

CCNP/CCIE(350-401)ENCOR 题库 (2023.01.05)

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CCNP/CCIE(350-401)ENCOR 题库

Implementing Cisco Enterprise Network Core Technologies

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Exam A

QUESTION 1

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

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

论坛ID tianlaodadas:这个考的是思科SDN网络的基本概念。思科原文如下，请参考：

Fabric edge node: Equivalent of an access layer switch in a traditional campus LAN design. Endpoints, IP phones, and access points are directly connected to edge nodes.

B: LISP是SD-WAN的概念，排除。

C: 这个应该是说的broder leaf / broder node节点，连接其他的fabric或者传统网络三层节点。

D: 这个应该说的underlay的路由协议（bgp/evpn等），提供fabric border 节点之间的可达性。

QUESTION 2

Refer to the exhibit.

```
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  
1  
end
```

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

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 3

What is the difference between a RIB and a FIB?

- A. The FIB is populated based on RIB content.
- B. The RIB maintains a minor image of the FIB.
- C. The RIB is used to make IP source prefix-based switching decisions.
- D. The FIB is where all IP routing information is stored.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

论坛ID tianlaodadas:

BCD都是说反了。

RIB是路由表routing information database，存储的是收到的所有路由条目，相当于一个基础的数据库，类似于ospf的database。FIB是转发表forwarding information database，存储的是最有的转发表（IOS会根据RIB路由信息表，按照IP前缀，算出最佳的路由条目，并且和下一跳端口直接对应起来，设备硬件基于FIB表进行快速转发）。

QUESTION 4

Which requirement for an Ansible-managed node is true?

- A. It must have an SSH server running.
- B. It must be a Linux server or a Cisco device.
- C. It must support ad hoc commands.
- D. It must have an Ansible Tower installed.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

论坛ID tianlaodadas:

- A: ansible对网络设备的支持都是基于SSH协议的，所以必须有一台SSH server。
- B: ansible支持在linux或者windows系统上，不一定非要是思科的设备，只要能运行ssh协议作为管理节点即可，虚拟机或者物理机都可以。
- C: ad hoc命令是指ansible下临时执行的一条命令，所有的命令执行都要依赖于事先写好的模块，默认安装好的ansible 里面已经自带了很多模块。这个跟ansible管理节点没啥关系。
- D: Ansible Tower是红帽的一款专门用于ansible管理的设备，性能非常强大，功能也非常丰富，一般都是商用的多，当然也非常的贵。自己用，或者测试什么的，用不着，随便弄个虚拟机就可以做为管理节点了。

QUESTION 5

A client device fails to see the enterprise SSID, but other client devices are connected to it.

What is the cause of this issue?

- A. The client has incorrect credentials stored for the configured broadcast SSID.
- B. The hidden SSID was not manually configured on the client.
- C. The broadcast SSID was not manually configured on the client.
- D. The client has incorrect credentials stored for the configured hidden SSID.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

论坛ID tianlaodadas:

题目说自己看不到SSID，其他人能连上，说明是SSID 是隐藏的，没有广播出来，AC排除。

D: 设备上存了错误的认证信息，说明是连不上，而不是看不到隐藏的SSID。

B: 正确，没配置，肯定就看不到SSID了。

QUESTION 6

Which two descriptions of FlexConnect mode for Cisco APs are true? (Choose two.)

- A. APs that operate in FlexConnect mode cannot detect rogue APs
- B. FlexConnect mode is used when the APs are set up in a mesh environment and used to bridge between each other.
- C. FlexConnect mode is a feature that is designed to allow specified CAPWAP-enabled APs to exclude themselves from managing data traffic between clients and infrastructure.
- D. When connected to the controller, FlexConnect APs can tunnel traffic back to the controller
- E. FlexConnect mode is a wireless solution for branch office and remote office deployments

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

论坛ID tianlaodadas:

Information About FlexConnect

FlexConnect (previously known as Hybrid Remote Edge Access Point or H-REAP) is a wireless solution for branch office and remote office deployments. It enables customers to configure and control access points in a branch or remote office from the corporate office through a wide area network (WAN) link without deploying a controller in each office. The FlexConnect access points can switch client data traffic locally and perform client authentication locally when their connection to the controller is lost. When they are connected to the controller, they can also send traffic back to the controller. In the connected mode, the FlexConnect access point can also perform local authentication.

可以看到几点：FlexConnect mode 用于总部-分支节点这种模式，总部有controller，分支机构没有，正常情况下，由总部的controller管理分支机构的无线AP，一旦总部的controller连不上或者失效了，则运行在分支机构的FlexConnect模式的AP可以管理本地AP，本地认证，总部的controller恢复后，则切换到原来的由总部管理的状态。

DE是正确答案

A, 这个选项应该没啥疑问。原文中有一段：

When a FlexConnect access point enters standalone mode, it disassociates all clients that are on centrally switched WLANs. Most radio resource management (RRM) features (such as neighbor discovery; noise, interference, load, and coverage measurements; use of the neighbor list; and rogue containment and detection) are disabled. 在standalone模式下，非法AP检测才不能用，不是FlexConnect 模式。

B和C原文都没有涉及到，属于干扰项。

QUESTION 7

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

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

论坛ID 天边那片猫：

A和D两个答案，因为两个类型的默认hello time和dead time是一样的，能建立起邻居关系，但因为网络拓扑计算方式不一样，计算不出路由。

B答案 的两种类型的默认hello time和dead time是不一样的，默认建立不起邻居关系。但可以改成一样的hello time和dead time，邻居关系就可以建立起来，并正常计算出路由。

QUESTION 8

Which NGFW mode blocks flows crossing the firewall?

- A. tap
- B. inline
- C. passive
- D. inline tap

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.cisco.com/c/en/us/support/docs/security/firepower-ngfw/200924-configuring-firepower-threat-defense-int.html>

QUESTION 9

Which statement about route targets is true when using VRF-Lite?

- A. Route targets control the import and export of routes into a customer routing table.
- B. When BGP is configured, route targets are transmitted as BGP standard communities.
- C. Route targets allow customers to be assigned overlapping addresses.
- D. Route targets uniquely identify the customer routing table.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 10

How does Cisco TrustSec enable more flexible access controls for dynamic networking environments and data centers?

- A. uses flexible NetFlow
- B. assigns a VLAN to the endpoint
- C. classifies traffic based on advanced application recognition
- D. classifies traffic based on the contextual identity of the endpoint rather than its IP address

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

论坛ID tianlaodadas :

思科原文：The ultimate goal of Cisco TrustSec technology is to assign a tag (known as a Security Group Tag, or SGT) to the user's or device's traffic at ingress (inbound into the network), and then enforce the access policy based on the tag elsewhere in the infrastructure (in the data center, for example). This SGT is used by switches, routers, and firewalls to make forwarding decisions.

根据为每个user分配一个tag，即SGT，并且基于SGT做转发，这样做比基于目的地址转发灵活的多，也更好做安全管控。

QUESTION 11

Refer to the exhibit.

```
R1#debug ip ospf hello  
R1#debug condition interface Fa0\1  
Condition 1 Set
```

Which statement about the OPSF debug output is true?

- A. The output displays OSPF hello messages which router R1 has sent or received on interface Fa0/1.
- B. The output displays OSPF messages which router R1 has sent or received on all interfaces.
- C. The output displays OSPF messages which router R1 has sent or received on interface Fa0/1.
- D. The output displays OSPF hello and LSACK messages which router R1 has sent or received.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

论坛ID bailing :

debug ip ospf hello : only display hello message

debug condition interface fa0/1: further only display the hello message that sent or received from or to the interface f0/1

QUESTION 12

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

- A. PITR
- B. map resolver

- C. map server
- D. PETR

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

itwong: PITR是Proxy Ingress Tunneling Router,负责连接非Lisp到lisp的，而PETR是负责链接lisp到非lisp的，大概原理跟SD-access下的fusion router/border nodes一样，为的是能让SD-Access能跟非SDA领域的通信交流

QUESTION 13

Which two protocols are used with YANG data models? (Choose two.)

- A. TLS
- B. RESTCONF
- C. SSH
- D. NETCONF
- E. HTTPS

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

itwong: 在IOSXE下，NETCONF/RESTCONF是使用YANG数据模式

QUESTION 14

Which HTTP status code is the correct response for a request with an incorrect password applied to a REST API session?

- A. HTTP Status Code: 200
- B. HTTP Status Code: 302
- C. HTTP Status Code: 401
- D. HTTP Status Code: 504

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

论坛ID tianlaodadas :

http的状态代码规则:

2xx 成功

3xx 重定向

4xx 客户机中出现的错误

5xx 服务器中出现的错误

题目中是说密码不对, http 504 意思是gateway time-out。所以选C

QUESTION 15

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

- . The first method for authentication is TACACS
- . 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 default group tacacs+
aaa session-id common
```

```
R1#sh run | section vty
```

```
line vty 0 4
```

```
  transport input none
```

```
R1#
```

C. 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 02050D480809

R1#**sh run | include username**

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 02050D480809

R1#**sh run | include username**

R1#

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 16

Which statement about multicast RPs is true?

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

论坛ID tianlaodadas:

题目考组播的模式，常用的组播路由协议PIM有2种模式，PIM-DS模式和PIM-SM模式。SP（汇聚点）类似于媒婆，只在PIM-SD模式中才会有，开始的时候，组播客户端都向RP去注册，生成客户端到RP以及组播源到RP的最短转发路径，然后RP就知道了到组播客户端和到组播源的最短转发路径，这时候后发生switch机制，RP会分别告诉组播源和组播客户端相互的信息，让组播客户端重新注册到组播源，生成最短转发路径，然后就自己转发了。PIM-SM（稀疏模式）模式适合组播客户端比较分散的环境，零星分布。PIM-DM模式适合组播客户端比较密集的场景，组播源会周期性的问网络哪些客户端要数据的，客户端收到询问报文后就会注册到组播源，说我要，你发给我。有一种说法是DM模式采用push的方式，SP模式采用pull的方式。

QUESTION 17

To increase total throughput and redundancy on the links between the wireless controller and switch, the customer enabled LAG on the wireless controller.

Which EtherChannel mode must be configured on the switch to allow the WLC to connect?

- A. Active
- B. Passive
- C. On
- D. Auto

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

论坛ID woyaoie：LAG是老的AirOS的无线控制器上的portchannel模式。在AirOS系统上只支持“mode on”。

QUESTION 18

Which feature does Cisco TrustSec use to provide scalable, secure communication throughout a network?

- A. security group tag ACL assigned to each port on a switch
- B. security group tag number assigned to each user on a switch
- C. security group tag number assigned to each port on a network
- D. security group tag ACL assigned to each router on a network

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

论坛ID tianlaodadas:

思科原文：The ultimate goal of Cisco TrustSec technology is to assign a tag (known as a Security Group Tag, or SGT) to the user's or device's traffic at ingress (inbound into the network), and then enforce the access policy based on the tag elsewhere in the infrastructure (in the data center, for example). This SGT is used by switches, routers, and firewalls to make forwarding decisions.

根据为每个user分配一个tag，即SGT，并且基于SGT做转发，这样做比基于目的地址转发灵活的多，也更好做安全管控。

QUESTION 19

An engineer configures a WLAN with fast transition enabled. Some legacy clients fail to connect to this WLAN.

Which feature allows the legacy clients to connect while still allowing other clients to use fast transition based on their OUIs?

- A. over the DS
- B. 802.11k
- C. adaptive R
- D. 802.11v

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

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

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 22

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

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

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

论坛ID woyaole :

SNR是信噪比，也就是接收信号相对于背景噪声的强度。接收信号强度通过RSSI来衡量。而背景噪声通过noise floor来衡量。二者相除就能得到信噪比。
英文解释如下：[https://documentation.meraki.com ... nal-to-Noise_Ratio_\(SNR\)_and_Wireless_Signal_Strength](https://documentation.meraki.com ... nal-to-Noise_Ratio_(SNR)_and_Wireless_Signal_Strength)

QUESTION 23

Which statements are used for error handling in Python?

- A. try/catch
- B. catch/release
- C. block/rescue
- D. try/except

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

论坛ID itwong: Python使用Try/except/else/finally来处理编程上的错误处理

<https://www.programiz.com/python-programming/exception-handling>

QUESTION 24

What are two benefits of virtualizing the server with the use of VMs in a data center environment? (Choose two.)

- A. reduced rack space, power, and cooling requirements
- B. smaller Layer 2 domain
- C. increased security
- D. speedy deployment
- E. reduced IP and MAC address requirements

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

论坛ID itwong: 题目是问在数据中心里，服务器虚拟化的两个优点？答案是A跟D，服务器虚拟化就减少实体服务器的数量，从而减少所需空间跟发热量，而且可以更快更有效率的部署新VM。比VM更有效率的是containers，因为不需要部署操作系统，多个containers可以共享一个操作系统的底层资源，所需储存空间也大大减少

QUESTION 25

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

- A. automation backup
- B. system update

- C. golden image selection
- D. proxy configuration
- E. application updates

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

论坛ID woyaole:

DNAC 是个大的集成系统，由DNAC本体和上面的application构成，所以要先升级本体，再升级app

https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/upgrade/b_cisco_dna_center_upgrade_guide/133x.html

QUESTION 26

What is a benefit of data modeling languages like YANG?

- A. They create more secure and efficient SNMP OIDs.
- B. They provide a standardized data structure, which results in configuration scalability and consistency.
- C. They enable programmers to change or write their own applications within the device operating system.
- D. They make the CLI simpler and more efficient.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

论坛ID Max2020:

Yang模型提供了结构化的数据，可以有XML或JSON的表示方式

QUESTION 27

Refer to the exhibit.

Name is Bob Johnson
Age is 75
is alive

Favorite foods are:

- Cereal
- Mustard
- Onions

What is the JSON syntax that is formed from the data?

- A. {Name: Bob Johnson, Age: 75, Alive: true, Favorite Foods: [Cereal, Mustard, Onions]}
- B. {"Name": "Bob Johnson", "Age": 75, "Alive": true, "Favorite Foods": ["Cereal", "Mustard", "Onions"]}
- C. {'Name': 'Bob Johnson', 'Age': 75, 'Alive': True, 'Favorite Foods': 'Cereal', 'Mustard', 'Onions'}
- D. {"Name": "Bob Johnson", "Age": Seventyfive, "Alive": true, "Favorite Foods": ["Cereal", "Mustard", "Onions"]}

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

论坛ID powerinside:

字符串双引号，排除AD。并列的值用方括弧，逗号隔开。C也不对。只能选B。

QUESTION 28

Based on this interface configuration, what is the expected state of OSPF adjacency?

R1:

```
interface GigabitEthernet0/1
    ip address 192.0.2.1 255.255.255.252
    ip ospf 1 area 0
    ip ospf hello-interval 2
    ip ospf cost 1
end
```

R2:

```
interface GigabitEthernet0/1
    ip address 192.0.2.2 255.255.255.252
    ip ospf 1 area 0
    ip ospf cost 500
end
```

- A. 2WAY/DROTHER on both routers
- B. not established
- C. FULL on both routers
- D. FULL/BDR on R1 and FULL/BDR on R2

Correct Answer: B

Section: (none)

Explanation

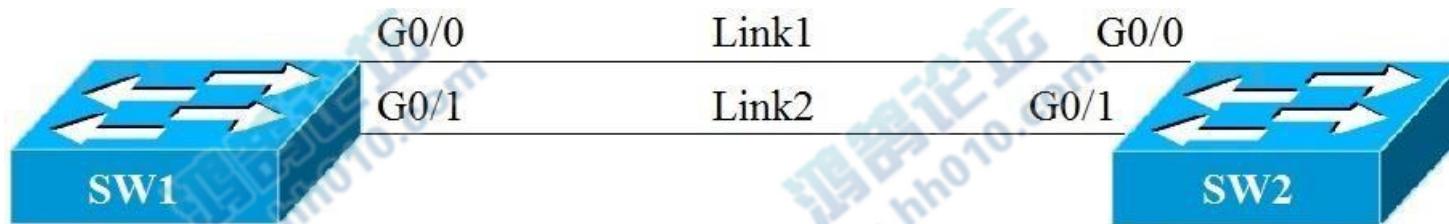
Explanation/Reference:

论坛ID 天边那片猫：

R1 的hello time被改成2了， hello time 不一致而建立不起来邻居关系

QUESTION 29

Refer to the exhibit.



SW2#show spanning-tree

VLAN0001

Spanning tree enabled protocol ieee

Root ID	Priority	32769
	Address	5000.0005.0000
	Cost	4
	Port	1 (GigabitEthernet0/0)
	Hello Time	2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID	Priority	32769 (priority 32769 sys-id-ext 1)
	Address	5000.0006.0000
	Hello Time	2 sec Max Age 20 sec Forward Delay 15 sec
	Aging Time	300 sec

Interface	Role	Sts	Cost	Prio.libr	Type
Gi0/0	Root	FWD	4	128.1	P2p
Gi0/1	Alto	BLW	4	32.2	P2p

Link1 is a copper connection and Link2 is a fiber connection. The fiber port must be the primary port for all forwarding. The output of the show spanning-tree command on SW2 shows that the fiber port is blocked by spanning tree. An engineer enters the spanning-tree port-priority 32 command on G0/1 on SW2, but the port remains blocked.

Which command should be entered on the ports that are connected to Link2 to resolve the issue?

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 30

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: C

Section: (none)

Explanation

Explanation/Reference:

论坛ID powerinside:

A 对象嵌套花括号 这个缺失了。

B 斜杠是转义吧 有点多余。

D 不应该用)括弧。

QUESTION 31

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

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

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 32

When using TLS for syslog, which configuration allows for secure and reliable transportation of messages to its default port?

- A. logging host 10.2.3.4 vrf mgmt transport tcp port 514
- B. logging host 10.2.3.4 vrf mgmt transport udp port 514
- C. logging host 10.2.3.4 vrf mgmt transport tcp port 6514
- D. logging host 10.2.3.4 vrf mgmt transport udp port 6514

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://tools.ietf.org/html/rfc5425>

QUESTION 33

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

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

论坛ID soul111: https://www.cisco.com/c/en/us/td ... i_nxos/l3_hsrp.html

When you change the HSRP version, Cisco NX-OS reinitializes the group because it now has a new virtual MAC address.

QUESTION 34

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

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

论坛ID powerinside:

使用ssl (https) 加密通讯，比http明文要安全。ssh是secure shell 这又不是ansible，排除。tcp只管传输，安全不安全是无关的。只有可靠性。

QUESTION 35

Refer to this output.

R1# *Feb 14 37:09:53.129: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

What is the logging severity level?

- A. notification
- B. emergency
- C. critical
- D. alert

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

itwong: logging level 5是notification。

QUESTION 36

Refer to the exhibit.



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	64517i
*		192.168.101.14	80	80	0	64516i
*		192.168.101.10			0	64515 64515i
*>		192.168.101.2			32768	64513i
*		192.168.101.6		80	0	64514 64514i

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

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 37

Which PAgP mode combination prevents an EtherChannel from forming?

- A. auto/desirable
- B. desirable/desirable
- C. desirable/auto
- D. auto/auto

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.omnisecu.com/cisco-certified-network-associate-ccna/etherchannel-pagp-and-lacp-modes.php>

QUESTION 38

If a VRRP master router fails, which router is selected as the new master router?

- A. router with the lowest priority
- B. router with the highest priority
- C. router with the highest loopback address
- D. router with the lowest loopback address

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 39

Which QoS component alters a packet to change the way that traffic is treated in the network?

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

Correct Answer: C

Section: (none)

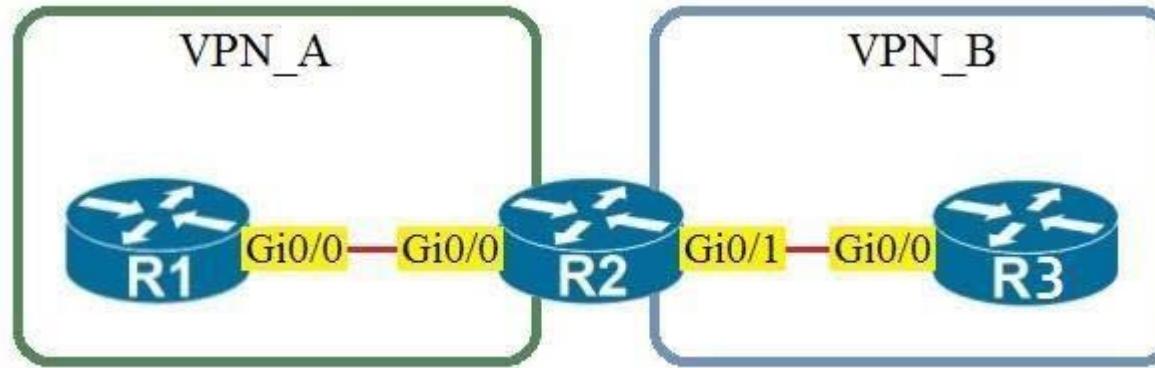
Explanation

Explanation/Reference:

论坛ID itwong: QoS会通过标记数据包header里面marking来区分那些数据包需要优先处理, 详情请看 ->https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/qos_mqc/configuration/xe-16/qos-mqc-xe-16-book/qos-mrkg.html

QUESTION 40

Refer to the exhibit.



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

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 41

Refer to the exhibit.

General Security QoS Advanced Policy Mapping

Layer 2 Layer 3 AAA Servers

Fast Transition

Fast Transition

Protected Management Frame

PMF

WPA+WPA2 Parameters

WPA Policy
WPA2 Policy-AES

Authentication Key Management

802.1X	<input type="checkbox"/> Enable
CCKM	<input type="checkbox"/> Enable
PSK	<input checked="" type="checkbox"/> Enable
FT 802.1X	<input type="checkbox"/> Enable
FT PSK	<input type="checkbox"/> Enable
PSK Format	<input type="button" value="ASCII"/> *****

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

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 42

Which two mechanisms are available to secure NTP? (Choose two.)

- A. IPsec
- B. IP prefix list-based
- C. encrypted authentication
- D. TACACS-based authentication
- E. IP access list-based

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.cisco.com/c/dam/en/us/td/docs/ios-xml/ios/bsm/configuration/xe-3se/3650/bsm-xe-3se-3650-book.html>

QUESTION 43

Which technology provides a secure communication channel for all traffic at Layer 2 of the OSI model?

- A. SSL
- B. Cisco TrustSec
- C. MACsec
- D. IPsec

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 44

Refer to the exhibit.

```
Extended IP access list EGRESS
10 permit ip 10.0.0.0.0.0.255 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
!
```

An engineer must block all traffic from a router to its directly connected subnet 209.165.200.0/24. The engineer applies access 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. Access control lists that are applied outbound to a router interface do not affect traffic that is sourced from the router.
- 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. Only standard access control lists can block traffic from a source IP address.
- D. The access control list must contain an explicit deny to block traffic from the router.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 45

Which two methods are used by an AP that is trying to discover a wireless LAN controller? (Choose two.)

- A. Cisco Discovery Protocol neighbor
- B. querying other APs

- C. DHCP Option 43
- D. broadcasting on the local subnet
- E. DNS lookup CISCO-DNA-PRIMARY.localdomain

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.cisco.com/c/en/us/support/docs/wireless/5500-series-wireless-controllers/119286-lap-notjoin-wlc-tshoot.html#backinfo>

QUESTION 46

Which IP SLA operation requires the IP SLA responder to be configured on the remote end?

- A. UDP jitter
- B. ICMP jitter
- C. TCP connect
- D. ICMP echo

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

scorpio920204: Cisco IOS IP SLA Responder 是一個 Cisco IOS 軟件組件，其功能是響應 Cisco IOS IP SLA 請求數據包。IP SLA 源在操作開始之前發送控制數據包以建立與響應者的連接。一旦控制包被確認，測試包被發送到響應者。響應者在接收到數據包時插入時間戳，併計算出目標處理時間並將時間戳添加到發送的數據包中。此功能允許以 ping 或其他專用探針測試無法實現的精度計算單向數據包丟失、延遲和抖動測量。

<https://www.cisco.com/c/en/us/td ... er-46SG/swipsla.pdf>

QUESTION 47

Which statement explains why Type 1 hypervisor is considered more efficient than Type2 hypervisor?

- A. Type 1 hypervisor is the only type of hypervisor that supports hardware acceleration techniques.
- B. Type 1 hypervisor relies on the existing OS of the host machine to access CPU, memory, storage, and network resources.
- C. Type 1 hypervisor runs directly on the physical hardware of the host machine without relying on the underlying OS.
- D. Type 1 hypervisor enables other operating systems to run on it.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

itwong : Type-1 hypervisor不需要依赖传统操作系统如Windows, macOS跟linux, 例如vmware esxi, 有点是轻巧, 占用系统资源低, 而Type-2 hypervisor需要依赖传统操作系统, 例如vmware workstation, Windows10/server 2016/2019自带的hyper-V。

QUESTION 48

A client with IP address 209.165.201.25 must access a web server on port 80 at 209.165.200.225. To allow this traffic, an engineer must add a statement to an access control list that is applied in the inbound direction on the port connecting to the web servers.

Which statement allows this traffic?

- A. permit tcp host 209.165.200.225 lt 80 host 209.165.201.25
- B. permit tcp host 209.165.201.25 host 209.165.200.225 eq 80
- C. permit tcp host 209.165.200.225 eq 80 host 209.165.201.25
- D. permit tcp host 209.165.200.225 host 209.165.201.25 eq 80

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 49

In OSPF, which LSA type is responsible for pointing to the ASBR router?

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 50
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. SW2(config)#vtp pruning
- D. SW1(config)#vtp pruning

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.orbit-computer-solutions.com/vtp-pruning/>

QUESTION 51

Which statement about a fabric access point is true?

- 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:

itwong: 在SDA模式下的AP运行在local模式，通过fabric edge使用vxlan跟WLC通信，详细请看 SDA design guide here -> <https://www.cisco.com/c/dam/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/deploy-guide/cisco-dna-center-sd-access-wl-dg.pdf>

QUESTION 52

Which First Hop Redundancy Protocol maximizes uplink utilization and minimizes the amount of configuration that is necessary?

- A. GLBP
- B. HSRP v2
- C. VRRP
- D. HSRP v1

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

论坛ID itwong: GLBP(gateway load balance protocol). HSRP/VRRP都是active/standby模式，也就是说两个uplink的话，任何时候只有其中一个router在forward数据包，而glbp可以load-balance，原理跟DNS的round-robin模式一样，也就是说所有glbp成员都在工作

QUESTION 53

Which standard access control entry permits traffic from odd-numbered hosts in the 10.0.0.0/24 subnet?

- A. permit 10.0.0.0 0.0.0.1
- B. permit 10.0.0.1 0.0.0.254
- C. permit 10.0.0.1 0.0.0.0
- D. permit 10.0.0.0 255.255.255.254

Correct Answer: B

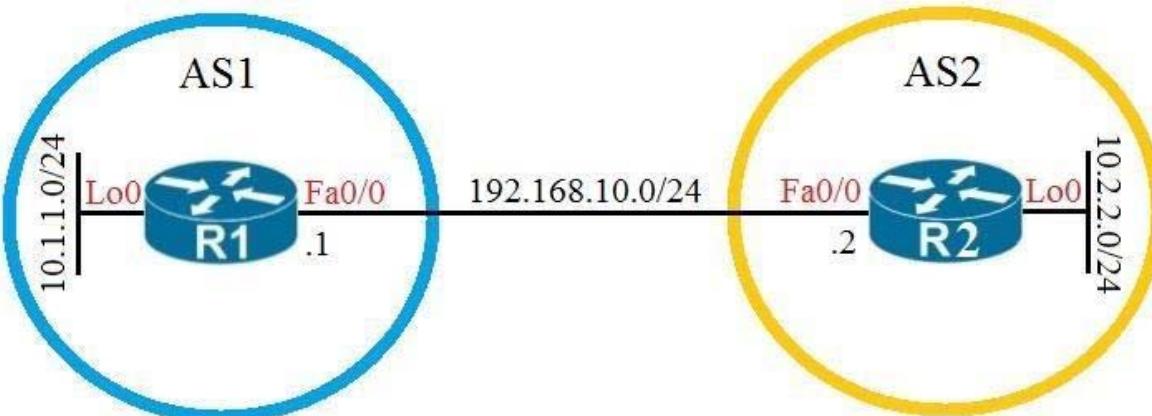
Section: (none)

Explanation

Explanation/Reference:

QUESTION 54

Refer to the exhibit.



Which configuration establishes EBGP connected 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 10.1.1.0 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
- B. 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
- C. 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
- 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: A

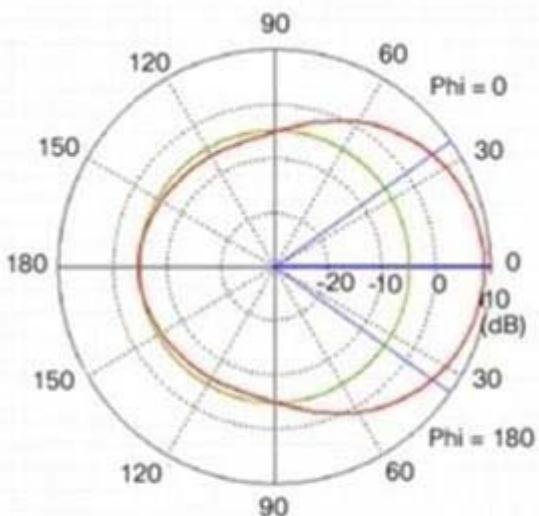
Section: (none)

Explanation

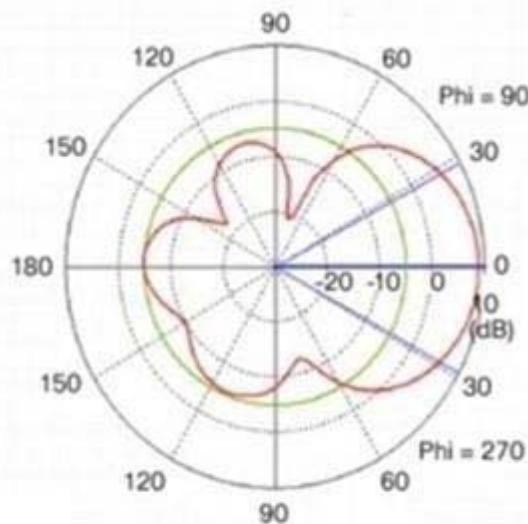
Explanation/Reference:

QUESTION 55

Refer to the exhibit.



Antenna Azimuth
Plane Pattern



Antenna Elevation
Plane Pattern

Which type of antenna do the radiation patterns present?

- A. Yagi
- B. patch

- C. omnidirectional
- D. dipole

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: https://www.cisco.com/c/en/us/products/collateral/wireless/aironet-antennas-accessories/prod_white_paper0900aecd806a1a3e.html

QUESTION 56

Which method creates an EEM applet policy that is registered with EEM and runs on demand or manually?

- A. event manager applet ondemand
event none
action 1.0 syslog priority critical msg 'This is a message from ondemand'
- B. event manager applet ondemand
action 1.0 syslog priority critical msg 'This is a message from ondemand'
- C. event manager applet ondemand
event register
action 1.0 syslog priority critical msg 'This is a message from ondemand'
- D. event manager applet ondemand
event manual
action 1.0 syslog priority critical msg 'This is a message from ondemand'

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 57

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. ISE server
- B. RADIUS server

- C. anchor WLC
- D. local WLC

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 58

Which controller is the single plane of management for Cisco SD-WAN?

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

itwong: 思科SD-WAN里面vManage为单一管理界面，所以答案是C. vBond为Orchestration plane, vSmart为control plane运行OMP(overlay management protocol)。

QUESTION 59

A network is being migrated from IPv4 to IPv6 using a dual-stack approach. Network management is already 100% IPv6 enabled.

In a dual-stack network with two dual-stack NetFlow collectors, how many flow exporters are needed per network device in the flexible NetFlow configuration?

- A. 1
- B. 2
- C. 4
- D. 8

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 60

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 provided using NGINX acting as a proxy web server.
- D. It is not supported on Cisco devices.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

kk199: NGINX is an internal webserver that acts as a proxy webserver. It provides Transport Layer Security (TLS)-based HTTPS. RESTCONF request sent via HTTPS is first received by the NGINX proxy web server and the request is transferred to the confd web server for further syntax/semantics check.https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/168/b_168_programmability_cg/RESTCONF.html

The certificate seems to not be required, but optional

QUESTION 61

Which reason could cause an OSPF neighborship to be in the EXSTART/EXCHANGE state?

- A. mismatched OSPF link costs
- B. mismatched OSPF network type
- C. mismatched areas
- D. mismatched MTU size

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

itwong: MTU值不匹配, 详细请看这里 ://www.cisco.com/c/en/us/support/docs/ip/open-shortest-path-first-ospf/13684-12.html

QUESTION 62

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:

Reference: https://www.cisco.com/c/en/us/products/collateral/ios-nx-os-software/locator-id-separation-protocol-lisp/white_paper_c11-652502.html

QUESTION 63

Which method does the enable secret password option use to encrypt device passwords?

- A. MD5
- B. PAP
- C. CHAP
- D. AES

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.cisco.com/c/en/us/support/docs/security-vpn/remote-authentication-dial-user-service-radius/107614-64.html>

QUESTION 64

Which statement about agent-based versus agentless configuration management tools is true?

- A. Agentless tools use proxy nodes to interface with slave nodes.
- B. Agentless tools require no messaging systems between master and slaves.
- C. Agent-based tools do not require a high-level language interpreter such as Python or Ruby on slave nodes.
- D. Agent-based tools do not require installation of additional software packages on the slave nodes.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 65

Which statement about Cisco Express Forwarding is true?

- A. The CPU of a router becomes directly involved with packet switching decisions.
- B. It uses a fast cache that is maintained in a router data plane.
- C. It maintains two tables in the data plane: the FIB and adjacency table.
- D. It makes forwarding decisions by a process that is scheduled through the IOS scheduler.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

论坛ID itwong 提供：

What are two characteristics of Cisco Express Forwarding CEF?

^

What are two characteristics of Cisco Express Forwarding (CEF)? (Choose two.)

- Packets are **forwarded** based on information in the FIB and an adjacency table.
- When a packet arrives on a router interface, it is **forwarded** to the control plane where the CPU matches the destination address with a matching routing table entry.

[More items...](#) • Oct 29, 2020

QUESTION 66

Refer to the exhibit.

```
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
```

What are two effects of this configuration? (Choose two.)

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

- E. The 10.1.1.0/27 subnet is assigned as the inside global address range.

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 67

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

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

itwong:

WPA2 Enterprise 使用 802.11x 配合 Radius server, 如 Cisco ISE. 所以答案是 C,

Reference: <https://www.cisco.com/c/en/us/support/docs/wireless/4400-series-wireless-lan-controllers/100708-wpa-uwn-config.html#conf>

QUESTION 68

What is the structure of a JSON web token?

- A. three parts separated by dots: header, payload, and signature
- B. three parts separated by dots: version, header, and signature
- C. header and payload
- D. payload and signature

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://auth0.com/docs/tokens/references/jwt-structure>

QUESTION 69

A response code of 404 is received while using the REST API on Cisco DNA Center to POST to this URL: /dna/intent/api/v1/template-programmer/project
What does the code mean?

- A. The POST/PUT request was fulfilled and a new resource was created. Information about the resource is in the response body.
- B. The request was accepted for processing, but the processing was not completed.
- C. The client made a request for a resource that does not exist.
- D. The server has not implemented the functionality that is needed to fulfill the request.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/application-policy-infrastructure-controller-enterprise-module/1-2-x/config-guide/b_apic-em_config_guide_v_1-2-x/b_apic-em_config_guide_v_1-2x_chapter_01001.html

QUESTION 70

What is a benefit of deploying an on-premises infrastructure versus a cloud infrastructure deployment?

- A. ability to quickly increase compute power without the need to install additional hardware
- B. less power and cooling resources needed to run infrastructure on-premises
- C. faster deployment times because additional infrastructure does not need to be purchased
- D. lower latency between systems that are physically located near each other

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

论坛whale-提供：问题问的是哪种情形使用私有云是优于公有云的。

A快速增加算力而不需要增加额外的硬件 ----这是共有云的优点，答案错误

B使用更少的电力和制冷资源-----这也是公有云的优点，答案错误。

C更快的部署----部署速度取决于硬件性能 CPU 内存 磁盘IO等等，另外公有云有很多SAS服务，感觉不正确

D系统之间更少的延迟----私有云部署在本地延迟相比公有云肯定会更少，D答案正确

QUESTION 71

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. SD-Access wireless
- D. Mobility Express

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 72

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

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

Correct Answer: CF

Section: (none)

Explanation

Explanation/Reference:

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b_166_programmability_cg/b_166_programmability_cg_chapter_01011.html

QUESTION 73

Refer to the exhibit.

Clients > Detail

[< Back](#) [Apply](#) [Link Test](#) [Remove](#)

Client Properties

AP Properties

MAC Address	00:09:ef:95:07:bd	AP Address	3c:ce:73:1b:33:39
IP Address	192.100.101.100	AP Name	172.22.253.20
Client Type	Regular	AP Type	Mobile
User Name		WLAN Profile	Staff
Port Number	29	Status	Associated
Interface	Staff	Association ID	0
VLAN ID	1602	802.11 Authentication	Open System
CCX Version	Not Supported	Reason Code	1
E2E Version	Not Supported	Status Code	0
Mobility Role	Anchor	CF Pollable	Not Implemented
Mobility Peer IP Address	172.22.253.20.	CF Poll Request	Not Implemented
Policy Manager State	LUN	Short Preamble	Implemented
Management Frame Protection	No	PBCC	Not Implemented
UpTime (Sec)	3710	Channel Agility	Not Implemented
Power Save Mode	OFF	Timeout	0
Current TxRateSet		WEP State	WEP Enable
Data RateSet	5.5,11.0,6.6,9.0,12.0,19.0,24.0,26.6,40.0,51.6		

The WLC administrator sees that the controller to which a roaming client associates has Mobility Role Anchor configured under Clients > Detail. Which type of roaming is supported?

- A. indirect
- B. Layer 3 intercontroller
- C. intracontroller
- D. Layer 2 intercontroller

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 74

In which part of the HTTP message is the content type specified?

- A. HTTP method
- B. body
- C. header
- D. URI

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/Content-Type>

QUESTION 75

Which statement about VXLAN is true?

- A. VXLAN encapsulates a Layer 2 frame in an IP-UDP header, which allows Layer 2 adjacency across router boundaries.
- B. VXLAN uses the Spanning Tree Protocol for loop prevention.
- C. VXLAN extends the Layer 2 Segment ID field to 24-bits, which allows up to 4094 unique Layer 2 segments over the same network.
- D. VXLAN uses TCP as the transport protocol over the physical data center network.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

itwong:

VXLAN是mac-in-ip或者是ip-in-ip，使用UDP/4789，vnid改为 $2^{24}=16.7\text{million}$. VXLAN不再使用STP

QUESTION 76

What is the fact about Cisco EAP-FAST?

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

The EAP-FAST protocol is a publicly accessible IEEE 802.1X EAP type that Cisco developed to support customers that cannot enforce a strong password policy and want to deploy an 802.1X EAP type that does not require digital certificates.

EAP-FAST is also designed for simplicity of deployment since it does not require a certificate on the wireless LAN client or on the RADIUS infrastructure yet incorporates a built-in provisioning mechanism

Reference: <https://www.cisco.com/c/en/us/support/docs/wireless/4400-series-wireless-lan-controllers/99791-eapfast-wlc-rad-config.html>

QUESTION 77

What do Cisco DNA southbound APIs provide?

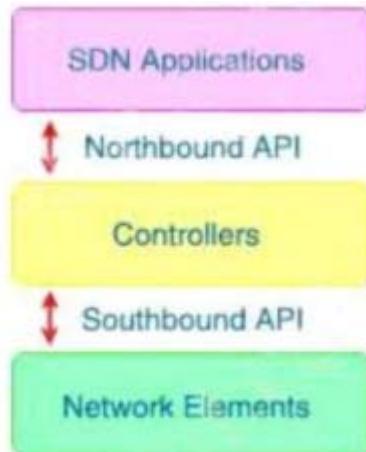
- A. interface between the controller and the consumer
- B. RESTful API interface for orchestrator communication
- C. interface between the controller and the network devices
- D. NETCONF API interface for orchestrator communication

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:



QUESTION 78

Which DNS lookup does an access point perform when attempting CAPWAP discovery?

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

itwong

1. AP issues a DHCP discover request to get an IP address, unless it has previously configured static IP.
2. AP send a layer 3 local broadcast(255.255.255.255) message to find a WLC
3. DHCP Option 43 in the DHCP offer messages.
4. DNS- AP try to resolve CISCO-CAPWAP-CONTROLLER.local-domain or CISCO-LWAPP-CONTROLLER.local-domain to find an IP of a WLC
5. Previously known WLC IP, AP will remember up to 24 previously learnt WLC IP address & send discovery to them.
6. Statically configured from WLC
7. Statically Configured from AP CLI

Reference: http://www.revolutionwifi.net/revolutionwifi/2010/11/capwap-controller-discovery-process_23.html

QUESTION 79

Which TCP setting is tuned to minimize the risk of fragmentation on a GRE/IP tunnel?

- A. MSS
- B. MTU
- C. MRU
- D. window size

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

eigrpospf :

MSS=Maximum Segment Size(最大分段长度) 是TCP协议中一个选项, 对于收发双向有效。

思科路由器在接口模式下使用命令 ip tcp adjust-mss xxxx "来做设置, 如

ip tcp adjust-mss 1480

QUESTION 80

Which statement about an RSPAN session configuration is true?

- A. Only one session can be configured at a time.
- B. A special VLAN type must be used as the RSPAN destination.
- C. A filter must be configured for RSPAN sessions.
- D. Only incoming traffic can be monitored.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:**QUESTION 81**

Refer to the exhibit.

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
```

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 GigabitEthernet 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 EGRESS
permit ip 10.1.10.0 255.255.255.0 10.1.2.0 255.255.255.0

B. 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
```

C. 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
```

D. 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
```

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 82

What is the role of a fusion router in an SD-Access solution?

- A. acts as a DNS server
- B. provides additional forwarding capacity to the fabric
- C. performs route leaking between user-defined virtual networks and shared services
- D. provides connectivity to external networks

Correct Answer: C

Section: (none)

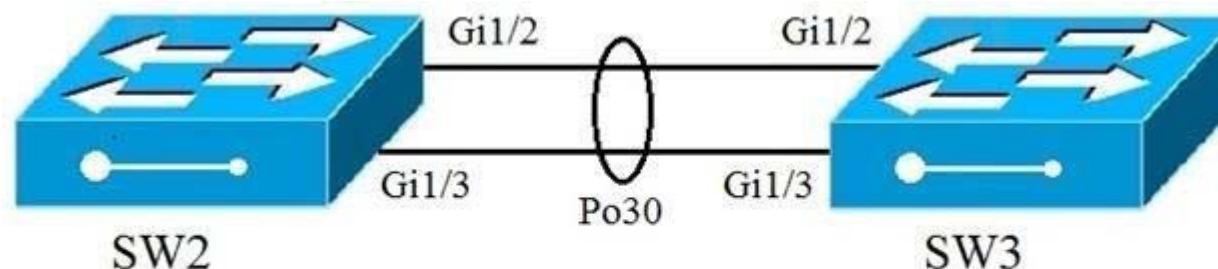
Explanation

Explanation/Reference:

Reference: <https://www.cisco.com/c/en/us/support/docs/cloud-systems-management/dna-center/213525-sda-steps-to-configure-fusion-router.html#anc1>

QUESTION 83

Refer to the exhibit.



Interface gil/2

Channel-group 30 mode desirable

Port-channel load-balance src-ip

Interface gil/3

Channel-group 30 mode desirable

Port-channel load-balance src-ip

Interface PortChannel 30

Switchport mode trunk

Switchport encapsulation dot1q

Switchport trunk allowed vlan 10-100

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 except 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 84

What does this EEM applet event accomplish?

"event snmp oid 1.3.6.1.3.7.0.9.5.3.1.2.9 get-type next entry-op gt entry-val 75 poll-interval 5"

- A. Upon the value reaching 75%, a SNMP event is generated and sent to the trap server.
- B. It reads an SNMP variable, and when the value exceeds 75%, it triggers an action.
- C. It issues email when the value is greater than 75% for five polling cycles.
- D. It presents a SNMP variable that can be interrogated.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 85

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 syslog priority direct msg '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 puts 'logging directly to console'

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/eem/configuration/xe-3s/eem-xe-3s-book/eem-policy-cli.html>

QUESTION 86

Which two GRE features are configured to prevent fragmentation? (Choose two.)

- A. TCP window size
- B. IP MTU
- C. TCP MSS
- D. DF bit clear
- E. MTU ignore

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

itwong: MTU值是关键，一般MTU为1500, 但在使用GRE时候，需要考虑overhead，例如overhead为50字节，那就需要ip mtu 改为1450或以下。TCP mss可以让router自己选择合适的MTU来避免TCP framentation.Cisco提供IPSEC overhead calculator -> <https://cway.cisco.com/ipsec-overhead-calculator>

QUESTION 87

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

- A. onboard vEdge nodes into the SD-WAN fabric
- B. gather telemetry data from vEdge routers
- C. distribute security information for tunnel establishment between vEdge routers
- D. manage, maintain, and gather configuration and status for nodes within the SD-WAN fabric

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

itwong :A是vBond的功能， B跟D是vManage功能

QUESTION 88

what is fact about Cisco SD-access wireless network infrastructure deployments?

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 89

Which feature is supported by EIGRP but is not supported by OSPF?

- A. route filtering
- B. unequal-cost load balancing
- C. route summarization
- D. equal-cost load balancing

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 90

What is the correct EBGP path attribute list, ordered from most preferred to least preferred, that the BGP best-path algorithm uses?

- A. local preference, weight, AS path, MED
- B. weight, local preference, AS path, MED
- C. weight, AS path, local preference, MED
- D. local preference, weight, MED, AS path



Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 91

At which layer does Cisco DNA Center support REST controls?

- A. session layer
- B. northbound APIs
- C. EEM applets or scripts
- D. YAML output from responses to API calls

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 92

On which protocol or technology is the fabric data plane based in Cisco SD-Access fabric?

- A. VXLAN
- B. LISP
- C. Cisco TrustSec
- D. IS-IS

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

itwong:SD-Access使用Lisp作为control plane, VXLAN作为data plane。

QUESTION 93

What is the difference between the enable password and the enable secret password when service password encryption is enabled on an IOS device?

- A. The enable secret password is protected via stronger cryptography mechanisms.
- B. The enable password cannot be decrypted.
- C. The enable password is encrypted with a stronger encryption method.
- D. There is no difference and both passwords are encrypted identically.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 94

Which access control list allows only TCP traffic with a destination port range of 22-443, excluding port 80?

- A. deny tcp any any eq 80
 permit tcp any any gt 21 lt 444
- B. permit tcp any any range 22 443
 deny tcp any any eq 80
- C. permit tcp any any eq 80
- D. deny tcp any any eq 80
 permit tcp any any range 22 443

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 95

Which statement describes the IP and MAC allocation requirements for virtual machines on Type 1 hypervisors?

- A. Virtual machines do not require a unique IP or unique MAC. They share the IP and MAC address of the physical server.
- B. Each virtual machine requires a unique IP address but shares the MAC address with the physical server.
- C. Each virtual machine requires a unique IP and MAC addresses to be able to reach other nodes.

- D. Each virtual machine requires a unique MAC address but shares the IP address with the physical server.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 96

A local router shows an EBGP neighbor in the Active state.

Which statement is true about the local router?

- A. The local router is attempting to open a TCP session with the neighboring router.
- B. The local router is receiving prefixes from the neighboring router and adding them in RIB-IN.
- C. The local router has active prefixes in the forwarding table from the neighboring router.
- D. The local router has BGP passive mode configured for the neighboring router.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 97

Which feature must be configured to allow packet capture over Layer 3 infrastructure?

- A. RSPAN
- B. ERSPAN
- C. VSPAN
- D. IPSPAN

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

itwong:ERSPAN使用L3 GRE来传输SPAN数据

Reference: <https://community.cisco.com/t5/networking-documents/understanding-span-rspan-and-erspan/ta-p/3144951>

QUESTION 98

Drag and drop the descriptions from the left onto the correct 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 99

Drag and drop the characteristics from the left onto the correct infrastructure deployment types on the right.

Select and Place:

- customizable hardware, purpose-built systems
- easy to scale and upgrade
- more suitable for companies with specific regulatory or security requirements
- resources can be over or underutilized as requirements vary
- requires a strong and stable internet connection
- built-in, automated data backups and recovery

On Premises

-
-
-

Cloud

-
-
-

Correct Answer:

On Premises

customizable hardware, purpose-built systems

more suitable for companies with specific regulatory or security requirements

resources can be over or underutilized as requirements vary

Cloud

easy to scale and upgrade

requires a strong and stable internet connection

built-in, automated data backups and recovery

Section: (none)

Explanation

Explanation/Reference:

QUESTION 100

Drag and drop the characteristics from the left onto the correct routing protocol types on the right.

Select and Place:

OSPF

supports unequal path load balancing

link state routing protocol

distance vector routing protocol

metric based on delay and reliability 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

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 based on delay and reliability by default

Section: (none)

Explanation

Explanation/Reference:

QUESTION 101

Refer to the exhibit.

```

SwitchC#show vtp status
VTP Version : 2
Configuration Revision : 0
Maximum VLANs supported locally : 255
Number of existing VLANs : 8
VTP Operating Mode : Transparent
VTP Domain Name : cisco.com
VTP Pruning Mode : Disabled
VTP V2 Mode : Disabled
VTP Traps Generation : Disabled
MDS 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

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

```

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

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 102

Refer to the exhibit.

```
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",
        "chunk": "0",
        "sid": "1",
        "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'][0]['body'][0]['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_tmstmp": "06/14/1970 09:49:04",
                    "chassis_id": "Nexus9000 03180YC-EX chassis",
                    "cpu_name": "Intel(R) Xeon(R) CPU @ 1.80GHz",
                    "memory": 24633488,
                    "mem_type": "kB",
                    "nr_usecs": 134703,
                    "nr_ctime": "Sun Mar 10 15:41:46 2019",
                    "nr_reason": "Reset Requested by CLI command reload",
                    "nr_sys_ver": "7.0(3)I7(4)",
                    "nr_service": "Cisco Systems, Inc.",
                    "TABLE_package_list": [
                        "ROW_package_list": [
                            "package_id": 0
                        ]
                    ]
                ]
            ]
        ]
    }
}
```

Which HTTP JSON response does the python code output give?

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

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:

QUESTION 103

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. control-plane node
- B. Identity Service Engine
- C. RADIUS server
- D. edge node

Correct Answer: B

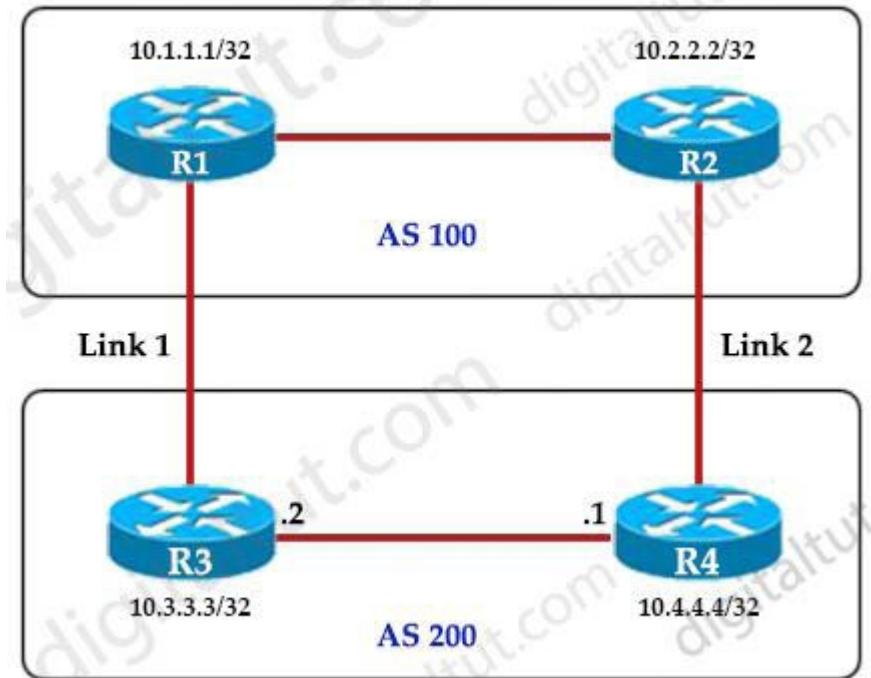
Section: (none)

Explanation

Explanation/Reference:

QUESTION 104

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 accomplish task?

- A. R4(config-router)#bgp default local-preference 200
- B. R3(config-router)#neighbor 10.1.1.1 weight 200
- C. R3(config-router)#bgp default local-preference 200
- D. R4(config-router)#neighbor 10.2.2.2 weight 200

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Local preference is an indication to the AS about which path has preference to exit the AS in order to reach a certain network. A path with a higher local preference is preferred. The default value for local preference is 100.

Unlike the weight attribute, which is only relevant to the local router, local preference is an attribute that routers exchange in the same AS. The local preference is set with the “bgp default local-preference value” command.

In this case, both R3 & R4 have exit links but R4 has higher local-preference so R4 will be chosen as the preferred exit point from AS 200.

QUESTION 105

Which protocol infers that a YANG data model is being used?

- A. SNMP
- B. REST
- C. RESTCONF
- D. NX-API

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

YANG (Yet another Next Generation) is a data modeling language for the definition of data sent over network management protocols such as the NETCONF and RESTCONF.

QUESTION 106

Which configuration restricts the amount of SSH 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  
    !!!  
  Interface GigabitEthernet0/1  
    ip address 209.165.200.225 255.255.255.0  
    ip access-group CoPP_SSH out  
    duplex auto  
    speed auto  
    media-type rj45  
    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 CoPP_SSH
exceed-action drop
!
Interface GigabitEthernet0/1
ip address 209.165.200.225 255.255.255.0
ip access-group ... out
duplex auto
speed auto
media-type rj45
service-policy input CoPP_SSH
!
Ip access-list extended CoPP_SSH
deny 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
!
Control-plane
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 transit

```
service-policy input CoPP_SSH
!
ip access-list extended CoPP_SSH
permit tcp any any eq 22
!
```

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 107

What NTP stratum level is a server that is connected directly to an authoritative time source?

- A. Stratum 0
- B. Stratum 1
- C. Stratum 14
- D. Stratum 15

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

forgotten: authoritative time source is with level 0, so the server connecting to it is with value +1 thus 1.

<https://www.cisco.com/c/en/us/td/docs/routers/asr920/configuration/guide/bsm/16-6-1/b-bsm-xe-16-6-1-asr920/bsm-time-calendar-set.html>

QUESTION 108

How does QoS traffic shaping alleviate network congestion?

- A. It drops packets when traffic exceeds a certain bitrate.
- B. It buffers and queue packets above the committed rate.
- C. It fragments large packets and queues them for delivery.
- D. It drops packets randomly from lower priority queues.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

sunnorth :

- A. Policing adapts to network congestion by queuing excess traffic
policing 不使用队列机制, shaping 使用队列
- B. Policing should be performed as close to the destination as possible
policing 应靠近源, 避免无用流量进入核心网络
- C. Policing drops traffic that exceeds the defined rate
对, policing 目的是drop超过CIR速率的流量, shaping 是尽量缓冲超过的流量
- D. Policing typically delays the traffic, rather than drops it
错, 这说的是shaping, 缓冲流量尽量不丢包, 但会产生延迟、抖动
- E. Policing should be performed as close to the source as possible
对, policing 应尽量靠近源, 避免无效流量进入网络

QUESTION 109

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

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

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 110

What mechanism does PIM use to forward multicast traffic?

- A. PIM sparse mode uses a pull model to deliver multicast traffic
- B. PIM dense mode uses a pull model to deliver multicast traffic
- C. PIM sparse mode uses receivers to register with the RP
- D. PIM sparse mode uses a flood and prune model to deliver multicast traffic

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 111

Which two namespaces does the LISP network architecture and protocol use? (Choose two)

- A. TLOC
- B. RLOC
- C. DNS
- D. VTEP
- E. EID

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

Locator ID Separation Protocol (LISP) is a network architecture and protocol that implements the use of two namespaces instead of a single IP address:
+ Endpoint identifiers (EIDs)—assigned to end hosts.
+ Routing locators (RLOCs)—assigned to devices (primarily routers) that make up the global routing system.
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_lisp/configuration/xe-3s/irl-xe-3s-book/irl-overview.html

QUESTION 112

Which First Hop Redundancy Protocol should be used to meet a design requirements for more efficient default bandwidth usage across multiple devices?

- A. GLBP
- B. LCAP
- C. HSRP
- D. VRRP

Correct Answer: A

Section: (none)

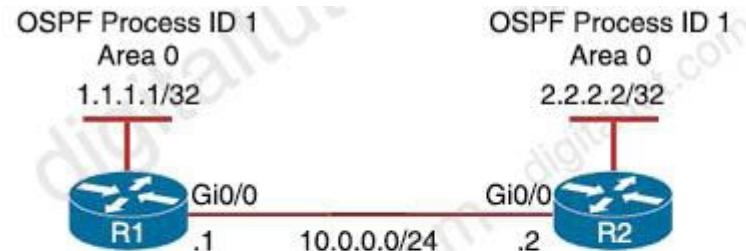
Explanation

Explanation/Reference:

The main disadvantage of HSRP and VRRP is that only one gateway is elected to be the active gateway and used to forward traffic whilst the rest are unused until the active one fails. Gateway Load Balancing Protocol (GLBP) is a Cisco proprietary protocol and performs the similar function to HSRP and VRRP but it supports load balancing among members in a GLBP group.

QUESTION 113

Refer to the exhibit.



Router R1

```
router ospf 1
  router-id 1.1.1.1
  network 1.1.1.1 0.0.0.0 area 0
  network 10.0.0.0 0.0.0.255 area 0
```

Router R2

```
router ospf 1
  router-id 2.2.2.2
  network 2.2.2.2 0.0.0.0 area 0
  network 10.0.0.0 0.0.0.255 area 0
```

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 Gigabit Ethernet interfaces in area 0. Which configuration set accomplishes this goal?

- A. 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
- 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 database-filter all out
R2(config-if)#interface Gi0/0
R2(config-if)#ip ospf database-filter all out
- D. 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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Broadcast and Non-Broadcast networks elect DR/BDR while Point-to-point/multipoint do not elect DR/BDR. Therefore we have to set the two Gi0/0 interfaces to point-to-point or point-to-multipoint network to ensure that a DR/BDR election does not occur.

QUESTION 114

What are two reasons why broadcast radiation is caused in the virtual machine environment? (Choose two)

- A. vSwitch must interrupt the server CPU to process the broadcast packet
- B. The Layer 2 domain can be large in virtual machine environments
- C. Virtual machines communicate primarily through broadcast mode
- D. Communication between vSwitch and network switch is broadcast based
- E. Communication between vSwitch and network switch is multicast based

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 115

A company plans to implement intent-based networking in its campus infrastructure. Which design facilities a migrate from a traditional campus design to a programmer fabric designer?

- A. Layer 2 access
- B. three-tier
- C. two-tier
- D. routed access

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Intent-based Networking (IBN) transforms a hardware-centric, manual network into a controller-led network that captures business intent and translates it into

policies that can be automated and applied consistently across the network. The goal is for the network to continuously monitor and adjust network performance to help assure desired business outcomes. IBN builds on software-defined networking (SDN). SDN usually uses spine-leaf architecture, which is typically deployed as two layers: spines (such as an aggregation layer), and leaves (such as an access layer).

QUESTION 116

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

Section: (none)

Explanation

Explanation/Reference:

A prerequisite for configuring Mobility Groups is “All controllers must be configured with the same virtual interface IP address”. If all the controllers within a mobility group are not using the same virtual interface, inter-controller roaming may appear to work, but the handoff does not complete, and the client loses connectivity for a period of time. -> Answer B is correct.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/config-guide/b_cg85/mobility_groups.html

QUESTION 117

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. SHA-1, SHA-256, and SHA-512
- D. PBKDF2, BCrypt, and SCrypt

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

One of the best practices to secure REST APIs is using password hash. Passwords must always be hashed to protect the system (or minimize the damage) even if it is compromised in some hacking attempts. There are many such hashing algorithms which can prove really effective for password security e.g. PBKDF2, bcrypt and scrypt algorithms.

Other ways to secure REST APIs are: Always use HTTPS, Never expose information on URLs (Usernames, passwords, session tokens, and API keys should not appear in the URL), Adding Timestamp in Request, Using OAuth, Input Parameter Validation.

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

We should not use MD5 or any SHA (SHA-1, SHA-256, SHA-512...) algorithm to hash password as they are not totally secure.

Note: A brute-force attack is an attempt to discover a password by systematically trying every possible combination of letters, numbers, and symbols until you discover the one correct combination that works.

QUESTION 118

What is the role of the RP in PIM sparse mode?

- A. The RP responds to the PIM join messages with the source of requested multicast group
- B. The RP maintains default aging timeouts for all multicast streams requested by the receivers
- C. The RP acts as a control-plane node and does not receive or forward multicast packets
- D. The RP is the multicast that is the root of the PIM-SM shared multicast distribution tree

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 119

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 client manager in prevent colleague making changes to the device while the script is running?

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

The command “m.locked (target='running')” causes a lock to be acquired on the running datastore.

QUESTION 120

What are two device roles in Cisco SD-Access fabric? (Choose two)

- A. core switch
- B. vBond controller
- C. edge node
- D. access switch
- E. border node

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

There are five basic device roles in the fabric overlay:
+ Control plane node: This node contains the settings, protocols, and mapping tables to provide the endpoint-to-location (EID-to-RLOC) mapping system for the fabric overlay.
+ Fabric border node: This fabric device (for example, core layer device) connects external Layer 3 networks to the SDA fabric.
+ Fabric edge node: This fabric device (for example, access or distribution layer device) connects wired endpoints to the SDA fabric.
+ Fabric WLAN controller (WLC): This fabric device connects APs and wireless endpoints to the SDA fabric.
+ Intermediate nodes: These are intermediate routers or extended switches that do not provide any sort of SD-Access fabric role other than underlay services.

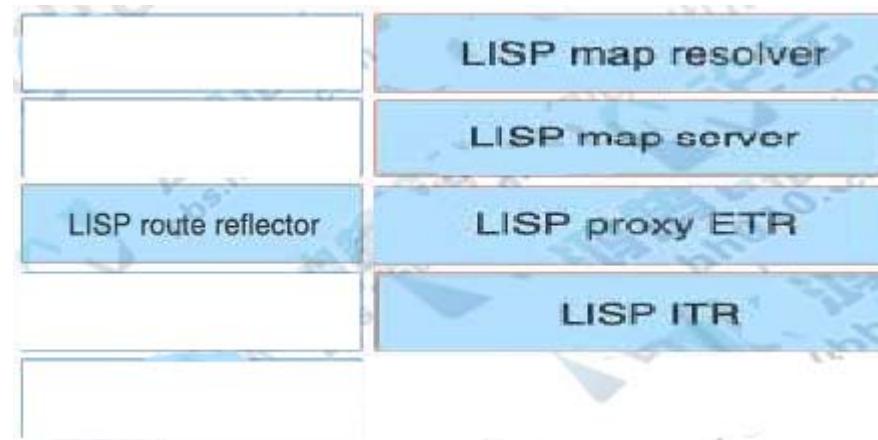
QUESTION 121

Drag and drop the LISP components from the left onto the function 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:



Section: (none)

Explanation

Explanation/Reference:

QUESTION 122

Drag and Drop the descriptions from the left onto the routing protocol they describe on the right.

Select and Place:

summaries can be created anywhere in the IGP topology	OSPF
uses areas to segment a network	EIGRP
DUAL algorithm	EIGRP
summaries can be created in specific parts of the IGP topology	

Correct Answer:

	OSPF
	summarizes can be created in specific parts of the IGP topology
	uses areas to segment a network
	EIGRP
	DUAL algorithm
	summaries can be created anywhere in the IGP topology

Section: (none)

Explanation

Explanation/Reference:

QUESTION 123

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

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

+ Orchestration plane (vBond) assists in securely onboarding the SD-WAN WAN Edge routers into the SD-WAN overlay. The vBond controller, or orchestrator, authenticates and authorizes the SD-WAN components onto the network. The vBond orchestrator takes an added responsibility to distribute the list of vSmart and vManage controller information to the WAN Edge routers. vBond is the only device in SD-WAN that requires a public IP address as it is the first point of contact and authentication for all SD-WAN components to join the SD-WAN fabric. All other components need to know the vBond IP or DNS information.

QUESTION 124

Which two entities are Type 1 hypervisors? (Choose two)

- A. Oracle VM Virtual Box
- B. Microsoft Hyper-V
- C. VMware server
- D. VMware ESX
- E. Microsoft Virtual PC

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

A bare-metal hypervisor (Type 1) is a layer of software we install directly on top of a physical server and its underlying hardware. There is no software or any operating system in between, hence the name bare-metal hypervisor. A Type 1 hypervisor is proven in providing excellent performance and stability since it does not run inside Windows or any other operating system. These are the most common type 1 hypervisors:

+ VMware vSphere with ESX/ESXi + KVM (Kernel-Based Virtual Machine) + Microsoft Hyper-V + Oracle VM + Citrix Hypervisor (formerly known as Xen Server)

QUESTION 125

Which access point mode allows a supported AP to function like a WLAN client would, associating and identifying client connectivity issues?

- A. client mode
- B. SE-connect mode
- C. sensor mode
- D. sniffer mode

Correct Answer: C

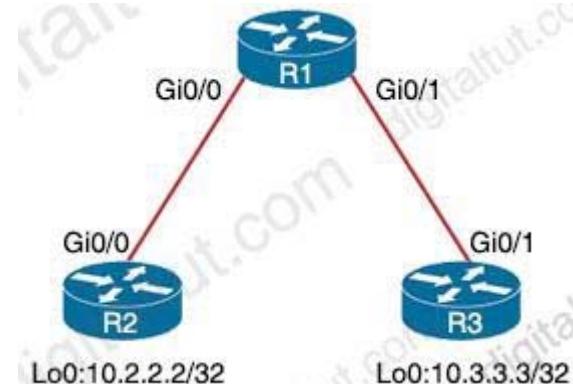
Section: (none)

Explanation

Explanation/Reference:

QUESTION 126

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 accomplish 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 Gi0/1
R3(config-if)#ip access-group 150 out
- B. 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 Gi0/1
R1(config-if)#ip access-group 150 in
C. 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 Gi0/1
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 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 Gi0/1
R3(config-if)#ip access-group 150 out
```

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

We cannot filter traffic that is originated from the local router (R3 in this case) so we can only configure the ACL on R1 or R2. "Weekend hours" means from Saturday morning through Sunday night so we have to configure: "periodic weekend 00:00 to 23:59".

Note: The time is specified in 24-hour time (hh:mm), where the hours range from 0 to 23 and the minutes range from 0 to 59.

## QUESTION 127

Which tool is used in Cisco DNA Center to build generic configurations that are able to be applied on device with similar network settings?

- A. Command Runner
- B. Template Editor
- C. Application Policies
- D. Authentication Template

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/1-3/user\\_guide/b\\_cisco\\_dna\\_center\\_ug\\_1\\_3/b\\_cisco\\_dna\\_center\\_ug\\_1\\_3\\_chapter\\_0111.html](https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/1-3/user_guide/b_cisco_dna_center_ug_1_3/b_cisco_dna_center_ug_1_3_chapter_0111.html)

**QUESTION 128**

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

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

**Correct Answer:** D

**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](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)

**QUESTION 129**

What does the LAP send when multiple WLCs respond to the CISCO\_CAPWAP-CONTROLLER.localdomain hostname during the CAPWAP discovery and join process?

- A. broadcast discover request
- B. join request to all the WLCs
- C. unicast discovery request to each WLC
- D. Unicast discovery request to the first WLC that resolves the domain name

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 130**

Refer to the exhibit.

```
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
!
```



What is the result when a technician adds the monitor session 1 destination remote vlan 233 command?

- A. The RSPAN VLAN is replaced by VLAN 223
- B. RSPAN traffic is sent to VLANs 222 and 223
- C. An error is flagged for configuring two destinations
- D. RSPAN traffic is split between VLANs 222 and 223

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 131**

In an SD-Access solution what is the role of a fabric edge node?

- A. to connect external Layer 3- network to the SD-Access fabric
- B. to connect wired endpoint to the SD-Access fabric
- C. to advertise fabric IP address space to external network
- D. to connect the fusion router to the SD-Access fabric

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 132**

Refer to the exhibit.

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

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

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

The command “ip nat inside source list 1 interface gigabitethernet0/0 overload” translates all source addresses that pass access list 1, which means 172.16.1.0/24 subnet, into an address assigned to gigabitethernet0/0 interface. Overload keyword allows to map multiple IP addresses to a single registered IP address (many-to-one) by using different ports so it is called Port Address Translation (PAT).

**QUESTION 133**

Which component of the Cisco Cyber Threat Defense solution provides user and flow context analysis?

- A. Cisco Firepower and FireSIGHT
- B. Cisco Stealth watch system
- C. Advanced Malware Protection
- D. Cisco Web Security Appliance

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://www.cisco.com/c/dam/en/us/td/docs/security/network\\_security/ctd/ctd2-0/design\\_guides/ctd\\_2-0\\_cvd\\_guide\\_jul15.pdf](https://www.cisco.com/c/dam/en/us/td/docs/security/network_security/ctd/ctd2-0/design_guides/ctd_2-0_cvd_guide_jul15.pdf)

**QUESTION 134**

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://www.cisco.com/c/dam/en/us/products/collateral/security/amp-for-endpoints/white-paper-c11-740980.pdf>

**QUESTION 135**

Refer to the exhibit.

WLANS > Edit 'LiveDemo'

General Security QoS Policy-Mapping Advanced

Layer 2 Layer 3 AAA Servers

Select AAA servers below to override use of default servers on this WLAN

**Radius Servers**

Radius Server Overwrite interface  Enabled

Interface Priority WLAN

|          | Authentication Servers                      | Accounting Servers                          |
|----------|---------------------------------------------|---------------------------------------------|
|          | <input checked="" type="checkbox"/> Enabled | <input checked="" type="checkbox"/> Enabled |
| Server 1 | None                                        | None                                        |
| Server 2 | None                                        | None                                        |
| Server 3 | None                                        | None                                        |
| Server 4 | None                                        | None                                        |
| Server 5 | None                                        | None                                        |
| Server 6 | None                                        | None                                        |

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. any interface configured on the WLC
- C. the controller management interface
- D. the controller virtual interface

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 136**

Which benefit is offered by a cloud infrastructure deployment but is lacking in an on-premises deployment?

- A. efficient scalability
- B. virtualization
- C. storage capacity
- D. supported systems

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 137**

Wireless users report frequent disconnections from the wireless network. While troubleshooting a network engineer finds that after the user disconnects, the connection reestablishes 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. increase BandSelect
- C. increase the AP heartbeat timeout
- D. enable coverage hole detection

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

These message logs inform that the radio channel has been reset (and the AP must be down briefly). With dynamic channel assignment (DCA), the radios can frequently switch from one channel to another but it also makes disruption. The default DCA interval is 10 minutes, which is matched with the time of the message logs. By increasing the DCA interval, we can reduce the number of times our users are disconnected for changing radio channels.

**QUESTION 138**

Which DHCP option helps lightweight APs find the IP address of a wireless LAN controller?

- A. Option 43
- B. Option 60
- C. Option 67
- D. Option 150

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 139**

A network administrator applies the following configuration to an IOS device.

**aaa new-model**

**aaa authentication login default local group tacacs+**

What is the process of password checks when a login attempt is made to the device?

- A. A TACACS+ server is checked first. If that check fail, a database is checked
- B. A TACACS+ server is checked first. If that check fail, a RADIUS server is checked. If that check fail, a local database is checked
- C. A local database is checked first. If that fails, a TACACS+server is checked, if that check fails, a RADIUS server is checked
- D. A local database is checked first. If that check fails, a TACACS+server is checked

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

The “aaa authentication login default local group tacacs+” command is broken down as follows:

+ The ‘aaa authentication’ part is simply saying we want to configure authentication settings. + The ‘login’ is stating that we want to prompt for a username/password when a connection is made to the device. + The ‘default’ means we want to apply for all login connections (such as tty, vty, console and aux). If we use this keyword, we don’t need to configure anything else under tty, vty and aux lines. If we don’t use this keyword then we have to specify which line(s) we want to

apply the authentication feature. + The ‘local group tacacs+’ means all users are authenticated using router’s local database (the first method). If the credentials are not found on the local database, then the TACACS+ server is used (the second method).

#### **QUESTION 140**

What is the role of the vsmart controller in a Cisco SD-WAN environment?

- A. IT performs authentication and authorization
- B. It manages the control plane
- C. It is the centralized network management system
- D. It manages the data plane

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

+ Control plane (vSmart) builds and maintains the network topology and make decisions on the traffic flows. The vSmart controller disseminates control plane information between WAN Edge devices, implements control plane policies and distributes data plane policies to network devices for enforcement.

#### **QUESTION 141**

Why is an AP joining a different WLC than the one specified through option 43?

- A. The WLC is running a different software version
- B. The API is joining a primed WLC
- C. The AP multicast traffic unable to reach the WLC through Layer 3
- D. The APs broadcast traffic is unable to reach the WLC through Layer 2

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 142**

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

- A. All devices integrating with ISE
- B. selected individual devices

- C. all devices in selected sites
- D. all wired devices

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

When you click Deploy, Cisco DNA Center requests the Cisco Identity Services Engine (Cisco ISE) to send notifications about the policy changes to the network devices.

Reference: [https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/1-3-1-0/user\\_guide/b\\_cisco\\_dna\\_center\\_ug\\_1\\_3\\_1\\_0/b\\_cisco\\_dna\\_center\\_ug\\_1\\_3\\_1\\_0\\_chapter\\_01011.html](https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/1-3-1-0/user_guide/b_cisco_dna_center_ug_1_3_1_0/b_cisco_dna_center_ug_1_3_1_0_chapter_01011.html)

**QUESTION 143**

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

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

The most common implementations of OAuth (OAuth 2.0) use one or both of these tokens:  
+ access token: sent like an API key, it allows the application to access a user's data; optionally, access tokens can expire.  
+ refresh token: optionally part of an OAuth flow, refresh tokens retrieve a new access token if they have expired. OAuth2 combines Authentication and Authorization to allow more sophisticated scope and validity control.

**QUESTION 144**

What does the Cisco DNA Center use to enable the delivery of applications through a network and to yield analytics for innovation?

- A. process adapters
- B. Command Runner
- C. intent-based APIs
- D. domain adapters

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/dna-center/nb-06-dna-cent-plat-sol-over-cte-en.html>

**QUESTION 145**

Which action is a function of VTEP in VXLAN?

- A. tunneling traffic from IPv6 to IPv4 VXLANs
- B. allowing encrypted communication on the local VXLAN Ethernet segment
- C. encapsulating and de-encapsulating VXLAN Ethernet frames
- D. tunneling traffic from IPv4 to IPv6 VXLANs

**Correct Answer:** C

**Section:** (none)

**Explanation**

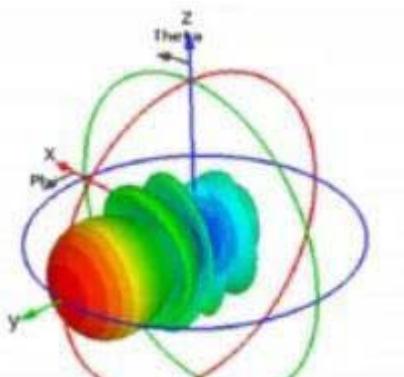
**Explanation/Reference:**

VTEPs connect between Overlay and Underlay network and they are responsible for encapsulating frame into VXLAN packets to send across IP network (Underlay) then decapsulating when the packets leaves the VXLAN tunnel.

VTEPs connect between Overlay and Underlay network and they are responsible for encapsulating frame into VXLAN packets to send across IP network (Underlay) then decapsulating when the packets leaves the VXLAN tunnel.

**QUESTION 146**

Which type of antenna does the radiation pattern represent?



- A. Yagi
- B. multidirectional
- C. directional 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.htm](https://www.cisco.com/c/en/us/products/collateral/wireless/aironet-antennas-accessories/prod_white_paper0900aecd806a1a3e.htm)

#### QUESTION 147

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.

```
%PM-SP-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)# interface G0/0  
Sw1(config-if)# no spanning-tree bpduguard enable  
Sw1(config-if)# shut  
Sw1(config-if)# no shut
- B. Sw1(config)# interface G0/0  
Sw1(config-if)# spanning-tree bpduguard enable  
Sw1(config-if)# shut  
Sw1(config-if)# no shut
- C. Sw1(config)# interface G0/1  
Sw1(config-if)# spanning-tree bpduguard enable  
Sw1(config-if)# shut

```
Sw1(config-if)# no shut
D. Sw1(config)# interface G0/0
Sw1(config-if)# no spanning-tree bpdufilter
Sw1(config-if)# shut
Sw1(config-if)# no shut
```

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 148

Drag and drop the REST API authentication method from the left to the description on the right.

**Select and Place:**

|                            |                                             |
|----------------------------|---------------------------------------------|
| HTTP Basic Authentication  | Public API Resources                        |
| Token Based Authentication | Username and Password in an enclosed string |
| Secure Vault               | API Dependent Secret                        |
| OAuth                      | Authorization through Identity Provider     |

**Correct Answer:**

|  |                            |
|--|----------------------------|
|  | Secure Vault               |
|  | HTTP Basic Authentication  |
|  | Token Based Authentication |
|  | OAuth                      |

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 149**

Which two security features are available when implementing NTP? (Choose two.)

- A. symmetric server passwords
- B. dock offset authentication
- C. broadcast association mode
- D. encrypted authentication mechanism
- E. access list-based restriction scheme

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 150**

What is calculated using the numerical values of the transmitter power level, cable loss, and antenna gain?

- A. EIRP
- B. dBi

- C. RSSI
- D. SNR

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 151**

Which two LISP infrastructure elements are needed to support LISP to non-LISP internetworking? (Choose two.)

- A. PETR
- B. PITR
- C. MR
- D. MS
- E. ALT

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 152**

In an SD-WAN deployment, which action in the vSmart controller responsible for?

- A. handle, maintain, and gather configuration and status for nodes within the SD-WAN fabric
- B. distribute policies that govern data forwarding performed within the SD-WAN fabric
- C. gather telemetry data from vEdge routers
- D. onboard vEdge nodes into the SD-WAN fabric

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 153**

Drag and drop the Qos mechanisms from the left to the correct descriptions on the right

**Select and Place:**

Drag each definition on the left to the matching term on the right.

|                |                                                                 |
|----------------|-----------------------------------------------------------------|
| service policy | mechanism to create a scheduler for packets prior to forwarding |
| shaping        | mechanism to apply a Qos policy to an interface                 |
| DSCP           | portion of the IP header used to classify packets               |
| policy map     | bandwidth management technique which delays datagrams           |
| policing       | tool to enforce-rate-limiting on ingress/egress                 |
| Cos            | portion of the 802.1Q header used to classify packets           |

**Correct Answer:**

**Drag each definition on the left to the matching term on the right.**

|  |
|--|
|  |
|  |
|  |
|  |
|  |
|  |

|                |
|----------------|
| policy map     |
| service policy |
| DSCP           |
| shaping        |
| policing       |
| Cos            |

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 154**

```
<errors xmlns="urn:ietf:params:xml:ns:yang:ietf-restconf">
 <error>
 <error-message>End-of-file reached in XML
stream</error-message>
 <error-path>/ietf-interfaces:interfaces/interface=Gigabi
tEthernet2</error-path>
 <error-tag>malformed-message</error-tag>
 <error-type>application</error-type>
 </error>
</errors>
```

Refer to the exhibit. An engineer is using XML in an application to send information to a RESTCONF-enable device. After sending the request, the engineer gets this response message and a HTTP response code of 400. What do these responses tell the engineer?

- A. The Accept header sent was application/xml
- B. POST was used instead of PUT to update
- C. The Content-Type header sent was application/xml
- D. A JSON body was used

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 155**

```
aaa new-model
aaa authentication login default local-case enable
aaa authentication login ADMIN local-case
username CCNP secret Str0ngP@ssw0rd!
line 0 4
 login authentication ADMIN
```

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 **autocommand** keyword to the **aaa authentication** command.
- B. Add the **autocommand** keyword to the **username** command.
- C. Add the **access-class** keyword to the **aaa authentication** command.
- D. Add the **access-class** keyword to the **username** command.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 156**

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 10  
deny tcp host 10.10.10.1 any eq 80  
permit ip any any
- B. ip access-list extended 200  
deny tcp host 10.10.10.1 eq 80 any  
permit ip any any
- C. ip access-list extended NO\_HTTP

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 157

R1  
interface GigabitEthernet0/0  
ip address 192.168.250.2 255.255.255.0  
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. R1 becomes the active router.
- B. If R1 goes down, R2 becomes active but reverts to standby when R1 comes back online.
- C. R1 becomes the standby router
- D. If R2 goes down, R1 becomes active but reverts to standby when R2 comes back online.
- E. If R1 goes down, R2 becomes active and remains the active device when R1 comes back online.

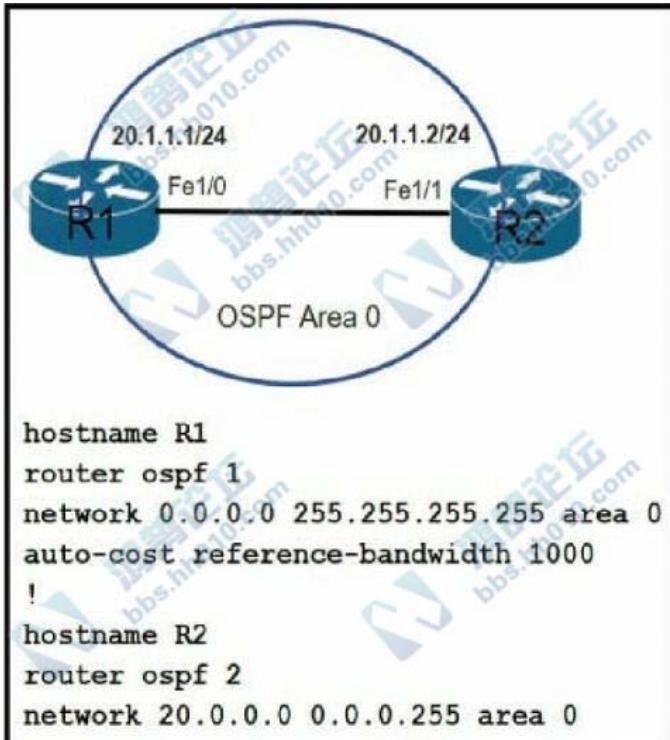
**Correct Answer:** AE

**Section:** (none)

## Explanation

Explanation/Reference:

### QUESTION 158



Refer to the exhibit. Which command must be applied to R2 for an OSPF neighborship to form?

- A. network 20.1.1.2 0.0.255.255 area 0
- B. network 20.1.1.2 255.255.0.0 area 0
- C. network 20.1.1.2 255.255.255.255 area 0
- D. network 20.1.1.2 0.0.0.0 area 0

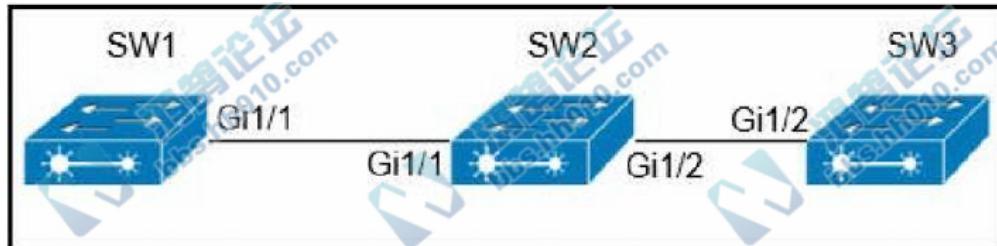
Correct Answer: D

Section: (none)

Explanation

**Explanation/Reference:**

**QUESTION 159**



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 10
- C. SW2(config)#int gi1/2  
SW2(config)#switchport trunk allowed vlan 1-9,11-4094
- D. SW1(config)#int gi1/1  
SW1(config)#switchport trunk allowed vlan 10

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 160**

```
monitor session 1 source vlan 10 - 12 rx
monitor session 1 destination interface gigabitethernet0/1
```

Refer to the exhibit. An engineer must configure a SPAN session. What is the effect of the configuration?

- A. Traffic sent on VLANs 10 and 12 only is copied and sent to interface g0/1

- B. Traffic received on VLANs 10,11, and 12 is copied and sent to interface g0/1
- C. Traffic received on VLANs 10 and 12 only is copied and sent to interface g0/1.
- D. Traffic sent on VLANs 10, 11 , and 12 is copied and sent to interface g0/1

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 161**

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 URG bit set is allowed
- B. TCP traffic with the SYN 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 162**

```
<?xml version="1.0" encoding="utf-8"?>
<data xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"/>
```

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

- A. A NETCONF request was made for a data model that does not exist
- B. A NETCONF message with valid content based on the YANG data models was made, but the request failed.

- C. The device received a valid NETCONF request and serviced it without error.
- D. The NETCONF running datastore is currently locked.

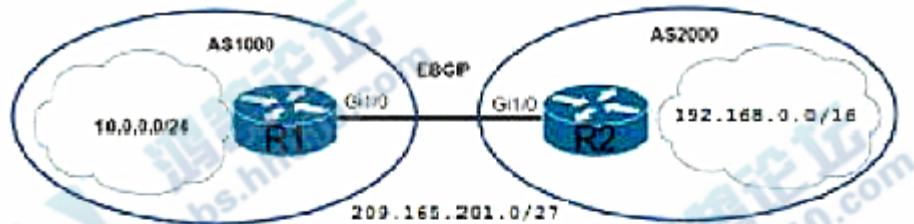
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 163**



R1

```
router bgp 1000
address-family ipv4 unicast
neighbor 209.165.201.2 remote-as 2000
network 10.0.0.0 mask 255.255.255.0
description Peer Router B
```

R2

```
router bgp 2000
address-family ipv4 unicast
neighbor 209.165.201.1 remote-as 1000
network 10.0.0.0 mask 255.255.255.0
description Peer Router A
```

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 192.168.0.0 mask 255.255.0.0
- B. R1#network 192.168.0.0 mask 255.255.0.0
- C. R2#network 209.165.201.0 mask 255.255.192.0
- D. R2#no network 10.0.0.0 255.255.255.0
- E. R1#no network 10.0.0.0 255.255.255.0

Correct Answer: AD

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 164**

What is a Type 1 hypervisor?

- A. runs directly on a physical server and depends on a previously installed operating system
- B. runs directly on a physical server and includes its own operating system
- C. runs on a virtual server and depends on an already installed operating system
- D. runs on a virtual server and includes its own operating system

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 165**

What is the difference between CEF and process switching?

- A. CEF is more CPU-intensive than process switching.
- B. CEF uses the FIB and the adjacency table to make forwarding decisions, whereas process switching punts each packet.
- C. CEF processes packets that are too complex for process switching to manage.
- D. Process switching is faster than CEF

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 166**

what is the purpose of an RP in PIM?

- A. send join messages toward a multicast source SPT
- B. ensure the shortest path the multicast source to the receiver
- C. receive IGMP joins from multicast receivers
- D. secure the communication channel between the multicast sender and receiver

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 167**

How do agent-based versus agentless configuration management tools compare?

- A. Agent-based tools do not require a high-level language interpreter such as Python or Ruby on slave nodes
- B. Agentless tools require no messaging systems between master and slaves.
- C. Agent-based tools do not require installation of additional software packages on the slave nodes
- D. Agentless tools use proxy nodes to interface with slave nodes

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 168**

```
SW1#sh monitor session all
Session 1

Type : Remote Destination Session
Source RSPAN VLAN : 50

Session 2

Type : Local Session
Source Ports :
 Both : Fa0/14
Destination Ports : Fa0/15
Encapsulation : Native
Ingress : Disables
```

Refer to the exhibit. An engineer configures monitoring on SW1 and enters the show 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. SPAN session 2 only monitors egress traffic exiting port FastEthernet 0/14.
- C. RSPAN session 1 is incompletely configured for monitoring.
- D. RSPAN session 1 monitors activity on VLAN 50 of a remote switch.

**Correct Answer:** C

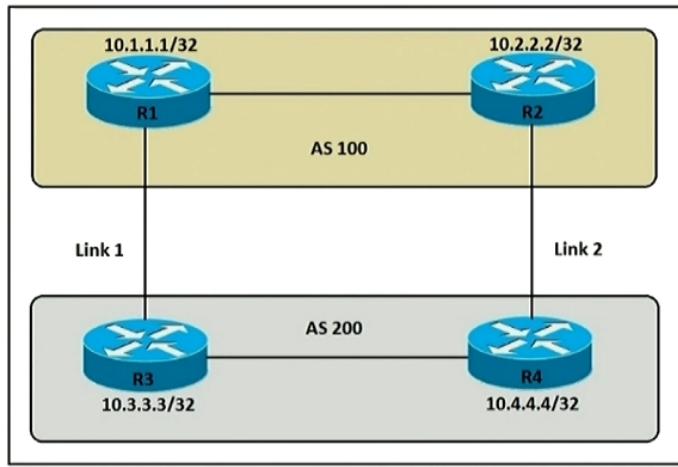
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 169**

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. 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
- B. 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
- 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 100 100 100  
R3(config)#router bgp 200  
R3(config-router)#neighbor 10.2.2.2 route-map PREPEND in

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 170**

An engineer reviews a router's logs and discovers the following entry. What is the event's logging severity level?  
Router# \*Jan 01 38:23:19.579: %LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up

- A. warning
- B. error
- C. notification
- D. informational

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 171**

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

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

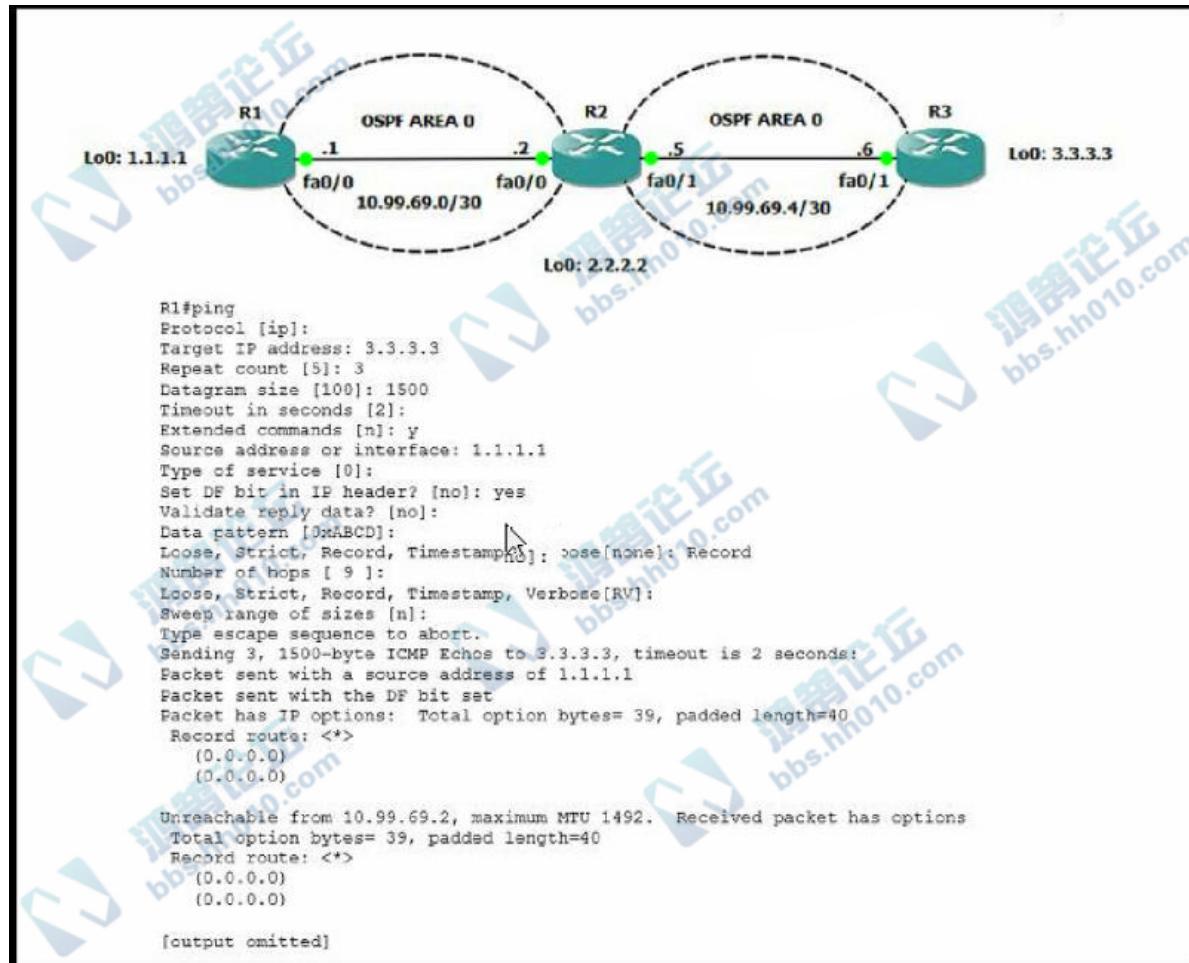
**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 172**



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

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

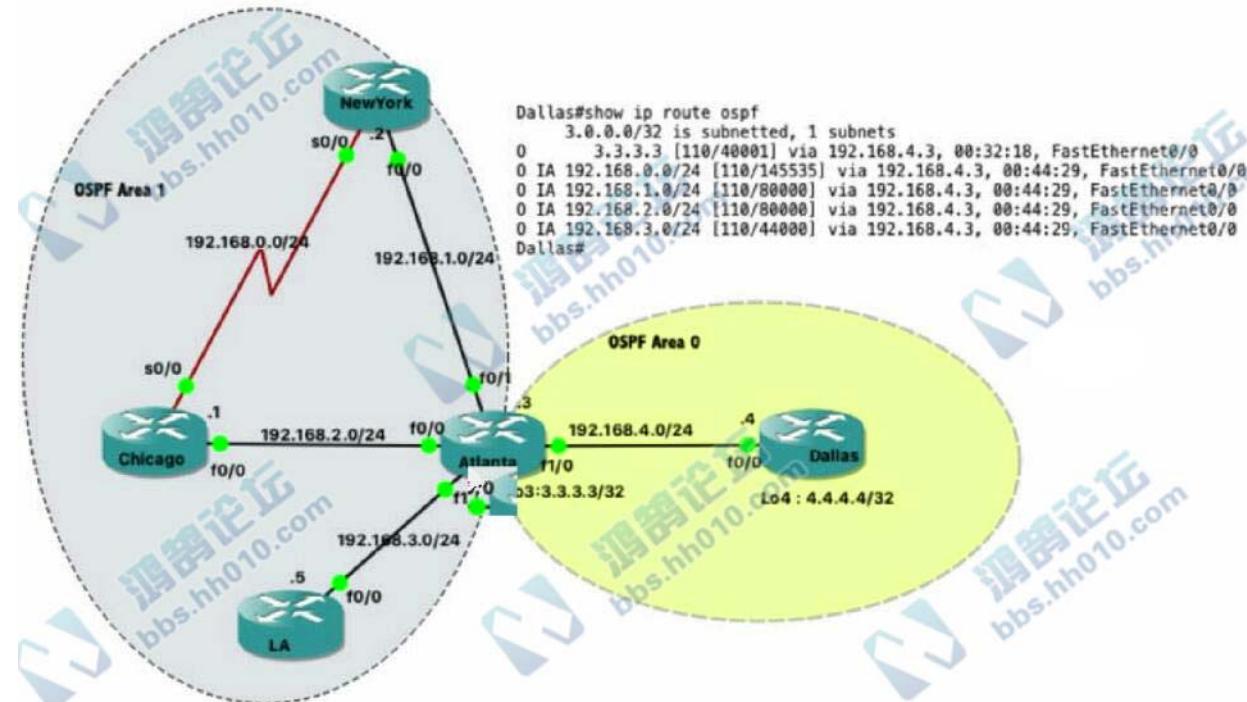
**Correct Answer:** B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 173



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

Correct Answer: B

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 174**

```
Router2# show policy-map control-plane

Control Plane
Service-policy input:CISCO
Class-map:CISCO (match-all)
 20 packets, 11280 bytes
 5 minute offered rate 0 bps, drop rate 0 bps
 Match:access-group 120
 police:
 8000 bps, 1500 limit, 1500 extended limit
 conformed 15 packets, 6210 bytes; action:transmit
 exceeded 5 packets, 5070 bytes; action:drop
 violated 0 packets, 0 bytes; action:drop
 conformed 0 bps, exceed 0 bps, violate 0 bps
Class-map:class-default (match-any)
 105325 packets, 11415151 bytes
 5 minute offered rate 0 bps, drop rate 0 bps
 Match:any
```

Refer to the exhibit. An engineer configures CoPP and enters the show command to verify the implementation. What is the result of the configuration?

- A. ICMP will be denied based on this configuration
- B. If traffic exceeds the specified rate, it will be transmitted and remarked
- C. Class-default traffic will be dropped
- D. All traffic will be policed on access-list 120

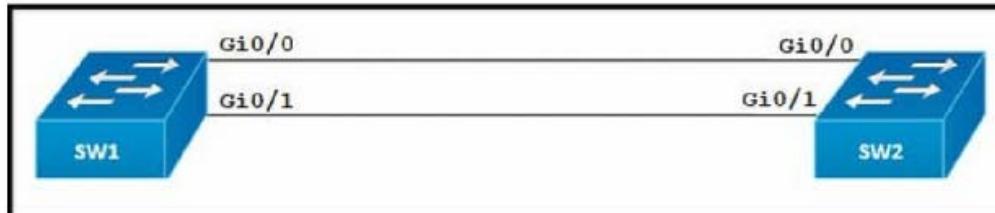
**Correct Answer: D**

**Section: (none)**

## Explanation

Explanation/Reference:

### QUESTION 175



Refer to the exhibit. An engineer reconfigures the port-channel between SW1 and SW2 from an access port to a trunk and immediately notice this error in sw1's log:

\*Mar 1 09:47:22.245: %PM-4-ERR\_DISABLE:bpduerror detected on Gi0/0, putting Gi0/0 in err-disable state  
which command set resolves this error?

- A. 

```
SW1(config-if)#interface Gi0/0
SW1(config-if)#spanning-tree bpduerror enable
SW1(config-if)#shut
SW1(config-if)#no shut
```
- B. 

```
SW1(config-if)#interface Gi0/1
SW1(config-if)#spanning-tree bpduerror enable
SW1(config-if)#shut
SW1(config-if)#no shut
```
- C. 

```
SW1(config-if)#interface Gi0/0
SW1(config-if)#no spanning-tree bpdufilter
SW1(config-if)#shut
SW1(config-if)#no shut
```

- D. SW1(config-if)#**interface Gi0/0**  
SW1(config-if)#**no spanning-tree bpduguard enable**  
SW1(config-if)#**shut**  
SW1(config-if)#**no shut**

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 176

An engineer must configure interface GigabitEthernet0/0 for VRRP group 10. When the router has the highest priority in the group, it must assume the master role. Which command set must be added to the initial configuration to accomplish this task?

#### Initial Configuration

```
interface GigabitEthernet0/0
description To IDF A 38-23-195.57
ip address 172.16.13.2 255.255.255.0
```

- A. **standby 10 ip 172.16.13.254 255.255.255.0**  
**standby 10 preempt**
- B. **vrrp group 10 ip 172.16.13.254 255.255.255.0**  
**vrrp group 10 priority 120**
- C. **vrrp 10 ip 172.16.13.254**  
**vrrp 10 preempt**
- D. **standby 10 ip 172.16.13.254**  
**standby 10 priority 120**

Correct Answer: C

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 177**

Which two actions provide controlled Layer 2 network connectivity between virtual machines running on the same hypervisor? (Choose two.)

- A. Use a virtual switch running as a separate virtual machine.
- B. Use a virtual switch provided by the hypervisor
- C. Use a single trunk link to an external Layer2 switch.
- D. Use a single routed link to an external router on stick.
- E. Use VXLAN fabric after installing VXLAN tunneling drivers on the virtual machines.

**Correct Answer:** BC

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 178**

How does SSO work with HSRP to minimize network disruptions?

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

**Correct Answer:** D

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 179**

---

```
Tunnel100 is up, line protocol is up
Hardware is Tunnel
Internet address is 192.168.200.1/24
MTU 17912 bytes, BW 100 Kbit/sec, DLY 50000 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation TUNNEL, loopback not set
Keepalive set (10 sec), retries 3
Tunnel source 209.165.202.129 (GigabitEthernet0/1)
Tunnel Subblocks:
src-track:
 Tunnel100 source tracking subblock associated with GigabitEthernet0/1
 Set of tunnels with source GigabitEthernet0/1, 1 members (includes iterators), on interface <OK>
Tunnel protocol/transport GRE/IP
Key disabled, sequencing disabled
Checksumming of packets disabled
Tunnel TTL 255, Fast tunneling enabled
Tunnel transport MTU 1476 bytes
```

---

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

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 180**

```

DSW1#sh spanning-tree
MST1
 Spanning tree enabled protocol mstp
 Root ID Priority 32769
 Address 0018.7363.4300
 Cost 2
 Port 13 (FastEthernet1/0/11)
 Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

 Bridge ID Priority 32769 (priority 32768 sys-id-ext 1)
 Address 001b.0d8e.e080
 Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

 Interface Role Sts Cost Prio.Nbr Type
 ----- -----
 Fa1/0/7 Desg FWD 2 128.9 P2p Bound (PVST)
 Fa1/0/10 Desg FWD 2 128.12 P2p Bound (PVST)
 Fa1/0/11 Root FWD 2 128.13 P2p
 Fa1/0/12 Altn BLK 2 128.14 P2p

```

```

DSW1#sh spanning-tree mst
#####
MST1 vlans mapped: 10,20
Bridge address 001b.0d8e.e080 priority 32769 (32768 sysid 1)
Root address 0018.7363.4300 priority 32769 (32768 sysid 1)
 port Fa1/0/11 cost 2 rem hops 19
!
... output omitted
!
```

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

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

E. spanning-tree mst 1 priority 4096

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 181**

How does the RIB differ from the FIB?

- A. The RIB is used to create network topologies and routing tables. The FIB is a list of routes to particular network destination
- B. The FIB includes many routes to a single destination. The RIB is the best route to a single destination.
- C. The RIB includes many routes to the same destination prefix. The FIB contains only the best route.
- D. The FIB maintains network topologies and routing tables. The RIB is a list of routes to particular network destinations.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 182**

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

- A. path
- B. omnidirectional
- C. dipole
- D. Yagi

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 183

which two characteristics define the intent API provided by Cisco DNA Center?(choose two)

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

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 184

```
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 eigrp 1
 10.0.0.0
 172.16.0.0
 192.168.1.0
```

Refer to 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. 

```
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
```
- B. 

```
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
```
- C. 

```
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 vrf forwarding Printers
ip address 10.1.1.2 255.255.255.0
```
- D. 

```
interface Vlan10
no ip vrf forwarding Clients
!
interface Vlan20
no ip vrf forwarding Servers
!
interface Vlan30
no ip vrf forwarding Printers
```

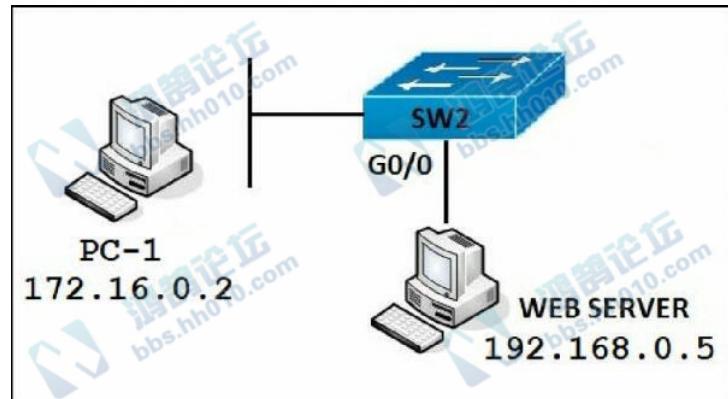
Correct Answer: C

Section: (none)

## Explanation

### Explanation/Reference:

#### QUESTION 185



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 lt 8080 host 172.16.0.2
- B. permit tcp host 172.16.0.2 host 192.168.0.5 eq 8080
- C. permit tcp host 192.168.0.5 host 172.16.0.2 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 186

```
!
interface FastEthernet0/1
 ip address 209.165.200.225 255.255.255.224
 ip nat outside
!
interface FastEthernet0/2
 ip address 10.10.10.1 255.255.255.0
 ip nat inside
!
access-list 10 permit 10.10.10.0 0.0.0.255
!
```

Refer to the exhibit<sup>^</sup> Which command allows hosts that are connected to FastEthernet0/2 to access the Internet?

- A. ip nat inside source list 10 interface FastEthernet0/1 overload
- B. ip nat outside source static 209.165.200.225 10.10.10.0 overload
- C. ip nat inside source list 10 interface FastEthernet0/2 overload
- D. ip nat outside source list 10 interface FastEthernet0/2 overload

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 187**

How is a data modeling language used?

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

- D. To provide human readability to scripting languages.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 188**

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. easy virtual network
- D. overlay network

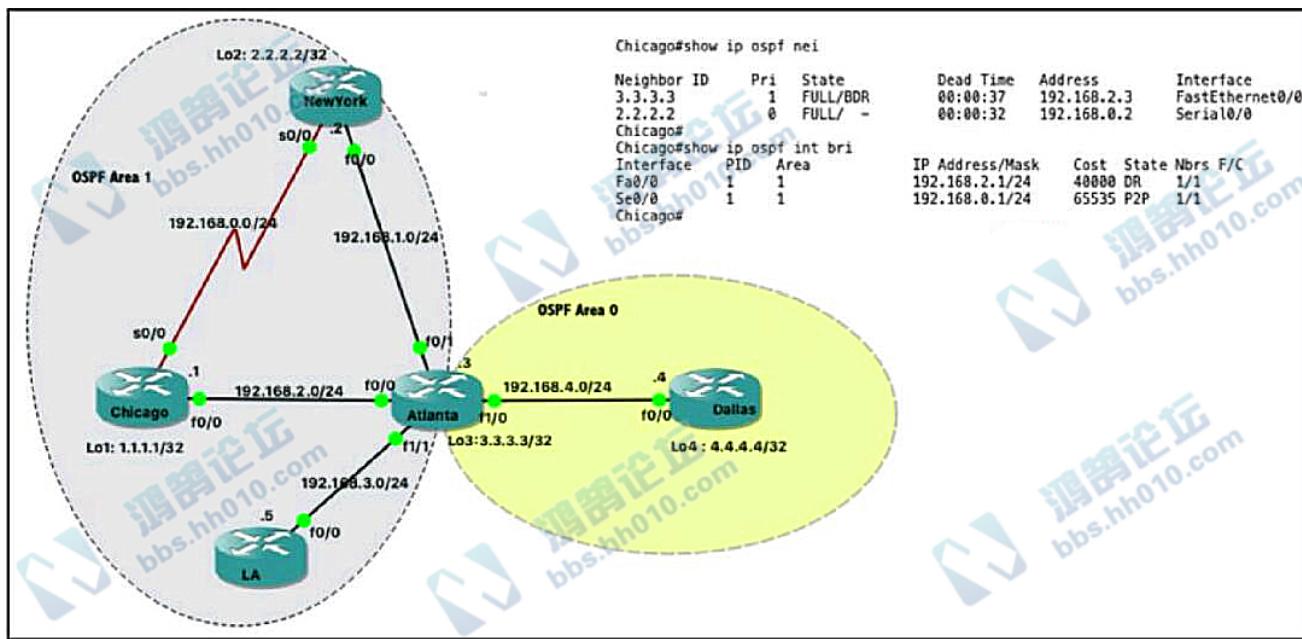
**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 189**



Refer to the exhibit Which router is the designated router on the segment 192.168.0.0/24?

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 190

Drag and drop the characteristics from the left onto the infrastructure types on the right.

**Select and Place:**

enterprise owns the hardware

low capital expenditure

provider maintains the infrastructure

slow upgrade lifecycle

high capital expenditure

fast upgrade lifecycle

#### On-Premises Infrastructure


#### Cloud-Hosted Infrastructure


Correct Answer:



#### On-Premises Infrastructure

enterprise owns the hardware

slow upgrade lifecycle

high capital expenditure

#### Cloud-Hosted Infrastructure

low capital expenditure

provider maintains the infrastructure

fast upgrade lifecycle

Section: (none)

Explanation

Explanation/Reference:

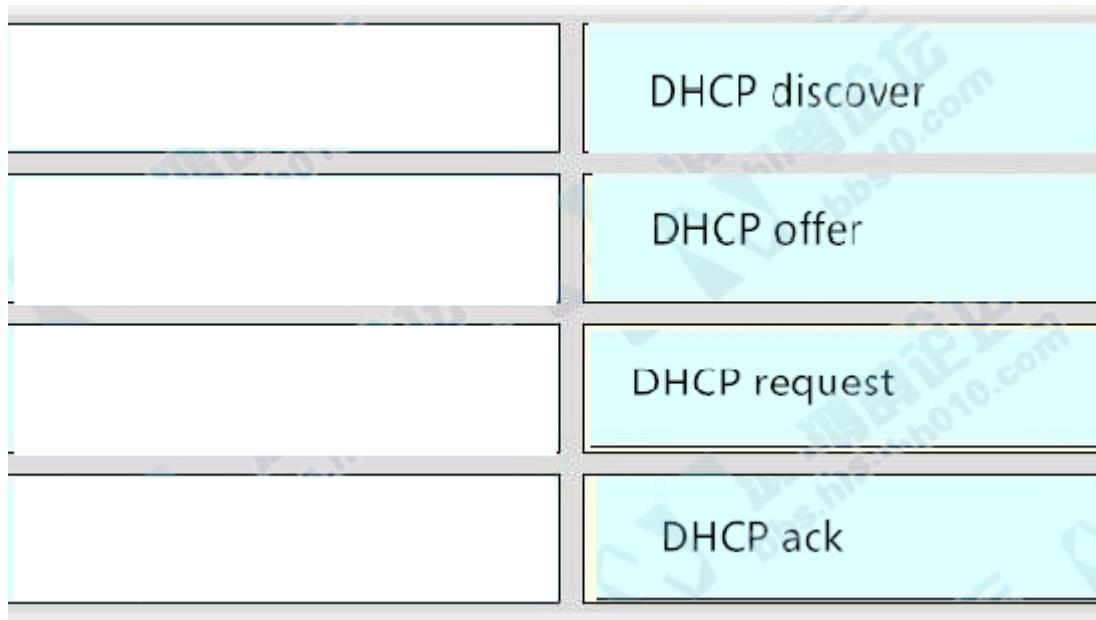
#### QUESTION 191

Drag and drop the DHCP message that are exchange between a client and an AP into the order they are exchanged on the right

Select and Place:



Correct Answer:



**Section:** (none)  
**Explanation:**

**Explanation/Reference:**

**QUESTION 192**

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 193**

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

Link State Protocol

selects routes using the DUAL algorithm

supports only equal multipath load balancing

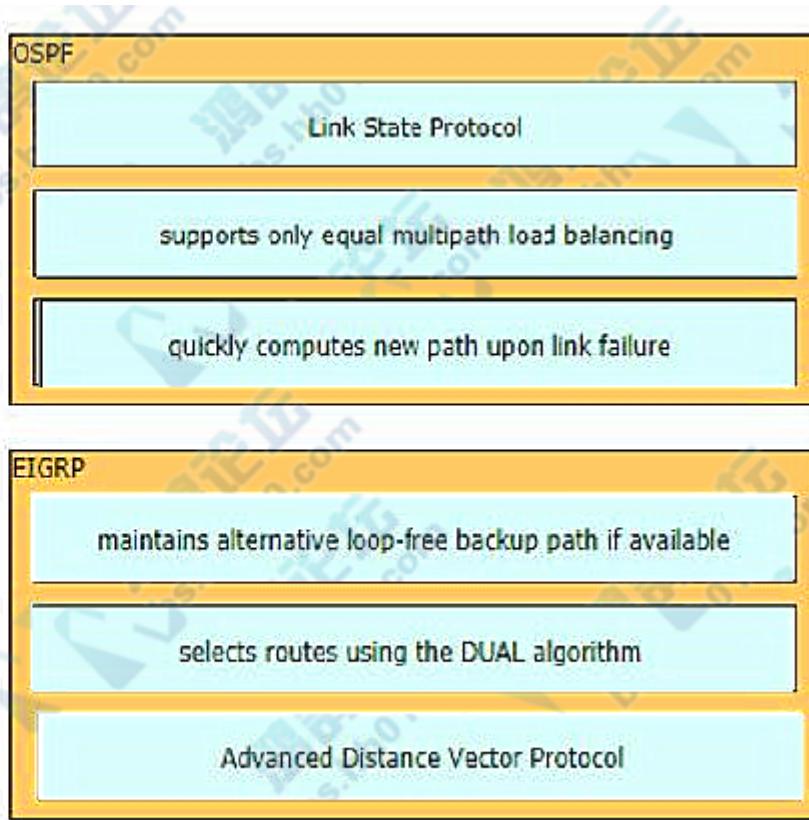
Advanced Distance Vector Protocol

quickly computes new path upon link failure

OSPF

EIGRP

Correct Answer:

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 194**

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

- A. pNIC
- B. vSwitch

- C. virtual router
- D. hypervisor

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 195**

Which router is elected the IGMP Querier when more than one router is in the same LAN segment?

- A. The router with the longest uptime
- B. The router with the shortest uptime.
- C. The router with the highest IP address
- D. The router with the lowest IP address

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 196**

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?

```
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
```

- A. monitor session 1 source interface port-channel 6
- B. monitor session 1 source vlan 10
- C. monitor session 1 source interface FastEthernet0/1 rx
- D. monitor session 1 source interface port-channel 7, port channel 8

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 197**

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

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

**Correct Answer:** B

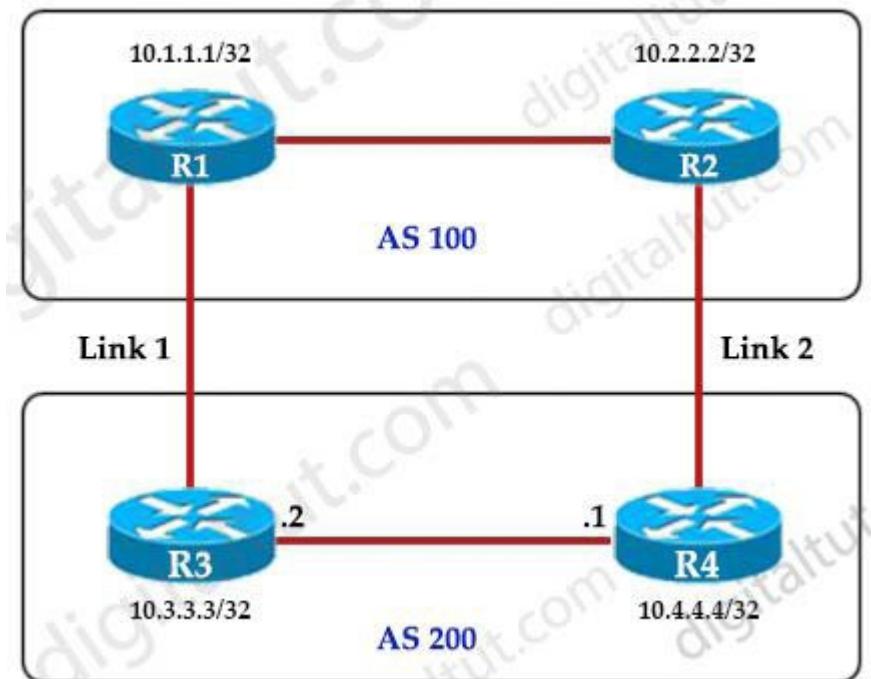
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 198**

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. R3(config-router)neighbor 10.1.1.1 weight 200
- B. R4(config-router)bgp default local-preference 200
- C. R3(config-router)bgp default local-preference 200
- D. R4(config-router)neighbor 10.2.2.2 weight 200

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 199

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

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 200**

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

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 201**

An engineer attempts to configure a trunk between switch SW1 and switch SW2 using DTP, but the trunk does not form. Which command should the engineer apply to switch SW2 to resolve this issue?



- A. switchport mode dynamic desirable
- B. switchport mode access
- C. no switchport
- D. switchport nonegotiate

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 202

How does the EIGRP metric differ from the OSPF metric?

- A. The EIGRP metric is calculated based on bandwidth only. The OSPF metric is calculated on delay only.
- B. The EIGRP metric is calculated based on delay only. The OSPF metric is calculated on bandwidth and delay
- C. The EIGRP metric is calculated based on bandwidth and delay. The OSPF metric is calculated on bandwidth only.
- D. The EIGRP metric is calculated based on hop count and bandwidth. The OSPF metric is calculated on bandwidth and delay

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 203

Which deployment option of Cisco NGFW provides scalability?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 204**

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

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 205**

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 206**

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

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

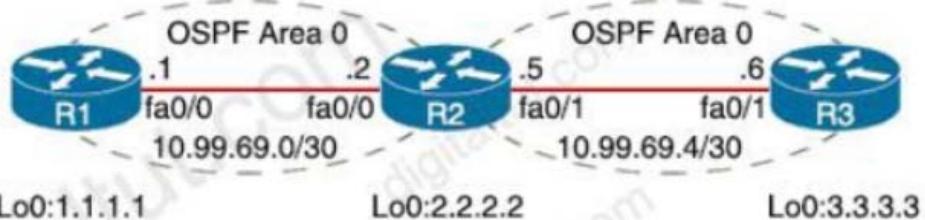
**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 207**



```
R1#traceroute
Protocol [ip]:
Target IP address: 3.3.3.3
Source address: 1.1.1.1
Numeric display [n]:
Timeout in seconds [3]:
Probe count [3]:
Minimum Time to Live [1]:
Maximum Time to Live [30]:
Port Number [33434]:
Loose, Strict, Record, Timestamp, Verbose[none]: Record
Number of hops [9]:
Loose, Strict, Record, Timestamp, Verbose [RV]:
Type escape sequence to abort.
```

Continued --->

```
Tracing the route to 3.3.3.3
1 10.99.69.2 36 msec
Received packet has options
Total option bytes = 40, padded length=40
Record route:
(10.99.69.1) <*>
(0.0.0.0)
(0.0.0.0)
End of list
---output omitted---

2 10.99.69.6 !A
Received packet has options
Total option bytes = 40, padded length=40
Record route:
(10.99.69.1)
(10.99.69.5) <*>
(0.0.0.0)
(0.0.0.0)
End of list
!A
---output omitted---
```

---

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

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 208**

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

```
DSW1#show spanning-tree
```

MST1

Spanning tree enabled protocol mstp

Root ID Priority 32769  
Address 0018.7363.4300  
Cost 2  
Port 13 (FastEthernet1/0/11)  
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID Priority 32769 (priority 32768 sys-id- ext 1)  
Address 001b.0d8e.e080  
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Interface	Role	Sts	Cost	Prio.Nbr	Type
Fa1/0/7	Desg	FWD	2	128.1	P2p Bound (PVST)
Fa1/0/10	Desg	FWD	2	128.12	P2p Bound (PVST)
Fa1/0/11	Root	FWD	2	128.13	P2p
Fa1/0/12	Altn	BLK	2	128.14	P2p

```
DSW1#show spanning-tree mst
```

##### MST1      vlans mapped: 10,20  
Bridge      address 001b.0d0e.e000 priority 32769 (32768 sysid 1)  
Root      address 0018.7363.4300 priority 32769 (32768 sysid 1)  
            port Fa1/0/11      cost 2      (rem hops 19)

----- output omitted -----

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

E. spanning-tree mst 1 priority 1

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 209**

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 shares the traffic load of the LAPs with the primary controller
- C. It avoids congestion on the primary controller by sharing the registration load on the LAPs.
- D. It registers the LAPs if the primary controller fails.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 210**

A wireless consultant is designing a high-density wireless network for a lecture hall for 1000 students. Which antenna type is recommended for this environment?

- A. sector antenna
- B. dipole antenna
- C. parabolic dish
- D. omnidirectional antenna

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 211**

Which command set configures RSPAN to capture outgoing traffic from VLAN3 on interface GigabitEthernet 0/3 while ignoring other VLAN traffic on the same interface?

- A. monitor session 2 source interface gigabitethernet 0/3 tx  
monitor session 2 filter vlan 1 - 2 , 4 - 4094
- B. monitor session 2 source interface gigabitethernet 0/3 tx  
monitor session 2 filter vlan 3
- C. monitor session 2 source interface gigabitethernet 0/3 rx  
monitor session 2 filter vlan 1 - 2 , 4 - 4094
- D. monitor session 2 source interface gigabitethernet 0/3 rx  
monitor session 2 filter vlan 3

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 212**

Refer to the exhibit Only administrators from the subnet 10.10.10.0/24 are permitted to have access to the router. A secure protocol must be used for the remote access and management of the router instead of clear-text protocols. Which configuration achieves this goal?

```
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
```

- A. access-list 23 permit 10.10.10.0 0.0.0.255  
line vty 0 15  
access-class 23 out  
transport input all
- B. access-list 23 permit 10.10.10.0 255.255.255.0  
line vty 0 15  
access-class 23 in  
transport input ssh
- C. access-list 23 permit 10.10.10.0 0.0.0.255  
line vty 0 4  
access-class 23 in  
transport input ssh
- D. access-list 23 permit 10.10.10.0 0.0.0.255  
line vty 0 15  
access-class 23 in  
transport input ssh

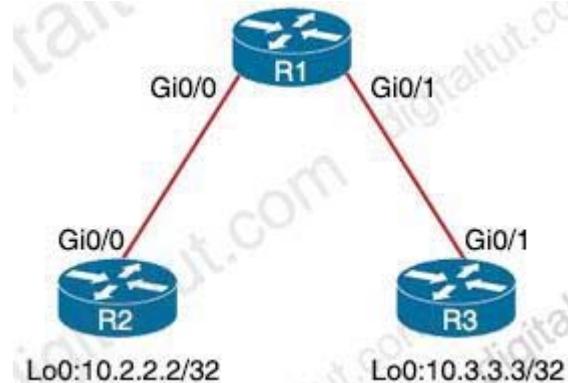
**Correct Answer:** D  
**Section:** (none)

## Explanation

### Explanation/Reference:

#### QUESTION 213

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 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

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 214**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<https://www.cisco.com/c/en/us/products/collateral/security/stealthwatch/solution-overview-c22-736505.html>

Cisco Stealthwatch collects and analyzes massive amounts of data to give even the largest, most dynamic networks comprehensive internal visibility and protection. It helps security operations teams gain **real-time** situational awareness of all users, devices, and traffic on the extended network so they can quickly and effectively respond to threats.

#### **QUESTION 215**

An engineer is configuring GigabitEthernet1/0/0 for VRRP. When the router has the highest priority in group 5, it must assume the master role. Which command set should the engineer add to the configuration to accomplish this task?

```
interface GigabitEthernet1/0/0
description To IDF A 38-38-720.28
ip address 172.16.13.2 255 255.255.0
```

- A. vrrp 5 ip 172.16.13.254 255.255.255.0  
vrrp 5 track 1 decrement 10  
vrrp 5 preempt
- B. standby 5 ip 172.16.13.254  
standby 5 priority 100  
standby 5 track 1 decrement 10
- C. standby 5 ip 172.16.13.254  
standby 5 priority 100  
standby 5 preempt
- D. vrrp 5 ip 172.16.13.254  
vrrp 5 priority 100

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 216**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## QUESTION 217

The screenshot shows the 'Policy-Mapping' tab of the Cisco ISE configuration interface. It includes sections for General, Security, QoS, Policy-Mapping (selected), and Advanced. The 'Policy-Mapping' section contains several configuration items:

- Allow AAA Override:  Enabled
- Coverage Hole Detection:  Enabled
- Enable Session Timeout:
- Aironet IE:  Enabled
- Diagnostic Channel:  Enabled
- Override Interface ACL: IPv4:  IPv6:
- Layer2 Acl:
- URL Acl:
- P2P Blocking Action:
- Client Exclusion:  Enabled
- Maximum Allowed Clients:
- Static IP Tunneling:  Enabled
- Wi-Fi Direct Clients Policy:
- Maximum Allowed Clients Per AP Radio:

The 'Advanced' section includes:

- DHCP: DHCP Server:  Override
- DHCP Addr Assignment:  Required
- 802.11a/n (1 - 255):
- 802.11b/g/n (1 - 255):
- NAC State:

Refer to the exhibit. An engineer has configured Cisco ISE to assign VLANs to clients based on their method of authentication, but this is not working as expected. Which action will resolve this issue?

- A. enable AAA override
- B. utilize RADIUS profiling
- C. require a DHCP address assignment
- D. set a NAC state

**Correct Answer: A**

Section: (none)

Explanation

Explanation/Reference:

## QUESTION 218

```
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 v_r1
exit
!
sampler SAMPLER-1
mode random 1 out-of 2
exit
!
ip cef
!
interface GigabitEthernet0/0/0
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. sampler SAMPLER-1  
mode random 1-out-of 2  
flow FLOW-MONITOR-1  
  
interface GigabitEthernet0/0/0  
ip flow monitor SAMPLER-1 input

- B. sampler SAMPLER-1  
no mode random 1-out-of 2  
mode percent 50  
  
interface GigabitEthernet0/0/0  
ip flow monitor FLOW\_MONITOR-1 sampler SAMPLER-1 input
- C. interface GigabitEthernet0/0/0  
ip flow monitor FLOW-MONITOR-1 sampler SAMPLER-1 input
- D. flow monitor FLOW-MONITOR-1  
record v4\_r1  
sampler SAMPLER-1  
  
interface GigabitEthernet0/0/0  
ip flow monitor FLOW-MONITOR-1 sampler SAMPLER-1 input

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 219**

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

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 220**

Which two sources cause interference for Wi-Fi networks? (Choose two)

- A. mirrored wall
- B. fish tank
- C. 900MHz baby monitor
- D. DECT 6.0 cordless
- E. incandescent lights

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 221**

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

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

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 222**

What is the function of the fabric control plane node in a Cisco SD-Access deployment?

- A. It is responsible for policy application and network segmentation in the fabric
- B. It performs traffic encapsulation and security profiles enforcement in the fabric
- C. It holds a comprehensive database that tracks endpoints and networks in the fabric
- D. It provides integration with legacy nonfabric-enabled environments

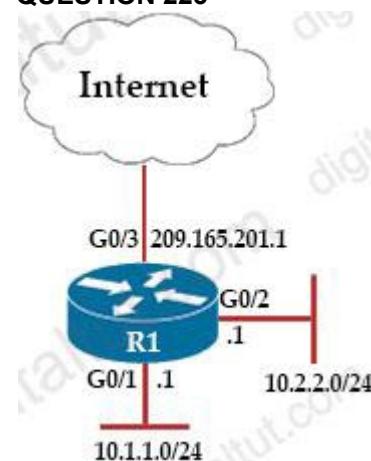
**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 223



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 G0/2 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 10 209.165.201.1
- 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 G0/3
- 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 interface G0/3 overload

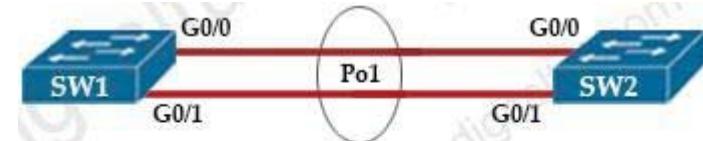
**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 224



```
SW1# show etherchannel summary
! output omitted

 Group Port-channel Protocol Ports
-----+-----+-----+
 1 Po1 (SD) -
```



---

```
SW2#
08:33:23: %PM-4-ERR_DISABLE: channel-misconfig error detection on Gi0/0, putting
Gi0/0 in err-disable state
08:33:23: %PM-4-ERR_DISABLE: channel-misconfig error detection on Gi0/1, putting
Gi0/1 in err-disable state
```

---

Refer to the exhibit. After an engineer configures an EtherChannel between switch SW1 and switch SW2, this error message is logged on switch SW2. Based on the output from SW1 and the log message received on Switch SW2, what action should the engineer take to resolve this issue?

- A. Configure the same protocol on the EtherChannel on switch SW1 and SW2.
- B. Connect the configuration error on interface Gi0/1 on switch SW1.
- C. Define the correct port members on the EtherChannel on switch SW1.
- D. Correct the configuration error on interface Gi0/0 switch SW1.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 225

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 226**

R1

```
key chain cisco123
key 1
key-string Cisco123!
```

```
Ethernet0/0 - Group 10
State is Active
 8 state changes, last state change 00:03:33
Virutal IP address is 192.168.0.1
Active virtual MAC address is 0000.0c07.ac0a
Local virtual MAC address is 0000.0c07.ac0a (v1 default)
Hello time 5 sec, hold time 15 sec
 Next hello sent in 2.704 secs
Authentication MD5, key-chain "cisco123"
Preemption enabled
 Active router is local
 Standby router is unknown
 Priority 255 (configured 255)
 Group name is "workstation-group" (cfgd)
```

R2

```
key chain cisco123
key 1
key-string cisco123!
```

```
Ethernet0/0 - Group 10
State is Active
 17 state changes, last state change 00:03:33
Virutal IP address is 192.168.0.1
Active virtual MAC address is 0000.0c07.ac0a
Local virtual MAC address is 0000.0c07.ac0a (v1 default)
Hello time 10 sec, hold time 30 sec
 Next hello sent in 6.704 secs
Authentication MD5, key-chain "cisco123"
Preemption disabled
 Active router is local
 Standby router is unknown
 Priority 200 (configured 200)
 Group name is "workstation-group" (cfgd)
```

An engineer is installing a new pair of routers in a redundant configuration. When checking on the standby status of each router the engineer notices that the routers are not functioning as expected. Which action will resolve the configuration error?

- A. configure matching hold and delay timers
- B. configure matching key-strings
- C. configure matching priority values
- D. configure unique virtual IP addresses

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

**QUESTION 227**

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

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 228**

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 229**

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

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

D. UDP

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 230**

In a Cisco Catalyst switch equipped with two supervisor modules an administrator must temporally remove the active supervisor from the chassis to perform hardware maintenance on it. Which mechanism ensure that the active supervisor removal is not disruptive to the network operation?

- A. NSF/NSR
- B. SSO
- C. HSRP
- D. VRRP

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 231**

Refer to the exhibit.

```
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
```

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 track 10 state down
- B. event manager applet EEM\_IP\_SLA  
event track 10 state unreachable
- C. event manager applet EEM\_IP\_SLA  
event sla 10 state unreachable
- D. event manager applet EEM\_IP\_SLA  
event sla 10 state down

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 232**

A network engineer is configuring Flexible NetFlow and enters these commands:

```
Sampler Netflow1
mode random one-out-of 100
interface fastethernet 1/0
flow-sampler netflow1
```

Which are two results of implementing this feature instead of traditional NetFlow? (Choose two)

- A. Only the flows of top 100 talkers are exported
- B. CPU and memory utilization are reduced
- C. The data export flow is more secure
- D. The accuracy of the data to be analyzed is improved
- E. The number of packets to be analyzed are reduced

**Correct Answer:** BE

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 233**

Which feature of EIGRP is not supported in OSPF?

- A. load balancing of unequal-cost paths
- B. load balance over four equal-costs paths
- C. uses interface bandwidth to determine best path
- D. per-packet load balancing over multiple paths

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 234**

In a Cisco SD-WAN solution, how is the health of a data plane tunnel monitored?

- A. with IP SLA
- B. ARP probing
- C. using BFD
- D. with OMP

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 235**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 236**

Which characteristic distinguishes Ansible from Chef?

- A. Ansible lacks redundancy support for the master server. Chef runs two masters in an active/active mode
- B. Ansible uses Ruby to manage configurations. Chef uses YAML to manage configurations
- C. Ansible pushes the configuration to the client. Chef client pulls the configuration from the server
- D. The Ansible server can run on Linux, Unix or Windows. The Chef server must run on Linux or Unix

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 237**

What function does vxlan perform in an SD-Access deployment?

- A. policy plane forwarding
- B. control plane forwarding
- C. data plane forwarding
- D. systems management and orchestration

**Correct Answer:** C

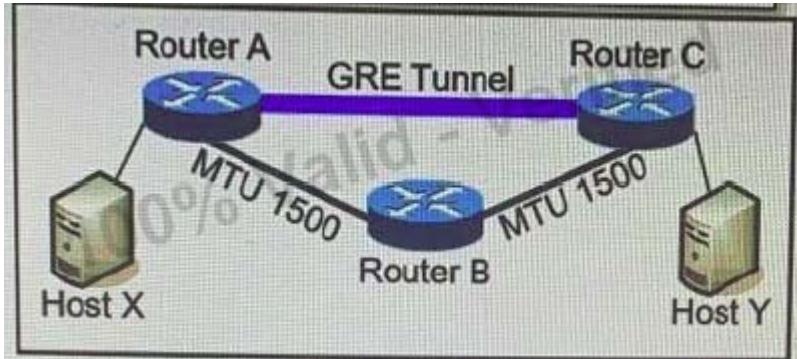
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 238**

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 A
- C. The packet is discarded on router B
- D. The packet arrives on router C fragmented

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 239**

R1	R2
key chain cisco123 key 1 key-string Cisco123!	key chain cisco123 key 1 key-string cisco123!
Ethernet0/0 - Group 10 State is Active 8 state changes, last state change 00:03:33 Virutal IP address is 192.168.0.1 Active virtual MAC address is 0000.0c07.ac0a Local virtual MAC address is 0000.0c07.ac0a (v1 default) Hello time 5 sec, hold time 15 sec Next hello sent in 2.704 secs Authentication MD5, key-chain "cisco123" Preemption enabled Active router is local Standby router is unknown Priority 255 (configured 255) Group name is "workstation-group" (cfgd)	Ethernet0/0 - Group 10 State is Active 17 state changes, last state change 00:03:33 Virutal IP address is 192.168.0.1 Active virtual MAC address is 0000.0c07.ac0a Local virtual MAC address is 0000.0c07.ac0a (v1 default) Hello time 10 sec, hold time 30 sec Next hello sent in 6.704 secs Authentication MD5, key-chain "cisco123" Preemption disabled Active router is local Standby router is unknown Priority 200 (configured 200) Group name is "workstation-group" (cfgd)

Refer to the exhibit. An engineer is installing a new pair of routers in a redundant configuration. Which protocol ensures that traffic is not disrupted in the event of a hardware failure?

- A. HSRPv1
- B. GLBP
- C. VRRP
- D. HSRPv2

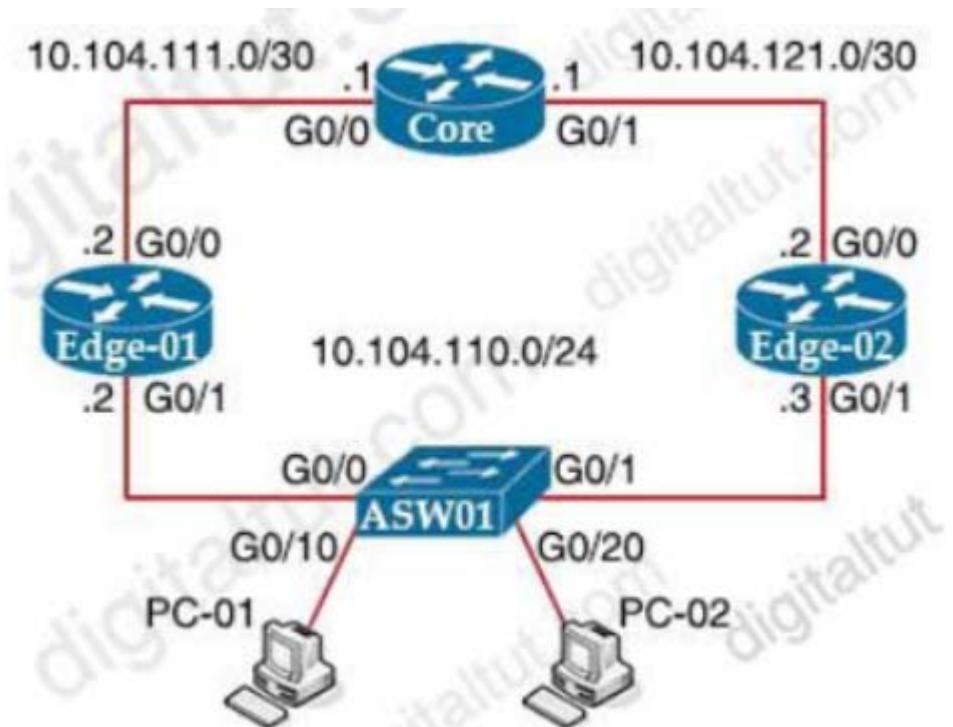
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 240**



Refer to the exhibit. Edge-01 is currently operational as the HSRP primary with priority 110. Which command on Edge-02 causes it to take over the forwarding role when Edge-01 is down?

- A. standby 10 priority
- B. standby 10 preempt
- C. standby 10 track
- D. standby 10 timers

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 241**

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

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 242**

Which QoS mechanism will prevent a decrease in TCP performance?

- A. Shaper
- B. Rate-Limit
- C. Policer
- D. Fair-Queue
- E. WRED
- F. LLQ

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 243**

Which statement about the default QoS configuration on a Cisco switch is true?

- A. The Cos value of each tagged packet is modified
- B. Port trust is enabled
- C. The Port Cos value is 0
- D. All traffic is sent through four egress queues

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 244**

How are the Cisco Express Forwarding table and the FIB related to each other?

- A. Cisco Express Forwarding uses a FIB to make IP destination prefix-based switching decisions correct
- B. The FIB is used to populate the Cisco Express Forwarding table
- C. There can be only one FIB but multiple Cisco Express Forwarding tables on IOS devices
- D. The Cisco Express Forwarding table allows route lookups to be forwarded to the route processor for processing before they are sent to the FIB

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 245**

Which two statements about Cisco Express Forwarding load balancing are true? (Choose two)

- A. Each hash maps directly to a single entry in the RIB
- B. It combines the source IP address subnet mask to create a hash for each destination
- C. Cisco Express Forwarding can load-balance over a maximum of two destinations
- D. It combines the source and destination IP addresses to create a hash for each destination
- E. Each hash maps directly to a single entry in the adjacency table

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## QUESTION 246

Which two statements about VRF-lite are true? (Choose two)

- A. It can support multiple customers on a single switch
- B. It supports most routing protocols, including EIGRP, ISIS, and OSPF
- C. It should be used when a customer's router is connected to an ISP over OSPF
- D. It can increase the packet switching rate
- E. It supports MPLS-VRF label exchange and labeled packets

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

VRF-lite does not support IGRP and ISIS.

- VRF-lite does not support all MPLS-VRF functionality: label exchange, LDP adjacency, or labeled packets.
- VRF-lite does not affect the packet switching rate.
- The capability vrf-lite subcommand under router ospf should be used when configuring OSPF as the routing protocol between the PE and the CE.

## QUESTION 247

```
*Jun19 11:12: BGP(4):10.1.1.2 rcvd UPDATE w/ attr:nexthop 10.1.1.2, origin ?, localpref
100,metric 0,extended community RT:999:999
*Jun19 11:12: BGP(4):10.1.1.2 rcvd 999:999:192.168.1.99/32,label 29--DENIED due
to:extended community not supported
```

You have just created a new VRF on PE3. You have enabled debug ip bgp vpnv4 unicast updates on PE1, and you can see the route in the debug, but not in the BGP VPNv4 table. Which two statements are true? (Choose two)

- A. After you configure route-target import 999:999 for a VRF on PE1, the route will be accepted
- B. VPNv4 is not configured between PE1 and PE3
- C. address-family ipv4 vrf is not configured on PE3
- D. PE1 will reject the route due to automatic route filtering
- E. After you configure route-target import 999:999 for a VRF on PE3, the route will be accepted

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 248**

What is the main function of VRF-lite?

- A. To connect different autonomous systems together to share routes
- B. To allow devices to use labels to make Layer 2 Path decisions
- C. To route IPv6 traffic across an IPv4 backbone
- D. To segregate multiple routing tables on a single device

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 249**



Which LISP component do routers in the public IP network use to forward traffic between the two networks?

- A. RLOC
- B. map resolver
- C. EID
- D. map Server

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 250**

Into which two pieces of information does the LISP protocol split the device identity?(Choose two)

- A. Device ID
- B. Enterprise Identifier
- C. LISP ID
- D. Routing Locator
- E. Resource Location
- F. Endpoint Identifier

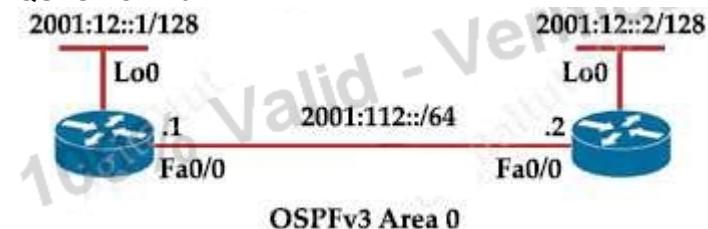
**Correct Answer:** DF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 251**



Which IPv6 OSPF network type is applied to interface Fa0/0 of R2 by default?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 252**

Which EIGRP feature allows the use of leak maps?

- A. neighbor
- B. Stub
- C. offset-list
- D. address-family

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 253**

Which two statements about EIGRP load balancing are true? (Choose two)

- A. Cisco Express Forwarding is required to load-balance across interfaces
- B. A path can be used for load balancing only if it is a feasible successor
- C. EIGRP supports unequal-cost paths by default
- D. Any path in the EIGRP topology table can be used for unequal-cost load balancing
- E. EIGRP supports 6 unequal-cost paths

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 254**

Which statement about LISP encapsulation in an EIGRP OTP implementation is true?

- A. LISP learns the next hop
- B. OTP uses LISP encapsulation to obtain routes from neighbors
- C. OTP uses LISP encapsulation for dynamic multipoint tunneling
- D. OTP maintains the LISP control plane

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 255**

Which two statements about VRRP are true? (Choose two)

- A. It supports both MD5 and SHA1 authentication
- B. It is assigned multicast address 224.0.0.9
- C. Three versions of the VRRP protocol have been defined
- D. It is assigned multicast address 224.0.0.8
- E. The TTL for VRRP packets must be 255
- F. Its IP address number is 115

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 256**

Which two statements about HSRP are true? (Choose two)

- A. It supports unique virtual MAC addresses
- B. Its virtual MAC is 0000.0C07.ACxx
- C. Its default configuration allows for pre-emption
- D. It supports tracking
- E. Its multicast virtual MAC is 0000.5E00.01xx

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 257**

What are three valid HSRP states? (Choose three)

- A. INIT
- B. listen
- C. full
- D. learning
- E. speak
- F. established

**Correct Answer:** ABE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 258**

Which two statements about IP SLA are true? (Choose two)

- A. It uses NetFlow for passive traffic monitoring
- B. It can measure MOS
- C. The IP SLA responder is a component in the source Cisco device
- D. It is Layer 2 transport-independent
- E. It uses active traffic monitoring
- F. SNMP access is not supported

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 259**

```
event manager applet LARGECONFIG
 event cli pattern "show running-config" sync yes
 action 1.0 puts "Warning! This device has a VERY LARGE configuration
 and may take some time to process"
 action 1.1 puts nonewline "Do you wish to continue [Y/N]"
 action 1.2 gets response
 action 1.3 string toupper "$response"
 action 1.4 string match "$_string_result" "Y"
 action 2.0 if $_string_result eq 1
 action 2.1 cli command "enable"
 action 2.2 cli command "show running-config"
 action 2.3 puts $_cli_result
 action 2.4 cli command "exit"
 action 2.9 end
```

Refer to the exhibit. Which two statements about the EEM applet configuration are true? (Choose two.)

- A. The EEM applet runs before the CLI command is executed
- B. The EEM applet runs after the CLI command is executed
- C. The EEM applet requires a case-insensitive response
- D. The running configuration is displayed only if the letter Y is entered at the CLI.

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 260

Refer to the exhibit. Which network script automation option or tool is used in the exhibit?

```
https://mydevice.mycompany.com/getstuff?queryName=errors&queryResults=yes
```

- A. EEM
- B. Python
- C. Bash script
- D. NETCONF

E. REST

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 261**

Which data modeling language is commonly used by NETCONF?

- A. REST
- B. YANG
- C. HTML
- D. XML

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 262**

Which variable in an EEM applet is set when you use the sync yes option?

- A. \$\_cli\_result
- B. \$\_exit\_status
- C. \$\_string\_result
- D. \$\_result

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 263**

Which IPv6 migration method relies on dynamic tunnels that use the 2002::/16 reserved address space?

- A. GRE
- B. 6RD
- C. 6to4
- D. ISATAP

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 264**

A GRE tunnel is down with the error message %TUN-5-RECURDOWN:

**Tunnel0 temporarily disabled due to recursive routing error.**

Which two options describe possible causes of the error? (Choose two.)

- A. Incorrect destination IP addresses are configured on the tunnel.
- B. There is link flapping on the tunnel
- C. There is instability in the network due to route flapping
- D. The tunnel mode and tunnel IP address are misconfigured
- E. The tunnel destination is being routed out of the tunnel interface

**Correct Answer:** CE

**Section:** (none)

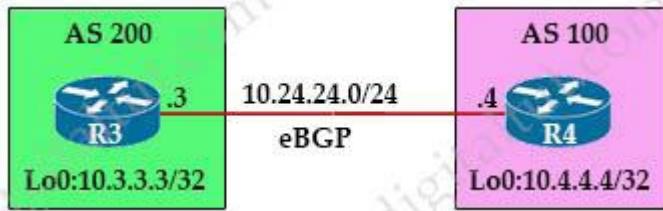
**Explanation**

**Explanation/Reference:**

**QUESTION 265**

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 10.24.24.4 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
- B. 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
- 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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 266

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

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

- D. better application performance

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 267**

In a wireless Cisco SD-Access deployment, which roaming method is used when a user moves from one access point to another on a different access switch using a single WLC?

- A. Layer 3
- B. inter-xTR
- C. auto anchor
- D. fast roam

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 268**

Which DHCP option provides the CAPWAP APs with the address of the wireless controller(s)?

- A. 43
- B. 66
- C. 69
- D. 150

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 269**

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 three commands are required? (Choose three)

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

**Correct Answer:** CDF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 270**

In a traditional 3 tier topology, an engineer must explicitly configure a switch as the root bridge and exclude it from any further election process for the spanningtree domain. Which action accomplishes this task?

- A. Configure the spanning-tree priority to 32768
- B. Configure root guard and portfast on all access switch ports
- C. Configure BPDU guard in all switch-to-switch connections
- D. Configure the spanning-tree priority equal to 0

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 271**

Refer to the exhibit.



Cisco DNA Center has obtained the username of the client and the multiple devices that the client is using on the network. How is Cisco DNA Center getting these context details?

- A. Those details are provided to Cisco DNA Center by the Identity Services Engine
- B. The administrator had to assign the username to the IP address manually in the user database tool on Cisco DNA Center
- C. User entered those details in the Assurance app available on iOS and Android devices
- D. Cisco DNA Center pulled those details directly from the edge node where the user connected

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: [https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/1-2-5/user\\_guide/b\\_dnac\\_ug\\_1\\_2\\_5/b\\_dnac\\_ug\\_1\\_2\\_4\\_chapter\\_0110.html](https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/1-2-5/user_guide/b_dnac_ug_1_2_5/b_dnac_ug_1_2_4_chapter_0110.html)

### QUESTION 272

Which QoS queuing method transmits packets out of the interface in the order the packets arrive?

- A. custom
- B. weighted-fair

- C. FIFO
- D. priority

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 273

Refer to the exhibit.

```
Router1#
Router1#show run int tunnel 0
Building configuration...
```

Current configuration : 93 bytes

```
!
interface Tunnel0
ip address 172.16.1.1 255.255.255.0
tunnel destination 192.168.10.2
end
```

```
Router1#show ip int brief
Interface IP-Address OK? Method Status Protocol
GigabitEthernet0/0 192.168.1.1 YES manual up up
GigabitEthernet0/1 unassigned YES unset administratively down down
GigabitEthernet0/2 unassigned YES unset administratively down down
GigabitEthernet0/3 unassigned YES unset administratively down down
Loopback0 192.168.10.1 YES manual up up
Tunnel0 172.16.1.1 YES manual up down
```

Which command must be applied to Router1 to bring the GRE tunnel to an up/up state?

- A. Router1(config-if)#tunnel source Loopback0
- B. Router1(config-if)#tunnel source GigabitEthernet0/1
- C. Router1(config-if)#tunnel mode gre multipoint

D. Router1(config)#interface tunnel0

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 274

Refer to the exhibit.

```
Router#sh run | b vty

line vty 0 4
 session-timeout 30
 exec-timeout 20 0
 session-limit 30
 login local
line vty 5 15
 session-timeout 30
 exec-timeout 20 0
 session-limit 30
 login local
```

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

- A. line vty 0 15  
exec-timeout 10 0
- B. line vty 0 15  
exec-timeout
- C. line vty 0 15  
absolute-timeout 600
- D. line vty 0 4  
exec-timeout 600

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 275**

A wireless consultant is designing a high-density wireless network for a lecture hall for 1000 students. Which antenna type is recommended for this environment?

- A. sector antenna
- B. dipole antenna
- C. parabolic dish
- D. omnidirectional antenna

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 276**

Refer to the exhibit. How can you configure a second export destination for IP address 192.168.10.1?

```
configure terminal
ip flow-export destination 192.168.10.1 9991
ip flow-export version 9
```

- A. Specify a different TCP port
- B. Specify a different UDP port
- C. Specify a VRF
- D. Configure a version 5 flow-export to the same destination
- E. Specify a different flow ID

**Correct Answer:** B

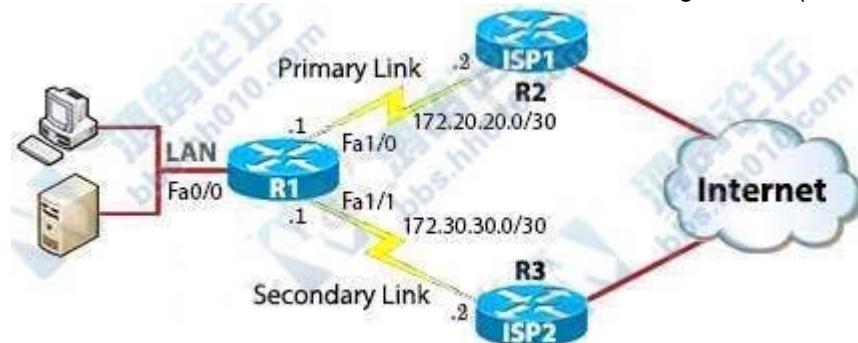
**Section:** (none)

## Explanation

### Explanation/Reference:

#### QUESTION 277

Refer to exhibit. What are two reasons for IP SLA tracking failure? (Choose two )



```
R1(config)#ip sla 1
R1(config-ip-sla)#icmp-echo 172.20.20.2 source-interface FastEthernet0/0
R1(config-ip-sla-echo)#timeout 5000
R1(config-ip-sla-echo)#frequency 10
R1(config-ip-sla-echo)#threshold 500
R1(config)#ip sla schedule 1 start-time now life forever
R1(config)#track 10 ip sla 1 reachability
R1(config)#ip route 0.0.0.0 0.0.0.0 172.20.20.2 track 10
R1(config)#no ip route 0.0.0.0 0.0.0.0 172.20.20.2
R1(config)#ip route 0.0.0.0 0.0.0.0 172.30.30.2 5
```

- A. The source-interface is configured incorrectly
- B. The destination must be 172.30.30.2 for icmp-echo
- C. A route back to the R1 LAN network is missing in R2
- D. The default route has wrong next hop IP address

E. The threshold value is wrong

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 278**

Which protocol is responsible for data plane forwarding in a Cisco SD-Access deployment?

- A. VXLAN
- B. IS-IS
- C. OSPF
- D. LISP

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 279**

Refer to the exhibit.

```

DSW2#sh spanning-tree vlan 10

VLAN0010
 Spanning tree enabled protocol ieee
 Root ID Priority 10
 Address 0018.7363.4300
 Cost 2
 Port 9 (FastEthernet1/0/7)
 Hello Time 2 sec Max Age 20 sec
 Forward Delay 15 sec

 Bridge ID Priority 4106 (priority 4096 sys-id-ext 10)
 Address 001b.0d8e.e080
 Hello Time 2 sec Max Age 20 sec
 Forward Delay 15 sec
 Aging Time 300 sec

Interface Role Sts Cost Prio.Nbr Type
----- ---- --- -- ----- -----
Fa1/0/7 Root FWD 2 128.9 P2p
Fa1/0/10 Desg FWD 4 128.12 P2p
Fa1/0/11 Desg FWD 2 128.13 P2p
Fa1/0/12 Desg FWD 2 128.14 P2p

```

```

DSW2#
*Mar 3 09:33:23.234: #SPANTREE-2-BLOCK_BPDUGUARD: Received BPDU on port Fa1/0/7 with BPDU Guard enabled. Disabling port.
*Mar 3 09:33:23.234: %PM-4-ERR_DISABLE: bpduguard error detected on Fa1/0/7, putting Fa1/0/7 in err-disable state
*Mar 3 09:33:23.678: %SPANTREE-2-BLOCK_BPDUGUARD: Received BPDU on port Fa1/0/7 with BPDU Guard enabled. Disabling port.
*Mar 3 09:33:23.679: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0/7, changed state to down
*Mar 3 09:33:23.701: %LINK-3-UPDOWN: Interface FastEthernet1/0/7, changed state to down

```

An engineer entered the no spanning-tree bpduguard enable on interface fa1/0/7 command. Which statement describes the effect of this command?

- A. Fa1/0/7 remains in err-disabled state until the shutdown/no shutdown command is entered in the interface configuration mode
- B. Interface Fa1/0/7 remains in err-disabled state until the errdisable recovery cause bpduguard command is entered in the interface configuration mode
- C. Fa1/0/7 remains in err-disabled state until the errdisable recovery bpduguard command is entered in the interface configuration mode
- D. Interface Fa1/0/7 remains in err-disabled state until the spanning-tree portfast bpduguard disable command is entered in the interface configuration mode
- E. Interface Fa1/0/7 returns to an up and operational state

**Correct Answer:** A

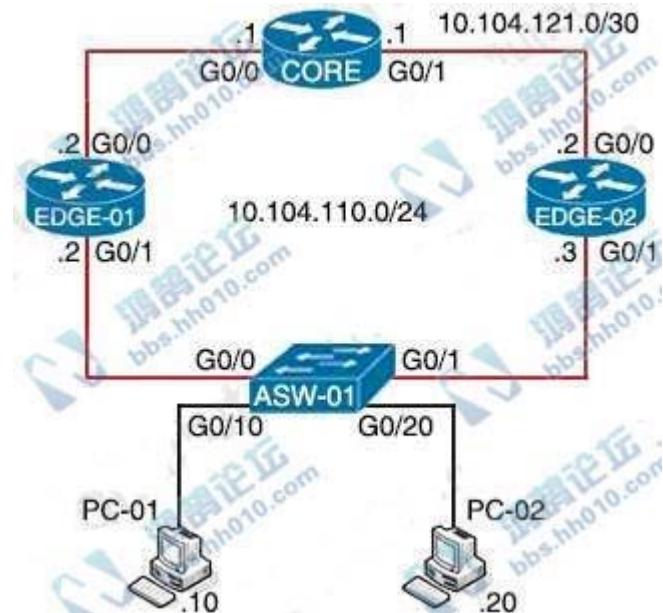
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 280**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 281**

Refer to the exhibit.

```
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
```

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 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
- B. 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
- C. 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
- D. 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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 282**

Refer to the exhibit.

```
aaa new-model
aaa authentication login local tacacs+
tacacs-server host 10.1.1.1
tacacs-server key CISCO
```

```
line con 0
 login authentication local
line aux 0
line vty 0 4
!
username tommy password 0 Cisco
end
```

### **TACACS+ Server Passwords**

---

**username tommy password 0 Tommy**

Which password allows access to line con 0 for a username of "tommy" under normal operation?

- A. Cisco
- B. local
- C. 0 Cisco
- D. Tommy

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 283**

Which tunneling technique is used when designing a Cisco SD-Access fabric data plane?

- A. VXLAN
- B. VRF Lite
- C. VRF
- D. LISP

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 284**

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-CAP2802IE-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 option 43 Hex F104.AC10.3205
- B. configure option 43 Hex F104.CA10.3205
- C. configure dns-server 172.16.50.5
- D. configure dns-server 172.16.100.1

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 285**

Why would a log file contain a \* next to the date?

- A. The network device is not configured to use NTP time stamps for logging
- B. The network device was unable to reach the NTP server when the log messages were recorded.
- C. The network device is not configured to use NTP
- D. The network device was receiving NTP time when the log messages were recorded

**Correct Answer:** C

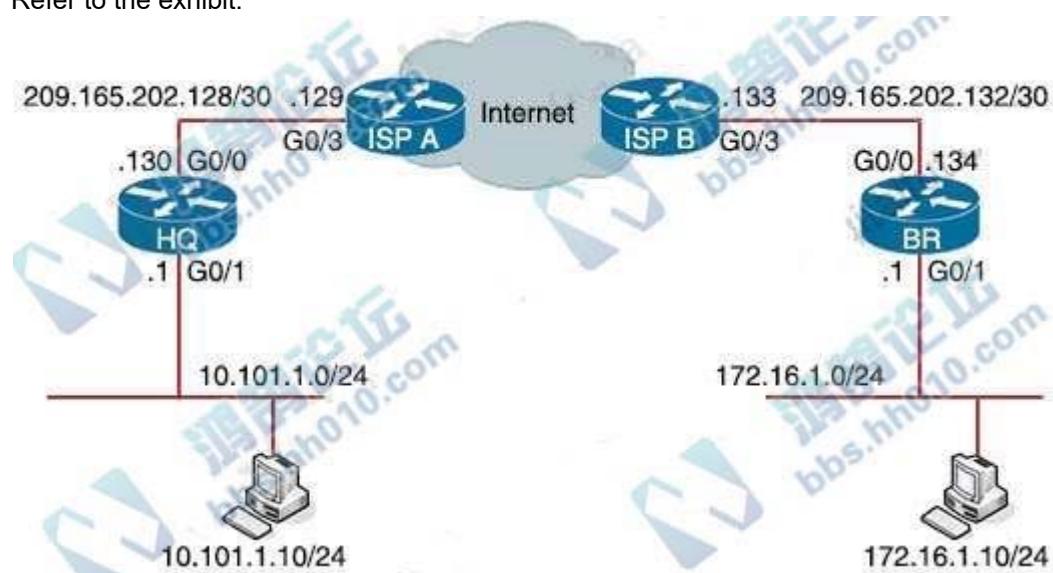
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 286**

Refer to the exhibit.



```
> Frame 24: 138 bytes on wire (1104 bits), 138 bytes captured (1104 bits) on interface 0
> Ethernet II, Src: 50:00:00:01:00:01 (50:00:00:01:00:01), Dst: 50:00:00:02:00:01 (50:00:00:02:00:01)
> Internet Protocol Version 4, Src: 209.165.202.130, Dst: 209.165.202.134
> Generic Routing Encapsulation (IP)
> Internet Protocol Version 4, Src: 10.111.111.1, Dst: 10.111.111.2
> Internet Control Message Protocol
```

A GRE tunnel has been created between HQ and BR routers. What is the tunnel IP on the HQ router?

- A. 209.165.202.130
- B. 10.111.111.2
- C. 10.111.111.1
- D. 209.165.202.134

**Correct Answer:** C

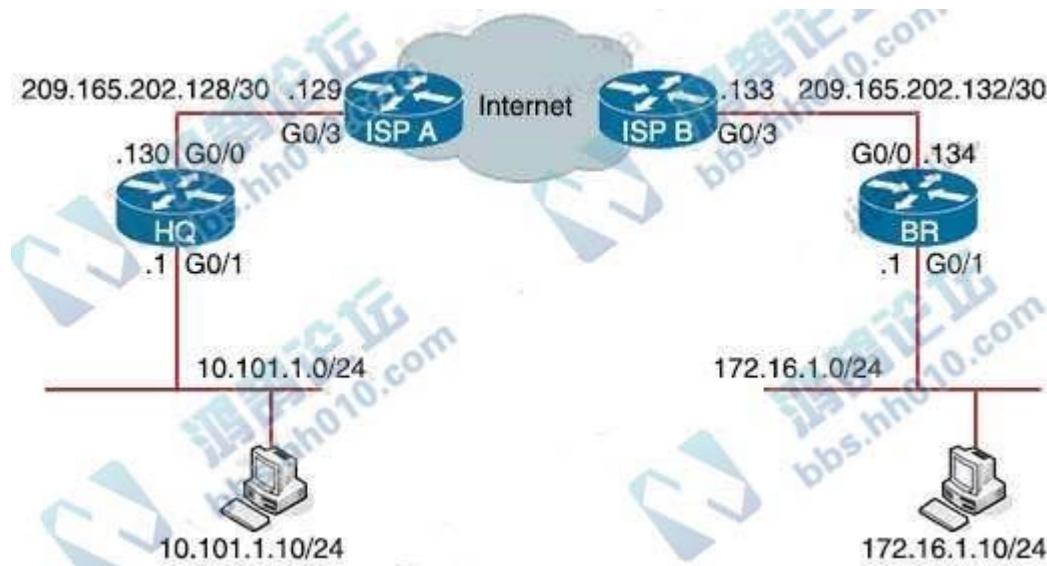
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 287

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 288**

A customer has deployed an environment with shared storage to allow for the migration of virtual machines between servers with dedicated operating systems that provide the virtualization platform. What is this operating system described as?

- A. hosted virtualization
- B. type 1 hypervisor
- C. container oriented
- D. decoupled

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 289**

Refer to the exhibit.

```
Make is Gocar
Model is Zoom

Features are
+ Power Windows
+ Manual Drive
+ Auto AC
```

What is the JSON syntax that is formed from the data?

- A. Make": "Gocar", "Model": "Zoom", "Features": ["Power Windows", "Manual Dnve", "Auto AC"]}
- B. ("Make": [ "Gocar", "Model": "Zoom"], Features": ["Power Windows", "Manual Drive", "Auto AC"])
- C. {"Make": Gocar, "Model": Zoom, "Features": Power Windows, Manual Drive, Auto AC}
- D. {"Make": "Gocar", "Model": "Zoom", "Features": ["Power Windows", "Manual Drive", "Auto AC"]}

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 290**

In OSPF, which LS type is responsible for pointing to the ASBR router?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 291**

An engineer is configuring GigabitEthernet1/0/0 for VRRP. When the router has the highest priority In group 5, It must assume the master role. Which command set should the engineer add to the configuration to accomplish this task?

```
interface GigabitEthernet1/0/0
description To IDF A 38-72-100-76
ip address 172.16.13.2 255.255.255.0
```

- A. standby 5 ip 172.16.13.254  
standby 5 priority 100  
standby 5 preempt
- B. vrrp 5 ip 172.16.13.254 255.255.255.0  
vrrp 5 track 1 decrement 10  
vrrp preempt
- C. standby 5 ip 172.16.13.254  
standby 5 priority 100  
standby 5 track 1 decrement 10
- D. vrrp 5 ip 172.16.13.254  
vrrp 5 priority 100

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 292**

Which HHTP status code is the correct response for a request with an incorrect password applied to a REST API session?

- A. HTTP Status Code 200
- B. HTTP Status Code 302
- C. HTTP Status Code 401
- D. HTTP Status Code: 504

**Correct Answer:** C

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 293**

Drag and drop the LISP components on the left to the correct description on the right.

Select and Place:

map server	IPv4 or IPv6 address of an endpoint within a LISP site
ETR	network infrastructure component that learns of EID-prefix mapping entries from an ETR
EID	de-encapsulates LISP packets coming from outside of the LISP site to destinations inside of the site

Correct Answer:

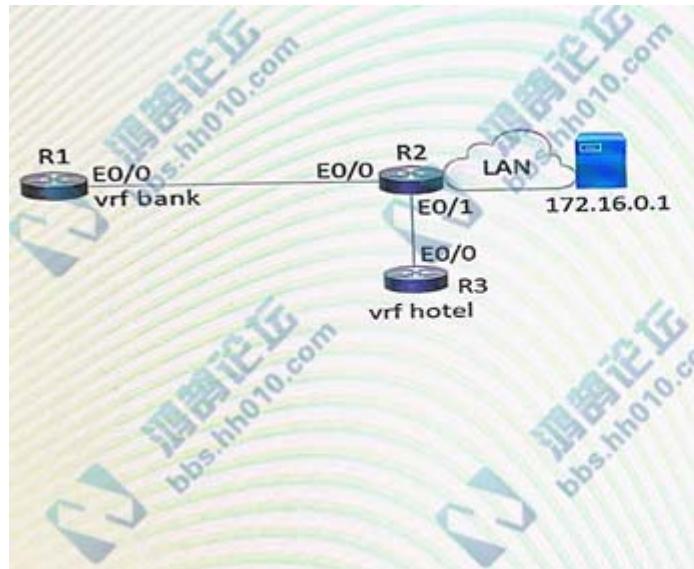


Section: (none)

Explanation

Explanation/Reference:

QUESTION 294



```

R2:
vrf definition bank
address-family ipv4
exit-address-family

vrf definition hotel
address-family ipv4
exit-address-family

interface Ethernet0/0
vrf forwarding bank
ip address 172.16.0.4 255.255.0.0

interface Ethernet0/1
vrf forwarding hotel
ip address 172.16.0.5 255.255.0.0

router ospf 42 vrf bank
router-id 1.1.1.1
network 172.16.0.0 0.0.255.255 area 0

router ospf 43 vrf hotel
router-id 3.3.3.3
network 172.16.0.0 0.0.255.255 area 0

R1:
vrf definition bank
!
address-family ipv4
exit-address-family

```

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 Ethernet 0/0  
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 Ethernet 0/0  
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
- C. interface Ethernet 0/0  
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
- D. interface Ethernet 0/0  
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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 295**

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

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

- A. It opens an ncclient connection to a cisco Nexus device and maintains it for the duration of the context
- B. It creates an SSH connection using the SSH key that is stored, and the password is ignored
- C. It opens a tunnel and encapsulates the login information, if the host key is correct
- 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 296**

Using the EIRP formula.what parameter is subtracted to determine the EIRP value ?

- A. transmitter power
- B. antenna cable loss
- C. antenna gain
- D. signal-to-noise ratio

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 297**

In Cisco SD-WAN, which protocol is used to measure link quality ?

- A. BFD
- B. RSVP
- C. IPsec
- D. OMP

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 298**

Refer to the exhibit. Which level message does the WLC send to the syslog server?

**Management**

- [Summary](#)
- [SNMP](#)
- [HTTP-HTTPS](#)
- [Telnet-SSH](#)
- [Serial Port](#)
- [Local Management](#)
- [Users](#)
- [User Sessions](#)
- [Logs](#)
- [Config](#)
- [Message logs](#)
- [Mgmt Via Wireless](#)
- [Tech Support](#)

**Syslog Server**

Syslog Server	192.168.100.2	<a href="#">Remove</a>
Syslog Level	Errors	<input type="button" value="▼"/>
Syslog Facility	Local Use 0	<input type="button" value="▼"/>
IPSec	<input type="checkbox"/>	
IPSec Profile Name	none	<input type="button" value="▼"/>

**Msg Log Configuration**

Buffered Log Level	Errors	<input type="button" value="▼"/>
Console Log Level	Disable	<input type="button" value="▼"/>
File Info	<input checked="" type="checkbox"/>	
Trace Info	<input checked="" type="checkbox"/>	
Traceback Logging Level	Errors	<input type="button" value="▼"/>

- A. syslog level errors and less severity messages
- B. syslog level errors messages
- C. all syslog levels messages
- D. syslog level errors and greater severity messages

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 299

Refer to the exhibit.



#### Your connection is not private

Attackers might be trying to steal your information from 192.168.1.10 (for example, passwords, messages, or credit cards). [Learn more](#)

NET::ERR\_CERT\_AUTHORITY\_INVALID

Automatically send some [system information](#) and [page content](#) to Google to help detect dangerous apps and sites. [Privacy policy](#)

ADVANCED

[Back to safety](#)

An engineer is designing a guest portal on Cisco ISE using the default configuration. During the testing phase, the engineer receives a warning when displaying the guest portal. Which issue is occurring?

- A. The server that is providing the portal has an expired certificate
- B. The server that is providing the portal has a self-signed certificate
- C. The connection is using an unsupported protocol
- D. The connection is using an unsupported browser

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### Explanation/Reference:

If you're a website owner and your website displays this error message, then there could be two reasons why the browser says the cert authority is invalid:

- + You're using a self-signed SSL certificate, OR
- + The certificate authority (CA) that issued your SSL certificate isn't trusted by your web browser.

### QUESTION 300

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
distinguish 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
	distinguish traffic types

Section: (none)

Explanation

Explanation/Reference:

QUESTION 301

Drag and drop the virtual component from the left onto their descriptions on the right.

Select and Place:

vNIC	zip file containing 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 a hypervisor

Correct Answer:

	OVA
	VMDK
	VMX
	vNIC

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 302**

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

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

**Correct Answer:** AE

**Section:** (none)

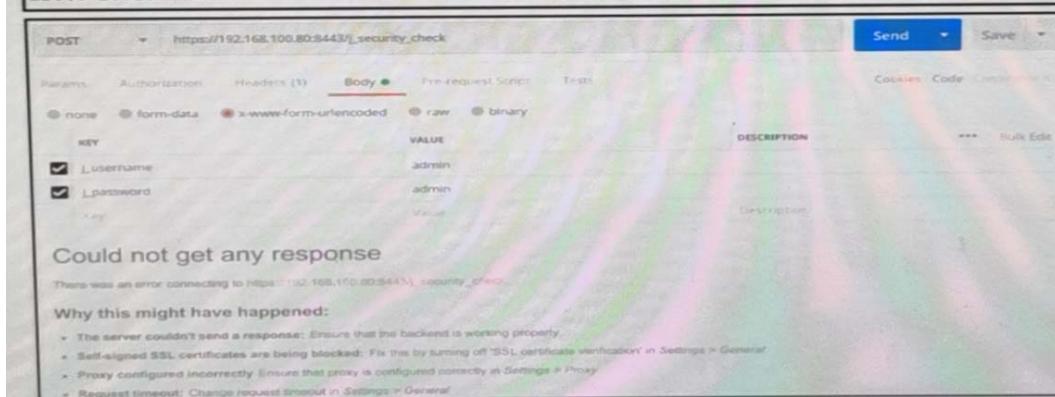
**Explanation**

**Explanation/Reference:**

**QUESTION 303**

```
vedge-001# show control connections
```

PEER		CONTROLLER		SITE		DOMAIN		PEER		PEER	
PEER	PEER	PEER	PEER	SITE		PRIVATE IP	PEER	PUB			
PRIV	PEER	PEER	PEER			LOCAL COLOR					
GROUP				ID	ID		PROXY	STATE	UPTIME	PORT	
TYPE	PROT	SYSTEM IP		PORT	PORT					ID	
PUBLIC IP											
vsmart	dtls	4.4.4.70		100	1	192.168.100.80					
12446	10.10.20.70					12446 default	No	up			
0:02:24:09	0										
vbond	dtls	0.0.0.0		0	0	192.168.100.81					
12346	10.10.20.80					12346 default	-	up			
0:02:24:10	0										
vmanage	dtls	4.4.4.90		100	0	192.168.100.82					
12446	10.10.20.90					12446 default					

POST https://192.168.100.80:8443/\_security\_check

Body

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> _username	admin	
<input checked="" type="checkbox"/> _password	admin	

Could not get any response

Why this might have happened:

- The server couldn't send a response: Ensure that the backend is working properly.
- Self-signed SSL certificates are being blocked: Fix this by turning off 'SSL certificate verification' in Settings > General.
- Proxy configured incorrectly: Ensure that proxy is configured correctly in Settings > Proxy.
- Request timeout: Change request timeout in Settings > General.

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

- use basic authentication
- change the port to 12446
- target 192.168.100.82 in the URI
- restart the vsmart host

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 304

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: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 305

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

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 306

A company has an existing Cisco 5520 HA cluster using SSO. An engineer deploys a new single Cisco Catalyst 9800 WLC to test new features. The engineer successfully configures a mobility tunnel between the 5520 cluster and 9800 WLC. Clients connected to the corporate WLAN roam seamlessly between access points on the 5520 and 9800 WLC. After a failure on the primary 5520 WLC, all WLAN services remain functional; however, clients cannot roam between the 5520 and 9800 controllers without dropping their connection. Which feature must be configured to remedy the issue?

- A. mobility MAC on the 5520 cluster
- B. mobility MAC on the 9800 WLC
- C. new mobility on the 5520 cluster

D. new mobility on the 9800 WLC

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 307**

Which three methods does Cisco DNA Center use to discover devices? (Choose three.)

- A. CDP
- B. SNMP
- C. LLDP
- D. ping
- E. NETCONF
- F. a specified range of IP addresses

**Correct Answer:** ACF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 308**

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

- A. The MAC address table supports partial matches. TCAM requires an exact match
- B. TCAM is used to make L2 forwarding decisions. CAM is used to build routing tables
- C. The MAC address table is contained in TCAM. ACL and QoS information is stored in TCAM
- D. Router prefix lookups happen in TCAM. MAC address table lookups happen in CAM.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 309**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 310**

```

access-list 100 permit gre host 209.165.201.1 host 209.165.201.6

crypto isakmp policy 5
authentication pre-share
hash sha256
encryption aes
group 14

crypto isakmp key D@t@c3nt3r address 209.165.201.6

crypto ipsec transform-set My_Set esp-aes esp-sha-hmac
mode transport

crypto map MAP 10 ipsec-isakmp
set peer 209.165.201.6
set transform-set My_Set
match address 100

interface GigabitEthernet0/0
description outside_interface
no switchport
ip address 209.165.201.1 255.255.255.252
crypto map MAP

interface Tunnel100
ip address 192.168.100.1 255.255.255.0
ip mtu 1400
tunnel source GigabitEthernet0/0
tunnel destination 209.165.201.6

ip route 10.20.0.0 255.255.255.0 192.168.100.2 Tunnel100

```

```

access-list 100 permit gre host 209.165.201.6 host 209.165.201.1

crypto isakmp policy 5
authentication pre-share
hash sha256
encryption aes
group 14

crypto isakmp key D@t@c3nt3 address 209.165.201.1

crypto ipsec transform-set My_Set esp-aes esp-sha-hmac
mode transport

crypto map MAP 10 ipsec-isakmp
set peer 209.165.201.1
set transform-set My_Set
match address 100

interface GigabitEthernet0/1
description outside_interface
no switchport
ip address 209.165.201.6 255.255.255.252
crypto map MAP

interface Tunnel100
ip address 192.168.100.2 255.255.255.0
ip mtu 1400
tunnel source GigabitEthernet0/1
tunnel destination 209.165.201.1

ip route 10.10.0.0 255.255.255.0 192.168.100.1 Tunnel100

```



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

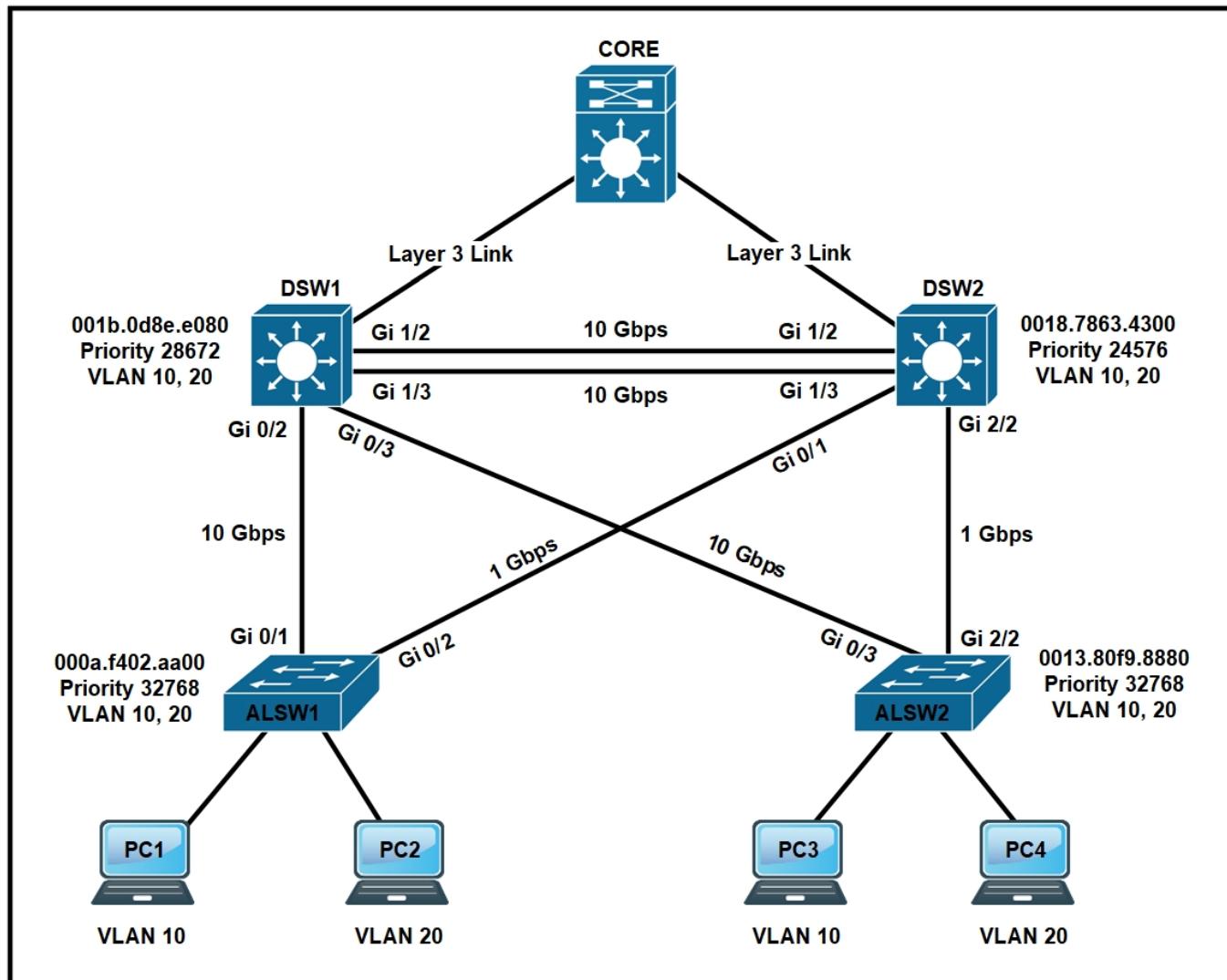
**Correct Answer:** DE

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 311**



Refer to the exhibit. All switches are configured with the default port priority value. Which two commands ensure that traffic from PC1 is forwarded over the Gi1/3 trunk port between DSW1 and DSW2? (Choose two.)

- A. DSW1 (config-if)#spanning-tree port-priority 0
- B. DSW2(config-if)#spanning-tree port-priority 128

- C. DSW2(config-if)#spanning-tree port-priority 16
- D. DSW2(config)#interface gi1/3
- E. DSW1(config)#interface gi1/3

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 312**

Which encryption hashing algorithm does NTP use for authentication?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 313**

A customer has completed the installation of a Wi-Fi 6 greenfield deployment at their new campus. They want to leverage Wi-Fi 6 enhanced speeds.on the trusted employee WLAN. To configure the employee WLAN, which two Layer 2 security policies should be used? (Choose two.)

- A. WPA (AES)
- B. WEP
- C. WPA2 (AES)
- D. 802.1X
- E. OPEN

**Correct Answer:** CD

**Section:** (none)

## Explanation

### Explanation/Reference:

#### QUESTION 314

```
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 Hello (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 Hello (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 DR, 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 00:00:07
 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. GigabitEthernet0/1 and GigabitEthernet0/1.40
- B. only GigabitEthernet0/0
- C. GigabitEthernet0/0 and GigabitEthernet0/1
- D. only GigabitEthernet0/1

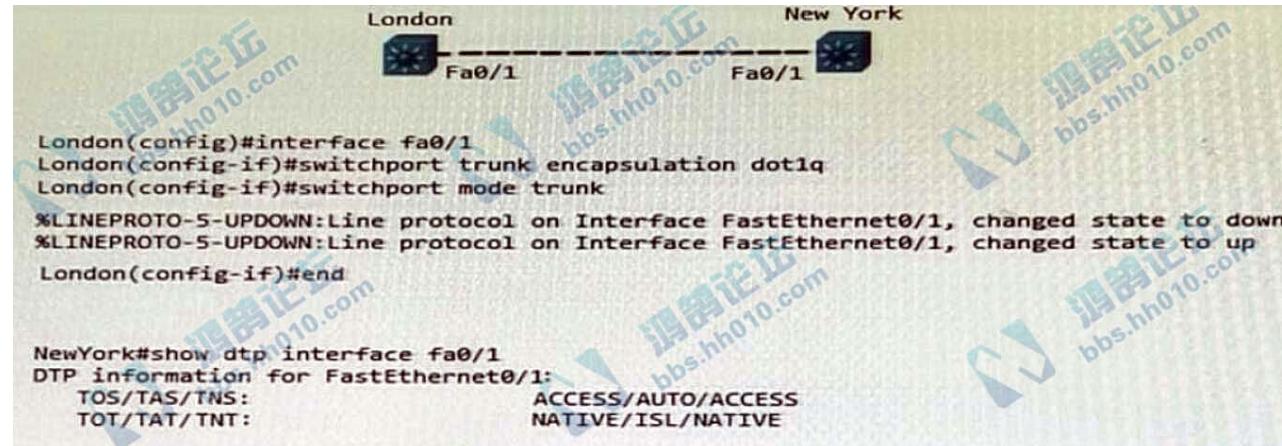
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 315**



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

- A. NewYork(config)int f0/1  
NewYork(config)#switchport mode dynamic desirable  
NewYork(config)end  
NewYork#
- B. NewYork(config)int f0/1  
NewYork(config)switchport nonegotiate  
NewYork(config)#end  
NewYork#
- C. NewYork(config)#int f0/1  
NewYork(config)#switchport trunk encap dot1q  
NewYork(config)#fend  
NewYork#
- D. NewYork(config)#int f0/1  
NewYork(config)#switchport mode trunk  
NewYork(config)#end

NewYork#

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 316**

What is YANG used for?

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 317**

An engineer must configure a GRE tunnel interface in the default mode. The engineer has assigned an IPv4 address on the tunnel and sourced the tunnel from an Ethernet interface. Which additional configuration must be made on the tunnel interface?

- A. (config-if)# tunnel destination <ip address>
- B. (config-if)# keepalive <seconds retries>
- C. (config-if)# ip tcp adjust-mss <value>
- D. (config-if)# ip mtu svalue>

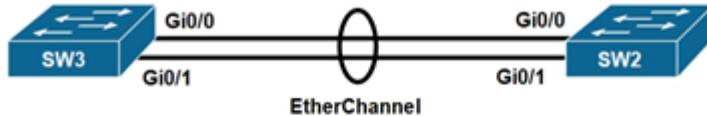
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 318



```
SW2# show ip interface brief | include Port
Port-channel unassigned YES unset down down
SW2# show etherchannel summary
Flags: D - down P - bundled in port-channel
I - stand-alone s - suspended
H - Hot-standby (LACP only)
R - Layer 3 S - Layer 2
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
Group Port-channel Protocol Ports
-----+-----+-----+
1 Pol (S D) PAgP Gi0/0(I) Gi0/1(I)
```

```
SW3# show etherchannel summary
Flags: D - down P - bundled in port-channel
I - stand-alone s - suspended
H - Hot-standby (LACP only)
R - Layer 3 S - Layer 2
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 Pol (S D) LACP Gi0/0(I) Gi0/1(I)
```

Refer to the exhibit. Which action resolves the EtherChannel issue between SW2 and SW3?

- A. Configure channel-group 1 mode active on both interfaces
- B. Configure switchport mode trunk on SW2

- C. Configure switchport nonegotiate on SW3
- D. Configure channel-group 1 mode desirable on both interfaces

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 319**

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

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

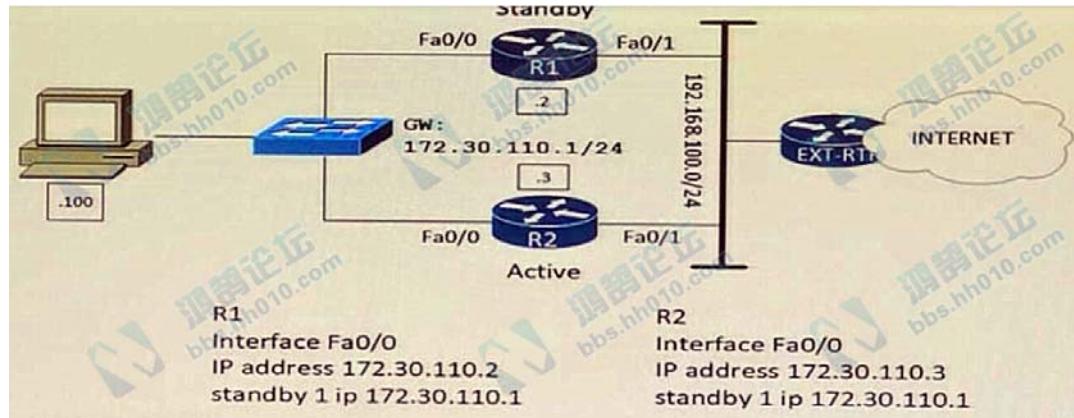
**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 320**



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. R1  
standby 1 preempt  
R2  
standby 1 priority 90
- D. R2  
standby 1 priority 90  
standby 1 preempt

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 321

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 322**

Which two methods are used to reduce the AP coverage area? (Choose two.)

- A. Reduce AP transmit power.
- B. Reduce channel width from 40 MHz to 20 MHz.
- C. Disable 2.4 GHz and use only 5 GHz.
- D. Increase minimum mandatory data rate.
- E. Enable Fastlane.

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 323**

Which outcome is achieved with this Python code?

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

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

- D. connects to a Cisco device using Telnet and exports the routing table information

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 324**

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 325**

Based on the output below, which Python code shows the value of the "upTime" key?

```
{
 "response": [
 {"family": "Routers",
 "type": "Cisco ASR 1001-X Router",
 "errorCode": null,
 "location": null, "macAddress": "00:c8:8b:80:bc:00",
 "hostname": "asr1001-x abcinc",
 "role": "BORDER ROUTER",
 "lastUpdateTime": 1577391777128,
 "serialNumber": "FXS1932Q2SE",
 "softwareVersion": "16.3.2",
 "locationName": null},
```

```
"upTime": "49 days, 13:43:44:231",
"lastUpdated": "2019-12-22 14:55:23"
}]
}
```

- A. `json_data = json.loads(response.text)  
print(json_data['response']['family']['upTime'])`
- B. `json_data = response.json()  
print(json_data['response'][0]['upTime'])`
- C. `json_data = response.json()  
print(json_data['response']['family']['upTime'])`
- D. `json_data = response.json()  
print(json_data['response'][0][upTime])`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 326

```
Vlan503 - Group 1
 State is Active
 1 state change, last state change 32w6d
 Virtual IP address is 10.0.3.241
 Active virtual MAC address is 0000.0c07.ac01
 Local virtual MAC address is 0000.0c07.ac01 (vl 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-V1503-1" (default)
```

Refer to the exhibit. Which two facts does the device output confirm? (Choose two.)

- A. The device's HSRP group uses the virtual IP address 10.0.3.242
- B. The device is configured with the default HSRP priority.

- C. The standby device is configured with the default HSRP priority.
- D. The device is using the default HSRP hello timer.
- E. The device sends unicast messages to its peers.

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 327**

In a three-tier hierarchical campus network design, which action is a design best-practice for the core layer?

- A. provide QoS prioritization services such as marking, queueing, and classification for critical network traffic.
- B. provide redundant Layer 3 point-to-point links between the core devices for more predictable and faster convergence
- C. provide advanced network security features such as 802.1X, DHCP snooping, VACLs, and port security
- D. provide redundant aggregation for access layer devices and first-hop redundancy protocols such as VRRP

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 328**

What is a VPN in a Cisco SD-WAN deployment?

- A. common exchange point between two different services
- B. attribute to identify a set of services offered in specific places in the SD-WAN fabric
- C. virtualized environment that provides traffic isolation and segmentation in the SD-WAN fabric
- D. virtual channel used to carry control plane information

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 329**

What is an emulated machine that has dedicated compute, memory, and storage resources and a fully installed operating system?

- A. container
- B. mainframe
- C. host
- D. virtual machine

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 330**

Which entity is a Type 1 hypervisor?

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 331**



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

- A. omnidirectional
- B. Yagi
- C. dipole
- D. patch

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 332**



**Person#1:**

First Name is Johnny

Last Name is Table

Hobbies are:

- Running
- Video games

**Person#2:**

First Name is Billy

Last Name is Smith

Hobbies are:

- Napping
- Reading

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

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 333

In a fabric-enabled wireless network, which device is responsible for maintaining the endpoint ID database?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 334

```
switch1(config)# interface GigabitEthernet 1/1
switch1(config-if)# switchport mode trunk
switch1(config-if)# switchport trunk allowed vlan 10,20,30,40,50,60,70-90
switch1(config)# exit
switch1(config)# monitor session 1 source vlan 10
switch1(config)# monitor session 1 destination remote vlan 70

switch2(config)# interface GigabitEthernet 1/1
switch2(config-if)# switchport mode trunk
switch2(config-if)# switchport trunk allowed vlan 10,20,30,40,50,60,80-90
switch2(config)# exit
switch2(config)# monitor session 2 source remote vlan 70
switch2(config)# monitor session 2 destination interface GigabitEthernet1/1
```

Refer to the exhibit A network administrator configured RSPAN to troubleshoot an issue between switch1 and switch2. The switches are connected using interface GigabitEthernet 1/1. An external packet capture device is connected to switch2 interface GigabitEthernet1/2. Which two commands must be added to complete this configuration? (Choose two.)

- A. switch2(config)# monitor session 2 destination vlan 10
- B. switch1(config)# interface GigabitEthernet 1/1  
switch1(config-if)# switchport mode access  
switch1(config-if)# switchport access vlan 10  
switch2(config)# interface GigabitEthernet 1/1  
switch2(config-if)# switchport mode access  
switch2(config-if)# switchport access vlan 10
- C. switch2(config)# monitor session 1 source remote vlan 70



- switch2(config)# monitor session 1 destination interface GigabitEthernet1/1
- D. switch2(config-if)# switchport trunk allowed vlan 10,20,30,40,50,60,70-80
- E. switch2(config)# monitor session 1 source remote vlan 70  
switch2(confia)# monitor session 1 destination interface GigabitEthernet1/2

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 335**

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

- A. list of ordered statements that define node configurations and authentication used within the SDWAN overlay
- B. Set of statements that defines how data is forwarded based on IP packet information and specific VPNs
- C. detailed database mapping several kinds of addresses with their corresponding location
- D. group of services tested to guarantee devices and links liveness within the SD-WAN overlay

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 336**

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

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

**Correct Answer:** AD

**Section:** (none)

## Explanation

### Explanation/Reference:

#### QUESTION 337

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 338**

Drag and drop the descriptions from the left onto the routing protocol they describe on the right.

**Select and Place:**

advanced distance vector

supports only equal cost path load balancing

link state

supports unequal cost path load balancing

OSPF

EIGRP

Correct Answer:

link state

supports only equal cost path load balancing

advanced distance vector

supports unequal cost path load balancing

Section: (none)

## Explanation

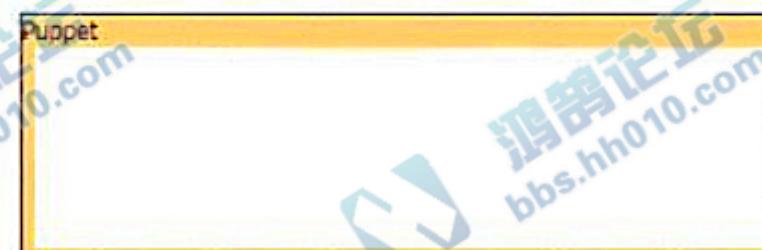
### Explanation/Reference:

#### QUESTION 339

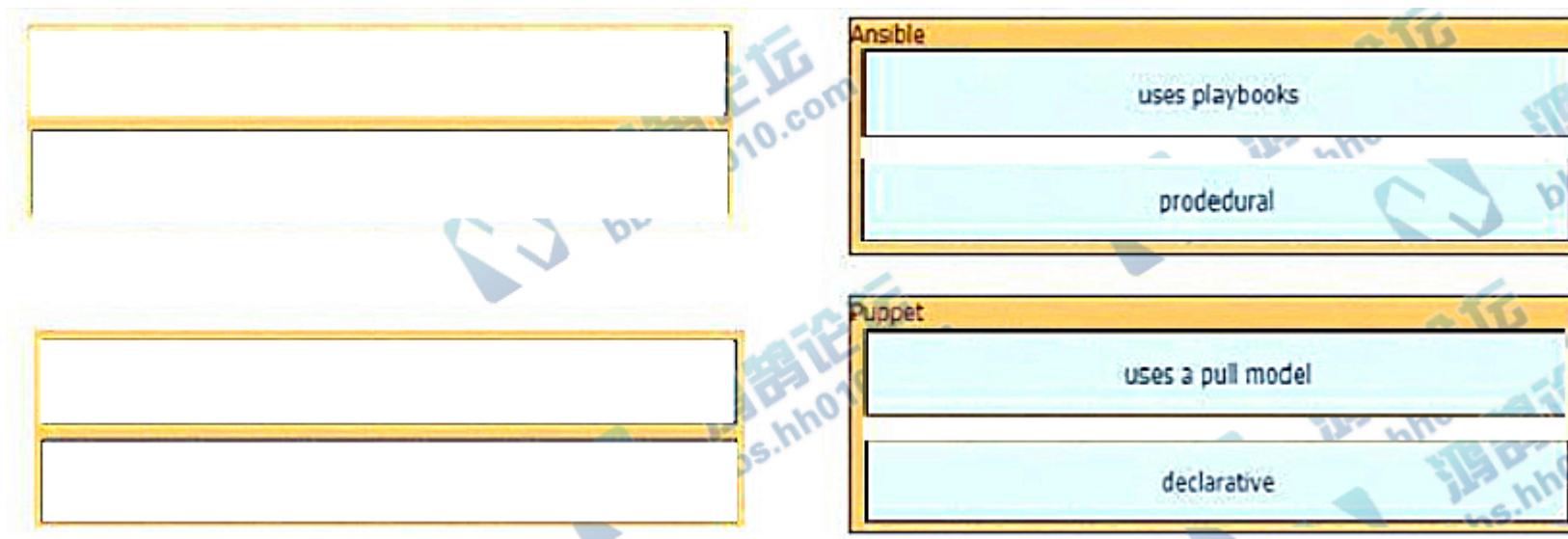
Drag and drop the characteristic from the left onto the orchestration tools that they describe on the right.

### Select and Place:

- uses a pull model
- declarative
- uses playbooks
- procedural



### Correct Answer:



Section: (none)

Explanation

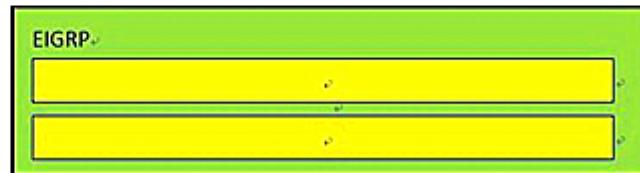
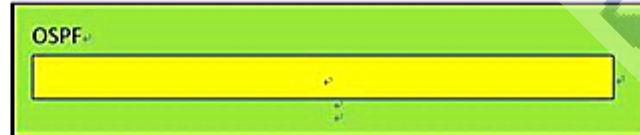
Explanation/Reference:

**QUESTION 340**

Drag and drop the characteristics from the left onto the routing protocols they describes on the right.

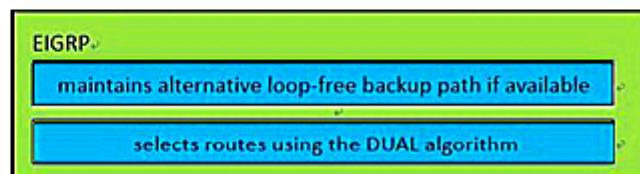
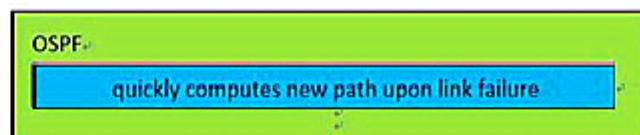
Select and Place:

- maintains alternative loop-free backup path if available
- quickly computes new path upon link failure
- selects routes using the DUAL algorithm



Correct Answer:

- quickly computes new path upon link failure



Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 341

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#show run | i aaa
aaa new-model
```

```
aaa authentication login default group AAA_RADIUS local-case
aaa session-id common
```

R1#

Select and Place:

AAA servers of AAA RADIUS group

local configured username in non-case-sensitive format

local configured username in case-sensitive format

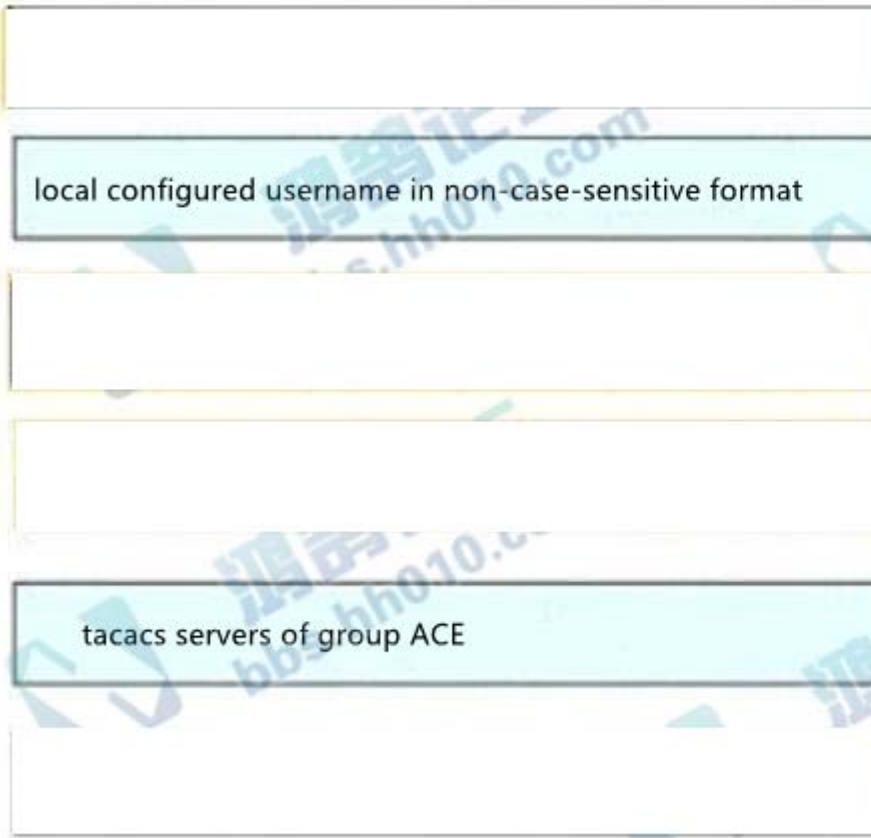
AAA servers of ACE group

tacacs servers of group ACE

if no method works,then deny login



Correct Answer:



**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 342**

What is a characteristic of a virtual machine?

- A. It must be aware of other virtual machines, in order to allocate physical resource for them
- B. It is deployable without a hypervisor to host it

- C. It must run the same operating system as its host
- D. It relies on hypervisor to allocate computing resources for it

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 343**

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. Stratum 15 devices are connected directly to an authoritative time source
- D. Stratum 15 devices are an authoritative time source

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 344**

What is the function of a fabric border node in a Cisco SD-Access environment?

- A. To collect traffic flow information toward external networks
- B. To connect the Cisco SD-Access fabric to another fabric or external Layer 3 networks
- C. To attach and register clients to the fabric
- D. To handle an ordered list of IP addresses and locations for endpoints in the fabric

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 345**

Which AP mode allows an engineer to scan configured channels for rogue access points?

- A. sniffer
- B. monitor
- C. bridge
- D. local

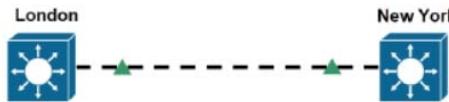
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 346**



```
London(config)# interface range fa0/1-2
London(config-if)# switchport trunk encapsulation dot1q
London(config-if)# switchport mode trunk
London(config-if)# channel-group 1 mode active
London(config-if)# end
London#
```

```
NewYork#show etherchannel summary
Flags: D - down P - in port-channel
 I - stand-alone S - suspended
 H - Hot-standby (LACP only)
 R - Layer3 L - Layer2
 U - in use F - failed to allocate
aggregator
 u - unsuitable for bundling
 w - waiting to be aggregated
 d - default port
Number of channel-groups in use: 1
Number of aggregators: 1

Group Port-channel Protocol Ports
-----+-----+-----+
 1 Po1 (SD) PAgP Fa0/1(I) Fa0/2(D)

NewYork#
NewYork#show etherchannel port-channel
 Channel-group listing:

Group: 1

 Port-channels in the group:

Port-channel: Po1

Age of the Port-channel = 00d:00h:14m:20s
Logical slot/port = 2/1 Number of ports
= 0
GC = 0x00000000 HotStandBy port
= null
Port state = Port-channel Ag-Inuse
Protocol = PAgP
Port Security = Disabled
```

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

- A. 

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

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

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

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 347

```
SW1# show interface trunk
! Output omitted for brevity

Port Mode Encapsulation Status Native
Gi1/0/1 auto 802.1q trunking 1

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

SW2# show interface trunk
! Output omitted for brevity

Port Mode Encapsulation Status Native
Gi1/0/1 auto 802.1q trunking 1

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

Refer to the exhibit. The trunk between Gig1/0/1 of switch SW2 and Gig1/0/1 of switch SW1 is not operational. Which action resolves this issue?

- A. Configure both interfaces in dynamic auto DTP mode and ensure that the switches are in the same VTP domain
- B. Configure both interfaces in dynamic desirable DTP mode and ensure that the switches are in the same VTP domain
- C. Configure both interfaces in nonegotiate and ensure that the switches are in the different VTP domain

- D. Configure both interfaces in dynamic auto DTP mode and ensure that the switches are in the different VTP domain

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 348

```
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 GigabitEthernet0/0/0
 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. NetFlow updates to the collector are sent 50% less frequently
- B. Every second IPv4 packet is forward to the collector for inspection
- C. CPU and memory utilization are reduced when compared with what is required for full NetFlow
- D. The resolution of sampling data increases, but it requires more performance from the router

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 349**

Which signal strength and noise values meet the minimum SNR for voice networks?

- A. signal strength -69 dBm, noise 94 dBm
- B. signal strength -67 dBm, noise 91 dBm
- C. signal strength -68 dBm, noise 89 dBm
- D. signal strength -66 dBm, noise 90 dBm

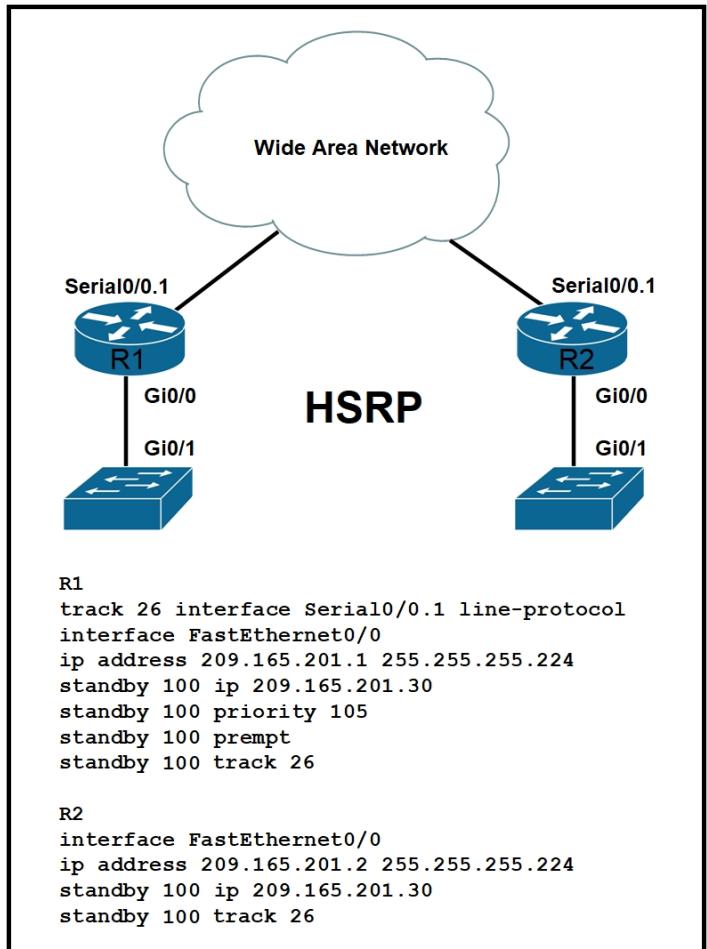
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 350**



Refer to the exhibit. Which command must be added to enable R2 to take over as master when Serial Interface 0/0.1 is down on R1?

- A. **R1# no standby 100 track 26**
- B. **R2# no standby 100 track 26**
- C. **R2# standby 100 preempt**
- D. **R2# standby 100 priority 100**

**Correct Answer: C**

**Section:** (none)  
**Explanation**

**Explanation/Reference:**

**QUESTION 351**

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 352**

How does IGMP function with multicast routing and PIM?

- A. IGMP is enabled automatically when multicast routing and PIM are configured on a router
- B. IGMP is incompatible with multicast routing
- C. IGMP is incompatible with PIM
- D. IGMP must be enabled manually when multicast routing and PIM are configured on a router.

**Correct Answer:** A

**Section:** (none)  
**Explanation**

**Explanation/Reference:**

**QUESTION 353**

An engineer is concerned with the deployment of a new application that is sensitive to inter-packet delay variance. Which command configures the router to be the destination of jitter measurements?

- A. Router(config)# **ip sla responder tcp-echo 172.29.139.134 5000**
- B. Router(config)# **ip sla responder udp-echo 172.29.139.134 5000**
- C. Router(config)# **ip sla responder tcp-connect 172.29.139.134 5000**
- D. Router(config)# **ip sla responder udp-connect 172.29.139.134 5000**

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 354**

If the maximum power level assignment for global TPC 802.11a/n/ac is configured to 10dBm, which power level effectively doubles the transmit power?

- A. 13 dBm
- B. 14 dBm
- C. 17 dBm
- D. 20 dBm

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

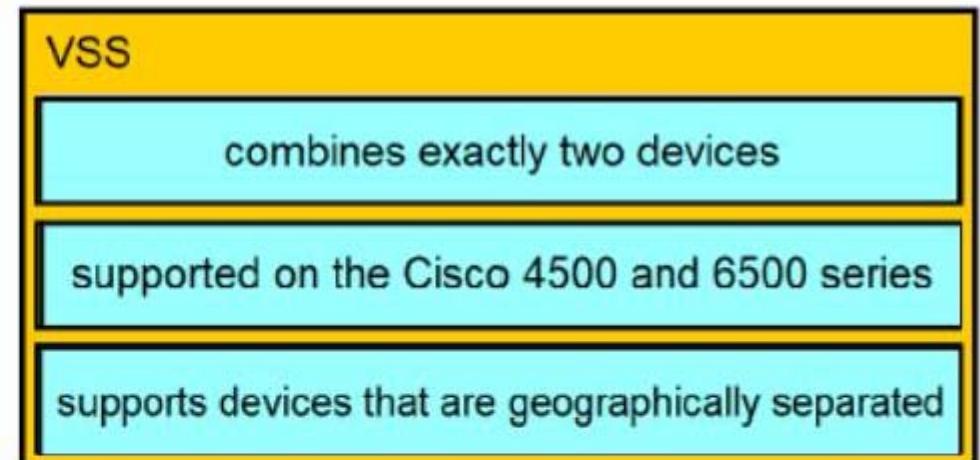
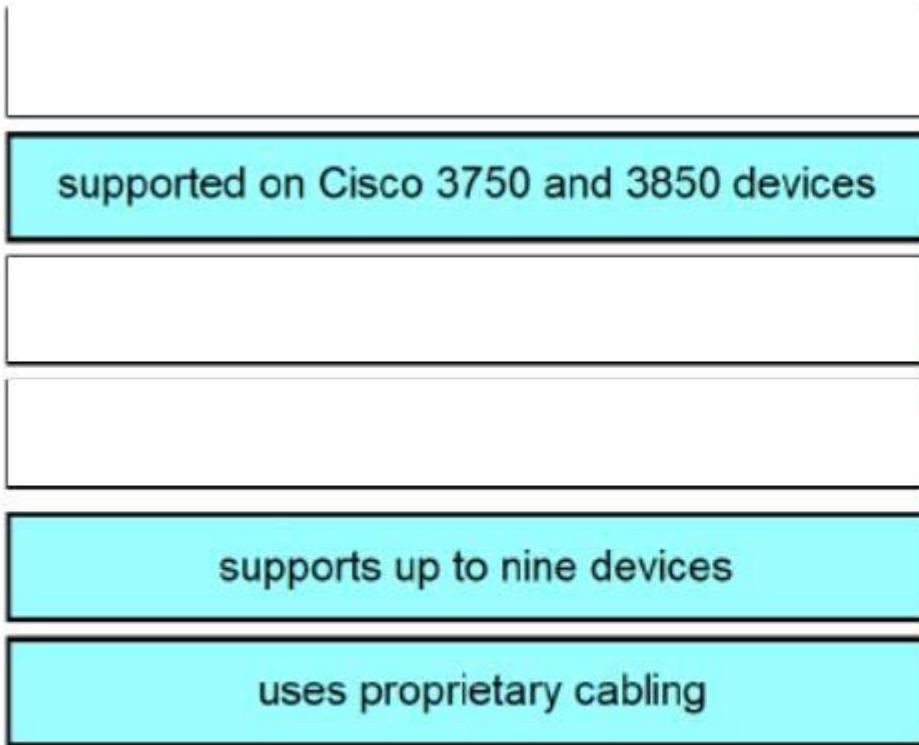
#### **QUESTION 355**

Drag and drop the descriptions of the VSS technology from the left to the right. Not all options are used.

**Select and Place:**

- combines exactly two devices
- supported on Cisco 3750 and 3850 devices
- supported on the Cisco 4500 and 6500 series
- supports devices that are geographically separated
- supports up to nine devices
- uses proprietary cabling

VSS



**Section:** (none)  
**Explanation:**

**Explanation/Reference:**

**QUESTION 356**

Drag and drop the QoS mechanisms from the left onto their 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

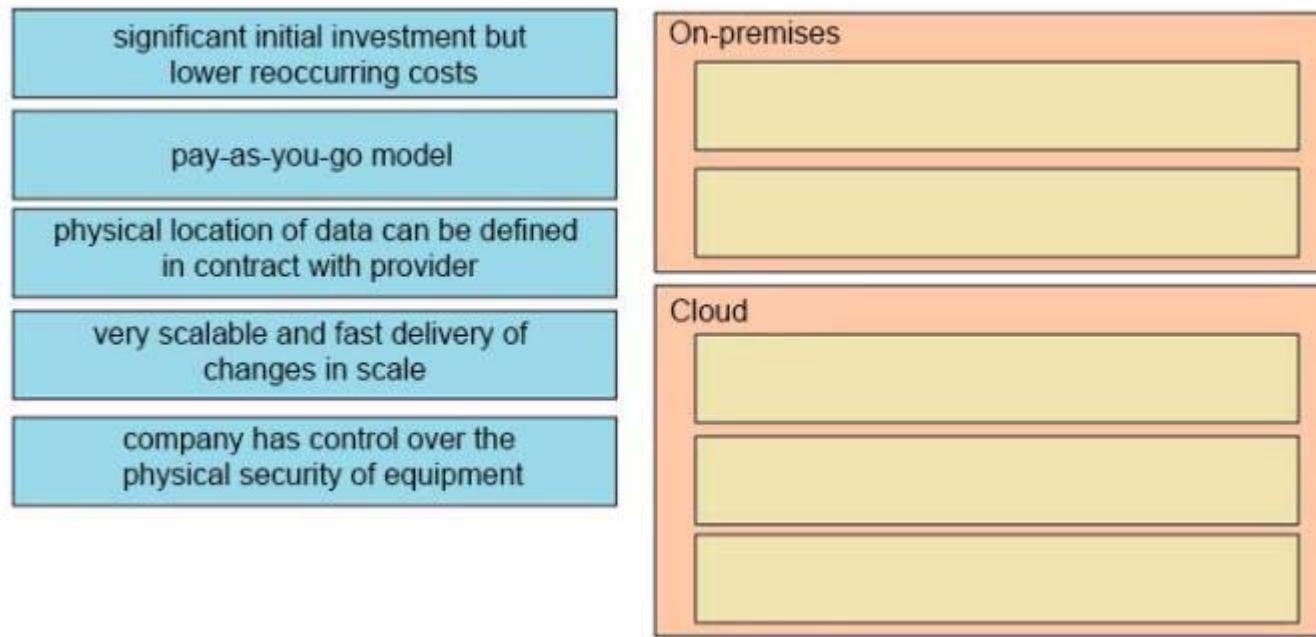
Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 357

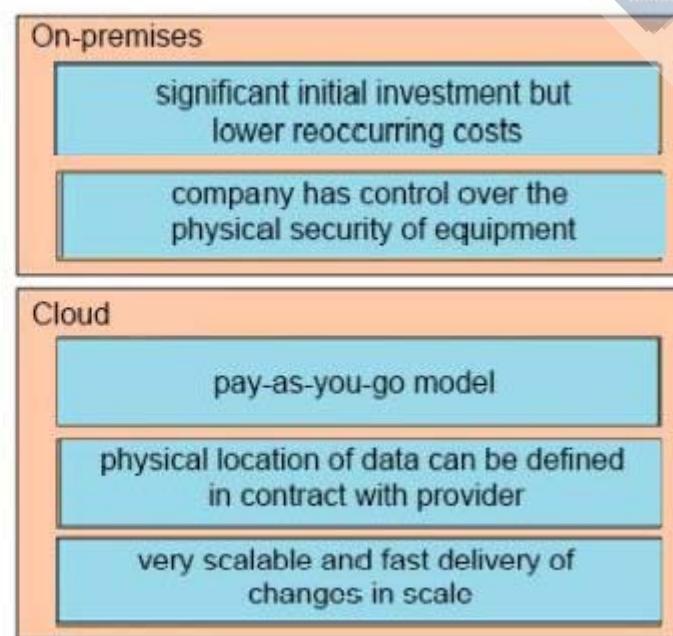
Drag and drop the characteristics from the left to the correct Infrastructure deployment type on the right.

Select and Place:



**Correct Answer:**



Section: (none)

Explanation

Explanation/Reference:

QUESTION 358

```
Switch2#
01:25:08: %PM-4-ERR_DISABLE: channel-misconfig error detected on
Fa0/23, putting Fa0/23 in err-disable
state
01:25:08: %PM-4-ERR_DISABLE: channel-misconfig error detected on
Fa0/24, putting Fa0/24 in err-disable
state
Switch2#
```

```
Switch1#show etherchannel summary
```

```
! output omitted
```

Group	Port-channel	Protocol	Ports
1	Po2 (SD)	LACP	Fa1/0/23 (D)

```
Switch2#show etherchannel summary
```

```
! output omitted
```

Group	Port-channel	Protocol	Ports
1	Po1 (SD)	-	Fa0/23 (D) Fa0/24 (D)

Refer to the exhibit. An engineer is configuring an EtherChannel between switch 1 and switch 2 and notice message on switch2. Based on the output, which action resolves this issue?

- A. configure more member ports on switch 1
- B. configure the same port channel interface number on both switches
- C. configure less member ports on switch2

- D. configure the same EtherChannel protocol on both switches

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 359**

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?

```
event snmp oid 1.3.6.1.4.1.9.9.109.1.1.1.1.3 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"
```

- A. action 4.0 syslog command "show process cpu sorted | append flash:high-cpu-file"
- B. action 4.0 cli command "show process cpu sorted | append flash:high-cpu-file"
- C. action 4.0 cns-event "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:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 360**

Which unit is used to express the signal-to-noise ratio?

- A. mw
- B. amp

- C. db
- D. dbm

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 361**

```
>>> netconf_data["GigabitEthernet"][0]["enabled"]
u'false'
>>> netconf_data["GigabitEthernet"][1]["enabled"]
u'true'
>>> netconf_data["GigabitEthernet"][2]["enabled"]
u'false'
>>> netconf_data["GigabitEthernet"][0]["description"]
u'my description'
```

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

- A. for interface in netconf\_data["GigabitEthernet"]:  
    if interface["enabled"] != 'true'  
        print(interface["descnption"])
- B. for interface in netconf\_data["GigabitEthernet"]:  
    if interface["enabled"] != 'true'  
        print(interface["description"])
- C. for interface in netconf\_data["GigabitEthernet"]:  
    if interface["enabled"] != 'false'  
        print(interface["description"])
- D. for interface in netconf\_data["GigabitEthernet"]:  
    print(interface["enable"])
        print(interface["descnption"])

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 362**

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

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 363**

How do cloud deployments differ from on-prem deployments?

- A. Cloud deployments are more customizable than on-premises deployments
- B. Cloud deployments require longer implementation times than on-premises deployments
- C. Cloud deployments require less frequent upgrades than on-premises deployments
- D. Cloud deployments have lower upfront costs than on-premises deployments

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 364**

What is a Type 2 hypervisor?

- A. installed as an application on an already installed operating system
- B. runs directly on a physical server and includes its own operating system
- C. supports over-allocation of physical resources
- D. also referred to as a "bare metal hypervisor" because it sits directly on the physical server

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 365**

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

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 366**

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

**Correct Answer:** B

**Section:** (none)

## Explanation

Explanation/Reference:

### QUESTION 367

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

**Correct Answer:** B

**Section:** (none)

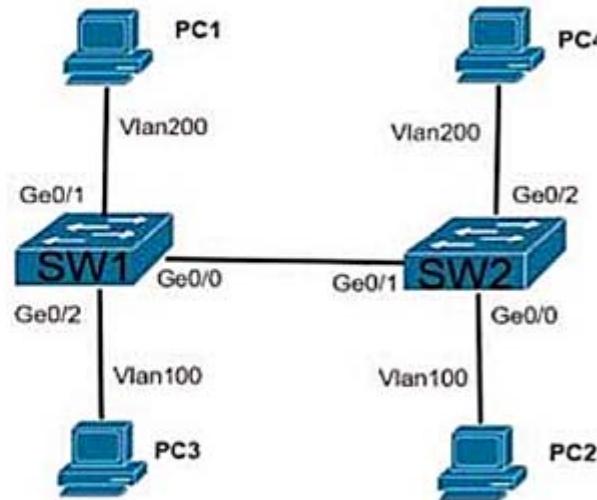
Explanation

Explanation/Reference:

### QUESTION 368

```
SW1# show interfaces gigabitethernet 0/0 switchport
Name: Gi0/0
Switchport: Enabled
Administrative Mode: dynamic auto
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 99 (NATIVE)
Administrative Native VLAN tagging: enabled
Voice VLAN: none
...output omitted...
```

```
SW2# show interfaces gigabitethernet 0/1 switchport
Name: Gi0/1
Switchport: Enabled
Administrative Mode: dynamic auto
Operational Mode: trunk
Administrative Trunking Encapsulation: negotiate
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 99 (NATIVE)
Administrative Native VLAN tagging: enabled
Voice VLAN: none
...output omitted...
```



Refer to the exhibit. The connection between SW1 and SW2 is not operational. Which two actions resolve the issue?

- A. configure **switchport nonegotiate** on SW1
- B. configure **switchport nonegotiate** on SW2
- C. configure **switchport mode trunk** on SW2
- D. configure **switchport mode dynamic desirable** on SW2
- E. configure **switchport mode access** on SW2

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 369

With IGMPv2, which multicast group address does the IGMP querier use to send query messages to all hosts on the LAN?

- A. 239.0.0.2
- B. 224.0.0.1
- C. 239.0.0.1
- D. 224.0.0.2

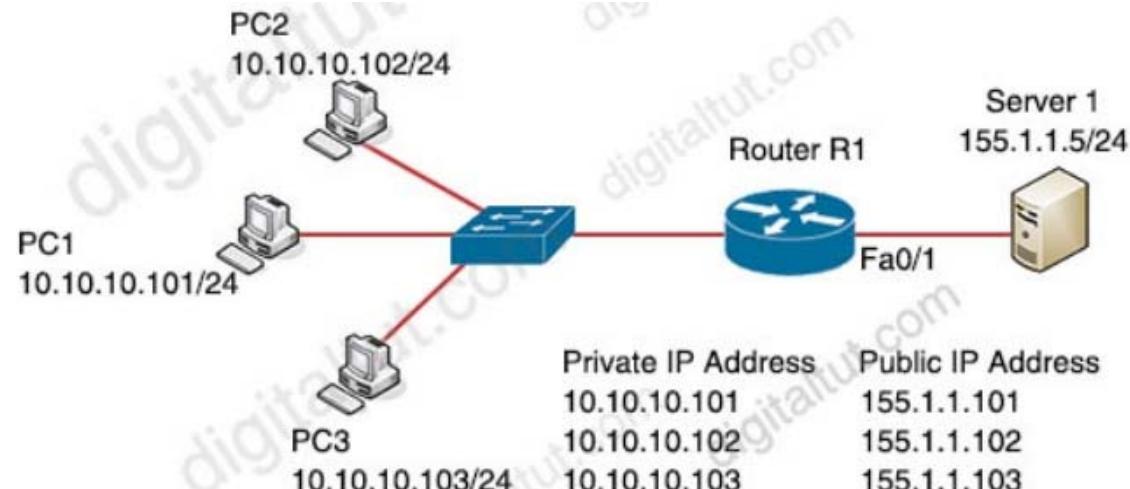
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 370



Refer to the exhibit. Which set of commands on router R1 allow deterministic translation of private hosts PC1, PC2, and PC3 to addresses in the public space?

- A. RouterR1(config)#int f0/0  
RouterR1 (config-if)#ip nat outside  
RouterR1 (config-if)#exit  
RouterR1(config)#int f0/1

- ```
RouterR 1(config-if)#ip nat inside
RouterR 1(config-if)#exit
RouterR1(config)#ip nat inside source static 10.10.10.101 155.1.1.101
RouterR1(config)#ip nat inside source static 10.10.10.102 155.1.1.102
RouterR1(config)#in nat inside squeue static 10.10.10.103 155.1.1.103
```
- B. RouterR1(config)#int f0/0
RouterR1 (config-if)#ip nat inside
RouterR1(config-if)#exit
RouterR 1(config)#int f0/1
RouterR1 (config-if)#ip nat outside
RouterR 1(config-if)#exit
RouterR1 (config)#access-list 1 10.10.10.0 0.0.0.255
RouterR1 (config)ip nat pool POOL 155.1.1.101 155.1.1.103 netmask 255.255.255.0
RouterR1(config)ip nat inside source list 1 pool POOL
- C. RouterR1 (config)#int f0/0
RouterR 1 (config-if)#ip nat inside
RouterR 1(config-if)#exit
RouterR 1 (config)#int f0/1
RouterR 1 (config-if)#ip nat outside
RouterR 1(config-if)#exit
RouterR 1 (config)#access-list 1 10.10.10.0 0.0.0.255
RouterR 1 (config)ip nat inside source list 1 interface f0/1 overload
- D. RouterR1 (config)#int f0/0
RouterR1 (config-if)#ip nat inside
RouterR 1(config-if)#exit
RouterR1 (config)#int f0/1
RouterR1 (config-if)#ip nat outside
RouterR1(config-if)#exit
RouterR1(config)#ip nat inside source static 10.10.10.101 155.1.1.101
RouterR1(config)#ip nat inside source static 10.10.10.102 155.1.1.102
RouterR 1(config)#ip nat inside source static 10.10.10.103 155.1.1.103

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 371



Sample Code

```
#!/usr/bin/env python

import json
import sys

test_json = """
{
    "type": "Cisco ASR 1001-X Router",
    "lastUpdateTime": 1552394222783,
    "macAddress": "00:c8:8b:80:bb:00",
    "serialNumber": "FXS1932Q1SE"
}
"""

print(json.load(test_json))
```

Output

```
$ python print_json.py
Traceback (most recent call last):
  File "question_3.py", line 15, in <module>
    Print(json.load(test_json))
  File
"/System/Library/Framework/Python framework?Versions?2.7/lib/python2.7/json/_init_.py", line 286 in load
    return loads(fp.read(),
      return loads(fp.read(),
AttributeError: 'str' object has no attribute 'read'
```

An engineer runs the sample code, and the terminal returns this output. Which change to the sample code corrects this issue?

- A. Change the JSON method from load() to loads().
- B. Enclose null in the test json string in double quotes.
- C. Use a single set of double quotes and condense test json to a single line.
- D. Call the read() method explicitly on the test json string.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 372

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 send "OSPF ROUTING ERROR"
- C. action 1 syslog pattern "OSPF ROUTING ERROR"
- D. action 1 syslog write "OSPF ROUTING ERROR"

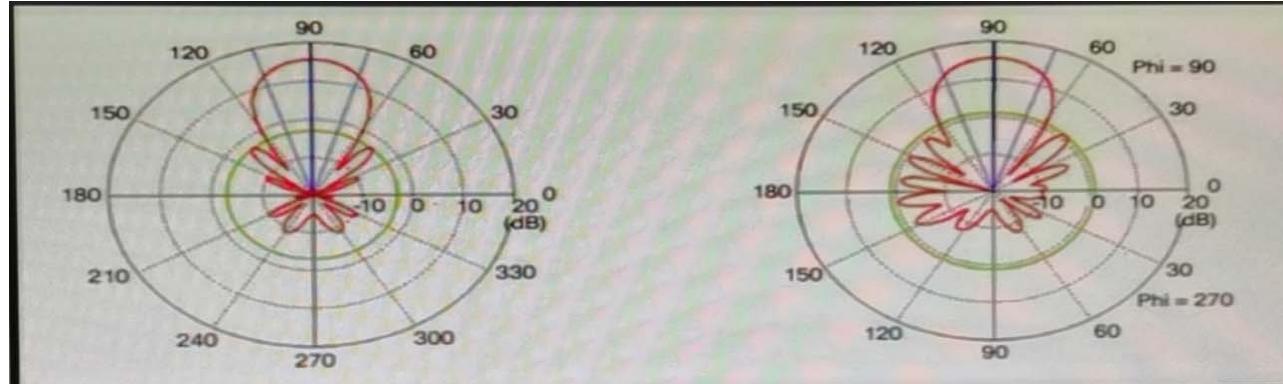
Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 373



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

- A. Yagi
- B. dipole
- C. patch
- D. omnidirectional

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 374

Refer to the exhibit. An engineer is investigating why guest users are able to access other guest user devices when the users are connected to the customer guest WLAN. What action resolves this issue?

The screenshot shows the 'Policy-Mapping' tab selected in a Cisco Wireless Controller configuration interface. The left pane lists various policy settings, and the right pane contains sections for DHCP, OEAP, Management Frame Protection (MFP), DTIM Period, and NAC.

| Setting | Value |
|--------------------------------------|---|
| Allow AAA Override | <input type="checkbox"/> Enabled |
| Coverage Hole Detection | <input checked="" type="checkbox"/> Enabled |
| Enable Session Timeout | <input type="checkbox"/> |
| Aironet IE | <input type="checkbox"/> Enabled |
| Diagnostic Channel | <input type="checkbox"/> Enabled |
| Override Interface ACL | IPv4: None IPv6: None |
| Layer2 Ad | None |
| URL ACL | None |
| P2P Blocking Action | Disabled |
| Client Exclusion | <input type="checkbox"/> Enabled |
| Maximum Allowed Clients | 0 |
| Static IP Tunneling | <input type="checkbox"/> Enabled |
| Wi-Fi Direct Clients Policy | Disabled |
| Maximum Allowed Clients Per AP Radio | 200 |

DHCP

| | |
|-------------|-----------------------------------|
| DHCP Server | <input type="checkbox"/> Override |
|-------------|-----------------------------------|

OEAP

| | |
|--------------|----------------------------------|
| Split Tunnel | <input type="checkbox"/> Enabled |
|--------------|----------------------------------|

Management Frame Protection (MFP)

| | |
|-----------------------|----------|
| MFP Client Protection | Optional |
|-----------------------|----------|

DTIM Period (in beacon intervals)

| | |
|-----------------------|---|
| 802.11a/n (1 - 255) | 1 |
| 802.11b/g/n (1 - 255) | 1 |

NAC

| | |
|-----------|------|
| NAC State | None |
|-----------|------|

- A. implement P2P blocking
- B. implement MFP client protection
- C. implement split tunneling
- D. implement Wi-Fi direct policy

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 375

How does EIGRP differ from OSPF?

- A. EIGRP has a full map of the topology, and OSPF only knows directly connected neighbors.
- B. EIGRP supports equal or unequal path cost, and OSPF supports only equal path cost.
- C. EIGRP uses more CPU and memory than OSPF
- D. EIGRP is more prone to routing loops than OSPF

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 376

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 in an UP state in the event of failover on the SSO cluster?

- A. Enable default gateway reachability check
- B. Use the same mobility domain on all WLCs
- C. Use the mobility MAC when the mobility peer is configured
- D. Configure back-to-back connectivity on the RP ports.

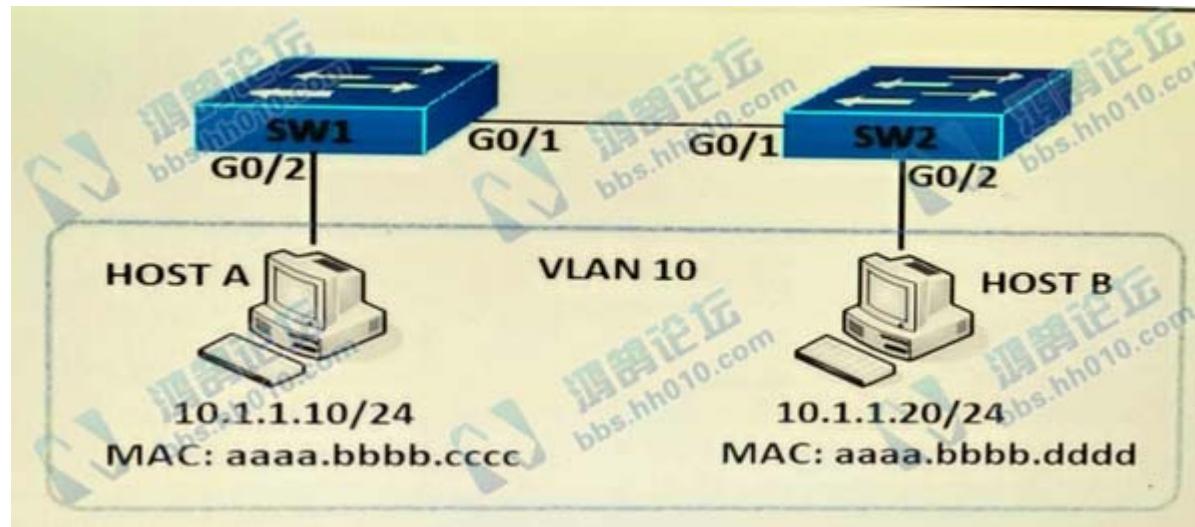
Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 377



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)# 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(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
- B. 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
Sw1(config) ylan filter HOST-A-B vlan 10
C. 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
SW1 (config)# vlan filter HOST-A-B vlan 10
D. 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
SW1 (config)# vlan filter HOST-A-B vlan 10
```

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 378**

```
#!/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["softwareVersion"],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. network\_device\_list(dnac("host"), dnac["username"],dnac["password"])  
login = dnac\_login(dnac)  
for item in dnac\_devices:  
print(dnac\_devices.item)
- B. login =dnac\_login(dnac["host"], dnac["username"], dnac["password"])  
network device\_list(dnac, login)  
for item in dnac\_devices:  
print(dnac\_devices.item)
- C. network\_device\_list(dnac["host"], dnac["username"].dnac["password"])

```
login = dnac_login(dnac)
print(dnac_devices)
D. login =dnac_login(dnac["host"], dnac["username"], dnac["password"])
 network device_list(dnac, login)
 print(dnac_devices)
```

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 379**

In a Cisco DNA Center Plug and Play environment, why would a device be labeled unclaimed?

- A. The device has not been assigned a workflow.
- B. The device could not be added to the fabric
- C. The device had an error and could not be provisioned
- D. The device is from a third-party vendor.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 380**

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

**Correct Answer:** D

**Section:** (none)

## Explanation

### Explanation/Reference:

#### QUESTION 381

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 authoritative time source.
- D. The number of hops it takes to reach the master time server

**Correct Answer:** C

**Section:** (none)

**Explanation**

### Explanation/Reference:

#### QUESTION 382

Which function is handled by vManage in the Cisco SD-WAN fabric?

- A. Establishes BFD sessions to test liveness of links and nodes.
- B. Distributes policies that govern data forwarding
- C. Performs remote software upgrades for WAN Edge, vSmart, and vBond
- D. Establishes IPsec tunnels with nodes

**Correct Answer:** C

**Section:** (none)

**Explanation**

### Explanation/Reference:

#### QUESTION 383

What is a characteristic of a WLC that is in master controller mode?

- A. All wireless LAN controllers are managed by the master controller

- B. The master controller is responsible for load balancing all connecting clients to other controllers
- C. Configuration on the master controller is executed on all wireless LAN controllers.
- D. All new APs that join the WLAN are assigned to the master controller.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 384**

```
ip nat pool Internet 10.10.10.1 10.10.10.100 netmask 255.255.255.0
ip nat inside source route-map Users pool Internet
!
ip access-list standard Users
 10 permit 192.168.1.0 0.0.0.255
!
route-map Users permit 10
 match ip address Users
```

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 385**

Which resource is able to be shared among virtual machines deployed on the same physical server?

- A. VM configuration file
- B. operating system

- C. disk
- D. applications

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 386

```
DSW2#sh spanning-tree vlan 10
VLAN0010
 Spanning tree enabled protocol ieee
 Root ID Priority 10
 Address 0013.80f9.8880
 Cost 2
 Port 9 (FastEthernet1/0/7)
 Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
 Bridge ID Priority - 4106 (priority 4096 sys-id-ext 10)
 Address 0018.7363.4300
 Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
 Aging Time 300
 Interface Role Sts Cost Prio.Nbr Type
 ----- -- -- -- -----
 Fa1/0/7 Root FWD 2 128.9 P2p
 Fa1/0/10 Desg FWD 4 128.12 P2p
 Fa1/0/11 Desg FWD 2 128.13 P2p
 Fa1/0/12 Desg FWD 2 128.14 P2p

DSW2#
*Mar 3 07:29:24.854: %SPAN TREE-2-BLOCK_BPDUGUARD: Received BPDU on port Fa1/0/7
with BPDU Guard enabled. Disabling port.
*Mar 3 07:29:24.854: %PM-4-ERR_DISABLE: bpduguard error detected on Fa1/0/7, putting
Fa1/0/7 in err-disabled state
*Mar 3 07:29:24.879: %SPAN TREE-2-BLOCK_BPDUGUARD: Received BPDU on port Fa1/0/7
with BPDU Guard enabled. Disabling port.
*Mar 3 07:29:25.869: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEtherne
t1/0/7, changed state to down
*Mar 3 07:29:26.884: %LINK-3-UPDOWN: Interface FastEthernet1/0/7, changed state
to down
```

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 shutdown/no shutdown command is entered in the interface configuration mode.

- B. It remains in err-disabled state until the errdisable recovery cause failed-port-state command is entered in the global configuration mode.
- C. It remains in err-disabled state until the no shutdown command is entered in the interface configuration mode.
- D. It remains in err-disabled state until the spanning-tree portfast bpduguard disable command is entered in the interface configuration mode

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 387**

What is a benefit of a virtual machine when compared with a physical server?

- A. Multiple virtual servers can be deployed on the same physical server without having to buy additional hardware.
- B. Virtual machines increase server processing performance
- C. The CPU and RAM resources on a virtual machine cannot be affected by other virtual machines
- D. Deploying a virtual machine is technically less complex than deploying a physical server

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 388**

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

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 389**

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

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 390**

What are two features of NetFlow flow monitoring? (Choose two.)

- A. Copies all ingress flow information to an interface
- B. Include the flow record and the flow importer
- C. Can track ingress and egress information
- D. Can be used to track multicast, MPLS, or bridged traffic.
- E. Does not require packet sampling on interfaces

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 391**

What is the wireless received signal strength indicator?

- A. The value given to the strength of the wireless signal received compared to the noise level

- B. The value of how strong the wireless signal is leaving the antenna using transmit power, cable loss, and antenna gain
- 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 392**

Which method should an engineer use to deal with a long-standing contention issue between any two VMs on the same host?

- A. Adjust the resource reservation limits
- B. Live migrate the VM to another host
- C. Reset the VM
- D. Reset the host

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 393**

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

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

**Correct Answer:** B

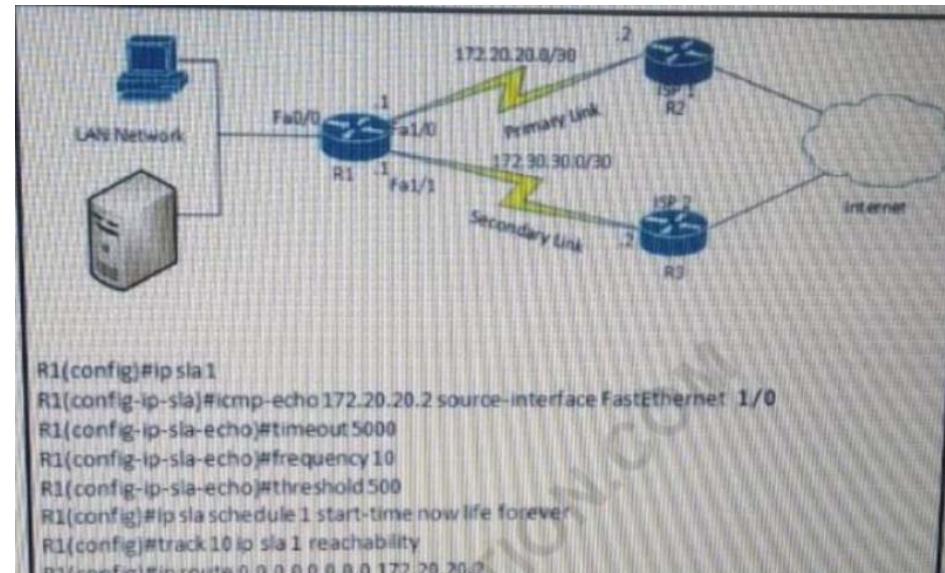
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 394**

Refer to the exhibit. After implementing the configuration 172.20.20.2 stops replying to ICMP echoes, but the default route fails to be removed. What is the reason for this behavior?



- A. The source-interface is configured incorrectly.
- B. The destination must be 172.30.30.2 for icmp-echo
- C. The default route is missing the track feature
- D. The threshold value is wrong.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 395**

Which controller is capable of acting as a STUN server during the onboarding process of Edge devices?

- A. vBond
- B. vSmart
- C. vManage
- D. PNP server

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 396**

When does a stack master lose its role?

- A. When the priority value of a stack member is changed to a higher value
- B. when a switch with a higher priority is added to the stack
- C. when the stack master is reset
- D. when a stack member fails

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 397**

Which of the following statements regarding BFD are correct? (choose two.)

- A. BFD is supported by OSPF, EIGRP, BGP, and IS-IS.
- B. BFD detects link failures in less than one second.
- C. BFD can bypass a failed peer without relying on a routing protocol.
- D. BFD creates one session per routing protocol per interface.
- E. BFD is supported only on physical interfaces.
- F. BFD consumes more CPU resources than routing protocol timers do.

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 398**

An engineer measures the Wi-Fi coverage at a customer site. The RSSI values are recorded as follows:

Location A: -72 dBm

Location B: -75 dBm

Location C: -65 dBm

Location D: -80 dBm

Which two statements does the engineer use to explain these values to the customer? (Choose two)

- A. The signal strength at location B is 10 dB better than location C.
- B. Location D has the strongest RF signal strength.
- C. The signal strength at location C is too weak to support web surfing.
- D. The RF signal strength at location B is 50% weaker than location A
- E. The RF signal strength at location C is 10 times stronger than location B

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 399**

Which design principle should be followed in a Cisco SD-Access wireless network deployment?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

WLC

- WLC is connected outside Fabric (optionally directly to Border)
- WLC needs to reside in global routing table – to talk to CP!
- No need for inter-VRF leaking for AP to join the WLC
- WLC can only belong to one FD. WLC talks to one CP (two for HA)

**QUESTION 400**

What is an advantage of using BFD?

- A. It local link failure at layer 1 and updates routing table
- B. It detects local link failure at layer 3 and updates routing protocols
- C. It has sub-second failure detection for layer 1 and layer 3 problems
- D. It has sub-second failure detection for layer 1 and layer 2 problems.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 401**

What is the function of vBond in a Cisco SDWAN deployment?

- A. initiating connections with SD-WAN routers automatically
- B. pushing of configuration toward SD-WAN routers
- C. onboarding of SDWAN routers into the SD-WAN overlay
- D. gathering telemetry data from SD-WAN routers

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 402**

Which three resources must the hypervisor make available to the virtual machines? (Choose three)

- A. memory
- B. bandwidth
- C. IP address
- D. processor
- E. storage
- F. secure access

**Correct Answer:** ADE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 403**

How does Protocol Independent Multicast function?

- A. In sparse mode it establishes neighbor adjacencies and sends hello messages at 5-second intervals.
- B. It uses the multicast routing table to perform the multicast forwarding function.
- C. It uses unicast routing information to perform the multicast forwarding function.
- D. It uses broadcast routing information to perform the multicast forwarding function.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 404**

What are two methods of ensuring that the multicast RPF check passes without changing the unicast routing table? (Choose two.)

- A. implementing static mroutes
- B. disabling BGP routing protocol
- C. implementing MBGP
- D. disabling the interface of the router back to the multicast source

E. implementing OSPF routing protocol

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 405**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 406**

Which two southbound interfaces originate from Cisco DNA Center and terminate at fabric underlay switches? (Choose two)

- A. UDP 67: DHCP
- B. ICMP: Discovery
- C. TCP 23: Telnet
- D. UDP 162: SNMP
- E. UDP 6007: NetFlow

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 407**

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

- A. to run a mapping system that manages endpoint to network device relationships
- 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 connect APs and wireless endpoints to the SD-Access fabric

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 408**

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

DSW2#sh spanning-tree vlan 10

VLAN0010

Spanning tree enabled protocol rstp

Root ID Priority 4106

Address 0018.7363.4300

This bridge is the root

Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID Priority 4106 (priority 4096 sys-id-ext 20)

Address 0018.7363.4300

Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Aging Time 300 sec

Interface	Role	Sts	Cost	Prio.Nbr	Type
Fa1/0/7	Desg	FWD	2	128.9	P2p Peer(STP)
Fa1/0/10	Desg	FWD	4	128.12	P2p Peer(STP)
Fa1/0/11	Desg	FWD	2	128.13	P2p Peer(STP)
Fa1/0/12	Desg	FWD	2	128.14	P2p Peer(STP)

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 409**

What is a characteristic of a next-generation firewall?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 410**

Which measure is used by an NTP server to indicate its closeness to the authoritative time source?

- A. stratum
- B. hop count
- C. time zone
- D. latency

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 411**

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

- A. All devices reload after detecting loss of connection to Cisco DNA Center
- B. Already connected users are unaffected, but new users cannot connect
- C. User connectivity is unaffected.

- D. Cisco DNA Center is unable to collect monitoring data in Assurance.
- E. Users lose connectivity

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 412**

Which two components are supported by LISP? (choose two )

- A. proxy ETR
- B. egress tunnel router
- C. route reflector
- D. HMAC algorithm
- E. spoke

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 413**

Refer to the exhibit.

```

DSW2#sh spanning-tree vlan 20

VLAN0020
 Spanning tree enabled protocol ieee
 Root ID Priority 24596
 Address 0018.7363.4300
 Cost 2
 Port 13 (FastEthernet1/0/11)
 Hello Time 2 sec Max Age 20 sec
 Forward Delay 15 sec

 Bridge ID Priority 28692 (priority 28672 sys-id-ext 20)
 Address 001b.0d8e.e080
 Hello Time 2 sec Max Age 20 sec
 Forward Delay 15 sec
 Aging Time 300 sec

Interface Role Sts Cost Prio.Nbr Type
----- ---- --- -- ----- -----
Fa1/0/7 Desg FWD 2 128.9 P2p
Fa1/0/10 Desg FWD 2 128.12 P2p
Fa1/0/11 Root FWD 2 128.13 P2p
Fa1/0/12 Altn BLK 2 128.14 P2p

```

What does the output confirm about the switch's spanning tree configuration?

- A. The spanning-tree mode `stp ieee` command was entered on this switch
- B. The spanning-tree operation mode for this switch is PVST
- C. The spanning-tree operation mode for this switch is IEEE
- D. The spanning-tree operation mode for this switch is PVST+

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 414**

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. Restore the OCA default settings because this automatically avoids channel interference
- C. Disable DFS channels to prevent interference with) Doppler radar
- D. Enable DFS channels because they are immune to radar interference
- E. Configure channels on the UNII-2 and the Extended UNII-2 sub-bands of the 5 Ghz band only

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 415**

What is a characteristic of para-virtualization?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 416**

A customer requests a network design that supports these requirements:

- \* FHRP redundancy
- \* multivendor router environment
- \* IPv4 and IPv6 hosts

Which protocol does the design include?

- A. GLBP

- B. VRRP version 2
- C. VRRP version 3
- D. HSRP version 2

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

**Explanation/Reference:**

#### **QUESTION 417**

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

```
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
```

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

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

**Explanation/Reference:**

**QUESTION 418**

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 419**

What is a characteristic of a next-generation firewall?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 420**

Which unit measures the power of a radio signal with reference to 1 milliwatt?

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

Correct Answer: D

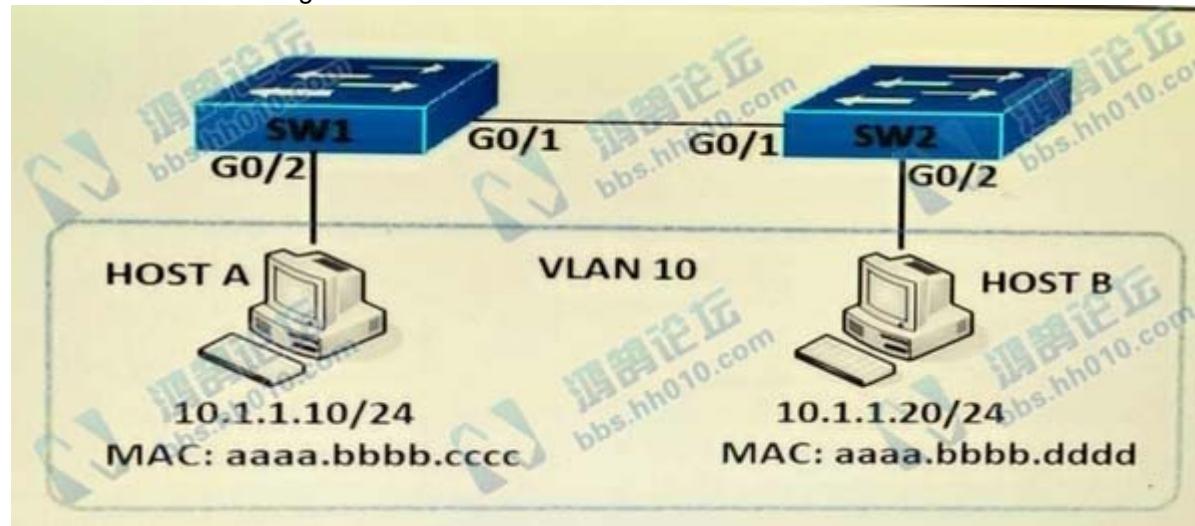
Section: (none)

Explanation

Explanation/Reference:

**QUESTION 421**

Refer to the exhibit. An engineer must deny HTTP traffic from host A to host V while allowing all other communication between the hosts, drag and drop the commands into the configuration to achieve these results.



Select and Place:

```
SW1(config)# ip access-list extended DENY-HTTP
SW1(config-ext-nacl)# [REDACTED] |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)# [REDACTED] 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)# [REDACTED]

SW1(config)# vlan access-map HOST-A-B 20
SW1(config-access-map)# match ip address MATCH_ALL
SW1(config-access-map)# [REDACTED]

SW1(config)# vlan filter HOST-A-B vlan 10
```

action drop

action forward

filter

permit

deny

match

Correct Answer:

```
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

SW1(config)# vlan filter HOST-A-B vlan 10
```

action drop

action forward

filter

permit

deny

match

Section: (none)

Explanation

Explanation/Reference:

QUESTION 422

What are two benefits of YANG?(choose two)

- A. it collects statistical constraint analysis information
- B. It enforces the use of specific encoding format for NETCONF
- C. it enforces configuration semantics
- D. it enables multiple leaf statements to exist within a leaf list
- E. it enforces configuration constraints

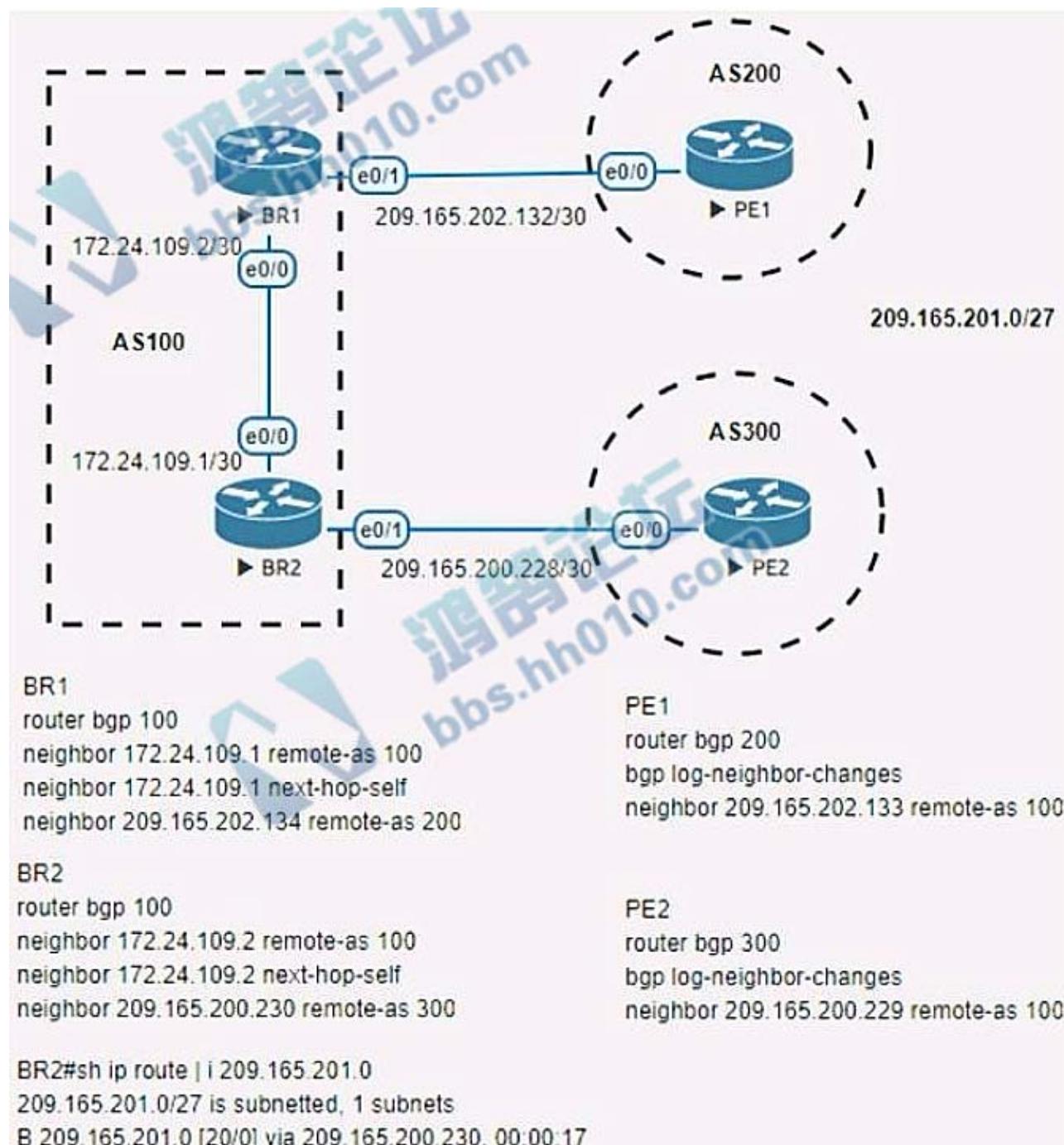
**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 423**



```
BR1
router bgp 100
neighbor 172.24.109.1 remote-as 100
neighbor 172.24.109.1 next-hop-self
neighbor 209.165.202.134 remote-as 200
```

```
BR2
router bgp 100
neighbor 172.24.109.2 remote-as 100
neighbor 172.24.109.2 next-hop-self
neighbor 209.165.200.230 remote-as 300
```

```
BR2#sh ip route | i 209.165.201.0
209.165.201.0/27 is subnetted, 1 subnets
B 209.165.201.0 [20/0] via 209.165.200.230, 00:00:17
```

```
PE1
router bgp 200
bgp log-neighbor-changes
neighbor 209.165.202.133 remote-as 100
```

```
PE2
router bgp 300
bgp log-neighbor-changes
neighbor 209.165.200.229 remote-as 100
```

Which configuration change will force BR2 to reach 209.165.201.0/27 via BR1?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 424

An engineer must export the contents of the devices object in JSON format. Which statement must be used?

```
Devices=[
 {
 'name': 'distsw1',
 'ip': '192.168.255.1',
 'type': 'Catalyst C9407R',
 'user': 'netadmin',
 'pass': '66674431c3577d398613263c0fb6fe5'
 }]
```

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 425

What is the function of Cisco DNA Center in a Cisco SD-Access deployment?

- A. It is responsible for routing decisions inside the fabric
- B. It is responsible for the design, management, deployment, provisioning, and assurance of the fabric network devices
- C. It possesses information about all endpoints, nodes, and external network related to the fabric
- D. It provides integration and automation for all non-fabric nodes and their fabric counterparts.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 426

```
username admin privilege 15 password 0 Cisco13579!
aaa new-model
!
aaa authentication login default local
aaa authentication enable default none
!
aaa common-criteria policy Administrators
 min-length 1
 max-length 127
 char-changes 4
 lifetime month 2
!
```

A network engineer must configure a password expiry mechanism on the gateway router for all local passwords to expire after 60 days. What is required to complete this task?

- A. Add the **username admin privilege 15 common-criteria-policy Administrators password 0 Cisco013579!** command
- B. No further action is required. The configuration is complete
- C. Add the aaa authentication enable default Administrators command
- D. The password expiry mechanism is on the AAA server and must be configured there

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 427**

```
R1#ping 10.1.3.2
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.1.3.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 24/43/72 ms

R1#ping 10.1.3.2 size 1500
Type escape sequence to abort.
Sending 5, 1500-byte ICMP Echos to 10.1.3.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 24/48/60 ms

R1#debug ip icmp
ICMP packet debugging is on

R1#ping 10.1.3.2 size 1500 df-bit
Type escape sequence to abort.
Sending 5, 1500-byte ICMP Echos to 10.1.3.2, timeout is 2 seconds:
Packet sent with the DF bit set
MMMMMM
Success rate is 0 percent (0/5)
```

An engineer troubleshoots connectivity issues with an application. Testing is performed from the server gateway, and traffic with the DF bit set is dropped along the path after increasing packet size. Removing the DF bit setting at the gateway prevents the packets from being dropped. What is the cause of this issue?

- A. PMTUD does not work due to ICMP Packet Too Big messages being dropped by an ACL
- B. The remote router drops the traffic due to high CPU load
- C. The server should not set the DF bit in any type of traffic that is sent toward the network
- D. There is a CoPP policy in place protecting the WAN router CPU from this type of traffic

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 428**

What are two benefits of virtual switching when compared to hardware switching? (Choose two)

- A. increased MTU size
- B. hardware independence
- C. VM-level isolation
- D. increased flexibility
- E. extended 802.1Q VLAN range

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 429**

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

Current configuration: 192 bytes

```
!
interface FastEthernet0/0
ip address 192.68.3.5 255.255.255.0
duplex full
vrrp 1 ip 192.168.3.1
vrrp 1 priority 110
vrrp 1 authentication text cisco
vrrp 1 track 20 decrement 20
end
```

```
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 192.68.3.2 255.255.255.0
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. communication between VRRP members is encrypted using MD5
- B. If R1 reboots, R2 becomes the master virtual router until R2 reboots
- C. There is no route to 10.10.1.1/32 in R2's routing table
- D. R1 is master if 10.10.1.1/32 is in its routing table

**Correct Answer:** D

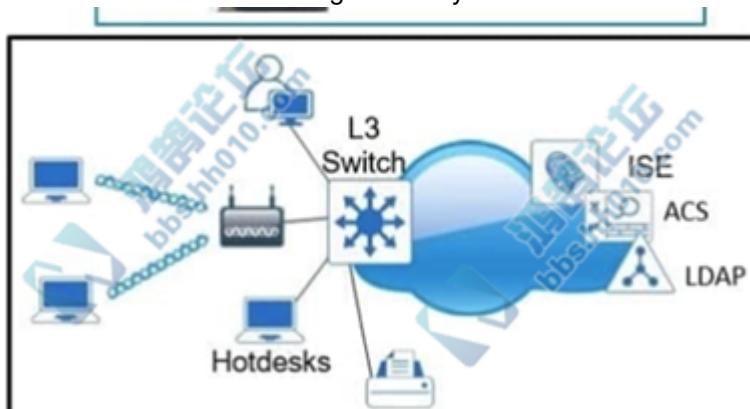
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 430

Refer to the exhibit. Which single security feature is recommended to provide Network Access Control in the enterprise?



- A. MAB
- B. 802.1X
- C. WebAuth
- D. Port Security sticky MAC

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 431**

Refer to the exhibit. An engineer must add the SNMP interface table to the NetFlow protocol flow records. Where should the SNMP table option be added?

```
flow record Recorder
 match ipv4 protocol
 match ipv4 source address
 match ipv4 destination address
 match transport source-port
 match transport destination-port
!
flow exporter Exporter
 destination 192.168.100.22
 transport udp 2055
!
flow monitor Monitor
 exporter Exporter
 record Recorder
!
et-analytics
 ip flow-export destination 192.168.100.22 2055
!
interface g1
 ip flow monitor Monitor input
 ip flow monitor Monitor output
 et-analytics enable
!
```

- A. under the interface
- B. under the flow record
- C. under the flow monitor
- D. under the flow exporter

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 432**

Which two operational models enable an AP to scan one or more wireless channels for rogue access points and at the same time provide wireless services to clients? (Choose two)

- A. Sniffer
- B. Rogue detector
- C. Local
- D. FlexConnect
- E. Monitor

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 433**

How does a router behave when configured with the default DNS lookup settings, and a URL is entered on the CLI?

- A. prompts the user to specify the desired IP address.
- B. initiates a pinfo request to the URL.
- C. continuously attempts to resolve the URL until the command is cancelled.
- D. attempts to query a DNS server on the network

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 434**

What does a router do when configured with the default DNS lookup settings, and a URL is entered on the CLI?

- A. initiates a ping request to the URL
- B. prompts the user to specify the desired IP address
- C. continuously attempts to resolve the URL until the command is cancelled
- D. sends a broadcast message in an attempt to resolve the URL

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 435**

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. polarized
- C. Yagi
- D. omnidirectional

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

一个工程师必须给一个办公室提供无线覆盖，这位工程师只有一个无线AP，这个AP应该放在办公室的中央位置，请问？下边哪种类型的天线是首选？

答案是D 全向天线

**QUESTION 436**

POSTMAN API Screenshot:

Request URL: <https://sandboxdnac.cisco.com/dna/intent/api/v1/network-devices>

Headers (1):

KEY	VALUE	DESCRIPTION
X-Auth-Token	eyJ0eXAiOiJKV1QiLCJhbGciOiJUzI1NiJ9.eyJzdWIiOiJ...	

Body (Pretty):

```
1 - {
2 - "response": {
3 - "errorCode": "Bad request",
4 - "message": "Invalid input request",
5 - "detail": "s is not a valid UUID of device"
6 - },
7 - "version": "1.0"
}
```

Refer to the exhibit. POSTMAN is showing an attempt to retrieve network device information from Cisco DNA Center API. what is the issue?

- A. The URI string is incorrect
- B. The token has expired
- C. Authentication has failed
- D. The JSON payload contains the incorrect UUID

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 437**

```
R2#show standby
FastEthernet1/0 - Group 50
 State is Active
 2 state changes, last state change 00:00:58
 Virtual IP address is 10.10.1.1
 Active virtual MAC address is 0000.0c07.ac32 (MAC In Use)
 Local virtual MAC address is 0000.0c07.ac32 (v1 default)
 Hello time 3 sec, hold time 10 sec
 Next hello sent in 0.704 secs
 Preemption enabled, delay reload 90 secs
 Active router is local
 Standby router is unknown
 Priority 200 (configured 200)
 Track interface FastEthernet0/0 state Up decrement 20
 Group name is "hsrp-Fa1/0-50" (default)
R2#
%IP-4-DUPADDR: Duplicate address 10.10.1.1 on FastEthernet1/0, sourced by 0000.0c07.ac28
R2#
```

Refer to the exhibit. An engineer configures a new HSRP group. While reviewing the HSRP status, the engineer sees the logging message generated on R2. What is the cause of the message?

- A. The HSRP configuration has caused a routing loop
- B. The HSRP configuration has caused a spanning-tree loop
- C. A PC is on the network using the IP address 10.10.1.1
- D. The same virtual IP address has been configured for two HSRP groups

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 438**

```
def get_token () :
 device_url = "https://192.168.1.1/dna/system/api/v1/auth/token"
 http_result = requests.post(device_url, auth = ("test", "test399079338!"))
 if http_result.status_code != requests.codes.ok:
 print ("Call failed! Review get_token () . ")
 sys.exit ()
 return (http_result.json () ["Token"])
```

Which HTTP code must be returned to prevent the script from exiting ?

- A. 200
- B. 201
- C. 300
- D. 301

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 439**

what is a consideration when designing a Cisco SD-Access underlay network ?

- A. The underlay switches provide endpoint physical connectivity for users
- B. End user subnets and endpoints are part of the underlay network
- C. It must support IPv4 and IPv6 underlay networks
- D. static routing is a requirement

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## QUESTION 440

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## QUESTION 441

What happens to the signal strength of an RF signal due to wave spreading?

- A. The signal strength of the RF signal will fall off equally near the transmitter and also farther away
- B. The signal strength of the RF signal will fall off quickly near the transmitter but more slowly farther away
- C. The signal strength of the RF signal will fall off slowly near the receiver and more quickly farther away
- D. The signal strength of the RF signal will fall off slowly near the transmitter but more quickly farther away

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 442**

Which two statements about AAA authentication are true? (Choose two)

- A. RADIUS authentication queries the router's local username database
- B. TACACS+ authentication uses an RSA server to authenticate users
- C. Local user names are case-insensitive
- D. Local authentication is maintained on the router
- E. KRB5 authentication disables user access when an incorrect password is entered

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 443**

what is the output of this code ?

```
def get_credentials():
 creds={'username': 'cisco', 'password': 'c3577dc8ae4e36c0bfb6fe5399079338'}
 return (creds.get('username'))

print(get_credentials())
```

- A. cisco
- B. get\_credentials
- C. username
- D. username:cisco

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 444**

```
Router# traceroute 10.10.10.1
```

Type escape sequence to abort.

Tracing the route to 10.10.10.1

```
1 10.0.0.1 5 msec 5 msec 5 msec
2 10.5.0.1 15 msec 17 msec 17 msec
3 10.10.10.1 * * *
```

Refer to the exhibit. An engineer is troubleshooting a connectivity issue and executes a traceroute. What does the result confirm?

- A. The probe times out
- B. The destination server reported it is too busy
- C. The protocol is unreachable
- D. The destination port is unreachable

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 445**

Where is radio resource management performed in a Cisco SD-Access wireless solution?

- A. DNA Center
- B. control plane node
- C. wireless controller
- D. Cisco CMX

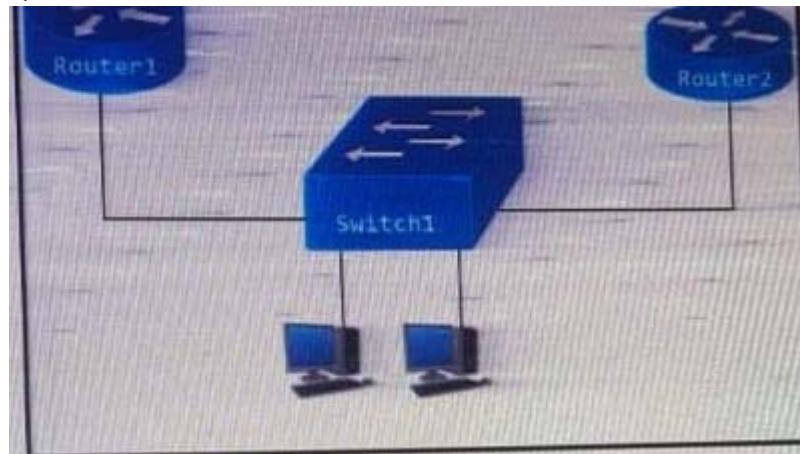
**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 446



Refer to the exhibit. Router1 is currently operating as the HSRP primary with a priority of 110. Router1 fails and Router2 takes over the forwarding role. Which command on Router1 causes it to take over the forwarding role when it returns to service?

- A. standby 2 priority
- B. standby 2 preempt
- C. standby 2 track
- D. standby 2 timers

**Correct Answer:** B

**Section:** (none)

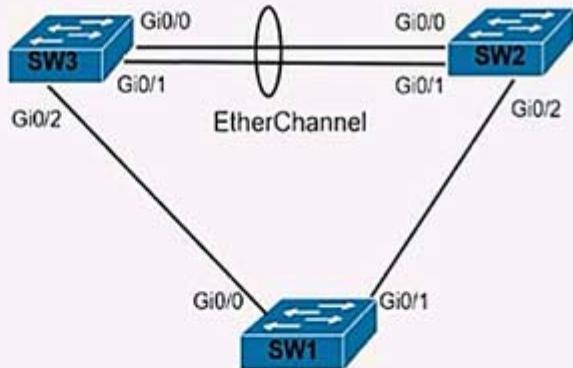
**Explanation**

## Explanation/Reference:

### QUESTION 447

```
SW2# 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(S D) LACP Gi0/0(I) Gi0/1(I)
```

```
SW3# 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(S D) LACP Gi0/0(I) Gi0/1(I)
```



```
SW2# show run interface
gigabitethernet 0/0
Building configuration...
Current configuration : 189 bytes
!
interface GigabitEthernet0/0
switchport trunk encapsulation isl
switchport mode access
switchport nonegotiate
channel-group 1 mode active
end

SW3# show run interface
gigabitethernet 0/0
Building configuration...
Current configuration : 151 bytes
!
interface GigabitEthernet0/0
switchport trunk encapsulation isl
switchport mode trunk
switchport nonegotiate
channel-group 1 mode passive
end
```

```
SW2# show run interface
gigabitethernet 0/1
Building configuration...
Current configuration : 189 bytes
!
interface GigabitEthernet0/1
switchport trunk encapsulation isl
switchport mode trunk
switchport nonegotiate
channel-group 1 mode active
end
```

```
SW3# show run interface
gigabitethernet 0/1
Building configuration...
Current configuration : 151 bytes
!
interface GigabitEthernet0/1
switchport trunk encapsulation isl
switchport mode trunk
switchport nonegotiate
channel-group 1 mode passive
end
```

Refer to the exhibit. The Etherchannel between SW2 and SW3 is not operational. which action resolves this issue ?

- A. configure the mode on sw2 Gi0/0 to trunk
- B. configure the mode on sw2 Gi0/1 to access

- C. configure the channel-group mode on SW2 Gi0/0 and Gi0/1 to on
- D. configure the channel-group mode on SW2 Gi0/0 and Gi0/1 to active

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 448**

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

- A. The object could not be located at the URL path
- B. The command succeeded in deleting the object
- C. The object was located at he URL, but it could not be deleted
- D. The URL was invalid

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

HTTP/1.1 204 No Content' : 服务器成功处理了请求，但没返回任何内容

#### **QUESTION 449**

what is one benefit of implementang a VSS archtecture?

- A. It uses a single database to manage configuration for multiple switches
- B. It provides a single point of management for improved efficiency
- C. It provides multiple points of management for redundancy and improved support
- D. It uses GLBP to balance traffic between gateways

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 450**

How is MSDP used to interconnect multiple PIM-SM domains?

- A. MSDP depends on BGP or multiprotocol BGP for interdomain operation
- B. MSDP messages are used to advertise active sources in a domain
- C. MSDP SA request messages are used to request a list of active sources for a specific group
- D. MSDP allows a rendezvous point to dynamically discover active sources outside of its domain

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 451**

what is the function of the LISP map resolver?

- A. to send traffic to non-LISP sites when connected to a service provider that does not accept nonroutable EIDs as packet sources
- B. 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
- C. to decapsulate map-request messages from ITRs and forward the messages to the MS
- D. to advertise routable non-LISP traffic from one address family to LISP sites in a different address family

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 452**

An engineer configures HSRP group 37. The configuration does not modify the default virtual MAC address. which virtual MAC address does the group use ?

- A. 00:00:0c:07:ac:25
- B. c0:39:97:39:655:5
- C. c0:00:00:25:00:00

D. 00:00:0c:07:ac:37

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 453**

If the noise floor is -90 dBm and the wireless client is receiving a signal of -75 dBm, what is the SNR?

- A. 15
- B. 1.2
- C. -165
- D. 83

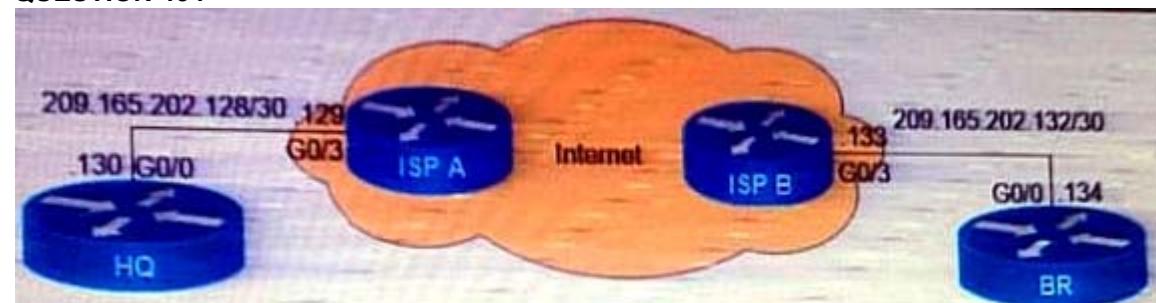
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 454**



Refer to the exhibit. What is the effect of these commands on the BR and HQ tunnel interfaces?

**BR(config)#interface tunnel 1**  
**BR(config-if)#keepalive 5 3**

**HQ(config)#interface tunnel 1**

**HQ(config-if)#keepalive 5 3**

- A. The tunnel line protocol goes down when the keepalive counter reaches 5
- B. The keepalives are sent every 5 seconds and 3 retnes
- C. The keepalives are sent every 3 seconds and 5 retnes
- D. The tunnel line protocol goes down when the keepalive counter reaches 6

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 455**

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 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: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>[REDACTED]</ios-bgp:number>
<ios-bgp:[REDACTED]>[REDACTED]</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: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:bgp>
<ios-bgp:address-family>
<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:bgp>
</router>
</native>
</config>
```

with-mask

subnet-mask

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 456

What is used to perform QoS packet classification?

- A. the Options field in the Layer 3 header
- B. the Type field in the Layer 2 frame

- C. the Flags field in the Layer 3 header
- D. the ToS field in the Layer 3 header

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 457**

Which LISP component is required for a LISP site to communicate with a non-LISP site?

- A. ETR
- B. ITR
- C. Proxy ETR
- D. Proxy ITR

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 458**

Which technology is used as the basis for the Cisco SD-Access data plane?

- A. IPsec
- B. LISP
- C. VXLAN
- D. 802.1Q

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 459**

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

**Jan 1 12:12:14.122: %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 group configuration on the remote router to 1
- B. Change the HSRP virtual address on the local router to 10.1.1.1
- C. Change the HSRP virtual address on the remote router to 10.1.1.1
- D. Change the HSRP group configuration on the local router to 1

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 460**

What is a characteristic of YANG?

- A. It is a Cisco proprietary language that models NETCONF data
- B. It allows model developers to create custom data types
- C. It structures data in an object-oriented fashion to promote model reuse
- D. It provides loops and conditionals to control flow within models

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 461**

When is an external antenna used inside a building?

- A. only when using 5 GHz
- B. only when using 2.4 GHz

- C. when it provides the required coverage
- D. only when using Mobility Express

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 462**

Drag and drop the snippets onto the blanks within the code construct a script that configure a loopback interface with an IP address. Not all options are used.

**Select and Place:**

```
{
 "@message-id": "101",
 "edit-config": {
 [REDACTED] {
 "running": null
 },
 "config": {
 "native": {
 "interface": {
 "Loopback": {
 [REDACTED],
 "ip": {
 "address": {
 [REDACTED] {
 "address": "10.10.10.10",
 [REDACTED] "255.255.255.255"
 }
 }
 }
 }
 }
 }
 }
 }
}
```

"fixed":  
"config":  
"mask":  
"primary":  
"target":  
"name": "100"

Correct Answer:

```
{
 "@message-id": "101",
 "edit-config": {
 "config": {
 "running": null
 },
 "config": {
 "native": {
 "interface": {
 "Loopback": {
 "name": "100",
 "ip": {
 "address": {
 "primary": {
 "address": "10.10.10.10",
 "mask": "255.255.255.255"
 }
 }
 }
 }
 }
 }
 }
 }
}
```

Section: (none)

Explanation

Explanation/Reference:

QUESTION 463

Refer to the exhibit.

```
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

How was spanning-tree configured on this interface?

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

**Correct Answer:** A

**Section:** (none)

**Explanation:**

**Explanation/Reference:**

#### QUESTION 464

An engineer is troubleshooting the AP join process using DNS. Which FQDN must be resolvable on the network for the access points to successfully register to the WLC?

- A. cisco-capwap-controller.domain.com
- B. wlchostname.domain.com
- C. ap-manager.domain.com
- D. primary-wlc.domain.com

**Correct Answer:** A

**Section:** (none)

**Explanation:**

**Explanation/Reference:**

**QUESTION 465**

How is Layer 3 roaming accomplished in a unified wireless deployment?

- A. An EoIP tunnel is created between the client and the anchor controller to provide seamless connectivity as the client is associated with the new AP
- B. The client entry on the original controller is passed to the database on the new controller
- C. The new controller assigns an IP address from the new subnet to the client
- D. The client database on the original controller is updated the anchor entry, and the new controller database is updated with the foreign entry.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 466**

A network administrator has designed a network with two multilayer switches on the distribution layer, which act as default gateways for the end hosts. Which two technologies allow every end host in a VLAN to use both gateways? (Choose two)

- A. HSRP
- B. GLBP
- C. MHSRP
- D. VRRP
- E. VSS

**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 467**

Which measurement is used from a post wireless survey to depict the cell edge of the access points?

- A. CCI
- B. Noise

- C. SNR
- D. RSSI

**Correct Answer:** D

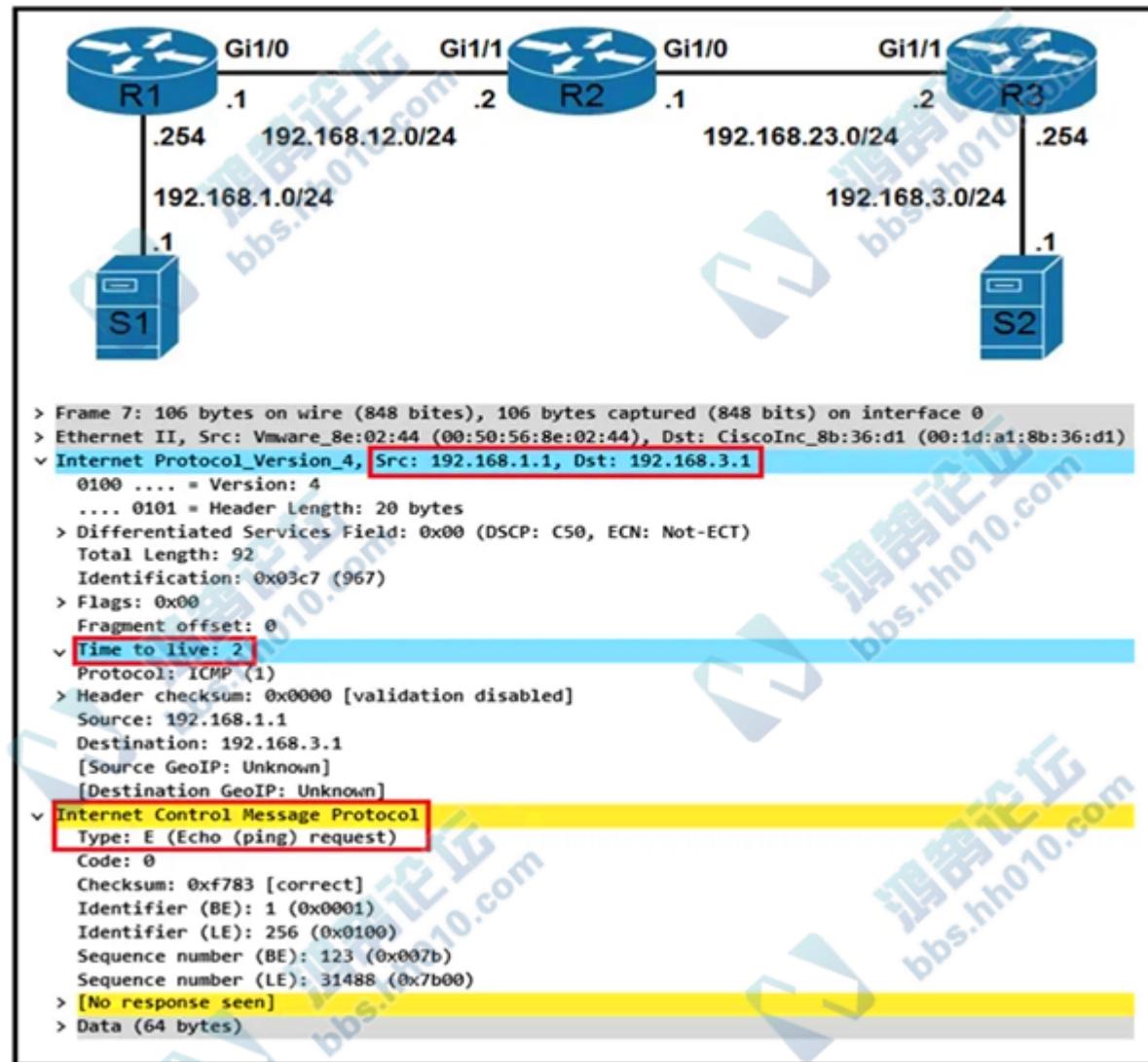
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 468**

Refer to the exhibit.



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

- A. The packet reaches R3, and the TTL expires
- B. R2 replies with a TTL exceeded message

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

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 469**

Refer to the exhibit.

```
Router#show access-list
Extended IP access list 100
 10 permit ip 192.168.0.0 0.0.255.255 any
 20 permit ip 172.16.0.0 0.0.15.255 any
```

Which command set must be added to permit and log all traffic that comes from 172.20.10.1 in interface GigabitEthernet0/1 without impacting the functionality of the access list?

- A. Router(config)#ip access-list extended 100  
Router(config-ext-nacl)#5 permit ip 172.20.10.0 0.0.0.255 any log  
Router(config)#interface GigabitEthernet0/1  
Router(config-if)#access-group 100 in
- B. Router(config)#no access-list 100 permit ip 172.16.0.0 0.0.15.255 any  
Router(config)#access-list 100 permit ip 172.16.0.0 0.0.15.255 any log  
Router(config)#interface Gigabit Ether net0/1  
Router(config-if)#access-group 100 in
- C. Router(config)#access-list 100 permit ip host 172.20.10.1 any log  
Router(config)#interface GigabitEthernet0/1  
Router(config-if)#access-group 100 in
- D. Router(config)#access-list 100 seq 5 permit ip host 172.20.10.1 any log  
Router(config)#interface GigabitEthernet0/1  
Router(config-if)#access-group 100 in

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 470**

How are the different versions of IGMP compatible?

- A. IGMPv2 is compatible only with IGMPv1
- B. IGMPv2 is compatible only with IGMPv2
- C. IGMPv3 is compatible only with IGMPv3
- D. IGMPv3 is compatible only with IGMPv1

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 471**

An engineer runs the code against an API of Cisco DNA Center, and the platform returns this output.

```
import requests
import sys
import urllib3

urllib3.disable_warnings(urllib3.exceptions.InsecureRequestWarning)

def main():
 device_uri = "https://192.168.1.1/dna/system/api/v1/auth/token"
 http_result = requests.get(device_uri, auth=("root", "test39383746!"))
 print(http_result)
 if http_result.status_code != requests.codes.ok:
 print("Call failed! Review get_token().")
 sys.exit()
 print(http_result.json()["Token"])

if __name__ == "__main__":
 sys.exit(main())
```

Output

```
$ python get_token.py
<Response [405]>
Call failed! Review get_token().
```

What does the response indicate?

- A. The authentication credentials are incorrect
- B. The URI string is incorrect
- C. The Cisco DNA Center API port is incorrect
- D. The HTTP method is incorrect

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 472**

What is one difference between Saltstack and Ansible?

- A. SaltStack uses an API proxy agent to program Cisco boxes on agent mode, whereas Ansible uses a Telnet connection
- 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 SSH to interact with Cisco devices, whereas Ansible uses an event bus

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 473**

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 474**

Refer to the exhibit.

```
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 101 ACTIVE
```

After configuring an IPsec VPN, an engineer enters the show command to verify the ISAKMP SA status. What does the status show?

- A. Peers have exchanged keys, but ISAKMP SA remains unauthenticated.
- B. ISAKMP SA is authenticated and can be used for Quick Mode.
- C. VPN peers agreed on parameters for the ISAKMP SA

- D. ISAKMP SA has been created, but it has not continued to form.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 475**

Refer to the exhibit.

```
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
```

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 476**

Which Cisco DNA center application is responsible for group-based access control permissions?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 477**

A client device roams between wireless LAN controllers that are mobility peers. Both controllers have dynamic interface on the same client VLAN. Which type of roam is described?

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 478**

Which line must be added in the Python function to return the JSON object {"cat\_9k": "FXS193202SE")?

```
import json
def get_data():
 test_json = """
{
 "response": [
 "managementIpAddress": "10.10.2.253",
 "memorySize": "3398345152",
 "serialNumber": "FXS1932Q2SE",
 "softwareVersion": "16.3.2",
 "hostname": "cat_9k"
],
 "version": "1.0"
}
```

- A. return (json.dumps({d['hostname']: d['serialNumber'] for d in json.loads(test\_json)['response']}))
- B. return (json.loads({for d in json.dumps(test\_json)['response']: d['hostname']: d['serialNumber']}))
- C. return (json.loads({d['hostname']: d['serialNumber'] for d in json.dumps(test\_json)['response']}))
- D. return (json.dumps({for d in json.loads(test\_json)['response']: d['hostname']: d['serialNumber']}))

**Correct Answer:** A

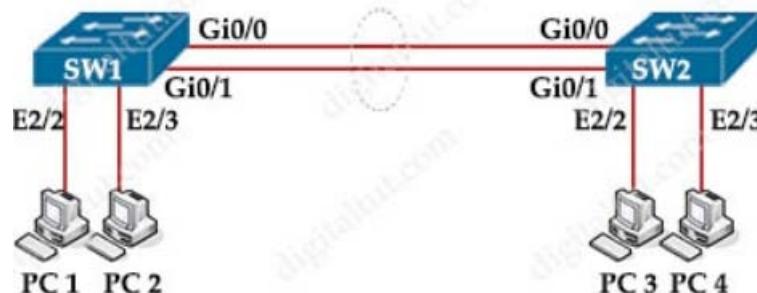
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 479**

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



\*Aug 12 02:22:23.233: %LINK-3-UPDOWN: Interface Port-channel10, changed state to down  
\*Aug 12 02:22:24.236: %LINEPROTO-5-UPDOWN: Line protocol on Interface Port-channel10,changed state to down  
\*Aug 12 02:22:27.237: %ETC-5-L3DONTBNDL2: Gi0/1 suspended: LACP currently not enabled on the remote port  
\*Aug 12 02:22:29.233: %ETC-5-L3DONTBNDL2: Gi0/0 suspended: LACP currently not enabled on the remote port

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

**Correct Answer:** A

**Section:** (none)

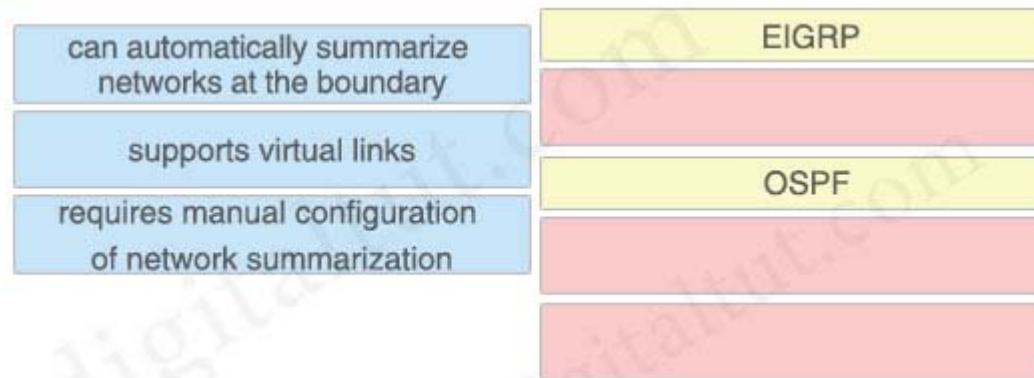
**Explanation**

**Explanation/Reference:**

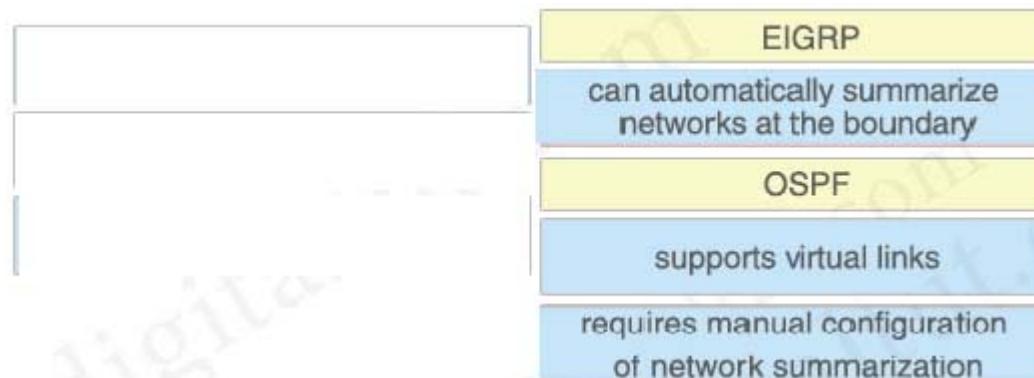
#### QUESTION 480

Drag and drop the characteristics from the left onto the routing protocols they describe on the right.

**Select and Place:**



**Correct Answer:**



**Section:** (none)

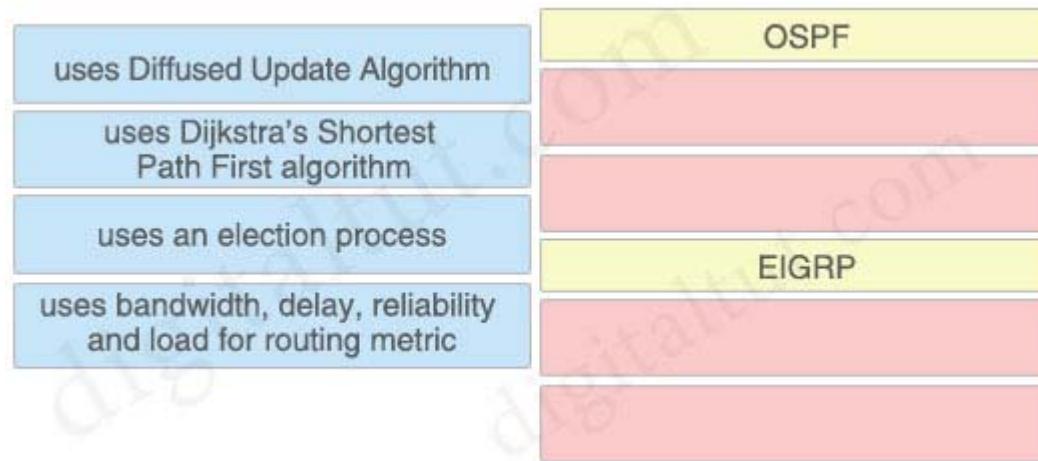
**Explanation**

**Explanation/Reference:**

**QUESTION 481**

Drag and drop the characteristics from the left onto the protocols they apply to on the right.

**Select and Place:**



Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

QUESTION 482

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

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 483

Drag and drop the wireless elements on the left to their definitions on the right.

**Select and Place:**

polarization	the relative increase in signal strength of an antenna in a given direction
beamwidth	a graph that shows the relative intensity of the signal strength of an antenna within its space
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:**



	the relative gain of an antenna	strength direction
	a graph showing the radiation patterns of the antenna within its space	intensity
	measures the angle of an antenna pattern strength	beamwidth signal
	the maximum value of radiated electromagnetic waves that influence polarization	antenna within its electromagnetic field

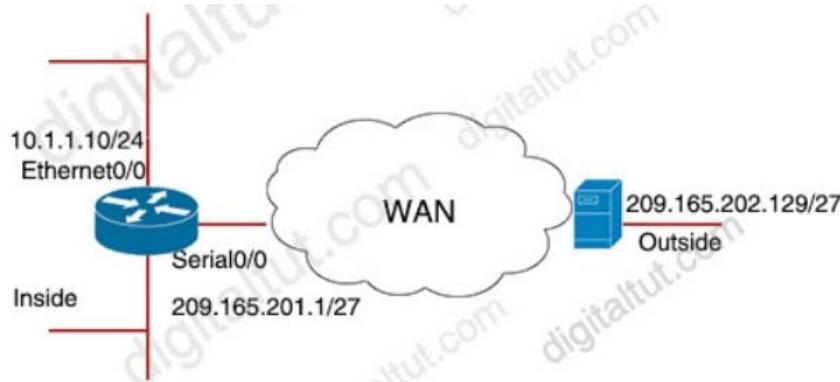
**Section: (none)**

**Explanation:**

**Explanation/Reference:**

**QUESTION 484**

Refer to the exhibit.



**R1**

```
interface Ethernet0/0
 ip address 10.1.1.10 255.255.255.0
```

```

ip nat inside
!
interface Serial0/0
 ip address 209.165.201.1 255.255.255.224
 ip nat outside
!
ip nat pool Busi 209.165.201.1 209.165.201.2 netmask 255.255.255.252
ip nat inside source list 1 pool Busi
!
access-list permit 10.1.1.0 0.0.0.255
!

R1#show ip nat statistics
Total active translations: 1 (0 static, 1 dynamic, 0 extended)
Outside Interfaces:
Inside Interfaces:
Ethernet0/0
Hits: 119 Misses: 1
Expired translations: 0
Dynamic mappings:
-- Inside Source
access-list 1 pool Busi refcount 1
pool fred: netmask 255.255.255.252
start 209.165.201.1 end 209.165.201.2
type generic, total addresses 2, allocated 1 (50%), misses 0

```

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 NAT overload parameters
- B. The first packet triggered NAT to add an entry to NAT table
- C. A Telnet from 160.1.1.1 to 10.1.1.10 has been initiated
- D. R1 is configured with PAT overload parameters

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 485**

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

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 486**

What does the Cisco DNA REST response indicate?

```
{
 "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",
 }
]
}
```

- 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 RouterASR-1
- D. Cisco DNA Center has the incorrect credentials for cat3850-1

**Correct Answer:** A

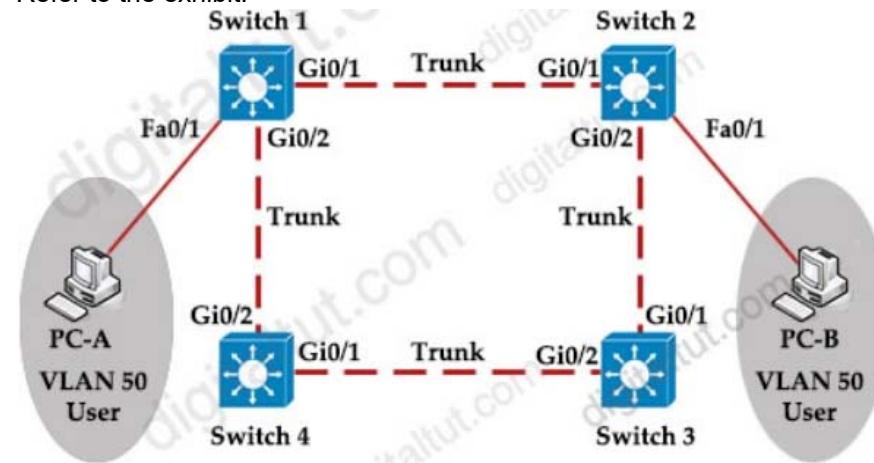
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 487

Refer to the exhibit.



Rapid PVST+ is enabled on all switches. Which command set must be configured on Switch1 to achieve the following results on port fa0/1?

- + When a device is connected, the port transitions immediately to a forwarding state
- + The interface should not send or receive BPDUs.
- + If a BPDU is received, it continues operating normally.

- A. Switch1(config)# interface f0/1  
Switch1(config-if)# spanning-tree portfast  
Switch1(config-if)# spanning-tree bpduguard enable
- B. Switch1(config)# spanning-tree portfast bpduguard default

- Switch1(config)# interface f0/1  
Switch1(config-if)# spanning-tree portfast
- C. Switch1(config)#interface f0/1  
Switch1(config-if)# spanning-tree portfast
- D. Switch1(config)#spanning-tree portfast bpdufilter default  
Switch1(config)# interface f0/1  
Switch1(config-if)# spanning-tree portfast

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 488

Refer to the exhibit.

```
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)
```

After running the code in the exhibit. Which step reduces the amount of data that NETCONF server returns to the NETCONF client, to only the interface's configuration?

- A. Create an XML filter as a string and pass it to get\_config() method as an argument
- B. Use the txmllib library to parse the data returned by the NETCONF server for the interface's configuration
- C. Create a JSON filter as a string and pass it to the get\_config() method as an argument
- D. Use the JSON library to parse the data returned by the NETCONF server for the interface's configuration

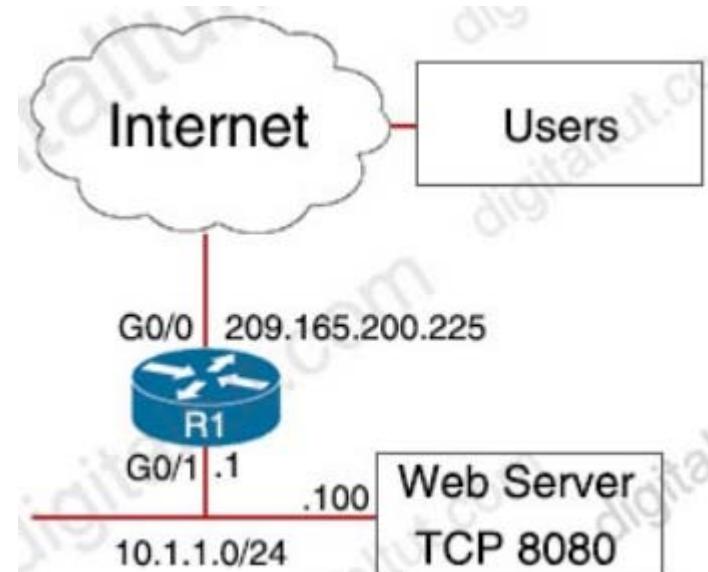
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 489**  
Refer to the exhibit



External users require HTTP connectivity to an internal company web server that is listening on TCP port 8080. Which command set accomplishes this requirement?

- A. interface G0/0  
ip address 209.165.200.225 255.255.255.224  
ip nat inside
- B. interface G0/0  
ip address 209.165.200.225 255.256.255.224  
ip nat inside  
interface G0/1  
ip address 10.1.1.1 255.255.255.0  
ip nat outside  
ip nat inside source static tcp 209.165.200.225 80 10.1.1.100 8080
- C. interface G0/0  
ip address 209.165.200.225 255.255.255.224  
ip nat inside  
interface G0/1  
ip address 10.1.1.1 255.255.255.0  
ip nat outside

- ip nat inside source static tcp 10.1.1.1 8080 209.166.200.225 80
- D. interface G0/0
  - ip address 209.165.200.225 255.255.255.224
  - ip nat outside
  - interface G0/1
    - ip address 10.1.1.1 255.255.255.0
    - ip nat inside
    - ip nat inside source static tcp 10.1.1.100 8080 interface G0/0 80
- E. interface G0/0
  - ip address 209.165.200.225 255.255.255.224
  - ip nat outside
  - interface G0/1
    - ip address 10.1.1.1 255.255.255.0
    - ip nat inside
    - ip nat inside source static tcp 209.165.200.225 8080 10.1.1.100 8080

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 490

A network engineer configures BGP between R1 and R2. Both routers use BGP peer group CORP and are set up to use MD5 authentication. This message is logged to the console of router R1:

**\*Jun 5 33:34:33.033: %TCP-6-BADAUTH: Invalid MD5 digest from 10.10.10.1 (29832) to 10.120.10.1 (179) tableid -0**

Which two configurations allow a peering session to form between R1 and R2? (Choose two)

- A. R2(config-router)#neighbor 10.10.10.1 peer-group CORP  
R2(config-router)#neighbor CORP password Cisco
- B. R2(config-router)#neighbor 10.10.10.1 peer-group CORP  
R2(Config-router)#neighbor PEER password Cisco
- C. R1(config-router)#neighbor 10.10.10.1 peer-group CORP  
R1(config-router)#neighbor CORP password Cisco
- D. R1(config-router)#neighbor 10.120.10.1 peer-group CORP  
R1(config-router)#neighbor CORP password Cisco
- E. R2(config-router)#neighbor 10.120.10.1 peer-group CORP  
R2(config-router)#neighbor CORP password Cisco

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 491**

Which three elements determine Air Time efficiency? (Choose three)

- A. event-driven RRM
- B. data rate (modulation density) or QAM
- C. channel bandwidth
- D. number of spatial streams and spatial reuse
- E. RF group leader
- F. dynamic channel assignment

**Correct Answer:** BCD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 492**

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 493**

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

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

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 494**

Refer to the exhibit.

%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: 10.0.0.1/32 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

What is the cause of the log messages?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 495**

What are two characteristics of VXLAN? (Choose two)

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

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 496

Refer to the exhibit.



<pre>interface Tunnel 100 ip address 192.168.100.1 255.255.255.255.0 keepalive 5 4 tunnel source GigabitEthernet0/0 tunnel destination 209.165.201.2 ! interface GigabitEthernet0/0 ip address 209.165.200.226 255.255.255.252 ! interface GigabitEthernet0/1 ip address 10.1.1.1 255.255.255.0 ! router ospf 100 network 0.0.0.0 255.255.255.255 area 0 ! ip route 0.0.0.0 0.0.0.0 209.165.200.225 !</pre>	<pre>interface Tunnel 100 ip address 192.168.100.2 255.255.255.255.0 keepalive 7 6 tunnel source GigabitEthernet0/1 tunnel destination 209.165.200.226 ! interface GigabitEthernet0/0 ip address 10.2.2.1 255.255.255.0 ! interface GigabitEthernet0/1 ip address 209.165.201.2 255.255.255.252 ! router ospf 200 network 0.0.0.0 255.255.255.255 area 0 ! ip route 0.0.0.0 0.0.0.0 209.165.201.1 !</pre>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

A network engineer configures a new GRE tunnel and enters the show run command. What does the output verify?

- A. The tunnel keepalive is configured incorrectly because they must match on both sites

- B. The tunnel destination will be known via the tunnel interface
- C. The tunnel will be established and work as expected
- D. The default MTU of the tunnel interface is 1500 byte.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 497**

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. least privilege
- B. fail-safe defaults
- C. economy of mechanism
- D. complete mediation

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 498**

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

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 499**

What is the function of a VTEP in VXLAN?

- A. provide the routing underlay and overlay for VXLAN headers
- B. dynamically discover the location of end hosts in a VXLAN fabric
- C. encapsulate and de-encapsulate traffic into and out of the VXLAN fabric
- D. statically point to end host locations of the VXLAN fabric

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 500**

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?

```

Switch1#
*May 2 15:12:44.477: %SPAN TREE-7-RECV_1Q_NON_TRUNK: Received 802.1Q BPDU on non trunk GigabitEthernet0/0 VLAN1.
*May 2 15:12:44.477: %SPAN TREE-7-BLOCK_PORT_TYPE: Blocking GigabitEthernet0/0 on VLAN0001. Inconsistent port type.

Vlan10 Vlan10
10.0.0.1/24 10.0.0.2/24
Switch1 Switch2
 Gi0/0 Gi0/0

hostname Switch1
!
vtp domain DATACENTER1
!
Interface Gi0/0
description TO DC2-Switch2
switchport mode trunk
!
Interface Vlan10
description LAN-10
ip address 10.0.0.1 255.255.255.0

hostname Switch2
!
vtp domain DATACENTER2
!
Interface Gi0/0
description TO DC1-Switch1
switchport mode dynamic desirable
!
Interface Vlan10
description LAN-10
ip address 10.0.0.2 255.255.255.0

```

- A. Change the VTP domain to match on both switches
- B. Change Switch2 to switch port mode dynamic auto
- C. Change Switch1 to switch port mode dynamic auto
- D. Change Switch1 to switch port mode dynamic desirable

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 501

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

```
aaa new-model
aaa authentication login authorizationlist tacacs+
tacacs-server host 192.168.0.202
tacacs-server key ciscotestkey
line vty 0 4
login authentication authorizationlist
```

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 502**



Refer to the exhibit. After configuring the BGP network, an engineer verifies that the path between server1 and server2 is functional, why did RouterSF choose the route from RouterDAL instead of the route from RouterCHI?

- A. BGP is not running on RouterCHI
- B. The Router-ID for Router DAL is lower than Router-ID for RouterCHI
- C. There is a static route in RouterSF for 10.0.0.0/24

- D. The route from RouterDAL has a lower MED

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 503**

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

```
{
 "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
 }
 }
}
```

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

Correct Answer:

URL - `http://10.10.10.10/restconf/api/running/native/` interface/GigabitEthernet/1/

HTTP Verb- GET

Body- N/A

Headers- Accept `-application/vnd.yang.data+json`

Authentication-privileged level 15 credentials

POST PUT Cisco-IOS-XE

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 504**

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. LDAP
- C. EAP-FAST
- D. PEAP

Correct Answer: D

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 505**

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 traffic classification and marking conditions
- D. under interface saturation conditions

**Correct Answer:** D

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 506**

Drag and drop the characteristics of PIM Dense Mode from the left to the right. Not all options are used.

**Select and Place:**

PIM Dense Mode

builds source-based distribution trees

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

### PIM Dense Mode

	builds source-based distribution trees
uses a pull model to distribute multicast traffic	uses a push 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	

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 507

Refer to the exhibit. Which command is required to verify NETCONF capability reply messages?

```
<rpc-reply> [0, 1] required
 <ok> [0, 1] required
 <data> [0, 1] required
<rpc-error> [0, 1] required
 <error-type> [0, 1] required
 <error-tag> [0, 1] required
 <error-severity> [0, 1] required
 <error-app-tag> [0, 1] required
 <error-path> [0, 1] required
 <error-message> [0, 1] required
 <error-info> [0, 1] required
 <bad-attribute> [0, 1] required
 <bad-element> [0, 1] required
 <ok-element> [0, 1] required
 <err-element> [0, 1] required
 <noop-element> [0, 1] required
 <bad-namespace> [0, 1] required
 <session-id> [0, 1] required
```

- A. show netconf | section rpc-reply
- B. show netconf rpc-reply
- C. show netconf xml rpc-reply
- D. show netconf schema | section rpc-reply

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 508**

A network engineer must configure a router to send logging messages to a syslog server based on these requirements:  
uses syslog IP address: 10.10.10.1  
uses a reliable protocol  
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 origin-id 10.10.10.1
- C. logging host 10.10.10.1 transport udp port 1023
- D. logging host 10.10.10.1 transport udp port 1024

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 509**

```
list = [1, 2, 3, 4]
list[3] = 10
print(list)
```

Refer to the exhibit.What is the value of the variable list after the code is run ?

- A. [1,2,10]
- B. [1,2,3,10]
- C. [1,2,10,4]
- D. [1,10,10,10]

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 510**

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

- A. Class-Based Weighted Fair Queueing
- B. Link Fragmentation
- C. Low Larency Queuing
- D. Automatic Qos

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

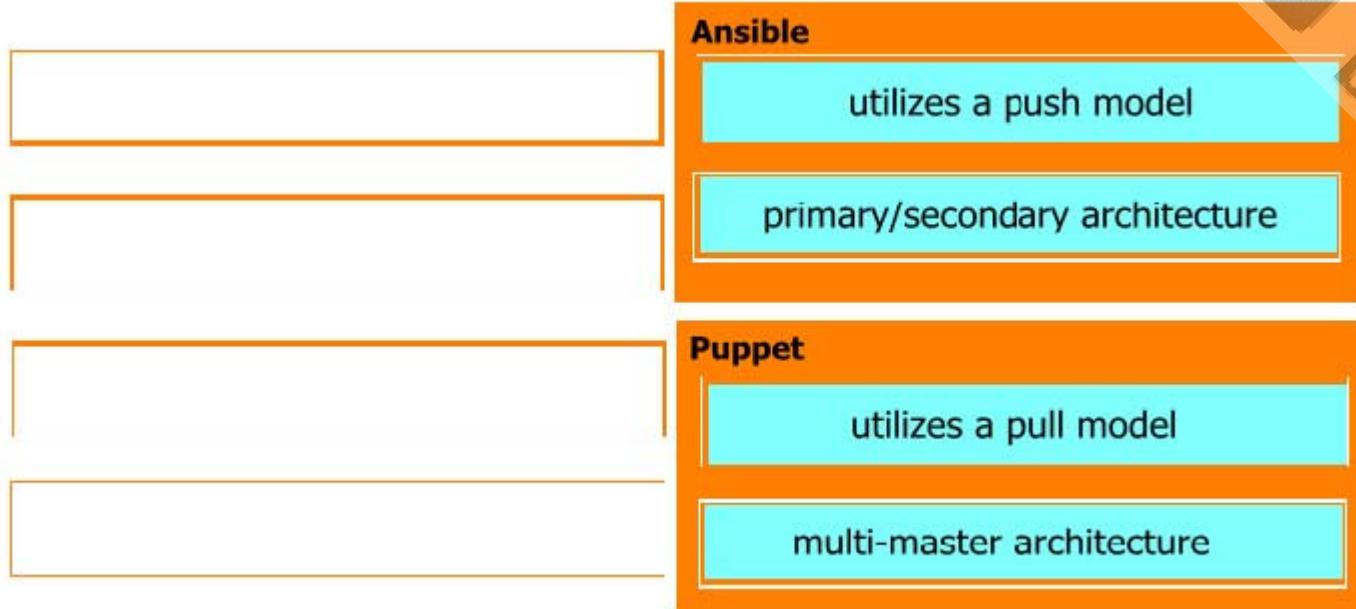
**QUESTION 511**

Drag and drop the characteristics from the left onto the orchestration tools they describe on the right.

**Select and Place:**

	<b>Ansible</b>
utilizes a pull model	
multi-master architecture	
primary/secondary architecture	<b>Puppet</b>
utilizes a push model	

Correct Answer:



**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 512**

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.

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.

It requires a process ID that is local to the router.

### EIGRP


### OSPF


**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)**

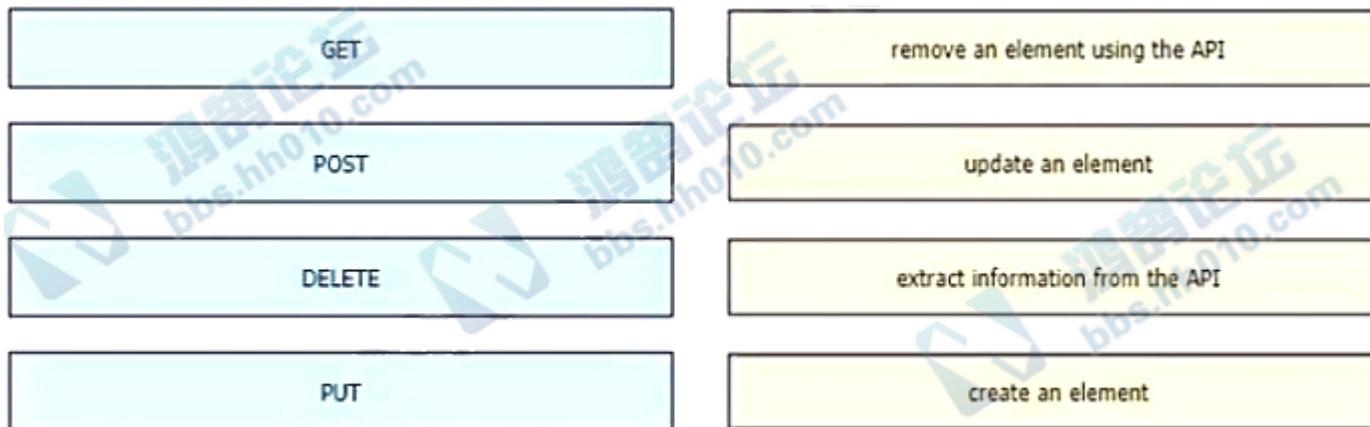
**Explanation**

**Explanation/Reference:**

**QUESTION 513**

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:**



Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 514

A network engineer is adding an additional 10Gps link to an exiting 2x10Gps LACP-based LAG to augment its capacity. Network standards require a bundle interface to be taken out of service if one of its member links goes down, and the new link must be added with minimal impact to the production network. Drag and drop the tasks that the engineer must perform from the left into the sequence on the right. Not all options are used.

**Select and Place:**

Execute the channel-group number mode active command to add the 10Gbps link to the existing bundle

Execute the channel-group number mode on command to add the 10Gbps link to the existing bundle

Execute the lacp min-bundle 3 command to set the minimum number of ports threshold

Validate the network layer of the 10Gbps link

Execute the channel-group number mode auto command to add the 10Gbps link to the existing bundle

Validate the physical and data link layers of the 10Gbps link

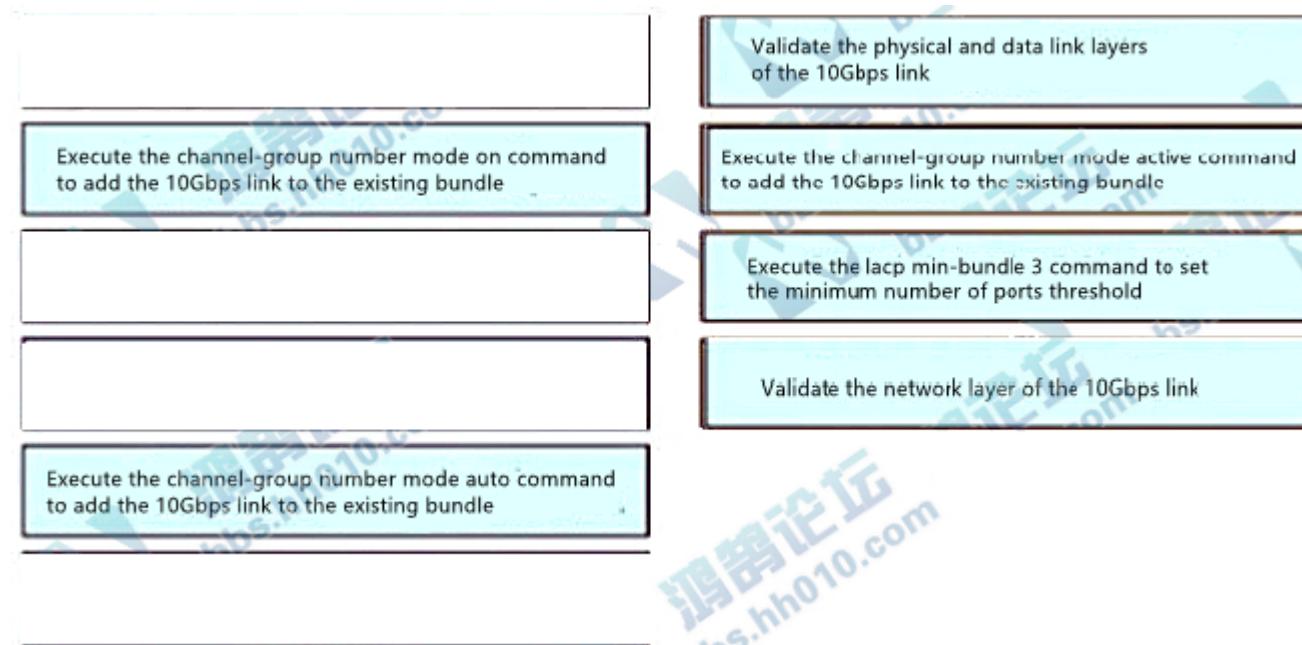
step1

step2

step3

step4

**Correct Answer:**



**Section:** (none)  
**Explanation**

**Explanation/Reference:**

**QUESTION 515**

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

hello packets are sent by default every 5 seconds on high-bandwidth links

metric is calculated using bandwidth and delay by default

cost is based on interface bandwidth

EIGRP

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

cost is based on interface bandwidth

Section: (none)

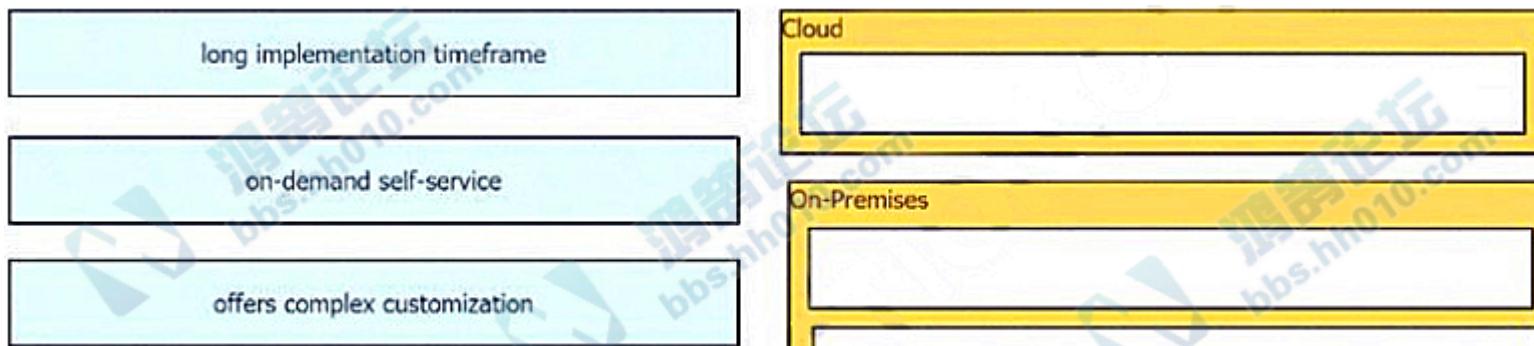
Explanation

Explanation/Reference:

**QUESTION 516**

Drag and drop the characteristics from the left onto the deployment models on the right.

Select and Place:



Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

**QUESTION 517**

What is the difference in dBm when an AP power increases from 25 mW to 100mW?

- A. 75dBm
- B. 150dBm
- C. 6dBm
- D. 125dBm

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 518**

Which free application make REST call against DNA center?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 519**

Which marking field is used only as an internal marking within a router?

- A. QoS Group
- B. Discard Eligibility
- C. IP Precedence
- D. MPLS Experimental

**Correct Answer:** A

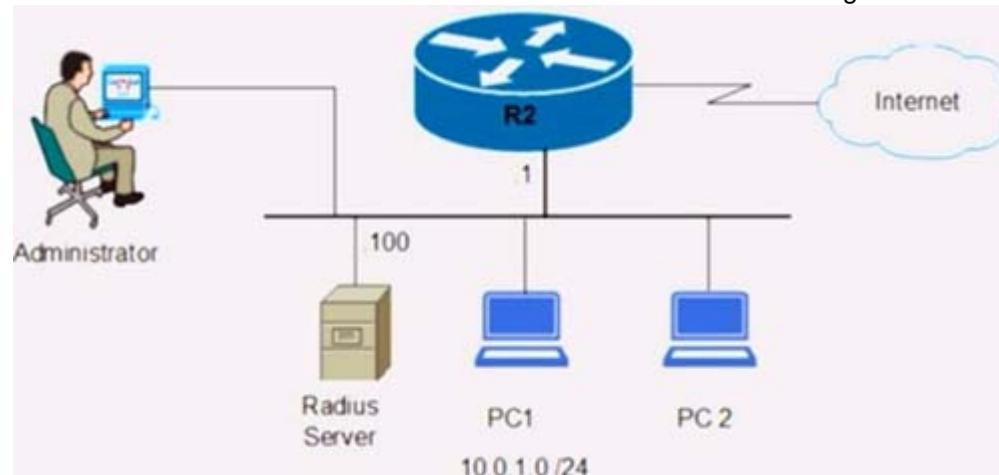
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 520**

Refer to the exhibit. Which command set enables router R2 to be configured via NETCONF?



- A. R2(config)#username Netconf privilege 15 password example\_password  
R2(config)#netconf-yang  
R2(config)# netconf-yang feature candidate-datastore
- B. R2(config)#snmp-server manager  
R2(config)#snmp-server community ENCOR ro
- C. R2(config)#snmp-server manager  
R2(config)#snmp-server community ENCOR rw
- D. R2(config)#netconf  
R2(config)#ip http secure server

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 521**

Which two actions are recommended as security best practice to protect REST API (Choose two)

- A. Use TACACACS+ authentication
- B. Enable dual authentication of the session
- C. Enable out-of band authentication
- D. Use SSL for encryption
- E. Use a password hash

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 522**

What are the two protocols redistributed into OMP?

- A. OSPF
- B. RIP
- C. LDP
- D. RSVP
- E. EIGRP

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 523**

An organization wants to use the cisco SD-WAN regionalized service-chaining feature to optimize cost and user experience with application in the network, which allows branch routers to analyze and steer traffic toward the required network function. Which feature meets this requirement?

- A. Cloud Services Platform
- B. VNF Service Channing
- C. Cloud onRamp for Colocation
- D. Cloud onRamp for IaaS

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 524**

A customer has two Cisco WLCs that manage separate APs throughout a building. Each WLC advertises the same SSID but terminates on different interfaces. Users report that they drop their connections and change IP addresses when roaming. Which action resolves this issue?

- A. Configure high availability
- B. Enable test roaming
- C. Enable client load balancing
- D. Configure mobility groups

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 525**

Refer to the exhibit. What is displayed when the code is run?

```
def main():
 print("The answer is " + str(magic(5)))

def magic(num):
 try:
 answer = num + 2 * 10
 except:
 answer = 100
 return answer

main()
```

- A. The answer is 25
- B. The answer is 70
- C. The answer is 5
- D. The answer is 100

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 526**

A script contains the statement “while loop != 999:”. Which value terminates the loop?

- A. A value less than or equal to 999
- B. A value greater than or equal to 999
- C. A value not equal to 999
- D. A value equal to 999

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 527**

Which CISCO SD-WAN component authenticates the routers and the vSmart controllers?

- A. vAnalytics
- B. vBond orchestrator
- C. vEdge
- D. vManage NMS

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 528**

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

- A. Aggressive load balancing
- B. Dynamic transmit power control
- C. Priority queuing
- D. Fastlane

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 529**

What is a characteristic of an AP operating in FlexConnect Mode?

- A. All traffic traverses the WLC to ensure policy enforcement on client traffic
- B. Forwarding continues when the AP loses connectivity to the WLC

- C. APs connect in a mesh topology and elect a root AP
- D. FlexConnect enables an AP to connect to multiple WLCs

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 530**

Refer to the exhibit. An engineer must configure an ERSPAN tunnel that mirrors traffic from Linux1 on Switch1 to Linux2 on Switch2. Which command must be added to the source configuration to enable the ERSPAN tunnel?



Switch1#show ip int br

Interface	IP-Address	OK?	Method	Status	Protocol
GigabitEthernet1	192.168.1.1	YES	manual	up	up
GigabitEthernet2	172.16.40.10	YES	manual	administratively down	down
Loopback0	172.16.10.10	YES	manual	up	up

Switch2#show ip int br

Interface	IP-Address	OK?	Method	Status	Protocol
GigabitEthernet1	192.168.1.2	YES	manual	up	up
GigabitEthernet2	172.16.20.10	YES	manual	up	up
Loopback0	10.10.10.10	YES	manual	up	up

Switch1(config)#monitor session 1 type erspan-source

Switch1(config-mon-erspan-src)#source interface gigabitethernet1

Switch1(config-mon-erspan-src)#destination

Switch1(config-mon-erspan-src-dst)#+

Switch1(config-mon-erspan-src-dst)# origin ip address 172.16.10.10

Switch2(config)#monitor session 1 type erspan-destination

Switch2(config-mon-erspan-src)#destination interface gigabitethernet2

Switch2(config-mon-erspan-src)#source

Switch2(config-mon-erspan-src-dst)#erspan-id 110

Switch2(config-mon-erspan-src-dst)# ip address 10.10.10.10

Switch2(config-mon-erspan-src-dst)#+

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 531**

Refer to the exhibit. An engineer configured the Bonjour Gateway on a Cisco WLC to support Apple Airplay. Users cannot see Apple TV while on the WLAN. Which action resolves this issue?

**General**   **Security**   **QoS**   **Policy-Mapping**   **Advanced**

Scan Defer Priority	0 1 2 3 4 5 6 7	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Scan Defer Time(msecs)	100	<input type="text"/>
<b>FlexConnect</b>		
FlexConnect Local Switching	<input checked="" type="checkbox"/>	Enabled
FlexConnect Local Auth	<input type="checkbox"/>	Enabled
Learn Client IP Address	<input checked="" type="checkbox"/>	Enabled
Vlan based Central Switching	<input type="checkbox"/>	Enabled
Central DHCP Processing	<input type="checkbox"/>	Enabled
Override DNS	<input type="checkbox"/>	Enabled
NAT-PAT	<input type="checkbox"/>	Enabled
Central Assoc	<input type="checkbox"/>	Enabled
<b>11k</b>		
Neighbor List	<input checked="" type="checkbox"/>	Enabled
Neighbor List Dual Band	<input type="checkbox"/>	Enabled
<b>Radius Client Profiling</b>		
DHCP Profiling	<input type="checkbox"/>	
HTTP Profiling	<input type="checkbox"/>	
<b>Local Client Profiling</b>		
DHCP Profiling	<input type="checkbox"/>	
HTTP Profiling	<input type="checkbox"/>	
<b>Universal AP Admin Support</b>		
Universal AP Admin	<input type="checkbox"/>	
<b>11v BSS Transition Support</b>		
BSS Transition	<input checked="" type="checkbox"/>	
Optimized Roaming Disassociation Timer(0 to 40 TBTT)	40	<input type="text"/>
BSS Max Idle Service	<input checked="" type="checkbox"/>	
Directed Multicast Service	<input checked="" type="checkbox"/>	
<b>mDNS</b>		
mDNS Snooping	<input type="checkbox"/>	Enabled
<b>TrustSec</b>		
Security Group Tag	0	<input type="text"/>

- A. Disable Neighbor List Dual Band
- B. Enable mDNS Snooping
- C. Disable Directed Multicast
- D. Enable FlexConnect Local Switching

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 532**

Refer to the exhibit. What is the value of the variable list after the code is run?

```
list = [1, 2, 3, 4]
list[3] = 10
print(list)
```

- A. [1, 10, 10, 10]
- B. [1, 2, 10]
- C. [1, 2, 10, 4]
- D. [1, 2, 3, 10]

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 533**

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?

```
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 4
password 0 test123
login authentication group2
```

- A. the username "cisco" and the password "cisco123"
- B. no username and only the password "test123"
- C. no username and only the password "cisco123"
- D. the username "cisco" and the password "cisco"

**Correct Answer:** C

**Section:** (none)

## Explanation

### Explanation/Reference:

#### QUESTION 534

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

**Correct Answer:** B

**Section:** (none)

## Explanation

### Explanation/Reference:

#### QUESTION 535

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

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

**Correct Answer:** AD

**Section:** (none)

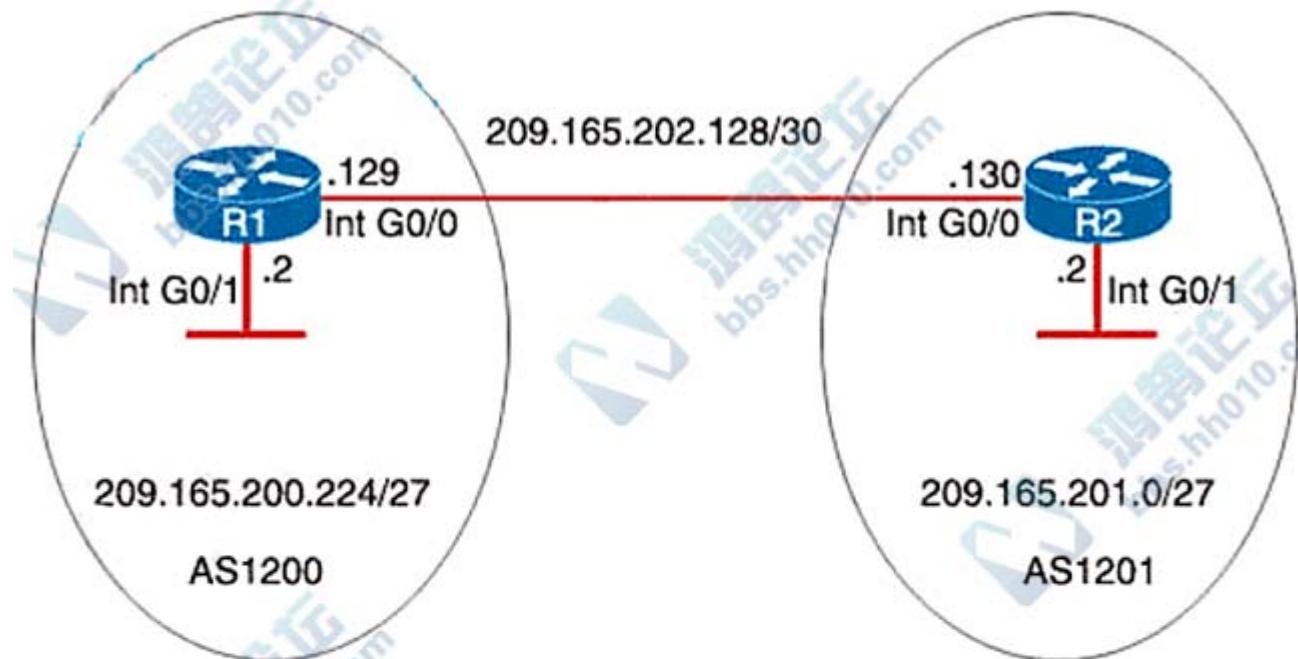
## Explanation

### Explanation/Reference:

#### QUESTION 536

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?



```
hostname R2
!
interface GigabitEthernet0/0
ip address 209.165.202.130 255.255.255.252
!
router bgp 1201
log-neighbor-changes
network 209.165.201.0 mask 255.255.255.224
neighbor 209.165.202.129 remote-as 1200
```

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 209.165.201.0 mask 255.255.255.224  
neighbor 209.165.202.130 remote-as 1201
- C. router bgp 1200  
network 209.165.200.224 mask 255.255.255.224  
neighbor 209.165.202.130 remote-as 1200
- D. router bgp 1200  
network 209.165.200.224 mask 255.255.255.224  
neighbor 209.165.201.2 remote-as 1200

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 537**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

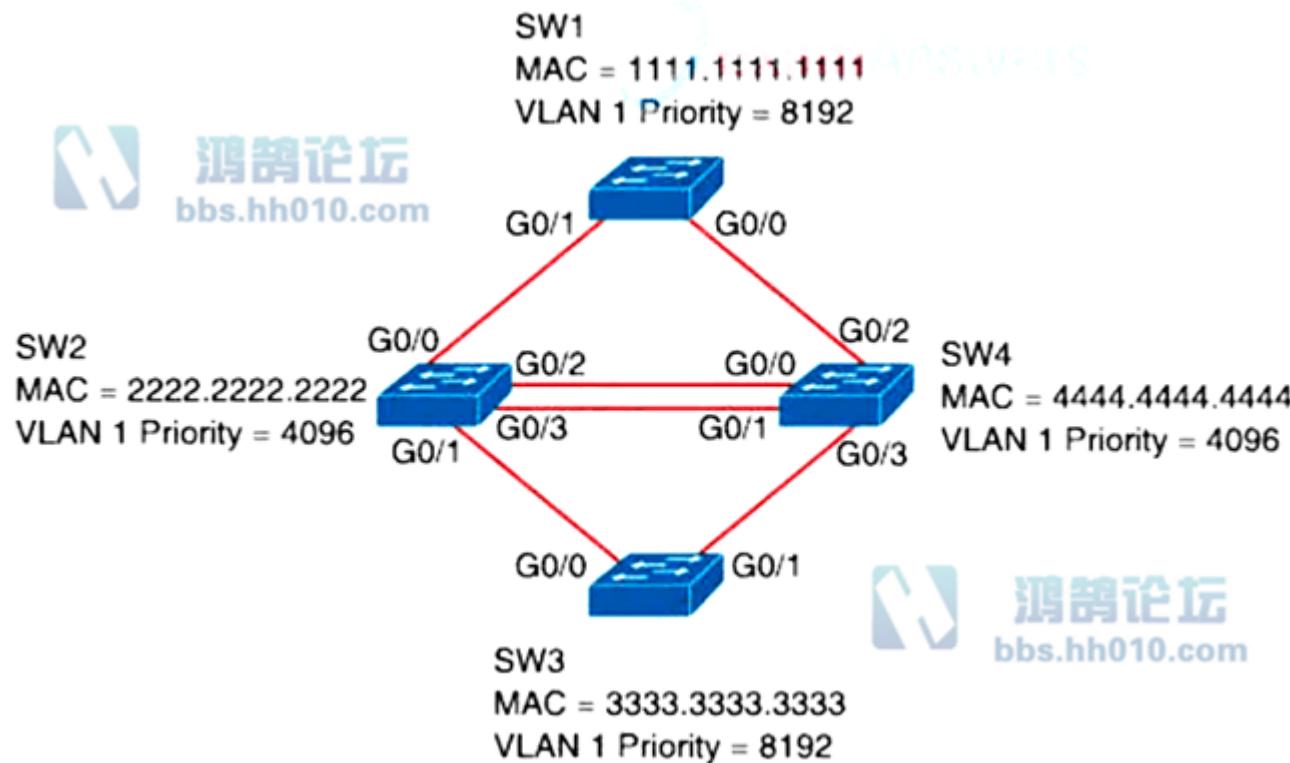
**Explanation/Reference:**

#### **QUESTION 538**

Refer the exhibit. Which configuration elects SW4 as the root bridge for VLAN 1 and puts G0/2 on SW2 into a blocking state?



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- A. SW4(config)#spanning-tree vlan 1 priority 32768  
!  
SW2(config)#interface G0/2  
SW2(config-if)#spanning-tree vlan 1 port-priority 0
- B. SW4(config)#spanning-tree vlan 1 priority 32768  
!  
SW2(config)#int G0/2  
SW2(config-if)#spanning-tree cost 128
- C. SW4(config)#spanning-tree vlan 1 priority 0  
!  
SW2(config)#int G0/2  
SW2(config-if)#spanning-tree cost 128
- D. SW4(config)#spanning-tree vlan 1 priority 0

```
!
SW2(config)#interface G0/2
SW2(config-if)#spanning-tree vlan 1 port-priority 64
```

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 539

Which Python code snippet must be added to the script to save the returned configuration as a JSON-formatted file?

```
import json
import requests
```

```
Creds = ("admin", "S!415535759SPtx")
Headers = { "Content-Type" : "application/yang-data+json",
 "Accept" : "application/yang-data+json" }
BaseURL = https://cpe/restconf/data
URL = baseURL + "/Cisco-IOS-XE-native/interface/GigabitEtherenet"
```

```
Response = requests.get(URL, auth = Creds, headers = Headers, verify = False)
```

- A. with open("ifaces.json", "w") as OutFile:  
 OutFile.write(Response.text)
- B. with open("ifaces.json", "w") as OutFile:  
 OutFile.write(Response.json())
- C. with open("ifaces.json", "w") as OutFile:  
 JSONResponse = json.loads(Response.text)  
 OutFile.write(JSONResponse)
- D. with open("ifaces.json", "w") as OutFile:  
 OutFile.write(Response)

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 540**

Refer to the exhibit. An engineer must configure an ERSPAN session with the remote end of the session 10.10.0.1. Which commands must be added to complete the configuration?

```
Device> enable
Device# configure terminal
Device(config)# monitor session 1 type erspan-source
Device(config-mon-erspan-src)# description source1
Device(config-mon-erspan-src)# source interface GigabitEthernet1/0/1 rx
Device(config-mon-erspan-src)# source interface GigabitEthernet1/0/4 - 8 tx
Device(config-mon-erspan-src)# source interface GigabitEthernet1/0/3
Device(config-mon-erspan-src)# destination
Device(config-mon-erspan-src-dst)# erspan-id 100
Device(config-mon-erspan-src-dst)# origin ip address 10.1.0.1
Device(config-mon-erspan-src-dst)# ip prec 5
Device(config-mon-erspan-src-dst)# ip ttl 32
Device(config-mon-erspan-src-dst)# mtu 1700
Device(config-mon-erspan-src-dst)# origin ip address 10.10.0.1
Device(config-mon-erspan-src-dst)# vrf 1
Device(config-mon-erspan-src-dst)# no shutdown
Device(config-mon-erspan-src-dst)# end
```

- A. Device(config)# monitor session 1 type erspan-source  
Device(config-mon-erspan-src)# destination

- Device(config-mon-erspan-src-dst)#no origin ip address 10.10.0.1  
Device(config-mon-erspan-src-dst)#ip address 10.10.0.1
- B. Device(config)# monitor session 1 type erspan-destination  
Device(config-mon-erspan-src)# source  
Device(config-mon-erspan-src-dst)#origin ip address 10.1.0.1
- C. Device(config)# monitor session 1 type erspan-source  
Device(config-mon-erspan-src)# destination  
Device(config-mon-erspan-src-dst)#no origin ip address 10.10.0.1  
Device(config-mon-erspan-src-dst)#ip destination address 10.10.0.1
- D. Device(config)# monitor session 1 type erspan-source  
Device(config-mon-erspan-src)# destination  
Device(config-mon-erspan-src-dst)#no vrf 1

**Correct Answer:** A

**Section:** (none)

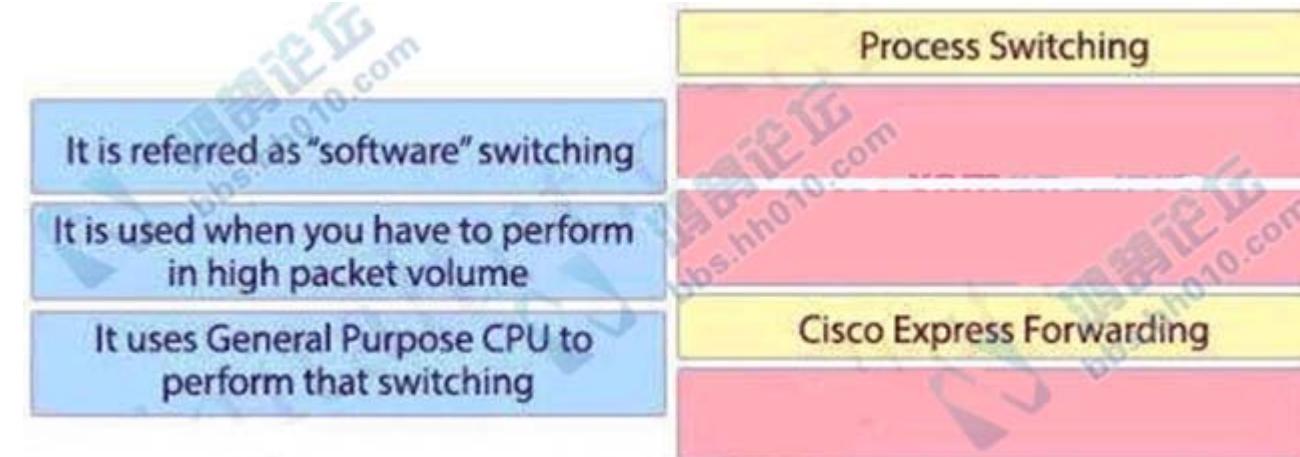
**Explanation**

**Explanation/Reference:**

#### QUESTION 541

Drag and drop packet switching architecture from the left onto the correct positions on the right.

**Select and Place:**



Correct Answer:

	Process Switching
	It is referred as "software" switching
	It uses General Purpose CPU to perform that switching
	Cisco Express Forwarding
	It is used when you have to perform in high packet volume

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 542**

Drag and drop the characteristics from the left onto the routing protocol types on the right.

Select and Place:

	OSPF
The path metrics are complex	
The path metric is simple and based on interface cost	
The summary can be interface based	EIGRP
The route summary is not interface based	

Correct Answer:

	OSPF
	The path metric is simple and based on interface cost
	The route summary is not interface based
	EIGRP
	The path metrics are complex
	The summary can be interface based

Section: (none)

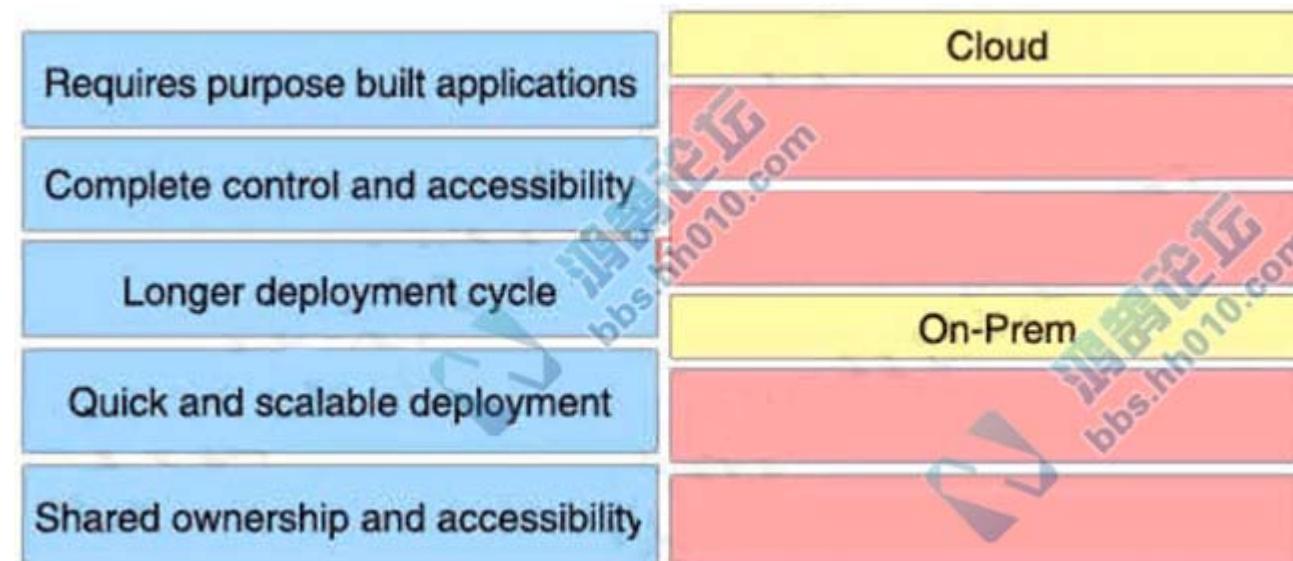
Explanation

Explanation/Reference:

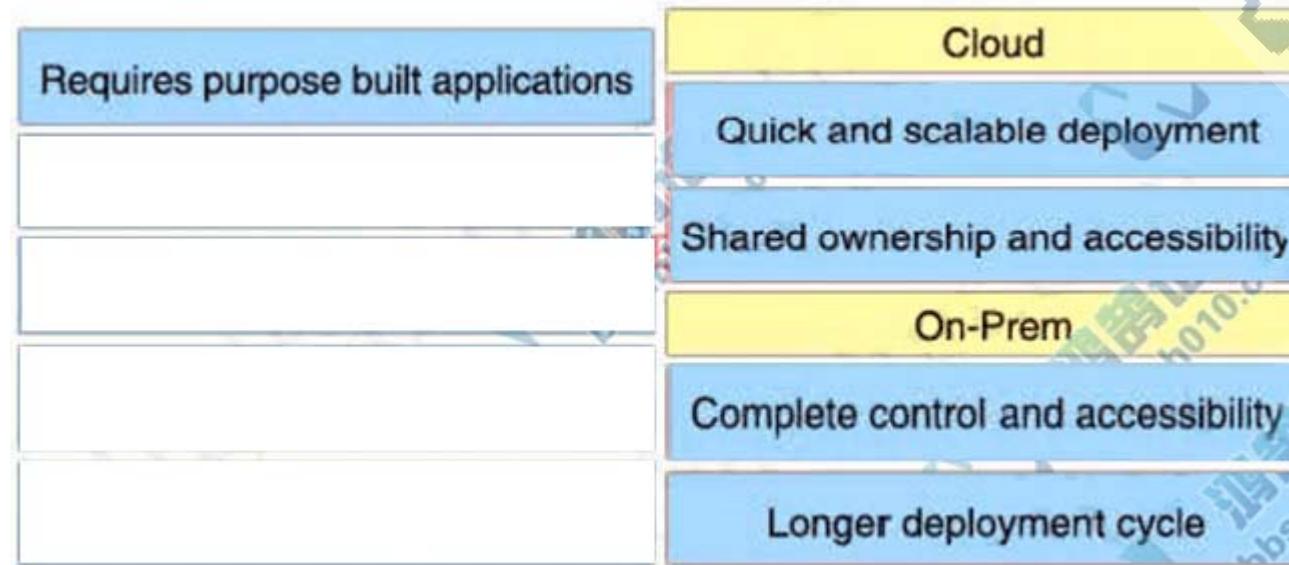
**QUESTION 543**

Drag and drop the characteristics from the left onto the correct infrastructure deployment types on the right.

Select and Place:



Correct Answer:



Section: (none)  
Explanation

Explanation/Reference:

**QUESTION 544**

Drag and drop the characteristics from the left onto the technology types on the right.

Select and Place:

Puppet is used for this type of technology.	Configuration Management
Ansible is used for this type of technology.	
uses machine learning to identify and resolve issues	
This type of technology provides automation across multiple technologies and domains.	Orchestration
This type of technology enables consistent configuration of infrastructure resources.	

Correct Answer:

	Configuration Management
	Ansible is used for this type of technology.
uses machine learning to identify and resolve issues	This type of technology enables consistent configuration of infrastructure resources.
	Orchestration
	Puppet is used for this type of technology.
	This type of technology provides automation across multiple technologies and domains.



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 545**

What is the result when an active route processor fails in a design that combines NSF with SSO?

- A. An NSF-aware device immediately updates the standby route processor RIB without churning the network.
- B. The standby route processor temporarily forwards packets until route convergence is complete.
- C. An NSF-capable device immediately updates the standby route processor RIB without churning the network.
- D. The standby route processor immediately takes control and forwards packets along known routes

**Correct Answer:** D

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 546**

An engineer uses the Design workflow to create a new network infrastructure in Cisco DNA Center. How is the physical network device hierarchy structured?

- A. by location
- B. by role
- C. by organization
- D. by hostname naming convention

**Correct Answer:** A

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 547**

Refer to the exhibit. A network engineer must configure NETCONF. After creating the configuration, the engineer gets output from the command show line, but not

from show runningconfig. Which command completes the configuration?

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

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 548**

Refer to the exhibit. Router BRDR-1 is configured to receive the 0.0.0.0/0 and 172.17.1.0/24 network via BGP and advertise them into OSPF area 0. An engineer has noticed that the OSPF domain is receiving only the 172.17.1.0/24 route and default route 0.0.0.0/0 is still missing. Which configuration must the engineer apply to resolve the problem?

```
RP/0/0/CPU0:BRDR-1#show route ipv4 0.0.0.0
Routing entry for 0.0.0.0/0
 Known via "bgp 65001", distance 20, metric 0, candidate default path
 Tag 65002, type external
 Installed Jan 2 08:40:59.889 for 00:01:18
 Routing Descriptor Blocks
 100.65.19.1, from 100.65.19.1, BGP external
 Route metric is 0
 No advertising protos.

RP/0/0/CPU0:BRDR-1#show run router ospf
router ospf 1
 redistribute bgp 65001 route-policy BGP-TO-OSPF
 area 0
 mpls traffic-eng
 interface Loopback0
 interface GigabitEthernet0/0/0/0.92
 interface GigabitEthernet0/0/0/0.3132
 mpls traffic-eng router-id Loopback0

RP/0/0/CPU0:BRDR-1#show rpl route-policy BGP-TO-OSPF
route-policy BGP-TO-OSPF
 if destination in (0.0.0.0/0) then
 set metric-type type-1
 endif
 set metric-type type-2
 set ospf-metric 100
end-policy
```

- A. router ospf 1  
 default-information originate always  
 end
- B. router ospf 1  
 redistribute bgp 65001 metric 100 route-policy BGP-TO-OSPF  
 end

- C. router ospf 1  
  default-metric 100  
  end
- D. router ospf 1  
  default-information originate  
  end

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 549**

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

- A. event manager applet ENABLE OSPF DEBUG  
  event syslog pattern "%OSPF-5-ADJCHG 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"
- B. event manager applet ENABLE OSPF DEBUG  
  event syslog pattern "%OSPF-5-ADJCHG Process 5,Nbr 1.1.1.1 on serial0/0 from LOADING to FULL"  
  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-1-ADJCHG Process 5,Nbr 1.1.1.1 on serial0/0 from FULL to DOWN"  
  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"

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 550**

An engineer is implementing a Cisco MPLS TE tunnel to improve the streaming experience for the clients of a video-on-demand server. Which action must the engineer perform to configure extended discovery to support the MPLS LDP session between the headend and tailend routers?

- A. Configure the interface bandwidth to handle TCP and UDP traffic between the LDP peers
- B. Configure a Cisco MPLS TE tunnel on both ends of the session
- C. Configure an access list on the interface to permit TCP and UDP traffic
- D. Configure a targeted neighbor session.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 551**

An engineer is implementing a route map to support redistribution within BGP. The route map must be configured to permit all unmatched routes. Which action must the engineer perform to complete this task?

- A. Include a permit statement as the first entry
- B. Include at least one explicit deny statement
- C. Remove the implicit deny entry
- D. Include a permit statement as the last entry

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 552**

Refer to the exhibit. A network operator is attempting to configure an IS-IS adjacency between two routers, but the adjacency cannot be established. To troubleshoot the problem, the operator collects this debugging output. Which interfaces are misconfigured on these routers?

```
RP/0/0/CPU0:R2#debug isis adjacencies
RP/0/0/CPU0:Apr 2 20:57:00.421 : isis[1010]: RECV P2P IIH (L2)
from GigabitEthernet0/0/0/0 SNPA fa16.3ebe.a7bc: System ID R2,
Holdtime 30, length 1429
RP/0/0/CPU0:Apr 2 20:57:01.761 : isis[1010]: SEND P2P IIH (L1)
on GigabitEthernet0/0/0/0: Holdtime 30s, Length 41
```

- A. The peer router interface is configured as Level 1 only, and the R2 interface is configured as Level 2 only
- B. The R2 interface is configured as Level 1 only, and the Peer router interface is configured as Level 2 only
- C. The R2 interface is configured as point-to-point, and the peer router interface is configured as multipoint.
- D. The peer router interface is configured as point-to-point, and the R2 interface is configured as multipoint.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 553**

What occurs when a high bandwidth multicast stream is sent over an MVPN using Cisco hardware?

- A. The traffic uses the default MDT to transmit the data only if it is a (S,G) multicast route entry
- B. A data MDT is created to if it is a (\*, G) multicast route entries
- C. A data and default MDT are created to flood the multicast stream out of all PIM-SM neighbors.
- D. A data MDT is created to allow for the best transmission through the core for (S, G) multicast route entries.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 554**

AN engineer is implementing MPLS OAM to monitor traffic within the MPLS domain. Which action must the engineer perform to prevent from being forwarded beyond the service provider domain when the LSP is down?

- A. Disable IP redirects only on outbound interfaces
- B. Implement the destination address for the LSP echo request packet in the 127.x.y.z/8 network
- C. Disable IP redirects on all ingress interfaces
- D. Configure a private IP address as the destination address of the headend router of Cisco MPLS TE.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 555**

An engineer must configure AAA on a cisco 9800 WLC for central web authentication.which two commands are needed to accomplish this task?(choose two)

- A. (Cisco Controller)>config wlan aaa-override disable<wlan-id>
- B. (Cisco Controller)>config radius acct add 10.10.10.12 1812 SECRET
- C. (Cisco Controller)>config wlan aaa-override enable<wlan-id>
- D. Device(config-locsvr-da-radius)#client 10.10.10.12 server-key 0 SECRET
- E. Device(config)#aaa server radius dynamic-author

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 556**

An engineer configures GigabitEthernet 0/1 for VRRP group 115.The router must assume the primary role when it has the highest priority in the group.which command set is required to complete this task?

```
interface GigabitEthernet0/1
ip address 10.10.10.2 255.255.255.0
vrrp 115 ip 10.10.10.1
vrrp 115 authentication 45451452214
```

- A. Router(config-if)#vrrp 115 priority 100
- B. Router(config-if)#standby 115 priority 100  
Router(config-if)#standby 115 preempt
- C. Router(config-if)#vrrp 115 track 1 decrement 100  
Router(config-if)#vrrp 115 preempt
- D. Router(config-if)#vrrp 115 track 1 decrement 10  
Router(config-if)#vrrp 115 preempt

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 557**

what is required for a virtual machine to run?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 558**

Under which network conditions is an outbound QoS policy that is applied on a router WAN interface most beneficial?

- A. under network convergence conditions
- B. under traffic classification and marking conditions
- C. under interface saturation conditions
- D. under all network conditions

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 559**

Which network devices secure API platform?

- A. next-generation intrusion detection systems
- B. Layer 3 transit network devices
- C. content switches
- D. web application firewalls

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 560**

Which protocol is used to encrypt control plane traffic between SD-WAN controllers and SDWAN endpoints?

- A. DTLS
- B. IPsec
- C. PGP
- D. HTTPS

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 561**

An engineer must configure the strongest password authentication to locally authenticate on a router. Which configuration must be used?

- A. username netadmin secret 5 \$1\$b1JUSkZbBS1Pyh4OzwXyZ1kSz2
- B. username netadmin secret \$15b1JuSk404850110QzwXyZ1k Sz2
- C. line Console 0  
password \$15b1Ju\$
- D. username netadmin secret 9 \$9\$vFpMfBelbRVV8SseX/bDActuV

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 562**

Which two items are found in YANG data models? (Choose two.)

- A. HTTP return codes
- B. rpc statements
- C. JSON schema
- D. container statements
- E. XML schema

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 563**

Which threat defence mechanism, when deployed at the network perimeter, protects against zero-day attacks?

- A. intrusion prevention
- B. stateful inspection
- C. sandbox
- D. SSL decryption

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 564**

What is a characteristic of MACsec?

- A. 802.1AE provides encryption and authentication services
- 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 is built between the host and switch using the MKA protocol using keys generated via the Diffie-Hellman algorithm (anonymous encryption mode)
- D. 802.1AE is negotiated using Cisco AnyConnect NAM and the SAP protocol

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 565**

What are two benefits of implementing a Cisco SD-WAN architecture? (Choose two)

- A. It allows configuration of application-aware policies with real time enforcement
- B. It enforces a single, scalable, hub-and-spoke topology
- C. It improves endpoint protection by integrating embedded and cloud security features
- D. It provides resilient and effective traffic flow using MPLS
- E. It simplifies endpoint provisioning through standalone router management

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 566**

What is the role of vSmart in a Cisco SD-WAN environment ?

- A. to establish secure control plane connections
- B. to monitor,configure, and maintain SD-WAN devices
- C. to perform initial authentication of devices
- D. to provide secure data plane connectivity over WAN links

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 567**

```
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 yyymmdd representation
- C. The code converts time to the "year/month/day" time format
- D. The code encrypts a base64 decrypted password

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 568**

Refer to the exhibit. An engineer is troubleshooting an application running on Apple phones. The application Is receiving incorrect QoS markings. The systems administrator confirmed that ail configuration profiles are correct on the Apple devices. Which change on the WLC optimizes QoS for these devices?



- A. Enable Fastlane
- B. Set WMM to required
- C. Change the QoS level to Platinum
- D. Configure AVC Profiles

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 569**

What is a characteristic of Cisco DNA Northbound APIs?

- A. They simplify the management of network infrastructure devices.
- B. They enable automation of network infrastructure based on intent.
- C. They utilize RESTCONF.
- D. They utilize multivendor support APIs.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 570**

What is a benefit of Type 1 hypervisors?

- A. Administrators are able to load portable virtual machine packages in OVA or QCOW2 formats.
- B. Network engineers are able to create virtual networks or interconnect virtual machines in Layer 2 topologies
- C. Operators are able to leverage orchestrators to manage workloads that run on multiple Type 1 hypervisors
- D. Storage engineers are able to leverage VMDK files to provide storage to virtual machine.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 571**

Which technology uses network traffic telemetry, contextual information, and file reputation to provide insight into cyber threats?

- A. threat defense
- B. security services
- C. security intelligence
- D. segmentation

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 572**

What is required for intercontroller Layer 3 roaming?

- A. Mobility groups are established between wireless controllers.
- B. The management VLAN is present as a dynamic VLAN on the second WLC.
- C. WLCs use separate DHCP servers.
- D. WLCs have the same IP addresses configured on their interfaces.

**Correct Answer:** A

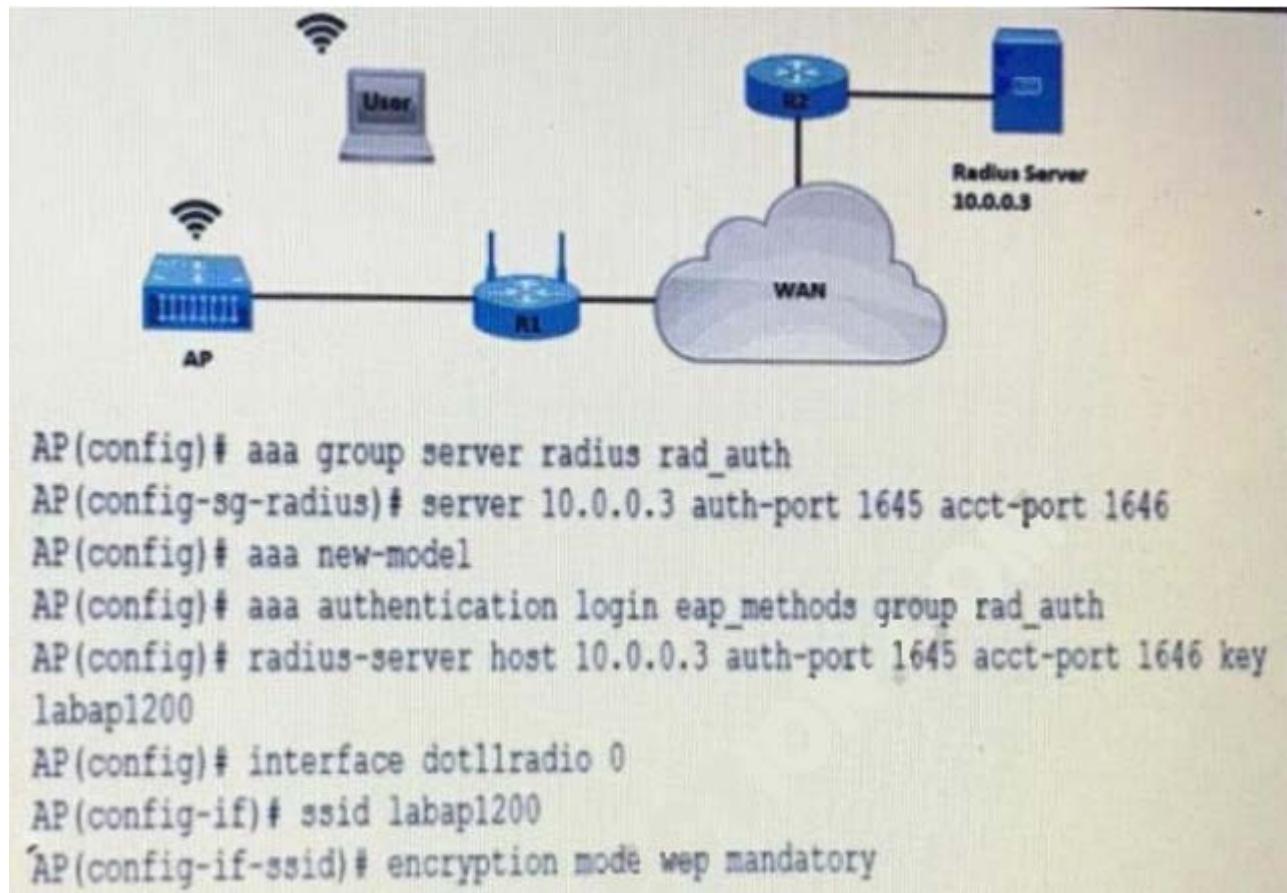
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 573**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 574**

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

- A. The MAC address table supports partial matches
- B. TCAM requires an exact match. TCAM is used to make L2 forwarding decisions.CAM is used to build routing tables.
- C. Router prefix lookups happen in TCAM . MAC address table lookups happen in CAM
- D. The MAC address table is contained in TCAM.ACL and QoS information is stored in CAM

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 575**

Which architectural component enables a zero-trust security model?

- A. control plane
- B. data plane
- C. management plane
- D. plug-and-play

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 576**

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

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

D. TrustSec

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 577**

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

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

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 578**

A network engineer is enabling HTTPS access to the core switch, which requires a certificate to be installed on the switch signed by the corporate certificate authority ,Which configuration commands are required to issue a certificate signing request from the core switch?

- A. Core-Switch(config)#crypto pki trustpoint Core-Switch  
Core-Switch(ca-trustpoint)#enrollment terminal  
Core-Switch(config)#crypto pki enroll Core-Switch
- B. Core-Switch(config)#crypto pki trustpoint Core-Switch  
Core-Switch(ca-trustpoint)#enrollment terminal  
Core-Switch(config)#ip http secure-trustpoint Core-Switch
- C. Core-Switch(config)#crypto pki enroll Core-Switch  
Core-Switch(config)#ip http secure-trustpoint Core-Switch

- D. Core-Switch(config)#ip http secure-trustpoint Core-Switch
- Core-Switch(config)#crypto pki enroll Core-Switch

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 579**

What is one primary REST security design principle?

- A. fail-safe defaults
- B. password hash
- C. adding a timestamp in requests
- D. OAuth

**Correct Answer:** A

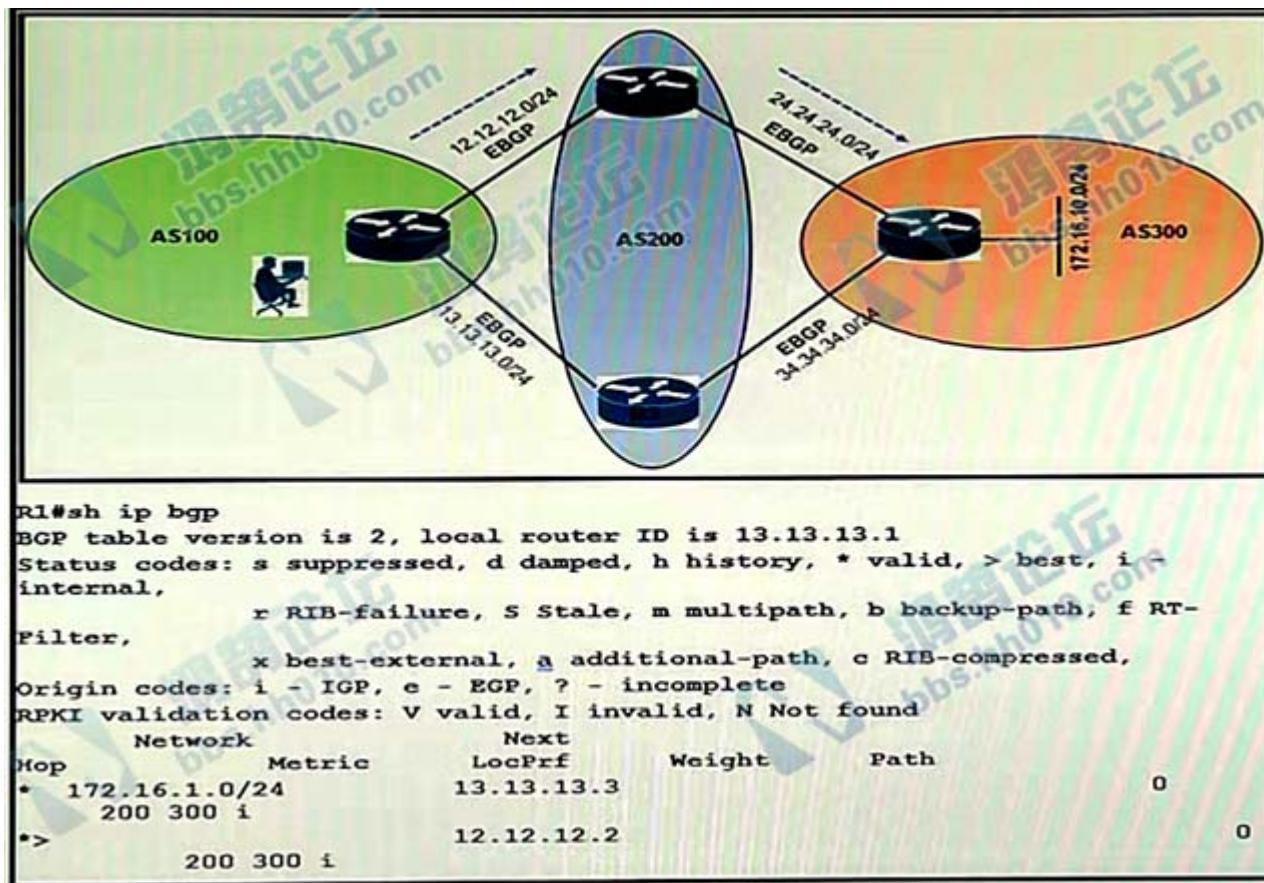
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 580**

Refer to the exhibit , An engineer is reaching network 172.16.10.0/24 via the R1-R2-R4 path.Which configuration forces the traffic to take a path of R1-R3-R4?



- A. R1(config)#router bgp 100  
 R1(config-router)#neighbor 13.13.13.3 weight 1  
 R1(config-router)#end
- B. R1(config)#route-map RM\_LOCAL\_PREF permit 10  
 R1(config-route-map)#set local-preference 101  
 R1(config-route-map)#exit  
 R1(config)#router bgp 100  
 R1(config-router)#neighbor 13.13.13.3 route-map RM\_LOCAL\_PREF in  
 R1(config-router)#end

R1#clear ip bgp 13.13.13.3 soft in

C. R1(config)#route-map RM\_AS\_PATH\_PREPEND  
R1(config-route-map)#set as-path prepend 200 200  
R1(config-route-map)#exit  
R1(config)frouter bgp 100  
R1(config-router)#neighbor 12.12.12.2 route-map RM\_AS\_PATH\_PREPEND in  
R1(config-router)#end  
R1#clear ip bgp 12.12.12.2 soft in

D. R2(config)#route-map RM\_MED permit 10  
R2(config-route-map)#set metric 1  
R2(config-route-map)#exit  
R2(config)#router bgp 200  
R2(config-router)#neighbor 12.12.12.1 route-map RM\_MED out  
R2(config-router)#end  
R2#clear ip bgp 12.12.12.1 soft out

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 581

Why would an engineer use YANG?

- A. to model data for NETCONF
- B. to transport data between a controller and a network device
- C. to translate JSON into an equivalent XML syntax
- D. to access data using SNMP

**Correct Answer:** A

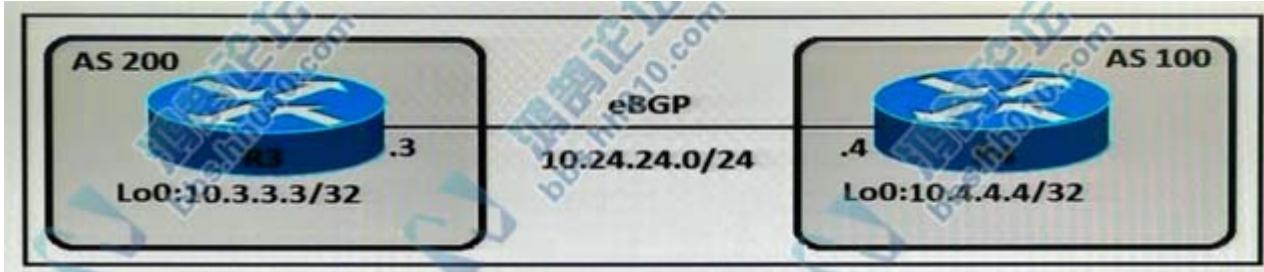
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 582**

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 10.4.4.4 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
- C. R3(config)#frouter 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 10.24.24.4 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
```

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 583**

By default, which virtual MAC address does HSRP group 16 use?

- A. c0:41:49:45:76:10
- B. 05:00:0c:07:ac:16
- C. 00:00:0c:07:ac:10
- D. 00:05:5c:07:0c:16

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 584**

When is the Design workflow used in Cisco DNA Center?

- A. in a greenfield deployment, with no existing infrastructure
- B. in a greenfield or brownfield deployment, to wipe out existing data
- C. in a brownfield deployment, to modify configuration of existing devices in the network
- D. in a brownfield deployment, to provision and onboard new network devices

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 585**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 586**

```
sw2(config)#track 1000 interface gigabitEthernet 0/0 line-protocol
sw2(config-track)# exit
sw2(config)# interface vlan 1000
sw2(config-if)# ip address 10.23.87.3 255.255.255.0
```

Refer to the exhibit. An engineer must configure HSRP for VLAN 1000 on SW2. The secondary switch must immediately take over the role of active router if the interlink with the primary switch fails. Which command set completes this task?

- A. sw2(config-if)# standby version 2



- sw2(config-if)# standby 1000 ip 10.23.87.1  
sw2(config-if)#standby 1000 priority 95  
sw2(config-if)# standby 1000 track 1000
- B. sw2(config-if)# standby 1000 ip 10.23.87.1  
sw2(config-if)#standby 1000 priority 95  
sw2(config-if)# standby 1000 preempt  
sw2(config-if)# standby 1000 track 1000
- C. sw2(config-if)# standby version 2  
sw2(config-if)# standby 1000 ip 10.23.87.1  
sw2(config-if)#standby 1000 priority 95  
sw2(config-if)# standby 1000 preempt  
sw2(config-if)# standby 1000 track 1000
- D. sw2(config-if)# standby version 2  
sw2(config-if)# standby 1000 ip 10.23.87.1  
sw2(config-if)#standby 1000 priority 95  
sw2(config-if)# standby 1000 preempt  
sw2(config-if)# standby 1000 track gigabitEthernet 0/0

**Correct Answer:** C

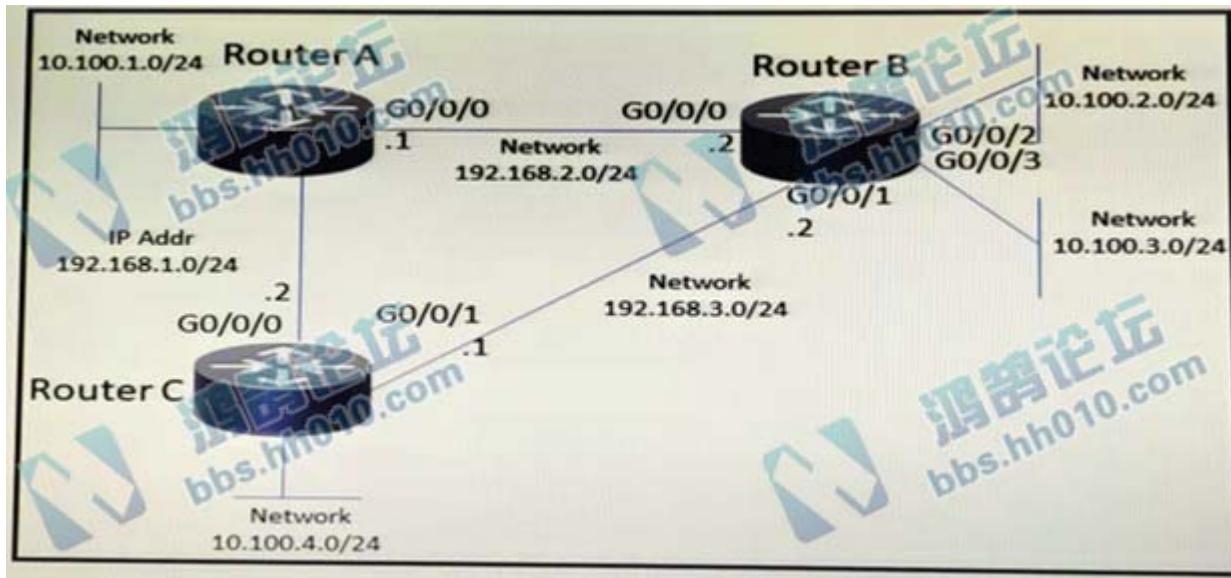
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 587**

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 routerB . Which configuration must be applied?



- A. 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
- B. RouterB(config)# access-list 101 permit ip 10.100.3.0 0.0.0.255 any  
 RouterB(config)#f access-list 101 deny any  
 RouterB(config)# int g0/0/0  
 RouterB(config-if)# ip access-group101 out  
 RouterB(config)# int g0/0/1  
 RouterB(config-if# ip access-group 101 out
- 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 g0/0/2  
 RouterB(config-if)# ip access-group 101 in
- D. RouterB(config)# access-list 101 permit ip 10.100.2.0 0.0.0.255 any  
 RouterB(config)# int g0/0/0  
 RouterB(config-in# ip access-group101 out

RouterB(config)# int g0/0/1  
RouterB(config-if)# ip access-group 101 out

Correct Answer: D

Section: (none)

Explanation

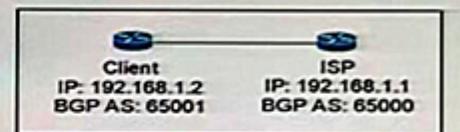
Explanation/Reference:

### QUESTION 588

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>[REDACTED]</ios-bgp:id>
<ios-bgp:neighbor>
<ios-bgp:id>[REDACTED]</ios-bgp:id>
<ios-bgp:remote-as>[REDACTED]</ios-bgp:remote-as>
</ios-bgp:neighbor>
<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:neighbor>
<ios-bgp:id>[REDACTED]</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>
```



[REDACTED] 192.168.1.1 [REDACTED] 192.168.1.2 [REDACTED] 65000 [REDACTED] 65001

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:bgp>
<ios-bgp:id> 65001 </ios-bgp:id>
<ios-bgp:neighbor>
<ios-bgp:id> 192.168.1.1 </ios-bgp:id>
<ios-bgp:remote-as> 65000 </ios-bgp:remote-as>
</ios-bgp:neighbor>
<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:neighbor>
<ios-bgp:id> 192.168.1.1 </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

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bbs.hh010.com

192.168.1.1 192.168.1.2 65000 65001

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 589

In a Cisco SD-WAN solution, which two functions are performed by OMP?(Choose two.)

- A. advertisement of network prefixes and their attributes
- B. configuration of control and data policies
- C. gathering of underlay infrastructure data
- D. delivery of crypto keys
- E. segmentation and differentiation of traffic

Correct Answer: AB

Section: (none)

## Explanation

Explanation/Reference:

### QUESTION 590

In a Cisco StackWise Virtual environment, which planes are virtually combined in the common logical switch?

- A. control and management
- B. control, and forwarding
- C. control and data
- D. management and data

Correct Answer: A

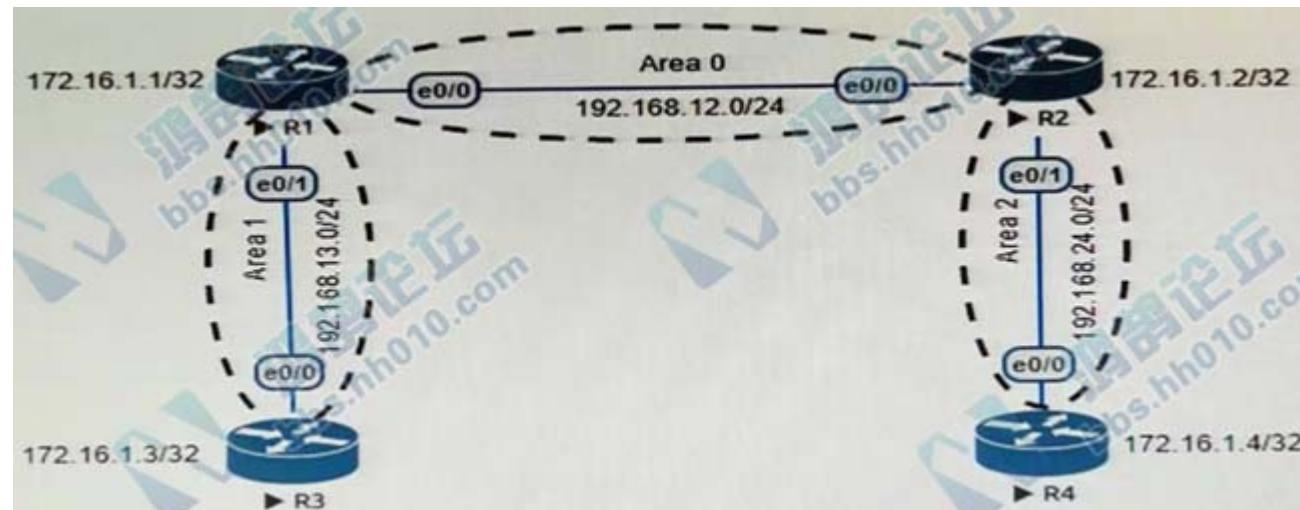
Section: (none)

## Explanation

Explanation/Reference:

### QUESTION 591

Refer to the exhibit.



An engineer must create a configuration that prevents R3 from receiving the LSA about 172.16.1.4/32. Which configuration set achieves this goal?

A. On R3

```
ip access-list standard R4_Lo
deny host 172.16.1.4
permit any
router ospf 200
distribute-list R4_Lo in
```

B. On R1

```
ip prefix-list INTO-AREA1 seq 5 deny 172.16.1.4/32
ip prefix-list INTO-AREA1 seq 10 permit 0.0.0.0/0 le 32
router ospf 200
area 1 filter-list prefix INTO-AREA1 out
```

C. On R1

```
ip prefix-list INTO-AREA1 seq 5 deny 172.16.1.4/32
ip prefix-list INTO-AREA1 seq 10 permit 0.0.0.0/0 le 32
router ospf 200
area 1 filter-list prefix INTO-AREA1 in
```

D. On R3

```
ip prefix-list INTO-AREA1 seq 5 deny 172.16.1.4/32
ip prefix-list INTO-AREA1 seq 10 permit 0.0.0.0/0 le 32
router ospf 200
area 1 filter-list prefix INTO-AREA1 in
```

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 592

Based on the router's API output in JSON format below, which Python code will display the value of the "hostname" key?

```
{
 "response": [
 {"family": "Switches",
 "macAddress": "00:41:49:45:76:00",
 "hostname": "SwitchIDF14",
 "upTime": "352 days, 6:17:26:10",
 "lastUpdated": "2020-07-12 21:15:29"
]
}
```

- A. json\_data= json.loads(response.text)  
print(json\_data['response'][0]['family'][hostname])
- B. json\_data = response.json()  
print(json\_data['response'][0]['hostname'])
- C. json\_data = json.loads(response.text)  
print(json\_data[response][0][hostname])
- D. json\_data = response.json()  
print(json\_data['response'][family][hostname])

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 593**

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. WPA2 Policy
- B. Web Policy

- C. CCKM
- D. Local Policy

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 594**

```
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 none
- 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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 595**

Drag and drop the snippets onto the blanks within the code to construct a script that adds a prefix list to a route map and sets the local preference.Not all options are used.

**Select and Place:**

```
{
 "@message-id": "101",
 "edit-config": {
 "target": {
 [REDACTED]
 },
 "config": {
 "native": {
 "ip": {
 "prefix-list": {
 "prefixes": {
 [REDACTED]
 "permit": {
 "prefix-only-list": {
 "prefix": "192.168.1.0/24"
 }
 }
 }
 }
 }
 }
 }
 }
 "route-map-without-order-seq": {
 [REDACTED] "10",
 "set": {
 "local-preference": "200"
 },
 [REDACTED] {
 "ip": {
 "address": {
 "prefix-list": "100"
 }
 }
 }
 }
}
```

```
"running": null
"seq_no":
"config": null
"permit":
"match":
"name": "100",
```



**Correct Answer:**

```
{
 "@message-id": "101",
 "edit-config": {
 "target": {
 "running": null
 },
 "config": {
 "native": {
 "ip": {
 "prefix-list": {
 "prefixes": {
 "name": "100",
 "permit": {
 "prefix-only-list": {
 "prefix": "192.168.1.0/24"
 }
 }
 }
 }
 }
 }
 }
 }
 "route-map-without-order-seq": {
 "permit": "10",
 "set": {
 "local-preference": "200"
 },
 "match": {
 "ip": {
 "address": {
 "prefix-list": "100"
 }
 }
 }
 }
}
```

"seq\_no":  
"config": null  
[ ]  
[ ]  
[ ]



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 596**

Which two parameters are examples of a QoS traffic descriptor?(Choose two.)

- A. packet size
- B. ToS
- C. bandwidth
- D. MPLS EXP bits
- E. DSCP

**Correct Answer:** BE

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 597**

Refer to the exhibit.An engineer configures OSPF and wants to verify the configuration. Which configuration is applied to this device?

```
GigabitEthernet0/1 is up, line protocol is up
Internet Address 192.168.50.1/24, Area 0, Attached via Interface Enable
Process ID 1, Router ID 192.168.50.1, Network Type BROADCAST, Cost: 1
Topology-MTID Cost Disabled Shutdown Topology Name
 0 1 no no Base
Enabled by interface config, including secondary ip addresses
Transmit Delay is 1 sec, State DR, Priority 1
Designated Router (ID) 192.168.50.1, Interface address 192.168.50.1
No backup designated router on this network
Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
 oob-resync timeout 40
 Hello due in 00:00:07
Supports Link-local Signaling (LLS)
Cisco NSF helper support enabled
IETF NSF helper support enabled
Index 1/2/2, 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 1 msec, maximum is 1 msec
Neighbor Count is 0, Adjacent neighbor count is 0
Suppress hello for 0 neighbor(s)
```

- A. R1(config)#router ospf 1  
R1(config-router)#network 192.168.50.0 0.0.0.255 area 0
- B. R1(config)#interface Gi0/1  
R1(config-if)#ip ospf 1 area 0  
R1(config-if)#no shutdown
- C. R1(config)#interface Gi0/1  
R1(config-if)#ip ospf enable  
R1(config-if)#ip ospf network broadcast  
R1(config-if)#no shutdown
- D. R1(config)#router ospf 1  
R1(config-router)#network 0.0.0.0 0.0.0.0 area 0

```
R1(config-router)#no passive-interface Gi0/1
```

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 598**

Refer to the exhibit. How does the router handle traffic after the CoPP policy is configured on the router?

R1#show policy-map control-plane

Control Plane

Service-policy output: CoPP

Class-map: SNMP-Out (match-all)

0 packets, 0 bytes

5 minute offered rate 0000 bps, drop rate 0000 bps

Match: access-group name SNMP

police:

cir 8000 bps, bc 1500 bytes

conformed 0 packets, 0 bytes; actions:

transmit

exceeded 0 packets, 0 bytes; actions:

drop

conformed 0000 bps, exceeded 0000 bps

Class-map: class-default (match-any)

13858 packets, 1378745 bytes

5 minute offered rate 0000 bps, drop rate 0000 bps

Match: any

- A. Traffic coming to R1 that matches access list SNMP is policed.
- B. Traffic coming to R1 that does not match access list SNMP is dropped.
- C. Traffic generated by R1 that matches access list SNMP is policed.
- D. Traffic passing through R1 that matches access list SNMP is policed.

Correct Answer: C

Section: (none)

## **Explanation**

**Explanation/Reference:**

### **QUESTION 599**

What is a characteristic of Cisco DNA southbound APIs?

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

**Correct Answer:** A

**Section:** (none)

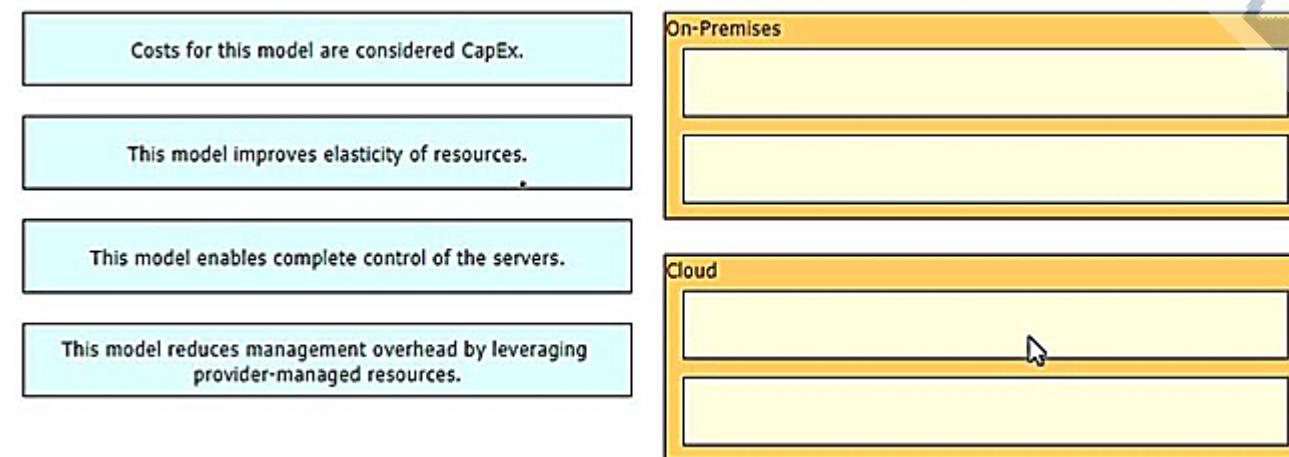
**Explanation**

**Explanation/Reference:**

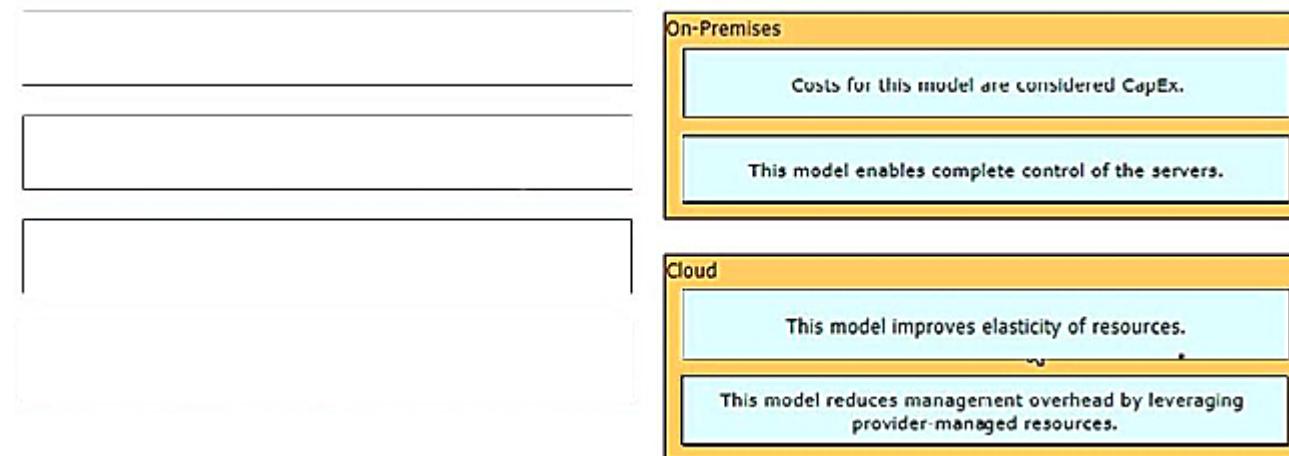
### **QUESTION 600**

Drag and drop the characteristics from the left onto the infrastructure deployment models on the right

**Select and Place:**



**Correct Answer:**



**Section:** (none)

**Explanation:**

**Explanation/Reference:**

**QUESTION 601**

What is a characteristic of Cisco StackWise technology?

- A. It supports devices that are geographically separated.
- B. It is supported on the Cisco 4500 series.
- C. It combines exactly two devices.
- D. It uses proprietary cabling.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 602

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

```
R2#show standby
FastEthernet1/0 - Group 40
 State is Standby
 4 state changes, last state change 00:01:51
 Virtual IP address is 10.10.1.1
 Active virtual MAC address is 0000.0c07.ac28 (MAC Not In Use)
 Local virtual MAC address is 0000.0c07.ac28 (v1 default)
 Hello time 3 sec, hold time 10 sec
 Next hello sent in 1.856 secs
 Preemption disabled
 Active router is 10.10.1.3, priority 85 (expires in 8.672 sec)
 Standby router is local
 Priority 90 (configured 90)
 Track interface FastEthernet0/0 state Up decrement 10
 Group name is "hsrp-Fa1/0-40" (default)
```

- A. The router with IP 10.10.1.3 is active because it has a higher IP address
- B. If Fa0/0 is shut down, the HSRP priority on R2 becomes 80
- C. R2 Fa1/0 regains the primary role when the link comes back up
- D. R2 becomes the active router after the hold time expires

- E. R2 is using the default HSRP hello and hold timers

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 603

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?

```
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))
```

- 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. The configuration fails because another interface is already configured with IP address 10.10.10.1/24
- D. Interface GigabitEthernet2 is configured with IP address 10.10.10.1/24.

**Correct Answer:** D

**Section:** (none)

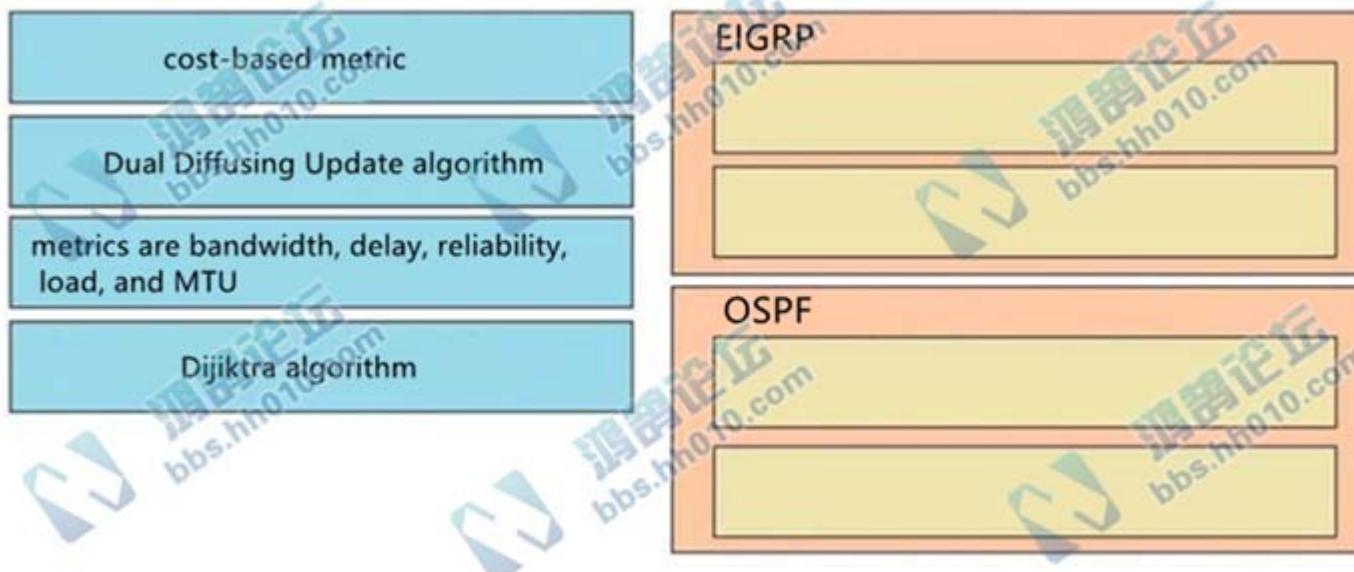
**Explanation**

**Explanation/Reference:**

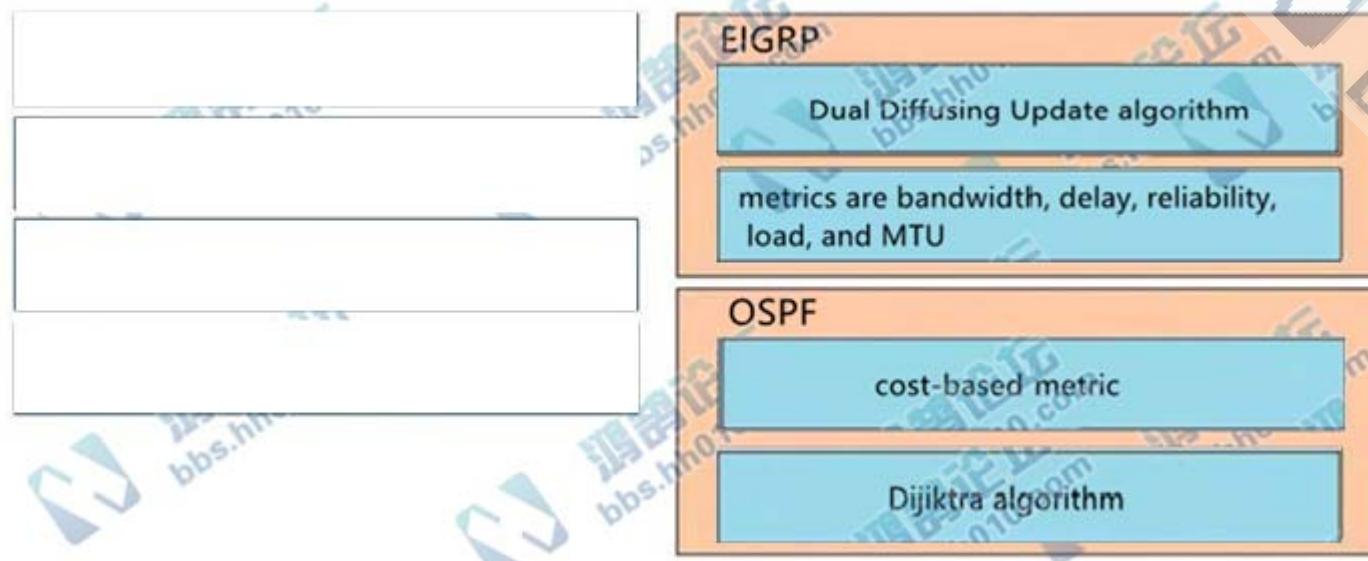
#### QUESTION 604

Drag and drop the characteristics from the left onto the routing protocols they describe on the right

**Select and Place:**



**Correct Answer:**



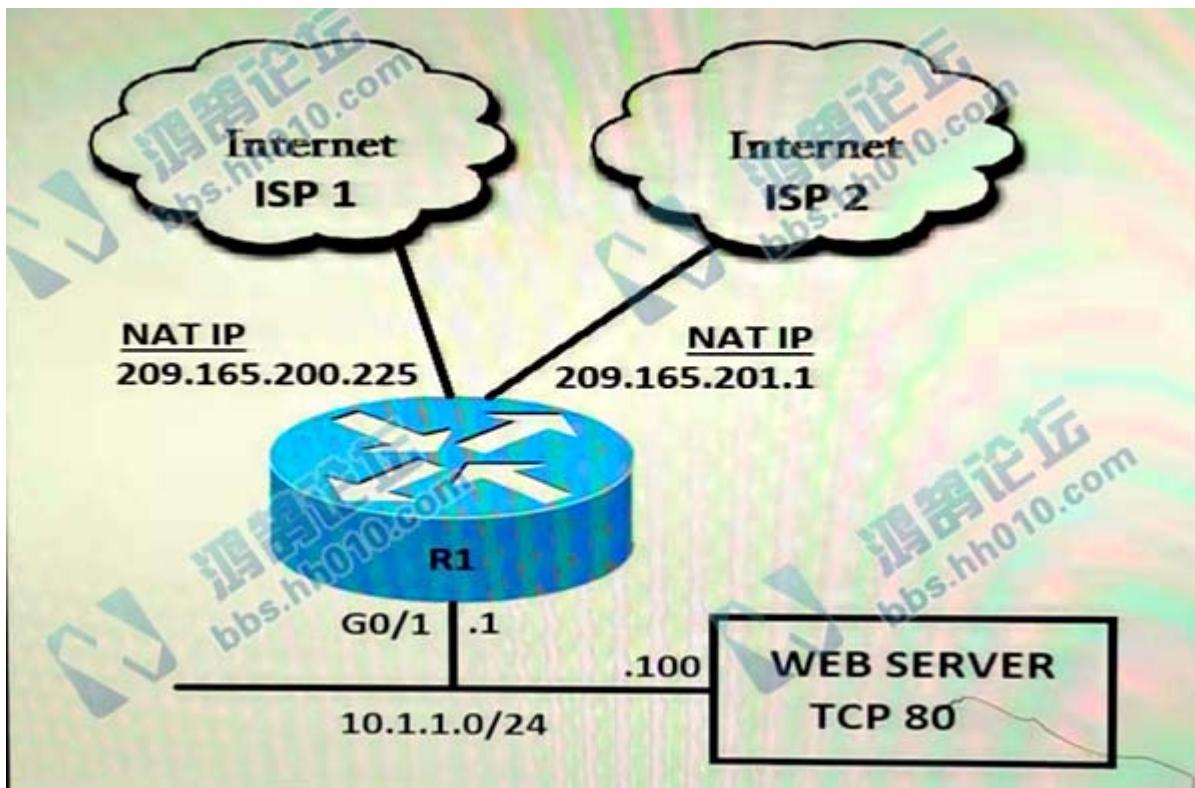
Section: (none)

Explanation

Explanation/Reference:

**QUESTION 605**

Refer to the exhibit. An engineer must configure static NAT on R1 to allow users HTTP access to the web server on TCP port 80. The web server must be reachable through ISP 1 and ISP 2. Which command set should be applied to R1 to fulfill these requirements?



- A. ip nat inside source static tcp 10.1.1.100 80 209.165.200.225 80  
ip nat inside source static tcp 10.1.1.100 8080 209.165.201.1 8080
- B. ip nat inside source static tcp 10.1.1.100 80 209.165.200.225 80  
ip nat inside source static tcp 10.1.1.100 80 209.165.201.180
- C. ip nat inside source static tcp 10.1.1.100 80 209.165.200.225 80 extendable  
ip nat inside source static tcp 10.1.1.100 80 209.165.201.1 80 extendable
- D. ip nat inside source static tcp 10.1.1.100 80 209.165.200.225 80 no-alias  
ip nat inside source static tcp 10.1.1.100 80 209.165.201.1 80 no-alias

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 606**

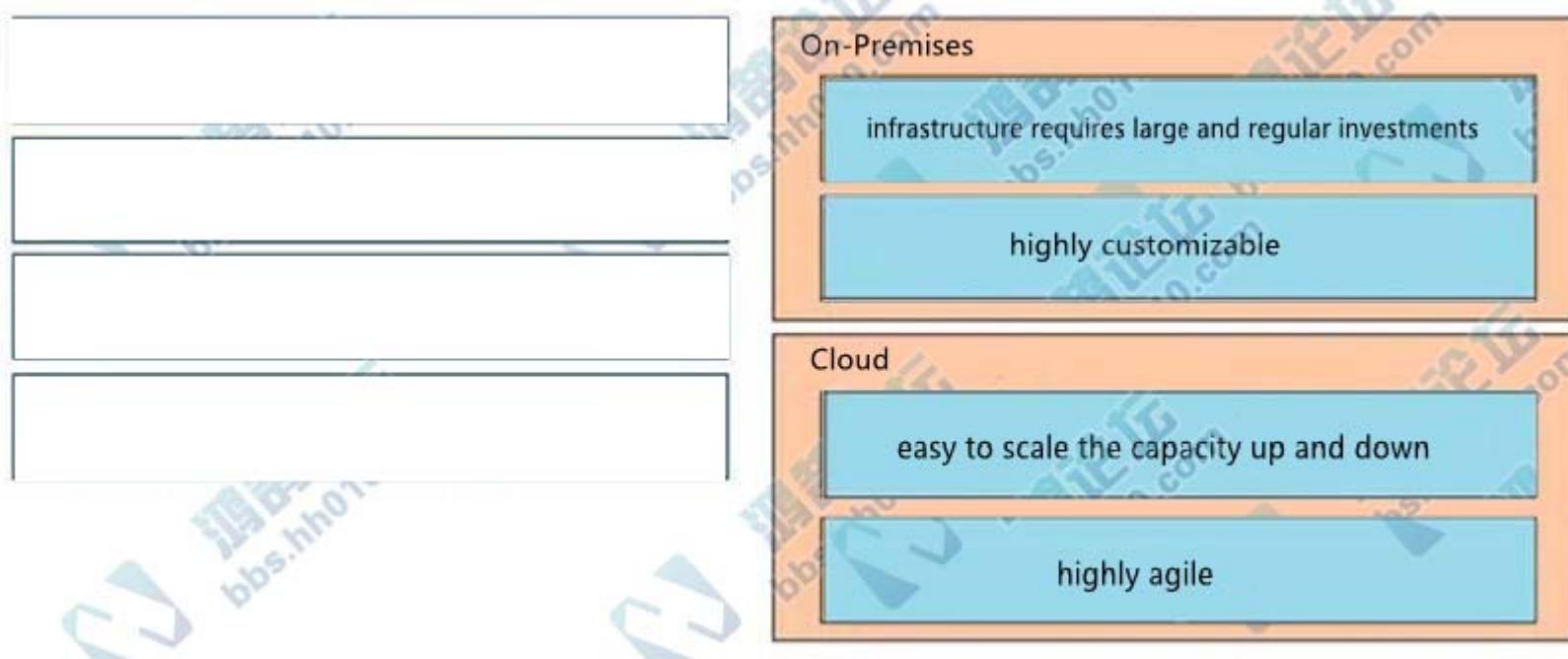
Drag and drop the characteristics from the left onto the infrastructure deployment models they describe on the right.

**Select and Place:**

- easy to scale the capacity up and down
- infrastructure requires large and regular investments
- highly agile
- highly customizable



**Correct Answer:**



Section: (none)

Explanation

Explanation/Reference:

**QUESTION 607**

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. Use a private or incognito session
- C. Use a browser that supports 128-bit or larger ciphers.
- D. Disable Adobe Flash Player.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 608**

In a Cisco SD-Access solution, which protocol is used by an extended node to connect to a single edge node ?

- A. VXLAN
- B. IS-IS
- C. 802.1Q
- D. CTS

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 609**

An engineer must configure and validate a CoPP policy that allows the network management server to monitor router R1 via SNMP while protecting the control plane. Which two commands or command sets must be used? (Choose two.)



- A. `show policy-map control-plane`
- B. 

```
access-list 150 permit udp 10.0.1.4 0.0.0.0 host 10.0.1.2 eq snmp
class-map match-all CoPP-management
match access-group 150
policy-map CoPP-policy
class CoPP-management
police 8000 conform-action transmit exceed-action transmit
violate-action transmit
control-plane
Service-policy input CoPP-policy
```
- C. 

```
access-list 150 permit udp 10.0.1.4 0.0.0.0 host 10.0.1.2 eq snmp
access-list 150 permit udp 10.0.1.4 0.0.0.0 eq snmp host 10.0.1.2
class-map match-all CoPP-management
match access-group 150
policy-map CoPP-policy
class CoPP-management
```



- police 8000 conform-action transmit exceed-action transmit
  - violate-action drop
  - control-plane
  - Service-policy input CoPP-policy
- D. show ip interface brief
  - E. show quality-of-service-profile

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 610**

What does a northbound API accomplish?

- A. programmatic control of abstracted network resources through a centralized controller
- B. access to controlled network resources from a centralized node
- C. communication between SDN controllers and physical switches
- D. controlled access to switches from automated security applications

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 611**

Refer to the exhibit ,The trunk does not work over the back-to-back link between Swich1 interface Gig1/0/20 and Switch2 inerace Gig1/0/20. which configuration fixes the problem?

```
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
```

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 612**

An engineer must enable a login authentication method that allows a user to log in by using local authentication if all other defined authentication methods fail

Which configuration should be applied?

- A. aaa authentication login CONSOLE group radius local-case enable aaa
- B. authentication login CONSOLE group radius local enable none
- C. aaa authentication login CONSOLE group radius local enable
- D. aaa authentication login CONSOLE group tacacs+ local enable

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 613

Refer to the exhibit. Which command set changes the neighbor state from Idle (Admin) to Active?

```
R1#show ip bgp sum
BGP router identifier 1.1.1.1, local AS number 65001
<output omitted>

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd
192.168.50.2 4 65002 0 0 1 0 0 00:00:46 Idle (Admin)
```

- A. R1(config)#router bgp 65002  
R1(config-router)#neighbor 192.168.50.2 activate
- B. R1(config)#router bgp 65001  
R1(config-router)#neighbor 192.168.50.2 activate
- C. R1(config)#router bgp 65001  
R1(config-router)#no neighbor 192.168.50.2 shutdown
- D. R1(config)#router bgp 65001  
R1(config-router)#neighbor 192.168.50.2 remote-as 65001

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 614**

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?

```
logging buffered discriminator Disc1
logging monitor discriminator Disc1
logging host 10.1.55.237 discriminator Disc1
```

- A. logging buffered debugging
- B. logging discriminator Disc1 severity includes 7
- C. logging buffered discriminator Disc1 debugging
- D. logging discriminator Disc1 severity includes 7 facility includes fac7

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 615**

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. Policy
- C. WLAN
- D. Flex

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 616**

Refer to the exhibit. VPN-A sends point-to-point traffic to VPN-B and receives traffic only from VPN-C. VPN-B sends point-to-point traffic to VPN-C and receives traffic only from VPN-A. Which configuration is applied?

```
PE1# show vrf all detail
VRF VPN-A; RD 1:100; VPN ID not set
Description not set
Interfaces:
 GigabitEthernet0/0/0/0
Address family IPV4 Unicast
 Import VPN route-target communities:
 RT:100:3
 Export VPN route-target communities:
 RT:100:1
 No import route policy
 No export route policy
!
```

- A. PE-2  
vrf VPN-B address-family ipv4 unicast  
import route-target 100:1  
export route-target 100:2
- B. PE-3  
vrf VPN-B address-family ipv4 unicast  
import route-target 100:1  
export route-target 100:2
- C.
- D.

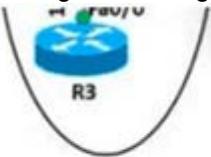
**Correct Answer: B**  
**Section: (none)**

## Explanation

### Explanation/Reference:

#### QUESTION 617

Refer to the exhibit. An engineer configures the BGP adjacency between R1 and R2, however, it fails to establish. Which action resolves the issue?



Router R1

```
router bgp 5500
no synchronization
bgp router-id 10.10.10.10
bgp log-neighbor-changes
network 192.168.100.0
redistribute connected
neighbor 172.16.10.2 remote-as 5500
neighbor 172.16.10.2 soft-reconfiguration inbound
neighbor 192.168.100.11 remote-as 5500
no auto-summary
!
address-family vpnv4
 neighbor 172.16.10.2 activate
 neighbor 172.16.10.2 send-community both
exit-address-family
```

```
router bgp 6500
no synchronization
bgp router-id 20.20.20.20
bgp log-neighbor-changes
neighbor 172.16.10.1 remote-as 5500
no auto-summary
!
!
address-family vpnv4
 neighbor 172.16.10.1 activate
 neighbor 172.16.10.1 send-community both
exit-address-family

address-family ipv4 vrf WAN
 redistribute connected
 redistribute static
 neighbor 172.16.10.1 remote-as 5500
 neighbor 172.16.10.1 activate
 no synchronization
exit-address-family
```

- A. Change the network statement on R1 to 172.16 10.0
- B. Change the remote-as number for 192 168.100.11.
- C. Enable synchronization on R1 and R2
- D. Change the remote-as number on R1 to 6500.

**Correct Answer:** D

**Section:** (none)

**Explanation**

### Explanation/Reference:

#### QUESTION 618

Which method is used by an AP to join HA controllers and is configured in NVRAM?

- A. stored WLC information
- B. DNS
- C. IP Helper Addresses
- D. Primary/Secondary/Tertiary/Backup

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 619**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 620**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 621**

Refer to the exhibit. R2 is the neighboring router of R1. R2 receives an advertisement for network 192.168.10.50/32. Which configuration should be applied for the subnet to be advertised with the original /24 netmask?

```
R1#show run | b router ospf
router ospf 1
network 192.168.10.0 0.0.0.255 area 0
```

```
R1#show run | b interface loopback0
interface loopback0
ip address 192.168.10.50 255.255.255.0
```

- A. R1(config)# router ospf 1  
R1(config-router)# network 192.168.10.0 255.255.255.0 area 0
- B. R1(config)#interface loopback0  
R1(confia-if)# ip ospf 1 area 0
- C. R1(config)# interface loopback0  
R1(config-if)# ip ospf network point-to-point
- D. R1(config)# interface loopback0  
R1(config-if)# ip ospf network non-broadcast

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 622**

How are map-register messages sent in a LISP deployment?

- A. egress tunnel routers to map resolvers to determine the appropriate egress tunnel router
- B. ingress tunnel routers to map servers to determine the appropriate egress tunnel router
- C. egress tunnel routers to map servers to determine the appropriate egress tunnel router

- D. ingress tunnel routers to map resolvers to determine the appropriate egress tunnel router

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 623**

A network monitoring system uses SNMP polling to record the statistics of router interfaces. The SNMP queries work as expected until an engineer installs a new interface and reloads the router. After this action, all SNMP queries for the router fail. What is the cause of this issue?

- A. The SNMP community is configured incorrectly.
- B. The SNMP interface index changed after reboot.
- C. The SNMP server traps are disabled for the interface index.
- D. The SNMP server traps are disabled for the link state.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 624**

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?

- 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

- A. access-list acl\_subnets permit ip 10.0.32.0 0 0.0.255 log
- B. access-list acl\_subn\*ls permit ip 10.0.32.0 0 0.7.255 log

- C. access-list acl\_subnets permit ip 10.0.32.0 0.0.7.255  
access-list acl\_subnets deny ip any log
- D. access-list acl\_subnets permit ip 10.0.32.0 255.255.248.0 log

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 625**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 626**

Refer to the exhibit. An engineer attempts to bundle interface Gi0/0 into the port channel, but it does not function as expected. Which action resolves the issue?

```
Switch1#show lacp internal
Flags: S - Device is requesting Slow LACPDU
 F - Device is requesting Fast LACPDU
 A - Device is in Active mode P - Device is in Passive mode
```

Channel group 1

Port	Flags	State	LACP port	Admin	Oper	Port	Port
			Priority	Key	Key	Number	State
Gi0/0	SP	hot-sby	20	0x1	0x1	0x1	0x5
Gi0/1	SA	bndl	15	0x1	0x1	0x2	0x3C

- A. Configure channel-group 1 mode active on interface Gi0/0.
- B. Configure no shutdown on interface Gi0/0
- C. Enable fast LACP PDUs on interface Gi0/0.
- D. Set LACP max-bundle to 2 on interface Port-channel

**Correct Answer:** D

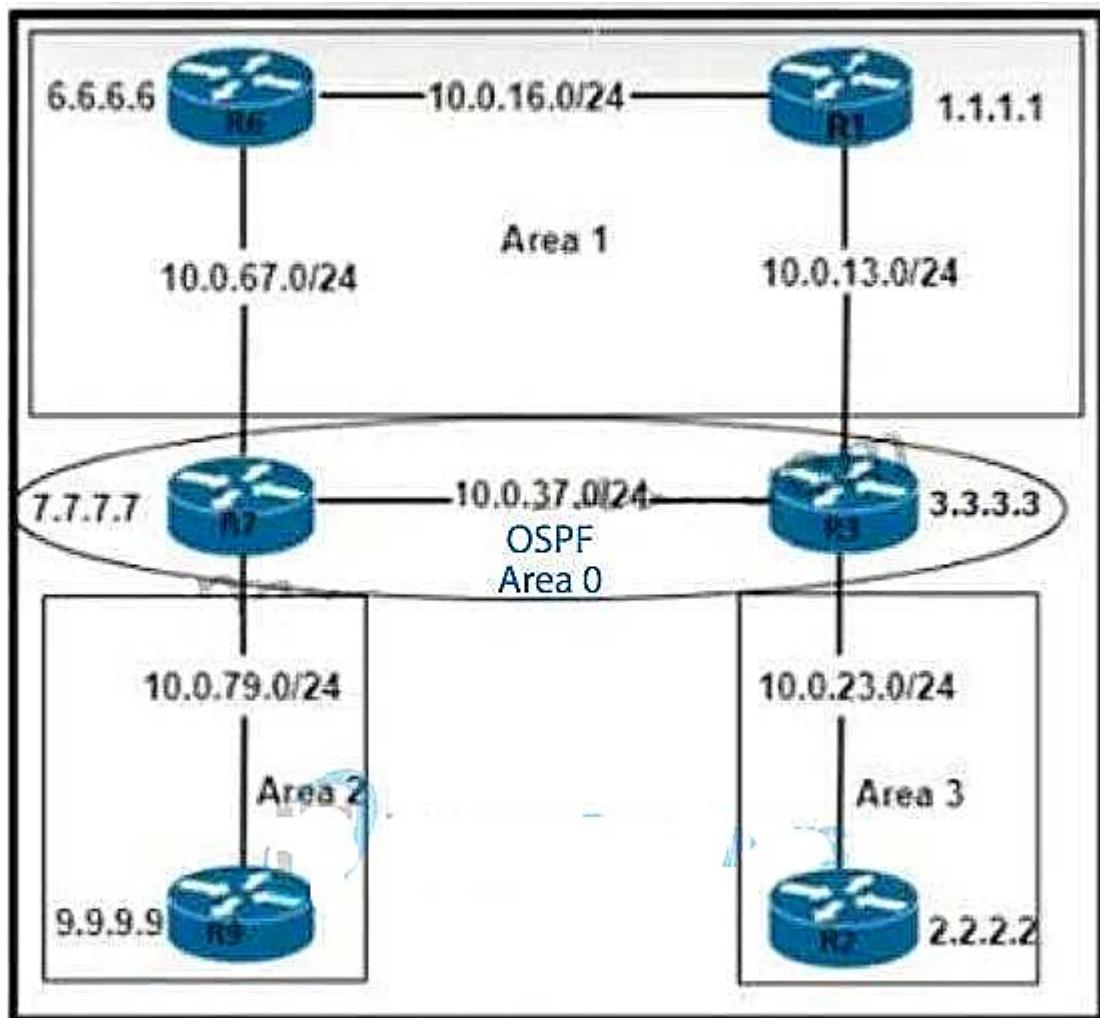
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 627**

Refer to the exhibit. An engineer must prevent the R6 loopback from getting into Area 2 and Area 3 from Area 0. Which action must the engineer take?



- A. Apply a filter list inbound on R2 and R9
- B. Apply a filter list outbound on R3 and R7
- C. Apply a filter list outbound on R7 only.
- D. Apply a filter list inbound on R3 and R7

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 628**

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. Use a password hash
- C. Add OAuth to the request in the API header.
- D. UseHTTPS

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 629**

An administrator must enable Telnet access to Router X using the router username and password database for authentication. Which configuration should be applied?

- A. RouterX(config)# line aux 0  
RouterX(config line)# password cisco  
RouterX(config-line)# login
- B. RouterX(config)# aaa new-model  
RouterX(config)# aaa authentication login auth-list local
- C. RouterX(config)# line vty 0 4  
RouterX(config-line)# login local  
RouterX(config-line)# end
- D. RouterX(config)# line vty 0 4  
RouterX(config-line)# login  
RouterX(config-line)# end

**Correct Answer:** C

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 630**

When firewall capabilities are considered, which feature is found only in Cisco nextgeneration firewalls?

- A. malware protection
- B. stateful inspection
- C. traffic filtering
- D. active/standby high availability

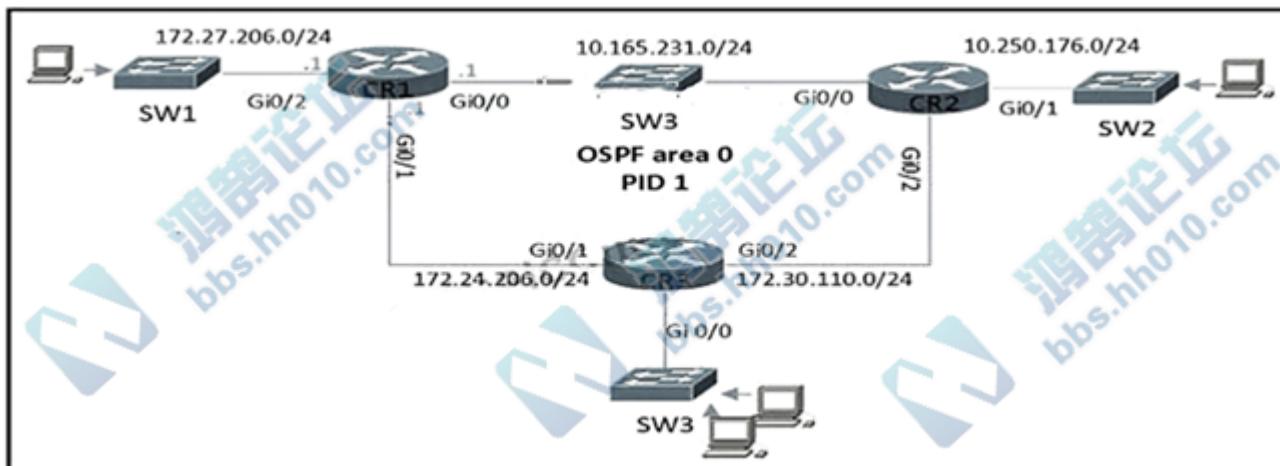
**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 631**



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. 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
- C. interface Gi0/2  
ip ospf 1 area 0  
  
router ospf 1  
passive-interface GigabitEthernet0/2
- D. 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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 632**

In which two ways does TCAM differ from CAM? (Choose two.)

- A. CAM is used to make Layer 2 forwarding decisions, and TCAM is used for Layer 3 address lookups.
- B. The MAC address table is contained in CAM, and ACL and QoS Information Is stored in TCAM.
- C. CAM Is used by routers for IP address lookups, and TCAM is used to make Layer 2 forwarding decisions.
- D. CAM is used for software switching mechanisms, and TCAM Is used for hardware switching mechanisms.
- E. The MAC address table Is contained in TCAM, and ACL and QoS information is stored in CAM.

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 633**

Refer to the exhibit. An engineer must configure HSRP for VLAN 1000 on SW2. The secondary switch must immediately take over the role of active router if the interlink with the primary switch fails. Which command set completes this task?

```
SW2(config)#track 1000 interface gigabitEthernet0/0 line-protocol
SW2(config-track)#exit
SW2(config)#interface vlan 1000
SW2(config-if)#ip address 10.23.87.3 255.255.255.0
```

- A. SW2(config-if)# standby version 2  
SW2(config-if)# standby 1000 ip 10.23.87.1  
SW2(config-if)# standby 1000 priority 95  
SW2(config-if)# standby 1000 preelect  
SW2(config-if)# standby 1000 track gigabitethernet0/0
- B. SW2(config-if)# standby 1000 ip 10.23.87.1  
SW2(config-if)# standby 1000 priority 95  
SW2(config-if)# standby 1000 preempt  
SW2(config-if)# standby 1000 track 1000
- C. SW2(config-if)# standby version 2  
SW2(config-if)# standby 1000 ip 10.23.87.1  
SW2(config-if)# standby 1000 priority 95  
SW2(config-if)# standby 1000 preempt  
SW2(config-if)# standby 1000 track 1000
- D. SW2(config-if)# standby version 2  
SW2(config-if)# standby 1000 ip 10.23.87.1  
SW2(config-if)# standby 1000 priority 95  
SW2(config-if)# standby 1000 track 1000

**Correct Answer:** C

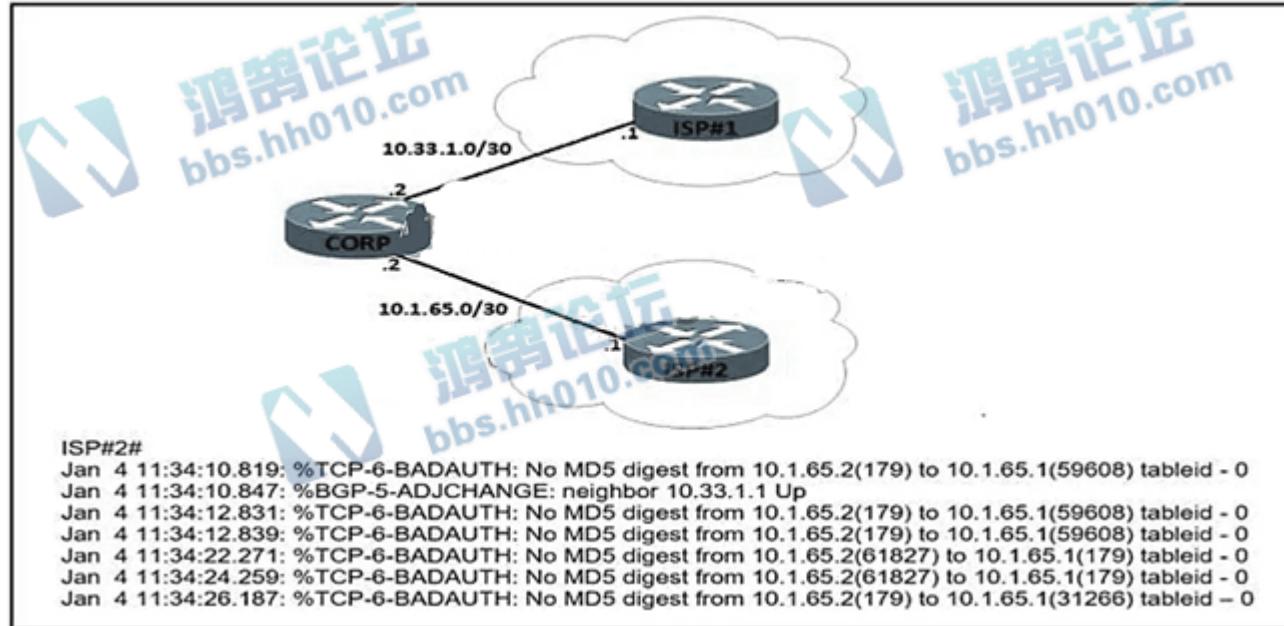
**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 634**

Refer to the exhibit. An engineer attempts to establish BGP peering between router CORP and two ISP routers. What is the root cause for the failure between CORP and ISP#2?



- A. Router ISP#2 is configured to use SHA-1 authentication.
- B. There is a password mismatch between router CORP and router ISP#2.
- C. Router CORP is configured with an extended access control list.
- D. MD5 authorization is configured incorrectly on router ISP#2.

**Correct Answer:** B

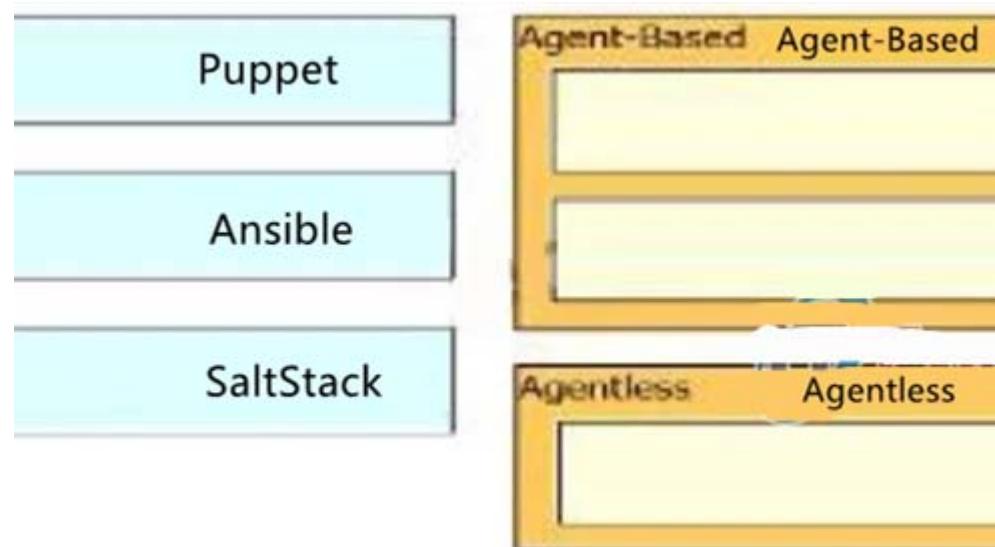
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 635

**Select and Place:**



Correct Answer:



Section: (none)

## Explanation

### Explanation/Reference:

#### QUESTION 636

Refer to the exhibit. Users cannot reach the web server at 192.168.100.1. What is the root cause for the failure?

```
>traceroute www.crmABC.com
Tracing route to www.crmABC.com [192.168.100.1]
 1 3ms 5ms 3ms 10.10.10.1
 2 4ms 6ms 4ms 10.100.100.1
 3 4ms 6ms 4ms 10.100.200.1

 4 4ms 6ms 4ms 10.100.100.1
 5 4ms 6ms 4ms 10.100.200.1
 6 4ms 6ms 4ms 10.100.100.1
 7 4ms 6ms 4ms 10.100.200.1
<output truncated>
```

- A. There is a loop in the path to the server.
- B. The server is attempting to load balance between links 10.100.100.1 and 10.100.200.1
- C. The server is out of service.
- D. The gateway cannot translate the server domain name.

**Correct Answer:** A

**Section:** (none)

**Explanation**

### Explanation/Reference:

#### QUESTION 637

An engineer must configure a multicast UDP jitter operation. Which configuration should be applied?

- A. Router(config)#ip sla 1

- Router(config )#udp-jitter 192.0.2.115 65051 num-packets 20
- B. Router(config)#ip sla 1  
Router(config )#udp-jitter 192.0.2.115 65051
- C. Router(config)#ip sla 1  
Router(config)#udp jitter 239.1.1.1 65051 end-point list List source-ip 192.168.1.1
- D. Router(config)#ip sla 1  
Router(config)#udp jitter 10.0.0.1 source-ip 192.168.1.1

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 638**

What is the API keys option for REST API authentication?

- A. a username that is stored in the local router database
- B. a predetermined string that is passed from client to server
- C. a credential that is transmitted unencrypted
- D. a one-time encrypted token

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 639**

Refer to the exhibit. An administrator configures two switches with LACP EtherChannels, but packets are not being exchanged between the switches. What is the reason, and what fixes the issue?

```
S1> enable
S1# configure terminal
S1(config)# interface port-channel 1
S1(config-if)# ip address 10.1.1.1 255.255.255.0
S1(config-if)# interface g2/0/0
S1(config-if)# no ip address
S1(config-if)# channel-group 1 mode active
S1(config-if)# exit
S1(config)# interface g4/0/0
S1(config-if)# no ip address
S1(config-if)# channel-group 1 mode active

S2> enable
S2# configure terminal
S2(config)# interface port-channel 1
S2(config-if)# ip address 10.1.1.2 255.255.255.0
S2(config-if)# interface g2/0/0
S2(config-if)# no ip address
S2(config-if)# channel-group 1 mode desirable
S2(config-if)# exit
S2(config)# interface g4/0/0
S2(config-if)# no ip address
S2(config-if)# channel-group 1 mode desirable
```

- A. S1 is configured as PAgP. Change the channel group mode to desirable.
- B. S2 is configured as LACP. Change the channel group mode to passive.
- C. S2 is configured with PAgP. Change the channel group mode to active.
- D. S1 is configured with LACP. Change the channel group mode to on.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 640**

How must network management traffic be treated when defining QoS policies?

- A. using the same marking as IP routing
- B. as best effort
- C. as delay-sensitive traffic in a low latency queue
- D. using minimal bandwidth guarantee

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 641**

Refer to the exhibit. Which configuration enables password checking on the console line, using only a password?

```
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#
```

- A. router(config)# line con 0  
    router(config-line)# login local
- B. router(config)# line vty 0 4  
    router(config-line)# login
- C. router(config)# line con 0  
    router(config-line)# login
- D. router(config)# line con 0  
    router(config-line)# exec-timeout 0 0

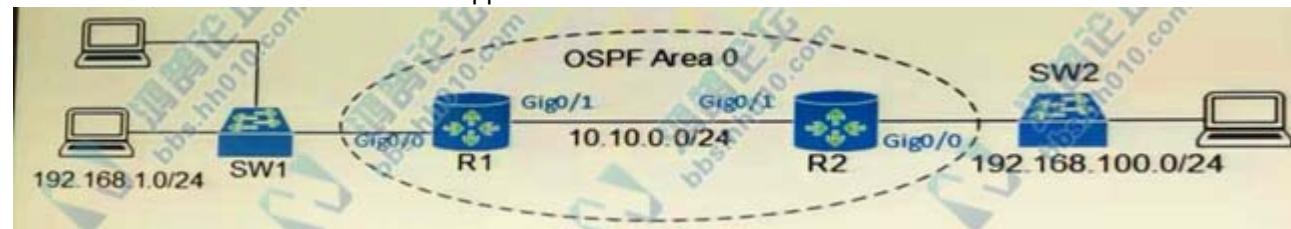
**Correct Answer:** C

Section: (none)  
Explanation

Explanation/Reference:

**QUESTION 642**

Refer to the exhibit. An engineer must allow R1 to advertise the 192.168.1.0/24 network to R2. R1 must perform this action without sending OSPF packets to SW1. Which command set should be applied?



- A. R1(config)# router ospf 1  
R1(config-router)# no passive-interface gig0/0
- B. R1(config)# interface gig0/0  
R1(config-if)# ip ospf hello-interval 65535
- C. R1(config)# router ospf 1  
R1(config-router)# passive-interface gig0/0
- D. R1(config)# interface gig0/0  
R1(config-if)# ip ospf hello-interval 0

Correct Answer: C

Section: (none)  
Explanation

Explanation/Reference:

**QUESTION 643**

Which IPv4 packet field carries the QoS IP classification marking?

- A. ID
- B. TTL
- C. FCS

D. ToS

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 644**

Refer to the exhibit. What does the response "204 No Content" mean for the REST API request?

Delete ▼<https://192.168.42.105/restconf/data/ietf-interfaces: interfaces/interface-Loopback100> send ▼

- A. The DELETE method is not supported.
- B. Interface loopback 100 is not removed from the configuration.
- 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 645**

Which benefit is realized by implementing SSO?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 646**

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 647**

What is one difference between EIGRP and OSPF?

- A. OSPF is a Cisco proprietary protocol, and EIGRP is an IETF open standard protocol.
- B. OSPF uses the DUAL distance vector algorithm, and EIGRP uses the Dijkstra link-state algorithm
- C. EIGRP uses the variance command lot unequal cost load balancing, and OSPF supports unequal cost balancing by default.
- 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 648**

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. coordinates configuration of autonomous nonfabric access points within the fabric

- C. performs the assurance engine role for both wired and wireless clients
- D. is dedicated to onboard clients in fabric-enabled and nonfabric-enabled APs within the fabric

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 649**

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 VLAN1 is not passing. Which action resolves the issue and allow communication for all configured VLANs?

SW2#

%CDP-4-NATIVE\_VLAN\_MISMATCH:NATIVE VLAN mismatch discovered on GigabitEthernet0/1(1),with SW1 GigabitEthernet 0/1(30).

SW2#

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 650**

How must network management traffic be treated when defining QoS policies?

- A. as delay-sensitive traffic in a low latency queue
- B. using minimal bandwidth guarantee
- C. using the same marking as IP routing
- D. as best effort

**Correct Answer:** A

**Section: (none)**  
**Explanation**

**Explanation/Reference:**

