout 0 0
  privilege level 15
  logging synchronous
  stopbits 1
line aux 0
  exec-timeout 0 0
  privilege level 15
  logging synchronous
  stopbits 1
line vty 0 4
  password 7 045802150C2E
  login
line vty 5 15
  password 7 045802150C2E
  login
end

R1# sh run | include aaa | enable
no aaa new-model
R1#
```

Refer to the exhibit. Which privilege level is assigned to VTY users?

- A. 1
- B. 7
- C. 13
- D. 15

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 17

```
R1#show ip bgp
BGP table version is 32, local router ID is 192.168.101.5
Status codes: S suppressed, d damped, h history, * valid, > best, i - internal,
               r RIB-failure, S Stale, m multipath, b backup-path, f RT-Filter,
               x best-external, a additional-path, c RIB-compressed,
Origin codes: i - IGP, e - EGP, ? - incomplete
RPKI validation codes: V valid, I invalid, N Not found

   Network        Next Hop        Metric LocPrf  Weight Path
*  192.168.102.0   192.168.101.18   80      0 64517 i
*                 192.168.101.14   80      80  0 64516 i
*                 192.168.101.10   80      80  0 64515 64515 i
>                 192.168.101.2   32768   64513 i
*                 192.168.101.6   80      0 64514 64514 i
```

Refer to the exhibit. Which IP address becomes the active next hop for 192.168.102.0/24 when 192.168.101.2 fails?

- A. 192.168.101.6
- B. 192.168.101.18
- C. 192.168.101.14
- D. 192.168.101.10

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 18

Which two operations are valid for RESTCONF? (Choose two.)

- A. HEAD
- B. ADD
- C. PATCH
- D. PUSH
- E. REMOVE
- F. PULL

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 19

A customer has several small branches and wants to deploy a Wi-Fi solution with local management using CAPWAP. Which deployment model meets this requirement?

- A. local mode
- B. autonomous
- C. Mobility Express
- D. SD-Access wireless

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 20

Which exhibit displays a valid JSON file?

- A.

```
{
  "hostname": "edge_router_1"
  "interfaces": [
    "GigabitEthernet1/1"
    "GigabitEthernet1/2"
    "GigabitEthernet1/3"
  ]
}
```
- B.

```
{
  "hostname": "edge_router_1"
  "interfaces": {
    "GigabitEthernet1/1",
    "GigabitEthernet1/2",
    "GigabitEthernet1/3",
  },
}
```
- C.

```
{
  "hostname": "edge_router_1"
  "interfaces": {
    "GigabitEthernet1/1"
    "GigabitEthernet1/2"
    "GigabitEthernet1/3"
  }
}
```
- D.

```
{
  "hostname": "edge_router_1"
  "interfaces": [
    "GigabitEthernet1/1",
    "GigabitEthernet1/2",
    "GigabitEthernet1/3"
  ]
}
```

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 21

Which method displays text directly into the active console with a synchronous EEM applet policy?

- A.

```
event manager applet boom
event syslog pattern 'UP'
action 1.0 puts 'logging directly to console'
```
- B.

```
event manager applet boom
event syslog pattern 'UP'
action 1.0 gets 'logging directly to console'
```
- C.

```
event manager applet boom
event syslog pattern 'UP'
action 1.0 string 'logging directly to console'
```
- D.

```
event manager applet boom
event syslog pattern 'UP'
action 1.0 syslog priority direct msg 'logging directly to console'
```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

<https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/eem/configuration/xr-3s/eem-xr-3s-book/eem-policy-cli.html#GUID-8C15FA9E-EE28-4EDD-996E-97BBBB8E525F>

QUESTION 22

A network administrator is preparing a Python script to configure a Cisco IOS XE-based device on the network. The administrator is worried that colleagues will make changes to the device while the script is running. Which operation of the ncclient manager prevents colleagues from making changes to the devices while the script is running?

- A. `m.lock(config='running')`
- B. `m.freeze(c onfig='running')`
- C. `m.lock(target='running')`
- D. `m.freeze(target='running')`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 23

Which method of account authentication does OAuth 2.0 use within REST APIs?

- A. username/role combination
- B. cookie authentication
- C. basic signature workflow
- D. access tokens

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 24

When a wireless client roams between two different wireless controllers, a network connectivity outage is experienced for a period of time. Which configuration issue would cause this problem?

- A. All of the controllers within the mobility group are using the same virtual interface IP address.
- B. Not all of the controllers in the mobility group are using the same mobility group name.
- C. Not all of the controllers within the mobility group are using the same virtual interface IP address
- D. All of the controllers in the mobility group are using the same mobility group name.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 25

An engineer must protect their company against ransomware attacks. Which solution allows the engineer to block the execution stage and prevent file encryption?

- A. Use Cisco Firepower with Intrusion Policy and snort rules blocking SMB exploitation.
- B. Use Cisco AMP deployment with the Exploit Prevention engine enabled.
- C. Use Cisco AMP deployment with the Malicious Activity Protection engine enabled.
- D. Use Cisco Firepower and block traffic to TOR networks.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 26



Refer to the exhibit. Assuming the WLC's interfaces are not in the same subnet as the RADIUS server, which interface would the WLC use as the source for all RADIUS-related traffic?

- A. The interface specified on the WLAN configuration
- B. The controller virtual interface
- C. Any interface configured on the WLC
- D. The controller management interface

Correct Answer: A

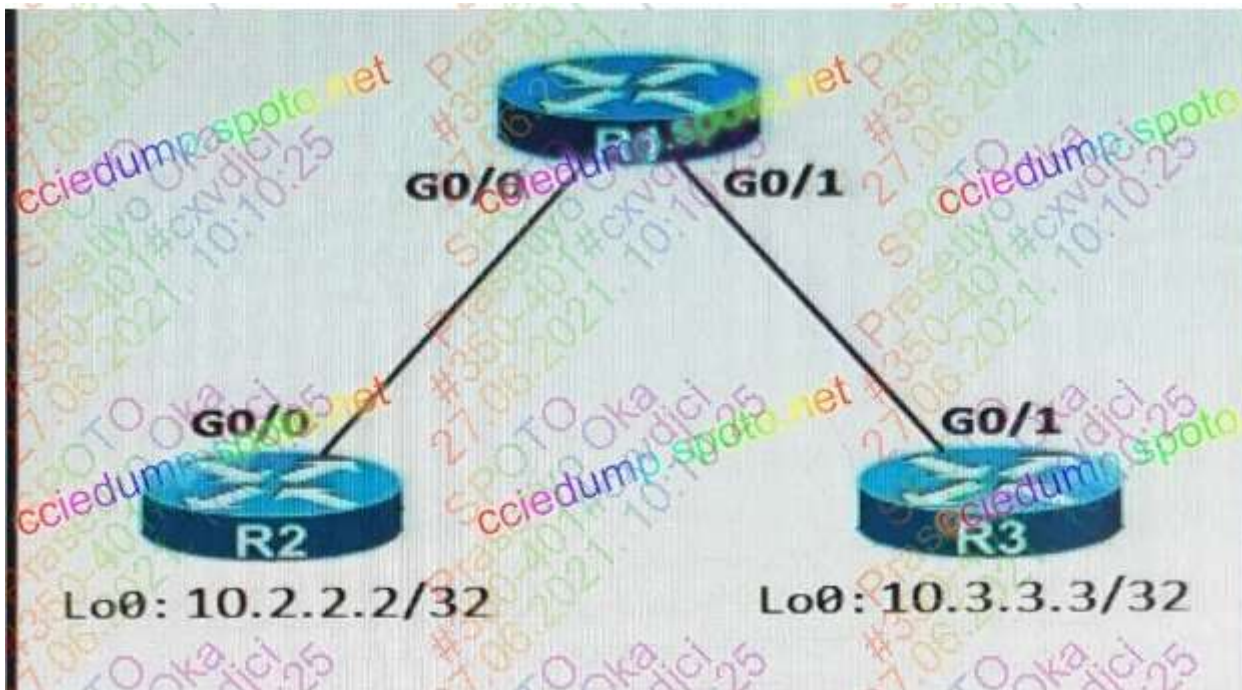
Section: (none)

Explanation

Explanation/Reference:

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-2/config-guide/b_cg82/b_cg82_chapter_01100111.pdf

QUESTION 27



Refer to the exhibit. An engineer must deny Telnet traffic from the loopback interface of router R3 to the loopback interface of router R2 during the weekend hours. All other traffic between the loopback interfaces of routers R3 and R2 must be allowed at all times. Which command set accomplishes this task?

- A.
- ```
R3(config)#time-range WEEKEND
R3(config-time-range)#periodic Saturday Sunday 00:00 to 23:59

R3(config)#access-list 150 deny tcp host 10.3.3.3 host 10.2.2.2 eq 23 time-range WEEKEND
R3(config)# access-list 150 permit ip any any time-range WEEKEND

R3(config)#interface G0/1
R3(config-if)#ip access-group 150 out
```

- B. R1(config)#time-range WEEKEND  
R1(config-time-range)#periodic weekend 00:00 to 23:59  
  
R1(config)#access-list 150 deny tcp host 10.3.3.3 host 10.2.2.2 eq 23 time-range WEEKEND  
R1(config)#access-list 150 permit ip any any  
  
R1(config)#interface G0/1  
R1(config-if)#ip access-group 150 in
- C. R1(config)#time-range WEEKEND  
R1(config-time-range)#periodic Friday Sunday 00:00 to 00:00  
  
R1(config)#access-list 150 deny tcp host 10.3.3.3 host 10.2.2.2 eq 23 time-range WEEKEND  
R1(config)#access-list 150 permit ip any any  
  
R1(config)#interface G0/1  
R1(config-if)#ip access-group 150 in
- D. R3(config)#time-range WEEKEND  
R3(config-time-range)#periodic weekend 00:00 to 23:59  
  
R3(config)#access-list 150 permit tcp host 10.3.3.3 host 10.2.2.2 eq 23 time-range WEEKEND  
R3(config)#access-list 150 permit ip any any time-range WEEKEND  
  
R3(config)#interface G0/1  
R3(config-if)#ip access-group 150 out

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 28

A client device roams between access points located on different floors in an atrium. The access points are joined to the same controller and configured in local mode. The access points are in different AP groups and have different IP addresses, but the client VLAN in the groups is the same. What type of roam occurs?

- A. intra-VLAN
- B. inter-subnet
- C. intra-controller
- D. inter-controller

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-4/configuration/guides/consolidated/b\\_cg74\\_CONSOLIDATED/b\\_cg74\\_CONSOLIDATED\\_chapter\\_01100.html#ID2694](https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-4/configuration/guides/consolidated/b_cg74_CONSOLIDATED/b_cg74_CONSOLIDATED_chapter_01100.html#ID2694)

#### QUESTION 29

```
access-list 1 permit 172.16.1.0 0.0.0.255
ip nat inside source list 1 interface gigabitethernet0/0 overload
```

Refer to the exhibit. The inside and outside interfaces in the NAT configuration of this device have been correctly identified. What is the effect of this configuration?

- A. static NAT
- B. NAT64
- C. PAT
- D. dynamic NAT

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 30

Wireless users report frequent disconnections from the wireless network. While troubleshooting, a network engineer finds that after the user is disconnected, the connection re-establishes automatically without any input required. The engineer also notices these message logs:

```
AP 'AP2' is down. Reason: Radio channel set 6:54:04 PM
AP 'AP4' is down. Reason: Radio channel set 6:44:49 PM
AP 'AP7' is down. Reason: Radio channel set 6:34:32 PM
```

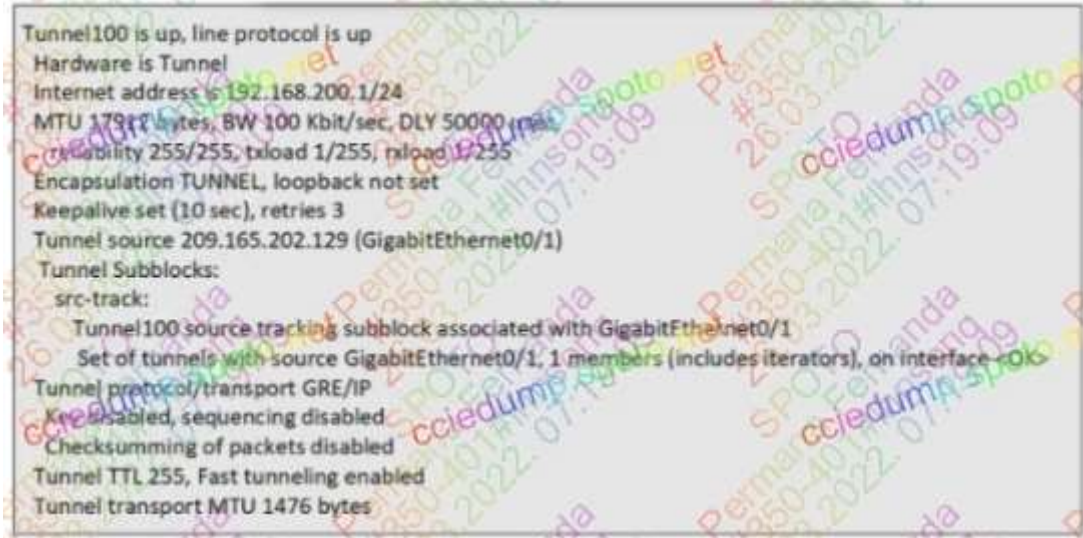
Which action reduces the user impact?

- A. increase the dynamic channel assignment interval
- B. enable BandSelect
- C. enable coverage hole detection
- D. increase the AP heartbeat timeout

Correct Answer: A  
Section: (none)  
Explanation

Explanation/Reference:  
[https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-3/b\\_RRM\\_White\\_Paper/b\\_RRM\\_White\\_Paper\\_chapter\\_0100.html](https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-3/b_RRM_White_Paper/b_RRM_White_Paper_chapter_0100.html)

QUESTION 31



Refer to the exhibit. A network engineer configures a GRE tunnel and enters the show interface tunnel command. What does the output confirm about configuration?

- A. The keepalive value is modified from the default value.
- B. Interface tracking is configured.
- C. The physical interface MTU is 1476 bytes.
- D. The tunnel mode is set to the default.

Correct Answer: D  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 32



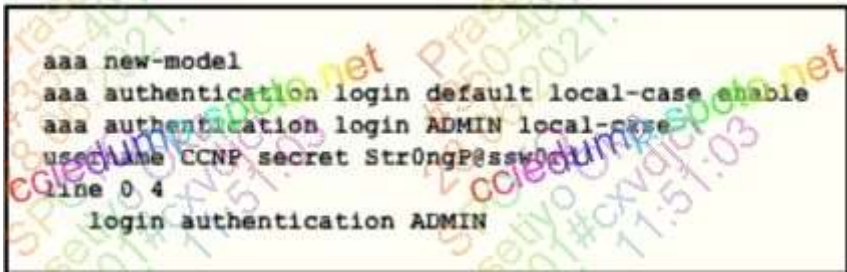
Refer to the exhibit. Which two commands ensure that DSW1 becomes root bridge for VLAN 10 and 20? (Choose two.)

- A. spanning-tree mst 1 priority 1
- B. spanning-tree mst 1 priority 4096
- C. spanning-tree mstp vlan 10, 20 root primary
- D. spanning-tree mst vlan 10, 20 priority root
- E. spanning-tree mst 1 root primary

Correct Answer: BE  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 33



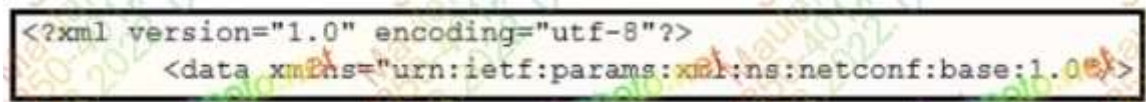
Refer to the exhibit. An engineer must create a configuration that executes the **show run** command and then terminates the session when user CCNP logs in. Which configuration change is required?

- A. Add the access-class keyword to the username command.
- B. Add the autocmd keyword to the username command.
- C. Add the autocmd keyword to the aaa authentication command.
- D. Add the access-class keyword to the aaa authentication command.

Correct Answer: B  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 34



Refer to the exhibit. What does the error message relay to the administrator who is trying to configure a Cisco IOS device?

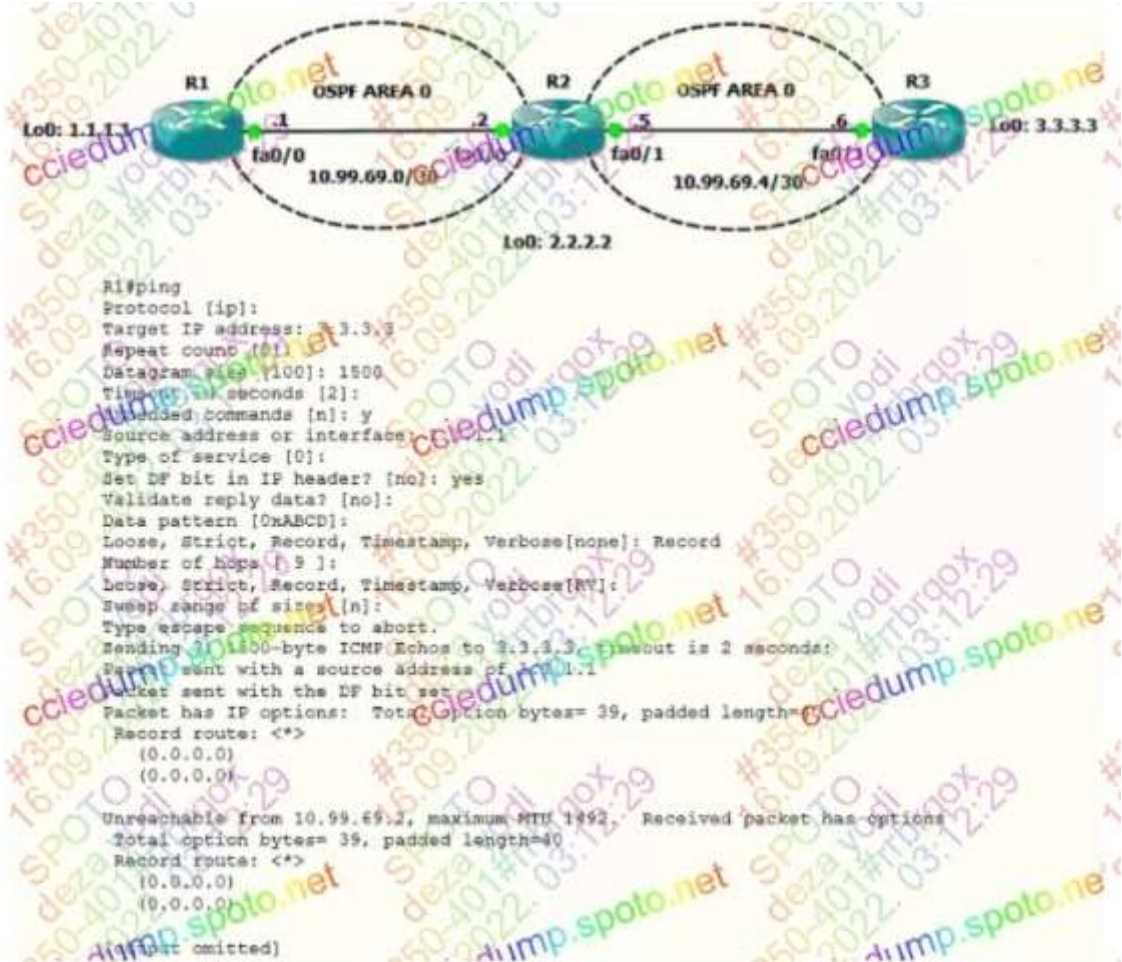
- A. The device received a valid NETCONF request and serviced it without error.
- B. NETCONF message with valid content based on the YANG data models was made, but the request failed.
- C. A NETCONF request was made for a data model that does not exist.
- D. The NETCONF running datastore is currently locked.

Correct Answer: C  
Section: (none)  
Explanation

Explanation/Reference:

<https://www.cisco.com/c/en/us/support/docs/storage-networking/management/200933-YANG-NETCONF-Configuration-Validation.html#anc42>

QUESTION 35



Refer to the exhibit. R1 is able to ping the R3 fa0/1 interface. Why do the extended pings fail?

- A. R3 is missing a return route to 10.99.69.0/30.
- B. The DF bit has been set.
- C. The maximum packet size accepted by the command is 1476 bytes.
- D. R2 and R3 do not have an OSPF adjacency.

Correct Answer: B  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 36

Which outbound access list, applied to the WAN interface of a router, permits all traffic except for http traffic sourced from the workstation with IP address 10.10.10.1?

- A. 

```
ip access-list extended NO_HTTP
deny tcp host 10.10.10.1 any eq 80
```

- B. 

```
ip access-list extended 10
deny tcp host 10.10.10.1 any eq 80
permit ip any any
```
- C. 

```
ip access-list extended 100
deny tcp host 10.10.10.1 any eq 80
permit ip any any
```
- D. 

```
ip access-list extended 200
deny tcp host 10.10.10.1 eq 80 any
permit ip any any
```

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 37

Which antenna type should be used for a site-to-site wireless connection?

- A. Yagi
- B. Dipole
- C. patch
- D. Omnidirectional

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://www.cisco.com/c/en/us/products/collateral/wireless/aironet-antennas-accessories/prod\\_white\\_paper0900aecd806a1a3e.html](https://www.cisco.com/c/en/us/products/collateral/wireless/aironet-antennas-accessories/prod_white_paper0900aecd806a1a3e.html)

#### QUESTION 38

In a Cisco SD-Access fabric, which control plane protocol is used for mapping and resolving endpoints?

- A. DHCP
- B. LISP
- C. SXP
- D. VXLAN

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://www.cisco.com/c/en/us/td/docs/solutions/CVD/Campus/cisco-sda-design-guide.html>

#### QUESTION 39

Which two characteristics define the Intent API provided by Cisco DNA Center? (Choose two.)

- A. northbound API
- B. southbound API
- C. business outcome oriented
- D. procedural
- E. device-oriented

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://developer.cisco.com/docs/dna-center/#!/cisco-dna-center-platform-overview/intent-api-northbound>

#### QUESTION 40



Refer to the exhibit. An engineer configures monitoring on SW1 and enters the show command to verify operation. What does the output confirm?

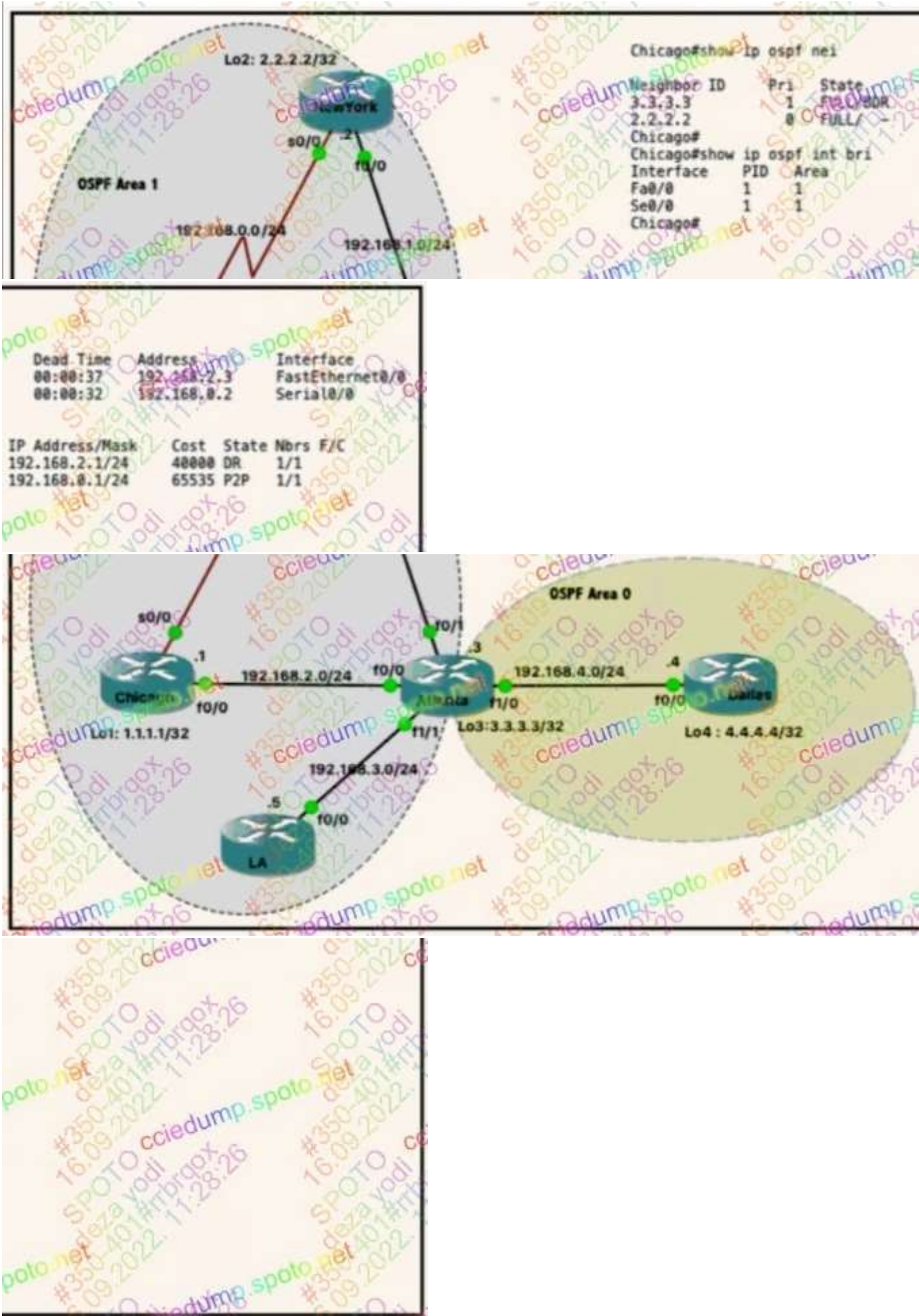
- A. SPAN session 2 monitors all traffic entering and exiting port FastEthernet 0/15.

- B. RSPAN session 1 monitors activity on VLAN 50 of a remote switch.
- C. SPAN session 2 only monitors egress traffic exiting port FastEthernet 0/14.
- D. RSPAN session 1 is incompletely configured for monitoring.

Correct Answer: D  
 Section: (none)  
 Explanation

Explanation/Reference:

QUESTION 41



Which router is the designated router on the segment 192.168.0.0/24?

- A. This segment has no designated router because it is a nonbroadcast network type.
- B. Router Chicago because it has a lower router ID.
- C. Router NewYork because it has a higher router ID.
- D. This segment has no designated router because it is a p2p network type.

Correct Answer: D  
 Section: (none)  
 Explanation

Explanation/Reference:

QUESTION 42

How is a data modeling language used?

- A. To model the flows of unstructured data within the infrastructure.
- B. To enable data to be easily structured, grouped, validated, and replicated.
- C. To provide human readability to scripting languages.
- D. To represent finite and well-defined network elements that cannot be changed.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 43

```
with manager.connect(host=192.168.0.1, port=22,
 username='admin', password='password1', hostkey_verify=True,
 device_params={'name': 'nexus'}) as m:
```

Refer to the exhibit. What does the snippet of code achieve?

- A. It opens an ncclient connection to a Cisco Nexus device and maintains it for the duration of the context.
- B. It opens a tunnel and encapsulates the login information, if the host key is correct.
- C. It creates an SSH connection using the SSH key that is stored, and the password is ignored.
- D. It creates a temporary connection to a Cisco Nexus device and retrieves a token to be used for API calls

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 44



Refer to the exhibit. An engineer must ensure that all traffic entering AS 200 from AS 100 chooses Link 2 as an entry point. Assume that all BGP neighbor relationships have been formed and that the attributes have not been changed on any of the routers. Which configuration accomplishes this task?

- A. R3(config)# route-map PREPEND permit 10  
R3(config-route-map)# set as-path prepend 100 100 100  
R3(config)# router bgp 200  
R3(config-router)# neighbor 10.1.1.1 route-map PREPEND in
- B. R4(config)# route-map PREPEND permit 10  
R4(config-route-map)# set as-path prepend 200 200 200  
R4(config)# router bgp 200  
R4(config-router)# neighbor 10.2.2.2 route-map PREPEND out
- C. R4(config)# route-map PREPEND permit 10  
R4(config-route-map)# set as-path prepend 100 100 100  
R4(config)# router bgp 200  
R4(config-router)# neighbor 10.2.2.2 route-map PREPEND in
- D. R3(config)# route-map PREPEND permit 10  
R3(config-route-map)# set as-path prepend 200 200 200  
R3(config)# router bgp 200  
R3(config-router)# neighbor 10.1.1.1 route-map PREPEND out

**Correct Answer:** D

**Section:** (none)

**Explanation**

Explanation/Reference:

#### QUESTION 45

```
R1
interface GigabitEthernet0/0
ip address 192.168.250.0 255.255.255.0
standby 20 ip 192.168.250.1
standby 20 priority 120

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

Refer to the exhibit. What are two effects of this configuration? (Choose two.)

- A. If R1 goes down, R2 becomes active and remains the active device when R1 comes back online.
- B. If R1 goes down, R2 becomes active but reverts to standby when R1 comes back online.
- C. If R2 goes down, R1 becomes active but reverts to standby when R2 comes back online.
- D. R1 becomes the active router.
- E. R1 becomes the standby router

**Correct Answer:** AD

**Section:** (none)

**Explanation**

Explanation/Reference:

#### QUESTION 46

What are two considerations when using SSO as a network redundancy feature? (Choose two.)

- A. must be combined with NSF to support uninterrupted Layer 3 operations
- B. both supervisors must be configured separately .
- C. requires synchronization between supervisors in order to guarantee continuous connectivity
- D. must be combined with NSF to support uninterrupted Layer 2 operations
- E. the multicast state is preserved during switchover

**Correct Answer:** AC

**Section:** (none)

**Explanation**

Explanation/Reference:

#### QUESTION 47

Which action is performed by Link Management Protocol in a Cisco StackWise Virtual domain?

- A. It rejects any unidirectional link traffic forwarding.
- B. It determines which switch becomes active or standby.
- C. It discovers the StackWise domain and brings up SVL interfaces.
- D. It determines if the hardware is compatible to form the StackWise Virtual domain.

**Correct Answer:** A

**Section:** (none)

**Explanation**

Explanation/Reference:

<https://www.cisco.com/c/en/us/products/collateral/switches/catalyst-9000/nb-06-cat-9k-stack-wp-cte-en.html#StackWiseVirtualLink>

#### QUESTION 48

What is the purpose of the LISP routing and addressing architecture?

- A. It allows multiple instances of a routing table to co-exist within the same router
- B. It allows LISP to be applied as a network virtualization overlay through encapsulation.
- C. It creates head-end replication used to deliver broadcast and multicast frames to the entire network.
- D. It creates two entries for each network node, one for its identity and another for its location on the network.

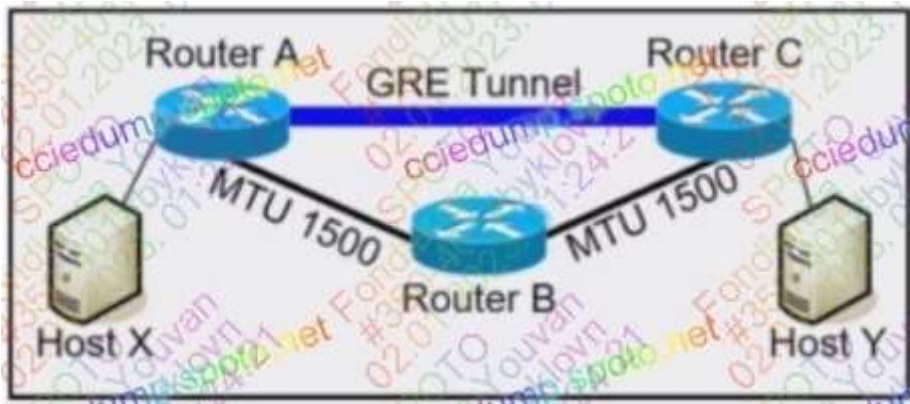
**Correct Answer:** D

**Section:** (none)

**Explanation**

Explanation/Reference:

#### QUESTION 49



Refer to the exhibit. MTU has been configured on the underlying physical topology, and no MTU command has been configured on the tunnel interfaces. What happens when a 1500-byte IPv4 packet traverses the GRE tunnel from host X to host Y, assuming the DF bit is cleared?

- A. The packet arrives on router C without fragmentation.
- B. The packet is discarded on router B.
- C. The packet arrives on router C fragmented.
- D. The packet is discarded on router A.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 50

Which deployment option of Cisco NGFW provides scalability?

- A. tap
- B. inline tap
- C. clustering
- D. high availability

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 51

What are two differences between the RIB and the FIB? (Choose two.)

- A. FIB is a database of routing prefixes, and the RIB is the information used to choose the egress interface for each packet.
- B. The FIB is derived from the data plane, and the RIB is derived from the FIB.
- C. The FIB is derived from the control plane, and the RIB is derived from the FIB.
- D. The RIB is a database of routing prefixes, and the FIB is the information used to choose the egress interface for each packet.
- E. The RIB is derived from the control plane, and the FIB is derived from the RIB.

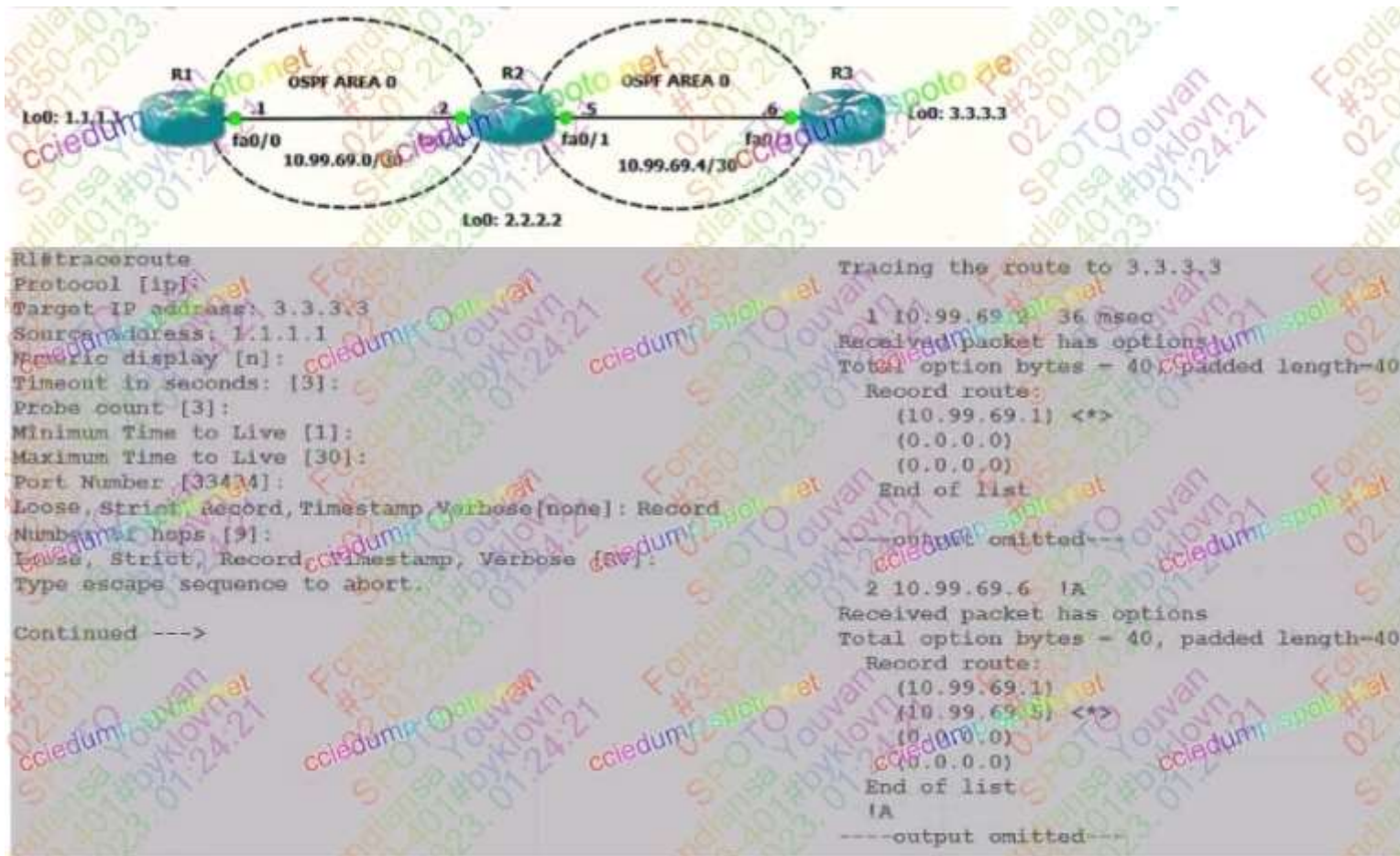
**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 52



Refer to the exhibit. The traceroute falls from R1 to R3. What is the cause of the failure?

- A. Redistribution of connected routes into OSPF is not configured.
- B. An ACL applied inbound on fa0/1 of R3 is dropping the traffic.
- C. The loopback on R3 is in a shutdown state.
- D. An ACL applied inbound on loopback0 of R2 is dropping the traffic.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 53

A server running Linux is providing support for virtual machines along with DNS and DHCP services for a small business. Which technology does this represent?

- A. hardware pass-thru
- B. Type 2 hypervisor
- C. container
- D. Type 1 hypervisor

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 54



Refer to the exhibit. On which interfaces should VRRP commands be applied to provide first hop redundancy to PC-01 and PC-02?

- A. G0/0 and G0/1 on ASW-01
- B. G0/1 on Edge-01 and G0/1 on Edge-02

- C. G0/0 on Edge-01 and G0/0 on Edge-02
- D. G0/0 and G0/1 on Core

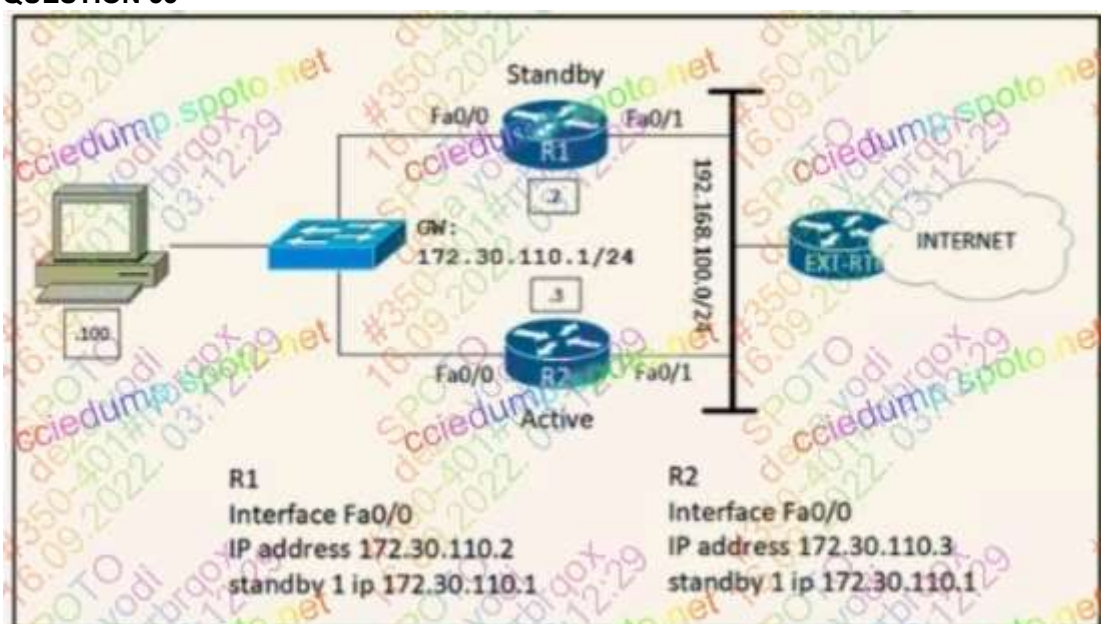
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 55



Refer to the exhibit. Which configuration change ensures that R1 is the active gateway whenever it is in a functional state for the 172.30.110.0/24 network?

- A. R2  
standby 1 priority 100  
standby 1 preempt
- B. R1  
standby 1 preempt  
R2  
standby 1 priority 100
- C. R2  
standby 1 priority 90  
standby 1 preempt
- D. R1  
standby 1 preempt  
R2  
standby 1 priority 90

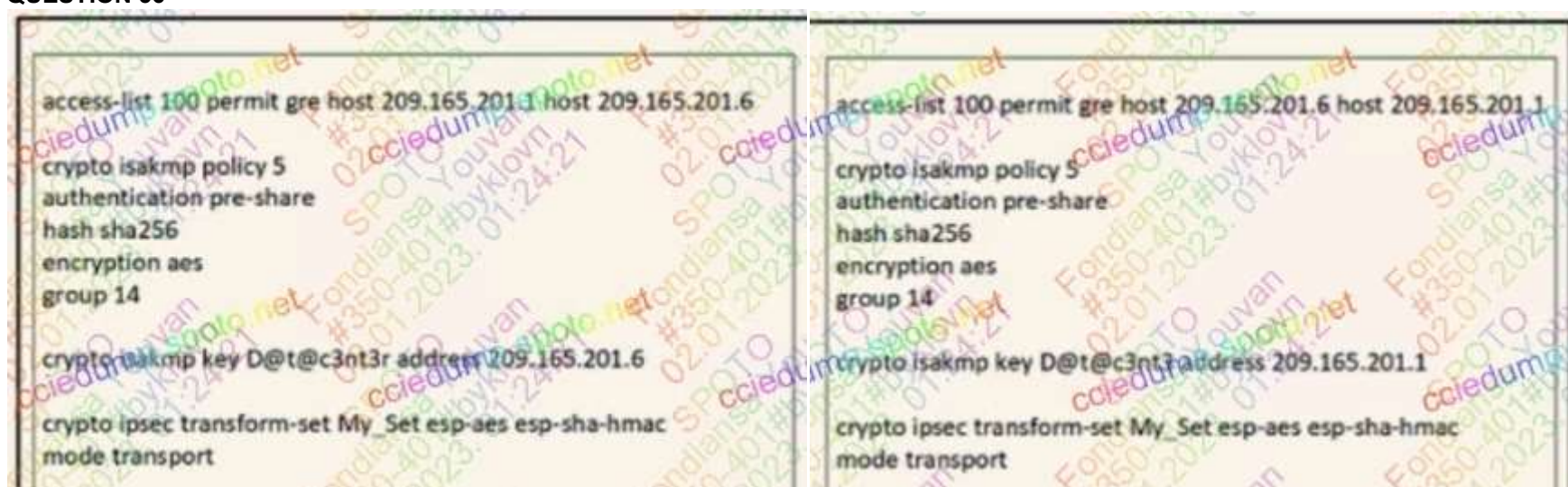
**Correct Answer:** D

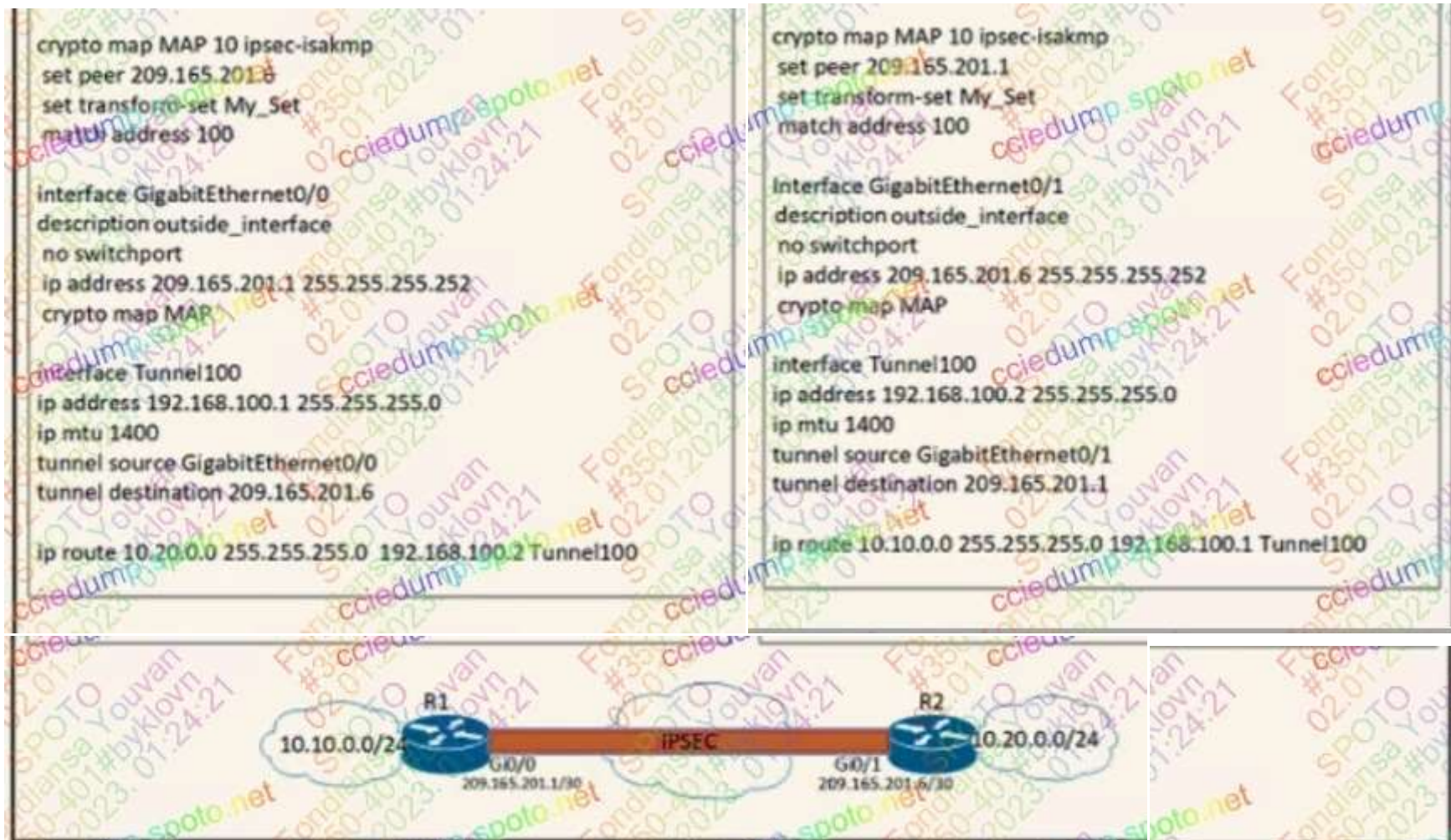
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 56





Refer to the exhibit. A network engineer must simplify the IPsec configuration by enabling IPsec over GRE using IPsec profiles. Which two configuration changes accomplish this? (Choose two)

- A. Create an IPsec profile, associate the transform-set, and apply the profile to the tunnel interface.
- B. Apply the crypto map to the tunnel interface and change the tunnel mode to tunnel mode ipsec ipv4.
- C. Remove all configuration related to crypto map from R1 and R2 and eliminate the ACL.
- D. Create an IPsec profile, associate the transform-set ACL, and apply the profile to the tunnel interface.
- E. Remove the crypto map and modify the ACL to allow traffic between 10.10.0.0/24 to 10.20.0.0/24.

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 57

Which method does Cisco DNA Center use to allow management of non-Cisco devices through southbound protocols?

- A. It obtains MIBs from each vendor that details the APIs available.
- B. It creates device packs through the use of an SDK
- C. It imports available APIs for the non-Cisco device in a CSV format
- D. It uses an API call to interrogate the devices and register the returned data.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 58

Which two network problems indicate a need to implement QoS in a campus network? (Choose two.)

- A. bandwidth-related packet loss
- B. misrouted network packets
- C. excess jitter
- D. duplicate IP addresses
- E. port flapping

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 59

Which data is properly formatted with JSON?

- A.
- ```
{
  "name": "Peter"
  "age": "25"
  "likesJson": true
  "characteristics": ["small", "strong", 18]
}
```
- B.
- ```
{
 "name": "Peter",
 "age": "25",
 "likesJson": true,
 "characteristics": ["small", "strong", 18],
}
```
- C.
- ```
{
  "name": Peter,
  "age": 25,
  "likesJson": true,
  "characteristics": ["small", "strong", 18],
}
```
- D.
- ```
{
 "name": "Peter",
 "age": "25",
 "likesJson": true,
 "characteristics": ["small", "strong", 18]
}
```

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 60

In a Cisco SD-Access solution, what is the role of the Identity Services Engine?

- A. It is used to analyze endpoint to app flows and monitor fabric status.
- B. It provides GUI management and abstraction via apps that share context.
- C. It manages the LISP EID database.
- D. It is leveraged for dynamic endpoint to group mapping and policy definition.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 61

```
Current configuration : 142 bytes
vrf definition STAFF
!
interface GigabitEthernet1
 vrf forwarding STAFF
 no ip address
 negotiation auto
 no mop enabled
 no mop sysid
end
```

Refer to the exhibit. An engineer must assign an IP address of 192.168.1.1/24 to the GigabitEthernet1 interface. Which two commands must be added to the existing configuration to accomplish this task? (Choose two)

- A. Router(config-if)#address-family ipv4
- B. Router(config-vrf)#ip address 192.168.1.1 255.255.255.0
- C. Router(config-vrf)#address-family ipv6
- D. Router(config-if)#ip address 192.168.1.1 255.255.255.0
- E. Router(config-vrf)#address-family ipv4

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 62

What is provided by the Stealthwatch component of the Cisco Cyber Threat Defense solution?

- A. real-time threat management to stop DDoS attacks to the core and access networks
- B. malware control

- C. dynamic threat control for web traffic
- D. real-time awareness of users, devices, and traffic on the network

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 63

```
client.connect(ip, port=22, username=usr, password=pswd)
stdin, stdout, stderr = client.exec_command('show ip bgp 192.168.101.0 bestpath\n')
print(stdout)
```

Which outcome is achieved with this Python code?

- A. connects to a Cisco device using SSH and exports the BGP table for the prefix
- B. connects to a Cisco device using Telnet and exports the routing table information
- C. connects to a Cisco device using SSH and exports the routing table information
- D. displays the output of the show command in a formatted way

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 64

Which encryption hashing algorithm does NTP use for authentication?

- A. AES128
- B. AES256
- C. SSL
- D. MD5

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 65

An engineer must configure an ACL that permits packets which include an ACK in the TCP header. Which entry must be included in the ACL?

- A. access-list 10 permit ip any any eq 21 tcp-ack
- B. access-list 10 permit tcp any any eq 21 established
- C. access-list 110 permit tcp any any eq 21 established
- D. access-list 110 permit tcp any any eq 21 tcp-ack

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 66

A customer has 20 stores located throughout a city. Each store has a single Cisco access point managed by a central WLC. The customer wants to gather analytics for users in each store. Which technique supports these requirements?

- A. trilateration
- B. angle of arrival
- C. hyperlocation
- D. presence

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 67

An engineer has deployed a single Cisco 5520 WLC with a management IP address of 172.16.50.5/24. The engineer must register 50 new Cisco AIR-CAP2802I-E-K9 access points to the WLC using DHCP option 43. The access points are connected to a switch in VLAN 100 that uses the 172.16.100.0/24 subnet. The engineer has configured the DHCP scope on the switch as follows:

```
Network 172.16.100.0 255.255.255.0
Default Router 172.16.100.1
Option 43 Ascii 172.16.50.5
```

The access points are failing to join the wireless LAN controller. Which action resolves the issue?

- A. configure dns-server 172.16.50.5
- B. configure option 43 Hex F104.CA10.3205
- C. configure option 43 Hex F104.AC10.3205

D. configure dns-server 172.16.1001

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 68

Which function does a fabric AP perform in a Cisco SD-Access deployment?

- A. It configures security policies down to wireless clients in the fabric.
- B. It updates wireless clients' locations in the fabric.
- C. It manages wireless clients' membership information in the fabric.
- D. It connects wireless clients to the fabric.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 69



```
R1#show access-list 100
Extended IP access list 100
 10 deny ip any any
 20 permit ip 192.168.0.0 0.0.255.255 any
 30 permit ip any 192.168.0.0 0.0.255.255
```

Refer to the exhibit. Extended access-list 100 is configured on interface GigabitEthernet 0/0 in an inbound direction, but it does not have the expected behavior of allowing only packets to or from 192.168.0.0/16. Which command set properly configures the access list?

- A. R1(config)#ip access-list extended 100  
R1(config-ext-nacl)#5 permit ip any any
- B. R1(config)#no access-list 100 deny ip any any
- C. R1(config)#no access-list 100 seq 10  
R1(config)#access-list 100 seq 40 deny ip any any
- D. R1(config)#ip access-list extended 100  
R1(config-ext-nacl)# no 10

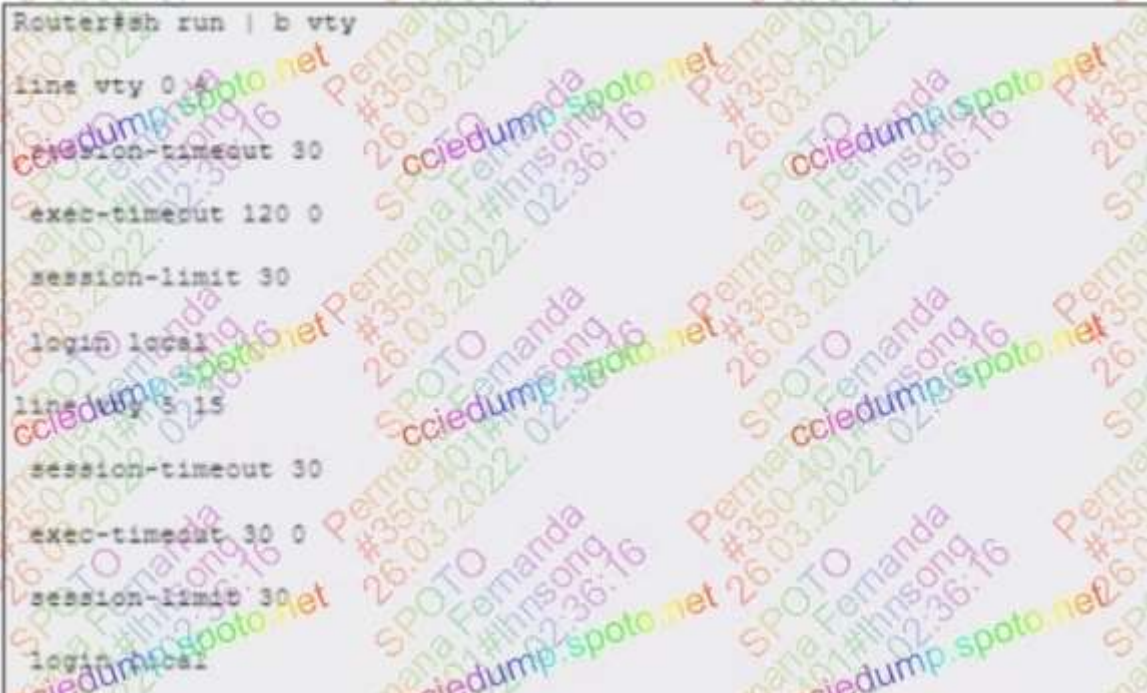
**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 70



```
Router#sh run | b vty
line vty 0 4
 session-timeout 30
 exec-timeout 120 0
 session-limit 30
 login local
line vty 5 15
 session-timeout 30
 exec-timeout 30 0
 session-limit 30
 login local
```

Refer to the exhibit. Security policy requires all idle exec sessions to be terminated in 600 seconds. Which configuration achieves this goal?

- A. line vty 0 15  
no exec-timeout
- B. line vty 0 15  
exec-timeout 10 0
- C. line vty 0 4  
exec-timeout 600
- D. line vty 0 15  
absolute-timeout 600

Correct Answer: B  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 71



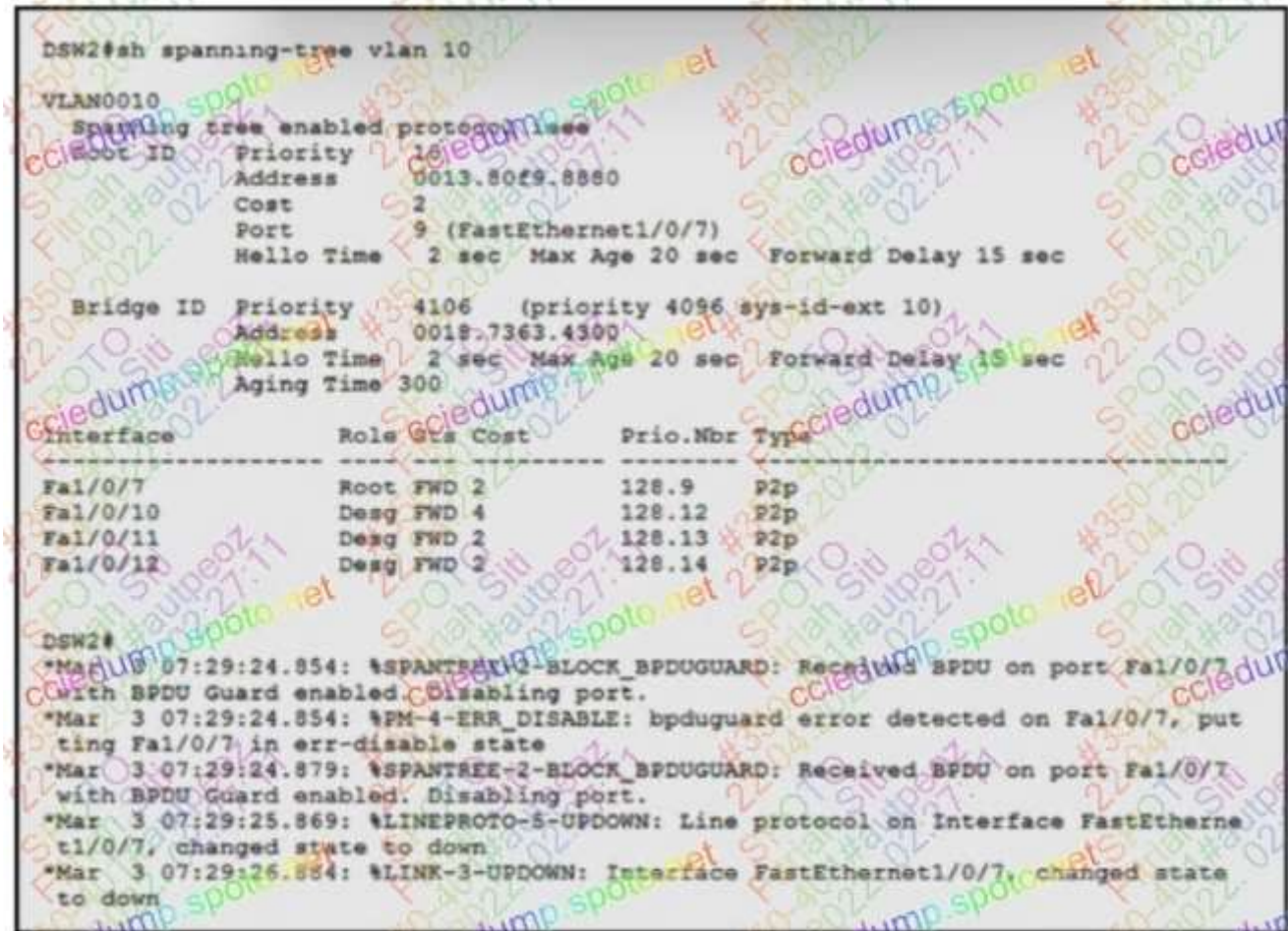
Refer to the exhibit. An engineer is configuring an EtherChannel between Switch1 and Switch2 and notices the console message on Switch2. Based on the output, which action resolves this issue?

- A. Configure the same port channel interface number on both switches.
- B. Configure the same EtherChannel protocol on both switches.
- C. Configure more member ports on Switch1.
- D. Configure less member ports on Switch2.

Correct Answer: B  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 72



Refer to the exhibit. An engineer entered the command **no spanning-tree bpduguard enable** on interface Fa1/0/7.What is the effect of this command on Fa1/0/7?

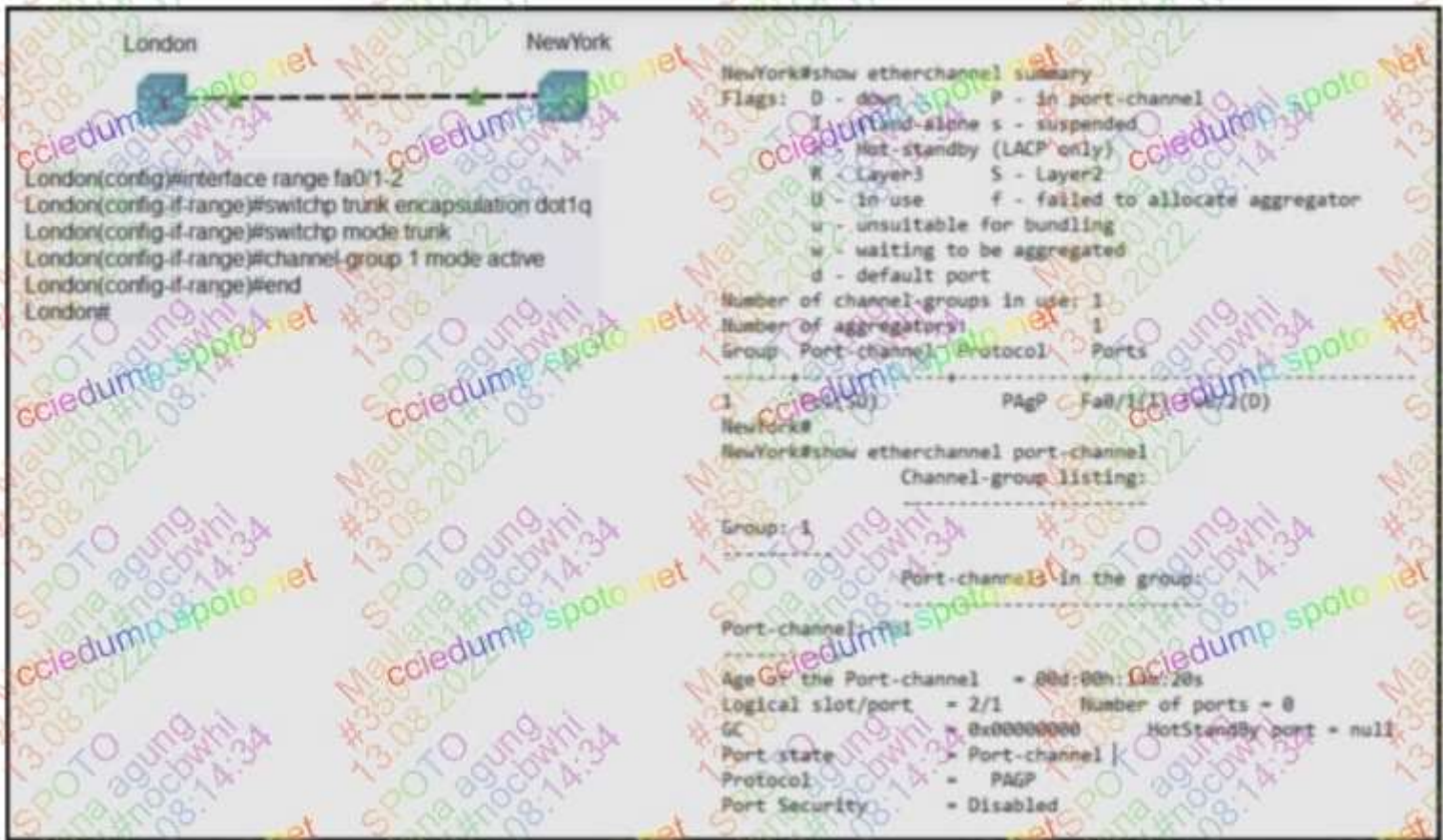
- A. It remains in err-disabled state until the **no shutdown** command is entered in the interface configuration mode
- B. It remains in err-disabled state until the **shutdown/no shutdown** command is entered in the interface configuration mode

- C. It remains in err-disabled state until the **spanning-tree portfast bpduguard disable** command is entered in the interface configuration mode
- D. It remains in err-disabled state until the **errdisable recovery cause failed-port-state** command is entered in the global configuration mode.

Correct Answer: B  
 Section: (none)  
 Explanation

Explanation/Reference:

### QUESTION 73



Refer to the exhibit. Communication between London and New York is down. Which command set must be applied to the NewYork switch to resolve the issue?

- A. 

```
NewYork(config)#no interface po1
NewYork(config)#interface range fa0/1-2
NewYork(config-if)#channel-group 1 mode auto
NewYork(config-if)#end
!NewYork#
```
- B. 

```
NewYork(config)#no interface po1
NewYork(config)#interface range fa0/1-2
NewYork(config-if)#channel-group 1 mode negotiate
NewYork(config-if)#end
NewYork#
```
- C. 

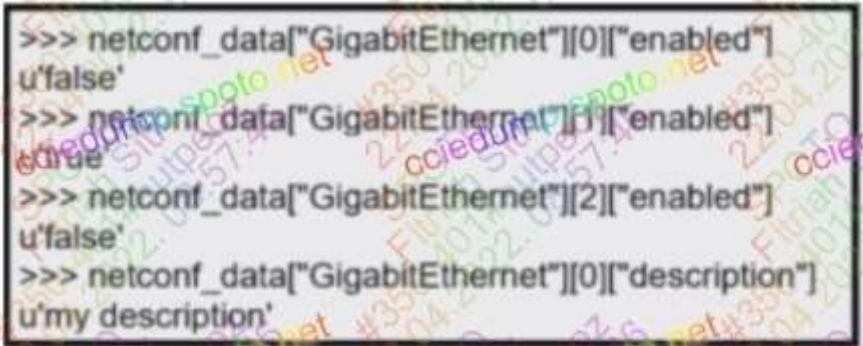
```
NewYork(config)#no interface po1
NewYork(config)#interface range fa0/1-2
NewYork(config-if)#channel-group 1 mode passive
NewYork(config-if)#end
NewYork#
```
- D. 

```
NewYork(config)#no interface po1
NewYork(config)#interface range fa0/1-2
NewYork(config-if)#channel-group 1 mode on
NewYork(config-if)#end
NewYork#
```

Correct Answer: C  
 Section: (none)  
 Explanation

Explanation/Reference:

### QUESTION 74



Refer to the exhibit. Which Python code snippet prints the descriptions of disabled interfaces only?

- A. 

```
for interface in netconf_data["GigabitEthernet"]
 print(interface["enabled"])
 print(interface["description"])
```

- B. 

```
for interface in netconf_data["GigabitEthernet"]:
 print("enabled")!= 'true':
 print(interface["description"])
```
- C. 

```
for interface in netconf_data["GigabitEthernet"]:
 if interface["enabled"]!= 'true':
 print(interface["description"])
```
- D. 

```
for interface in netconf_data["GigabitEthernet"]:
 if interface["enabled"]!= 'false':
 print(interface["description"])
```

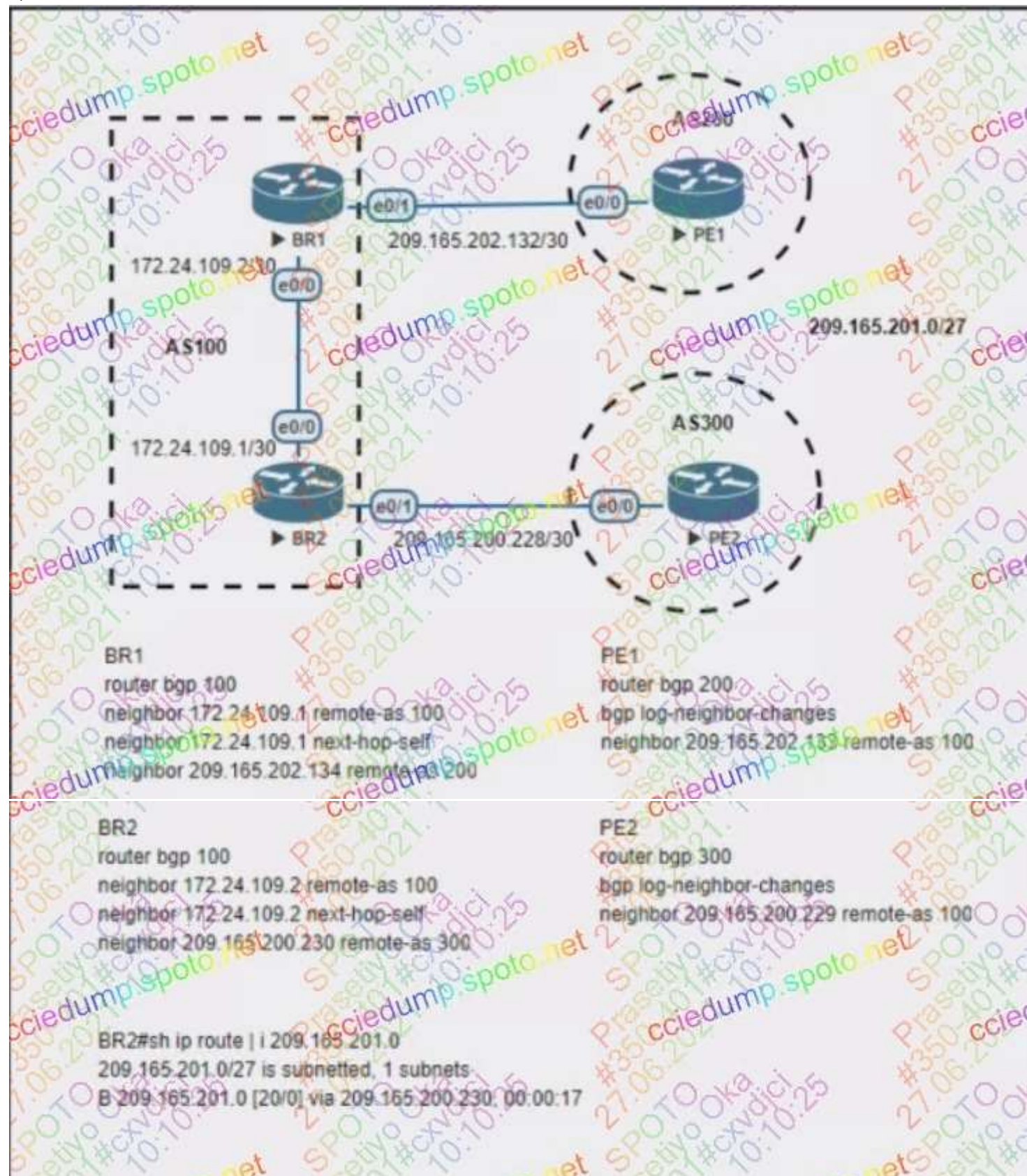
**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 75



Refer to the exhibit. Which configuration change will force BR2 to reach 209.165.201.0/27 via BR1?

- A. Set the local preference to 150 on PE1 toward BR1 outbound.
- B. Set the weight attribute to 65,535 on BR1 toward PE1.
- C. Set the origin to igp on BR2 toward PE2 inbound.
- D. Set the MED to 1 on PE2 toward BR2 outbound.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 76

DSW1#sh spanning-tree int fa1/0/7

| Vlan     | Role | Sts | Cost | Prio. | Nbr | Type     |
|----------|------|-----|------|-------|-----|----------|
| VLAN0001 | Desg | FWD | 2    | 128   | 9   | P2p Edge |
| VLAN0010 | Desg | FWD | 2    | 128   | 9   | P2p Edge |
| VLAN0020 | Desg | FWD | 2    | 128   | 9   | P2p Edge |
| VLAN0030 | Desg | FWD | 2    | 128   | 9   | P2p Edge |
| VLAN0040 | Desg | FWD | 2    | 128   | 9   | P2p Edge |

Refer to the exhibit. How was spanning-tree configured on this interface?

- A. By entering the command **spanning-tree portfast** in the interface configuration mode.
- B. By entering the command **spanning-tree vlan 10,20,30,40 root primary** in the interface configuration mode.
- C. By entering the command **spanning-tree mst1 vlan 10,20,30,40** in the global configuration mode.
- D. By entering the command **spanning-tree portfast trunk** in the interface configuration mode.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 77

|              |
|--------------|
| 10.0.32.0/24 |
| 10.0.33.0/24 |
| 10.0.34.0/24 |
| 10.0.35.0/24 |
| 10.0.36.0/24 |
| 10.0.37.0/24 |
| 10.0.38.0/24 |
| 10.0.39.0/24 |

Refer to the exhibit. An engineer must permit traffic from these networks and block all other traffic. An informational log message should be triggered when traffic enters from these prefixes. Which access list must be used?

- A. `access-list acl_subnets permit ip 10.0.32.0 0.0.7.255 log`
- B. `access-list acl_subnets permit ip 10.0.32.0 0.0.7.255`  
`access-list acl_subnets deny ip any log`
- C. `access-list acl_subnets permit ip 10.0.32.0 255.255.248.0 log`
- D. `access-list acl_subnets permit ip 10.0.32.0 0.0.0.255 log`

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 78

What is required for a virtual machine to run?

- A. only a Type 1 hypervisor
- B. a Type 1 hypervisor and a host operating system
- C. a hypervisor and physical server hardware
- D. only a Type 2 hypervisor

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 79

What is a characteristic of a next-generation firewall?

- A. only required at the network perimeter
- B. filters traffic using Layer 3 and Layer 4 information only
- C. provides intrusion prevention
- D. required in each layer of the network

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 80**

What is the wireless Received Signal Strength Indicator?

- A. the value of how strong the wireless signal is leaving the antenna using transmit power, cable loss, and antenna gain
- B. the value given to the strength of the wireless signal received compared to the noise level
- C. the value of how much wireless signal is lost over a defined amount of distance
- D. the value of how strong a wireless signal is received, measured in dBm

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 81**

Which two threats does AMP4E have the ability to block? (Choose two.)

- A. ransomware
- B. Microsoft Word macro attack
- C. email phishing
- D. DDoS
- E. SQL injection

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 82**

What are two characteristics of VXLAN? (Choose two.)

- A. It allows for up to 16 million VXLAN segments
- B. It lacks support for host mobility.
- C. It extends Layer 2 and Layer 3 overlay networks over a Layer 2 underlay.
- D. It has a 12-bit network identifier.
- E. It uses VTEPs to encapsulate and decapsulate frames.

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 83**

Which two results occur if Cisco DNA Center loses connectivity to devices in the SD-Access fabric? (Choose two.)

- A. Already connected users are unaffected, but new users cannot connect.
- B. User connectivity is unaffected.
- C. All devices reload after detecting loss of connection to Cisco DNA Center.
- D. Cisco DNA Center is unable to collect monitoring data in Assurance.
- E. Users lose connectivity.

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 84**

```

{
 "response": [
 {
 "family": "Routers",
 "interfaceCount": "12",
 "lineCardCount": "9",
 "platformId": "ASR1001-X",
 "reachabilityFailureReason": "",
 "reachabilityStatus": "Reachable",
 "hostname": "RouterASR-1",
 "macAddress": "00:c8:8b:80:bb:00",
 },
 {
 "family": "Switches and Hubs",
 "interfaceCount": "41",
 "lineCardCount": "2",
 "platformId": "C9300-24UX",
 "reachabilityFailureReason": "",
 "reachabilityStatus": "Authentication Failed",
 "hostname": "cat9000-1",
 "macAddress": "f8:7b:20:67:62:80",
 },
 {
 "family": "Switches and Hubs",
 "interfaceCount": "59",
 "lineCardCount": "2",
 "platformId": "WS-C3850-48U-E",
 "reachabilityFailureReason": "",
 "reachabilityStatus": "Unreachable",
 "hostname": "cat3850-1",
 "macAddress": "cc:d8:c1:15:d2:80",
 }
],
 "version": "1.0"
}

```

What does the Cisco DNA REST response indicate?

- A. Cisco DNA Center has the incorrect credentials for cat9000-1
- B. Cisco DNA Center is unable to communicate with cat9000-1
- C. Cisco DNA Center has the incorrect credentials for cat3850-1
- D. Cisco DNA Center has the incorrect credentials for RouterASR-1

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 85

```

%OSPF-5-ADJCHG: Process 1, Nbr 10.0.0.2 on FastEthernet0/0 from
FULL to DOWN, Neighbor Down: Interface down or detached
%OSPF-6-AREACHG: 10.0.0.1/0 changed from area 0 to area 1
%OSPF-4-ERRRCV: Received invalid packet, mismatch area ID, from
backbone area must be virtual-link but not found from 10.0.0.2,
FastEthernet0/0

```

Refer to the exhibit. What is the cause of the log messages?

- A. IP address mismatch
- B. OSPF area change
- C. MTU mismatch
- D. hello packet mismatch

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 86

```

Switch1# show interfaces trunk
! Output omitted for brevity
Port Mode Encapsulation Status Native
Gi1/0/20 auto 802.1q trunking 10

Port Vlans allowed on trunk
Gi1/0/20 1-4094

Switch2# show interfaces trunk
! Output omitted for brevity
Port Mode Encapsulation Status Native
Gi1/0/20 auto 802.1q trunking 10

Port Vlans allowed on trunk
Gi1/0/20 1-4094

```

Refer to the exhibit. The trunk does not work over the back-to-back link between Switch1 interface Gig1/0/20 and Switch2 interface Gig1/0/20. Which configuration fixes the problem?

- A. Switch2(config)# interface gig1/0/20  
Switch2(config-if)# switchport mode dynamic auto
- B. Switch1(config)# interface gig1/0/20  
Switch1(config-if)# switchport trunk native vlan 1  
Switch2(config)# interface gig1/0/20  
Switch2(config-if)# switchport trunk native vlan 1
- C. Switch1(config)# interface gig1/0/20  
Switch1(config-if)# switchport mode dynamic auto
- D. Switch2(config) finterface gig1/0/20  
Switch2(config-if)# switchport mode dynamic desirable

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 87

An engineer must configure HSRP group 300 on a Cisco IOS router. When the router is functional, it must be the active HSRP router. The peer router has been configured using the default priority value. Which command set is required?

- A. standby version 2  
standby 300 priority 110  
standby 300 preempt
- B. standby 300 priority 110  
standby 300 timers 1 110
- C. standby version 2  
standby 300 priority 90  
standby 300 preempt
- D. standby 300 priority 90  
standby 300 preempt

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 88

What is the recommended MTU size for a Cisco SD-Access Fabric?

- A. 17914
- B. 9100
- C. 1500
- D. 4464

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 89

"HTTP/1.1 204 No Content" is returned when the curl -i -x DELETE command is issued. Which situation has occurred?

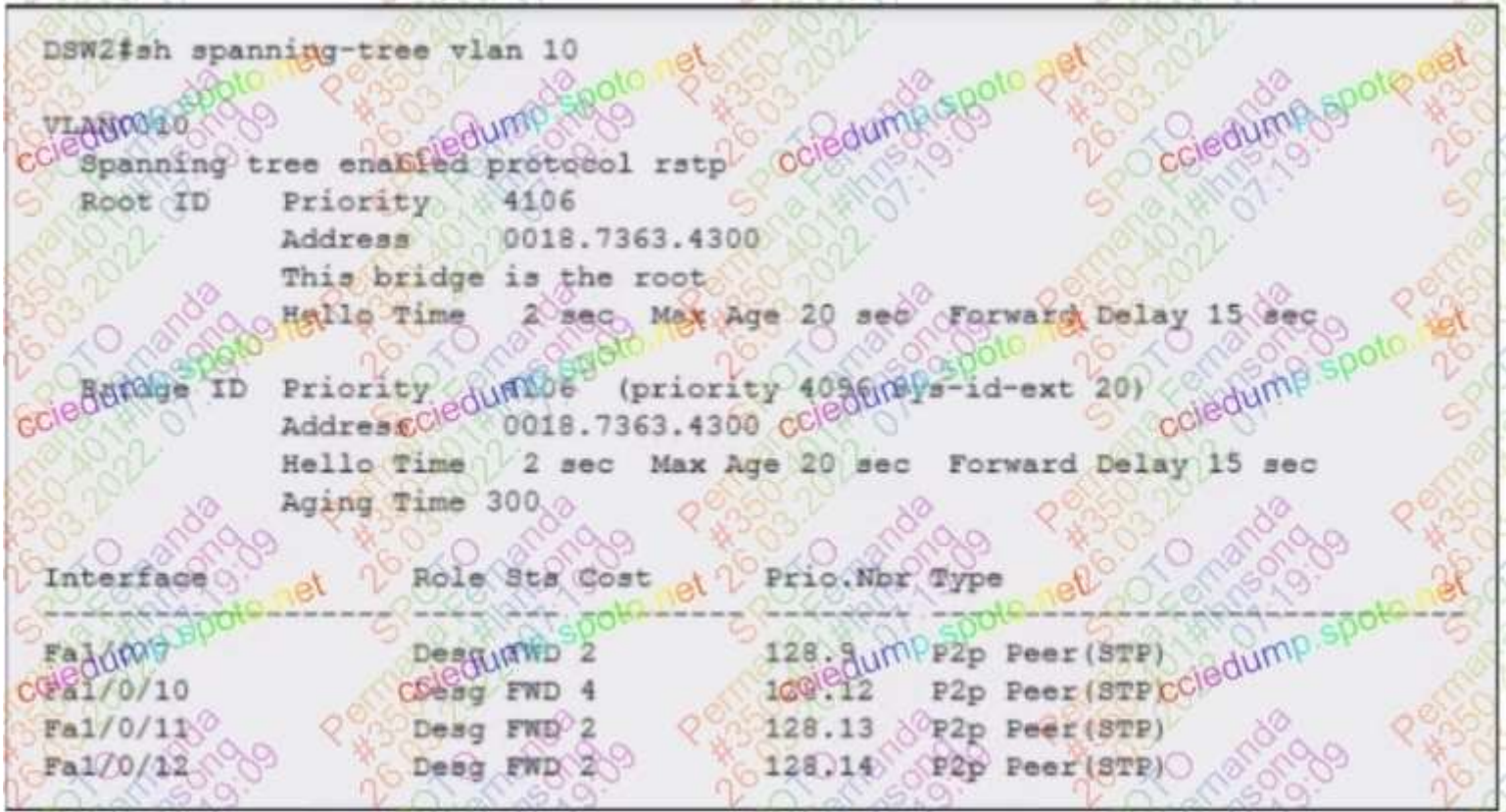
- A. The URI was invalid
- B. The object could not be located at the URI path.
- C. The object was located at the URI, but it could not be deleted.

D. The command succeeded in deleting the object

Correct Answer: D  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 90



Refer to the exhibit. What is the result when a switch that is running PVST+ is added to this network?

- A. Both switches operate in the PVST+ mode.
- B. Both switches operate in the Rapid PVST+ mode.
- C. Spanning tree is disabled automatically on the network
- D. DSW2 operates in Rapid PVST+ and the new switch operates in PVST+

Correct Answer: D  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 91

An engineer is configuring a new SSID to present users with a splash page for authentication. Which WLAN Layer 3 setting must be configured to provide this functionality?

- A. Local Policy
- B. CCKM
- C. Web Policy
- D. WPA2 Policy

Correct Answer: C  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 92



Refer to the exhibit. An engineer configures a new WLAN that will be used for secure communications; however, wireless clients report that they are

able to communicate with each other. Which action resolves this issue?

- A. Enable Wi-Fi Direct Client Policy.
- B. Enable P2P Blocking.
- C. Disable Aironet IE.
- D. Enable Client Exclusions.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 93



```
R2#
*May 27 15:33:59.642: OSPF-1 ADJ Gi1: Send DBD to 192.168.201.137 seq 0xDE7 opt 0x52 flag 0x7 len 32
*May 27 15:33:59.642: OSPF-1 ADJ Gi1: Retransmitting DBD to 192.168.201.137 [15]
*May 27 15:33:59.645: OSPF-1 ADJ Gi1: Rcv DBD from 192.168.201.137 seq 0xDE7 opt 0x52 flag 0x2 len 112 mtu 9100 state EXSTART
```

Refer to the exhibit. The OSPF neighborhood fails between two routers. What is the cause of this issue?

- A. The OSPF router ID is missing on this router.
- B. There is an MTU mismatch between the two routers.
- C. The OSPF process is stopped on the neighbor router.
- D. The OSPF router ID is missing on the neighbor router.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 94

A network engineer is designing a QoS policy for voice and video applications. Which software queuing feature provides strict-priority servicing?

- A. Low Latency Queuing
- B. Class-Based Weighted Fair Queuing
- C. Link Fragmentation
- D. Automatic QoS

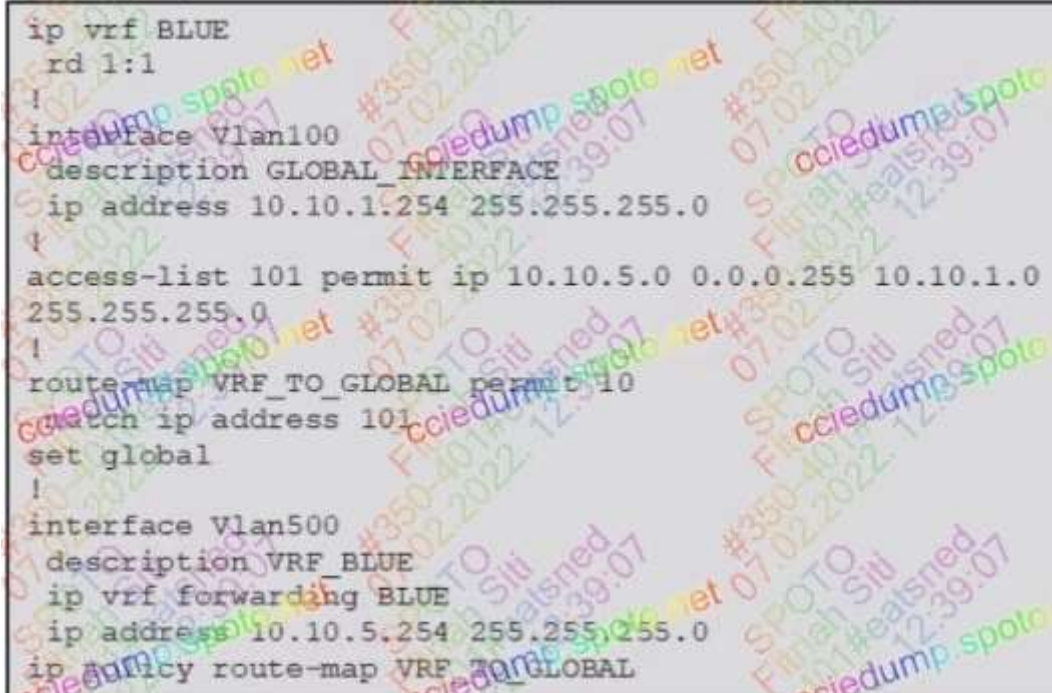
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 95



```
ip vrf BLUE
 rd 1:1
!
interface Vlan100
 description GLOBAL_INTERFACE
 ip address 10.10.1.254 255.255.255.0
!
access-list 101 permit ip 10.10.5.0 0.0.0.255 10.10.1.0
255.255.255.0
!
route-map VRF_TO_GLOBAL permit 10
 match ip address 101
 set global
!
interface Vlan500
 description VRF_BLUE
 ip vrf forwarding BLUE
 ip address 10.10.5.254 255.255.255.0
 ip policy route-map VRF_TO_GLOBAL
```

Refer to the exhibit. An engineer attempts to create a configuration to allow the Blue VRF to leak into the global routing table, but the configuration does not function as expected. Which action resolves this issue?

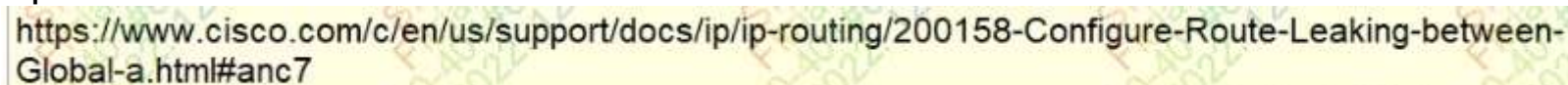
- A. Change the access-list number in the route map.
- B. Change the access-list destination mask to a wildcard.
- C. Change the source network that is specified in access-list 101.
- D. Change the route-map configuration to VRF\_BLUE

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**



<https://www.cisco.com/c/en/us/support/docs/ip/ip-routing/200158-Configure-Route-Leaking-between-Global-a.html#anc7>

**QUESTION 96**

A customer wants to use a single SSID to authenticate IoT devices using different passwords. Which Layer 2 security type must be configured in conjunction with Cisco ISE to achieve this requirement?

- A. Central Web Authentication
- B. Identity PSK
- C. Fast Transition
- D. Cisco Centralized Key Management

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-5/b\\_identity\\_PSK\\_Feature\\_Deployment\\_Guide.html#concept\\_5CBD7AB7DE994F45A173CF9B9F25BBB7](https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-5/b_identity_PSK_Feature_Deployment_Guide.html#concept_5CBD7AB7DE994F45A173CF9B9F25BBB7)

Central Web Authentication

**QUESTION 97**

How can an engineer prevent basic replay attacks from people who try to brute force a system via REST API?

- A. Add a timestamp to the request in the API header.
- B. Add OAuth to the request in the API header.
- C. Use HTTPS.
- D. Use a password hash.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://restfulapi.net/security-essentials/>

**QUESTION 98**

A customer requests a design that includes GLBP as the FHRP. The network architect discovers that the members of the GLBP group have different throughput capabilities. Which GLBP load balancing method supports this environment?

- A. weighted
- B. round robin
- C. least connection
- D. host dependent

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://www.cisco.com/c/en/us/products/collateral/ios-nx-os-software/ip-services/product\\_data\\_sheet0900aecd803a546c.html](https://www.cisco.com/c/en/us/products/collateral/ios-nx-os-software/ip-services/product_data_sheet0900aecd803a546c.html)

**QUESTION 99**

If a client's radio device receives a signal strength of -67 dBm and the noise floor is -85 dBm, what is the SNR value?

- A. 18dB
- B. 16dB
- C. 20dB
- D. 15dB

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://documentation.meraki.com/MR/WiFi\\_Basics\\_and\\_Best\\_Practices/Signal-to-Noise\\_Ratio\\_\(SNR\)\\_and\\_Wireless\\_Signal\\_Strength](https://documentation.meraki.com/MR/WiFi_Basics_and_Best_Practices/Signal-to-Noise_Ratio_(SNR)_and_Wireless_Signal_Strength)

**QUESTION 100**

An engineer must create a new SSID on a Cisco 9800 wireless LAN controller. The client has asked to use a pre-shared key for authentication. Which profile must the engineer edit to achieve this requirement?

- A. RF
- B. Flex
- C. WLAN
- D. Policy

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-8/b\\_c9800\\_wireless\\_controller\\_series\\_web\\_dg.html#id\\_90818](https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-8/b_c9800_wireless_controller_series_web_dg.html#id_90818)

**QUESTION 101**

Which device is responsible for finding EID-to-RLOC mappings when traffic is sent to a LISP-capable site?

- A. ingress tunnel router
- B. map resolver
- C. egress tunnel router
- D. map server

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 102**

What does the Cisco DNA Center Authentication API provide?

- A. list of global issues that are logged in Cisco DNA Center
- B. client health status
- C. access token to make calls to Cisco DNA Center
- D. list of VLAN names

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 103**

Which definition describes JWT in regard to REST API security?

- A. an encoded JSON token that is used to securely exchange Information
- B. an encrypted JSON token that is used for authentication
- C. an encoded JSON token that is used for authentication
- D. an encrypted JSON token that is used for authorization

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 104**

A network engineer must configure a router to send logging messages to a syslog server based on these requirements:

1. uses syslog IP address: 10.10.10.1
2. uses a reliable protocol
3. must not use any well-known TCP/UDP ports

Which configuration must be used?

- A. logging host 10.10.10.1 transport tcp port 1024
- B. logging host 10.10.10.1 transport udp port 1024
- C. logging origin-id 10.10.10.1
- D. logging host 10.10.10.1 transport udp port 1023

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 105**

```

Router#show policy-map control-plane
Control Plane
Service-policy input: CoPP
Class-map: class-telnet (match-all)
 0 packets, 0 bytes
 5 minute offered rate 0 bps, drop rate 0 bps
 Match: access-group 100
 police:
 cir 100000 bps, bc 3125 bytes
 conformed 0 packets, 0 bytes; actions:
 transmit
 exceeded 0 packets, 0 bytes; actions:
 drop
 conformed 0 bps, exceed 0 bps
Class-map: class-default (match-any)
 56 packets, 9874 bytes
 5 minute offered rate 0 bps, drop rate 0 bps
 Match: any

Router#show access-list 100
Extended IP access list 100
10 permit tcp any any eq telnet

```

Refer to the exhibit. Which commands are required to allow SSH connections to the router?

- A. Router(config)# access-list 100 permit tcp any any eq 22  
Router(config)# access-list 101 permit tcp any any eq 22  
Router(config)# class-map class-ssh  
Router(config-cmap)# match access-group 101  
Router(config)# policy-map CoPP  
Router(config-pmap)# class class-ssh  
Router(config-pmap-c)# police 100000 conform-action transmit
- B. Router(config)# access-list 100 permit tcp any eq 22 any  
Router(config)# class-map class-ssh  
Router(config-cmap)# match access-group 10  
Router(config)# policy-map CoPP  
Router(config-pmap)# class class-ssh  
Router(config-pmap-c)# police 100000 conform-action transmit
- C. Router(config)# access-list 10 permit tcp any eq 22 any  
Router(config)# class-map class-ssh  
Router(config-cmap)# match access-group 10  
Router(config)# policy-map CoPP  
Router(config-pmap)# class class-ssh  
Router(config-pmap-c)# police 100000 conform-action transmit
- D. Router(config)# access-list 100 permit udp any any eq 22  
Router(config)# access-list 101 permit tcp any any eq 22  
Router(config)# class-map class-ssh  
Router(config-cmap)# match access-group 101  
Router(config)# policy-map CoPP  
Router(config-pmap)# police 100000 conform-action transmit

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 106

A customer wants to provide wireless access to contractors using a guest portal on Cisco ISE. The portal is also used by employees. A solution is implemented, but contractors receive a certificate error when they attempt to access the portal. Employees can access the portal without any errors. Which change must be implemented to allow the contractors and employees to access the portal?

- A. Install an internal CA signed certificate on the contractor devices.
- B. Install a trusted third-party certificate on the Cisco ISE.
- C. Install an Internal CA signed certificate on the Cisco ISE.
- D. Install a trusted third-party certificate on the contractor devices.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 107

```

SW2#
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on
GigabitEthernet0/1 (1), with SW1 GigabitEthernet 0/1 (30)
SW2#

```

Refer to the exhibit, An engineer must set up connectivity between a campus aggregation layer and a branch office access layer. The engineer uses dynamic trunking protocol to establish this connection; however, management traffic on VLAN 1 is not passing. Which action resolves the issue and allow communication for all configured VLANs?

- A. Change both interfaces to access ports.
- B. Allow all VLANs on the trunk links.
- C. Configure the correct native VLAN on the remote Interface.
- D. Disable Spanning Tree for the native VLAN.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 108



Refer to the exhibit. Which command set must be applied on R1 to establish a BGP neighborship with R2 and to allow communication from R1 to reach the networks?

- A. 

```
router bgp 1200
network 209.165.200.224 mask 255.255.255.224
neighbor 209.165.202.130 remote-as 1201
```
- B. 

```
router bgp 1200
network 209.165.200.224 mask 255.255.255.224
neighbor 209.165.201.2 remote-as 1200
```
- C. 

```
router bgp 1200
network 209.165.201.0 mask 255.255.255.224
neighbor 209.165.202.130 remote-as 1201
```
- D. 

```
router bgp 1200
network 209.165.200.224 mask 255.255.255.224
neighbor 209.165.202.130 remote-as 1200
```

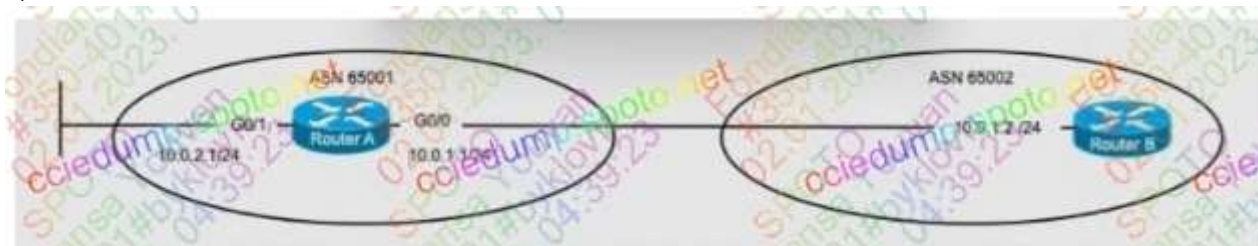
Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 109



Refer to the exhibit. An engineer must configure an eBGP neighborship to Router B on Router A. The network that is connected to G0/1 on Router A must be advertised to Router B. Which configuration should be applied?

- A. 

```
router bgp 65001
neighbor 10.0.1.2 remote-as 6500
redistribute static
```
- B. 

```
router bgp 65001
neighbor 10.0.1.2 remote-as 65002
network 10.0.2.0 255.255.255.0
```

- C. 

```
router bgp 65001
neighbor 10.0.1.2 remote-as 65002
network 10.0.1.0 255.255.255.0
```
- D. 

```
router bgp 65001
neighbor 10.0.1.2 remote-as 6500
redistribute static
```

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 110

An engineer must create an EEM script to enable OSPF debugging in the event the OSPF neighborhood goes down. Which script must the engineer apply?

- A. 

```
event manager applet ENABLE_OSPF_DEBUG
event syslog pattern "%OSPF-1-ADJCHG: Process 5, Nbr 1.1.1.1 on Serial0/0 from FULL to DOWN"
action 1.0 cli command "debug ip ospf event"
action 2.0 cli command "debug ip ospf adj"
action 3.0 syslog priority informational msg "ENABLE_OSPF_DEBUG"
```
- B. 

```
event manager applet ENABLE_OSPF_DEBUG
event syslog pattern "%OSPF-5-ADJCFG: Process 5, Nbr 1.1.1.1 on Serial0/0 from LOADING to FULL"
action 1.0 cli command "enable"
action 2.0 cli command "debug ip ospf event"
action 3.0 cli command "debug ip ospf adj"
action 4.0 syslog priority informational msg "ENABLE_OSPF_DEBUG"
```
- C. 

```
event manager applet ENABLE_OSPF_DEBUG
event syslog pattern "%OSPF-5-ADJCHG: Process 6, Nbr 1.1.1.1 on Serial0/0 from FULL to DOWN"
action 1.0 cli command "enable"
action 2.0 cli command "debug ip ospf event"
action 3.0 cli command "debug ip ospf adj"
action 4.0 syslog priority informational msg "ENABLE_OSPF_DEBUG"
```
- D. 

```
event manager applet ENABLE_OSPF_DEBUG
event syslog pattern "%OSPF-5-ADJCFG: Process 5, Nbr 1.1.1.1 on Serial0/0 from LOADING to FULL"
action 1.0 cli command "debug ip ospf event"
action 2.0 cli command "debug ip ospf adj"
action 3.0 syslog priority informational msg "ENABLE_OSPF_DEBUG"
```

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 111

Which character formatting is required for DHCP Option 43 to function with current AP models?

- A. ASCII
- B. Hex
- C. MD5
- D. Base64

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 112



Refer to the exhibit. An engineer configures routing between all routers and must build a configuration to connect R1 to R3 via a GRE tunnel. Which configuration must be applied?

- A. R1  
interface Tunnel2  
ip address 1.1.1.12 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.125
- R2  
interface Tunnel1  
ip address 1.1.1.125 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.110  
interface Tunnel3  
ip address 1.1.1.125 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.160
- R3  
interface Tunnel2  
ip address 1.1.1.32 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.125
- B. R1  
interface Tunnel1  
ip address 1.1.1.13 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.110
- R3  
interface Tunnel1  
ip address 1.1.1.31 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.160
- C. R1  
interface Tunnel1  
ip address 1.1.1.13 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.160
- R3  
interface Tunnel1  
ip address 1.1.1.31 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.110
- D. R1  
interface Tunnel1  
ip address 1.1.1.13 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.110
- R3  
interface Tunnel1  
ip address 1.1.1.31 255.255.255.0  
tunnel source Loopback0  
tunnel destination x.y.z.125

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 113

What is a characteristic of traffic shaping?

- A. can be applied in both traffic directions
- B. drops out-of-profile packets
- C. queues out-of-profile packets until the buffer is full
- D. causes TCP retransmits when packets are dropped

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 114

```
R1#show running-config interface fa0/0
Building configuration...

Current configuration : 193 bytes
interface FastEthernet0/0
 ip address 192.168.3.5 255.255.255.0
 duplex full
 vrrp 1 ip 192.168.3.1
 vrrp 1 priority 140
 vrrp 1 authentication text cisco
 vrrp track 20 decrement 20

R1#show running-config | include track 20
track 20 ip route 10.10.1.1 255.255.255.255 reachability

R2#show running-config interface fa0/0
Building configuration...

Current configuration : 141 bytes
interface FastEthernet0/0
 ip address 192.168.3.2 255.255.255.0
 duplex full
 vrrp 1 ip 192.168.3.1
 vrrp 1 authentication text cisco
end
```

Refer to the exhibit. An engineer configures VRRP and issues the show commands to verify operation. What does the engineer confirm about VRRP group 1 from the output?

- A. R1 is primary if 10.10.1.1/32 is in its routing table.
- B. If R1 reboots, R2 becomes the primary virtual router until R2 reboots.
- C. Communication between VRRP members is encrypted using MD5.
- D. There is no route to 10.10.1.1/32 in R2's routing table.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 115

How do stratum levels relate to the distance from a time source?

- A. Stratum 0 devices are connected directly to an authoritative time source.
- B. Stratum 1 devices are connected directly to an authoritative time source.
- C. xStratum 15 devices are an authoritative time source.
- D. Stratum 15 devices are connected directly to an authoritative time source.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 116

What is the recommended minimum SNR for data applications on wireless networks?

- A. 20
- B. 10
- C. 25
- D. 15

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://documentation.meraki.com/MR/WiFi\\_Basics\\_and\\_Best\\_Practices/Signal-to-Noise\\_Ratio\\_\(SNR\)\\_and\\_Wireless\\_Signal\\_Strength](https://documentation.meraki.com/MR/WiFi_Basics_and_Best_Practices/Signal-to-Noise_Ratio_(SNR)_and_Wireless_Signal_Strength)

#### QUESTION 117

```

enable secret cisco

aaa new-model
tacacs server ise-1
address 10.1.1.1
key cisco123!

tacacs server ise-2
address 10.2.2.1
key cisco123!

aaa group server tacacs+ ISE-Servers
server name ise-1
server name ise-2

```

Refer to the exhibit. A network engineer must configure the router to use the ISE-Servers group for authentication. If both ISE servers are unavailable, the local username database must be used. If no usernames are defined in the configuration, then the enable password must be the last resort to log in. Which configuration must be applied to achieve this result?

- A. aaa authentication login error-enable  
aaa authentication login default group enable local ISE-Server
- B. aaa authentication login default group enable local ISE-Servers
- C. aaa authentication login default group ISE-Servers local enable
- D. aaa authorization exec default group ISE-Servers local enable

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 118

A system must validate access rights to all its resources and must not rely on a cached permission matrix. If the access level to a given resource is revoked but is not reflected in the permission matrix, the security is violated. Which term refers to this REST security design principle?

- A. economy of mechanism
- B. least common mechanism
- C. complete mediation
- D. separation of privilege

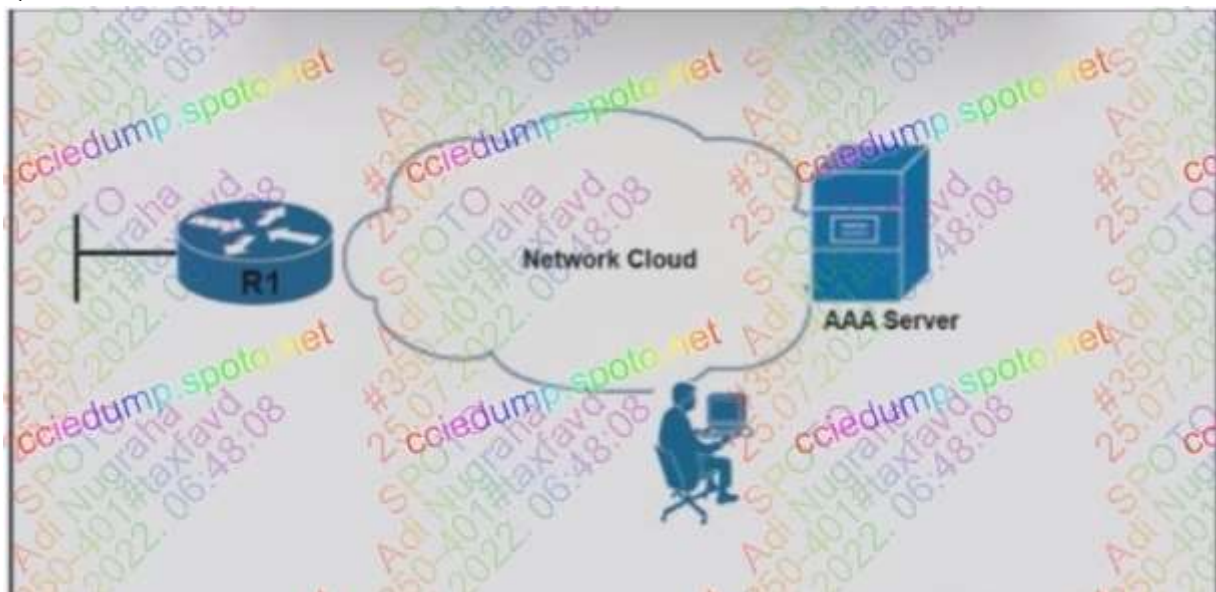
**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 119



```

Router1$ ssh -s admin@192.168.20.3 -p 830 netconf
admin@192.168.20.3's password: cisco123
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
 <capabilities>
 <capability>urn:ietf:params:netconf:base:1.0</capability>
 <capability>urn:ietf:params:netconf:base:1.1</capability>
 <capability>urn:ietf:params:netconf:capability:writable-
running:1.0</capability>
 <capability>urn:ietf:params:netconf:capability:xpath:1.0</capability>
 <capability>urn:ietf:params:netconf:capability:validate:1.0</capability>
 <capability>urn:ietf:params:netconf:capability:validate:1.1</capability>
 <capability>urn:ietf:params:netconf:capability:rollback-on-
error:1.0</capability>
 --snip--
 </capabilities>
 <session-id>2870</session-id></hello>]]>]]>
Use Ctrl-C to exit

```

Refer to the exhibit. An engineer tries to log in to router R1 .Which configuration enables a successful login?

- A. R1# username admin privilege 15  
aaa authorization exec default local
- B. R1# aaa new-model  
aaa authorization exec default local  
enable aaa admin privilege 15
- C. R1#netconf-yang  
username admin privilege 15 secret cisco123  
aaa new-model  
aaa authorization exec default local
- D. R1#username admin privilege 15  
aaa authorization exec default local  
netconf-yang

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 120

What is one method for achieving REST API security?

- A. using HTTPS and TLS encryption
- B. using built-in protocols known as Web Services Security
- C. using a MD5 hash to verify the integrity
- D. using a combination of XML encryption and XML signatures

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 121

What does the destination MAC on the outer MAC header identify in a VXLAN packet?

- A. the next hop
- B. the remote spine
- C. the remote switch
- D. the leaf switch

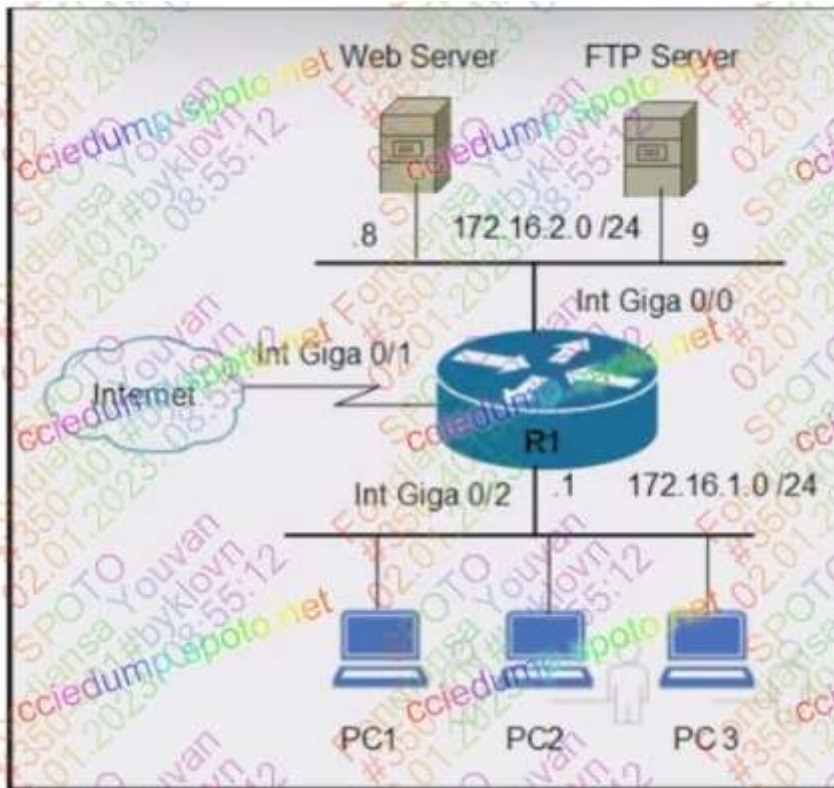
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 122



Refer to the exhibit. An engineer must allow the FTP traffic from users on 172.16.1.0/24 to 172.16.2.0/24 and block all other traffic. Which configuration must be applied?

- A. 

```
R1(config)# access-list 120 permit tcp 172.16.1.0 0.0.0.255 172.16.2.0 0.0.0.255 20
R1(config)# access-list 120 permit tcp 172.16.1.0 0.0.0.255 172.16.2.0 0.0.0.255 21
R1(config)# interface giga 0/2
R1(config-if)# ip access-group 120 in
```
- B. 

```
R1(config)# access-list 120 deny any any
R1(config)# access-list 120 permit tcp 172.16.1.0 0.0.0.255 172.16.2.0 0.0.0.255 21
R1(config)# interface giga 0/0
R1(config-if)# ip access-group 120 out
```
- C. 

```
R1(config)# access-list 120 permit tcp 172.16.1.0 0.0.0.255 21 172.16.2.0 0.0.0.255
R1(config)# access-list 120 permit udp 172.16.1.0 0.0.0.255 21 172.16.2.0 0.0.0.255
R1(config)# interface giga 0/2
R1(config-if)# ip access-group 120 out
```
- D. 

```
R1(config)# access-list 120 permit tcp 172.16.1.0 0.0.0.255 21 172.16.2.0 0.0.0.255
R1(config)# interface giga 0/2
R1(config-if)# ip access-group 120 in
```

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 123

```
Router#sh access-list
Extended IP access list 100
10 permit tcp any any eq telnet
Extended IP access list 101
10 permit tcp any any eq 22
```

Refer to the exhibit. Which configuration set implements Control Plane Policing for SSH and Telnet?

- A. 

```
Router(config)#class-map class-telnet
Router(config-cmap)#match access-group 100
Router(config)#class-map class-ssh
Router(config-cmap)#match access-group 101
Router(config)#policy-map CoPP

Router(config-pmap)#class class-telnet-ssh
Router(config-pmap-c)#police 1000000 conform-action transmit
Router(config)#control-plane
Router(config-cp)#service-policy input CoPP
```
- B. 

```
Router(config)#class-map type inspect match-all
Router(config-cmap)#match access-group 100
Router(config-cmap)#match access-group 101
Router(config)#policy-map CoPP

Router(config-pmap)#class class-control
Router(config-pmap-c)#police 1000000 conform-action transmit
Router(config)#control-plane
Router(config-cp)#service-policy output CoPP
```

- C. Router(config)#class-map match-all class-control  
Router(config-cmap)#match access-group 100  
Router(config-cmap)#match access-group 101  
Router(config)#policy-map CoPP  
  
Router(config-pmap)#class class-control  
Router(config-pmap-c)#police 1000000 conform-action transmit  
Router(config)#control-plane  
Router(config-cp)#service-policy output CoPP
- D. Router(config)#class-map match-any class-control  
Router(config-cmap)#match access-group 100  
Router(config-cmap)#match access-group 101  
Router(config)#policy-map CoPP  
  
Router(config-pmap)# class class-control  
Router(config-pmap-c)# police 1000000 conform-action transmit  
Router(config)#control-plane  
Router(config-cp)#service-policy input CoPP

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

**Explanation/Reference:**

#### QUESTION 124

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre> R1#show ip ospf interface Gi0/0 GigabitEthernet0/0 is up, line protocol is up   Internet Address 172.20.0.1/24, Area 0, Attached via   Network Statement   Process ID 1, RouterID 172.20.0.1, Network Type   BROADCAST, Cost: 1   Topology-MTID      Cost      Disabled      Shutdown   Topology Name   0                    no          no            no   Base   Transmit Delay is 1 sec, State DR, Priority 1   Designated Router (ID) 172.20.0.1, Interface address   172.20.0.1   No backup designated router on this network   Timer intervals configured, Hello 10, Dead 40, Wait 40,   Retransmit 5   oob-resync timeout 40   Hello 10, Dead 40, Wait 40, Retransmit 5   No Hellos (Passive interface)   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 0, maximum is 0   Last flood scan time is 0 msec, maximum is 0 msec   Neighbor Count is 0, Adjacent neighbor count is 0   Suppress hello for 0 neighbor(s) </pre> | <pre> R2#show ip ospf interface Gi0/0 GigabitEthernet0/0 is up, line protocol is up   Internet Address 172.20.0.2/24, Area 0, Attached via   Network Statement   Process ID 1, RouterID 172.20.0.2, Network Type   BROADCAST, Cost: 5   Topology-MTID      Cost      Disabled      Shutdown   Topology Name   0                    5          no            no   Base   Transmit Delay is 1 sec, State DR, Priority 1   Designated Router (ID) 172.20.0.2, Interface address   172.20.0.2   No backup designated router on this network   Timer intervals configured, Hello 10, Dead 40, Wait 40,   Retransmit 5   oob-resync timeout 40   Hello 10, Dead 40, Wait 40, Retransmit 5   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 2   Last flood scan time is 2 msec, maximum is 2 msec   Neighbor Count is 0, Adjacent neighbor count is 0   Suppress hello for 0 neighbor(s) </pre> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Refer to the exhibit. Cisco IOS routers R1 and R2 are interconnected using interface Gi0/0. Which configuration allows R1 and R2 to form an OSPF neighborhood on interface Gi0/0?

- A. R1(config)# router ospf 1  
R1 (config-router)# no passive-interface Gi0/0
- B. R1(config)# router ospf 1  
R1(config-if)# network 172.20.0.0 0.0.0.255 area 1
- C. R2(config)# interface Gi0/0  
R2(config-if)# ip ospf cost 1
- D. R2(config)# router ospf 1  
R2(config-router)# passive-interface Gi0/0

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

**Explanation/Reference:**

#### QUESTION 125

```

S1# show etherchannel summary
Flags: D - down P - bundled in port-channel
I - stand-alone s - suspended
H - Hot-standby (LACP only)
R - Layer3 S - Layer2
U - in use f - failed to allocate aggregator

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

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

Group Port-channel Protocol Ports

1 Po1 (SD) - Fa0/1 (D) Fa0/2 (D)

S1# show run | begin interface port-channel
interface Port-channel1
switchport mode trunk

interface FastEthernet0/1
switchport mode trunk
channel-group 1 mode on

interface FastEthernet0/2
switchport mode trunk
channel-group 1 mode on
<Output omitted>

S2# show run | begin interface port-channel
interface Port-channel1
switchport mode trunk

interface FastEthernet0/1
switchport mode trunk
channel-group 1 mode desirable

interface FastEthernet0/2
switchport mode trunk
channel-group 1 mode desirable
<Output omitted>

```

Refer to the exhibit .Traffic is not passing between SW1 and SW2. Which action fixes the issue?

- A. Configure LACP mode on S1 to active.
- B. Configure LACP mode on S1 to passive.
- C. Configure PAgP mode on S1 to desirable.
- D. Configure switch port mode to ISL on S2.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 126

Which features does Cisco EDR use to provide threat detection and response protection?

- A. cloud analysis and endpoint firewall controls
- B. containment, threat intelligence, and machine learning
- C. container-based agents
- D. firewalling and intrusion prevention

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

<https://www.cisco.com/c/en/us/products/security/endpoint-security/what-is-endpoint-detection-response-edr-medr.html>

#### QUESTION 127

A customer deploys a new wireless network to perform location-based services using Cisco DNA Spaces. The customer has a single WLC located on-premises in a secure data center. The security team does not want to expose the WLC to the public Internet. Which solution allows the customer to securely send RSSI updates to Cisco DNA Spaces?

- A. Deploy a Cisco DNA Spaces connector as a VM.
- B. Implement Cisco Mobility Services Engine.
- C. Perform tethering with Cisco DNA Center.
- D. Replace the WLC with a cloud-based controller.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 128

General Security QoS Policy-Mapping Advanced

Profile Name: Cisco

Type: WLAN

SSID: Cisco

Status: ☒ Enabled

Security Policies: [WPA2][Auth(802.1X)]  
(Modifications done under security tab will appear after applying the changes.)

Radio Policy: All

Interface/Interface Group(G): management

Multicast Vlan Feature: ☐ Enabled

Broadcast SSID: ☒ Enabled

NAS-ID: none

Refer to the exhibit. Clients report that they cannot connect to this SSID using the provided PSK Which action will resolve this issue?

- A. Select the PSK under authentication key management.
- B. Apply the correct interface to this WLAN.
- C. Define the correct Radio Policy.
- D. Apply the changes this SSID.

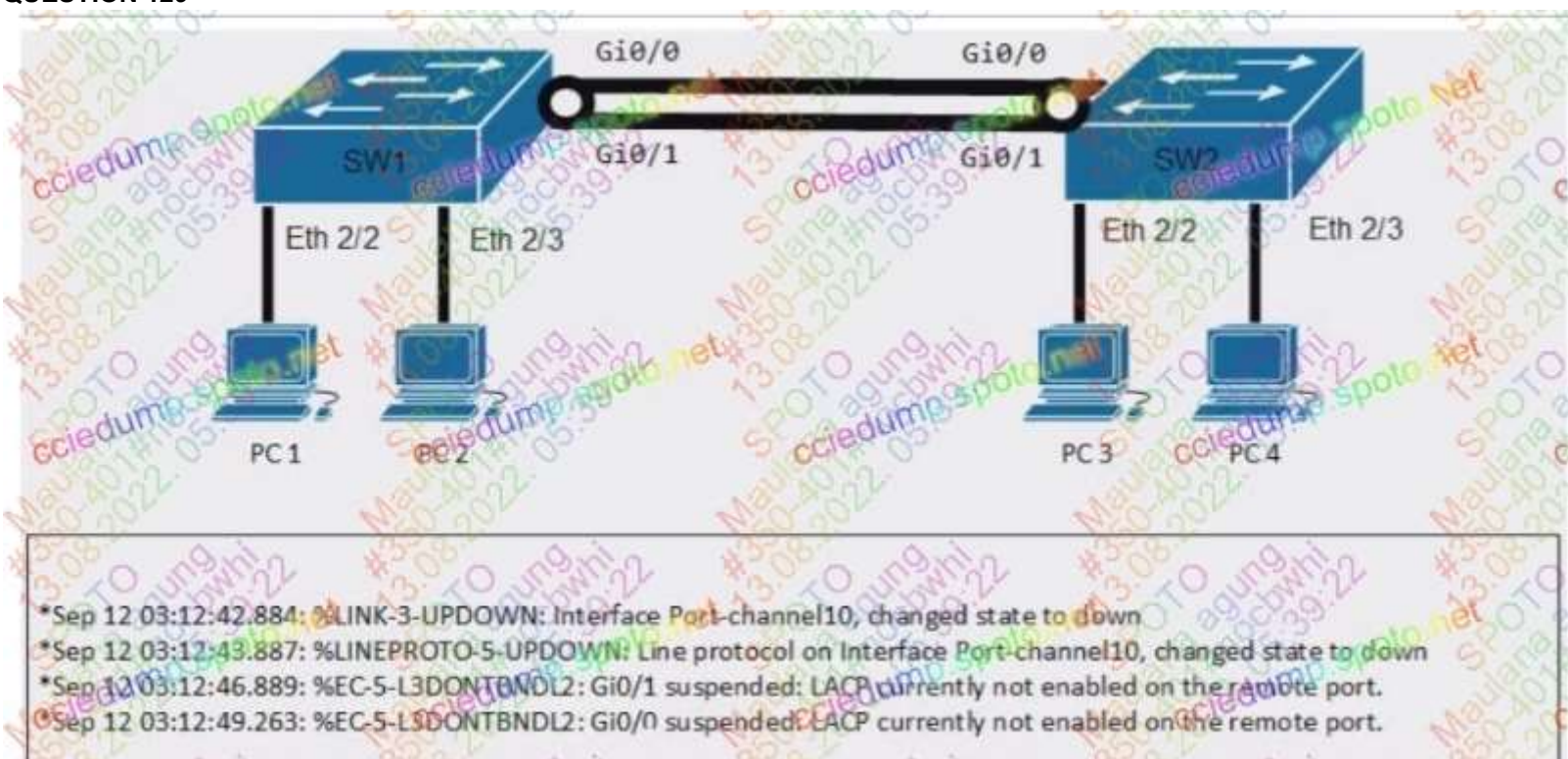
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 129



Refer to the exhibit. A network engineer troubleshoots an issue with the port channel between SW1 and SW2. Which command resolves the issue?

- A. SW2(config-if)# switchport mode trunk
- B. SW1(config-if)# channel-group 10 mode desirable
- C. SW2(config-if)#channel-group 10 mode on
- D. SW1(config-if)# channel-group to mode active

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 130

Refer to the exhibit. A company has an internal wireless network with a hidden SSID and RADIUS-based client authentication for increased security. An employee attempts to manually add the company network to a laptop, but the laptop does not attempt to connect to the network. The regulatory domains of the access points and the laptop are identical. Which action resolves this issue?

- A. Limit the enabled wireless channels on the laptop to the maximum channel range that is supported by the access points.
- B. Use the empty string as the hidden SSID network name.
- C. Ensure that the "Connect even if this network is not broadcasting" option is selected.
- D. Change the security type to WPA2-Personal AES.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 131

A customer has a wireless network deployed within a multi-tenant building. The network provides client access, location-based services, and is monitored using Cisco DNA Center. The security department wants to locate and track malicious devices based on threat signatures. Which feature is required for this solution?

- A. malicious rogue rules on Cisco DNA Center
- B. malicious rogue rules on the WLC
- C. Cisco aWIPS policies on Cisco DNA Center
- D. Cisco aWIPS policies on the WLC

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 132

How do the RIB and the FIB differ?

- A. FIB contains routes learned through a dynamic routing protocol, and the RIB contains routes that are static or directly connected.
- B. RIB is derived from the control plane, and the FIB is derived from the RIB.
- C. FIB is derived from the control plane, and the RIB is derived from the data plane.
- D. RIB contains the interface for a destination, and the FIB contains the next hop information.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 133

An engineer is connected to a Cisco router through a Telnet session. Which command must be issued to view the logging messages from the current session as soon as they are generated by the router?

- A. terminal monitor
- B. logging buffer
- C. logging host
- D. service timestamps log uptime

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 134

An engineer is configuring RADIUS-Based Authentication with EAP. MS-CHAPV2 is configured on a client device. Which outer method protocol must be configured on the ISE to support this authentication type?

- A. EAP-TLS
- B. EAP-FAST
- C. LDAP
- D. PEAP

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 135

Which QoS feature uses the IP Precedence bits in the ToS field of the IP packet header to partition traffic into different priority levels?

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

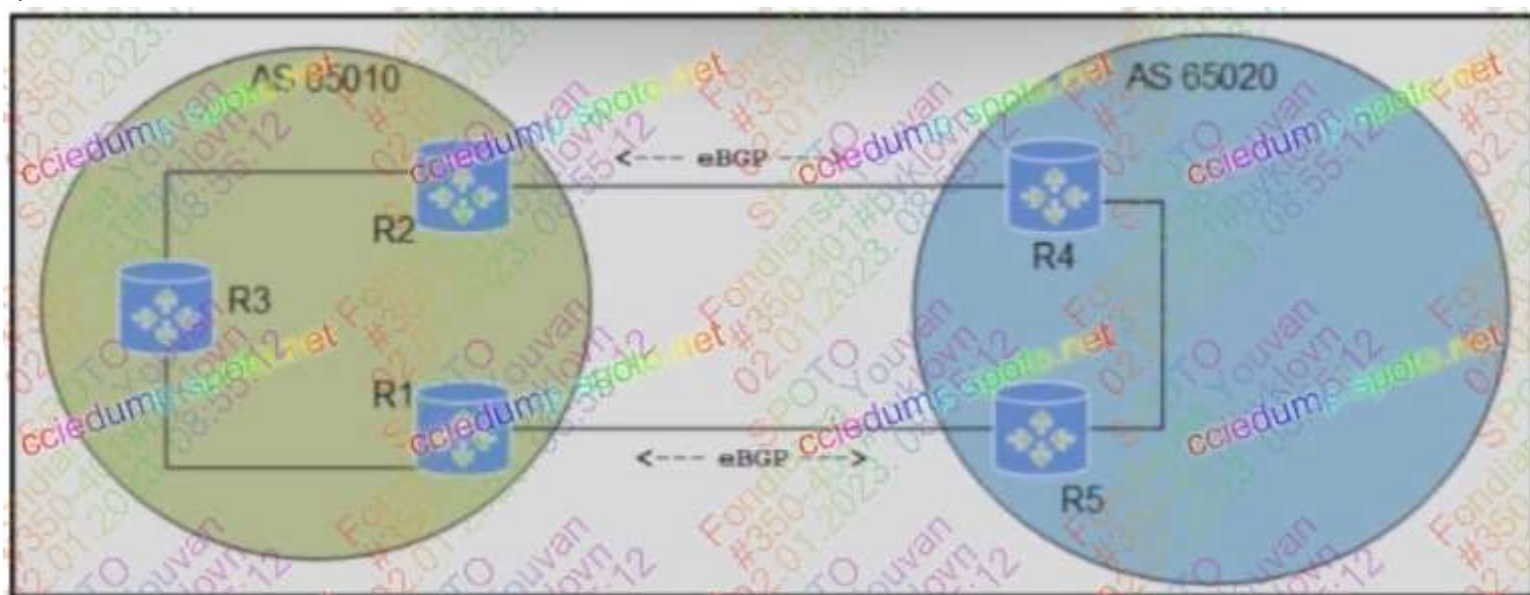
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 136



Refer to the exhibit. Which configuration must be applied to ensure that the preferred path for traffic from AS 65010 toward AS 65020 uses the R2 to R4 path?

- A. 

```
R2(config)#router bgp 65010
R2(config-router)#bgp default local-preference 200
R1(config)#router bgp 65010
R1(config-router)#bgp default local-preference 300
```
- B. 

```
R4(config)#router bgp 65020
R4(config-router)#bgp default local-preference 300
R5(config)#router bgp 65020
R5(config-router)#bgp default local-preference 200
```
- C. 

```
R2(config)#router bgp 65010
R2(config-router)#bgp default local-preference 300
R1(config)#router bgp 65010
R1(config-router)#bgp default local-preference 200
```
- D. 

```
R4(config)#router bgp 65020
R4(config-router)#bgp default local-preference 200
R5(config)#router bgp 65020
R5(config-router)#bgp default local-preference 300
```

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 137

What is the purpose of the weight attribute in an EID-to-RLOC mapping?

- A. It identifies the preferred RLOC address family.
- B. It determines the administrative distance of USP generated routes in the RIB.
- C. It indicates the preference for using LISP over native IP connectivity.
- D. It indicates the load-balancing ratio between ETRs of the same priority.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 138

What is a characteristic of para-virtualization?

- A. Para-virtualization allows the host hardware to be directly accessed.
- B. Para-virtualization lacks support for containers.
- C. Para-virtualization allows direct access between the guest OS and the hypervisor.
- D. Para-virtualization guest servers are unaware of one another.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 139

What is an advantage of utilizing data models in a multivendor environment?

- A. removing the distinction between configuration and runtime state data
- B. lowering CPU load incurred to managed devices
- C. Improving communication security with binary-encoded protocols
- D. facilitating a unified approach to configuration and management

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 140

How is traffic classified when using Cisco TrustSec technology?

- A. with the VLAN
- B. with the IP address
- C. with the security group tag
- D. with the MAC address

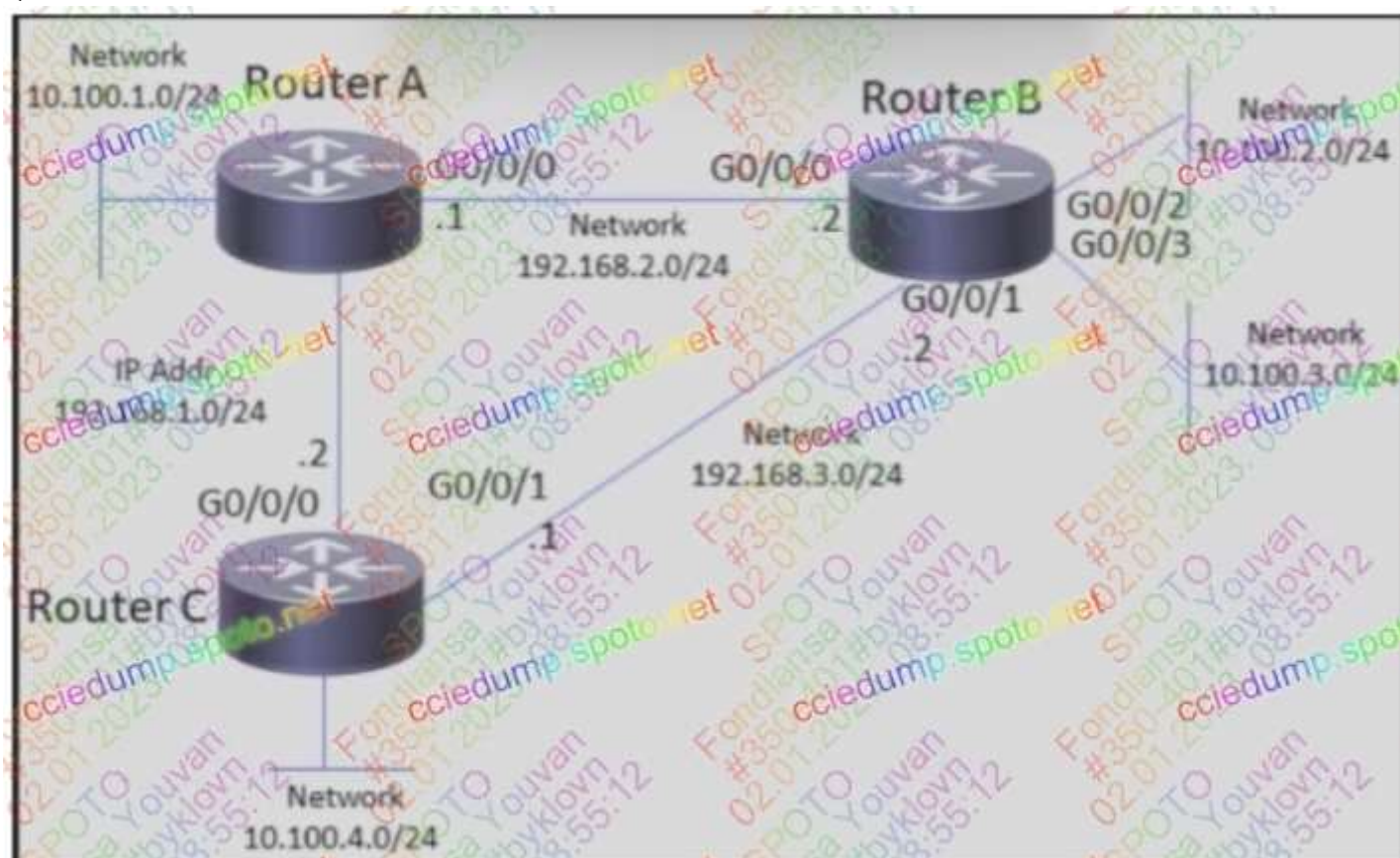
**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 141



Refer to the exhibit. A network administrator must configure router B to allow traffic only from network 10.100.2.0 to networks outside of router B. Which configuration must be applied?

- A. RouterB(config)#access-list 101 permit ip 10.100.2.0 0.0.0.255 any  
RouterB(config)#int g0/0/0  
RouterB(config-if)#ip access-group 101 out  
RouterB(config)#int g0/0/1  
RouterB(config-if)#ip access-group 101 out
- B. RouterB(config)#access-list 101 permit ip 10.100.2.0 0.0.0.255 any  
RouterB(config)#access-list 101 deny any  
RouterB(config)#int g0/0/2  
RouterB(config-if)#ip access-group 101 in
- C. RouterB(config)#access-list 101 permit ip 10.100.2.0 0.0.0.255 any  
RouterB(config)#access-list 101 deny any  
RouterB(config)#int g0/0/0  
RouterB(config-if)#ip access-group 101 out
- D. RouterB(config)#access-list 101 permit ip 10.100.3.0 0.0.0.255 any  
RouterB(config)#access-list 101 deny any  
RouterB(config)#int g0/0/0  
RouterB(config-if)#ip access-group 101 out  
RouterB(config)#int g0/0/1  
RouterB(config-if)#ip access-group 101 out

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 142

Which authorization framework gives third-party applications limited access to HTTP services?

- A. GRE
- B. OAuth 2.0
- C. IPsec
- D. Basic Auth

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 143

How do cloud deployments compare to on-premises deployments?

- A. Cloud deployments are inherently unsecure, whereas a secure architecture is mandatory for on-premises deployments.
- B. Cloud deployments must include automation infrastructure, whereas on-premises deployments often lack the ability for automation.
- C. Cloud deployments mandate a secure architecture, whereas on-premises deployments are inherently unsecure.
- D. Cloud deployments provide a better user experience across world regions, whereas on-premises deployments depend upon region-specific conditions.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 144

When a DNS host record is configured for a new Cisco AireOS WLC, which hostname must be added to allow APs to successfully discover the WLC?

- A. CONTROLLER-CAPWAP-CISCO
- B. CISCO-CAPWAP-CONTROLLER
- C. CAPWAP-CISCO-CONTROLLER
- D. CISCO-CONTROLLER-CAPWAP

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 145

An engineer must implement a configuration to allow a network administrator to connect to the console port of a router and authenticate over the network. Which command set should the engineer use?

- A. aaa new-model  
aaa authentication login console local
- B. aaa new-model  
aaa authentication login console group radius
- C. aaa new-model  
aaa authentication enable default

D. `aaa new-model`  
`aaa authentication login default enable`

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 146

Which two new security capabilities are introduced by using a next-generation firewall at the Internet edge? (Choose two.)

- A. stateful packet inspection
- B. application-level inspection
- C. integrated intrusion prevention
- D. NAT
- E. VPN

**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 147

Why would a small or mid-size business choose a cloud solution over an on-premises solution?

- A. Cloud provides more control over the implementation process than on-premises.
- B. Cloud provides higher data security than on-premises.
- C. Cloud provides lower upfront cost than on-premises.
- D. Cloud provides greater ability for customization than on-premises.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 148

A wireless administrator must create a new web authentication corporate SSID that will be using ISE as the external RADIUS server. The guest VLAN must be specified after the authentication completes. Which action must be performed to allow the ISE server to specify the guest VLAN?

- A. Set RADIUS Profiling.
- B. Enable Network Access Control State.
- C. Set AAA Policy name.
- D. Enable AAA Override.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 149

Why does the vBond orchestrator have a public IP?

- A. to allow for global reachability from all WEs in the Cisco SD-WAN and to facilitate NAT traversal
- B. to provide access to Cisco Smart Licensing servers for license enablement
- C. to enable vBond to learn the public IP of WAN Edge devices that are behind NAT gateways or in private address space
- D. to facilitate downloading and distribution of operational and security patches

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 150

What does the statement `print (format(0.8,'.0%'))` display?

- A. .08%
- B. 80%
- C. 8%
- D. 8.8%

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 151

```

ip access-list extended 101
10 deny ip any any
event manager applet Block_Users
action 1.0 cli command "enable"
action 2.0 cli command "configure terminal"
action 3.0 cli command "interface GigabitEthernet1"
action 4.0 cli command "ip access-group 101 in"
action 5.0 cli command "ip access-group 101 out"

```

Refer to the exhibit. An engineer builds an EEM script to apply an access list. Which statement must be added to complete the script?

- A. action 6.0 cli command "ip access-list extended 101"
- B. event none
- C. action 3.1 cli command "ip access-list extended 101"
- D. action 2.1 cli command "ip access-list extended 101"

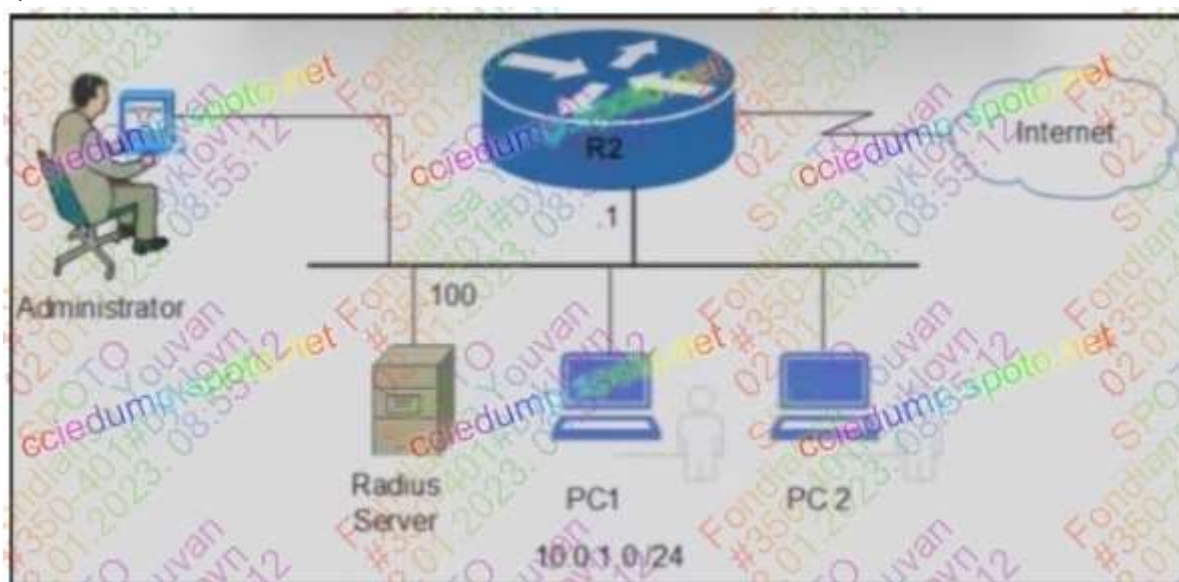
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 152



Refer to the exhibit. An engineer must save the configuration of router R2 using the NETCONF protocol. Which script must be used?

- A. 

```
<?xml version="1.0" encoding="utf-8"?>
<rpc xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="">
 <cisco-ia:sync-from xmlns:cisco-ia="http://cisco.com/yang/cisco-ia"></cisco-ia:sync-from>
</rpc>
```
- B. 

```
<?xml version="1.0" encoding="utf-8"?>
<rpc xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="">
 <get>
 <filter type="subtree">
 <ncm:netconf-state xmlns:ncm="urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring">
 <ncm:capabilities/>
 </ncm:netconf-state>
 </filter>
 </get>
</rpc>
```
- C. 

```
<?xml version="1.0" encoding="utf-8"?>
<rpc xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="">
 <cisco-ia:reset xmlns:cisco-ia="http://cisco.com/yang/cisco-ia">
 <cisco-ia:reinitialize>true</cisco-ia:reinitialize>
 </cisco-ia:reset>
</rpc>
```
- D. 

```
<?xml version="1.0" encoding="utf-8"?>
<rpc xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="">
 <cisco-ia:save-config xmlns:cisco-ia="http://cisco.com/yang/cisco-ia"/>
</rpc>
```

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 153

How does Cisco Express Forwarding switching differ from process switching on Cisco devices?

- A. Cisco Express Forwarding switching uses a proprietary protocol based on IS-IS for MAC address lookup, and process switching uses the MAC address table.
- B. Cisco Express Forwarding switching uses dedicated hardware processors, and process switching uses the main processor.
- C. Cisco Express Forwarding switching saves memory by storing adjacency tables in dedicated memory on the line cards, and process switching stores all tables in the main memory.
- D. Cisco Express Forwarding switching uses adjacency tables built by the CDP protocol, and process switching uses the routing table.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 154

```
Router#show running-config | include aaa
aaa new-model
aaa authentication login default group tacacs+
aaa authorization exec default group tacacs+
aaa session-id common
```

Refer to the exhibit. Which configuration enables fallback to local authentication and authorization when no TACACS+ server is available?

- A. Router(config)#aaa authentication login default group tacacs+ local  
Router(config)#aaa authorization exec default group tacacs+ local
- B. Router(config)#aaa authentication login default local  
Router(config)#aaa authorization exec default local
- C. Router(config)#aaa authentication login FALLBACK local  
Router(config)#aaa authorization exec FALLBACK local
- D. Router(config)#aaa fallback local

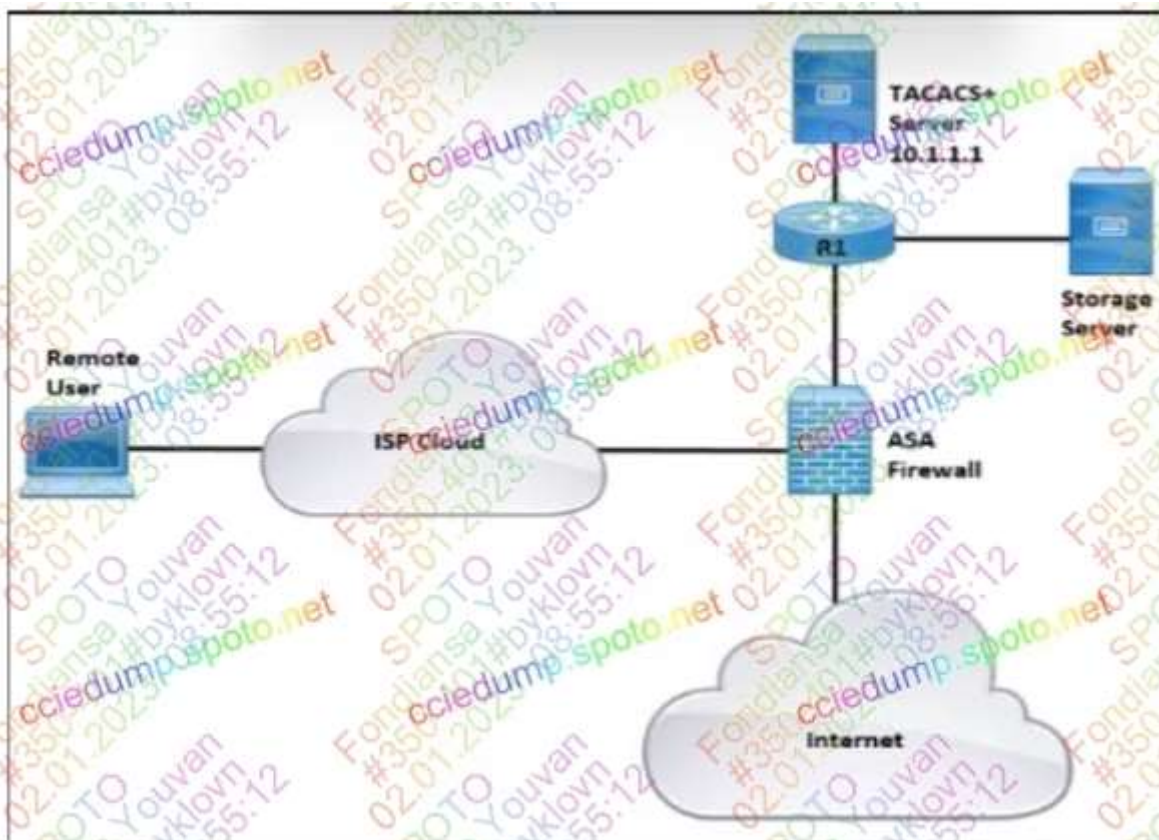
**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 155



Refer to the exhibit. Remote users cannot access the Internet but can upload files to the storage server. Which configuration must be applied to allow Internet access?

- A. ciscoasa(config)#access-list MAIL AUTH extended permit tcp any any eq www  
ciscoasa(config)#aaa authentication listener http inside redirect
- B. ciscoasa(config)#access-list HTTP AUTH extended permit udp any any eq http  
ciscoasa(config)#aaa authentication listener http outside port 43
- C. ciscoasa(config)#access-list MAIL\_AUTH extended permit udp any any eq http  
ciscoasa(config)#aaa authentication listener http outside redirect
- D. ciscoasa(config)#access-list MAIL\_AUTH extended permit tcp any any eq http  
ciscoasa(config)#aaa authentication listener http inside port 43

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 156**

Which two features are available only in next-generation firewalls? (Choose two.)

- A. application awareness
- B. packet filtering
- C. stateful inspection
- D. virtual private network
- E. deep packet inspection

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 157**

What is one difference between the RIB and the FIB?

- A. The RIB is known as the CEF table, and the FIB is known as the routing table.
- B. The RIB works at the data plane, and the FIB works at the control plane.
- C. The FIB contains routing prefixes, and the RIB contains the Layer 2 and Layer 3 information necessary to make a forwarding decision.
- D. The RIB keeps all routing information received from peers, and the FIB keeps the minimum information necessary to make a forwarding decision.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 158**

Which statement must be used to export the contents of the devices object in JSON format?

```
from json import dumps, loads
```

```
Devices=[
{
'name': 'SwitchA',
'ip': '10.10.10.1',
'model': 'WS-2960',
'user': 'CiscoAdmin'
}]
```

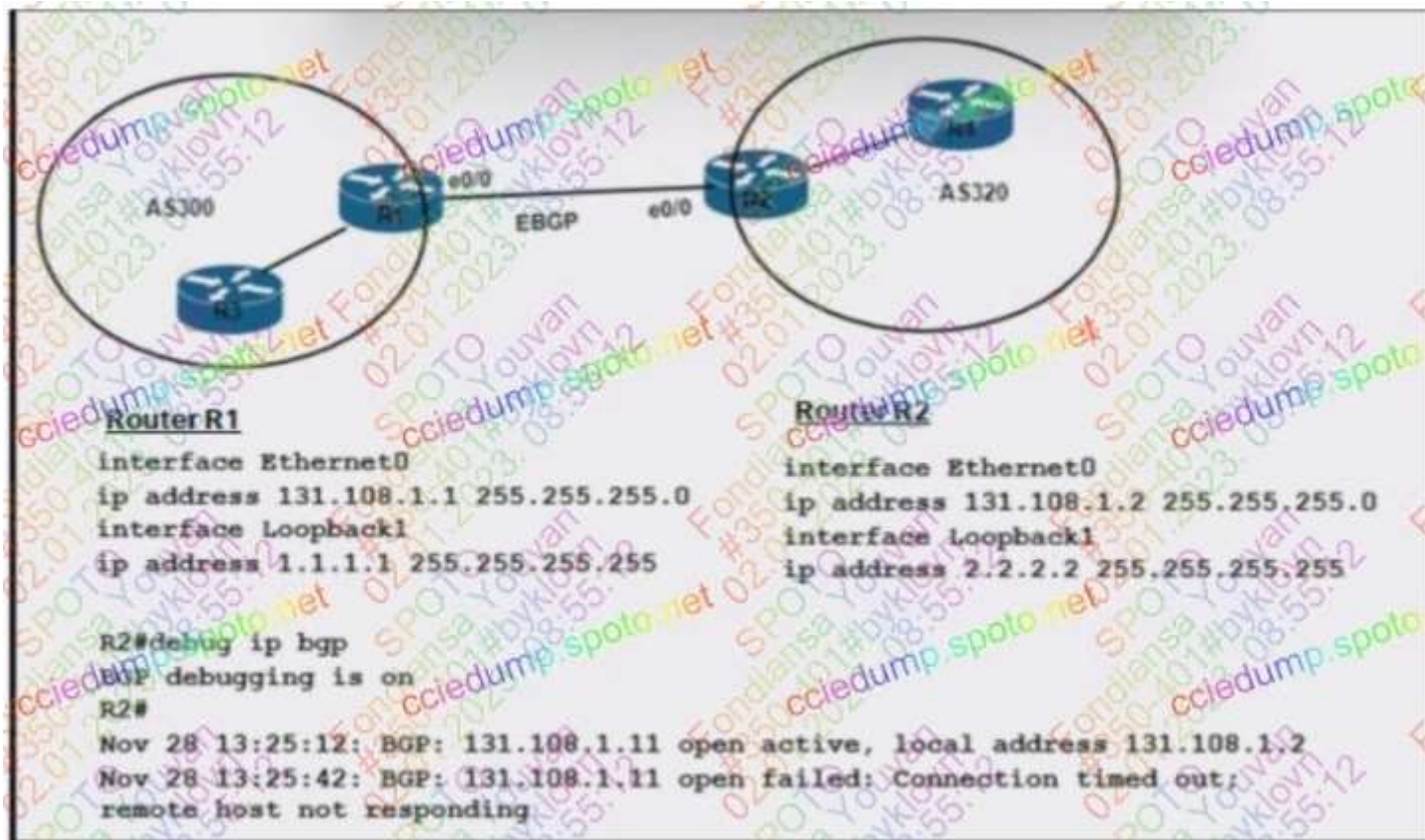
- A. json.repr(Devices)
- B. json.print(Devices)
- C. json.loads(Devices)
- D. json.dumps(Devices)

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 159**

Refer to the exhibit. Which configuration must be implemented to establish EBGp peering between R1 and R2?

- A. R2  
router bgp 320  
neighbor 131.108.1.11 remote-as 300  
R1  
router bgp 300  
neighbor 131.108.1.2 remote-as 320
- B. R2  
router bgp 320  
neighbor 131.108.1.1 remote-as 300  
R1  
router bgp 300  
neighbor 131.108.1.2 remote-as 320
- C. R2  
router bgp 300  
neighbor 131.108.1.1 remote-as 320  
R1  
router bgp 320  
neighbor 131.108.1.2 remote-as 300
- D. R2  
router bgp 320  
neighbor 1.1.1.1 remote-as 300  
R1  
router bgp 300  
neighbor 2.2.2.2 remote-as 320

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 160



Refer to the exhibit. Which JSON syntax is derived from this data?

- A. {'Person': [{'First Name': 'Johnny', 'Last Name': 'Table', 'Hobbies': ['Running', 'Video games']}, {'First Name': 'Billy', 'Last Name': 'Smith', 'Hobbies': ['Napping', 'Reading']}]}
- B. {'Person': [{'First Name': 'Johnny', 'Last Name': 'Table', 'Hobbies': 'Running', 'Video games'}, {'First Name': 'Billy', 'Last Name': 'Smith', 'Hobbies': 'Napping', 'Reading'}]}
- C. {[{'First Name': 'Johnny', 'Last Name': 'Table', 'Hobbies': ['Running', 'Video games']}, {'First Name': 'Billy', 'Last Name': 'Smith', 'Hobbies': ['Napping', 'Reading']}]}
- D. {[{'First Name': 'Johnny', 'Last Name': 'Table', 'Hobbies': 'Running', 'Hobbies': 'Video games'}, {'First Name': 'Billy', 'Last Name': 'Smith', 'Hobbies': 'Napping', 'Hobbies': 'Reading'}]}

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 161

By default, which virtual MAC address does HSRP group 12 use?

- A. 00:5e:05:00:07:3c
- B. 00:05:5e:00:0c:12
- C. 00:00:0c:07:ac:0c
- D. 00:5e:0c:07:ac:12

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 162

Router R1 must be configured as a UDP responder on port 6336. Which configuration accomplishes this task?

- A. (config)#ip sla responder udp-echo ipv4 10.10.10.1 port 6336

- B. (config)#ip sla responder udp-echo ipaddress 10.10.10.1 port 6336
- C. (config-if)#ip sla responder udp-port ipaddress 10.10.10.1 port 6336
- D. (config)#ip sla responder ipaddress 10.10.10.1 port 6336

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 163

A network engineer wants to configure console access to a router without using AAA so that the privileged exec mode is entered directly after a user provides the correct login credentials. Which action achieves this goal?

- A. Configure a RADIUS or TACACS+ server and use it to send the privilege level.
- B. Configure privilege level 15 on line con 0.
- C. Configure login authentication privileged on line con 0.
- D. Configure a local username with privilege level 15.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 164

When voice services are deployed over a wireless environment, which service must be disabled to ensure the quality of calls?

- A. Fastlane
- B. dynamic transmit power control
- C. priority queuing
- D. aggressive load balancing

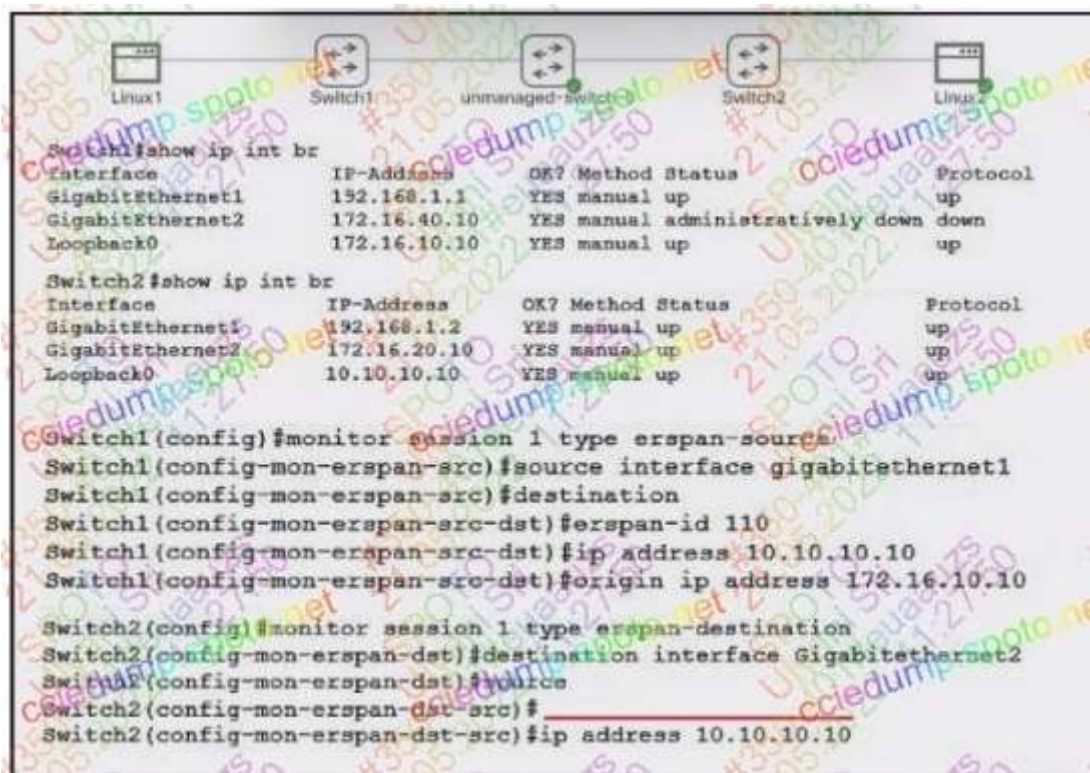
**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 165



Refer to the exhibit. An engineer must configure an ERSPAN tunnel that mirrors traffic from Linux on Switch1 to Linux2 on Switch2. Which command must be added to the destination configuration to enable the ERSPAN tunnel?

- A. (config-mon-erspan-src-dst)monitor session 1 activate
- B. (config-mon-erspan-src-dst)#traffic bidirectional
- C. (config-mon-erspan-src-dst)#no shut
- D. (config-mon-erspan-src-dst)#ip address 10.10.10.10

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 166

```

hostname Cat3850
!
interface GigabitEthernet0/0
 vrf forwarding Mgmt-vrf
 ip address 198.51.100.214 255.255.255.0
 no shutdown
!
 ip route vrf Mgmt-vrf 0.0.0.0 0.0.0.0 198.51.100.1

```

Refer to the exhibit. The administrator must extend the configuration of the switch to perform remote logging using syslog according to these requirements:

1. syslog server: 203.0.113.11 reachable through Gi0/0
2. initial message severity: notifications
3. message transport reliable

Which two commands must be added to the configuration to accomplish this goal? (Choose two.)

- A. logging host 203.0.113.11 vrf Mgmt-vrf
- B. logging host 203.0.113.11 vrf Mgmt-vrf transport tcp
- C. logging source-interface GigabitEthernet0/0 vrf Mgmt-vrf
- D. logging monitor notifications
- E. logging trap notifications

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 167

What is the centralized control policy in a Cisco SD-WAN deployment?

- A. list of ordered statements that define user access policies
- B. list of enabled services for all nodes within the cloud
- C. set of rules that governs nodes authentication within the cloud
- D. set of statements that defines how routing is performed

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 168

An engineer must configure a router to leak routes between two VRFs. Which configuration must the engineer apply?

- A. 

```
ip access-list extended acl-to-red
permit ip 10.1.1.0 0.0.0.255 any
route-map rm-to-red permit 10
match ip address acl-to-red
ip vrf RED
rd 1:1
import ipv4 unicast map rm-to-red
```
- B. 

```
ip access-list extended acl-to-red
permit ip any 10.1.1.0 0.0.0.255
route-map rm-to-red permit 10
match ip address 50
ip vrf RED
rd 1:1
import ipv4 unicast map rm-to-red
```
- C. 

```
ip access-list extended acl-to-red
permit ip 10.1.1.0 0.0.0.255 any
route-map rm-to-red permit 10
match ip address acl-to-red
ip vrf RED
rd 1:1
import ipv4 unicast acl-to-red
```
- D. 

```
ip access-list extended acl-to-red
permit ip 10.1.1.0 0.0.0.255 any
route-map rm-to-red permit 10
match ip address acl-to-red
ip vrf RED
rd 1:1
import ipv4 unicast route-map acl-to-red
```

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 169

What is a characteristic of MACsec?

- A. 802.1AE is negotiated using Cisco AnyConnect NAM and the SAP protocol
- B. 802.1AE is built between the host and switch using the MKA protocol, which negotiates encryption keys based on the master session key from a successful 802.1X session
- C. 802.1AE provides encryption and authentication services
- D. 802.1AE is built between the host and switch using the MKA protocol using keys generated via the Diffie-Hellman algorithm (anonymous encryption mode)

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 170

Which configuration restricts the amount of SSH traffic that a router accepts to 100 kbps?

- A.
 

```
class-map match-all CoPP_SSH
match access-group name CoPP_SSH
!
policy-map CoPP_SSH
class CoPP_SSH
police cir 100000
exceed-action drop
!
!
control-plane transit
service-policy input CoPP_SSH
!
ip access-list extended CoPP_SSH
permit tcp any any eq 22
```
- B.
 

```
class-map match-all CoPP_SSH
match access-group name CoPP_SSH
!
policy-map CoPP_SSH
class CoPP_SSH
police cir 100000
exceed-action drop
!
!
interface GigabitEthernet0/1
ip address 209.165.200.225 255.255.255.0
ip access-group EGRESS out
service-policy input CoPP_SSH
ip access-list extended CoPP_SSH
permit tcp any any eq 22
```
- C.
 

```
class-map match-all CoPP_SSH
match access-group name CoPP_SSH
!
policy-map CoPP_SSH
class CoPP_SSH
police cir 100000
exceed-action drop
!
!
interface GigabitEthernet0/1
ip address 209.165.200.225 255.255.255.0
ip access-group EGRESS out
service-policy input CoPP_SSH
ip access-list extended CoPP_SSH
deny tcp any any eq 22
```
- D.
 

```
class-map match-all CoPP_SSH
match access-group name CoPP_SSH
!
policy-map CoPP_SSH
class CoPP_SSH
police cir 100000
exceed-action drop
!
!
control-plane
service-policy input CoPP_SSH
!
ip access-list extended CoPP_SSH
permit tcp any any eq 22
```

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 171

Which feature is used to propagate ARP, broadcast and link-local frames across a Cisco SD-Access fabric to address connectivity needs for silent hosts that require reception of traffic to start communicating?

- A. SDA Transit
- B. Layer 2 Flooding
- C. Multisite Fabric
- D. Native Fabric Multicast

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 172

What is a difference between TCAM and the MAC address table?

- A. The MAC address table supports partial matches. TCAM requires an exact match.
- B. Router prefix lookups happen in CAM. MAC address table lookups happen in TCAM.
- C. TCAM is used to make Layer 2 forwarding decisions. CAM is used to build routing tables.
- D. The MAC address table is contained in CAM. ACL and QoS information is stored in TCAM.

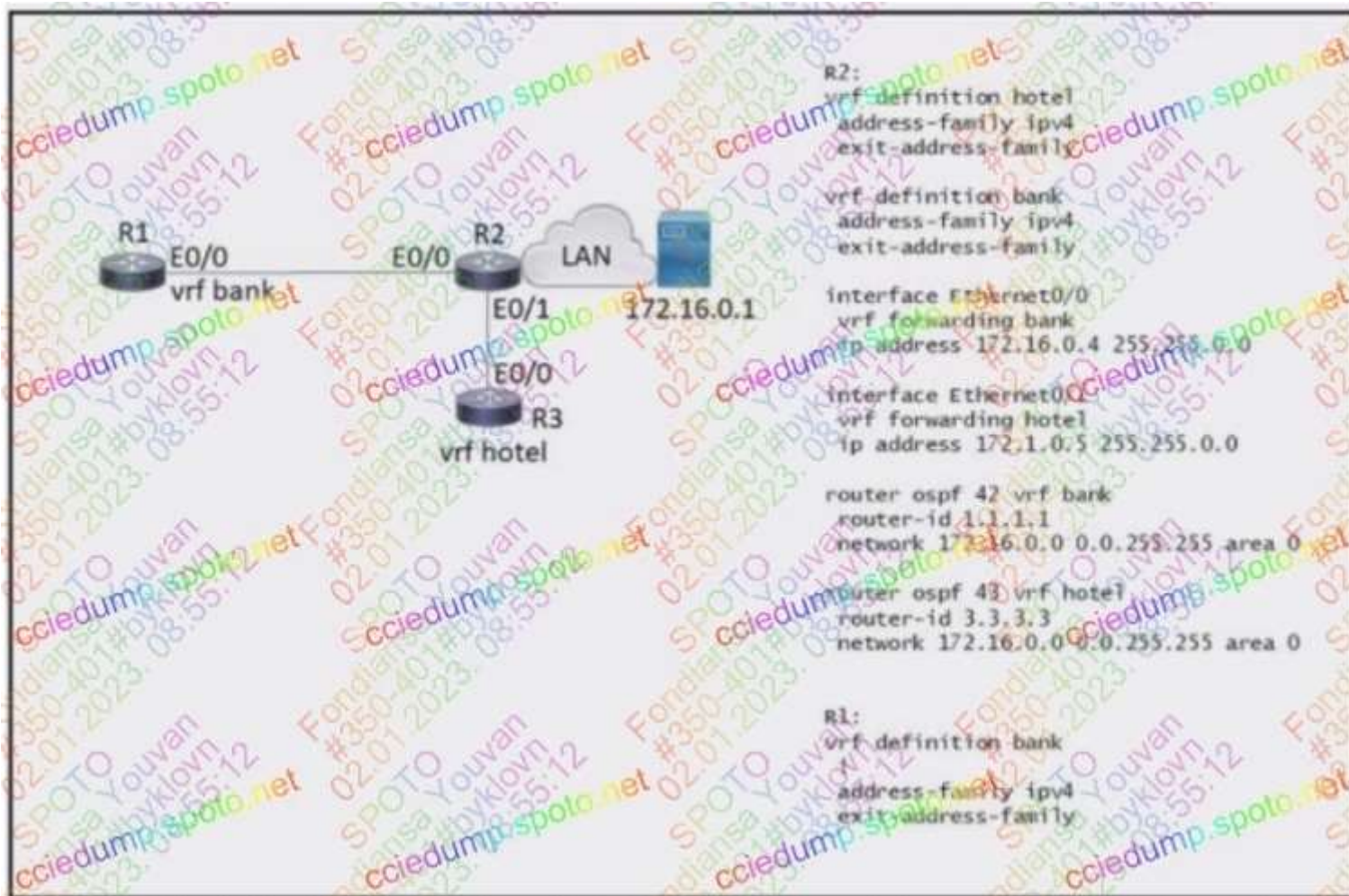
**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 173



Refer to the exhibit. Which configuration must be applied to R1 to enable R1 to reach the server at 172.16.0.1?

- A. 

```
interface Ethernet0/0
vrf forwarding hotel
ip address 172.16.0.7 255.255.0.0
router ospf 44 vrf hotel
network 172.16.0.0 0.0.255.255 area 0
```
- B. 

```
interface Ethernet0/0
ip address 172.16.0.7 255.255.0.0
router ospf 44 vrf bank
network 172.16.0.0 255.255.0.0
```
- C. 

```
interface Ethernet0/0
vrf forwarding bank
ip address 172.16.0.7 255.255.0.0
router ospf 44 vrf bank
network 172.16.0.0 0.0.255.255 area 0
```

D. interface Ethernet0/0  
ip address 172.16.0.7 255.255.0.0  
  
router ospf 44 vrf hotel  
network 172.16.0.0 255.255.0.0

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 174

What are two characteristics of Cisco SD-Access elements? (Choose two )

- A. Traffic within the fabric always goes through the control plane node
- B. The control plane node has the full RLOC-to-EID mapping database
- C. The border node is required for communication between fabric and nonfabric devices.
- D. Fabric endpoints are connected directly to the border node
- E. The border node has the full RLOC-to-EID mapping database

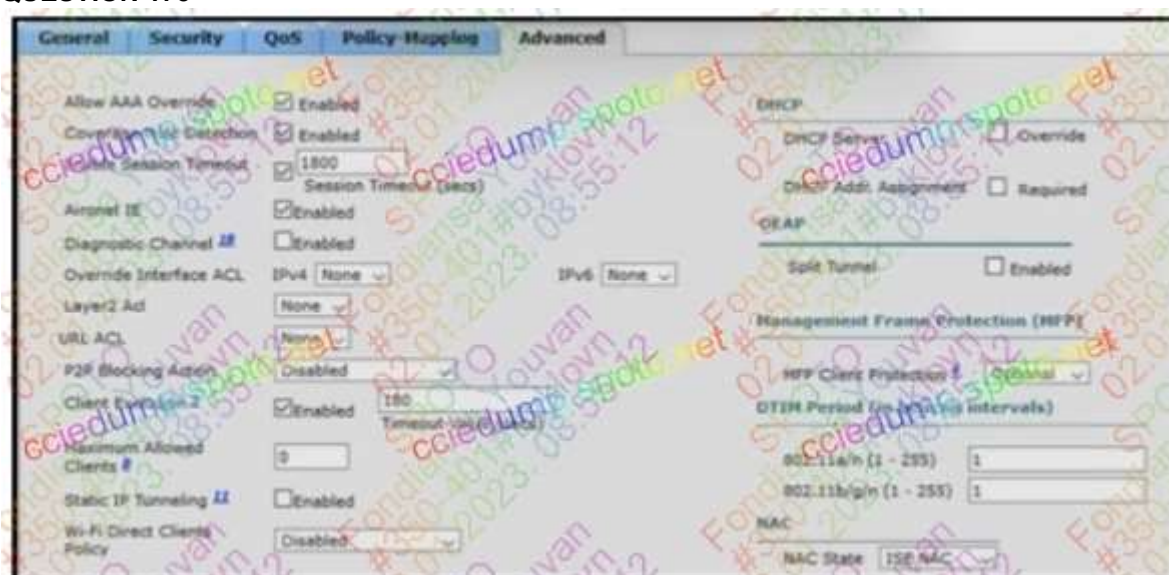
**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 175



Refer to the exhibit. An engineer is troubleshooting an issue with client devices triggering excessive power changes on APs in the 2.4 GHz band. Which action resolves this issue?

- A. Enable MFP Client Protection.
- B. Set the 802.11b/g/n DTIM interval to 0.
- C. Disable Coverage Hole Detection.
- D. Disable Aironet IE.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 176

```

Router#show ip ospf interface
GigabitEthernet0/1.40 is up, line protocol is up
Internet Address 10.3.5.254/24, Area 0, Attached via Network Statement
Process ID 1, Router ID 172.16.11.29, 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) 172.16.11.29, Interface address 10.3.5.254
No backup designated router on this network
Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
oob-resync timeout 40
No Hellos (Passive interface)
Supports Link-local Signaling (LLS)
! lines omitted for brevity
GigabitEthernet0/1 is up, line protocol is up
Internet Address 172.16.30.1/24, Area 0, Attached via Network Statement
Process ID 1, Router ID 172.16.11.29, 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) 172.16.11.29, Interface address 172.16.30.1
No backup designated router on this network
Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
oob-resync timeout 40
No Hellos (Passive interface)
Supports Link-local Signaling (LLS)
! lines omitted for brevity
GigabitEthernet0/0 is up, line protocol is up
Internet Address 172.16.11.29/24, Area 0, Attached via Network Statement
Process ID 1, Router ID 172.16.11.29, Network Type BROADCAST, Cost: 1
Topology-MTID Cost Disabled Shutdown Topology Name
0 1 no no Base
Transmit Delay is 1 sec, State DROTHER, Priority 1
Designated Router (ID) 172.16.11.27, Interface address 172.16.11.27
Backup Designated router (ID) 172.16.11.30, Interface address 172.16.11.30
Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
oob-resync timeout 40
Hello due in 00:00:03
Supports Link-local Signaling (LLS)
! lines omitted for brevity

```

Refer to the exhibit. A network engineer configures OSPF and reviews the router configuration. Which interface or interfaces are able to establish OSPF adjacency?

- A. only GigabitEthernet0/0
- B. GigabitEthernet0/0 and GigabitEthernet0/1
- C. only GigabitEthernet0/1
- D. GigabitEthernet0/1 and GigabitEthernet0/1.40

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 177

What is a benefit of using a Type 2 hypervisor instead of a Type 1 hypervisor?

- A. improved security because the underlying OS is eliminated
- B. improved density and scalability
- C. better application performance
- D. ability to operate on hardware that is running other OSs

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 178

Which two prerequisites must be met before Cisco DNA Center can provision a device? (Choose two.)

- A. The provisioned device must be put into bootloader mode.
- B. The provisioned device must recognize Cisco DNA Center as its LLDP neighbor.
- C. The provisioned device must be configured with CLI and SNMP credentials that are known to Cisco DNA Center.
- D. Cisco DNA Center must have the software image for the provisioned device in its image repository.
- E. Cisco DNA Center must have IP connectivity to the provisioned device.

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 179

```
Script
import ncclient
with ncclient.manager.connect(host='192.168.1.1', port=830, username='root', password='test123!',
allow_agent=False) as m:
 print(m.get_config('running').data_xml)

Output
python get_config.py
Traceback (most recent call last):
 File "get_config.py", line 3, in <module>
 with ncclient.manager.connect(host='192.168.1.1', port=830, username='root',
AttributeError: 'module' object has no attribute 'manager'
```

Refer to the exhibit. Running the script causes the output in the exhibit. What should be the first line of the script?

- A. from ncclient import \*
- B. import manager
- C. ncclient manager import
- D. from ncclient import manager

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 180

A vulnerability assessment highlighted that remote access to the switches is permitted using unsecure and unencrypted protocols. Which configuration must be applied to allow only secure and reliable remote access for device administration?

- A. line vty 0 15  
login local  
transport input none
- B. line vty 0 15  
login local  
transport input ssh
- C. line vty 0 15  
login local  
transport input all
- D. line vty 0 15  
login local  
transport input telnet ssh

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 181

Which two actions, when applied in the LAN network segment, will facilitate Layer 3 CAPWAP discovery for lightweight AP? (Choose two.)

- A. Configure an ip helper-address on the router interface.
- B. Configure WLC IP address on LAN switch.
- C. Enable port security on the switch port.
- D. Utilize DHCP option 43.
- E. Utilize DHCP option 17.

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 182

What is YANG used for?

- A. processing SNMP read-only polls
- B. providing a transport for network configuration data between client and server
- C. scraping data via CLI
- D. describing data models

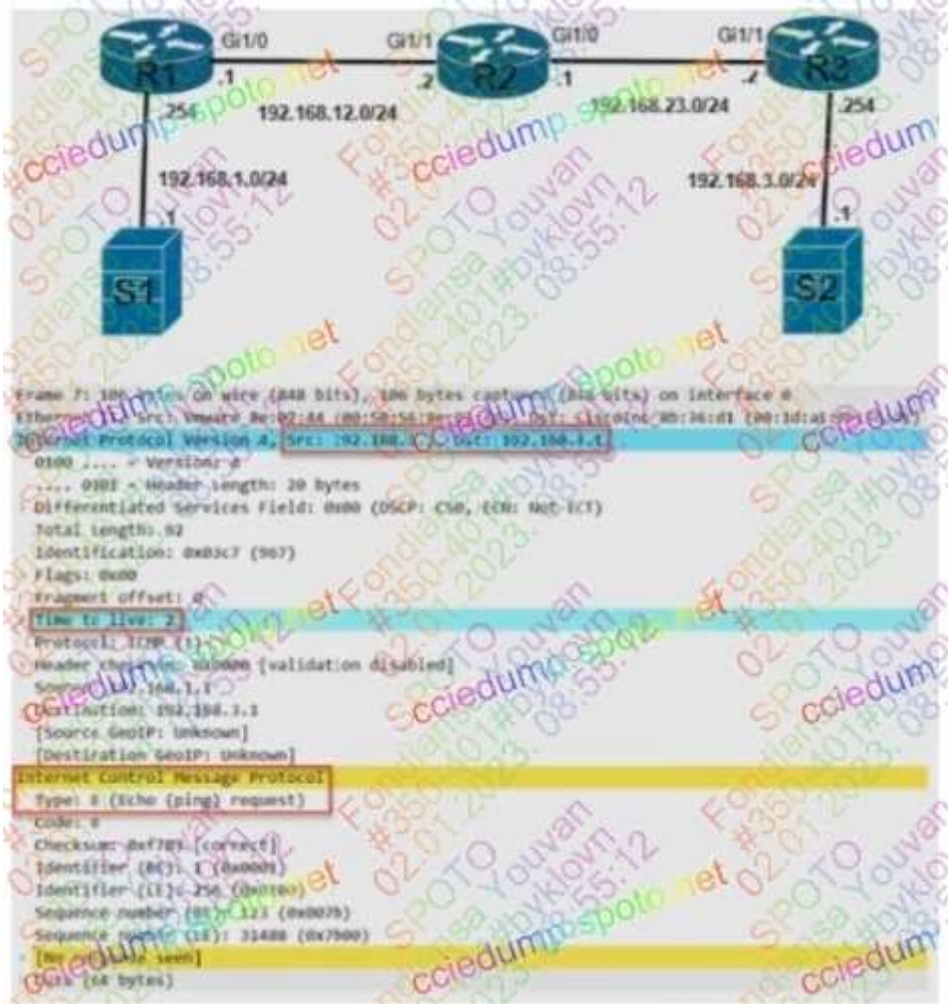
**Correct Answer:** D

**Section:** (none)

**Explanation**

Explanation/Reference:

QUESTION 183



Refer to the exhibit. While troubleshooting a routing issue, an engineer issues a ping from S1 to S2. Which two actions result from the initial value of the TTL? (Choose two.)

- A. The packet reaches R1, and the TTL expires.
- B. R3 replies with a TTL exceeded message.
- C. R2 replies with a TTL exceeded message.
- D. The packet reaches R3, and the TTL expires.
- E. The packet reaches R2, and the TTL expires.
- F. R1 replies with a TTL exceeded message.

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 184

What is the calculation that is used to measure the radiated power of a signal after it has gone through the radio, antenna cable, and antenna?

- A. mW
- B. EIRP
- C. dBi
- D. dBm

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 185

```

flow record v4_r1
match ipv4 tos
match ipv4 protocol
match ipv4 source address
match ipv4 destination address
match transport source-port
match transport destination-port
collect counter bytes long
collect counter packets long
!
flow monitor FLOW-MONITOR-1
record v4_r1
exit
!
sampler SAMPLER-1
mode random 1 out-of 2
exit
!
ip cef
interface GigabitEthernet 0/0/0
ip address 172.16.6.2 255.255.255.0

```

Refer to the exhibit. Which command set must be added to the configuration to analyze 50 packets out of every 100?

- A. 

```
interface GigabitEthernet 0/0/0
ip flow monitor FLOW-MONITOR-1 sampler SAMPLER-1 input
```
- B. 

```
flow monitor FLOW-MONITOR-1
record v4_r1
sampler SAMPLER-1

interface GigabitEthernet 0/0/0
ip flow monitor FLOW-MONITOR-1 sampler SAMPLER-1 input
```
- C. 

```
sampler SAMPLER-1
mode random 1-out-of 2
flow FLOW-MONITOR-1

interface GigabitEthernet 0/0/0
ip flow monitor SAMPLER-1 input
```
- D. 

```
sampler SAMPLER-1
no mode random 1-out-of 2
mode percent 50

interface GigabitEthernet 0/0/0
ip flow monitor FLOW-MONITOR-1 sampler SAMPLER-1 input
```

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 186

Which component handles the orchestration plane of the Cisco SD-WAN?

- A. vEdge
- B. vManage
- C. vBond
- D. vSmart

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 187

Which protocol does REST API rely on to secure the communication channel?

- A. HTTP
- B. HTTPS
- C. TCP
- D. SSH

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 188

```

R1#show ip interface brief | include 192.168.12
FastEthernet0/0 192.168.12.1 YES manual up
R1#ping vrf CUST-A 192.168.12.2
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.12.2, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
R1#show ip arp 192.168.12.2
R1#

```

Refer to the exhibit. A network engineer checks connectivity between two routers. The engineer can ping the remote endpoint but cannot see an ARP entry. Why is there no ARP entry?

- A. When VRFs are used, ARP protocol is disabled in the global routing table.
- B. The ping command must be executed in the global routing table.
- C. Interface FastEthernet0/0 is configured in VRF CUST-A, so the ARP entry is also in that VRF.
- D. When VRFs are used, ARP protocol must be enabled in each VRF.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 189

Which free application has the ability to make REST calls against Cisco DNA Center?

- A. REST Explorer
- B. API Explorer
- C. Postman
- D. Mozilla

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 190

In a Cisco SD-Access wireless architecture, which device manages endpoint ID to edge node bindings?

- A. fabric control plane node
- B. fabric edge node
- C. fabric wireless controller
- D. fabric border node

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 191

```

*Sep 16 09:13:40:974: %SPANTREE-7-RECV_1Q_NON_TRUNK: Received 802.1Q BPDU on non
trunk GigabitEthernet0/0 VLAN0001.
*Sep 16 09:13:40:977: %SPANTREE-7-BLOCK_PORT_TYPE: Blocking GigabitEthernet0/0
on VLAN0001. Inconsistent port type.

```

Refer to the exhibit. Two switches are interconnected using interface GigabitEthernet0/0 on both sides. While configuring one of the switches, a network engineer receives the logging message. Which action resolves this issue?

- A. Configure interface GigabitEthernet0/0 as a trunk port.
- B. Shutdown interface GigabitEthernet0/0 and bring it back up.
- C. Configure interface GigabitEthernet0/0 as an access port.
- D. Block VLAN1 on the trunk interface GigabitEthernet0/0.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 192

Which statement about TLS is true when using RESTCONF to write configurations on network devices?

- A. It is used for HTTP and HTTPS requests.
- B. It requires certificates for authentication.
- C. It is not supported on Cisco devices.
- D. It is provided using NGINX acting as a proxy web server.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 193

Which congestion queuing method on Cisco IOS based routers uses four static queues?

- A. custom
- B. Priority
- C. weighted fair
- D. low latency

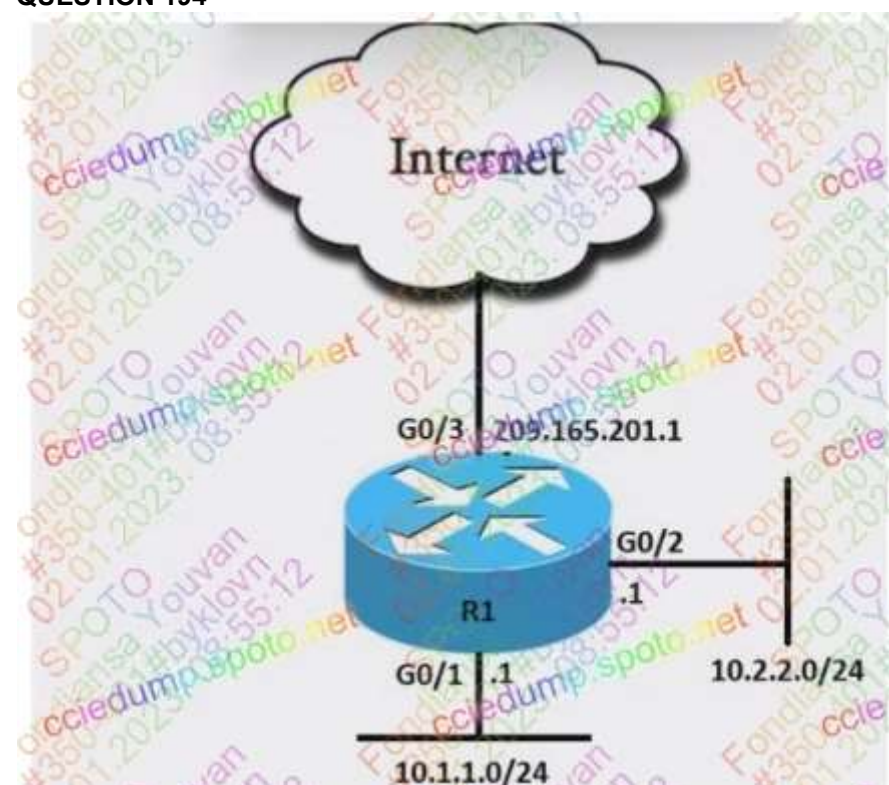
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 194



Refer to the exhibit. An engineer must allow all users in the 10.2.2.0/24 subnet to access the Internet. To conserve address space, the public interface address of 209.165.201.1 must be used for all external communication. Which command set accomplishes these requirements?

- A. 

```
access-list 10 permit 10.2.2.0 0.0.0.255
interface G0/3
ip nat outside
interface G0/2
ip nat inside
ip nat inside source list 10 interface G0/3 overload
```
- B. 

```
access-list 10 permit 10.2.2.0 0.0.0.255
interface G0/3
ip nat outside
interface G0/2
ip nat inside
ip nat inside source list 10 interface G0/3
```
- C. 

```
access-list 10 permit 10.2.2.0 0.0.0.255
interface G0/3
ip nat outside
interface G0/2
ip nat inside
ip nat inside source list 10 interface G0/2 overload
```
- D. 

```
access-list 10 permit 10.2.2.0 0.0.0.255
interface G0/3
ip nat outside
interface G0/2
ip nat inside
ip nat inside source list 10 209.165.201.1
```

**Correct Answer:** A

**Section:** (none)

**Explanation**

Explanation/Reference:

#### QUESTION 195



Refer to the exhibit. Based on the configuration in this WLAN security setting, which method can a client use to authenticate to the network?

- A. certificate
- B. text string
- C. username and password
- D. RADIUS token

**Correct Answer: B**

**Section: (none)**

**Explanation**

Explanation/Reference:

#### QUESTION 196



Refer to the exhibit. An engineer must establish eBGP peering between router R3 and router R4. Both routers should use their loopback interfaces as the BGP router ID. Which configuration set accomplishes this task?

- A. R3(config)# router bgp 200  
R3(config-router)# neighbor 10.4.4.4 remote-as 100  
R3(config-router)# bgp router-id 10.3.3.3  
  
R4(config)# router bgp 100  
R4(config-router)# neighbor 10.3.3.3 remote-as 200  
R4(config-router)# bgp router-id 10.4.4.4
- B. R3(config)# router bgp 200  
R3(config-router)# neighbor 10.24.24.4 remote-as 100  
R3(config-router)# bgp router-id 10.3.3.3  
  
R4(config)# router bgp 100  
R4(config-router)# neighbor 10.24.24.3 remote-as 200  
R4(config-router)# bgp router-id 10.4.4.4
- C. R3(config)# router bgp 200  
R3(config-router)# neighbor 10.24.24.4 remote-as 100  
R3(config-router)# neighbor 10.24.24.4 update-source Loopback0  
  
R4(config)# router bgp 100  
R4(config-router)# neighbor 10.24.24.3 remote-as 200  
R4(config-router)# neighbor 10.24.24.3 update-source Loopback0
- D. R3(config)# router bgp 200  
R3(config-router)# neighbor 10.4.4.4 remote-as 100  
R3(config-router)# neighbor 10.4.4.4 update-source Loopback0  
  
R4(config)# router bgp 100  
R4(config-router)# neighbor 10.3.3.3 remote-as 200  
R4(config-router)# neighbor 10.3.3.3 update-source Loopback0

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 197**

Which protocol is implemented to establish secure control plane adjacencies between Cisco SD-WAN nodes?

- A. DTLS
- B. IPsec
- C. ESP
- D. IKE

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 198**

After a redundant route processor failure occurs on a Layer 3 device, which mechanism allows for packets to be forwarded from a neighboring router based on the most recent tables?

- A. NSF
- B. RPVST+
- C. BFD
- D. RP failover

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 199**

While configuring an IOS router for HSRP with a virtual IP of 10.1.1.1, an engineer sees this log message.

**Jan 1 12:12:12.111: % HSRP-4-DIFFVIP1: GigabitEthernet0/0 Grp 1 active routers virtual IP address 10.1.1.1 is different to the locally configured address 10.1.1.25**

Which configuration change must the engineer make?

- A. Change the HSRP virtual address on the remote router to 10.1.1.1.
- B. Change the HSRP group configuration on the local router to 1.
- C. Change the HSRP virtual address on the local router to 10.1.1.1.
- D. Change the HSRP group configuration on the remote router to 1.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 200**

Which component does Cisco Threat Defense use to measure bandwidth, application performance, and utilization?

- A. Cisco Umbrella
- B. TrustSec
- C. NetFlow
- D. Advanced Malware Protection for Endpoints

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 201**

Which technology is used to provide Layer 2 and Layer 3 logical networks in the Cisco SD-Access architecture?

- A. underlay network
- B. VPN routing forwarding
- C. overlay network
- D. easy virtual network

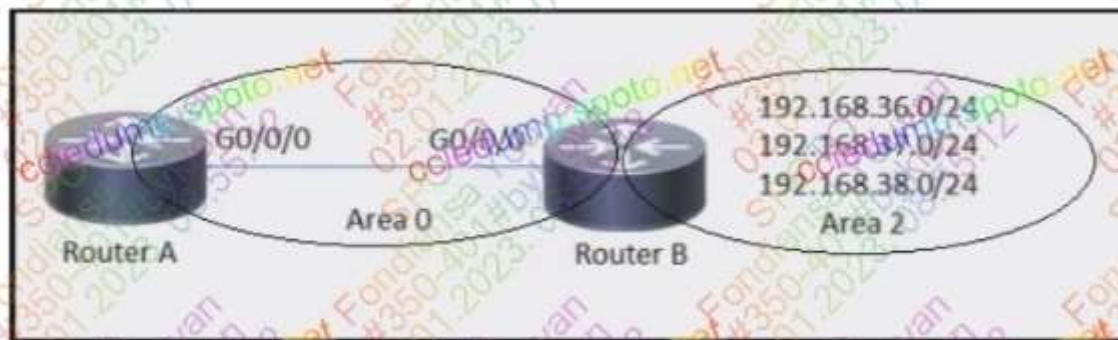
**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 202**



Refer to the exhibit. Which configuration is required to summarize the Area 2 networks that are advertised to Area 0?

- A. RouterB(config)# router ospf 1  
RouterB(config-router)# network 192.168.38.0 255.255.255.0
- B. RouterB(config)# router ospf 1  
RouterB(config-router)# area 2 range 192.168.36.0 255.255.252.0
- C. RouterB(config)# router ospf 1  
RouterB(config-router)# area 2 range 192.168.36.0 255.255.255.0
- D. RouterB(config)# router ospf 1  
RouterB(config-router)# network 192.168.38.0 255.255.252.0

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 203

Which control plane protocol is used between Cisco SD-WAN routers and vSmart controllers?

- A. TCP
- B. BGP
- C. OMP
- D. UDP

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 204

What is a difference between TCAM and the MAC address table?

- A. The MAC address table supports partial matches. TCAM requires an exact match.
- B. Router prefix lookups happen in CAM. MAC address table lookups happen in TCAM.
- C. The MAC address table is contained in CAM. ACL and QoS information is stored in TCAM.
- D. TCAM is used to make Layer 2 forwarding decisions. CAM is used to build routing tables.

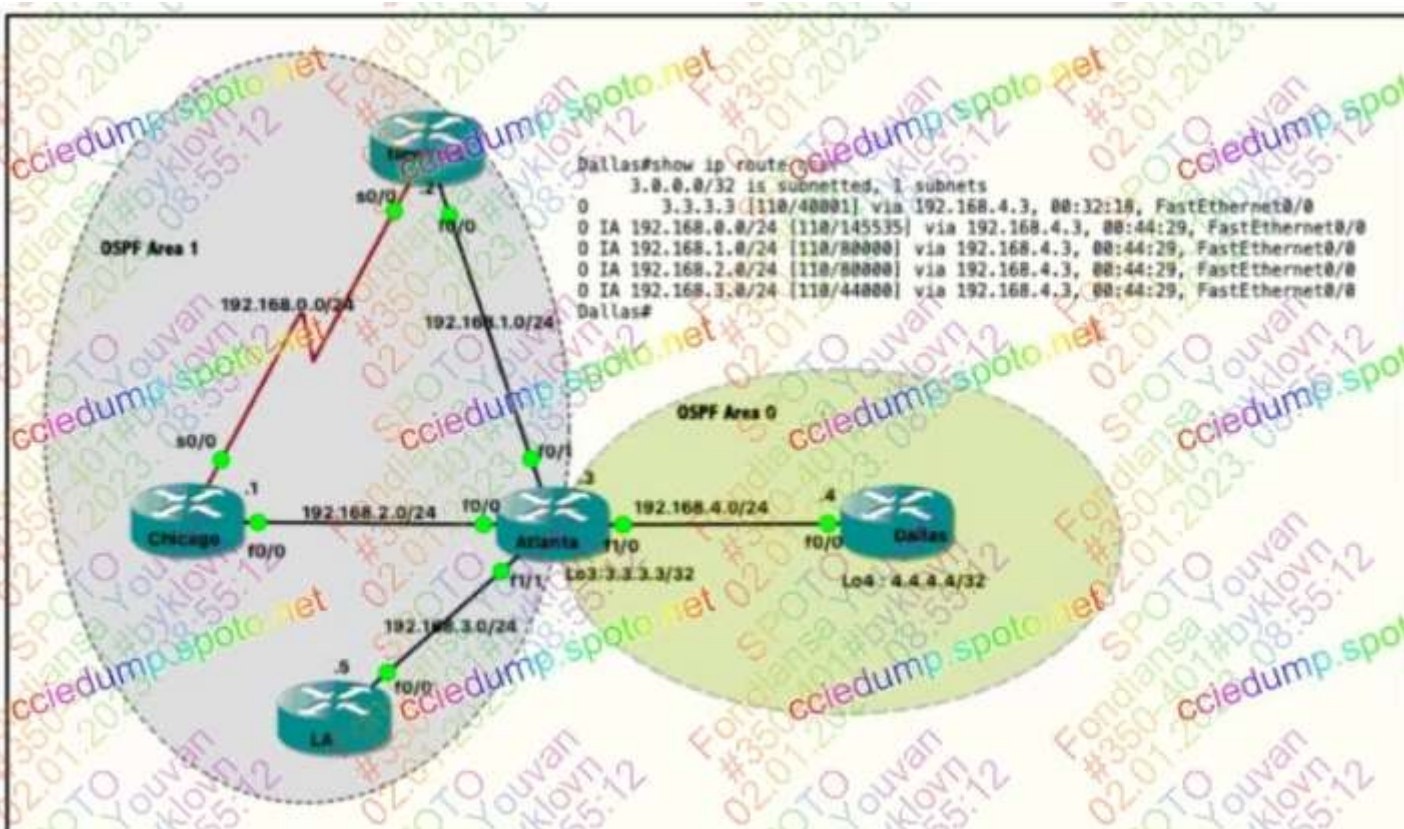
**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 205



Refer to the exhibit. Which command when applied to the Atlanta router reduces type 3 LSA flooding into the backbone area and summarizes the inter-area routes on the Dallas router?

- A. Atlanta(config-router)# area 0 range 192.168.0.0 255.255.248.0
- B. Atlanta(config-router)# area 0 range 192.168.0.0 255.255.252.0
- C. Atlanta(config-router)# area 1 range 192.168.0.0 255.255.248.0
- D. Atlanta(config-router)# area 1 range 192.168.0.0 255.255.252.0

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 206

The following system log message is presented after a network administrator configures a GRE tunnel:  
%TUN-RECURDOWN Interface Tunnel 0 temporarily disabled due to recursive routing

Why is Tunnel 0 disabled?

- A. Because the router cannot recursively identify its egress forwarding interface.
- B. Because dynamic routing is not enabled.
- C. Because the best path to the tunnel destination is through the tunnel itself.
- D. Because the tunnel cannot reach its tunnel destination.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 207

Which element enables communication between guest VMs within a virtualized environment?

- A. pNIC
- B. virtual router
- C. hypervisor
- D. vSwitch

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 208

Which command set configures RSPAN to capture outgoing traffic from VLAN 3 on interface GigabitEthernet 0/3 while ignoring other VLAN traffic on the same interface?

- A. monitor session 2 source interface gigabitethernet0/3 rx  
monitor session 2 filter vlan 3
- B. monitor session 2 source interface gigabitethernet0/3 tx  
monitor session 2 filter vlan 1 - 2, 4 - 4094
- C. monitor session 2 source interface gigabitethernet0/3 rx  
monitor session 2 filter vlan 1 - 2, 4 - 4094
- D. monitor session 2 source interface gigabitethernet0/3 tx  
monitor session 2 filter vlan 3

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 209

A large campus network has deployed two wireless LAN controllers to manage the wireless network. WLC1 and WLC2 have been configured as mobility peers. A client device roams from AP1 on WLC1 to AP2 on WLC2, but the controller's client interfaces are on different VLANs.

How do the wireless LAN controllers handle the inter-subnet roaming?

- A. WLC2 marks the client with a foreign entry in its own database. The database entry is copied to the new controller and marked with an anchor entry on WLC1.
- B. WLC1 marks the client with a foreign entry in its own database. The database entry is copied to the new controller and marked with an anchor entry on WLC2.
- C. WLC1 marks the client with an anchor entry in its own database. The database entry is copied to the new controller and marked with a foreign entry on WLC2.
- D. WLC2 marks the client with an anchor entry in its own database. The database entry is copied to the new controller and marked with a foreign entry on WLC1.

**Correct Answer:** C

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 210**

A customer transitions a wired environment to a Cisco SD-Access solution. The customer does not want to integrate the wireless network with the fabric. Which wireless deployment approach enables the two systems to coexist and meets the customer requirement?

- A. Deploy the wireless network over the top of the fabric.
- B. Deploy a separate network for the wireless environment.
- C. Deploy the APs in autonomous mode.
- D. Implement a Cisco DNA Center to manage the two networks.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 211**

The Gig0/0 interface of two routers is directly connected with a 1G Ethernet link. Which configuration must be applied to the interface of both routers to establish an OSPF adjacency without maintaining a DR/BDR relationship?

- A. 

```
interface Gig0/0
ip ospf network non-broadcast
```
- B. 

```
interface Gig0/0
ip ospf network broadcast
```
- C. 

```
interface Gig0/0
ip ospf network point-to-point
```
- D. 

```
interface Gig0/0
ip ospf network point-to-multipoint
```

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 212**

Which device makes the decision for a wireless client to roam?

- A. wireless LAN controller
- B. access point
- C. WCS location server
- D. wireless client

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 213**

Which technology does VXLAN use to provide segmentation for Layer 2 and Layer 3 traffic?

- A. VNI
- B. VRF
- C. bridge domain
- D. VLAN

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 214**

What is the function of a controlplane node in a Cisco SD-Access solution?

- A. to connect APs and wireless endpoints to the SD-Access fabric
- B. to implement policies and communicate with networks outside the fabric
- C. to connect external Layer 3 networks to the SD-Access fabric
- D. to run a mapping system that manages endpoint to network device relationships

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 215**

What is one primary REST security design principle?

- A. OAuth
- B. password hashing
- C. separation of privilege
- D. confidential algorithms

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 216**

Which function does a fabric edge node perform in an Cisco SD-Access deployment?

- A. connects endpoints to the fabric and forwards their traffic
- B. provides reachability between border nodes in the fabric underlay
- C. connects the SD-Access fabric to another fabric or external Layer 3 networks
- D. encapsulates end-user data traffic into LISP

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 217**

Refer to the exhibit. Which command must be configured for RESTCONF to operate on port 8888?

- A. ip http port 8888
- B. restconf port 8888
- C. restconf http port 8888
- D. ip http restconf port 8888

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 218**

Which VXLAN component is used to encapsulate and decapsulate Ethernet frames?

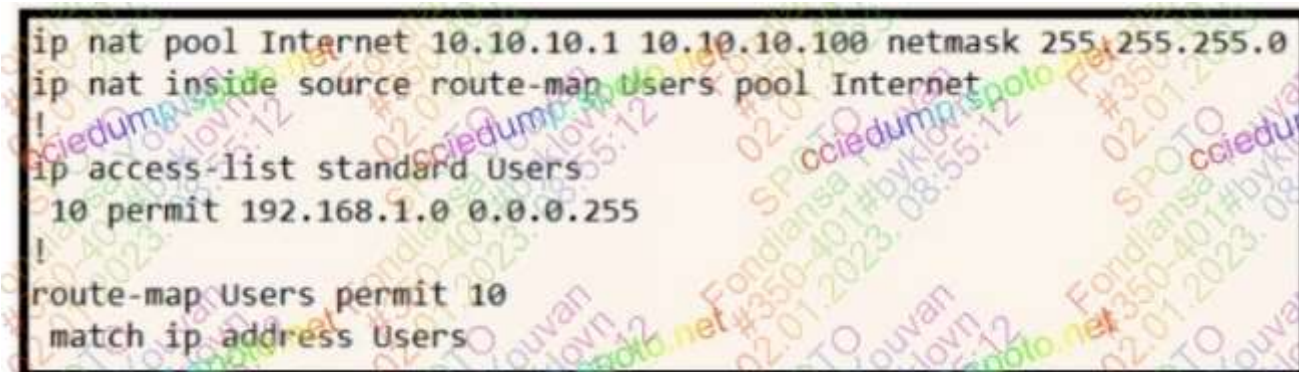
- A. GRE
- B. VNI
- C. VTEP
- D. EVPN

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 219**

Refer to the exhibit. Which action completes the configuration to achieve a dynamic continuous mapped NAT for all users?

- A. Reconfigure the pool to use the 192.168.1.0 address range.
- B. Increase the NAT pool size to support 254 usable addresses.
- C. Configure a one-to-one type NAT pool.
- D. Configure a match-host type NAT pool.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 220



Refer to the exhibit. CR2 and CR3 are configured with OSPF. Which configuration, when applied to CR1, allows CR1 to exchange OSPF information with CR2 and CR3 but not with other network devices or on new interfaces that are added to CR1?

- A. 

```
router ospf 1
network 0.0.0.0 255.255.255.255 area 0
passive-interface GigabitEthernet0/2
```
- B. 

```
interface Gi0/2
ip ospf 1 area 0

router ospf 1
passive-interface GigabitEthernet0/2
```
- C. 

```
router ospf 1
network 10.0.0.0 0.255.255.255 area 0
network 172.16.0.0 0.15.255.255 area 0
passive-interface GigabitEthernet0/2
```
- D. 

```
router ospf 1
network 10.165.231.0 0.0.0.255 area 0
network 172.27.206.0 0.0.0.255 area 0
network 172.24.206.0 0.0.0.255 area 0
passive-interface GigabitEthernet0/2
```

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 221

```
from ncclient import manager

with manager.connect(host=host, port=830, username=user, hostkey_verify=False) as m:
 c = m.get_config(source='running').data_xml
 with open("%s.xml" % host, 'w') as f:
 f.write(c)
```

Refer to the exhibit. What is generated by the script?

- A. the cdp neighbors
- B. the running configuration
- C. the router processes
- D. the routing table

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 222

```

Router#show running-config | section line vty
line vty 0 4
login local
line vty 5 15
login local

Router#show running-config | include username
username cisco secret 5 1cM67$V7NQK0g2BGit77x88U1/00

```

Refer to the exhibit. Which action automatically enables privilege exec mode when logging in via SSH?

- A. Configure privilege level 15 under the line configuration.
- B. Configure a password under the line configuration.
- C. Configure the enable secret to be the same as the secret for user "Cisco".
- D. Configure user "cisco" with privilege level 15.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 223



Refer to the exhibit. Which configuration causes the traffic from PC-1 to the internet to use the link between CoreSW-1 and CoreSW-2 when both switches are up?

- A. CoreSW-1(config)#interface vlan 10  
CoreSW-1(config-if)#standby 10 priority 90
- B. CoreSW-2(config)#interface vlan 10  
CoreSW-2(config-if)#standby 10 priority 110
- C. CoreSW-2(config)#interface vlan 10  
CoreSW-2(config-if)#standby 10 priority 100
- D. CoreSW-1(config)#interface vlan 10  
CoreSW-1(config-if)#standby 10 priority 110

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 224

What are two reasons a company would choose an on-premises deployment over a cloud deployment? (Choose two.)

- A. In an on-premises environment, costs adjust up or down depending on the amount of resources consumed. Cloud costs for hardware, power, and space are on-going regardless of usage.
- B. On-premises deployments can be accomplished quickly using operational expenditure processes. Cloud deployments require long implementation times due to capital expenditure processes.
- C. In a on-premises environment, the company controls technical issues. Cloud environments rely on the service provider to resolve technical issues.
- D. In an on-premises environment, the company is in full control of access to their data. Cloud risks access to data due to service provider outages.

- E. On-premises resources scale automatically to an increase in demand. Cloud requires additional capital expenditure.

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 225

Which version of NetFlow does Cisco Threat Defense utilize to obtain visibility into the network?

- A. IPFIX
- B. 8
- C. NBAR2
- D. flexible

**Correct Answer:** D

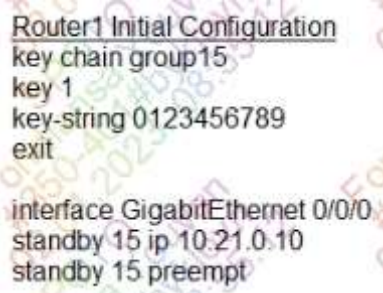
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 226

An engineer is configuring HSRP group 15 on Router1 interface GigabitEthernet0/0/0. The group must use MD5 authentication, and when Router1 has the highest priority in the group, it must assume the primary role. Which command or command set is required to complete the initial configuration on Router1?



```
Router1 Initial Configuration
key chain group15
key 1
key-string 0123456789
exit

interface GigabitEthernet 0/0/0
standby 15 ip 10.21.0.10
standby 15 preempt
```

- A. standby 15 priority 110  
standby 1 authentication text key1
- B. standby 1 authentication md5 key-chain group15
- C. standby 15 priority 110  
standby 1 authentication text group15
- D. standby 1 authentication md5 key-chain key1

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 227

What is a benefit of YANG modules?

- A. single protocol and model coupling to simplify maintenance and support
- B. avoidance of ecosystem fragmentation by having fixed modules that cannot be changed
- C. easier multivendor interoperability provided by common or industry models
- D. tightly coupled models with encoding to improve performance

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 228

What is a characteristic of Cisco DNA southbound APIs?

- A. enables orchestration and automation of network devices based on intent
- B. simplifies management of network devices
- C. implements monitoring by using the SOAP protocol
- D. utilizes REST API

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 229

Which A record type should be configured for access points to resolve the IP address of a wireless LAN controller using DNS?

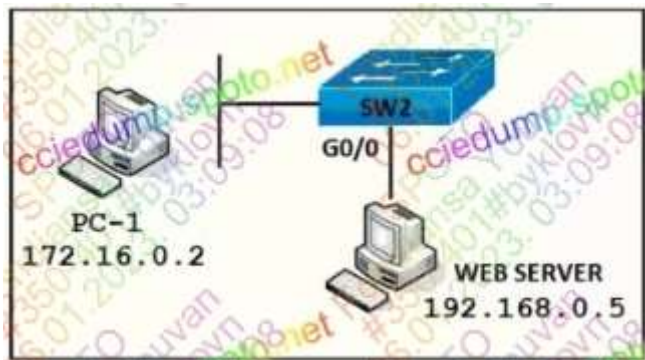
- A. CISCO-CONTROLLER.localdomain
- B. CISCO.CONTROLLER.localdomain

- C. CISCO.CAPWAP.CONTROLLER.localdomain
- D. CISCO-CAPWAP-CONTROLLER.localdomain

Correct Answer: D  
 Section: (none)  
 Explanation

Explanation/Reference:

QUESTION 230



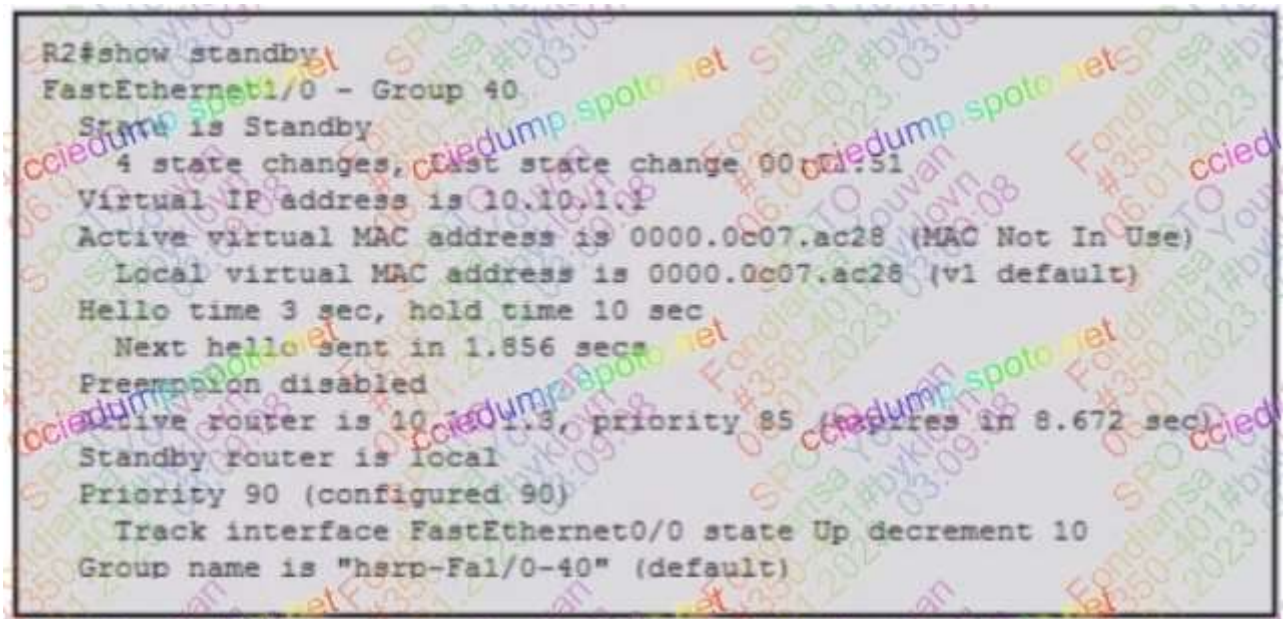
Refer to the exhibit. PC-1 must access the web server on port 8080. To allow this traffic, which statement must be added to an access control list that is applied on SW2 port G0/0 in the inbound direction?

- A. permit tcp host 192.168.0.5 host 172.16.0.2 eq 8080
- B. permit tcp host 192.168.0.5 lt 8080 host 172.16.0.2
- C. permit tcp host 172.16.0.2 host 192.168.0.5 eq 8080
- D. permit tcp host 192.168.0.5 eq 8080 host 172.16.0.2

Correct Answer: D  
 Section: (none)  
 Explanation

Explanation/Reference:

QUESTION 231



Refer to the exhibit. After configuring HSRP an engineer enters the show standby command. Which two facts are derived from the output?(Choose two.)

- A. R2 Fa1/0 regains the primary role when the link comes back up.
- B. The router with IP 10.10.13 is active because it has a higher IP address.
- C. R2 is using the default HSRP hello and hold timers.
- D. If Fa0/0 is shut down, the HSRP priority on R2 becomes 80.
- E. R2 becomes the active router after the hold time expires.

Correct Answer: CD  
 Section: (none)  
 Explanation

Explanation/Reference:

QUESTION 232

```
#!/usr/bin/env python3
from env_lab import dnac
import json
import requests
import urllib3
from requests.auth import HTTPBasicAuth
from prettytable import PrettyTable

dnac_devices = PrettyTable(['Hostname', 'Platform Id', 'Software Type', 'Software version', 'Up
Time'])
dnac_devices.padding_width = 1
headers = {
 'content-type': 'application/json',
 'x-auth-token': ""
}

def dnac_login(host, username, password):
 url = "https://{}/api/system/v1/auth/token".format(host)
 response = requests.request("POST", url, auth=HTTPBasicAuth(username, password),
 headers=headers, verify=False)
 return response.json()["Token"]

def network_device_list(dnac, token):
 url = "https://{}/api/v1/network-device".format(dnac["host"])
 headers["x-auth-token"] = token
 response = requests.get(url, headers=headers, verify=False)
 data = response.json()
 for item in data["response"]:
 dnac_devices.add_row([item["hostname"], item["platformId"], item["softwareType"], item["soft
wareVersion"], item["upTime"]])
```

Refer to the exhibit. Which code results in the working Python script displaying a list of network devices from the Cisco DNA Center?

- A. 

```
login = dnac_login(dnac["host"], dnac["username"], dnac["password"])
network_device_list(dnac, login)
print(dnac_devices)
```
- B. 

```
network_device_list(dnac["host"], dnac["username"], dnac["password"])
login = dnac_login(dnac)
print(dnac_devices)
```
- C. 

```
network_device_list(dnac["host"], dnac["username"], dnac["password"])
login = dnac_login(dnac)
for item in dnac_devices:
 print(dnac_devices.item)
```
- D. 

```
login = dnac_login(dnac["host"], dnac["username"], dnac["password"])
network_device_list(dnac, login)
for item in dnac_devices:
 print(dnac_devices.item)
```

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 233

An engineer must configure an EXEC authorization list that first checks a AAA server then a local username. If both methods fail, the user is denied. Which configuration should be applied?

- A. `aaa authorization exec default group radius local none`
- B. `aaa authorization exec default group radius local`
- C. `aaa authorization exec default local group tacacs+`
- D. `aaa authorization exec default local group radius none`

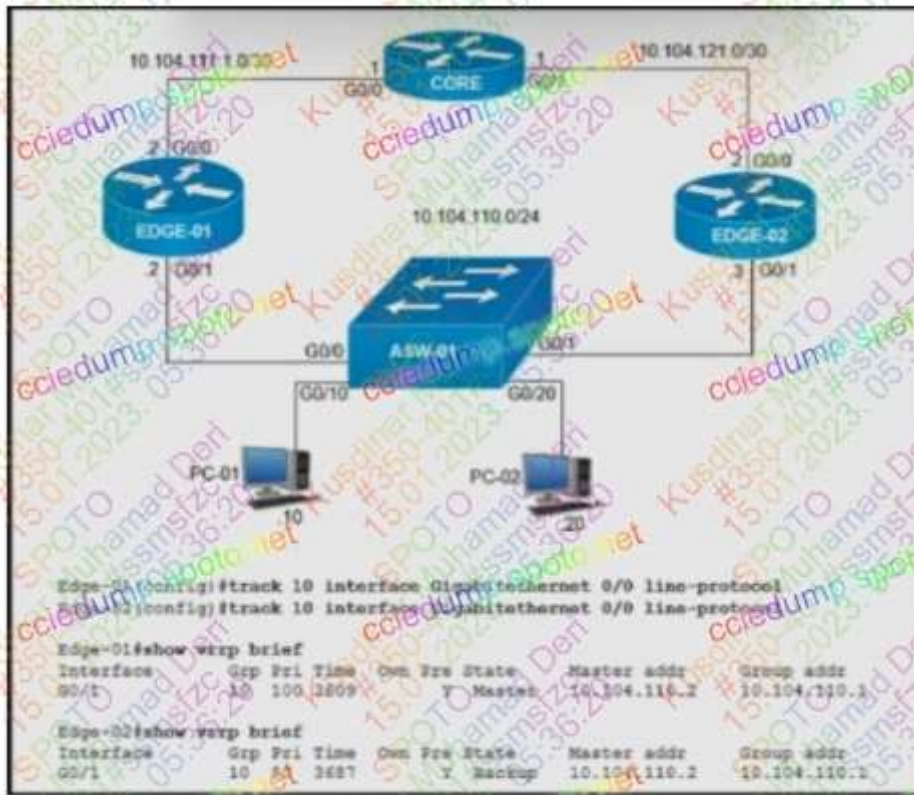
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 234



Refer to the exhibit. Object tracking has been configured for VRRP-enabled routers Edge-01 and Edge-02. Which commands cause Edge-02 to preempt Edge-01 in the event that interface G0/0 goes down on Edge-01?

- A. Edge-01(config)# interface G0/1  
Edge-01(config-if)# vrrp 10 track 10 decrement 10
- B. Edge-02(config)# interface G0/1  
Edge-02(config-if)# vrrp 10 track 10 decrement 10
- C. Edge-02(config)# interface G0/1  
Edge-02(config-if)# vrrp 10 track 10 decrement 30
- D. Edge-01(config)# interface G0/1  
Edge-01(config-if)# vrrp 10 track 10 decrement 30

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 235

```

enable secret cisco
username cisco privilege 15 secret cisco
aaa new-model
aaa authentication login default group radius local
aaa authorization network default group radius

```

Refer to the exhibit. The network administrator must be able to perform configuration changes when all the RADIUS servers are unreachable. Which configuration allows all commands to be authorized if the user has successfully authenticated?

- A. aaa authorization exec default group radius
- B. aaa authentication login default group radius local none
- C. aaa authorization exec default group radius if-authenticated
- D. aaa authorization exec default group radius none

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 236

```

flow monitor FLOW-MONITOR-1
 record netflow ipv6 original-input
 exit
 sampler SAMPLER-1
 mode deterministic 1 out-of-2
 exit
!
ip cef
ipv6 cef
!
interface GigabitEthernet 0/0/0
 ipv6 address 2001:DB8:2:ABCD::2/48
 ipv6 flow monitor FLOW-MONITOR-1 sampler SAMPLER-1 input
!

```

Refer to the exhibit. What is the effect of introducing the sampler feature into the Flexible NetFlow configuration on the router?

- A. CPU and memory utilization are reduced when compared with what is required for full NetFlow
- B. The resolution sampling data increases. but it requires more performance from the router.
- C. Every second IPv4 packet is forwarded to the collector for inspection
- D. NetFlow updates to the collector are sent 50% less frequently

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 237

Which action limits the total amount of memory and CPU that is used by a collection of VMs?

- A. Limit the amount of memory and CPU that is available to the cluster.
- B. Limit the amount of memory and CPU that is available to the individual VMS.
- C. Place the collection of VMS in a vApp.
- D. Place the collection of VMs in a resource pool.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 238

What is used to validate the authenticity of the client and is sent in HTTP requests as a JSON object?

- A. JWT
- B. TLS
- C. SSH
- D. HTTPS

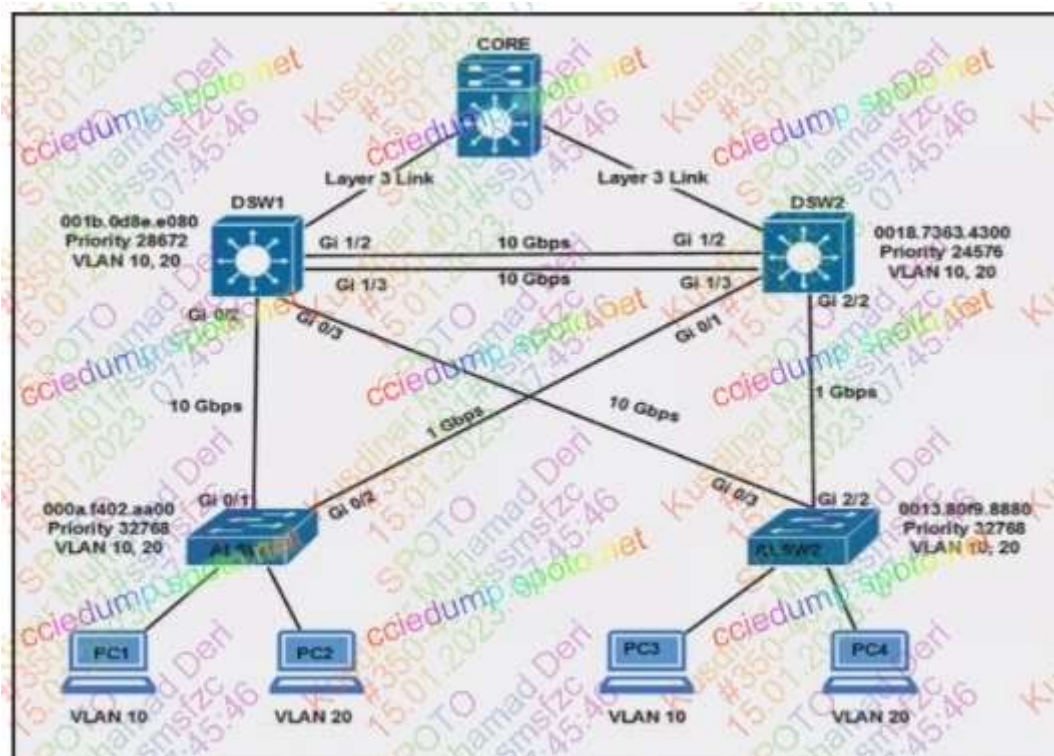
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 239



Refer to the exhibit. Assuming all links are functional, which path does PC1 take to reach DSW1?

- A. PC1 goes from ALSW1 to DSW1.  
B. PC1 goes from ALSW1 to DSW2 to DSW1.  
C. PC1 goes from ALSW1 to DSW2 to CORE to DSW1.  
D. PC1 goes from ALSW1 to DSW2 to ALSW2 to DSW1.

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

**Explanation/Reference:**

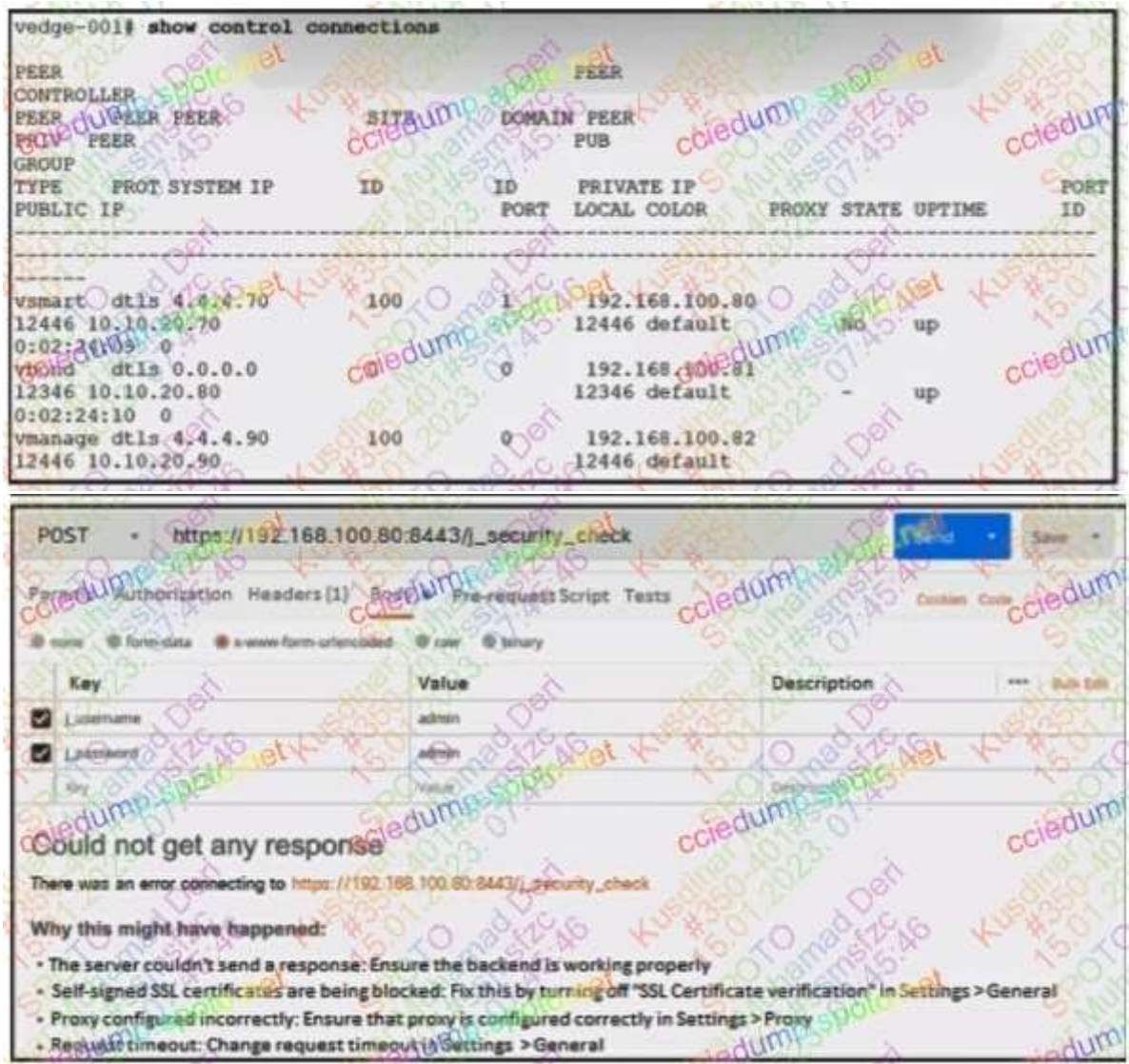
**QUESTION 240**  
Which entity is a Type 1 hypervisor?

- A. Microsoft Virtual PC  
B. Oracle VM VirtualBox  
C. Citrix XenServer  
D. VMware server

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

**Explanation/Reference:**

**QUESTION 241**



Refer to the exhibit.What step resolves the authentication issue?

- A. change the port to 12446  
B. restart the vsmart host  
C. target 192.168.100.82 in the URI  
D. use basic authentication

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

**Explanation/Reference:**



**QUESTION 242**  
Which security measure mitigates a man-in-the-middle attack of a REST API?

- A. nonrepudiation feature
- B. password hash
- C. SSL certificates
- D. biometric authentication

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

**Explanation/Reference:**

**QUESTION 243**  
Which benefit is realized by implementing SSO?

- A. minimal network downtime following an RP switchover
- B. communication between different nodes for cluster setup
- C. IP first-hop redundancy
- D. physical link redundancy

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

**Explanation/Reference:**

**QUESTION 244**  
Which devices does Cisco DNA Center configure when deploying an IP-based access control policy?

- A. selected individual devices
- B. all devices integrating with ISE
- C. all wired devices
- D. all devices in selected sites

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

**Explanation/Reference:**

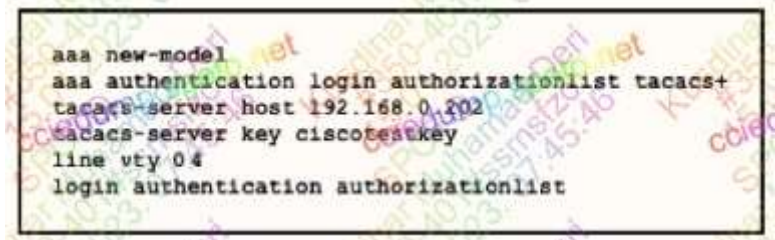
**QUESTION 245**  
If AP power level is increased from 25 mW to 100 mW, what is the power difference in dBm?

- A. 17 dBm
- B. 20 dBm
- C. 6 dBm
- D. 14 dBm

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

**Explanation/Reference:**

**QUESTION 246**



Refer to the exhibit. What is the effect of this configuration?

- A. The device will authenticate all users connecting to vty lines 0 through 4 against TACACS+.
- B. The device will allow only users at 192.168.0.202 to connect to vty lines 0 through 4.
- C. The device will allow users at 192.168.0.202 to connect to vty lines 0 through 4 using the password ciscotestkey.
- D. When users attempt to connect to vty lines 0 through 4, the device will authenticate them against TACACS+ if local authentication fails.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 247

Which LISP infrastructure device provides connectivity between non-LISP sites and LISP sites by receiving non-LISP traffic with a ISP site destination?

- A. PITR
- B. map resolver
- C. PETR
- D. map server

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 248

What is the result of applying this access control list?

```
ip access-list extended STATEFUL
10 permit tcp any any established
20 deny ip any any
```

- A. TCP traffic with the SYN bit set is allowed
- B. TCP traffic with the URG bit set is allowed
- C. TCP traffic with the ACK bit set is allowed
- D. TCP traffic with the DF bit set is allowed

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 249

An engineer is configuring Local WebAuth on a Cisco Wireless LAN Controller. According to RFC 5737, which virtual IP address must be used in this configuration?

- A. 172.20.10.1
- B. 192.168.0.1
- C. 1.1.1.1
- D. 192.0.2.1

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 250



```
SW1# show interface trunk
```

Port	Native Vlan	Status	Port Channel
Eth2/1	1	trunking	--

Port	Vlans Allowed on Trunk
Eth2/1	1-9,11-4094

Port	Vlans Err-disabled on Trunk
Eth2/1	none

Port	STP Forwarding
Eth2/1	none

Port	Vlans in spanning tree forwarding state and not pruned
Eth2/1	none

Port	Vlans Forwarding on FabricPath
Eth2/1	none

Refer to the exhibit. PC 2 cannot communicate with PC 4. Which configuration resolves this issue?

- A. SW1(config)# interface Gigabitethernet 2/1  
SW1(config-if)# switchport trunk allowed vlan add 10
- B. SW1(config)# interface Gigabitethernet 2/1  
SW1(config-if)# switchport mode access  
SW1(config-if)# switchport access vlan 10
- C. SW1(config)# interface Gigabitethernet 2/1  
SW1(config-if)# switchport vlan mapping 10 10
- D. SW1(config)# interface Gigabitethernet 2/1  
SW1(config-if)# switchport mode trunk

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 251

What is the output of this code?

```
def get_credentials():
 creds={'username': 'admin', 'password': '6f1bfb67e901'}
 return(creds.get('password'))

print(get_credentials())
```

- A. 6f1bfb67e901
- B. password
- C. username: password
- D. get\_credentials

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 252

Which technology provides an overlay fabric to connect remote locations utilizing commodity data paths and improves network performance, boosts security, and reduces costs?

- A. VXLAN
- B. InfiniBand
- C. VTEP
- D. SD-WAN

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 253

Why would a customer implement an on-premises solution instead of a cloud solution?

- A. On-premises offers shorter deployment time than cloud.
- B. On-premises offers greater compliance for government regulations than cloud.
- C. On-premises is more secure than cloud.
- D. On-premises offers greater scalability than cloud.

**Correct Answer:** B

**Section:** (none)

## Explanation

## Explanation/Reference:

### QUESTION 254

Which TLV value must be added to Option 43 when DHCP is used to ensure that APs join the WLC?

- A. 0xf1
- B. 0x77
- C. 642
- D. AAA

**Correct Answer:** A

**Section:** (none)

## Explanation

## Explanation/Reference:

### QUESTION 255

A company recently decided to use RESTCONF instead of NETCONF, and many of their NETCONF Scripts contain the operation <edit-config> (operation="create"). Which RESTCONF operation must be used to replace these statements?

- A. PUT
- B. GET
- C. CREATE
- D. POST

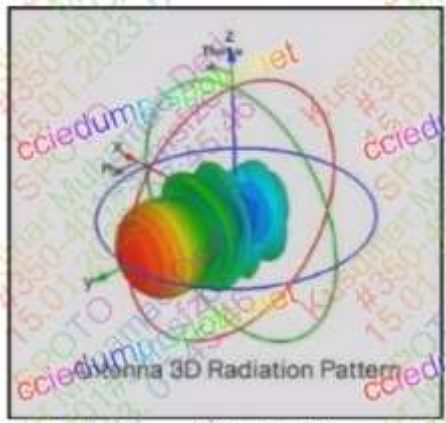
**Correct Answer:** D

**Section:** (none)

## Explanation

## Explanation/Reference:

### QUESTION 256



Refer to the exhibit. Which type of antenna does the radiation pattern represent?

- A. Yagi
- B. omnidirectional
- C. directional patch
- D. multidirectional

**Correct Answer:** A

**Section:** (none)

## Explanation

## Explanation/Reference:

### QUESTION 257

```
access-list 1 permit 10.1.1.0 0.0.0.31
ip nat pool CISCO 209.165.201.1 209.165.201.30 netmask 255.255.255.224
ip nat inside source list 1 pool CISCO
```

Refer to the exhibit. What are two effects of this configuration? (Choose two.)

- A. The 209.165.201.0/27 subnet is assigned as the outside local address range
- B. The 10.1.1.0/27 subnet is assigned as the inside local addresses.
- C. It establishes a one-to-one NAT translation
- D. The 10.1.1.0/27 subnet is assigned as the inside global address range.
- E. inside source addresses are translated to the 209.165.201.0/27 subnet.

**Correct Answer:** BE

**Section:** (none)

## Explanation

## Explanation/Reference:

### QUESTION 258

Which solution do IaaS service providers use to extend a Layer 2 segment across a Layer 3 network?

- A. VRF

- B. VTEP
- C. VXLAN
- D. VLAN

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 259

Which configuration protects the password for the VTY lines against over-the-shoulder attacks?

- A. username netadmin secret 9 \$9SvFpMf8elb4RVV8SseZ/bDA
- B. line vty 0 15  
password XD822j
- C. service password-encryption
- D. username netadmin secret 7 \$1pMf8elb4RpMf8elb4RV/bDA

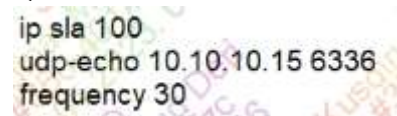
**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 260



Refer to the exhibit. An engineer has configured an IP SLA for UDP echos. Which command is needed to start the IP SLA to test every 30 seconds and continue until stopped?

- A. ip sla schedule 100 start-time now life forever
- B. ip sla schedule 30 start-time now life forever
- C. ip sla schedule 100 start-time now life 30
- D. ip sla schedule 100 life forever

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 261

Which new enhancement was implemented in Wi-Fi 6?

- A. 4096 Quadrature Amplitude Modulation Mode
- B. Channel bonding
- C. Wi-Fi Protected Access 3
- D. Uplink and Downlink Orthogonal Frequency Division Multiple Access

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 262

An engineer is describing QoS to a client. Which two facts apply to traffic policing? (Choose two)

- A. Policing should be performed as close to the source as possible.
- B. Policing should be performed as close to the destination as possible.
- C. Policing adapts to network congestion by queuing excess traffic.
- D. Policing typically delays the traffic, rather than drops it.
- E. Policing drops traffic that exceeds the defined rate.

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 263

Which behavior can be expected when the HSRP version is changed from 1 to 2?

- A. Each HSRP group reinitializes because the virtual MAC address has changed.
- B. No changes occur because the standby router is upgraded before the active router.
- C. Each HSRP group reinitializes because the multicast address has changed.
- D. No changes occur because version 1 and 2 use the same virtual MAC OUI.

**Correct Answer:** A

**Section:** (none)

**Explanation****Explanation/Reference:****QUESTION 264**

Which two solutions are used for backing up a Cisco DNA Center Assurance database? (Choose two.)

- A. NFS share
- B. remote server
- C. non-linux server
- D. local server
- E. bare metal server

**Correct Answer:** AB

**Section:** (none)

**Explanation****Explanation/Reference:****QUESTION 265**

Which function is performed by vSmart in the Cisco SD-WAN architecture?

- A. redistribution between OMP and other routing protocols
- B. execution of localized policies
- C. aggregation and distribution of VPN routing information
- D. facilitation of NAT detection and traversal

**Correct Answer:** C

**Section:** (none)

**Explanation****Explanation/Reference:****QUESTION 266**

A company hires a network architect to design a new OTT wireless solution within a Cisco SD-Access Fabric wired network. The architect wants to register access points to the WLC to centrally switch the traffic. Which AP mode must the design include?

- A. FlexConnect
- B. bridge
- C. fabric
- D. local

**Correct Answer:** D

**Section:** (none)

**Explanation****Explanation/Reference:****QUESTION 267**

Which option works with a DHCP server to return at least one WLAN management interface IP address during the discovery phase and is dependent upon the VCI of the AP?

- A. Option 15
- B. Option 43
- C. Option 42
- D. Option 125

**Correct Answer:** B

**Section:** (none)

**Explanation****Explanation/Reference:****QUESTION 268**

Which OSPF network types are compatible and allow communication through the two peering devices?

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

**Correct Answer:** C

**Section:** (none)

**Explanation****Explanation/Reference:****QUESTION 269**

When a wired client connects to an edge switch in an SDA fabric, which component decides whether the client has access to the network?

- A. RADIUS server
- B. Identity Services Engine

- C. edge node
- D. control-plane node

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

**Explanation/Reference:**

#### QUESTION 270

A network engineer configures a WLAN controller with increased security for web access. There is IP connectivity with the WLAN controller, but the engineer cannot start a management session from a web browser. Which action resolves the issue?

- A. Disable JavaScript on the web browser.
- B. Disable Adobe Flash Player.
- C. Use a private or incognito session.
- D. Use a browser that supports 128-bit or larger ciphers.

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

**Explanation/Reference:**

#### QUESTION 271

What is a characteristic of a Type 2 hypervisor?

- A. It is installed on an operating system and supports other operating systems.
- B. It is completely independent of the operating system.
- C. It eliminates the need for an underlying operating system.
- D. Its main task is to manage hardware resources between different operating systems.

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

**Explanation/Reference:**

#### QUESTION 272

Which Python library is used to work with YANG data models via NETCONF?

- A. requests
- B. ncclient
- C. cURL
- D. Postman

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

**Explanation/Reference:**

#### QUESTION 273

Which language defines the structure or modeling of data for NETCONF and RESTCONF?

- A. XML
- B. YANG
- C. YAML
- D. JSON

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

**Explanation/Reference:**

#### QUESTION 274



Refer to the exhibit. A company requires that all wireless users authenticate using dynamic key generation. Which configuration must be applied?

- A. AP(config-if-ssid)#authentication open wep wep\_methods
- B. AP(config-if-ssid)#authentication dynamic open wep\_dynamic
- C. AP(config-if-ssid)#authentication dynamic wep wep\_methods
- D. AP(config-if-ssid)#authentication open eap eap\_methods

Correct Answer: D  
 Section: (none)  
 Explanation

Explanation/Reference:

QUESTION 275  
 Which cisco DNA center application is responsible for group-based access control permissions?

- A. Provision
- B. Assurance
- C. Design
- D. Policy

Correct Answer: D  
 Section: (none)  
 Explanation

Explanation/Reference:

QUESTION 276  
 How does SSO work with HSRP to minimize network disruptions?

- A. It enables data forwarding along known routes following a switchover, while the routing protocol reconverges.
- B. It ensures fast failover in the case of link failure.
- C. It enables HSRP to elect another switch in the group as the active HSRP switch.
- D. It enables HSRP to failover to the standby RP on the same device.

Correct Answer: D  
 Section: (none)  
 Explanation

Explanation/Reference:  
[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipapp\\_fhrp/configuration/15-s/fhp-15-s-book/fhp-hsrp-ss0.html#GUID-956D434E-CA86-49EA-B635-BC0BE812897C](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipapp_fhrp/configuration/15-s/fhp-15-s-book/fhp-hsrp-ss0.html#GUID-956D434E-CA86-49EA-B635-BC0BE812897C)



Refer to the exhibit. Which type of antenna is shown on the radiation patterns?

- A. dipole

- B. Yagi
- C. patch
- D. Omnidirectional

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

**Explanation/Reference:**

#### QUESTION 278

Which entity is responsible for maintaining Layer 2 isolation between segments in a VXLAN environment?

- A. host switch
- B. VNID
- C. VTEP
- D. switch fabric

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

**Explanation/Reference:**

[https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus9000/sw/7-x/vxlan/configuration/guide/b\\_Cisco\\_Nexus\\_9000\\_Series\\_NX-OS\\_VXLAN\\_Configuration\\_Guide\\_7x/b\\_Cisco\\_Nexus\\_9000\\_Series\\_NX-OS\\_VXLAN\\_Configuration\\_Guide\\_7x\\_chapter\\_010.html#concept\\_1637575CA4834CD585ACEB8AAA7680AD](https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus9000/sw/7-x/vxlan/configuration/guide/b_Cisco_Nexus_9000_Series_NX-OS_VXLAN_Configuration_Guide_7x/b_Cisco_Nexus_9000_Series_NX-OS_VXLAN_Configuration_Guide_7x_chapter_010.html#concept_1637575CA4834CD585ACEB8AAA7680AD)

#### QUESTION 279



Refer to the exhibit. An attacker can advertise OSPF fake routes from 172.16.20.0 network to the OSPF domain and black hole traffic. Which action must be taken to avoid this attack and still be able to advertise this subnet into OSPF?

- A. Configure 172.16.20.0 as a stub network.
- B. Configure graceful restart on the 172.16.20.0 interface.
- C. Configure a passive interface on R2 toward 172.16.20.0
- D. Apply a policy to filter OSPF packets on R2.

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

**Explanation/Reference:**

#### QUESTION 280

A network administrator is implementing a routing configuration change and enables routing debugs to track routing behavior during the change. The logging output on the terminal is interrupting the command typing process. Which two actions can the network administrator take to minimize the possibility of typing commands incorrectly? (Choose two.)

- A. Configure the logging delimiter feature.
- B. Configure the logging synchronous global configuration command.
- C. Press the TAB key to reprint the command in a new line.
- D. Configure the logging synchronous command under the vty.
- E. Increase the number of lines on the screen using the terminal length command

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

Explanation/Reference:

QUESTION 281

What is the process for moving a virtual machine from one host machine to another with no dovmtime?

- A. disaster recovery
- B. multisite replication
- C. high availability
- D. live migration

Correct Answer: D  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 282



Refer to the exhibit. An engineer constructs an EEM applet to prevent anyone from entering configuration mode on a switch. Which snippet is required to complete the EEM applet?

- A. sync no skip yes
- B. sync no skip no
- C. sync yes skip no
- D. sync yes skip yes

Correct Answer: A  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 283

What are multicast RPS required?

- A. By default, the RP is needed only to start new sessions with sources and receivers.
- B. RPs are required only when using protocol independent multicast dense mode.
- C. RPs are required for protocol independent multicast sparse mode and dense mode
- D. By default, the RP is needed periodically to maintain sessions with sources and receivers.

Correct Answer: A  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 284

How is 802.11 traffic handled in a fabric-enabled SSID?

- A. converted by the AP into 802.3 and encapsulated into VXLAN
- B. centrally switched back to WLC where the user traffic is mapped to a VXLAN on the WLC
- C. converted by the AP into 802.3 and encapsulated into a VLAN
- D. centrally switched back to WLC where the user traffic is mapped to a VLAN on the WLC

Correct Answer: A  
Section: (none)  
Explanation

Explanation/Reference:

QUESTION 285



Refer to the exhibit. Hosts PC1, PC2, and PC3 must access resources on Server1. An engineer configures NAT on Router R1 to enable the

communication and enters the show command to verify operation. Which IP address is used by the hosts when they communicate globally to Server1?

- A. 155.1.1.1
- B. their own address in the 10.10.10.0/24 range
- C. 155.1.1.5
- D. random addresses in the 155.1.1.0/24 range

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 286

What is one difference between EIGRP and OSPF?

- A. EIGRP uses the variance command for unequal cost load balancing, and OSPF supports unequal cost balancing by default.
- B. OSPF uses the DUAL distance vector algorithm, and EIGRP uses the Dijkstra link-state, algorithm.
- C. OSPF is a Cisco proprietary protocol, and EIGRP is an IETF open standard protocol.
- D. EIGRP uses the DUAL distance vector algorithm, and OSPF uses the Dijkstra link-state algorithm.

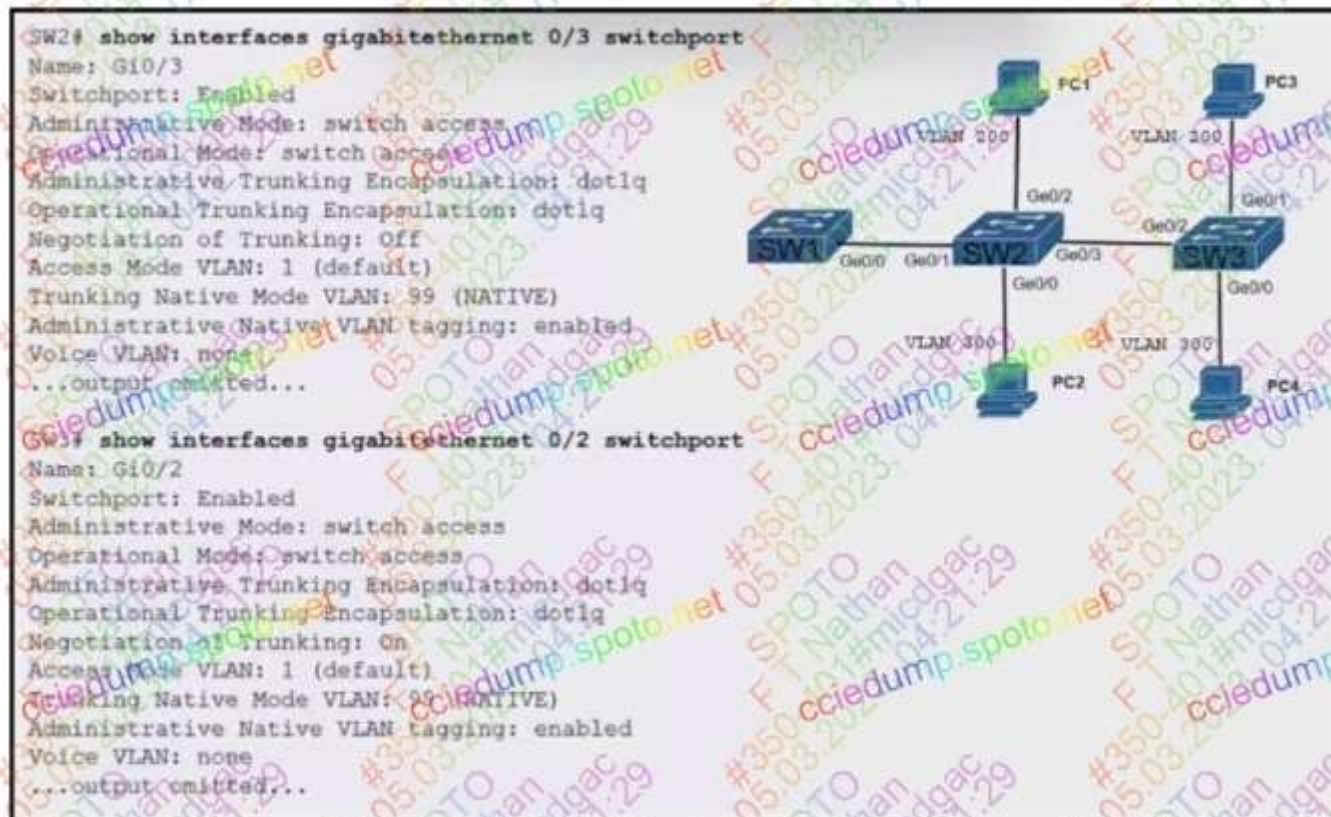
**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 287



Refer to the exhibit. The trunk between SW2 and SW3 is not operational. Which action enable traffic for VLAN 200 to pass?

- A. Configure switchport nonegotiate SW2 and SW3.
- B. Configure switchport mode dynamic desirable on SW2 and SW3
- C. Configure no switch mode trunk on SW2 and SW3.
- D. Configure vtp mode transparent on SW2 and SW3

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 288

Which element is unique to a Type 2 hypervisor?

- A. VM OS
- B. host OS
- C. memory
- D. host hardware.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 289

Which JSON script is properly formatted?

- A. 

```
"car": [
 {
 "type": "A New Book",
 "model": "J Doe",
 "year": "1"
 }
]
```
- B. 

```
[
 {
 "class": {
 "title": "Science",
 "grade": "11",
 "location": "Room C"
 }
 }
]
```
- C. 

```
{
 "host": {
 "name": "SwitchA",
 "model": "Catalyst",
 "serial": "0123456789"
 }
}
```
- D. 

```
{
 "book": [
 {
 "title": "A New Book",
 "author": "J P Doe",
 "edition": "2"
 }
]
}
```

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 290

Which access control feature does MAB provide?

- A. user access based on IP address
- B. simultaneous user and device authentication
- C. network access based on the physical address of a device
- D. allows devices to bypass authentication

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 291

Which two methods are used to assign security group tags to the user in a Cisco TrustSec architecture? (Choose two.)

- A. web authentication
- B. DHCP
- C. modular QoS
- D. IEEE 802.1X
- E. policy routing

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 292

In a Cisco SD-Access environment, which function is performed by the border node?

- A. Provide reachability information to fabric endpoints.
- B. Provide connectivity to traditional Layer 3 networks
- C. Group endpoints into IP pools.
- D. Connect users and devices to the fabric domain.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 293

Which action is the vSmart controller responsible for in a Cisco SD-WAN deployment?

- A. manage, maintain, and gather configuration and status for nodes within the Cisco SD-WAN fabric

- B. onboard WAN Edge nodes into the Cisco SD-WAN fabric
- C. distribute policies that govern data forwarding performed within the Cisco SD-WAN fabric
- D. gather telemetry data from WAN Edge routers

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 294

How does an on-premises infrastructure compare to a cloud infrastructure?

- A. On-premises requires less power and cooling resources than cloud.
- B. On-premises offers lower latency for physically adjacent systems than cloud.
- C. On-premises offers faster deployment than cloud.
- D. On-premises can increase compute power faster than cloud.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 295

Which function does a Cisco SD-Access extended node perform?

- A. provides fabric extension to nonfabric devices through remote registration and configuration
- B. in charge of establishing Layer 3 adjacencies with nonfabric unmanaged node
- C. used to extend the fabric connecting to downstream nonfabric enabled Layer 2 switches
- D. performs tunneling between fabric and nonfabric devices to route traffic over unknown networks

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 296

```
CPE# debug ip nat
*Jun 28 19:14:41.463: NAT: Entry assigned id 11
*Jun 28 19:14:41.483: NAT: s=10.0.1.1->198.51.100.5 d=203.0.113.8 [59922] NAT: dyn flow info
download suppressed for flow 11
*Jun 28 19:14:41.463: NAT: s=203.0.113.8 d=198.51.100.5->10.0.1.1 [53790] NAT: dyn flow info
download suppressed for flow 11
*Jun 28 19:14:46.147: NAT: Entry assigned id 13
*Jun 28 19:14:46.147: NAT: s=10.0.2.1->198.51.100.6 d=203.0.113.8 [60095] NAT: dyn flow info
download suppressed for flow 13
*Jun 28 19:14:46.148: NAT: s=203.0.113.8 d=198.51.100.6->10.0.2.1 [32109] NAT: dyn flow info
download suppressed for flow 13
*Jun 28 19:14:50.462: %IPNAT-4-ADDR_ALLOC_FAILURE: Address allocation failed for 10.0.1.1
pool might be exhausted
*Jun 28 19:14:50.462: NAT: translation failed (A), dropping packet s=10.0.1.1 d=203.0.113.8

CPE# show ip nat translation
Pro Inside global Inside local Outside local Outside global
tcp 198.51.100.5:61082 10.0.1.1:61082 203.0.113.8:23 203.0.113.8:23
- 198.51.100.5 10.0.1.1 - -
tcp 198.51.100.6:15360 10.0.2.1:15360 203.0.113.8:23 203.0.113.8:23
- 198.51.100.6 10.0.2.1 - -

CPE# show ip nat statistics
Total active translations: 4 (0 static, 4 dynamic, 2 extended)
Outside interfaces:
 Ethernet0/0
Inside interfaces:
 Ethernet0/1
Hits: 234 Misses: 0
CEF Translated packets: 234, CEF Punted packets: 7
Expired translations: 2
Dynamic mappings:
-- Inside Source
[Id: 1] -- list NAT pool NAT refcount 4
Pool NAT: id 1, netmask 255.255.255.0
 start 198.51.100.5 and 198.51.100.6
 type generic, total addresses 2, allocated 2 (100%), misses 7
nat-limit statistics:
 max entry, max allowed 0, used 0, missed 0
Outside global interfaces count: 1
```

Refer to the exhibit. An administrator troubleshoots intermittent connectivity from internal hosts to an external public server. Some internal hosts can connect to the server while others receive an ICMP Host Unreachable message, and these hosts change over time. What is the cause of this issue?

- A. The NAT pool netmask is excessively wide.
- B. The NAT ACL and NAT pool Share the same name.
- C. The translation does not use address overloading.
- D. The NAT ACL does not match all internal hosts.

**Correct Answer:** C

**Section:** (none)

Explanation

Explanation/Reference:

QUESTION 297

```
monitor session 11 type erspan-source
source interface GigabitEthernet3
destination
erspan-id 12
ip address 10.10.10.10
origin ip address 10.100.10.10
```

Refer to the exhibit. Which command set completes the ERSPAN session configuration?

- A. monitor session 12 type erspan-destination
destination interface GigabitEthernet4
source
erspan-id 11
ip address 10.10.10.10
- B. monitor session 11 type erspan-destination
destination interface GigabitEthernet4
source
erspan-id 11
ip address 10.10.10.10
- C. monitor session 12 type erspan-destination
destination interface GigabitEthernet4
source
erspan-id 12
ip address 10.10.10.10
- D. monitor session 11 type erspan-destination
destination interface GigabitEthernet4
source
erspan-id 12
ip address 10.100.10.10

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 298

```

SW2#show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID Priority 32769
Address 50:00:00:00:00:00
Cost 1
Port 1 (GigabitEthernet0/0)
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Bridge ID Priority 32769 (priority 32768 sys-id-ext 1)
Address 50:00:00:00:00:00
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Aging Time 300 sec

Interface Role Sts Cost Prio.Nbr Type

G0/0 Root FWD 128.1 P2p
G0/1 Altn BLK 4 32.2 P2p

```

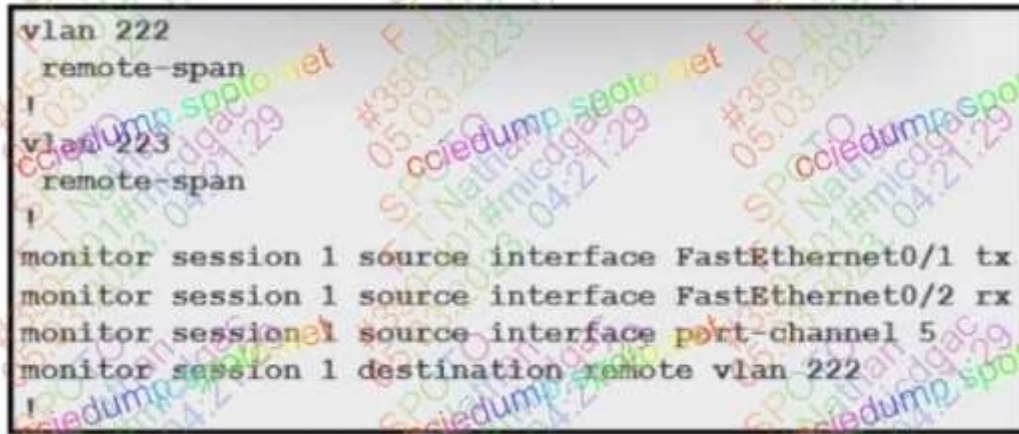
Refer to the exhibit. Link1 uses a copper connection and Link2 uses a fiber connection. The fiber port must be the primary port forwarding. The output of the show spanning-tree command on SW2 shows that the fiber port is blocked by Spanning Tree- After entering the spanning-tree port-priority 32 command on 60/1 on SW2, the port remains blocked. Which command should be entered on the ports connected to Link 2 to resolve the issue?

- A. Enter spanning-tree port-priority 32 on SW1
- B. Enter spanning-tree port-priority 224 on SW1
- C. Enter spanning-tree port-priority 64 on SW2
- D. Enter spanning-tree port-priority 4 on SW2

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

**Explanation/Reference:**

#### QUESTION 299



```
vlan 222
remote-span
vlan 223
remote-span
monitor session 1 source interface FastEthernet0/1 tx
monitor session 1 source interface FastEthernet0/2 rx
monitor session 1 source interface port-channel 5
monitor session 1 destination remote vlan 222
```

Refer to the exhibit. What happens to access interfaces where VLAN 222 is assigned?

- A. They cannot provide PoE.
- B. STP BPDU guard is enabled.
- C. A description "RSPAN" is added.
- D. They are placed into an inactive state.

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

**Explanation/Reference:**

#### QUESTION 300

What is an OVF?

- A. a package of files that is used to describe a virtual machine or virtual appliance
- B. a package that is similar to an IMG and that contains an OVA file used to build a virtual machine
- C. the third step in a P2V migration
- D. an alternative form of an ISO that is used to install the base operating system of a virtual machine

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

**Explanation/Reference:**

#### QUESTION 301

What is a characteristic of Cisco SD-WAN?

- A. uses control plane connections between routers
- B. requires manual secure tunnel configuration
- C. uses unique per-device feature templates
- D. operates over DTLS/TLS authenticated and secured tunnels

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

**Explanation/Reference:**

#### QUESTION 302

Which two methods are used to interconnect two Cisco SD-Access Fabric Sites? (Choose two.)

- A. fabric interconnect
- B. wireless transit
- C. SD-Access transit
- D. IP-based transit
- E. SAN transit

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

**Explanation/Reference:**

#### QUESTION 303

What is a characteristic of a traditional WAN?

- A. centralized reachability, security, and application policies
- B. operates over DTLS and TLS authenticated and secured tunnel

- C. unified data plane and control plane
- D. low complexity and high overall solution scale

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 304

```
response = requests.patch(
 url = 'https://192.168.1.1/restconf/data/Cisco-IOS-XE-
native:native/interface/GigabitEthernet=2'
 auth = ('admin', 'admin'),
 headers = {
 'Accept': 'application/yang-data+json',
 'Content-Type': 'application/yang-data+json'
 },
 data = json.dumps({
 'Cisco-IOS-XE-native:GigabitEthernet': {
 'ip': {
 'address': {
 'primary': {
 'address': '10.10.10.1',
 'mask': '255.255.255.0'
 }
 }
 }
 }
 }),
 verify = False)

Print the HTTP response code
print('Response Code: ' + str(response.status_code))
```

Refer to the exhibit. After the code is run on a Cisco IOS-XE router, the response code is 204. What is the result of the script?

- A. The configuration is successfully sent to the device in cleartext.
- B. The configuration fails because interface GigabitEthernet2 is missing on the target device.
- C. Interface GigabitEthernet2 is configured with IP address 10.10.10.1/24.
- D. The configuration fails because another interface is already configured with IP address 10.10.10.1/24.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 305

Which two methods are used to reduce the AP coverage area? (Choose two.)

- A. Reduce AP transmit power.
- B. Increase minimum mandatory data rate.
- C. Enable Fastlane.
- D. Disable 2.4 GHz and use only 5 GHz.
- E. Reduce channel width from 40 MHz to 20 MHz.

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 306



Refer to the exhibit. A network engineer configures NAT on R1 and enters the show command to verify the configuration. What does the output confirm?

- A. R1 is configured with PAT overload parameters.
- B. A Telnet session from 160.1.1.1 to 10.1.1.10 has been initiated.
- C. R1 is configured with NAT overload parameters.
- D. The first packet triggered NAT to add an entry to the NAT table.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 307

A company plans to implement intent-based networking in its campus infrastructure. Which design facilitates a migration from a traditional campus design to a programmable fabric design?

- A. three-tier
- B. Layer 2 access
- C. two-tier
- D. routed access

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 308

In which two ways does TCAM differ from CAM? (Choose two.)

- A. CAM is used for software switching mechanisms, and TCAM is used for hardware switching mechanisms.
- B. CAM is used to make Layer 2 forwarding decisions, and TCAM is used for Layer 3 address lookups.
- C. The MAC address table is contained in CAM, and ACL and QoS information is stored in CAM.
- D. The MAC address table is contained in CAM, and ACL and QoS information is stored in TCAM.
- E. CAM is used by routers for IP address lookups, and TCAM is used to make Layer 2 forwarding decisions.

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 309

```
Extended IP access list EGRESS
10 permit ip 10.1.100.0 0.0.0.255 10.1.2.0 0.0.0.255
20 deny ip any any
```

Refer to the exhibit. An engineer must modify the access control list EGRESS to allow all IP traffic from subnet 10.1.10.0/24 to 10.1.2.0/24. The access control list is applied in the outbound direction on router interface Gigabit Ethernet 0/1. Which configuration commands can the engineer use to allow this traffic without disrupting existing traffic flows?

- A. 

```
config t
ip access-list extended EGRESS2
permit ip 10.1.10.0 0.0.0.255 10.1.2.0 0.0.0.255
permit ip 10.1.100.0 0.0.0.255 10.1.2.0 0.0.0.255
deny ip any any
!
interface g0/1
no ip access-group EGRESS out
ip access-group EGRESS2 out
```
- B. 

```
config t
ip access-list extended EGRESS
permit ip 10.1.10.0 255.255.255.0 10.1.2.0 255.255.255.0
```
- C. 

```
config t
ip access-list extended EGRESS
5 permit ip 10.1.10.0 0.0.0.255 10.1.2.0 0.0.0.255
```
- D. 

```
config t
ip access-list extended EGRESS
permit ip 10.1.10.0 0.0.0.255 10.1.2.0 0.0.0.255
```

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 310

Which Cisco FlexConnect state allows wireless users that are connected to the network to continue working after the connection to the WLC has been lost?

- A. Authentication-Central/Switch-Central
- B. Authentication Down/Switching Down
- C. Authentication-Down/Switch-Local
- D. Authentication-Central/Switch-Local

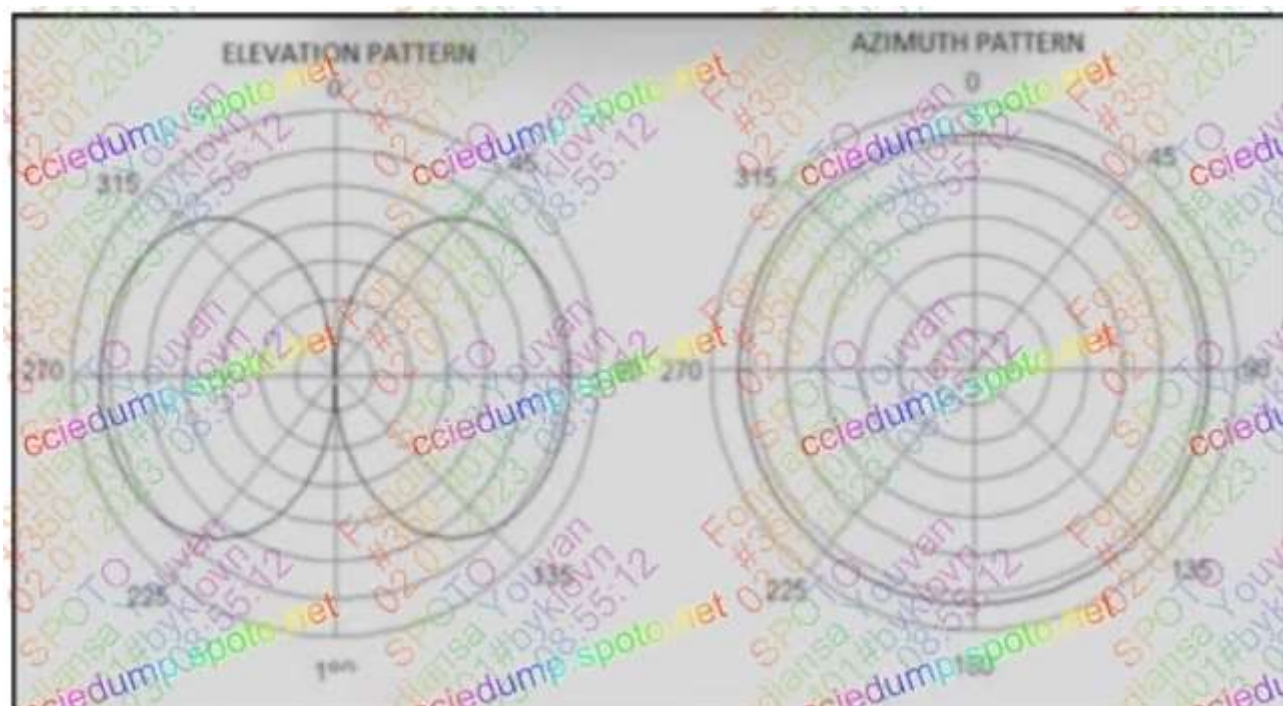
**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 311



Refer to the exhibit. Which antenna emits this radiation pattern?

- A. RP-TNC
- B. Yagi
- C. Omnidirectional
- D. Dish

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

# QUESTION 312



Refer to the exhibit. An engineer implemented several configuration changes and receives the logging message on Switch1. Which action should the engineer take to resolve this issue?

- A. Change Switch1 to switch port mode dynamic auto.
- B. Change the VTP domain to match on both switches.
- C. Change Switch1 to switch port mode dynamic desirable.
- D. Change Switch2 to switch port mode dynamic auto.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

%DTP-5-DOMAINMISMATCH: Unable to perform trunk negotiation on port Gi0/0 because of VTP domain mismatch.

# QUESTION 313

Why is an AP joining a different WLC than the one specified through option 43?

- A. The APs broadcast traffic is unable to reach the WLC through Layer 2.
- B. The WLC is running a different software version.
- C. The AP is joining a primed WLC.
- D. The AP multicast traffic is unable to reach the WLC through Layer 3.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

# QUESTION 314

Which controller is capable of acting as a STUN server during the onboarding process of Edge devices?

- A. vBond
- B. vSmart
- C. PNP Server
- D. vManage

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

# QUESTION 315

```

import requests

The authentication part is omitted for brevity purposes

URL = "https://dnac/dna/intent/api/v1/topology/vlan/vlan-names"
VlanNames = requests.get(URL, headers=Header).json()
print(VlanNames)

{'response': ['Vlan1', 'Vlan3002', 'Vlan3003', 'Vlan1023', 'Vlan2046', 'Vlan3009', 'Vlan3999'], 'version': '1.0'}

```

Refer to the exhibit. How should the programmer access the list of VLANs that were received via the API call?

- A. list(VlanNames)
- B. VlanNames[0]
- C. VlanNames['Vlan1']
- D. VlanNames['response']

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 316

```

interface Vlan10
 ip vrf forwarding Customer1
 ip address 192.168.1.1 255.255.255.0
!
interface Vlan20
 ip vrf forwarding Customer2
 ip address 172.16.1.1 255.255.255.0
!
interface Vlan30
 ip vrf forwarding Customer3
 ip address 10.1.1.1 255.255.255.0
!

```

Refer to the exhibit. Which configuration allows Customer2 hosts to access the FTP server of Customer1 that has the IP address of 192.168.1.200?

- A. ip route vrf Customer1 172.16.1.0 255.255.255.0 172.16.1.1 Customer2  
ip route vrf Customer2 192.168.1.200 255.255.255.255 192.168.1.1 Customer1
- B. ip route vrf Customer1 172.16.1.0 255.255.255.0 172.16.1.1 Customer1  
ip route vrf Customer2 192.168.1.200 255.255.255.255 192.168.1.1 Customer2
- C. ip route vrf Customer1 172.16.1.1 255.255.255.255 172.16.1.1 global  
ip route vrf Customer2 192.168.1.200 255.255.255.0 192.168.1.1 global  
ip route 192.168.1.0 255.255.255.0 Vlan10  
ip route 172.16.1.0 255.255.255.0 Vlan20
- D. ip route vrf Customer1 172.16.1.0 255.255.255.0 172.16.1.1 global  
ip route vrf Customer2 192.168.1.200 255.255.255.255 192.168.1.1 global  
ip route 192.168.1.0 255.255.255.0 Vlan10  
ip route 172.16.1.0 255.255.255.0 Vlan20

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 317

```

interface Vlan10
 ip vrf forwarding Clients
 ip address 192.168.1.1 255.255.255.0
!
interface Vlan20
 ip vrf forwarding Servers
 ip address 172.16.1.1 255.255.255.0
!
interface Vlan30
 ip vrf forwarding Printers
 ip address 10.1.1.1 255.255.255.0
!
-- output omitted for brevity --
router bgp 1
 10.0.0.0
 172.16.0.0
 192.168.1.0

```

Refer to the exhibit. An engineer attempts to configure a router on a stick to route packets between Clients, Servers, and Printers; however, initial tests

show that this configuration is not working. Which command set resolves this issue?

- A. 

```
interface Vlan10
no ip vrf forwarding Clients
ip address 192.168.1.2 255.255.255.0
!
interface Vlan20
no ip vrf forwarding Servers
ip address 172.16.1.2 255.255.255.0
!
interface Vlan30
no ip forwarding Printers
ip address 10.1.1.2 255.255.255.0
```
- B. 

```
interface Vlan10
no ip vrf forwarding Clients
!
interface Vlan20
no ip vrf forwarding Servers
!
interface Vlan30
no ip vrf forwarding Printers
```
- C. 

```
router eigrp 1
network 10.0.0.0 255.0.0.0
network 172.16.0.0 255.255.0.0
network 192.168.1.0 255.255.0.0
```
- D. 

```
router eigrp 1
network 10.0.0.0 255.255.255.0
network 172.16.0.0 255.255.255.0
network 192.168.1.0 255.255.255.0
```

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 318

What is a Type 2 hypervisor?

- A. runs directly on a physical server and includes its own operating system
- B. also referred to as a bare metal hypervisor because it sits directly on the physical server
- C. installed as an application on an already installed operating system
- D. supports over-allocation of physical resources

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 319

What is a characteristic of a Type 1 hypervisor?

- A. It is referred to as a hosted hypervisor.
- B. It is completely independent of the operating system.
- C. Problems in the base operating system can affect the entire system.
- D. It is installed on an operating system and supports other operating systems above it.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 320

What is the function of the fabric control plane node in a Cisco SD-Access deployment?

- A. It holds a comprehensive database that tracks endpoints and networks in the fabric.
- B. It provides integration with legacy nonfabric-enabled environments.
- C. It performs traffic encapsulation and security profiles enforcement in the fabric.
- D. It is responsible for policy application and network segmentation in the fabric.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 321

In a wireless network environment, what is calculated using the numerical values of the transmitter power level, cable loss, and antenna gain?

- A. dBi
- B. EIRP
- C. RSSI
- D. SNR

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

**Explanation/Reference:**

#### QUESTION 322



```
Extended IP access list EGRESS
10 permit ip 10.0.0.0 0.0.0.255 any
!
Output Omitted>
!
interface GigabitEthernet0/0
ip address 209.165.200.225 255.255.255.0
ip access-group EGRESS out
duplex auto
speed auto
media-type rj45
!
```

Refer to the exhibit. An engineer must block all traffic from a router to its directly connected subnet 209.165.200.0/24. The engineer applies a control list EGRESS in the outbound direction on the GigabitEthernet0/0 interface of the router. However the router can still ping hosts on the 209.165.200.0/24 subnet. Which explanation of this behavior is true?

- A. Only standard access control lists can block traffic from a source IP address.
- B. After an access control list is applied to an interface, that interface must be shut and no shut for the access control list to take effect
- C. Access control lists that are applied outbound to a router interface do not affect traffic that is sourced from the router.
- D. The access control list must contain an explicit deny to block traffic from the router.

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

**Explanation/Reference:**

#### QUESTION 323

An engineer must create an EEM applet that sends a syslog message in the event a change happens in the network due to trouble with an OSPF process. Which action should the engineer use?



```
event manager applet LogMessage
event routing network 172.30.197.0/24 type all
!
```

- A. action 1 syslog msg "OSPF ROUTING ERROR"
- B. action 1 syslog pattern "OSPF ROUTING ERROR"
- C. action 1 syslog write "OSPF ROUTING ERROR"
- D. action 1 syslog send "OSPF ROUTING ERROR"

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

**Explanation/Reference:**

#### QUESTION 324

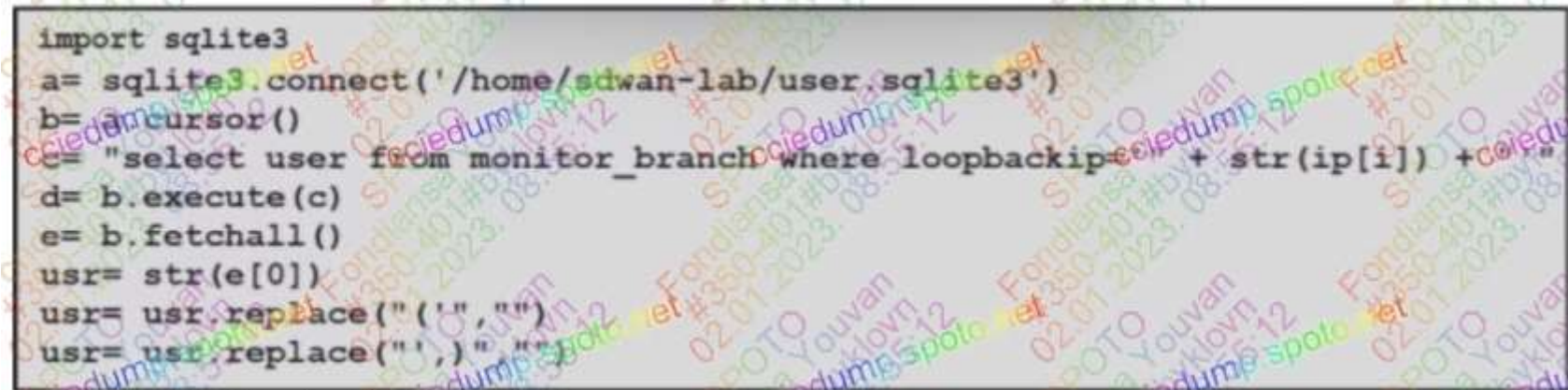
How do cloud deployments differ from on-premises deployments?

- A. Cloud deployments are more customizable than on-premises deployments.
- B. Cloud deployments require less frequent upgrades than on-premises deployments.
- C. Cloud deployments require longer implementation times than on-premises deployments.
- D. Cloud deployments have lower upfront costs than on-premises deployments.

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

**Explanation/Reference:**

#### QUESTION 325



```
import sqlite3
a=sqlite3.connect('/home/sdwan-lab/user/sqlite3')
b=a.cursor()
c= "select user from monitor_branch where loopbackip = " + str(ip[i]) + "
d= b.execute(c)
e= b.fetchall()
usr= str(e[0])
usr= usr.replace("(","'")
usr= usr.replace("'",'"')
```

Refer to the exhibit. What does this Python script do?

- A. enters the RADIUS username for a specific IP address
- B. enters the TACACS+ username for a specific IP address
- C. reads the username for a specific IP address from a light database
- D. writes the username for a specific IP address into a light database

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 326

What does a YANG model provide?

- A. creation of transport protocols and their interaction with the OS
- B. user access to interact directly with the CLI of the device to receive or modify network configurations
- C. standardized data structure that can be used only with NETCONF or RESTCONF transport protocols
- D. standardized data structure independent of the transport protocols

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 327

```
event snmp oid 1.3.6.1.4.1.9.9.109.1.1.1.3 get-type next entry-op gt entry-val 80 poll-interval 5
!
action 1.0 cli command "enable"
action 2.0 syslog msg "high cpu"
action 3.0 cli command "term length 0"
```

Refer to the exhibit. An engineer must create a script that appends the output of the **show process cpu sorted** command to a file. Which action completes the configuration?

- A. action 4.0 syslog command "show process cpu sorted | append flash:high-cpu-file"
- B. action 4.0 cns-event "show process cpu sorted | append flash:high-cpu-file"
- C. action 4.0 cli command "show process cpu sorted | append flash:high-cpu-file"
- D. action 4.0 publish-event "show process cpu sorted | append flash:high-cpu-file"

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://www.cisco.com/c/en/us/support/docs/switches/catalyst-6500-series-switches/116141-trouble-shooting-scripts-00.html#anc13>

#### QUESTION 328



Refer to the exhibit. An engineer must ensure that all traffic leaving AS 200 will choose Link 2 as the exit point. Assuming that all BGP neighbor relationships have been formed and that the attributes have not been changed on any of the routers, which configuration accomplishes this task?

- A. R4(config-router) bgp default local-preference 200
- B. R3(config-router) bgp default local-preference 200

- C. R4(config-router) neighbor 10.2.2.2 weight 200
- D. R3(config-router)neighbor 10.1.1.1 weight 200

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

**Explanation/Reference:**

**QUESTION 329**

What is the role of the vSmart controller in a Cisco SD-WAN environment?

- A. It is the centralized network management system
- B. It manages the data plane
- C. It performs authentication and authorization
- D. It manages the control plane

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

**Explanation/Reference:**

**QUESTION 330**

What does the number in an NTP stratum level represent?

- A. The amount of offset between the device clock and true time.
- B. The amount of drift between the device clock and true time.
- C. The number of hops it takes to reach the master time server.
- D. The number of hops takes to reach the authoritative time source.

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

**Explanation/Reference:**

<https://www.cisco.com/c/dam/en/us/td/docs/ios-xml/ios/bsm/configuration/xr-3se/3650/bsm-xr-3se-3650-book.html#GUID-4F2A80B2-9D90-46DD-9A1B-B5666236DD94>

**QUESTION 331**



Refer to the exhibit. Users cannot reach the web server at 192.168.100.1. What is the root cause for the failure?

- A. The gateway cannot translate the server domain name.
- B. The server is out of service.
- C. The server is attempting to load balance between links 10.100.100.1 and 10.100.200.1.
- D. There is a loop in the path to the server.

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

**Explanation/Reference:**

**QUESTION 332**

Which two features does the Cisco SD-Access architecture add to a traditional campus network? (Choose two.)

- A. SD-WAN
- B. software-defined segmentation
- C. private VLANs
- D. modular QoS
- E. identity services

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 333

What is the function of the LISP map resolver?

- A. to advertise routable non-ISP traffic from one address family to LISP sites in a different address family
- B. to send traffic to non-LISP sites when connected to a service provider that does not accept nonroutable EIDs as packet sources
- C. to connect a site to the LISP-capable part of a core network, publish the EID-to-RLOC mappings for the site and respond to map-request messages
- D. to decapsulate map-request messages from ITRs and forward the messages to the MS

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute\\_lisp/configuration/xr-3s/ir-3s-book/ir-3s-overview.html#GUID-89BB8D34-63BF-43DE-8743-5572D357CDB3](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_lisp/configuration/xr-3s/ir-3s-book/ir-3s-overview.html#GUID-89BB8D34-63BF-43DE-8743-5572D357CDB3)

#### QUESTION 334

Which design principle states that a user has no access by default to any resource, and unless a resource is explicitly granted, it should be denied?

- A. complete mediation
- B. economy of mechanism
- C. fail-safe defaults
- D. least privilege

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 335

What is a benefit of using segmentation with TrustSec?

- A. Packets sent between endpoints on a LAN are encrypted using symmetric key cryptography.
- B. Integrity checks prevent data from being modified in transit.
- C. Firewall rules are streamlined by using business-level profiles.
- D. Security group tags enable network segmentation.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 336

An EEM applet contains this command:

```
event snmp oid 1.3.6.1.3.7.1.2.3.6.2.8.9 get-type next entry-op gt entry-val 80 poll-interval 8
```

What is the result of the command?

- A. An SNMP event is generated when the value is greater than 80% for eight polling cycles.
- B. An SNMP event is generated when the value reaches 80%.
- C. An SNMP variable is monitored and an action is triggered when the value exceeds 80%.
- D. An SNMP event is generated when the value equals 80% for eight polling cycles.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 337

Which configuration filters out DOT1X messages in the format shown below from being sent toward Syslog server 10.15.20.33?

```
Nov 20 13:47:32.553: %DOT1X-5-FAIL: Authentication failed for client on Interface Gi1/0/1 AuditSession ID
```

- A. logging discriminator DOT1X facility drops DOT1X  
logging host 10.15.20.33 discriminator DOT1X
- B. logging discriminator DOT1X mnemonics includes DOTX  
logging host 10.15.20.33 discriminator DOT1X
- C. logging discriminator DOT1X msg-body drops DOTX  
logging host 10.15.20.33 discriminator DOTX
- D. logging discriminator DOT1X mnemonics includes DOT1X  
logging host 10.15.20.33 discriminator DOTX

**Correct Answer:** D

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 338

Which algorithms are used to secure REST API from brute attacks and minimize the impact?

- A. SHA-512 and SHA-384
- B. MD5 algorithm-128 and SHA-384
- C. PBKDF2, BCrypt, and SCrypt
- D. SHA-1, SHA-256, and SHA-512

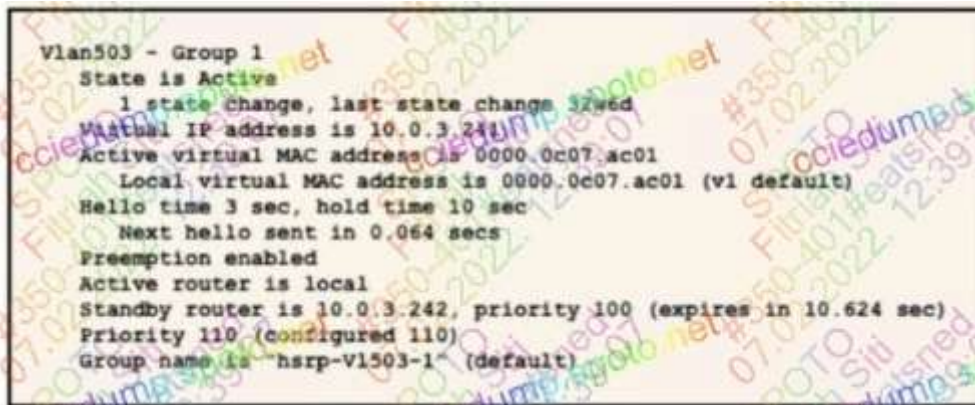
Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 339



```
Vlan503 - Group 1
State is Active
1 state change, last state change 32wed
Virtual IP address is 10.0.3.242
Active virtual MAC address is 0000.0c07.ac01
Local virtual MAC address is 0000.0c07.ac01 (v1 default)
Hello time 3 sec, hold time 10 sec
Next hello sent in 0.064 secs
Preemption enabled
Active router is local
Standby router is 10.0.3.242, priority 100 (expires in 10.624 sec)
Priority 110 (configured 110)
Group name is "hsrp-Vl503-1" (default)
```

Refer to the exhibit. Which two facts does the device output confirm? (Choose two.)

- A. The device is configured with the default HSRP priority.
- B. The device is using the default HSRP hello timer.
- C. The device sends unicast messages to its peers.
- D. The standby device is configured with the default HSRP priority.
- E. The device's HSRP group uses the virtual IP address 10.0.3.242.

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 340

Which function does a fabric wireless LAN controller perform in a Cisco SD-Access deployment?

- A. manages fabric-enabled APs and forwards client registration and roaming information to the Control Plane Node
- B. coordinated configuration of autonomous non fabric access points within the fabric
- C. is dedicated to onboard clients in fabric-enabled and nonfabric-enabled APs within the fabric
- D. performs the assurance engine role for both wired and wireless clients

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 341

Which technology enables a redundant supervisor engine to take over when the primary supervisor engine fails?

- A. FHRP
- B. NSF
- C. SSO
- D. graceful restart

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 342

A system must validate access rights to all its resources and must not rely on a cached permission matrix. If the access level to a given resource is revoked but is not reflected in the permission matrix, the security is violated. Which term refers to this REST security design principle?

- A. economy of mechanism
- B. least common mechanism
- C. complete mediation
- D. separation of privilege

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

**Explanation/Reference:**

#### QUESTION 343

An engineer must configure a new WLAN that allows a user to enter a passphrase and provides forward secrecy as a security measure. Which Layer 2 WLAN configuration is required on the Cisco WLC?

- A. WPA2 Enterprise
- B. WPA3 Personal
- C. WPA3 Enterprise
- D. WPA2 Personal

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

**Explanation/Reference:**

#### QUESTION 344

What is the responsibility of a secondary WLC?

- A. It enables Layer 2 and Layer 3 roaming between itself and the primary controller.
- B. It registers the LAPs if the primary controller fails.
- C. It avoids congestion on the primary controller by sharing the registration load on the LAPs.
- D. It shares the traffic load of the LAPs with the primary controller.

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

**Explanation/Reference:**

#### QUESTION 345

What is one difference between SaltStack and Ansible?

- A. SaltStack uses SSH to interact with Cisco devices, whereas Ansible uses an event bus.
- B. SaltStack uses the Ansible agent on the box, whereas Ansible uses a Telnet server on the box.
- C. SaltStack is constructed with minion, whereas Ansible is constructed with YAML
- D. SaltStack uses an API proxy agent to program Cisco boxes in agent mode, whereas Ansible uses a Telnet connection.

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

**Explanation/Reference:**

#### QUESTION 346

What are two benefits of implementing a Cisco SD-WAN architecture? (Choose two.)

- A. It simplifies endpoint provisioning through standalone router management.
- B. It enforces a single, scalable, hub-and-spoke topology.
- C. It allows configuration of application-aware policies with real time enforcement.
- D. It provides resilient and effective traffic flow using MPLS.
- E. It improves endpoint protection by integrating embedded and cloud security features.

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

**Explanation/Reference:**

#### QUESTION 347

Which three methods does Cisco DNA Center use to discover devices? (Choose three)

- A. SNMP
- B. LLDP
- C. CDP
- D. NETCONF
- E. a specified range of IP addresses
- F. Ping

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

**Explanation/Reference:**

#### QUESTION 348

Which two methods are used by an AP that is trying to discover a wireless LAN controller? (Choose two.)

- A. broadcasting on the local subnet
- B. Cisco DiScovey Protocol neighbor
- C. DNS lookup CISCO-DNA-PRIMARY.localdomain
- D. DHCP Option 43
- E. querying other APs

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 349

```
psswd = (base64.b64decode('SzFwM001RzchCg==').decode('utf-8')).strip('\n')
d = datetime.date.today()
date = str(10000*d.year + 100*d.month + d.day)
```

Refer to the exhibit. Which result does the Python code achieve?

- A. The code converts time to the Epoch LINUX time format.
- B. The code converts time to the "year/month/day" time format.
- C. The code encrypts a base64 decrypted password.
- D. The code converts time to the yyymmdd representation.

**Correct Answer:** D

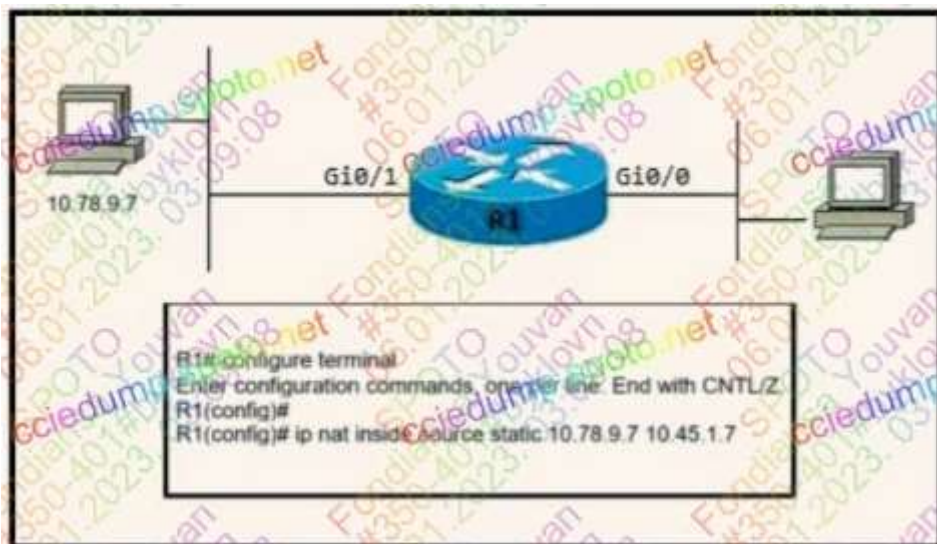
**Section:** (none)

**Explanation**

**Explanation/Reference:**

```
import base64
import datetime
psswd = (base64.b64decode('SzFwM001RzchCg==').decode('utf-8')).strip('\n')
d = datetime.date.today()
date = str(10000*d.year + 100*d.month + d.day)
print date
```

#### QUESTION 350



Refer to the exhibit. A network architect has partially configured static NAT. Which commands should be added to complete the configuration?

- A. R1(config)# interface GigabitEthernet 0/0  
R1(config)# ip nat outside  
R1(config)# interface GigabitEthernet 0/1  
R1(config)# ip nat inside
- B. R1(config)# interface GigabitEthernet 0/0  
R1(config-if)# ip nat outside  
R1(config)# interface GigabitEthernet 0/1  
R1(config-if)# ip nat inside
- C. R1(config)# interface GigabitEthernet 0/0  
R1(config)# ip nat inside  
R1(config)# interface GigabitEthernet 0/1  
R1(config)# ip nat outside
- D. R1(config)# interface GigabitEthernet 0/0  
R1(config-if)# ip nat inside  
R1(config)# interface GigabitEthernet 0/1  
R1(config-if)# ip nat outside

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 351

Under which network conditions is an outbound QoS policy that is applied on a router WAN interface most beneficial?

- A. under all network conditions
- B. under network convergence conditions
- C. under interface saturation conditions
- D. under traffic classification and marking conditions

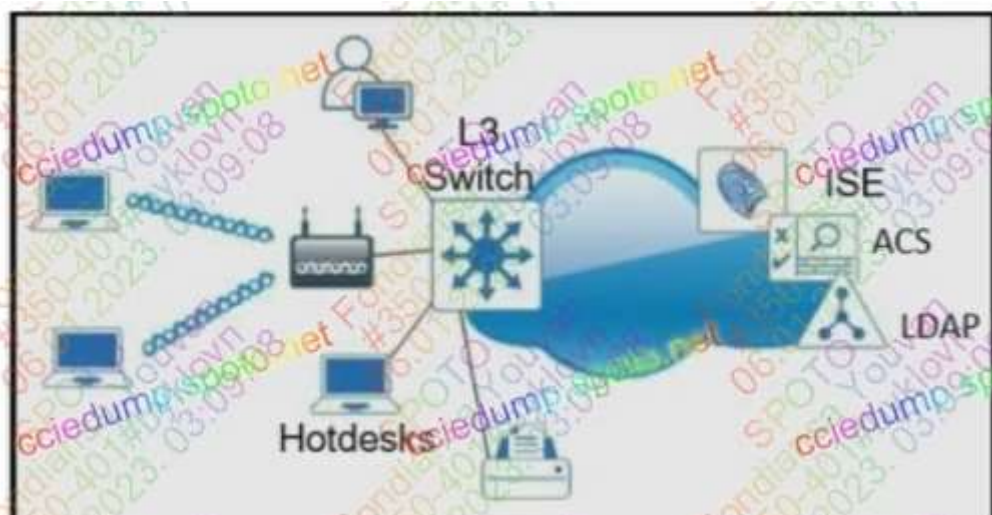
**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 352



Refer to the exhibit. Which single security feature is recommended to provide Network Access Control in the enterprise?

- A. port security sticky MAC
- B. 802.1 X
- C. MAB
- D. WebAuth

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 353



Refer to the exhibit. A network engineer is troubleshooting an issue with the file server based on reports of slow file transmissions. Which two commands or command sets are required in switch SW1 to analyze the traffic from the file server with a packet analyzer? (Choose two.)

- A. SW1#show ip route
- B. SW1#show vlan
- C. SW1#show monitor
- D. SW1(config)#monitor session 1 source interface gigabitethernet0/3  
SW1(config)#monitor session 1 destination interface gigabitethernet0/1 encapsulation replicate
- E. SW1(config)#monitor session 1 source interface gigabitethernet0/1  
SW1(config)#monitor session 1 destination interface gigabitethernet0/3 encapsulation replicate

**Correct Answer: CD**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 354

Which protocol is used to encrypt control plane traffic between SD-WAN controllers and SD-WAN endpoints?

- A. PGP
- B. DTLS
- C. HTTPS
- D. IPsec

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 355



Refer to the exhibit. Which two configurations enable R1 and R2 to advertise routes into OSPF? (Choose two.)

- A. R1  
router ospf 0  
network 192.168.1.0 255.255.255.0 area 0  
network 192.168.2.0 255.255.255.0 area 0
- B. R2  
router ospf 0  
network 172.16.1.0 0.0.0.255 area 0  
network 172.16.2.0 255.255.255.0 area 0
- C. R1  
router ospf 0  
network 192.168.1.0 0.0.0.255 area 0  
network 192.168.2.0 0.0.0.255 area 0
- D. R2  
router ospf 0  
network 172.16.1.0 255.255.255.0 area 0  
network 172.16.2.0 255.255.255.0 area 0
- E. R2  
router ospf 0  
network 172.16.1.0 0.0.0.255 area 0  
network 172.16.2.0 0.0.0.255 area 0

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 356



Company policy restricts VLAN 10 to be allowed only on SW1 and SW2. All other VLANs can be on all three switches. An administrator has noticed that VLAN 10 has propagated to SW3. Which configuration corrects the issue?

- A. SW1(config)#int gi1/1  
SW1(config)#switchport trunk allowed vlan 1-9,11-4094
- B. SW2(config)#int gi1/2  
SW2(config)#switchport trunk allowed vlan 1-9,11-4094
- C. SW1(config)#int gi1/1  
SW1(config)#switchport trunk allowed vlan 10
- D. SW2(config)#int gi1/2  
SW2(config)#switchport trunk allowed vlan 10

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 357

Which function is handled by Manage in the Cisco SD-WAN fabric?

- A. Establishes BFD sessions to test liveliness of links and nodes.
- B. Distributes policies that govern data forwarding.

- C. Establishes IPsec tunnels with nodes.
- D. Performs remote software upgrades for WAN Edge, vSmart, and vBond.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 358



Refer to the exhibit. An engineer reconfigures the port-channel between SW1 and SW2 from an access port to a trunk and immediately notices this error in SW1's log:  
 \*Mar 1 09:47:22.245: % PM-4-ERR\_DISABLE: bpduguard error detected on Gi0/0, putting Gi0/0 in err-disable state

Which command set resolves this error?

- A. SW1(config-if)#interface G0/0  
 SW1(config-if)#no spanning-tree bpduguard enable  
 SW1(config-if)#shut  
 SW1(config-if)#no shut
- B. SW1(config-if)#interface G0/0  
 SW1(config-if)#spanning-tree bpduguard enable  
 SW1(config-if)#shut  
 SW1(config-if)#no shut
- C. SW1(config-if)#interface G0/0  
 SW1(config-if)#no spanning-tree bpdufilter  
 SW1(config-if)#shut  
 SW1(config-if)#no shut
- D. SW1(config-if)#interface G0/1  
 SW1(config-if)#spanning-tree bpduguard enable  
 SW1(config-if)#shut  
 SW1(config-if)#no shut

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 359

Where is radio resource management performed in a Cisco SD-access wireless solution?

- A. DNA Center
- B. Cisco CMX
- C. control plane node
- D. wireless controller

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 360

What mechanism does PIM use to forward multicast traffic?

- A. PIM dense mode uses a pull model to deliver multicast traffic.
- B. PIM sparse mode uses a flood and prune model to deliver multicast traffic.
- C. PIM sparse mode uses a pull model to deliver multicast traffic.
- D. PIM sparse mode uses receivers to register with the RP.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 361

By default, which virtual MAC address does HSRP group 41 use?

- A. 0c:5e:ac:07:0c:29
- B. 00:00:00:07:ac:29
- C. 00:05:0c:07:ac:41
- D. 0c:5e:ac:07:c0:41

**Correct Answer:** B

**Section:** (none)

**Explanation**

Explanation/Reference:

#### QUESTION 362

```
from pythonping import ping
import paramiko
import sys

s= "%s %s" % (sys.argv[1], '')
s1=s.replace(' ', '')
ip= s1
t= "%s %s" % (sys.argv[2], '')
r= ping(s1, count=7)
r1= r.success()
if r1!= True:
 exit()
client= paramiko.SSHClient()
client.load_system_host_keys()
client.set_missing_host_key_policy(paramiko.AutoAddPolicy())
client.connect(ip, port= 22, username= usr, password= pswd)
stdin, stdout, stderr = client.exec_command(t + '\n')
time.sleep(3)
print(t)
for u in stdout:
 print(u)
client.close()
```

Refer to the exhibit. Which action results from executing the Python script?

- A. SSH to the IP address that is manually entered on that device
- B. display the unformatted output of a command that is entered on that device
- C. display the output of a command that is entered on that device
- D. display the output of a command that is entered on that device in a single line

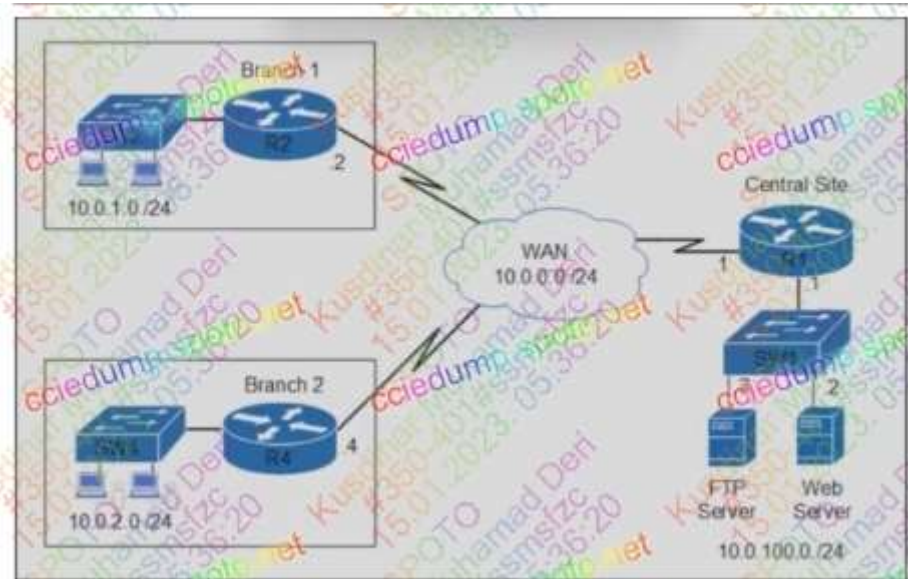
**Correct Answer: C**

**Section: (none)**

**Explanation**

Explanation/Reference:

#### QUESTION 363



Refer to the exhibit. A network engineer must monitor the response time from the branch offices to the central site. Which command set configures and activates the IPSLA feature in the R4 router?

- A. 

```
ip sla 35
icmp-echo 10.0.0.4 source-ip 10.0.100.3
history buckets-kept 300
ip sla schedule 35 life forever start-time now
```
- B. 

```
ip sla 35
icmp-echo 10.0.100.3 source-ip 10.0.0.4
frequency 300
ip sla schedule 35 life forever start-time now
```
- C. 

```
ip sla 35
icmp-echo 10.0.0.1source-ip 10.0.100.1
timeout 300
ip sla schedule 35 life forever start-time now
```
- D. 

```
ip sla 35
icmp-echo 10.0.0.4 source-ip 10.0.100.3
request-data-size 64
ip sla schedule 35 life forever start-time now
```

**Correct Answer: B**

**Section: (none)**

**Explanation**

Explanation/Reference:

**QUESTION 364**

A customer has a pair of Cisco 5520 WLCs set up in an SSO cluster to manage all Aps. Guest traffic is anchored to a Cisco 3504 WLC located in a DMZ. Which action is needed to ensure that the EoIP tunnel remains an UP state in the event of failover on the SSO cluster?

- A. Use the mobility MAC when the mobility peer is configured.
- B. Configure back-to-back connectivity on the RP ports.
- C. Use the same mobility domain on all WLCs.
- D. Enable default gateway reachability check

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 365**

Which two GRE features are configured to prevent fragmentation? (Choose two)

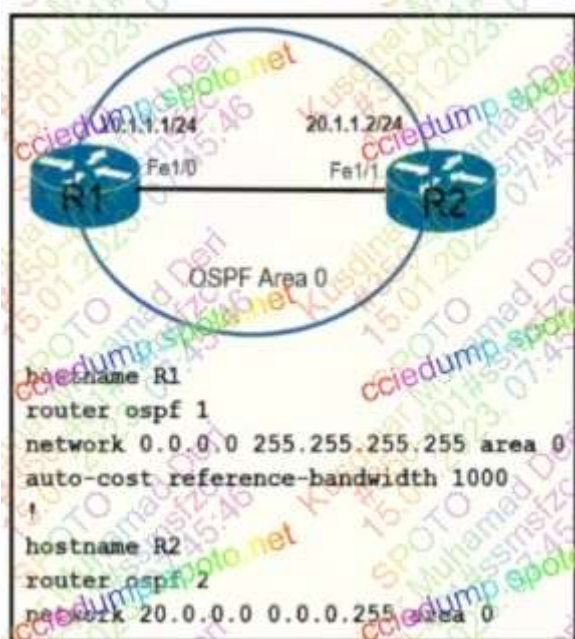
- A. MTU ignore
- B. IP MTU
- C. DF bit clear
- D. TCP MSS
- E. TCP window size

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 366**

Refer to the exhibit. Which command must be applied to R2 for an OSPF neighborship to form?

- A. network 20.0.0.2 0.0.0.0 area 0
- B. network 20.0.0.2 0.0.0.3 area 0
- C. network 20.1.1.0 0.0.0.0 area 0
- D. network 20.1.1.2 0.0.0.0 area 0

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 367**

What is one characteristic of VXLAN?

- A. It uses STP to prevent loops in the underlay network.
- B. It supports multitenant segments.
- C. It uses the Layer 2 header to transfer packets through the network underlay.
- D. It supports a maximum of 4096 VLANs.

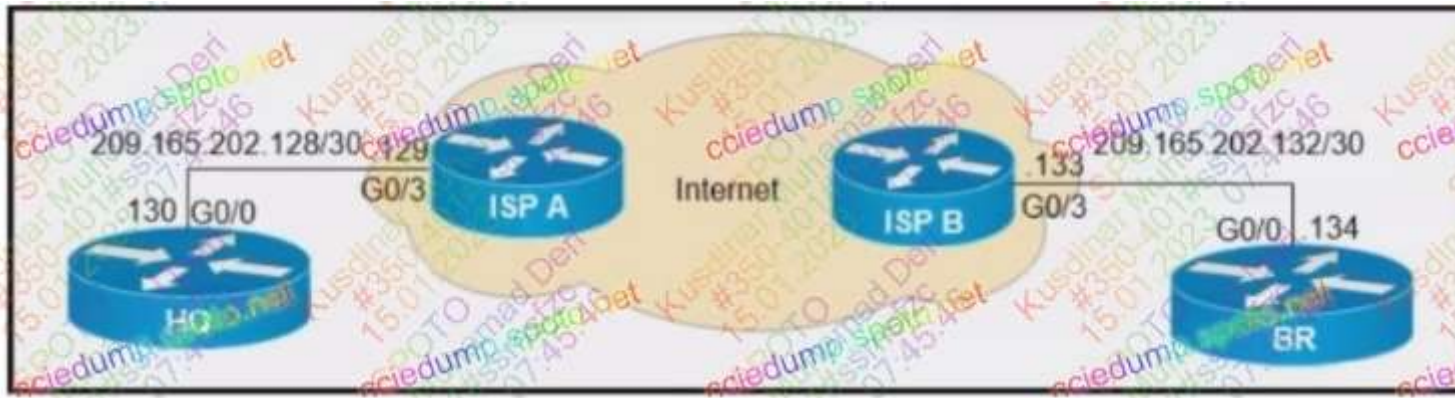
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 368**



Refer to the exhibit. What is the effect of these commands on the BR and HQ tunnel interfaces?

```
BR(config)# interface tunnel1
BR(config-if) # keepalive 53

HQ(config)# interface tunnel1
HQ(config-if)# keepalive 53
```

- A. The tunneling protocol goes down when the keepalive counter reaches 5.
- B. The keepalives are sent every 3 seconds and 5 retries.
- C. The keepalives are sent every 5 seconds and 3 retries.
- D. The tunneling protocol goes down when the keepalive counter reaches 6.

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

**Explanation/Reference:**

#### QUESTION 369

A customer has recently implemented a new wireless infrastructure using WLC-5520s at a site directly next to a large commercial airport. Users report that they intermittently lose Wi-Fi connectivity, and troubleshooting reveals it is due to frequent channel changes. Which two actions fix this issue? (Choose two.)

- A. Remove UNII-2 and Extended UNII-2 channels from the 5 Ghz channel list
- B. Configure channels on the UNII-2 and the Extended UNII-2 sub bands of the 5 Ghz band only.
- C. Disable DFS channels to prevent interference with Doppler radar.
- D. Enable DFS channels because they are immune to radar interference.
- E. Restore the DCA default settings because this automatically avoids'rchannel interference.

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

**Explanation/Reference:**

#### QUESTION 370

Which method creates an EEM applet policy that is registered with EEM and runs on demand or manually?

- A. 

```
event manager applet ondemand
event register
action 1.0 syslog priority critical msg 'This is a message from ondemand'
```
- B. 

```
event manager applet ondemand
event none
action 1.0 syslog priority critical msg 'This is a message from ondemand'
```
- C. 

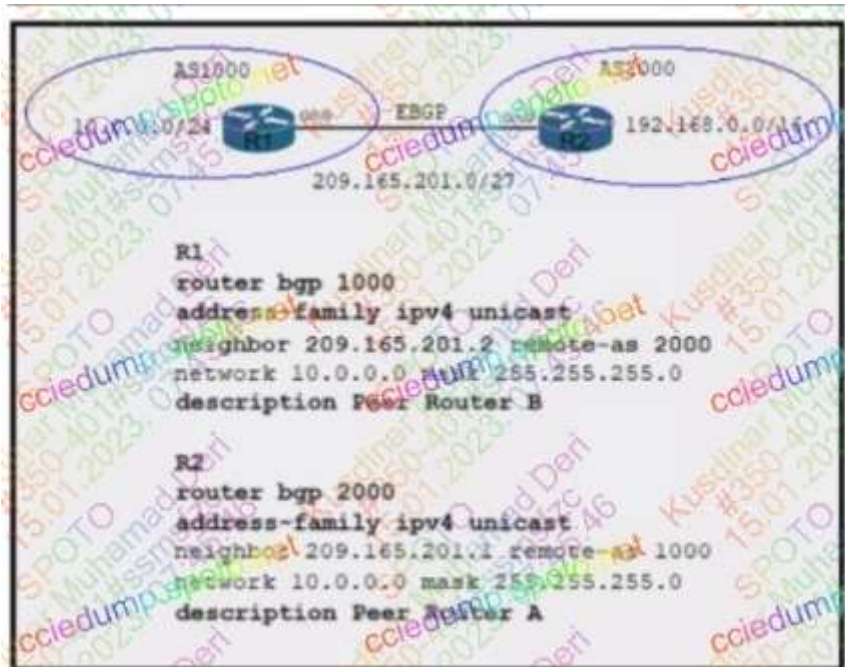
```
event manager applet ondemand
event manual
action 1.0 syslog priority critical msg 'This is a message from ondemand'
```
- D. 

```
event manager applet ondemand
action 1.0 syslog priority critical msg 'This is a message from ondemand'
```

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

**Explanation/Reference:**

#### QUESTION 371



Refer to the exhibit. Which two commands are needed to allow for full reachability between AS 1000 and AS 2000? (Choose two.)

- A. R2#network 209.165.201.0 mask 255.255.192.0
- B. R1#network 192.168.0.0 mask 255.255.0.0
- C. R2#no network 10.0.0.0 mask 255.255.255.0
- D. R1#no network 10.0.0.0 mask 255.255.255.
- E. R2#network 192.168.0.0 mask 255.255.0.0

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

**Explanation/Reference:**

#### QUESTION 372

Which LISP component decapsulates messages and forwards them to the map server responsible for the egress tunnel routers?

- A. Ingress Tunnel Router
- B. Router Locator
- C. Map Resolver
- D. Proxy ETR

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

**Explanation/Reference:**

#### QUESTION 373

Which two functions is an edge node responsible for? (Choose two.)

- A. provides the default entry point for fabric traffic
- B. provides a host database that maps endpoint ID to a current location
- C. provides multiple entry and exit points for fabric traffic
- D. authenticates endpoints
- E. provides the default exit point for fabric traffic

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

**Explanation/Reference:**

#### QUESTION 374

Which DNS lookup does an access point perform when attempting CAPWAP discovery?

- A. CISCO-CONTROLLER.local
- B. CISCO-DNA-CONTROLLER.local
- C. CISCO-CAPWAP-CONTROLLER.local
- D. CAPWAP-CONTROLLER.local

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

**Explanation/Reference:**

#### QUESTION 375

```
ip sla 10
icmp-echo 192.168.10.20
timeout 500
frequency 3
ip sla schedule 10 life forever start-time now
track 10 ip sla 10 reachability
```

Refer to the exhibit. The IP SLA is configured in a router. An engineer must configure an EEM applet to shut down the interface and bring it back up when there is a problem with the IP SLA. Which configuration should the engineer use?

- A. 

```
event manager applet EEM_IP_SLA
event sla 10 state unreachable
```
- B. 

```
event manager applet EEM_IP_SLA
event track 10 state down
```
- C. 

```
event manager applet EEM_IP_SLA
event track 10 state unreachable
```
- D. 

```
event manager applet EEM_IP_SLA
event sla 10 state down
```

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 376

If the noise floor is -90 dBm and the wireless client is receiving a signal of -75 dBm, what is the SNR?

- A. -165
- B. 1.2
- C. 83
- D. 15

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 377

Which activity requires access to Cisco DNA Center CLI?

- A. graceful shutdown of Cisco DNA Center
- B. provisioning a wireless LAN controller
- C. creating a configuration template
- D. upgrading the Cisco DNA Center software

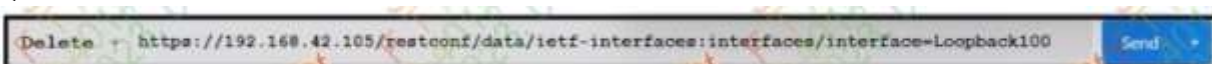
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 378



Refer to the exhibit. What does the response "204 No Content" mean for the REST API request?

- A. Interface loopback 100 is not removed from the configuration.
- B. The DELETE method is not supported.
- C. Interface loopback 100 is not found in the configuration.
- D. Interface loopback 100 is removed from the configuration.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 379

```

vlan 222
 remote-span
!
vlan 223
 remote-span
!
monitor session 1 source interface FastEthernet0/1 tx
monitor session 1 source interface FastEthernet0/2 rx
monitor session 1 source interface port-channel 5
monitor session 1 destination remote vlan 222

```

Refer to the exhibit. These commands have been added to the configuration of a switch. Which Command flags an error if it is added to this configuration?

- A. monitor session 1 source vlan 10
- B. monitor session 1 source interface port-channel 6
- C. monitor session 1 source interface port-channel 7, port-channel8
- D. monitor session 1 source interface FastEthernet0/1 rx

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 380

An engineer applies this configuration to router R1. How does R1 respond when the user "cisco" logs in?

```

username cisco privilege 15 noescape secret 5 J$dhR5qRK%rnzP$g&
username cisco autocommand show startup-config
aaa authentication login default local-case enable
aaa authorization exec default local

```

- A. It displays the startup config and then permits the user to execute commands.
- B. It displays the startup config and then terminates the session
- C. It places the user into EXEC mode but permits the user to execute only the show startup-config com
- D. It places the user into EXEC mode and permits the user to execute any command.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 381

What are two benefits of implementing a traditional WAN instead of an SD-WAN solution? (Choose two.)

- A. faster fault detection
- B. simplified troubleshooting
- C. lower data plane overhead
- D. lower control plane abstraction
- E. comprehensive configuration standardization

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 382

What is one benefit of adopting a data modeling language?

- A. augmenting the use of management protocols like SNMP for status subscriptions
- B. refactoring vendor and platform specific configurations with widely compatible configurations
- C. augmenting management process using vendor centric actions around models
- D. deploying machine-friendly codes to manage a high number of devices

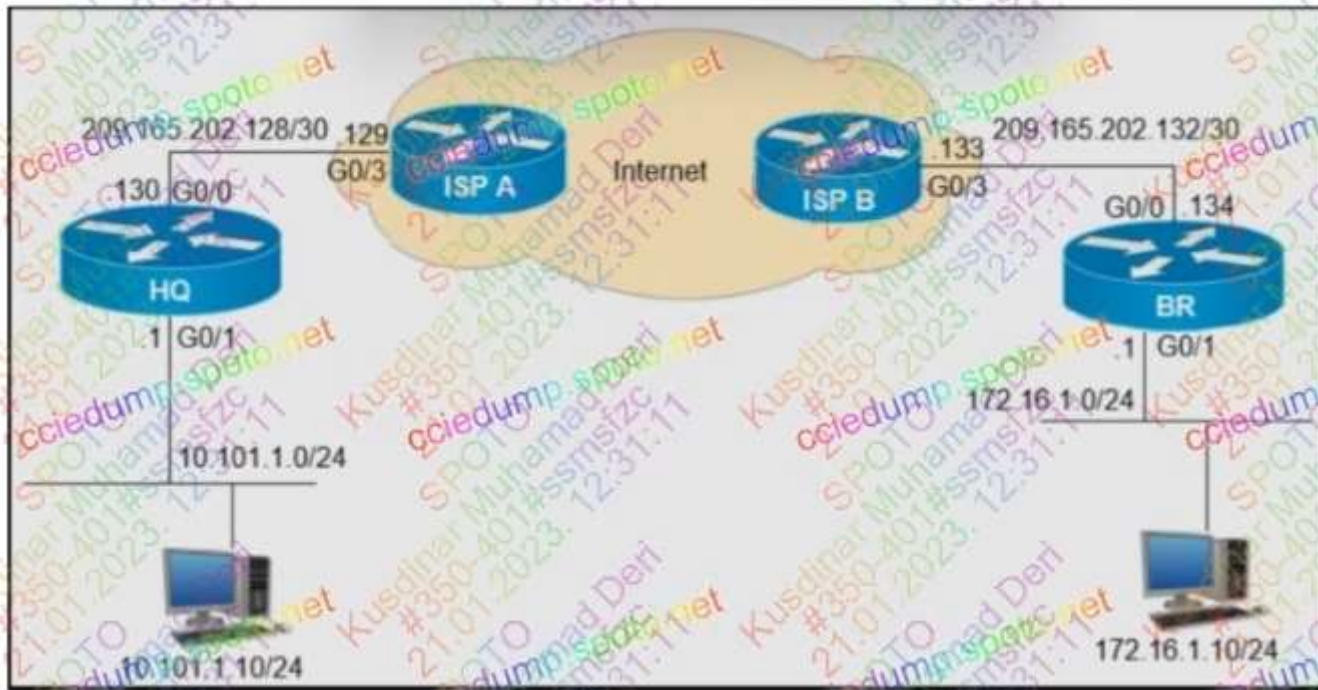
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 383



Refer to the exhibit. Which configuration must be applied to the HQ router to set up a GRE tunnel between the HQ and BR routers?

- A. 

```
interface Tunnel1
ip address 209.165.202.130 255.255.255.252
tunnel source GigabitEthernet0/0
tunnel destination 209.165.202.129
```
- B. 

```
interface Tunnel1
ip address 10.111.111.1 255.255.255.0
tunnel source GigabitEthernet0/0
tunnel destination 209.165.202.133
```
- C. 

```
interface Tunnel1
ip address 10.111.111.1 255.255.255.0
tunnel source GigabitEthernet0/0
tunnel destination 209.165.202.134
```
- D. 

```
interface Tunnel1
ip address 10.111.111.1 255.255.255.0
tunnel source GigabitEthernet0/0
tunnel destination 209.165.202.129
```

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 384

What is the data policy in a Cisco SD-WAN deployment?

- A. group of services tested to guarantee devices and links liveliness within the SD-WAN overlay
- B. set of statements that defines how data is forwarded based on IP packet information and specific VPNs
- C. list of ordered statements that define node configurations and authentication used within the SD-WAN overlay
- D. detailed database mapping several kinds of addresses with their corresponding location

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 385

What does the LAP send when multiple WLCs respond to the CISCO-CAPWAP-CONTROLLER local domain hostname during the CAPWAP discovery and join process?

- A. unicast discovery request to the first WLC that resolves the domain name
- B. unicast discovery request to each WLC
- C. join request to all the WLCs
- D. multicast discovery request

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 386

A customer has recently implemented a new wireless infrastructure using WLC-5520s at a site directly next to a large commercial airport. Users report that they intermittently lose Wi-Fi connectivity, and troubleshooting reveals it is due to frequent channel changes. Which two actions fix this issue? (Choose two.)

- A. Remove UNII-2 and Extended UNII-2 channels from the 5 Ghz channel list
- B. Configure channels on the UNII-2 and the Extended UNII-2 sub bands of the 5 Ghz band only.
- C. Disable DFS channels to prevent interference with Doppler radar.
- D. Enable DFS channels because they are immune to radar interference.
- E. Restore the DCA default settings because this automatically avoids channel interference.

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 387

Which function is performed by vSmart in the Cisco SD-WAN architecture?

- A. facilitation of NAT detection and traversal
- B. redistribution between OMP and other routing protocols
- C. execution of localized policies
- D. distribution of IPsec keys

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 388



Refer to the exhibit. An engineer must deny HTTP traffic from host A to host B while allowing all other communication between the hosts. Which command set accomplishes this task?

- A. 

```
SW1(config)# ip access-list extended DENY-HTTP
SW1(config-ext-nacl)# deny tcp host 10.1.1.10 host 10.1.1.20 eq www

SW1(config)# ip access-list extended MATCH_ALL
SW1(config-ext-nacl)# permit ip any any

SW1(config)# vlan access-map HOST-A-B 10
SW1(config-access-map)# match ip address DENY-HTTP
SW1(config-access-map)# action drop
SW1(config)# vlan access-map HOST-A-B 20
SW1(config-access-map)# match ip address MATCH_ALL
SW1(config-access-map)# action forward
```
- B. 

```
SW1(config)# ip access-list extended DENY-HTTP
SW1(config-ext-nacl)# permit tcp host 10.1.1.10 host 10.1.1.20 eq www

SW1(config)# ip access-list extended MATCH_ALL
SW1(config-ext-nacl)# permit ip any any

SW1(config)# vlan access-map HOST-A-B 10
SW1(config-access-map)# match ip address DENY-HTTP
SW1(config-access-map)# action drop
SW1(config)# vlan access-map HOST-A-B 20
SW1(config-access-map)# match ip address MATCH_ALL
SW1(config-access-map)# action forward
```
- C. 

```
SW1(config)# mac access-list extended HOST-A-B
SW1(config-ext-macl)# permit host aaaa.bbbb.cccc aaaa.bbbb.dddd

SW1(config)# ip access-list extended DENY-HTTP
SW1(config-ext-nacl)# permit tcp host 10.1.1.10 host 10.1.1.20 eq www

SW1(config)# vlan access-map DROP-MAC 10
SW1(config-access-map)# match mac address HOST-A-B
SW1(config-access-map)# action forward
SW1(config)# vlan access-map HOST-A-B 20
SW1(config-access-map)# match ip address DENY-HTTP
SW1(config-access-map)# action drop
```

D. SW1(config)# mac access-list extended HOST-A-B  
 SW1(config-ext-macl)# permit host aaaa.bbbb.cccc aaaa.bbbb.dddd

SW1(config)# ip access-list extended DENY-HTTP  
 SW1(config-ext-nacl)# deny tcp host 10.1.1.10 host 10.1.1.20 eq www

SW1(config)# vlan access-map DROP-MAC 10  
 SW1(config-access-map)# match mac address HOST-A-B  
 SW1(config-access-map)# action drop  
 SW1(config)# vlan access-map HOST-A-B 20  
 SW1(config-access-map)# match ip address DENY-HTTP  
 SW1(config-access-map)# action drop

SW1(config)# vlan filter HOST-A-B vlan 10

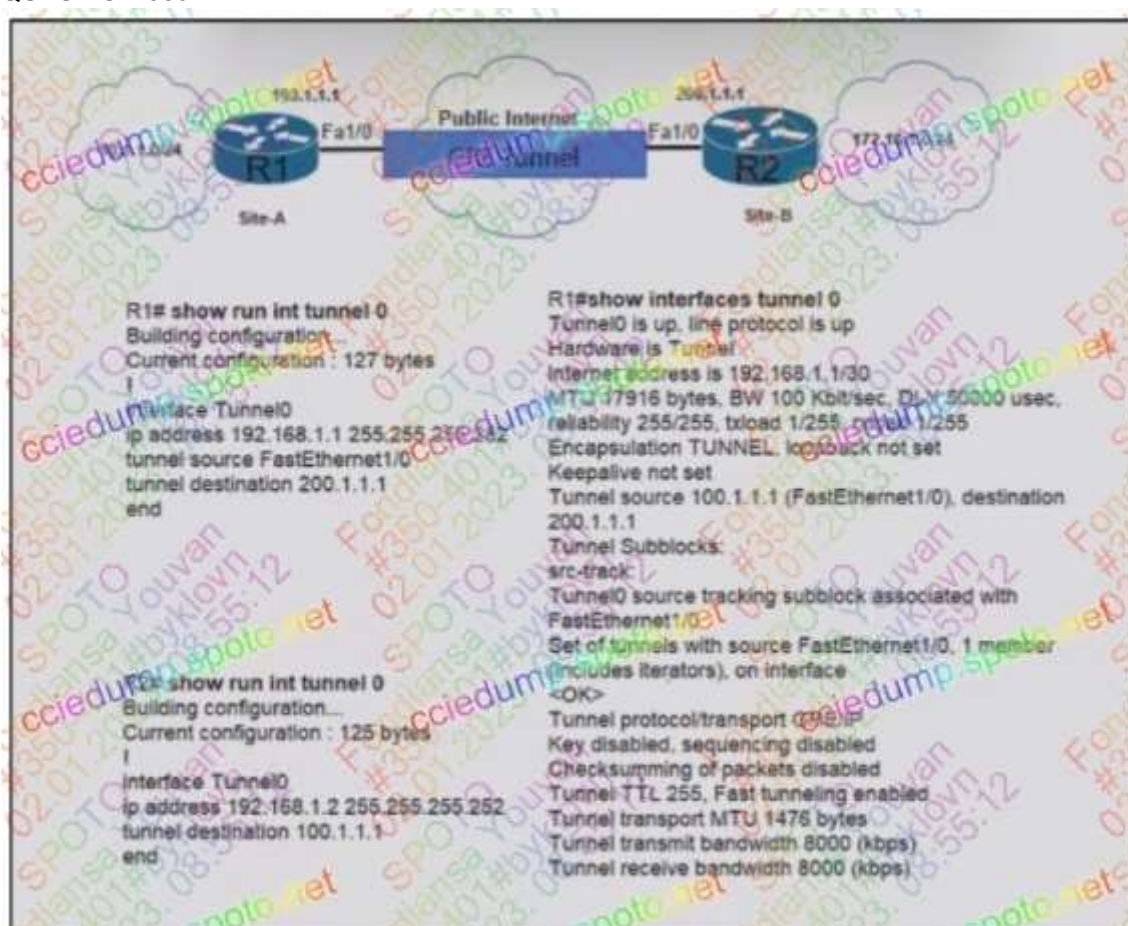
Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 389



Which GRE tunnel configuration command is missing on R2?

- A. tunnel destination 200.1.1.1
- B. tunnel source 200.1.1.1
- C. tunnel source 172.16.1.0
- D. tunnel source 192.168.1.2

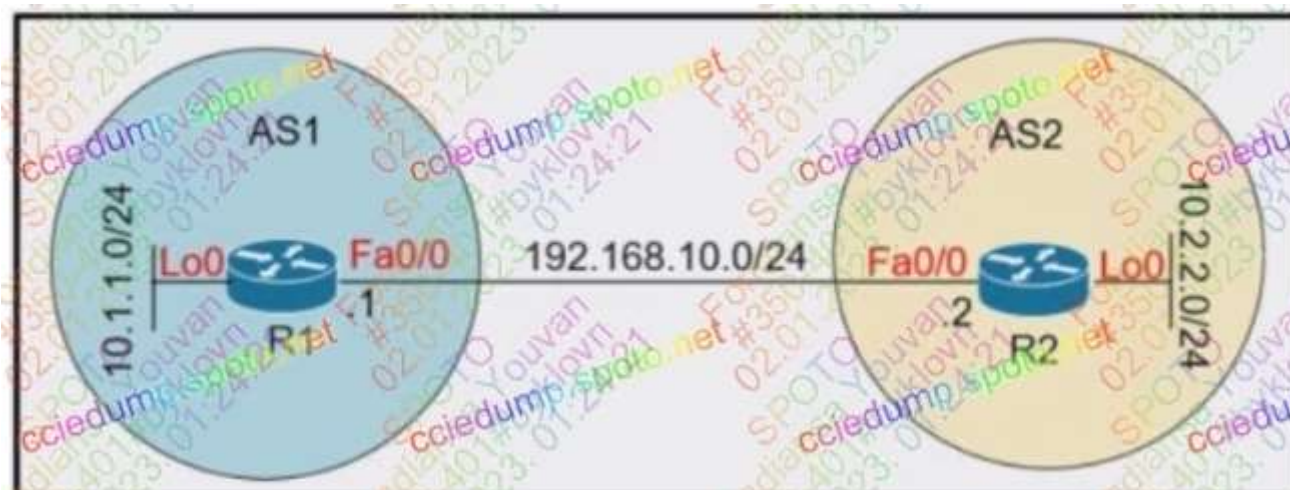
Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 390



Refer to the exhibit. Which configuration establishes EBGP neighborship between these two directly connected neighbors and exchanges the loopback network of the two routers through BGP?

- A. R1(config)#router bgp 1  
R1(config-router)#neighbor 192.168.10.2 remote-as 2  
R1(config-router)#network 10.0.0.0 mask 255.0.0.0  
  
R2(config)#router bgp 2  
R2(config-router)#neighbor 192.168.10.1 remote-as 1  
R2(config-router)#network 10.0.0.0 mask 255.0.0.0
- B. R1(config)#router bgp 1  
R1(config-router)#neighbor 192.168.10.2 remote-as 2  
R1(config-router)#network 10.1.1.0 mask 255.255.255.0  
  
R2(config)#router bgp 2  
R2(config-router)#neighbor 192.168.10.1 remote-as 1  
R2(config-router)#network 10.2.2.0 mask 255.255.255.0
- C. R1(config)#router bgp 1  
R1(config-router)#neighbor 10.2.2.2 remote-as 2  
R1(config-router)#network 10.1.1.0 mask 255.255.255.0  
  
R2(config)#router bgp 2  
R2(config-router)#neighbor 10.1.1.1 remote-as 1  
R2(config-router)#network 10.2.2.0 mask 255.255.255.0
- D. R1(config)#router bgp 1  
R1(config-router)#neighbor 10.2.2.2 remote-as 2  
R1(config-router)#neighbor 10.2.2.2 update-source lo0  
R1(config-router)#network 10.1.1.0 mask 255.255.255.0  
  
R2(config)#router bgp 2  
R2(config-router)#neighbor 10.1.1.1 remote-as 1  
R2(config-router)#neighbor 10.1.1.1 update-source lo0  
R2(config-router)#network 10.2.2.0 mask 255.255.255.0

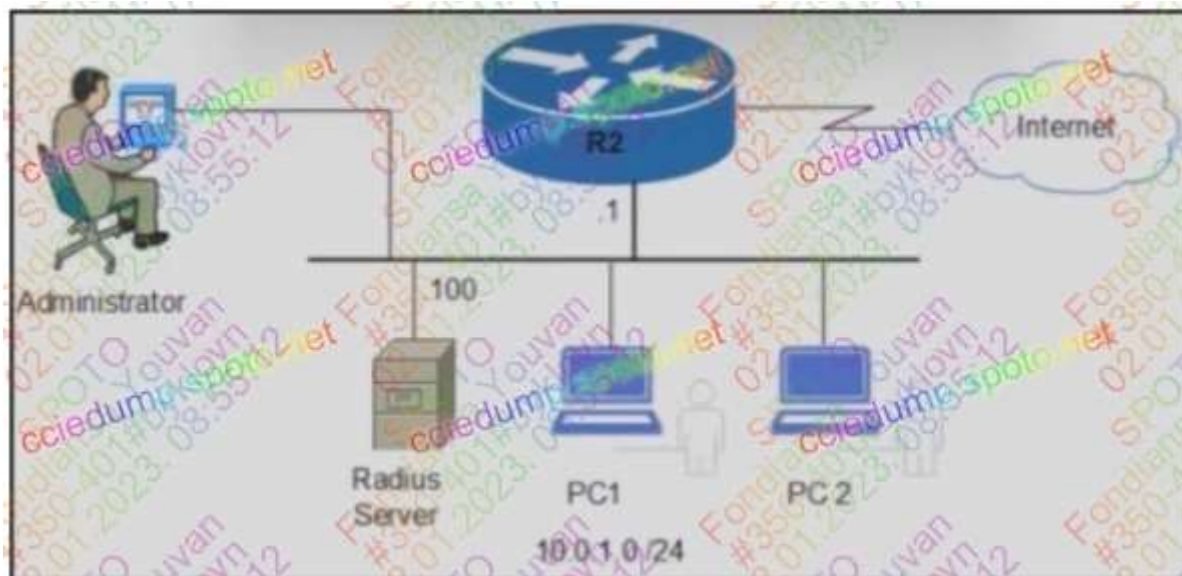
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 391



Refer to the exhibit. Which command set enables router R2 to be configured via NETCONF?

- A. R1(config)#snmp-server manager  
R1(config)#snmp-server community ENCOR rw
- B. R1(config)#netconf  
R1(config)#ip http secure-server
- C. R1(config)#username Netconf privilege 15 password example\_password  
R1(config)#netconf-yang  
R1(config)#netconf-yang feature candidate-datastore
- D. R1(config)#snmp-server manager  
R1(config)#snmp-server community ENCOR ro

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 392

Which measurement is used from a post wireless survey to depict the cell edge of the access points?

- A. CCI  
B. SNR  
C. RSSI  
D. Noise

**Correct Answer:** C

**Section:** (none)

**Explanation**

Explanation/Reference:

#### QUESTION 393

```
router#sh run | b line con
line con 0
password cisco
stopbits 1
line aux 0
stopbits 1
line vty 0 4
!
end

router#sh run | i username|aaa
no aaa new-model
username user password 0 user
router#
```

Refer to the exhibit. Which configuration enables password checking on the console line, using only a password?

- A. 

```
router(config)# line vty 0 4
router(config-line)# login
```
- B. 

```
router(config)# line con 0
router(config-line)# login
```
- C. 

```
router(config)# line con 0
router(config-line)# exec-timeout 0 0
```
- D. 

```
router(config)# line con 0
router(config-line)# login local
```

**Correct Answer:** B

**Section:** (none)

**Explanation**

Explanation/Reference:

#### QUESTION 394

```
import requests
import json

url='https://switch1P-100.com/ins'
switchuser='username'
switchpassword='password123'

myheaders={'content-type':'application/json-rpc'}
payload={
 {
 "jsonrpc": "2.0",
 "method": "cli",
 "params": [
 "show clock",
 "version": 1
],
 "id": 1
 }
}

response = requests.post(url,data=json.dumps(payload), headers=myheaders,auth=(switchuser,switchpassword), verify=False) json(P
```

Refer to the exhibit. Which Python code parses the response and prints "18:32:21.474 UTC Sun Mar 10 2019"?

- A. `print(response['jsonrpc']['body']['simple_time'])`
- B. `print(response['result'][0]['simple_time'])`
- C. `print(response['body']['simple_time'])`
- D. `print(response['result']['body']['simple_time'])`

**Correct Answer:** D

**Section:** (none)

**Explanation**

Explanation/Reference:

<https://www.kelsercorp.com/blog/cisco-nexus-9000-automation-part-2>

#### QUESTION 395

Which LISP component is required for a LISP site to communicate with a non-LISP site?

- A. Proxy ETR
- B. Proxy ITR
- C. ITR
- D. ETR

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 396

```
R1#show crypto isakmp sa
IPv4 Crypto ISAKMP SA
dst src state conn-id status
209.165.201.6 209.165.201.1 QM_IDLE 1001 ACTIVE
```

Refer to the exhibit. After configuring an IPsec VPN, an engineer enters the show command to verify the ISAKMP SA status. What does the status show?

- A. ISAKMP SA has been created, but it has not continued to form.
- B. ISAKMP SA is authenticated and can be used for Quick Mode.
- C. VPN peers agreed on parameters for the ISAKMP SA
- D. Peers have exchanged keys, but ISAKMP SA remains unauthenticated.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 397

Which resource is able to be shared among virtual machines deployed on the same physical server?

- A. Applications
- B. Operating System
- C. VM configuration file
- D. Disk

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 398

What is a characteristic of a WLC that is in master controller mode?

- A. The master controller is responsible for load balancing all connecting clients to other controllers.
- B. All wireless LAN controllers are managed by the master controller.
- C. All new APs that Join the WLAN are assigned to the master controller.
- D. Configuration on the master controller is executed on all wireless LAN controllers.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://www.cisco.com/c/en/us/support/docs/wireless/4400-series-wireless-lan-controllers/69561-wlc-faq.html>

#### QUESTION 399

What is one characteristic of Cisco DNA Center and Manage northbound APIs?

- A. They push configuration changes down to devices.
- B. They are RESTful APIs.
- C. They implement the NETCONF protocol.
- D. They exchange XML-formatted content.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 400

```

*Apr 6 13:35:07.826: AAA/BIND(00000055): Bind i/f
*Apr 6 13:35:07.826: AAA/AUTHEN/LOGIN (00000055): Pick method list 'default'
*Apr 6 13:35:07.826: TPLUS: Queuing AAA Authentication request 85 for processing
*Apr 6 13:35:07.826: TPLUS(00000055) login timer started 1020 sec timeout
*Apr 6 13:35:07.826: TPLUS: processing authentication start request id 85
*Apr 6 13:35:07.826: TPLUS: Authentication start packet created for 85()
*Apr 6 13:35:07.826: TPLUS: Using server 10.106.60.182
*Apr 6 13:35:07.826: TPLUS(00000055)/0/NB_WAIT/225FE2DC: Started 5 sec timeout
*Apr 6 13:35:07.830: TPLUS(00000055)/0/NB_WAIT: socket event 2
*Apr 6 13:35:07.830: TPLUS(00000055)/0/NB_WAIT: wrote entire 38 bytes request
*Apr 6 13:35:07.830: TPLUS(00000055)/0/READ: socket event 1
*Apr 6 13:35:07.830: TPLUS(00000055)/0/READ: Would block while reading
*Apr 6 13:35:07.886: TPLUS(00000055)/0/READ: socket event 1
*Apr 6 13:35:07.886: TPLUS(00000055)/0/READ: read entire 12 header bytes (expect 6 bytes data)
*Apr 6 13:35:07.886: TPLUS(00000055)/0/READ: socket event 1
*Apr 6 13:35:07.886: TPLUS(00000055)/0/READ: read entire 18 bytes response
*Apr 6 13:35:07.886: TPLUS(00000055)/0/225FE2DC: Processing the reply packet
*Apr 6 13:35:07.886: TPLUS: received bad AUTHEN packet: length = 6, expected 43974
*Apr 6 13:35:07.886: TPLUS: Invalid AUTHEN packet (check keys).

```

Refer to the exhibit. An engineer configured TACACS+ to authenticate remote users, but the configuration is not working as expected. Which configuration must be applied to enable access?

- A. R1(config)#tacacs server prod  
R1(config-server-tacacs)#port 1020
- B. R1(config)#ip tacacs source-interface Gig 0/0
- C. R1(config)#tacacs server prod  
R1(config-server-tacacs)#key cisco123
- D. R1(config)#aaa authorization exec default group tacacs+ local

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 401



Refer to the exhibit. A network engineer is configuring OSPF between router R1 and router R2. The engineer must ensure that a DR/BDR election does not occur on the Ethernet interfaces in area 0. Which configuration set accomplishes this goal?

- A. R1(config-if)interface Gi0/0  
R1(config-if)ip ospf database-filter all out  
R2(config-if)interface Gi0/0  
R2(config-if)ip ospf database-filter all out
- B. R1(config-if)interface Gi0/0  
R1(config-if)ip ospf network broadcast  
R2(config-if)interface Gi0/0  
R2(config-if)ip ospf network broadcast
- C. R1(config-if)interface Gi0/0  
R1(config-if)ip ospf priority 1  
R2(config-if)interface Gi0/0  
R2(config-if)ip ospf priority 1

- D. R1(config-if)interface Gi0/0  
R1(config-if)ip ospf network point-to-point  
R2(config-if)interface Gi0/0  
R2(config-if)ip ospf network point-to-point

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 402

What is a characteristic of a type 2 hypervisor?

- A. complicated deployment  
B. ideal for data center  
C. referred to as bare-metal  
D. ideal for client/end-user system

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 403



Refer to the exhibit. An engineer must configure an ERSPAN tunnel that mirrors traffic from Linux on Switch1 to Linux2 on Switch2. Which command must be added to the destination configuration to enable the ERSPAN tunnel?

- A. (config-mon-erspan-dst-src)# erspan-id 172.16.10.10  
B. (config-mon-erspan-dst-src)# erspan-id 110  
C. (config-mon-erspan-dst-src)# no shut  
D. (config-mon-erspan-dst-src)# origin ip address 172.16.10.10

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 404

An engineer must provide wireless coverage in a square office. The engineer has only one AP and believes that it should be placed in the middle of the room. Which antenna type should the engineer use?

- A. directional  
B. Omnidirectional  
C. Polarized  
D. Yagi

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 405

Which two mechanisms are available to secure NTP? (Choose two.)

- A. IP access list-based  
B. IP prefix list-based

- C. TACACS-based authentication
- D. IPsec
- E. encrypted authentication

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 406

Which technology uses network traffic telemetry, contextual information, and file reputation to provide insight into cyber threats?

- A. security services
- B. security intelligence
- C. threat defense
- D. segmentation

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 407

Which DHCP option helps lightweight APs find the IP address of a wireless LAN controller?

- A. Option 60
- B. Option 150
- C. Option 43
- D. Option 67

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 408

How does the EIGRP metric differ from the OSPF metric?

- A. The EIGRP metric is calculated based on bandwidth and delay. The OSPF metric is calculated on bandwidth only.
- B. The EIGRP metric is calculated based on bandwidth only. The OSPF metric is calculated on delay only.
- C. The EIGRP metric is calculated based on hop count and bandwidth. The OSPF metric is calculated on bandwidth and delay.
- D. The EIGRP metric is calculated based on delay only. The OSPF metric is calculated on bandwidth and delay.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 409

In a Cisco SD-WAN solution, how is the health of a data plane tunnel monitored?

- A. ARP probing
- B. with IP SLA
- C. using BFD
- D. with OMP

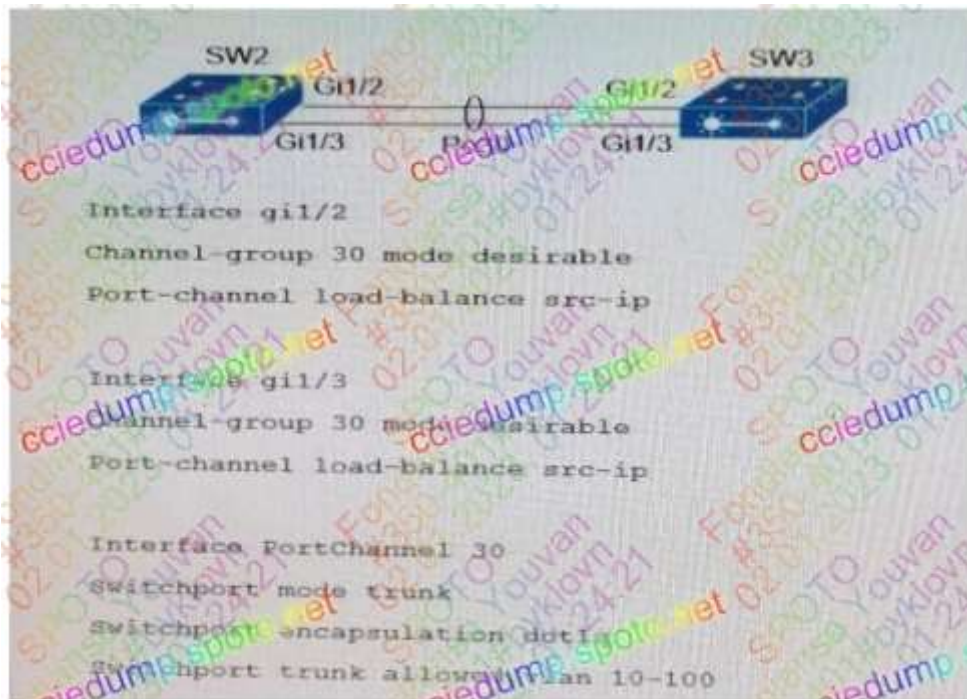
**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 410



Refer to the exhibit. A port channel is configured between SW2 and SW3. SW2 is not running a Cisco operating system. When all physical connections are made, the port channel does not establish. Based on the configuration excerpt of SW3, what is the cause of the problem?

- A. The port-channel mode should be set to auto
- B. The port channel on SW2 is using an incompatible protocol
- C. The port-channel trunk is not allowing the native VLAN.
- D. The port-channel interface load balance should be set to src-mac

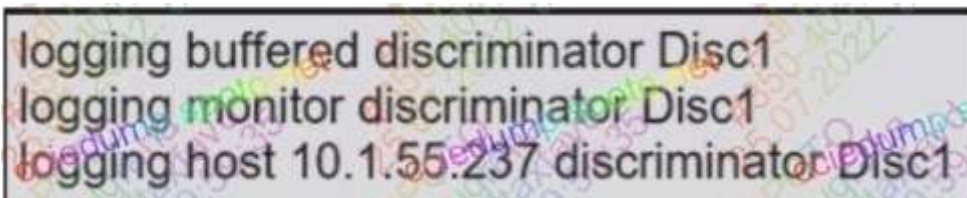
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 411



Refer to the exhibit. A network engineer is enabling logging to a local buffer, to the terminal, and to a syslog server for all debugging level logs filtered by facility code 7. Which command is needed to complete this configuration snippet?

- A. logging buffered discriminator Disc1 debugging
- B. logging buffered debugging
- C. logging discriminator Disc1 severity includes 7 facility includes fac 7
- D. logging discriminator Disc1 severity includes 7

**Correct Answer:** C

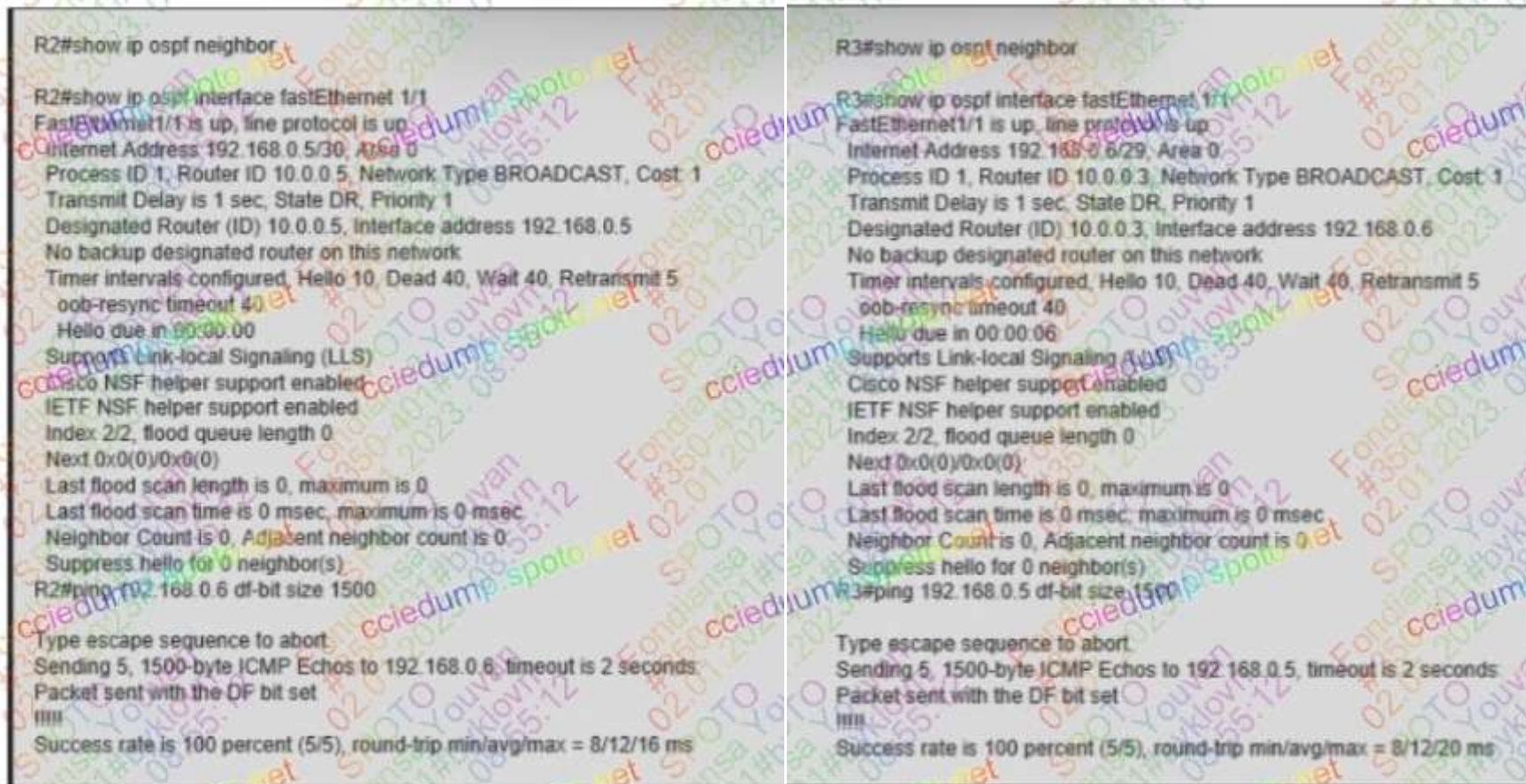
**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/esm/command/esm-cr-book/esm-cr-a1.html#wp1888787448>

#### QUESTION 412



Refer to the exhibit .Why does the OSPF neighborhood fail between the two interfaces?

- A. The OSPF timers are different.
- B. The MTU is not the same.
- C. The IP subnet mask is not the same.
- D. There is a mismatch in the OSPF interface network type.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 413

Which DHCP option provides the CAPWAP APs with the address of the wireless controller(s)?

- A. 66
- B. 150
- C. 43
- D. 69

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 414

What is one characteristic of the Cisco SD-Access control plane?

- A. It is based on VXLAN technology.
- B. Each router processes every possible destination and route.
- C. It stores remote routes in a centralized database server.
- D. It allows host mobility only in the wireless network.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 415

```

Router# show running-config
! lines omitted for brevity
username cisco password 0 cisco

aaa authentication login group1 group radius line
aaa authentication login group2 group radius local
aaa authentication login group3 group radius none

line con 0
password 0 cisco123
login authentication group1

line aux 0
login authentication group3

line vty 0
password 0 test123
login authentication group2

```

Refer to the exhibit. A network engineer must log in to the router via the console, but the RADIUS servers are not reachable. Which credentials allow console access?

- A. no username and only the password "cisco123"
- B. the username "cisco" and the password "cisco123"
- C. the username "cisco" and the password "cisco"
- D. no username and only the password "test123"

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 416

What is a command-line tool for consuming REST APIs?

- A. cURL
- B. Firefox
- C. Python requests
- D. Postman

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 417

In the Cisco DNA Center Image Repository, what is a golden image?

- A. The Cisco recommended software image for a specific device type.
- B. The latest software image that is available for a specific device type.
- C. A software image that meets the compliance requirements of the organization.
- D. A software image that is compatible with multiple device types.

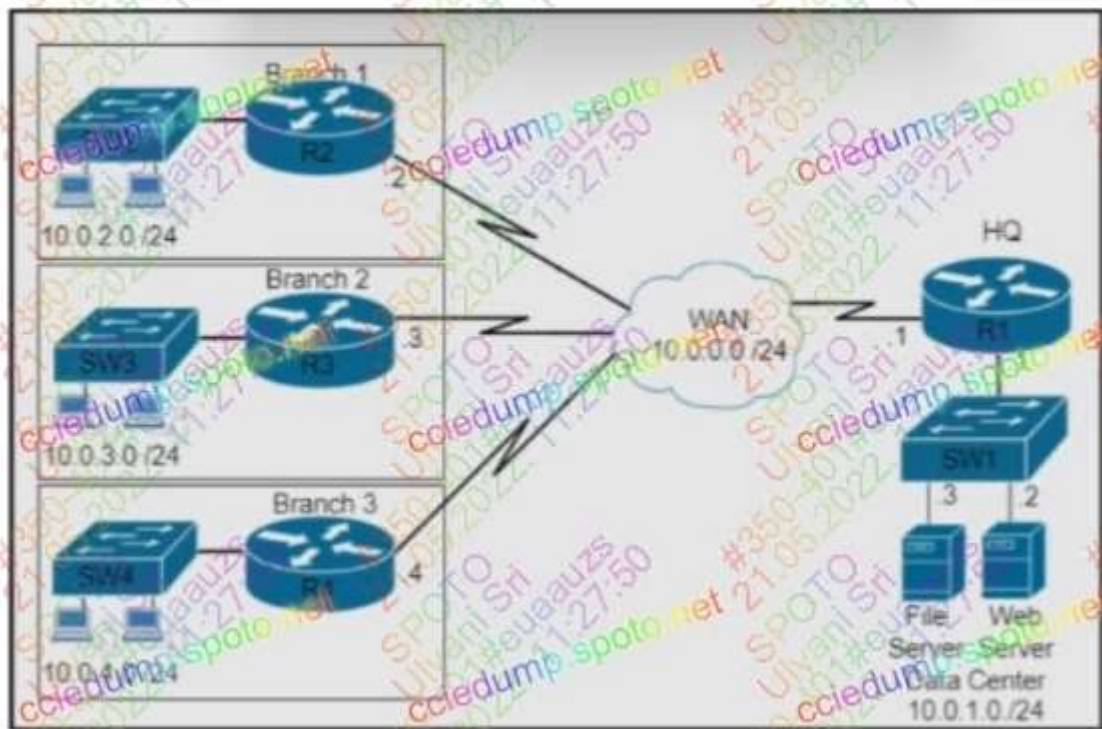
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 418



Refer to the exhibit. Which command set is needed to configure and verify router R3 to measure the response time from router R3 to the file server located in the data center?

- ```
ip sla 6
icmp-echo 172.29.139.134 source-ip 172.29.139.132
frequency 300
ip sla schedule 6 start-time now
show ip protocol
```
- ```
ip sla 6
icmp-echo 10.0.1.3 source-ip 10.0.0.3
frequency 300
ip sla schedule 6 life forever start-time now
show ip sla statistics 6
```
- ```
ip sla 6
icmp-echo 10.0.1.3 source-ip 10.0.0.3
frequency 300
ip sla schedule 6 life forever start-time now
show ip protocol
```
- ```
ip sla 6
icmp-echo 172.29.139.134 source-ip 172.29.139.132
frequency 300
ip sla schedule 6 start-time now
show ip sla statistics 6
```

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 419

```
Cat9300(config)# monitor session 1 type erspan-source
Cat9300(config-mon-erspan-src)# source interface Gi1/0/3
Cat9300(config-mon-erspan-src)# destination
Cat9300(config-mon-erspan-src-dst)# erspan-id 1
Cat9300(config-mon-erspan-src-dst)# ip address 198.51.100.123
Cat9300(config-mon-erspan-src-dst)# origin ip address 10.4.255.100
Cat9300(config-mon-erspan-src-dst)# do ping 198.51.100.123 source 10.4.255.100
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 198.51.100.123, timeout is 2 seconds:
Packet sent with a source address of 10.4.255.100
!!!!
Success rate is 80 percent (4/5), round-trip min/avg/max = 1/1/1 ms
```

Refer to the exhibit. The administrator configures an ERSPAN session, but no packets are received on the destination host. Which action is required to complete the configuration?

- Enable the ERSPAN session.
- Configure the ERSPAN destination VLAN as an RSPAN VLAN.
- Ensure that the ERSPAN destination addresses are not reachable through the Mgmt-vrf VRF.
- Ensure that the ERSPAN destination is reachable from the switch.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Exam B

QUESTION 1

Drag and drop the LISP components from the left onto the functions they perform on the right. Not all options are used.

Select and Place:

LISP map resolver	accepts LISP encapsulated map requests
LISP proxy ETR	learns of EID prefix mapping entries from an ETR
LISP route reflector	receives traffic from LISP sites and sends it to non-LISP sites
LISP ITR	receives packets from site-facing interfaces
LISP map server	

Correct Answer:

	LISP map resolver
	LISP map server
LISP route reflector	LISP proxy ETR
	LISP ITR

Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

Drag and drop the DHCP messages that are exchanged between a client and an AP into the order they are exchanged on the right.

Select and Place:

DHCP request	Step 1
DHCP offer	Step 2
DHCP discover	Step 3
DHCP ack	Step 4

Correct Answer:

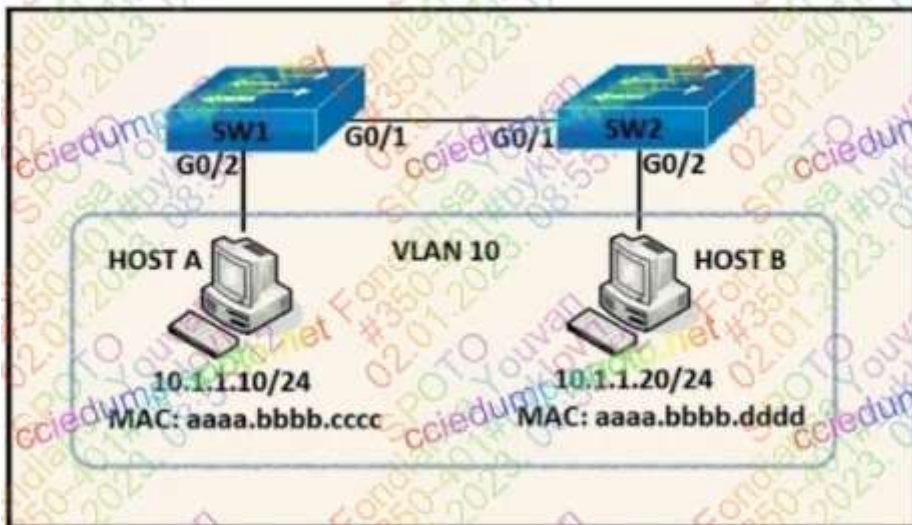
	DHCP discover
	DHCP offer
	DHCP request
	DHCP ack

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 3



Refer to the exhibit. An engineer must deny HTTP traffic from host A to host B while allowing all other communication between the hosts. Drag and drop the commands into the configuration to achieve these results. Some commands may be used more than once. Not all commands are used.

Select and Place:

```
SW1(config)# ip access-list extended DENY-HTTP
SW1(config-ext-nacl)# tcp host 10.1.1.10 host 10.1.1.20 eq www

SW1(config)# ip access-list extended MATCH_ALL
SW1(config-ext-nacl)# ip any any

SW1(config)# vlan access-map HOST-A-B 10
SW1(config-access-map)# match ip address DENY-HTTP
SW1(config-access-map)#

SW1(config)# vlan access-map HOST-A-B 20
SW1(config-access-map)# match ip address MATCH_ALL
SW1(config-access-map)#

SW1(config)# vlan filter HOST-A-B vlan 10
```

Correct Answer:

```
SW1(config)# ip access-list extended DENY-HTTP
SW1(config-ext-nacl)# tcp host 10.1.1.10 host 10.1.1.20 eq www

SW1(config)# ip access-list extended MATCH_ALL
SW1(config-ext-nacl)# ip any any

SW1(config)# vlan access-map HOST-A-B 10
SW1(config-access-map)# match ip address DENY-HTTP
SW1(config-access-map)#

SW1(config)# vlan access-map HOST-A-B 20
SW1(config-access-map)# match ip address MATCH_ALL
SW1(config-access-map)#

SW1(config)# vlan filter HOST-A-B vlan 10
```

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 4

Drag and drop the solutions that comprise Cisco Cyber Threat Defense from the left onto the objectives they accomplish on the right.

Select and Place:

StealthWatch	detects suspicious web activity
Identity Services Engine	analyzes network behavior and detects anomalies
Web Security Appliance	uses pxGrid to remediate security threats

Correct Answer:

	Web Security Appliance
	StealthWatch
	Identity Services Engine

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 5

Drag and drop the REST API authentication methods from the left onto their descriptions on the right.

Select and Place:

HTTP basic authentication	public API resource
OAuth	username and password in an encoded string
secure vault	authorization through identity provider

Correct Answer:

	secure vault
	HTTP basic authentication
	OAuth

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 6

Drag and drop the wireless elements on the left to their definitions on the right

Select and Place:

beamwidth	A graph that shows the relative intensity of the signal strength of an antenna within its space
polarization	the relative increase in signal strength of an antenna in a given direction
radiation patterns	measures the angle of an antenna pattern in which the relative signal strength is half power below the maximum value
gain	radiated electromagnetic waves that influence the orientation of an antenna within its electromagnetic field

Correct Answer:

	radiation patterns
	gain
	beamwidth
	polarization

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 7

Drag and drop the virtual components from the left onto their descriptions on the right.

Select and Place:

VNIC	zip file connecting a virtual machine configuration file and a virtual disk
OVA	file containing a virtual machine disk drive
VMDK	configuration file containing settings for a virtual machine such as guest OS
VMX	component of a virtual machine responsible for sending packets to the hypervisor

Correct Answer:

	OVA
	VMDK
	VMX
	VNIC

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 8

Drag and drop the characteristics from the left onto the orchestration tools they describe on the right.

Select and Place:

utilizes a pull model	Ansible
utilizes a push model	
multimaster architecture	
primary/secondary architecture	Puppet

Correct Answer:

	Ansible
	utilizes a push model
	primary/secondary architecture
	Puppet
	utilizes a pull model
	multimaster architecture

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 9

Drag and drop the characteristics from the left onto the switching mechanisms they describe on the right.

Select and Place:

The forwarding table is created in advance.	Cisco Express Forwarding
The router processor is involved with every forwarding decision.	
All forwarding decisions are made in software.	
All packets are switched using hardware.	Process Switching

Correct Answer:

	<b>Cisco Express Forwarding</b> The forwarding table is created in advance. All packets are switched using hardware.
	<b>Process Switching</b> The router processor is involved with every forwarding decision. All forwarding decisions are made in software.

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 10

Drag and drop the QoS mechanisms from the left to the correct descriptions on the right.

Select and Place:

service policy	mechanism to create a scheduler for packets prior to forwarding
policy map	mechanism to apply a QoS policy to an interface
DSCP	portion of the IP header used to classify packets

Correct Answer:

	policy map
	service policy
	DSCP

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 11

```

{
 "Cisco-IOS-XE-native:GigabitEthernet": {
 "name": "1",
 "vrf": {
 "forwarding": "MANAGEMENT"
 },
 "ip": {
 "address": {
 "primary": {
 "address": "10.0.0.151",
 "mask": "255.255.255.0"
 }
 }
 },
 "mop": {
 "enabled": false
 },
 "Cisco-IOS-XE-ethernet-negotiation": {
 "auto": true
 }
 }
}

```

Refer to the exhibit. Drag and drop the snippets into the RESTCONF request to form the request that returns this response. Not all options are used.

Select and Place:

URL - http://10.10.10.10/restconf/api/running/native/

HTTP Verb-

Body- N/A

Headers-  -application/vnd.yang.data+json

Authentication privileged level 15 credentials

POST	Accept	Cisco-IOS-XE
interface/GigabitEthernet/1/	GET	PUT

Correct Answer:

URL - http://10.10.10.10/restconf/api/running/native/

HTTP Verb-

Body- N/A

Headers-  -application/vnd.yang.data+json

Authentication privileged level 15 credentials

POST		Cisco-IOS-XE
		PUT

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 12

Drag and drop the characteristics from the left onto the routing protocols they describe on the right.

Select and Place:

cost-based metric	EIGRP
Dual Diffusing Update algorithm	
metrics are bandwidth, delay, reliability, load, and MTU	
Dijkstra algorithm	OSPF

Correct Answer:

EIGRP

Dual Diffusing Update algorithm

metrics are bandwidth, delay, reliability, load, and MTU

OSPF

cost-based metric

Dijkstra algorithm

Section: (none)  
Explanation

Explanation/Reference:

QUESTION 13

Drag and drop the snippets onto the blanks within the code to construct a script that advertises the network prefix 192.168.5.0/24 into a BGP session. Not all options are used.

Select and Place:

```

<config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
 <native xmlns="http://cisco.com/ns/yang/Cisco-IOS-XE-native" xmlns:ios-bgp="http://cisco.com/ns/yang/Cisco-IOS-XE-bgp">
 <router>
 <ios-bgp>
 <ios-bgp:address-family>
 <ios-bgp:no-vrf>
 <ios-bgp:ipv4>
 <ios-bgp:af-name>unicast</ios-bgp:af-name>
 <ios-bgp:ipv4-unicast>
 <ios-bgp:network>
 <ios-bgp:with-mask>
 <ios-bgp:number> <input type="text" value="192.168.5.0" /> </ios-bgp:number>
 <ios-bgp: <input type="text" value="mask" /> </ios-bgp:mask>
 </ios-bgp:with-mask>
 </ios-bgp:network>
 </ios-bgp:ipv4-unicast>
 </ios-bgp:ipv4>
 </ios-bgp:no-vrf>
 </ios-bgp:address-family>
 </ios-bgp>
 </router>
 </native>
</config>

```

192.168.5.0

255.255.255.0

with-mask

mask

subnet-mask

Correct Answer:

```

<config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
 <native xmlns="http://cisco.com/ns/yang/Cisco-IOS-XE-native" xmlns:ios-bgp="http://cisco.com/ns/yang/Cisco-IOS-XE-bgp">
 <router>
 <ios-bgp>
 <ios-bgp:address-family>
 <ios-bgp:no-vrf>
 <ios-bgp:ipv4>
 <ios-bgp:af-name>unicast</ios-bgp:af-name>
 <ios-bgp:ipv4-unicast>
 <ios-bgp:network>
 <ios-bgp:with-mask>
 <ios-bgp:number> 192.168.5.0 </ios-bgp:number>
 <ios-bgp: mask > 255.255.255.0 </ios-bgp:mask>
 </ios-bgp:with-mask>
 </ios-bgp:network>
 </ios-bgp:ipv4-unicast>
 </ios-bgp:ipv4>
 </ios-bgp:no-vrf>
 </ios-bgp:address-family>
 </ios-bgp>
 </router>
 </native>
</config>

```

with-mask

subnet-mask

Section: (none)  
Explanation

Explanation/Reference:

QUESTION 14

Drag and drop the characteristics from the left onto the infrastructure deployment models on the right.

Select and Place:

Costs for this model are considered CapEx.

This model improves elasticity of resources.

This model enables complete control of the servers.

This model reduces management overhead by leveraging provider-managed resources.

On-Premises

Cloud

Correct Answer:

On-Premises

Costs for this model are considered CapEx.

This model enables complete control of the servers.

Cloud

This model improves elasticity of resources.

This model reduces management overhead by leveraging provider-managed resources.

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 15

Drag and drop the snippets onto the blanks within the code to construct a script that configures BGP according to the topology. Not all options are used, and some options may be used twice.

Select and Place:

```

<config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
 <native xmlns="http://cisco.com/ns/yang/Cisco-IOS-XE-native" xmlns:ios-bgp="http://cisco.com/ns/yang/Cisco-IOS-XE-bgp">
 <router>
 <ios-bgp:bgp>
 <ios-bgp:id> [] </ios-bgp:id>
 <ios-bgp:neighbor>
 <ios-bgp:id> [] </ios-bgp:id>
 <ios-bgp:remote-as> [] </ios-bgp:remote-as>
 </ios-bgp:neighbor>
 <ios-bgp:address-family>
 <ios-bgp:no-vrf>
 <ios-bgp:ipv4>
 <ios-bgp:af-name>undist</ios-bgp:af-name>
 <ios-bgp:ipv4-unicast>
 <ios-bgp:neighbor>
 <ios-bgp:id> [] </ios-bgp:id>
 <ios-bgp:soft-reconfiguration>inbound</ios-bgp:soft-reconfiguration>
 </ios-bgp:neighbor>
 </ios-bgp:ipv4-unicast>
 </ios-bgp:ipv4>
 </ios-bgp:no-vrf>
 </ios-bgp:address-family>
 </ios-bgp:bgp>
 </router>
 </native>
</config>

```

Client  
IP: 192.168.1.2  
BGP AS: 65001

ISP  
IP: 192.168.1.1  
BGP AS: 65000

192.168.1.1

192.168.1.2

65000

65001

Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 16

Drag and drop the LISP components on the left to their descriptions on the right. Not all options are used.

Select and Place:

map server	IPv4 or IPv6 address of an egress tunnel router that is Internet facing or network core facing
map resolver	receives map-request messages from ITR and searches for the appropriate ETR by consulting mapping database
RLOC	encapsulates LISP packets coming from inside of the LISP site to destinations outside of the site
ITR	

Correct Answer:

map server	RLOC
	map resolver
	ITR

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 17

Drag and drop the characteristics from the left onto the configuration models on the right.

Select and Place:

Administrators require deep syntax and context knowledge for the configured entities.	Procedural
This model states what is wanted but not how it is achieved.	
Puppet is a tool that uses this configuration model.	Declarative
This model defines a set of commands that must be executed in a certain order for the system to achieve the desired state.	

Correct Answer:

	Procedural
	Declarative

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 18

Drag and drop the characteristics from the left onto the deployment types on the right.

Select and Place:

It is responsible for hardware maintenance.	On-Premises
It provides on-demand scalability.	
Maintenance is handled by a third party.	Cloud-Based
Scalability requires time and effort.	

Correct Answer:

	On-Premises
	It is responsible for hardware maintenance.
	Scalability requires time and effort.
	Cloud-Based
	It provides on-demand scalability.
	Maintenance is handled by a third party.

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 19

Drag and drop the automation characteristics from the left onto the appropriate tools on the right.

Select and Place:

provides intent-based networking feedback loop	Ansible
agent or agentless automation platform	
agentless automation platform	
assesses the impact of changes before applied	Puppet

Correct Answer:

	Ansible
	agentless automation platform
	assesses the impact of changes before applied
	Puppet
	provides intent-based networking feedback loop
	agent or agentless automation platform

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 20

Drag and drop the characteristics from the left onto the switching architectures on the right.

Select and Place:

proprietary switching mechanism	Cisco Express Forwarding
supports the centralized and distributed modes of operation	
low switching performance	Process Switching

Correct Answer:

	Cisco Express Forwarding
	proprietary switching mechanism
	supports the centralized and distributed modes of operation
	Process Switching
	low switching performance

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 21

Drag and drop the characteristics from the left onto the orchestration tool classifications on the right.

Select and Place:

mutable infrastructure	Configuration Management
immutable infrastructure	
designed to provision the servers	Orchestration
designed to install and manage software on existing servers	

Correct Answer:

	Configuration Management
	mutable infrastructure
	designed to install and manage software on existing servers
	Orchestration
	immutable infrastructure
	designed to provision the servers

Section: (none)  
Explanation  
Explanation/Reference:

QUESTION 22  
Drag and drop the characteristics from the left onto the orchestration tools that they describe on the right

Select and Place:

declarative

uses Ruby

uses Python

procedural

Chef

SaltStack

Correct Answer:

Chef

procedural

uses Ruby

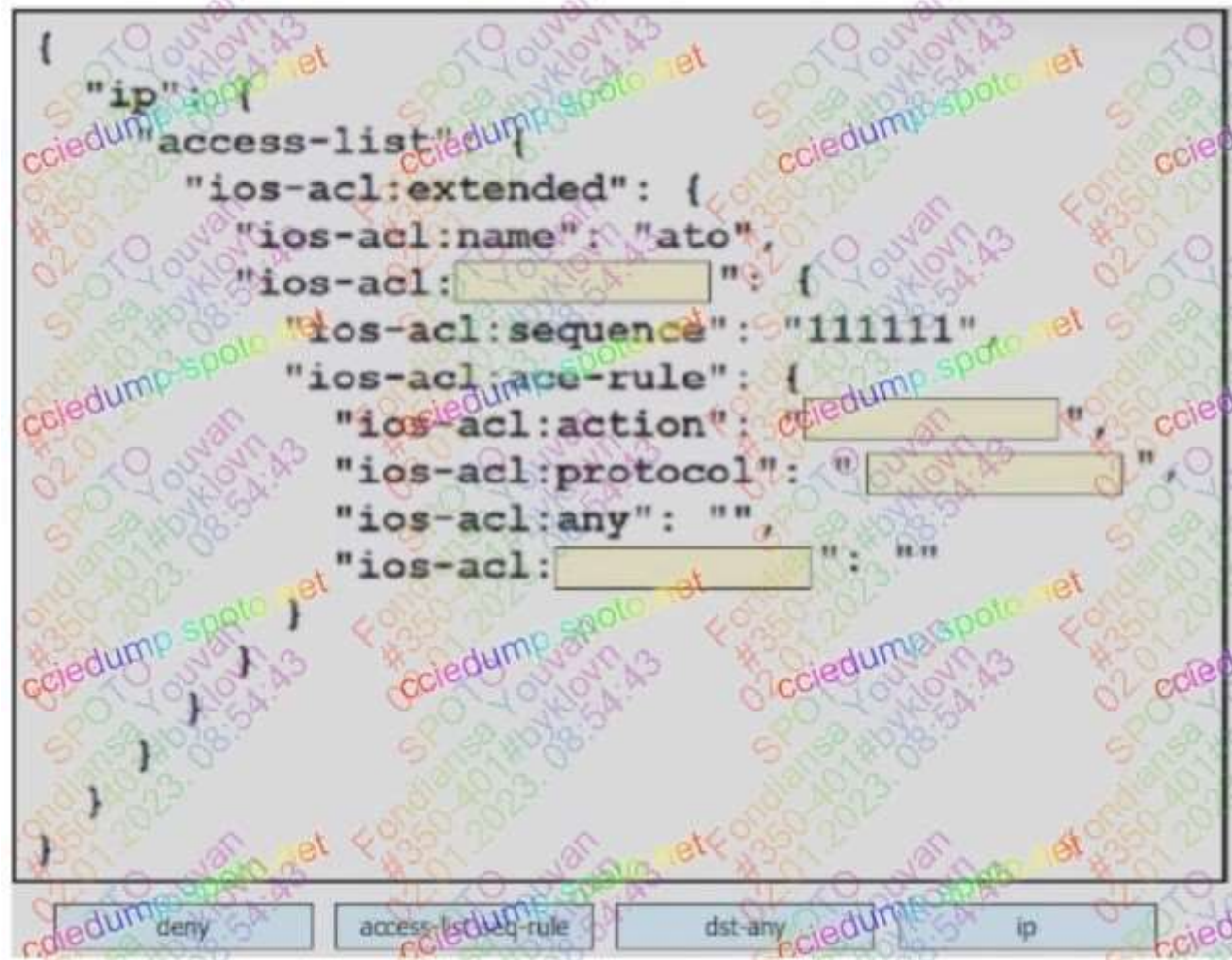
SaltStack

declarative

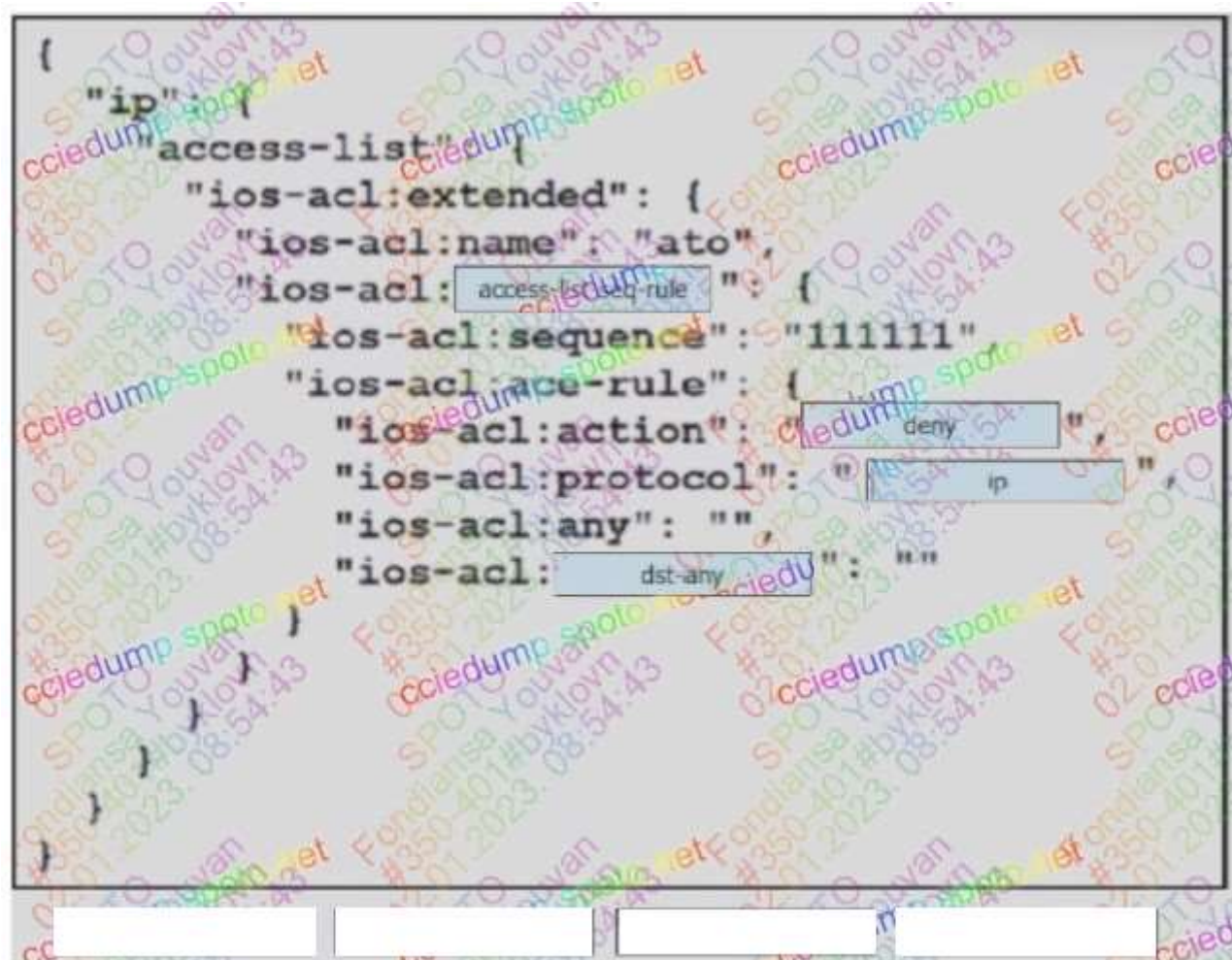
uses Python

Section: (none)  
Explanation  
Explanation/Reference:

QUESTION 23  
Drag and drop the code snippets from the bottom onto the blanks in the code to construct a request that configures a deny rule on an access list.  
Select and Place:



Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 24

Drag the characteristics from the left onto the routing protocols they describe on the right.

Select and Place:

uses virtual links to link an area that does not have a connection to the backbone	EIGRP
hello packets are sent by default every 5 seconds on high-bandwidth links	
default cost is based on interface bandwidth only	
metric is calculated using bandwidth and delay by default	OSPF

Correct Answer:

	EIGRP
	hello packets are sent by default every 5 seconds on high-bandwidth links
	metric is calculated using bandwidth and delay by default
	OSPF
	uses virtual links to link an area that does not have a connection to the backbone
	default cost is based on interface bandwidth only

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 25

Drag and drop the characteristics from the left onto the deployment models on the right.

Select and Place:

Remote access must be arranged via third-party solutions.	Cloud
Remote access requires an Internet connection only.	
This model is cost-effective.	
This model is high-maintenance and has high operating costs.	On-Premises

Correct Answer:

Cloud

- Remote access requires an Internet connection only.
- This model is cost-effective.

On-Premises

- Remote access must be arranged via third-party solutions.
- This model is high-maintenance and has high operating costs.

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 26

Drag and drop the characteristics from the left onto the deployment models on the right.

Select and Place:

long implementation timeframe

on-demand self-service

offers complex customization

Cloud

On-Premise

Correct Answer:

Cloud

- on-demand self-service

On-Premise

- long implementation timeframe
- offers complex customization

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 27

Drag and drop the characteristics from the left onto the routing protocol they describe on the right.

Select and Place:

supports unequal path load balancing

link state routing protocol

distance vector routing protocol

metric is based on delay and bandwidth by default

makes it easy to segment the network logically

constructs three tables as part of its operation: neighbor table, topology table, and routing table

OSPF

EIGRP

Correct Answer:

OSPF

link state routing protocol

makes it easy to segment the network logically

constructs three tables as part of its operation: neighbor table, topology table, and routing table

EIGRP

supports unequal path load balancing

distance vector routing protocol

metric is based on delay and bandwidth by default

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 28

Drag and drop the tools from the left onto the agent types on the right

Select and Place:

Ansible

Terraform

Chef

Agentless

Agent-Based

Correct Answer:

Agentless

Ansible

Terraform

Agent-Based

Chef

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 29

Drag and drop the characteristics from the left onto the infrastructure deployment models they describe on the right.

Select and Place:

easy to scale the capacity up and down

infrastructure requires large and regular investments

highly agile

highly customizable

On-Premises

Cloud

Correct Answer:

On-Premises

infrastructure requires large and regular investments

highly customizable

Cloud

easy to scale the capacity up and down

highly agile

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 30

Drag and drop the LISP components on the left to the correct description on the right.

Select and Place:

ETR

map server

EID

network infrastructure component that learns of EID-prefix mapping entries from an ETR

IPv4 or IPv6 address of an endpoint within a LISP site

de-encapsulates LISP packets coming from outside of the LISP site to destinations inside of the site

Correct Answer:

	map server
	EID
	ETR

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 31

An engineer creates the configuration below. Drag and drop the authentication methods from the left into the order of priority on the right. Not all options are used.

```
R1#sh run | i aaa
aaa new-model
aaa authentication login default group ACE group AAA_RADIUS local-case
aaa session-id common
R1#
```

Select and Place:

tacacs servers of group ACE	priority 1
local configured username in non-case-sensitive format	priority 2
local configured username in case-sensitive format	priority 3
AAA servers of ACE group	priority 4
AAA servers of AAA_RADIUS group	
If no method works, then deny login	

Correct Answer:

tacacs servers of group ACE	AAA servers of ACE group
local configured username in non-case-sensitive format	AAA servers of AAA_RADIUS group
	local configured username in case-sensitive format
	If no method works, then deny login

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 32

Drag and drop the characteristics from the left onto the routing protocols they describe on the right.

Select and Place:

maintains alternative loop-free backup path if available	OSPF
quickly computes new path upon link failure	
selects routes using the DUAL algorithm	EIGRP

Correct Answer:

	OSPF
	quickly computes new path upon link failure
	EIGRP
	maintains alternative loop-free backup path if available
	selects routes using the DUAL algorithm

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 33

Drag and drop the characteristics from the left onto the QoS components they describe on the right.

Select and Place:

applied on traffic to convey information to a downstream device	shaping
distinguishes traffic types	marking
process used to buffer traffic that exceeds a predefined rate	trust
permits traffic to pass through the device while retaining DSCP/COS values	classification

Correct Answer:

	process used to buffer traffic that exceeds a predefined rate
	applied on traffic to convey information to a downstream device
	permits traffic to pass through the device while retaining DSCP/COS values
	distinguishes traffic types

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 34

Drag and drop the threat defense solutions from the left onto their descriptions on the right.

Select and Place:

Umbrella	provides malware protection on endpoints
AMP4E	provides IPS/IDS capabilities
FTD	performs security analytics by collecting network flows
StealthWatch	protects against email threat vector
ESA	provides DNS protection

Correct Answer:

	AMP4E
	FTD
	StealthWatch
	ESA
	Umbrella

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 35

Drag and drop the snippets onto the blanks within the code to construct a script that configures a loopback interface with an IP address. Not all options are used.

Select and Place:

```

{
 "@message-id": "101",
 "edit-config": {
 {
 "running": null
 },
 "config": {
 "native": {
 "interface": {
 "Loopback": {
 {
 "ip": {
 "address": {
 {
 "address": "10.10.10.10",
 "255.255.255.255"
 }
 }
 }
 }
 }
 }
 }
 }
 }
}

```

"mask":  
 "name": "100"  
 "primary":  
 "config":  
 "target":

Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 36

Drag and drop the characteristics from the left onto the orchestration tools that they describe on the right,

Select and Place:

uses a pull model	Ansible
uses playbooks	
procedural	
declarative	Puppet

Correct Answer:

	Ansible
	uses playbooks
	procedural
	Puppet
	uses a pull model
	declarative

Section: (none)

Explanation

Explanation/Reference:

QUESTION 37

Drag and drop the Cisco SD-Access solution areas from the left onto the protocols they use on the right.

Select and Place:

fabric data plane	LISP
fabric security policy	BGP
fabric control plane	CTS
external connectivity from the fabric	VXLAN

Correct Answer:

	fabric control plane
	external connectivity from the fabric
	fabric security policy
	fabric data plane

Section: (none)

Explanation

Explanation/Reference:

QUESTION 38

Drag and drop the characteristics of PIM Dense Mode from the left to the right. Not all options are used.

Select and Place:

builds source-based distribution trees	PIM Dense Mode
uses a push model to distribute multicast traffic	
uses a pull model to distribute multicast traffic	
uses prune mechanisms to stop unwanted multicast traffic	
builds shared distribution trees	
requires a rendezvous point to deliver multicast traffic	

Correct Answer:

	<b>PIM Dense Mode</b> builds source-based distribution trees uses a push model to distribute multicast traffic uses prune mechanisms to stop unwanted multicast traffic
uses a pull model to distribute multicast traffic	
builds shared distribution trees	
requires a rendezvous point to deliver multicast traffic	

Section: (none)  
Explanation

Explanation/Reference:

### QUESTION 39

An engineer is working with the Cisco DNA Center API. Drag and drop the methods from the left onto the actions that they are used for on the right

Select and Place:

GET	remove an element using the API
POST	update an element
DELETE	extract information from the API
PUT	create an element

Correct Answer:

	DELETE
	PUT
	GET
	POST

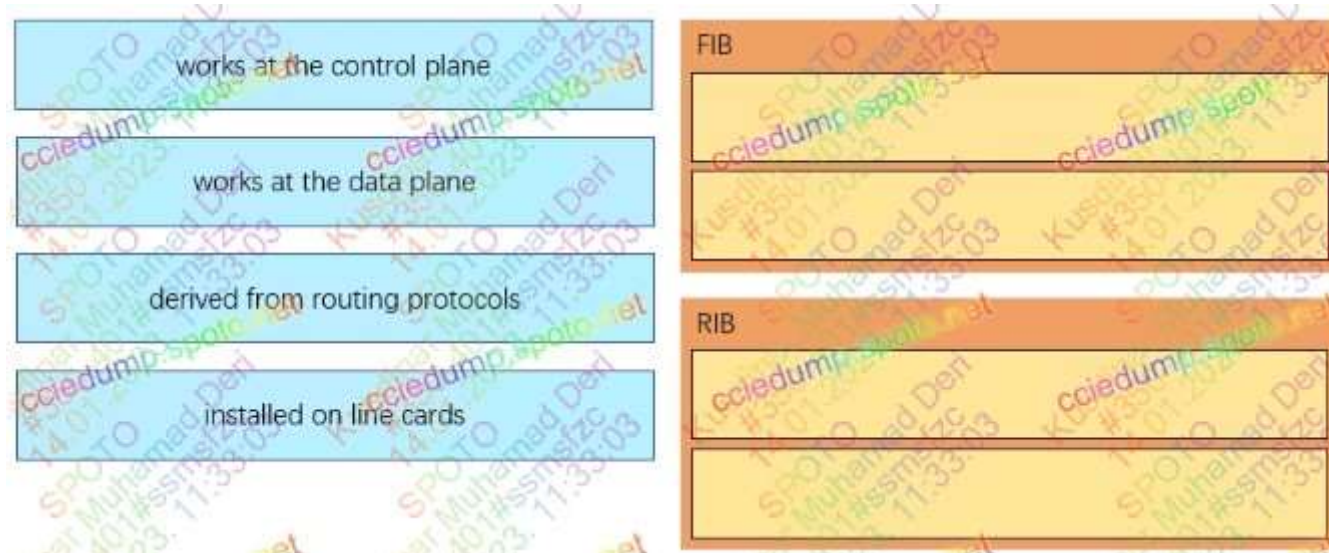
Section: (none)  
Explanation

Explanation/Reference:

### QUESTION 40

Drag and drop the characteristics from the left onto the architectures on the right.

Select and Place:



Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

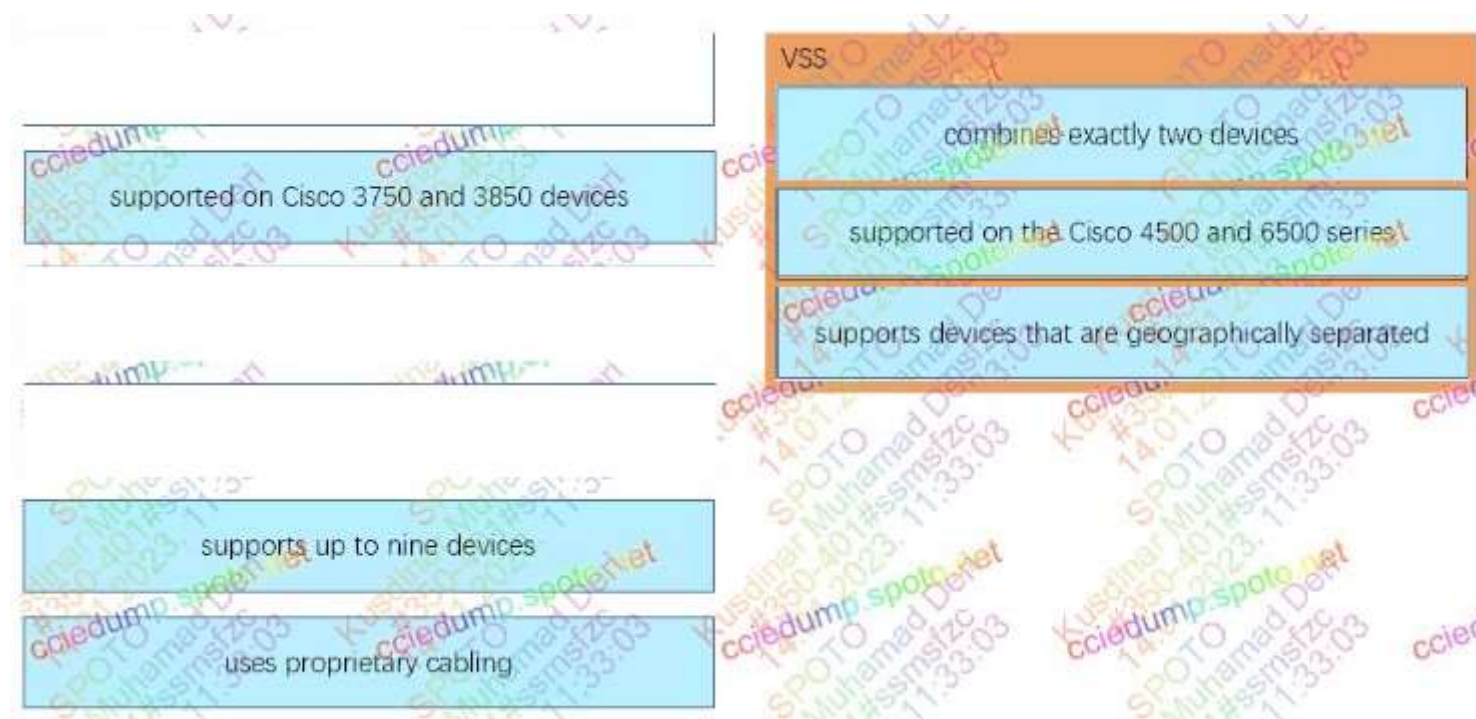
#### QUESTION 41

Drag and drop the descriptions of the VSS technology from the left to the right. Not all options are used.

Select and Place:



Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 42

Drag and drop the snippets onto the blanks within the code to construct a script that shows all logging that occurred on the appliance from Sunday until 9:00 pm. Thursday. Not all options are used.

Select and Place:

```
event manager applet Logging
 event timer cron name Logging cron-entry " "
 action 2.0 cli command "enable"
 action " " cli command "show logging | " "
```

Options to be placed in the blanks:

- 1.0
- 3.0
- 0 21 \* \* 0-4
- 0 21 \* \* 1-5
- redirect ftp://cisco:cisco@192.168.1.1
- ftp://cisco:cisco@192.168.1.1

Correct Answer:

```
event manager applet Logging
 event timer cron name Logging cron-entry " 0 21 * * 0-4 "
 action 2.0 cli command "enable"
 action 3.0 cli command "show logging | redirect ftp://cisco:cisco@192.168.1.1 " "
```

Options to be placed in the blanks:

- 1.0
- 0 21 \* \* 1-5
- ftp://cisco:cisco@192.168.1.1

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 43

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

Select and Place:

causes TCP retransmissions when traffic is dropped

buffers excessive traffic

introduces no delay and jitter

introduces delay and jitter

drops excessive traffic

typically delays, rather than drops traffic

Traffic Policing

Traffic Shaping

Correct Answer:

Traffic Policing

causes TCP retransmissions when traffic is dropped

introduces no delay and jitter

drops excessive traffic

Traffic Shaping

buffers excessive traffic

introduces delay and jitter

typically delays, rather than drops traffic

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 44

Drag and drop the characteristics from the left onto the routing protocols they describe on the right.

Select and Place:

The default Administrative Distance is equal to 110.	EIGRP
It requires an Autonomous System number to create a routing instance for exchanging routing information.	
It uses virtual links to connect two parts of a partitioned backbone through a non-backbone area.	
It is an Advanced Distance Vector routing protocol.	
It relies on the Diffused Update Algorithm to calculate the shortest path to a destination.	OSPF
It requires a process ID that is local to the router.	

Correct Answer:

	EIGRP
	It requires an Autonomous System number to create a routing instance for exchanging routing information.
	It is an Advanced Distance Vector routing protocol.
	It relies on the Diffused Update Algorithm to calculate the shortest path to a destination.
	OSPF
	The default Administrative Distance is equal to 110.
	It uses virtual links to connect two parts of a partitioned backbone through a non-backbone area.
	It requires a process ID that is local to the router.

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 45

Drag and drop the characteristics from the left onto the protocols they apply to on the right.

Select and Place:

uses Dijkstra's Shortest Path First algorithm	OSPF
uses Diffused Update Algorithm	
uses bandwidth, delay, reliability, and load for routing metric	
uses an election process	EIGRP

Correct Answer:

	OSPF
	uses Dijkstra's Shortest Path First algorithm
	uses an election process
	EIGRP
	uses Diffused Update Algorithm
	uses bandwidth, delay, reliability, and load for routing metric

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 46

Drag and drop the characteristics from the left onto the technology types on the right.

Select and Place:

This type of technology provides automation across multiple technologies and domains.	Configuration Management
This type of technology enables consistent configuration of infrastructure resources.	
Puppet is used for this type of technology.	
Ansible is used for this type of technology.	Orchestration

Correct Answer:

	Configuration Management
	This type of technology enables consistent configuration of infrastructure resources.
	Puppet is used for this type of technology.
	Orchestration
	This type of technology provides automation across multiple technologies and domains.
	Ansible is used for this type of technology.

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 47

Drag and drop the characteristics from the left onto the deployment models on the right. Not all options are used.

Select and Place:

longer deployment cycle	Cloud
shared ownership and accessibility	
complete control and accessibility	
requires purpose built applications	On-Prem
quick and scalable deployment	

Correct Answer:

	Cloud
	shared ownership and accessibility
	quick and scalable deployment
	On-Prem
requires purpose built applications	longer deployment cycle
	complete control and accessibility

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 48

Drag and drop the descriptions from the left onto the routing protocol they describe on the right.

Select and Place:

supports unequal cost path load balancing	OSPF
link state	
advanced distance vector	
supports only equal cost path load balancing	EIGRP

Correct Answer:

	OSPF
	link state
	supports only equal cost path load balancing
	EIGRP
	supports unequal cost path load balancing
	advanced distance vector

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 49

Drag and drop the snippets onto the blanks within the code to construct a script that brings up the failover Ethernet port if the primary port goes down and also shuts down the failover port when the primary returns to service. Not all options are used.

Select and Place:

```

event manager applet SRV-1-Up
event syslog pattern "Line protocol on Interface GigabitEthernet4/0/9, changed state to []"
action 1.0 cli command "enable"
action 2.0 cli command "configure terminal"
action 3.0 cli command "Interface GigabitEthernet3/0/10"
action 4.0 cli command "[] shutdown"
action 5.0 cli command "end"
event manager applet SRV-1-Down
event syslog pattern "Line protocol on Interface [] changed state to up"
action 1.0 cli command "enable"
action 2.0 cli command "configure terminal"
action 3.0 cli command "Interface GigabitEthernet3/0/10"
action 4.0 cli command "[]"
action 5.0 cli command "end"

```

Correct Answer:



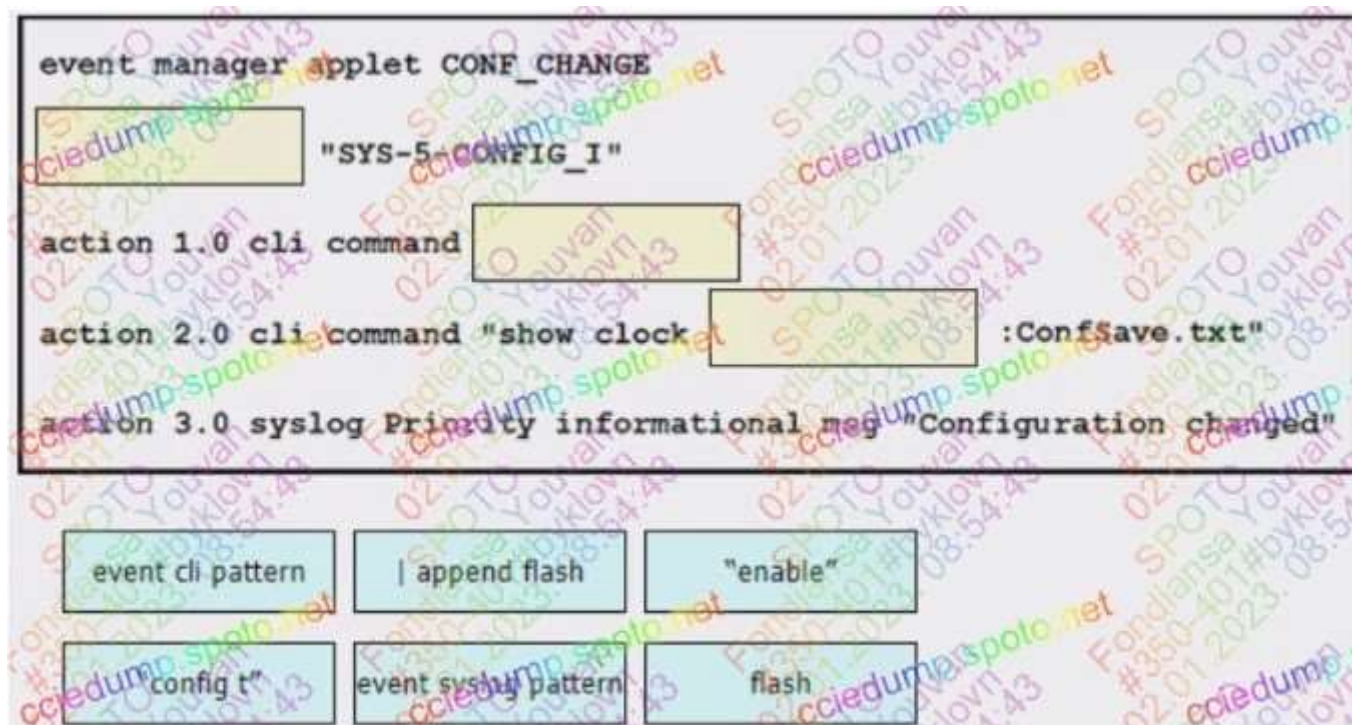
Section: (none)  
Explanation

Explanation/Reference:

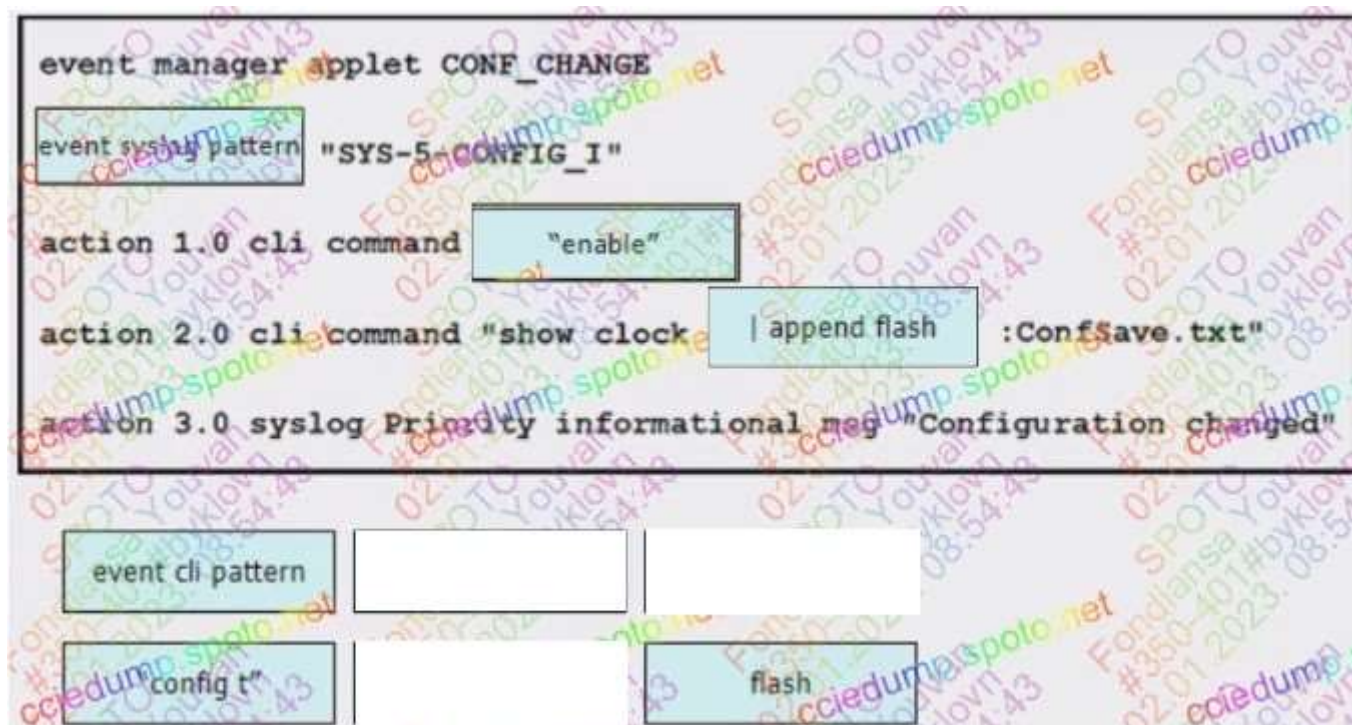
#### QUESTION 50

Drag and drop the snippets onto the blanks within the code to create an EEM script that adds an entry to a locally stored text file with a timestamp when a configuration change is made. Not all options are used.

Select and Place:



Correct Answer:



Section: (none)  
Explanation

Explanation/Reference:

## Exam C

### QUESTION 1

#### Guidelines

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

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

#### Tasks

Implement VRRP between DISTRO-SW1 and DISTRO-SW2 on VLAN100 for hosts connected to ACCESS-SW1 to achieve these goals:

1. Configure group number **200** using the virtual IP address of **192.168.1.200/24**.
2. Configure DISTRO-SW1 as the active router using a priority value of **200** and DISTRO-SW2 as the standby router.
3. DISTRO-SW1 and DISTRO-SW2 should exchange VRRP hello packets every **20** seconds.



```
A. DISTRO-SW1> en
DISTRO-SW1# config t
DISTRO-SW1(config)# int vlan 100
DISTRO-SW1(config-if)# vrrp 200 ip 192.168.1.200
DISTRO-SW1(config-if)# vrrp 200 priority 200
DISTRO-SW1(config-if)# vrrp 200 timers advertise 20
DISTRO-SW1(config-if)# end
DISTRO-SW1# write

DISTRO-SW2> en
DISTRO-SW2# config t
DISTRO-SW2(config)# int vlan 100
DISTRO-SW2(config-if)# vrrp 200 ip 192.168.1.200
DISTRO-SW2(config-if)# vrrp 200 timers advertise 20
DISTRO-SW2(config-if)# end
DISTRO-SW2# write
```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 2

#### Guidelines

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

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

#### Tasks

Implement GLBP between DISTRO-SW1 and DISTRO-SW2 on VLAN100 for hosts connected to ACCESS-SW1 to achieve these goals:

1. Configure group 30 using the virtual IP address of 192.168.1.254.
2. Configure DISTRO-SW1 as the AVG using a priority value of 130.
3. If DISTRO-SW1 suffers a failure and recovers, ensure that it automatically resumes the AVG role after waiting for a minimum of 35 seconds.



A. DISTRO-SW1> en  
DISTRO-SW1# config t  
DISTRO-SW1(config)# int vlan 100  
DISTRO-SW1(config-if)# glbp 30 ip 192.168.1.254  
DISTRO-SW1(config-if)# glbp 30 priority 130  
DISTRO-SW1(config-if)# glbp 30 preempt delay minimum 35  
DISTRO-SW1(config-if)# end  
DISTRO-SW1# write

DISTRO-SW2> en  
DISTRO-SW2# config t  
DISTRO-SW2(config)# int vlan 100  
DISTRO-SW2(config-if)# glbp 30 ip 192.168.1.254  
DISTRO-SW2(config-if)# glbp 30 preempt  
DISTRO-SW2(config-if)# end  
DISTRO-SW2# write

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 3

#### Guidelines

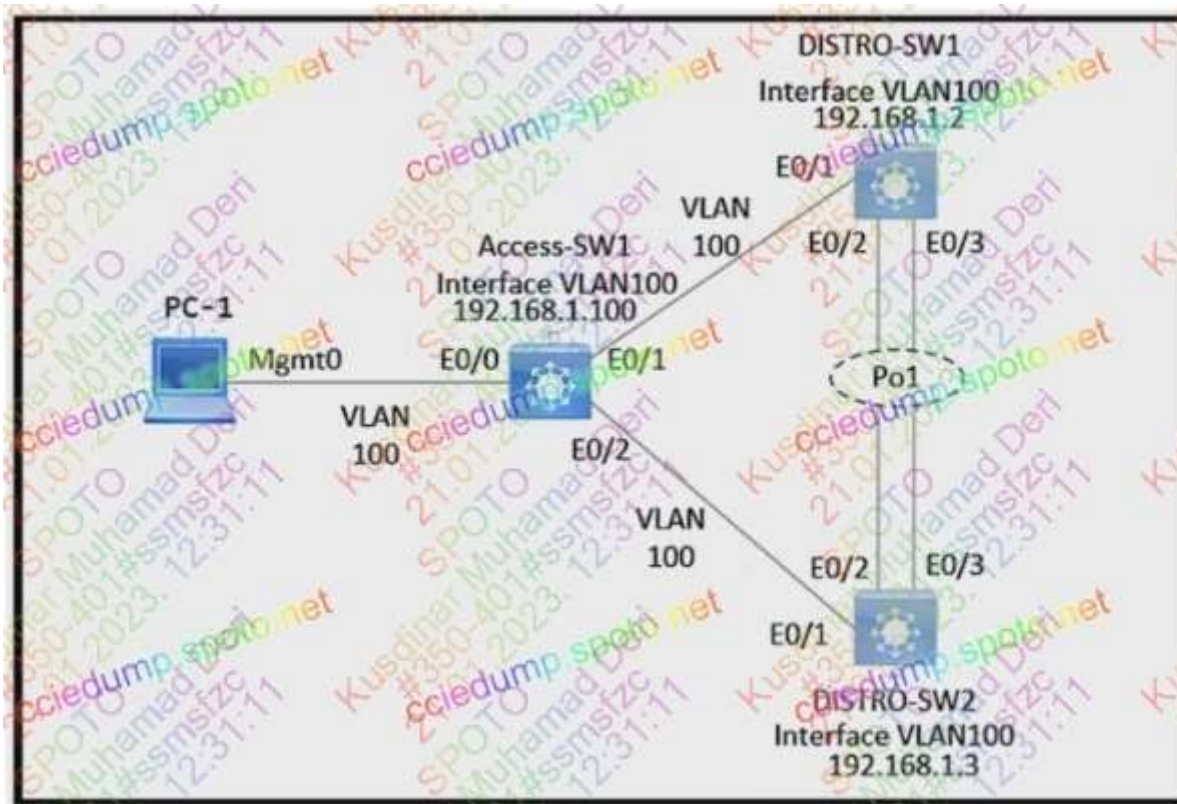
This is a lab item in which tasks will be performed on virtual devices.

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

#### Tasks

Configure HSRP between DISTRO-SW1 and DISTRO-SW2 on VLAN100 for hosts connected to ACCESS-SW1 to achieve these goals:

1. Configure group number 5 using the virtual IP address of 192.168.1.75/24.
2. Configure DISTRO-SW1 as the active router using a priority value of 105 and DISTRO-SW2 as the standby router.
3. Ensure that DISTRO-SW2 will take over the active role when DISTRO-SW1 goes down, and when DISTRO-SW1 recovers, it automatically resumes the active role.



A.

```

DISTRO-SW1> en
DISTRO-SW1# config t
DISTRO-SW1(config)# int vlan 100
DISTRO-SW1(config-if)# standby 5 ip 192.168.1.75
DISTRO-SW1(config-if)# standby 5 priority 105
DISTRO-SW1(config-if)# standby 5 preempt
DISTRO-SW1(config-if)# end
DISTRO-SW1# write

DISTRO-SW2> en
DISTRO-SW2# config t
DISTRO-SW2(config)# int vlan 100
DISTRO-SW2(config-if)# standby 5 ip 192.168.1.75
DISTRO-SW2(config-if)# standby 5 preempt
DISTRO-SW2(config-if)# end
DISTRO-SW2# write

```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 4

##### Guidelines

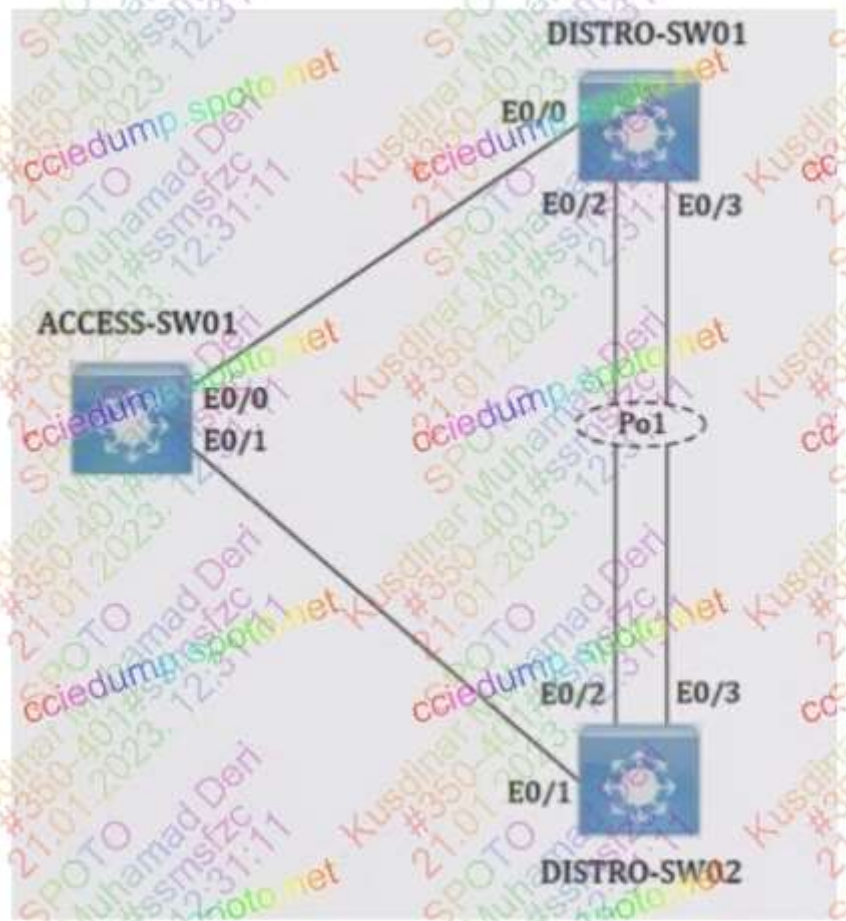
This is a lab item in which tasks will be performed on virtual devices.

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

##### Tasks

The operations team started configuring network devices for a new site. Complete the configurations to achieve these goals:

1. Ensure that port channel Po1 between DISTRO-SW01 and DISTRO-SW02 is operational using the LACP protocol. Configuration changes for this task must be made on DISTRO-SW01.
2. Ensure that traffic on VLAN 10 is carried as untagged traffic between DISTRO-SW01 and DISTRO-SW02.
3. Complete the Rapid-PVST+ configuration on DISTRO-SW2 by ensuring it is the secondary root switch for all VLANs in the range of 1 to 1005.



A.

```

DISTRO-SW1> en
DISTRO-SW1# config t
DISTRO-SW1(config)# interface e0/0
DISTRO-SW1(config-if)# no channel-group 1 mode passive
DISTRO-SW1(config)# interface range ethernet0/2-3
DISTRO-SW1(config-if-range)# channel-group 1 mode active
DISTRO-SW1(config-if-range)# exit
DISTRO-SW1(config)# interface port-channel 1
DISTRO-SW1(config-if)# switchport trunk native vlan 10
DISTRO-SW1(config-if)# end
DISTRO-SW1# write

DISTRO-SW2> en
DISTRO-SW2# config t
DISTRO-SW2(config)# interface port-channel 1
DISTRO-SW2(config-if)# switchport trunk native vlan 10
DISTRO-SW2(config-if)# exit
DISTRO-SW2(config)# spanning-tree vlan 1-1005 root secondary
DISTRO-SW2(config)# end
DISTRO-SW2# write

```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

## QUESTION 5

### Guidelines

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

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

### Tasks

Configure OSPF on all three routers according to the topology diagram to achieve these goals:

1. Enable OSPF on all interfaces using the network statement and match the network mask of each interface.
2. Ensure that all networks are advertised between the routers.
3. Ensure that all routers use OSPF process ID 1 and that the Lo0 interface is used for the router ID.
4. Configure OSPF MD5 authentication on every physical interface running OSPF using key 1 and the password **ccnp321**.



A.

```

R1> en
R1# config t
R1(config)# interface e0/0
R1(config-if)# ip ospf message-digest-key 1 md5 ccnp321
R1(config-if)# ip ospf authentication message-digest
R1(config-if)# exit
R1(config)# router ospf 1
R1(config-router)# router-id 1.1.1.1
R1(config-router)# network 10.0.0.0 0.0.0.255 area 0
R1(config-router)# network 1.1.1.1 0.0.0.0 area 1
R1(config-router)# exit
R1(config)# do write

R2> en
R2# config t
R2(config)# interface range e0/0-1
R2(config-if)# ip ospf message-digest-key 1 md5 ccnp321
R2(config-if)# ip ospf authentication message-digest
R2(config-if)# exit
R2(config)# router ospf 1
R2(config-router)# router-id 2.2.2.2
R2(config-router)# network 10.0.0.0 0.0.0.255 area 0
R2(config-router)# network 192.168.0.0 0.0.0.255 area 0
R2(config-router)# network 2.2.2.2 0.0.0.0 area 0
R2(config-router)# exit
R2(config)# do write

R3> en
R3# config t
R3(config)# interface e0/1
R3(config-if)# ip ospf message-digest-key 1 md5 ccnp321
R3(config-if)# ip ospf authentication message-digest
R3(config-if)# exit
R3(config)# router ospf 1
R3(config-router)# router-id 3.3.3.3
R3(config-router)# network 192.168.0.0 0.0.0.255 area 0
R3(config-router)# network 3.3.3.3 0.0.0.0 area 2
R3(config-router)# exit
R3(config)# do write

```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

## QUESTION 6

### Guidelines

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

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

### Tasks

Configure OSPF on all three routers according to the topology to achieve these goals:

1. Configure OSPF without using the "network" statement under the "router ospf" configuration section.
2. Ensure that all networks are advertised between the routers.
3. Configure a single command under each Ethernet interface to prevent OSPF neighbors from participating in a DR/BDR election and ensure that no extra host routes are generated.



A.

```

R1:
R1>en
R1#config t
R1(config)#router ospf 1
R1(config-router)#int range lo0 e0/0
R1(config-if-range)#ip ospf 1 area 0
R1(config-if-range)#int e0/0
R1(config-if)#ip ospf network point-to-point
R1(config-if)#end
R1#wr

R2:
R2>en
R2#config t
R2(config)#router ospf 1
R2(config-router)#int range lo0 e0/0-1
R2(config-if-range)#ip ospf 1 area 0
R2(config-if-range)#int range e0/0-1
R2(config-if)#ip ospf network point-to-point
R2(config-if)#end
R2#wr

R3:
R3>en
R3#config t
R3(config)#router ospf 1
R3(config-router)#int range lo0 e0/1
R3(config-if-range)#ip ospf 1 area 0
R3(config-if-range)#int e0/1
R3(config-if)#ip ospf network point-to-point
R3(config-if)#end
R3#wr

```

B.  
C.  
D.

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

**Explanation/Reference:**

#### QUESTION 7

##### Guidelines

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

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

##### Tasks

Configure OSPF on both routers according to the topology to achieve these goals:

1. Ensure that all networks are advertised between the routers without using the "network" statement under the "router ospf" configuration section.
2. Configure a single command on both routers to ensure:
  - The DR/BDR election does not occur on the link between the OSPF neighbors.
  - No extra OSPF host routes are generated.



A.

```

R1:
R1>en
R1#config t
R1(config)#router ospf 1
R1(config-router)#int range lo0,e0/0
R1(config-if-range)#ip ospf 1 area 0
R1(config-if-range)#int e0/0
R1(config-if)#ip ospf network point-to-point
R1(config-if)#end
R1#wr

R2:
R2>en
R2#config t
R2(config)#router ospf 1
R2(config-router)#int range lo0,e0/0
R2(config-if-range)#ip ospf 1 area 0
R2(config-if-range)#int e0/0
R2(config-if)#ip ospf network point-to-point
R2(config-if)#end
R2#wr

```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

## QUESTION 8

### Guidelines

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

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

### Tasks

Configure an EEM applet on LAB-RTR-01 that will automatically re-enable interface Loopback0 if it is administratively shut down.



A. LAB-RTR-01

```

LAB-RTR-01>en
LAB-RTR-01#config t
LAB-RTR-01(config)#event manager applet test
LAB-RTR-01(config-applet)#event syslog pattern "Interface Loopback0, changed state to administratively down"
LAB-RTR-01(config-applet)#action 1.0 cli command "enable"
LAB-RTR-01(config-applet)#action 2.0 cli command "config t"
LAB-RTR-01(config-applet)#action 3.0 cli command "int lo0"
LAB-RTR-01(config-applet)#action 4.0 cli command "no shutdown"
LAB-RTR-01(config-applet)#action 5.0 cli command "end"
LAB-RTR-01(config-applet)#end
LAB-RTR-01#wr

```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

## QUESTION 9

### Guidelines

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

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

### Tasks

BGP connectivity exists between Headquarters and both remote sites, however Remote Site 1 cannot communicate with Remote Site 2. Configure BGP according to the topology to achieve these goals:

1. Configure R2 under the BGP process to provide reachability between Remote Site 1 and Remote Site 2. No configuration changes are permitted on R1 or R3.
2. Ensure that the /32 networks at Remote Site 1 and Remote Site 2 can ping each other.



A. R2

```

R2>en
R2#config t
R2(config)#router bgp 456
R2(config-router)#address-family ipv4
R2(config-router-af)#neighbor 10.0.0.1 as-override
R2(config-router-af)#neighbor 192.168.1.3 as-override
R2(config-router-af)#end
R2#wr

```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 10

##### Guidelines

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

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

##### Tasks

BGP connectivity exists between Headquarters and both remote sites, however Remote Site 1 cannot communicate with Remote Site 2. Configure BGP according to the topology to achieve these goals:

1. Configure R1 and R3 under the BGP process to provide reachability between Remote Site 1 and Remote Site 2. No configuration changes are permitted on R2.
2. Ensure that the /32 networks at Remote Site 1 and Remote Site 2 can ping each other.



A. R1:

```
R1>en
R1#config t
R1#(config)#router bgp 123
R1#(config-router)#address-family ipv4
R1#(config-router-af)#neighbor 10.0.0.2 allowas-in
R1#(config-router-af)#end
R1#wr
```

R3:

```
R3>en
R3#config t
R3#(config)#router bgp 123
R3#(config-router)#address-family ipv4
R3#(config-router-af)#neighbor 192.168.1.2 allowas-in
R3#(config-router-af)#end
R3#wr
```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 11

##### Guidelines

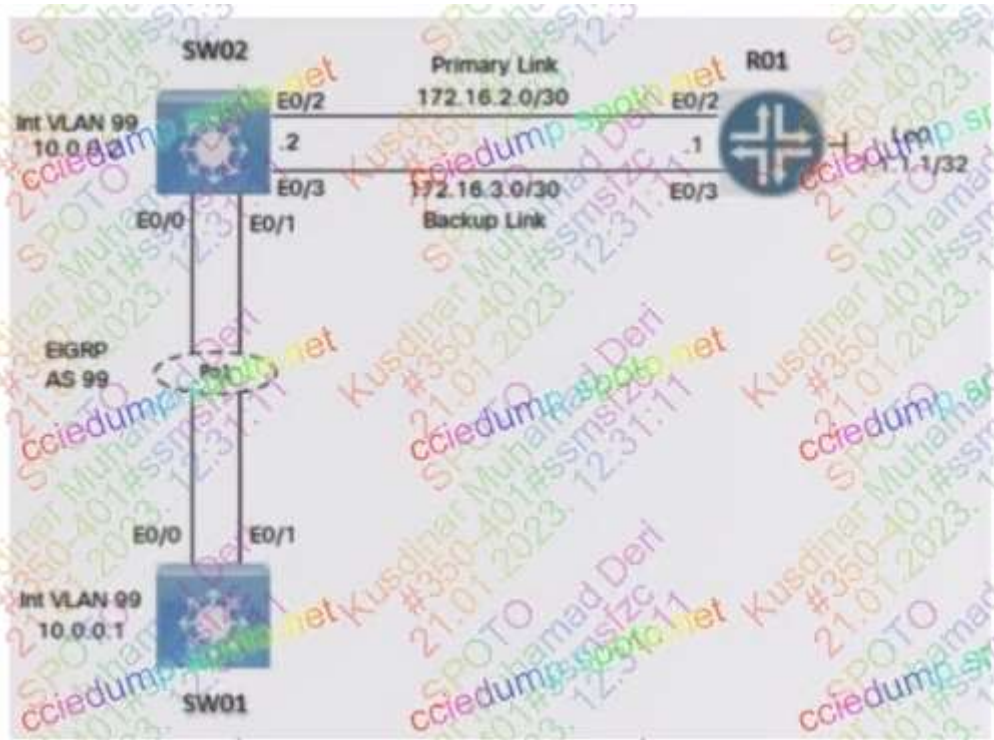
This is a lab item in which tasks will be performed on virtual devices.

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

##### Tasks

Configure logging on SW01 and NetFlow on R01 to achieve these goals:

1. Enable archive logging on SW01 to track each time a change is made to the configuration and the user who made the change.
2. The NetFlow Top Talkers feature has been preconfigured on R01. Enable the feature for all inbound traffic on interface E0/2 of R01.



A. SW01:

```

SW01>en
SW01#conf t
SW01(config)#archive
SW01(config-archive)#log config
SW01(config-archive-log-cfg)#logging enable
SW01(config-archive-log-cfg)#end
SW01#wr

R01:

R01>en
R01#conf t
R01(config)# interface e0/2
R01(config-if)# ip flow ingress
R01(config-if)# end
R01#wr

```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

## QUESTION 12

### Guidelines

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

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

### Tasks

Configure the devices according to the topology to achieve these goals:

1. Configure a SPAN session on SW01 using these parameters:

Session Number: 20

Source Interface: VLAN 99

Traffic Direction: Transmitted Traffic

Destination Interface: Ethernet 0/1

2. Configure the NetFlow Top Talkers feature for outbound traffic on interface E0/2 of R01 with these parameters.

Number of Top Talkers: 50

Sort Type: Packets

Cache Timeout: 30 seconds

3. Configure an IP SLA operation on SW02 and start the ICMP probe with these parameters:

Entry Number: 10

Target IP: 1.1.1.1

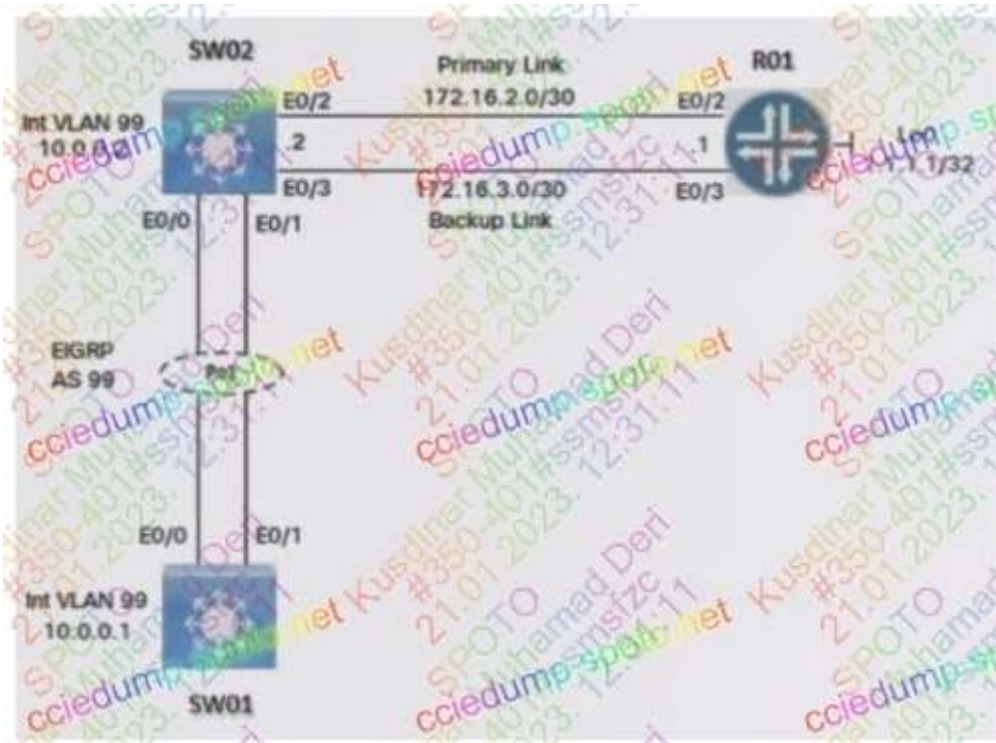
Source IP: 172.16.2.2

Frequency: 5 seconds

Threshold: 250 milliseconds

Timeout: 3000 milliseconds

Lifetime: Forever



```

A. SW01> en
SW01# config t
SW01(config)# monitor session 20 source vlan 99 tx
SW01(config)# monitor session 20 destination interface e0/1
SW01(config)# do write

R01> en
R01# config t
R01(config)# ip flow-top-talkers
R01(config-flow-top-talkers)# top 50
R01(config-flow-top-talkers)# sort-by packets
R01(config-flow-top-talkers)# cache-timeout 30000
R01(config-flow-top-talkers)# exit
R01(config)# interface e0/2
R01(config-if)# ip flow egress
R01(config-if)# exit
R01(config)# do write

SW02> en
SW02# config t
SW02(config)# ip sla 10
SW02(config-ip-sla)# icmp-echo 1.1.1.1 source-ip 172.16.2.2
SW02(config-ip-sla-echo)# frequency 5
SW02(config-ip-sla-echo)# threshold 250
SW02(config-ip-sla-echo)# timeout 3000
SW02(config-ip-sla-echo)# exit
SW02(config)# ip sla schedule 10 life forever start-time now
SW02(config)# do write

```

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**