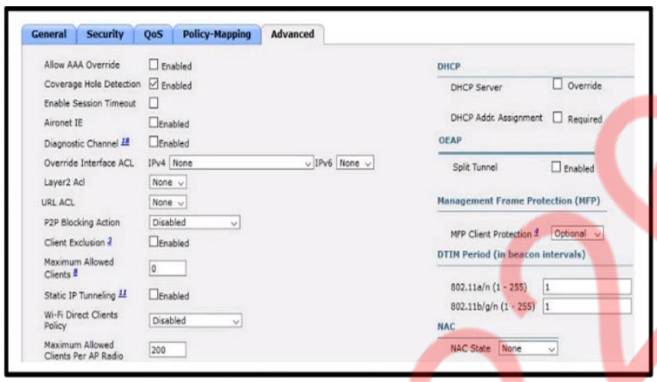


Refer to the exhibit. An engineer is investigating why guest users are able to access other guest user devices when the users are connected to the customer guest WLAN. What action resolves this issue?

- implement P2P blocking
- implement Wi-Fi direct policy
- implement split tunneling
- implement MFP client protection

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.)

- [ ] Increase the number of lines on the screen using the **terminal length** command.
- [ ] Configure the **logging synchronous** global configuration command.
- [ ] Configure the logging delimiter feature.
- [x] Configure the **logging synchronous** command under the vty.
- [x] Press the TAB key to reprint the command in a new line.

```
R1#show crypto isakmp sa
IPv4 Crypto ISAKMP SA
dst             src             state          conn-id status
209.165.201.6   209.165.201.1   QM_IDLE           1001 ACTIVE
```

Refer to the exhibit. After configuring an IPsec VPN, an engineer enters the **show** command to verify the ISAKMP SA status. What does the status show?

- ISAKMP SA has been created, but it has not continued to form.
- Peers have exchanged keys, but ISAKMP SA remains unauthenticated.
- VPN peers agreed on parameters for the ISAKMP SA.
- ISAKMP SA is authenticated and can be used for Quick Mode.

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?

- (•) from ncclient import manager
- ( ) import manager
- ( ) from ncclient import *
- ( ) ncclient manager import

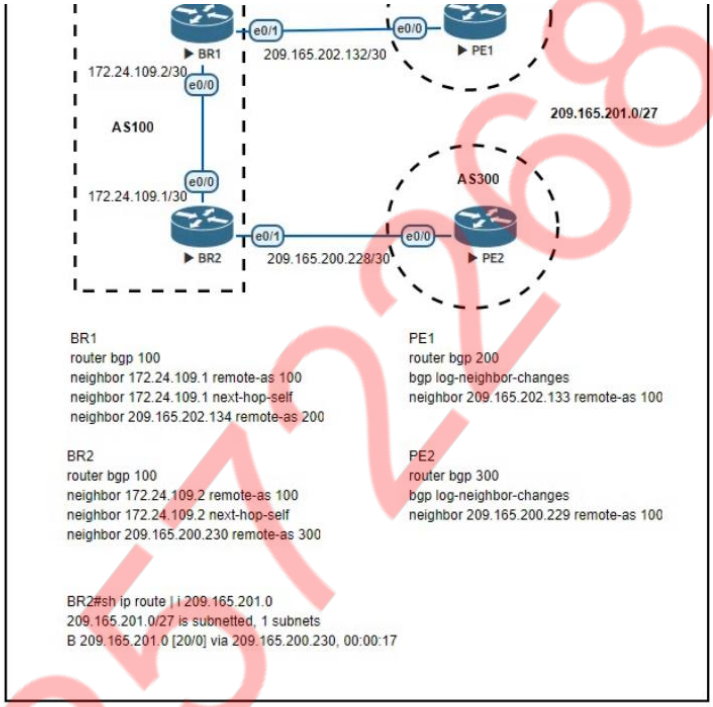
Which protocol infers that a YANG data model is being used?

- (•) RESTCONF
- ( ) REST
- ( ) SNMP
- ( ) NX-API

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

Vlan                Role Sts Cost      Prio.Nbr Type
------------------- ---- --- --------- -------- -----------
VLAN0001            Desg FWD 2         128.9    P2p Edge
VLAN0010            Desg FWD 2         128.9    P2p Edge
VLAN0020            Desg FWD 2         128.9    P2p Edge
VLAN0030            Desg FWD 2         128.9    P2p Edge
VLAN0040            Desg FWD 2         128.9    P2p Edge
```

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

- ( ) By entering the command **spanning-tree mst1 vlan 10,20,30,40** in the global configuration mode.
- ( ) By entering the command **spanning-tree portfast** in the interface configuration mode.
- (•) By entering the command **spanning-tree portfast trunk** in the interface configuration mode.
- ( ) By entering the command **spanning-tree vlan 10,20,30,40 root primary** in the interface configuration mode.



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

- (•) Set the MED to 1 on PE2 toward BR2 outbound.
- ( ) Set the origin to igp on BR2 toward PE2 inbound.
- ( ) Set the weight attribute to 65,535 on BR1 toward PE1.
- ( ) Set the local preference to 150 on PE1 toward BR1 outbound.

A client device roams between wireless LAN controllers that are mobility peers. Both controllers have dynamic interfaces on the same client VLAN. Which type of roam is described?

- ( ) intra-VLAN
- (•) inter-controller
- ( ) intra-controller
- ( ) inter-subnet

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

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

- [x] HEAD
- [x] PATCH
- [ ] PUSH
- [ ] REMOVE
- [ ] ADD
- [ ] PULL

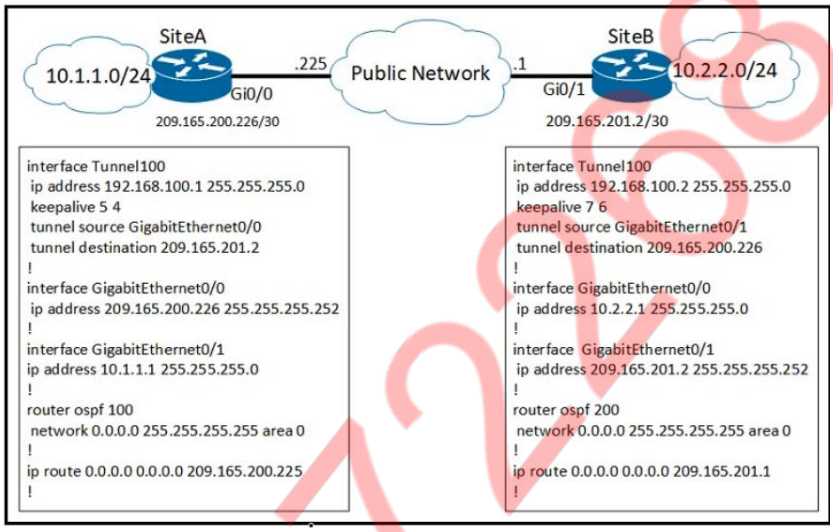
```
Router#show ip ospf interface
GigabitEthernet0/1.40 is up, line protocol is up
  Internet Address 10.3.5.254/24, Area 0, Attached via Network Statement
  Process ID 1, Router ID 172.16.11.29, Network Type BROADCAST, Cost: 1
  Topology-MTID    Cost    Disabled    Shutdown      Topology Name
        0           1          no          no           Base
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 172.16.11.29, Interface address 10.3.5.254
  No backup designated router on this network
  Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
    oob-resync timeout 40
    No Hellos (Passive interface)
  Supports Link-local Signaling (LLS)
  ! lines omitted for brevity
GigabitEthernet0/1 is up, line protocol is up
  Internet Address 172.16.30.1/24, Area 0, Attached via Network Statement
  Process ID 1, Router ID 172.16.11.29, Network Type BROADCAST, Cost: 1
  Topology-MTID    Cost    Disabled    Shutdown      Topology Name
        0           1          no          no           Base
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 172.16.11.29, Interface address 172.16.30.1
  No backup designated router on this network
  Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
    oob-resync timeout 40
    No Hellos (Passive interface)
  Supports Link-local Signaling (LLS)
  ! lines omitted for brevity
GigabitEthernet0/0 is up, line protocol is up
  Internet Address 172.16.11.29/24, Area 0, Attached via Network Statement
  Process ID 1, Router ID 172.16.11.29, Network Type BROADCAST, Cost: 1
  Topology-MTID    Cost    Disabled    Shutdown      Topology Name
        0           1          no          no           Base
  Transmit Delay is 1 sec, State DROTHER, Priority 1
  Designated Router (ID) 172.16.11.27, Interface address 172.16.11.27
  Backup Designated router (ID) 172.16.11.30, Interface address 172.16.11.30
  Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
    oob-resync timeout 40
    Hello due in 00:00:07
  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?

- GigabitEthernet0/1 and GigabitEthernet0/1.40
- only GigabitEthernet0/0
- GigabitEthernet0/0 and GigabitEthernet0/1
- only GigabitEthernet0/1

What is the wireless Received Signal Strength Indicator?

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



Refer to the exhibit. A network engineer configures a new GRE tunnel and enters the **show run** command. What does the output verify?

- The tunnel will be established and work as expected.
- The default MTU of the tunnel interface is 1500 bytes.
- The tunnel keepalive is configured incorrectly because they must match on both sites.
- The tunnel destination will be known via the tunnel interface.

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

- 43
- 66
- 69
- 150

Refer to the exhibit. An engineer must deny HTTP traffic from host A to host B while allowing all other communication between the hosts. Drag and drop the commands into the configuration to achieve these results. Some commands may be used more than once. Not all commands are used.

```
SW1(config)# ip access-list extended DENY-HTTP
SW1(config-ext-nacl)# [          ] tcp host 10.1.1.10 host 10.1.1.20 eq www

SW1(config)# ip access-list extended MATCH_ALL
SW1(config-ext-nacl)# [          ] ip any any

SW1(config)# vlan access-map HOST-A-B 10
SW1(config-access-map)# match ip address DENY-HTTP
SW1(config-access-map)# [          ]

SW1(config)# vlan access-map HOST-A-B 20
SW1(config-access-map)# match ip address MATCH_ALL
SW1(config-access-map)# [          ]

SW1(config)# vlan filter HOST-A-B vlan 10
```

action drop | action forward | filter | permit | deny | match


```
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


```
list = [1, 2]
list = list * 3
print(list)
```

Refer to the exhibit. What is the value of the variable list after the code is run?

- [1, 2, 1, 2, 1, 2]
- [3, 6]
- [1, 2] * 3
- [1, 2], [1, 2], [1, 2]

```
Extended IP access list EGRESS
10 permit ip 10.1.100.0 0.0.0.255 10.1.2.0 0.0.0.255
20 deny ip any any
```

Refer to the exhibit. An engineer must modify the access control list EGRESS to allow all IP traffic from subnet 10.1.10.0/24 to 10.1.2.0/24. The access control list is applied in the outbound direction on router interface GigabitEthernet 0/1. Which configuration command set will allow this traffic without disrupting existing traffic flows?

- (●) **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

- ( ) **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

- ( ) **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

- ( ) **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

Which two operational modes 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.)

- [ ] sniffer
- [ ] monitor
- [ ] rogue detector
- [x] local
- [x] FlexConnect

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

- ( ) list of ordered statements that define node configurations and authentication used within the SD-WAN overlay
- (●) set of statements that defines how data is forwarded based on IP packet information and specific VPNs
- ( ) detailed database mapping several kinds of addresses with their corresponding location
- ( ) group of services tested to guarantee devices and links liveliness within the SD-WAN overlay

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

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

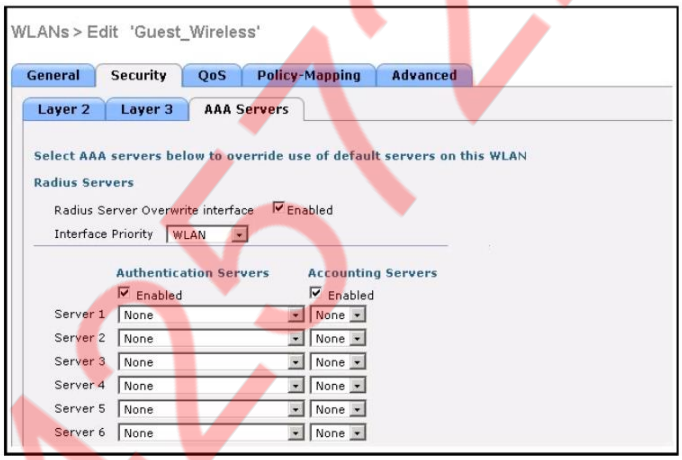
Which configuration change must the engineer make?

- ( ) Change the HSRP virtual address on the remote router to 10.1.1.1.
- (●) Change the HSRP virtual address on the local router to 10.1.1.1.
- ( ) Change the HSRP group configuration on the local router to 1.
- ( ) Change the HSRP group configuration on the remote router to 1.

```
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?

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

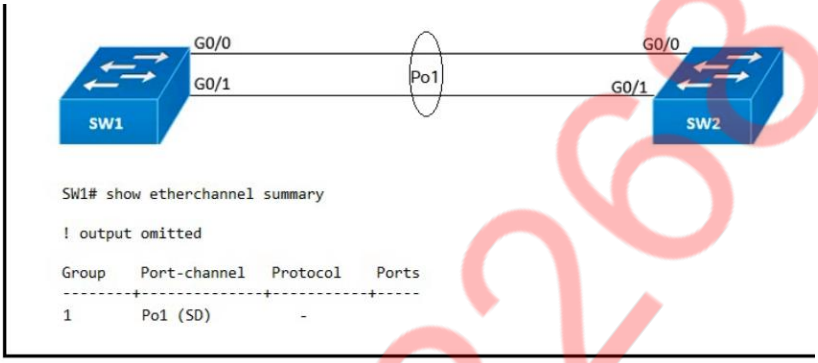


Refer to the exhibit. Assuming the WLC's interfaces are not in the same subnet as the RADIUS server, which interface would the WLC use as the source for all RADIUS-related traffic?

- any interface configured on the WLC
- the interface specified on the WLAN configuration
- the controller management interface
- the controller virtual interface

Which Cisco DNA Center application is responsible for group-based access control permissions?

- Policy
- Provision
- Design
- Assurance



Refer to the exhibit. After an engineer configures an EtherChannel between switch SW1 and switch SW2, this error message is logged on switch SW2:

SW2#
09:45:32: %PM-4-ERR_DISABLE: channel-misconfig error detected on Gi0/0, putting Gi0/0 in err-disable state
09:45:32: %PM-4-ERR_DISABLE: channel-misconfig error detected on Gi0/1, putting Gi0/1 in err-disable state

Based on the output from switch SW1 and the log message received on switch SW2, which action should the engineer take to resolve this issue?

- Correct the configuration error on Interface Gi0/0 on switch SW1.
- Configure the same protocol on the EtherChannel on switch SW1 and SW2.
- Correct the configuration error on Interface Gi0/1 on switch SW1.
- Define the correct port members on the EtherChannel on switch SW1.

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

- supported systems
- virtualization
- storage capacity
- efficient scalability

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

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

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

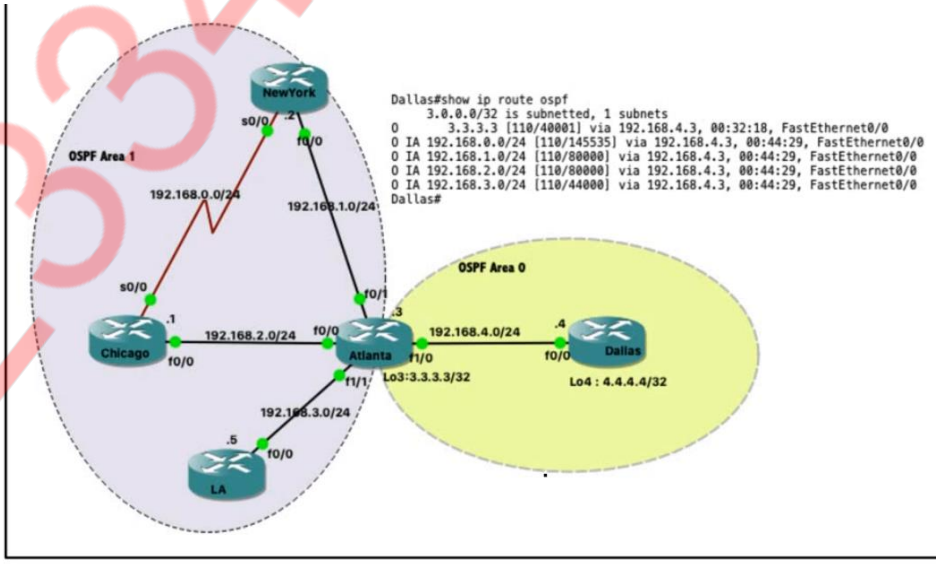
vNIC	zip file connecting a virtual machine configuration file and a virtual disk
OVA	file containing a virtual machine disk drive
VMDK	configuration file containing settings for a virtual machine such as guest OS
VMX	component of a virtual machine responsible for sending packets to the hypervisor

OVA

VMDK

VMX

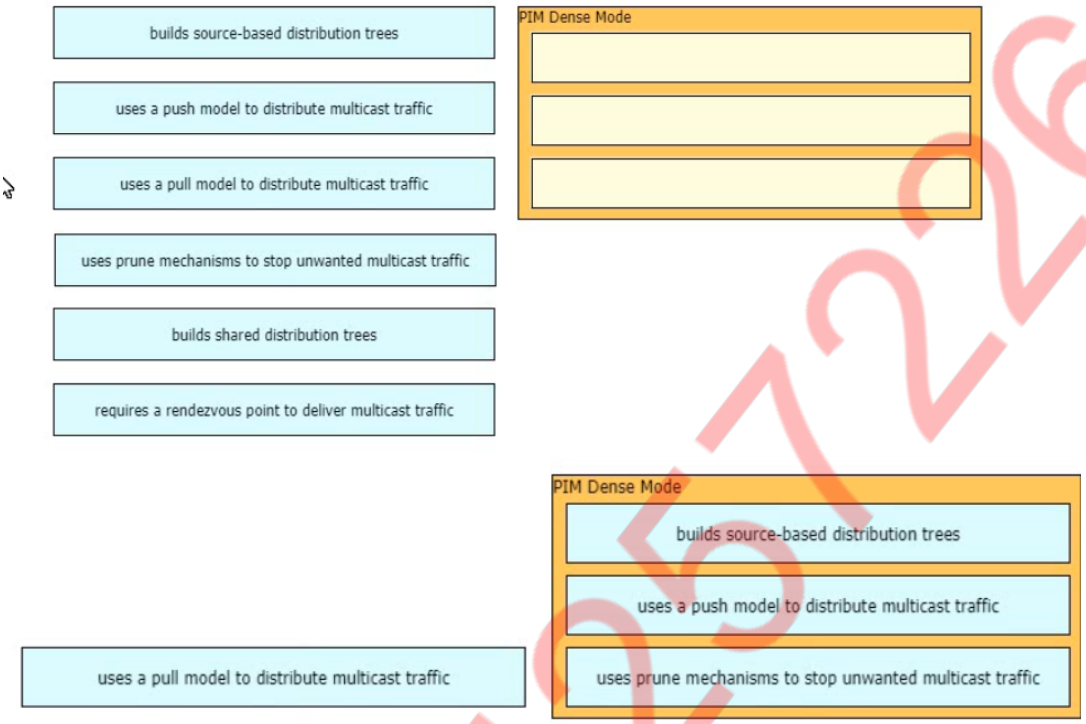
vNIC



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

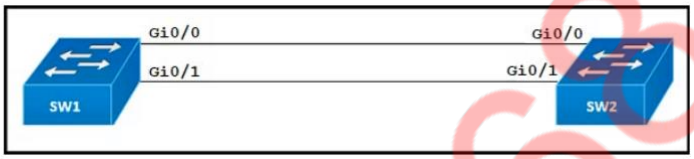
- Atlanta(config-router)#**area 0 range 192.168.0.0 255.255.252.0**
- Atlanta(config-router)#**area 1 range 192.168.0.0 255.255.248.0**
- Atlanta(config-router)#**area 0 range 192.168.0.0 255.255.248.0**
- Atlanta(config-router)#**area 1 range 192.168.0.0 255.255.252.0**

Drag and drop the characteristics of PIM Dense Mode from the left to the right. Not all options are used.



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

- username/role combination
- access tokens
- cookie authentication
- basic signature workflow

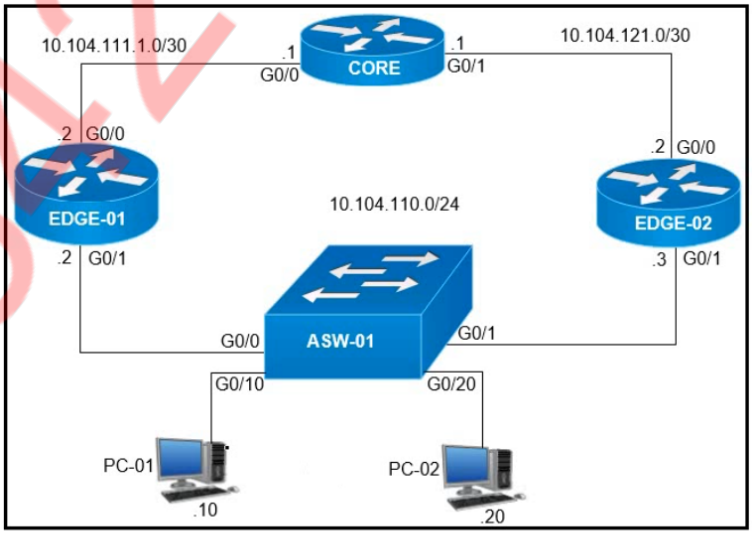


Refer to the exhibit. An engineer reconfigures the port-channel between SW1 and SW2 from an access port to a trunk and immediately notices this error in SW1's log:

*Mar 1 09:47:22.245: %PM-4-ERR_DISABLE: bpduguard error detected on Gi0/0, putting Gi0/0 in err-disable state

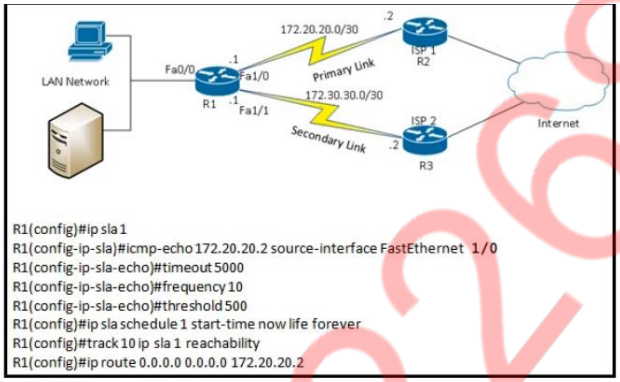
Which command set resolves this error?

- SW1(config-if)#**interface Gi0/0**
  SW1(config-if)#**no spanning-tree bpduguard enable**
  SW1(config-if)#**shut**
  SW1(config-if)#**no shut**
- SW1(config-if)#**interface Gi0/0**
  SW1(config-if)#**no spanning-tree bpdufilter**
  SW1(config-if)#**shut**
  SW1(config-if)#**no shut**
- SW1(config-if)#**interface Gi0/0**
  SW1(config-if)#**spanning-tree bpduguard enable**
  SW1(config-if)#**shut**
  SW1(config-if)#**no shut**
- SW1(config-if)#**interface Gi0/1**
  SW1(config-if)#**spanning-tree bpduguard enable**
  SW1(config-if)#**shut**
  SW1(config-if)#**no shut**



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

- G0/0 and G0/1 on Core
- G0/0 on Edge-01 and G0/0 on Edge-02
- G0/1 on Edge-01 and G0/1 on Edge-02
- G0/0 and G0/1 on ASW-01



Refer to the exhibit. After implementing the configuration, 172.20.20.2 stops replying to ICMP echos, but the default route fails to be removed. What is the reason for this behavior?

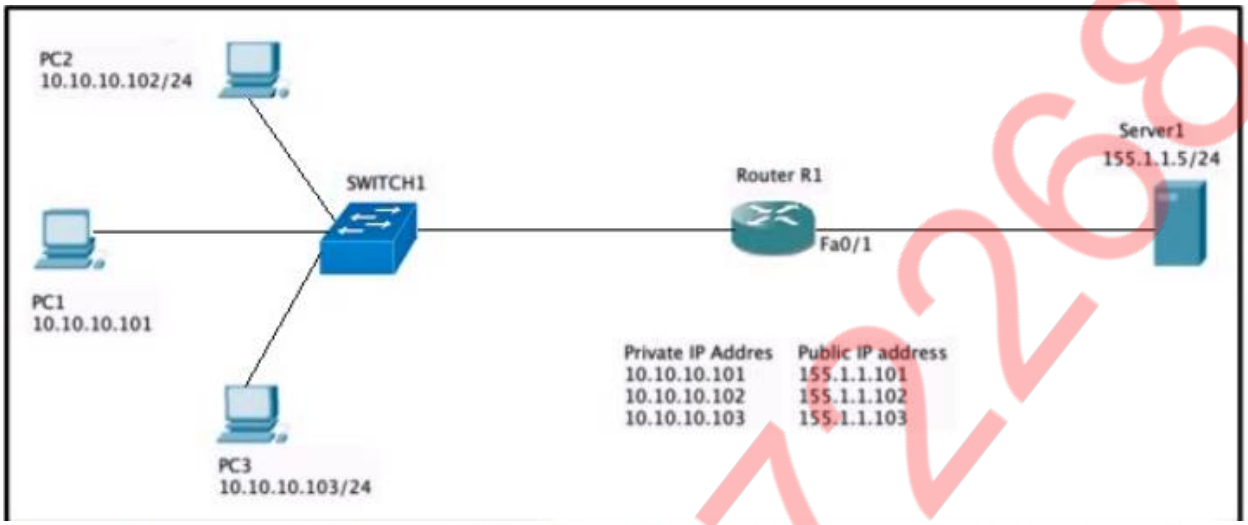
- The destination must be 172.30.30.2 for icmp-echo.
- The source-interface is configured incorrectly.
- [x] The default route is missing the track feature
- The threshold value is wrong.

Which LISP component is required for a LISP site to communicate with a non-LISP site?

- [x] Proxy ETR
- ITR
- ETR
- Proxy ITR

Which JSON syntax is valid?

- [x] {"switch": {"name": "dist1", "interfaces": ["gig1", "gig2", "gig3"]}}
- {'switch': ('name': 'dist1', 'interfaces': ['gig1', 'gig2', 'gig3'])}
- {"switch": "name": "dist1", "interfaces": ["gig1", "gig2", "gig3"]}
- {/"switch/": {/"name/": "dist1", /"interfaces/": ["gig1", "gig2", "gig3"]}}



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?

```
RouterR1(config)#int f0/0
RouterR1(config-if)#ip nat outside
RouterR1(config-if)#exit
RouterR1(config)#int f0/1
RouterR1(config-if)#ip nat inside
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
RouterR1(config)#ip nat inside source static 10.10.10.103 155.1.1.103
```

```
RouterR1(config)#int f0/0
RouterR1(config-if)#ip nat inside
RouterR1(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
RouterR1(config)#ip nat inside source static 10.10.10.103 155.1.1.103
```

```
RouterR1(config)#int f0/0
RouterR1(config-if)#ip nat inside
RouterR1(config-if)#exit
RouterR1(config)#int f0/1
RouterR1(config-if)#ip nat outside
RouterR1(config-if)#exit
RouterR1(config)#access-list 1 10.10.10.0 0.0.0.255
RouterR1(config)ip nat inside source list 1 interface f0/1 overload
```

```
RouterR1(config)#int f0/0
RouterR1(config-if)#ip nat inside
RouterR1(config-if)#exit
RouterR1(config)#int f0/1
RouterR1(config-if)#ip nat outside
RouterR1(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
```

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?

- SD-Access wireless
- autonomous
- Mobility Express
- local mode

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

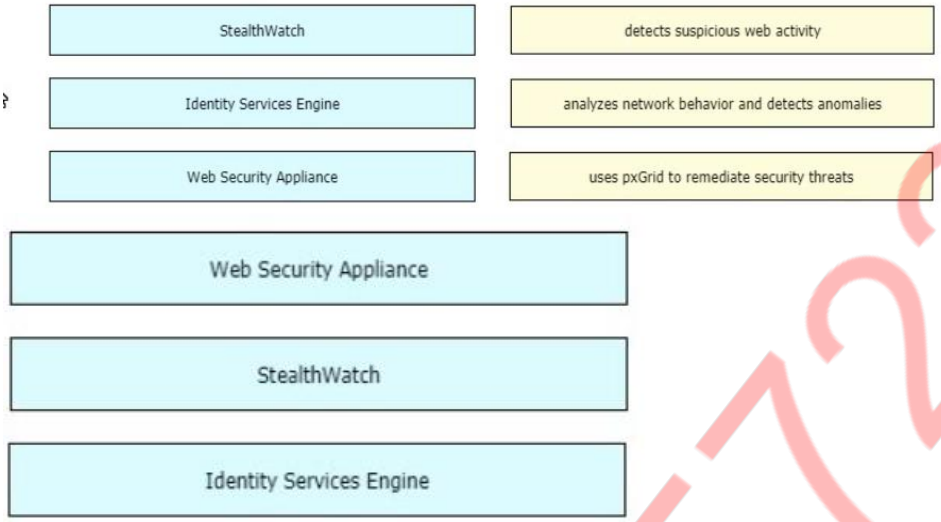
- [x] It enforces configuration constraints.
- [ ] It collects statistical constraint analysis information.
- [x] It enforces the use of a specific encoding format for NETCONF.
- [ ] It enforces configuration semantics.
- [ ] It enables multiple leaf statements to exist within a leaf list.

```
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"
```

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?

- **action 4.0 syslog command "show process cpu sorted | append flash:high-cpu-file"**
- **action 4.0 cli command "show process cpu sorted | append flash:high-cpu-file"**
- **action 4.0 cns-event "show process cpu sorted | append flash:high-cpu-file"**
- **action 4.0 publish-event "show process cpu sorted | append flash:high-cpu-file"**

Drag and drop the solutions that comprise Cisco Cyber Threat Defense from the left onto the objectives they accomplish on the right.



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

- process adapters
- Command Runner
- intent-based APIs
- domain adapters

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

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

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

- RADIUS token
- text string
- username and password
- certificate

Which controller is capable of acting as a STUN server during the onboarding process of Edge devices?

- vBond
- vSmart
- vManage
- PNP Server

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?

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#

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#

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#

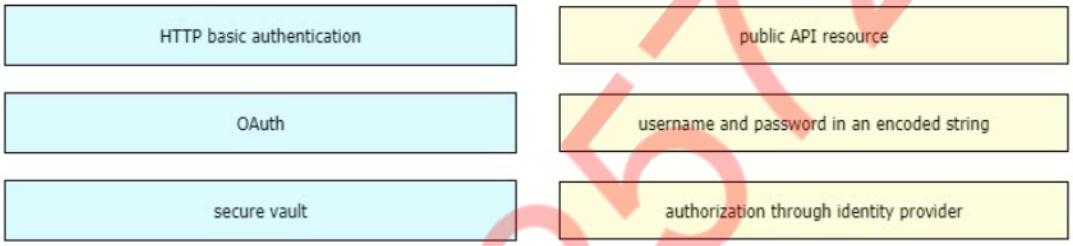
R1#**sh run | include aaa**
aaa new-model
aaa authentication login default group tacacs+
aaa session-id common

R1#**sh run | section vty**
line vty 0 4
transport input none
R1#

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

- **logging host 10.2.3.4 vrf mgmt transport tcp port 6514**
- **logging host 10.2.3.4 vrf mgmt transport udp port 6514**
- **logging host 10.2.3.4 vrf mgmt transport udp port 514**
- **logging host 10.2.3.4 vrf mgmt transport tcp port 514**

Drag and drop the REST API authentication methods from the left onto their descriptions on the right.



secure vault

HTTP basic authentication

OAuth

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

- switch fabric
- host switch
- VNID
- VTEP

```
interface Vlan10
 ip vrf forwarding Customer1
 ip address 192.168.1.1 255.255.255.0
!
interface Vlan20
 ip vrf forwarding Customer2
 ip address 172.16.1.1 255.255.255.0
!
interface Vlan30
 ip vrf forwarding Customer3
 ip address 10.1.1.1 255.255.255.0
```

Refer to the exhibit. Which configuration allows Customer2 hosts to access the FTP server of Customer1 that has the IP address of 192.168.1.200?

- (●) **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
- ( ) **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

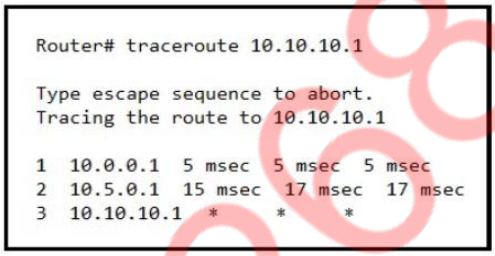
  ip route 192.168.1.0 255.255.255.0 Vlan10
  ip route 172.16.1.0 255.255.255.0 Vlan20
- ( ) **ip route vrf Customer1 172.16.1.0 255.255.255.0 172.16.1.1 Customer2**
  ip route vrf Customer2 192.168.1.200 255.255.255.255 192.168.1.1 Customer1
- ( ) **ip route vrf Customer1 172.16.1.0 255.255.255.0 172.16.1.1 Customer1**
  ip route vrf Customer2 192.168.1.200 255.255.255.255 192.168.1.1 Customer2

An engineer must configure the strongest password authentication to locally authenticate on a router. Which configuration must be used?

- ( ) **line Console 0**
  password 1b1Ju$
- ( ) **username netadmin secret 1b1Ju$k406675189QzwXyZ1kSZ2**
- ( ) **username netadmin secret 9 9vFpMf8elb4RVV8$seZ/bDAx1uV**
- (●) **username netadmin secret 5 1b1Ju$kZbBS1Pyh4QzwXyZ1kSZ2**

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

- (●) **monitor session 2 source interface gigabitethernet0/3 tx**
  monitor session 2 filter vlan 3
- ( ) **monitor session 2 source interface gigabitethernet0/3 tx**
  monitor session 2 filter vlan 1 - 2 , 4 - 4094
- ( ) **monitor session 2 source interface gigabitethernet0/3 rx**
  monitor session 2 filter vlan 1 - 2 , 4 - 4094
- ( ) **monitor session 2 source interface gigabitethernet0/3 rx**
  monitor session 2 filter vlan 3



```
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?

- The protocol is unreachable.
- The destination server reported it is too busy.
- The destination port is unreachable.
- [x] The probe timed out.

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

- [ ] port flapping
- [x] excess jitter
- [ ] misrouted network packets
- [ ] duplicate IP addresses
- [x] bandwidth-related packet loss

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

- [x] northbound API
- [x] business outcome oriented
- [ ] device-oriented
- [ ] southbound API
- [ ] procedural

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

- window size
- MTU
- MRU
- MSS

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?

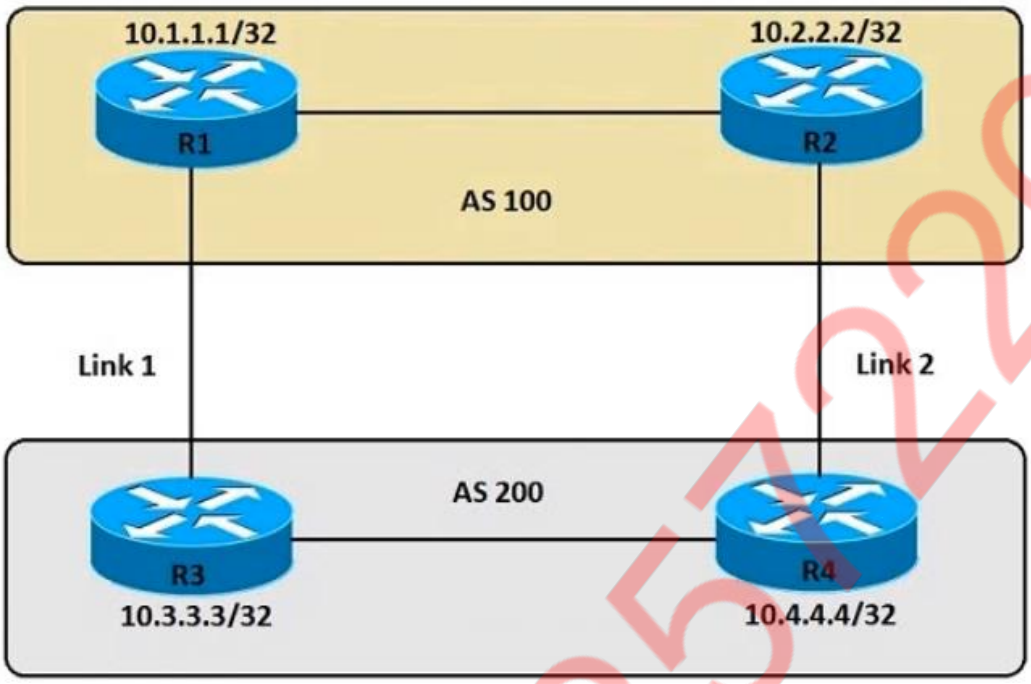
- over the DS
- 802.11v
- adaptive R
- 802.11k

How do cloud deployments differ from on-premises deployments?

- Cloud deployments require longer implementation times than on-premises deployments.
- Cloud deployments have lower upfront costs than on-premises deployments.
- Cloud deployments require less frequent upgrades than on-premises deployments
- Cloud deployments are more customizable than on-premises deployments.

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

- The wireless client is part of the fabric overlay.
- The access point is part of the fabric overlay.
- The WLC is part of the fabric underlay.
- The access point is part of the fabric underlay.



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?

- 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**
- R3(config)#**route-map PREPEND permit 10**
  R3(config-route-map)#**set as-path prepend 100 100 100**

  R3(config)#**router bgp 200**
  R3(config-router)#**neighbor 10.1.1.1 route-map PREPEND in**
- 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**
- 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**

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

- [x] The RIB is a database of routing prefixes, and the FIB is the information used to choose the egress interface for each packet.
- [ ] The FIB is derived from the control plane, and the RIB is derived from the FIB.
- [ ] FIB is a database of routing prefixes, and the RIB is the information used to choose the egress interface for each packet.
- [x] The RIB is derived from the control plane, and the FIB is derived from the RIB.
- [ ] The FIB is derived from the data plane, and the RIB is derived from the FIB.

```
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
!
```

Refer to the exhibit. 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?

- Add the **aaa authentication enable default Administrators** command.
- The password expiry mechanism is on the AAA server and must be configured there.
- Add the **username admin privilege 15 common-criteria-policy Administrators password 0 Cisco13579!** command.
- No further action is required. The configuration is complete.

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 bestpath\n ' )
print (stdout)
```

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

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

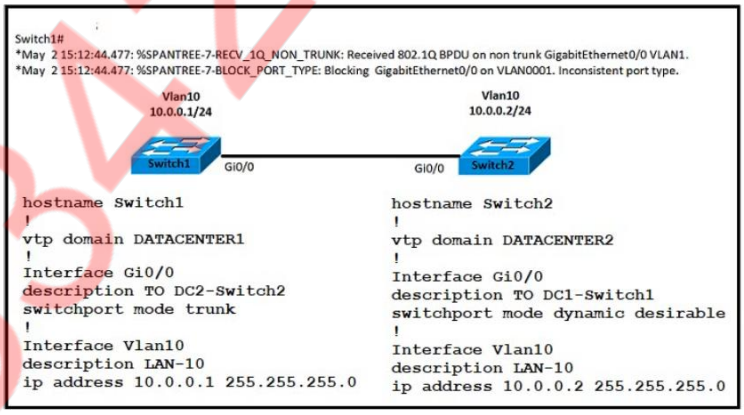
- TCP
- SSH
- HTTPS
- HTTP

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?

- VRRP version 2
- VRRP version 3
- GLBP
- HSRP version 2



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?

- Change Switch1 to switch port mode dynamic desirable.
- Change the VTP domain to match on both switches.
- Change Switch1 to switch port mode dynamic auto.
- Change Switch2 to switch port mode dynamic auto.

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

- [x] broadcast to nonbroadcast
- [ ] point-to-multipoint to broadcast
- [ ] broadcast to point-to-point
- [ ] point-to-multipoint to nonbroadcast

What is a fact about Cisco EAP-FAST?

- [ ] It operates in transparent mode.
- [x] It does not require a RADIUS server certificate.
- [ ] It requires a client certificate.
- [ ] It is an IETF standard.

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?

- [ ] 1
- [x] 2
- [ ] 4
- [ ] 8

What is a characteristic of MACsec?

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

What is the function of a VTEP in VXLAN?

- provide the routing underlay and overlay for VXLAN headers
- dynamically discover the location of end hosts in a VXLAN fabric
- encapsulate and de-encapsulate traffic into and out of the VXLAN fabric
- statically point to end host locations of the VXLAN fabric

What is the responsibility of a secondary WLC?

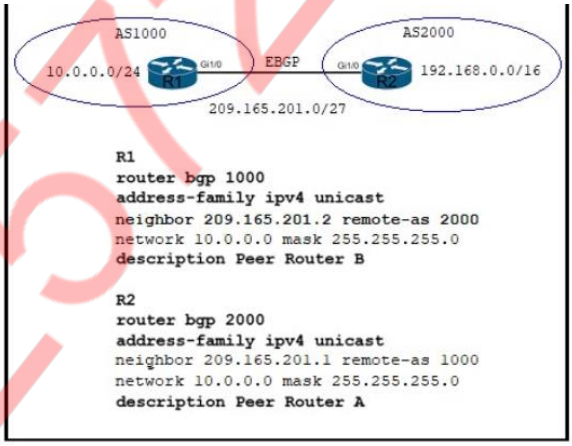
- It registers the LAPs if the primary controller fails.
- It enables Layer 2 and Layer 3 roaming between itself and the primary controller.
- It avoids congestion on the primary controller by sharing the registration load on the LAPs.
- It shares the traffic load of the LAPs with the primary controller.

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

- Yagi
- omnidirectional
- dipole
- patch

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

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



Refer to the exhibit. Which two commands are needed to allow for full reachability between AS 1000 and AS 2000? (Choose two.)

- [ ] R1
  no network 10.0.0.0 mask 255.255.255.0
- [x] R2
  network 209.165.201.0 mask 255.255.192.0
- [ ] R2
  network 192.168.0.0 mask 255.255.0.0
- [ ] R1
  network 192.168.0.0 mask 255.255.0.0
- [x] R2
  no network 10.0.0.0 mask 255.255.255.0

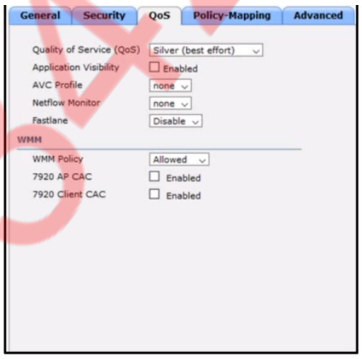
```
Extended IP access list EGRESS
10 permit ip 10.0.0.0 0.0.0.255 any
!
<Output Omitted>
!
interface GigabitEthernet0/0
 ip address 209.165.200.225 255.255.255.0
 ip access-group EGRESS out
 duplex auto
 speed auto
 media-type rj45
!
```

Refer to the exhibit. An engineer must block all traffic from a router to its directly connected subnet 209.165.200.0/24. The engineer applies 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. What explains this behavior?

- (•) Access control lists that are applied outbound to a router interface do not affect traffic that is sourced from the router.
- ( ) The access control list must contain an explicit deny to block traffic from the router.
- ( ) 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.
- ( ) Only standard access control lists can block traffic from a source IP address.

What is a benefit of a virtual machine when compared with a physical server?

- (•) Multiple virtual servers can be deployed on the same physical server without having to buy additional hardware.
- ( ) Virtual machines increase server processing performance.
- ( ) The CPU and RAM resources on a virtual machine cannot be affected by other virtual machines.
- ( ) Deploying a virtual machine is technically less complex than deploying a physical server.



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 all configuration profiles are correct on the Apple devices. Which change on the WLC optimizes QoS for these devices?

- ( ) Set WMM to required.
- ( ) Configure AVC Profiles.
- (•) Enable Fastlane.
- ( ) Change the QoS level to Platinum.

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

- to connect external Layer 3 networks to the SD-Access fabric
- [x] to connect wired endpoints to the SD-Access fabric
- to advertise fabric IP address space to external networks
- to connect the fusion router to the SD-Access fabric

What is used to perform QoS packet classification?

- the Options field in the Layer 3 header
- the Type field in the Layer 2 frame
- the Flags field in the Layer 3 header
- [x] the TOS field in the Layer 3 header

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

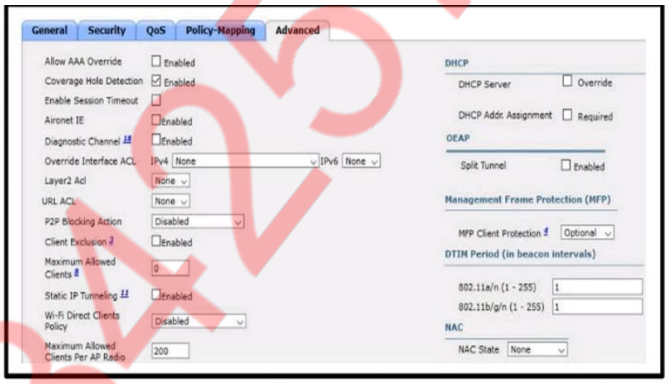
- Cisco Firepower and FireSIGHT
- [x] Cisco Stealthwatch system
- Advanced Malware Protection
- Cisco Web Security Appliance

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?

- {[{'First Name': 'Johnny', 'Last Name': 'Table', 'Hobbies': ['Running', 'Video games']}, {'First Name': 'Billy', 'Last Name': 'Smith', 'Hobbies': ['Napping', 'Reading']}]}
- {'Person': [{'First Name': 'Johnny', 'Last Name': 'Table', 'Hobbies': 'Running', 'Video games'}, {'First Name': 'Billy', 'Last Name': 'Smith', 'Hobbies': 'Napping', 'Reading'}]}
- {[{'First Name': 'Johnny', 'Last Name': 'Table', 'Hobbies': 'Running', 'Hobbies': 'Video games'}, {'First Name': 'Billy', 'Last Name': 'Smith', 'Hobbies': 'Napping', 'Hobbies': 'Reading'}]}
- **{'Person': [{'First Name': 'Johnny', 'Last Name': 'Table', 'Hobbies': ['Running', 'Video games']}, {'First Name': 'Billy', 'Last Name': 'Smith', 'Hobbies': ['Napping', 'Reading']}]}**

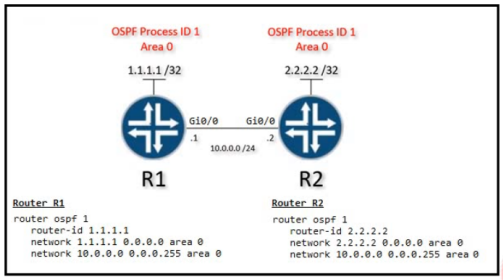


Refer to the exhibit. An engineer has configured Cisco ISE to assign VLANs to clients based on their method of authentication, but this is not working as expected. Which action will resolve this issue?

- **enable AAA override**
- utilize RADIUS profiling
- require a DHCP address assignment
- set a NAC state

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

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



Refer to the exhibit. A network engineer is configuring OSPF between router R1 and router R2. The engineer must ensure that a DR/BDR election does not occur on the Gigabit Ethernet interfaces in area 0. Which configuration set accomplishes this goal?

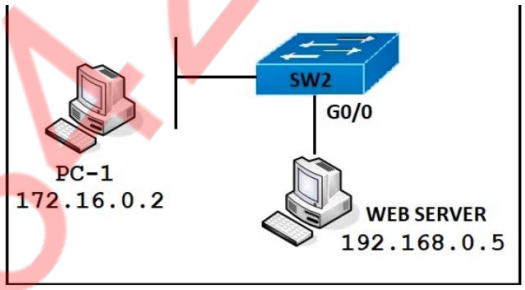
- R1(config-if)**interface Gi0/0**
  R1(config-if)**ip ospf network broadcast**

  R2(config-if)**interface Gi0/0**
  R2(config-if)**ip ospf network broadcast**
- 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**
- R1(config-if)**interface Gi0/0**
  R1(config-if)**ip ospf database-filter all out**

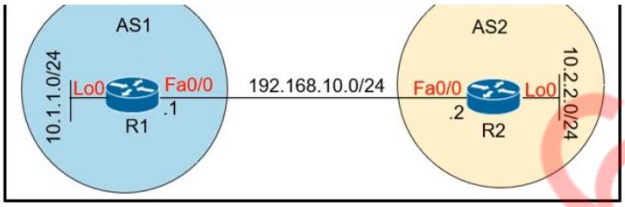
  R2(config-if)**interface Gi0/0**
  R2(config-if)**ip ospf database-filter all out**
- R1(config-if)**interface Gi0/0**
  R1(config-if)**ip ospf network point-to-point**

  R2(config-if)**interface Gi0/0**
  R2(config-if)**ip ospf network point-to-point**



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?

- permit tcp host 192.168.0.5 eq 8080 host 172.16.0.2
- permit tcp host 192.168.0.5 lt 8080 host 172.16.0.2
- permit tcp host 192.168.0.5 host 172.16.0.2 eq 8080
- permit tcp host 172.16.0.2 host 192.168.0.5 eq 8080



Refer to the exhibit. Which configuration establishes EBGP neighborship between these two directly connected neighbors and exchanges the loopback network of the two routers through BGP?

- 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**

- 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**

- 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**

- 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**

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 TACACS+ server is checked first. If that check fails, a local database is checked.
- A TACACS+ server is checked first. If that check fails, a RADIUS server is checked. If that check fails, a local database is checked.
- A local database is checked first. If that check fails, a TACACS+ server is checked. If that check fails, a RADIUS server is checked.
- A local database is checked first. If that check fails, a TACACS+ server is checked.

How does the RIB differ from the FIB?

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

```
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?

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

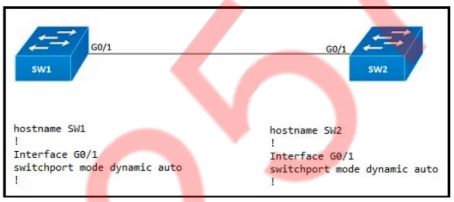
```
SW1#sh monitor session all
Session 1
------------
Type                   : Remote Destination Session
Source RSPAN VLAN      : 50

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** command to verify operation. What does the output confirm?

- ( ) RSPAN session 1 monitors activity on VLAN 50 of a remote switch.
- ( ) SPAN session 2 only monitors egress traffic exiting port FastEthernet 0/14.
- (●) RSPAN session 1 is incompletely configured for monitoring.
- ( ) SPAN session 2 monitors all traffic entering and exiting port FastEthernet 0/15.

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

- event manager applet ondemand
  action 1.0 syslog priority critical msg 'This is a message from ondemand'
- event manager applet ondemand
  event manual
  action 1.0 syslog priority critical msg 'This is a message from ondemand'
- event manager applet ondemand
  event register
  action 1.0 syslog priority critical msg 'This is a message from ondemand'
- **event manager applet ondemand**
  event none
  action 1.0 syslog priority critical msg 'This is a message from ondemand'



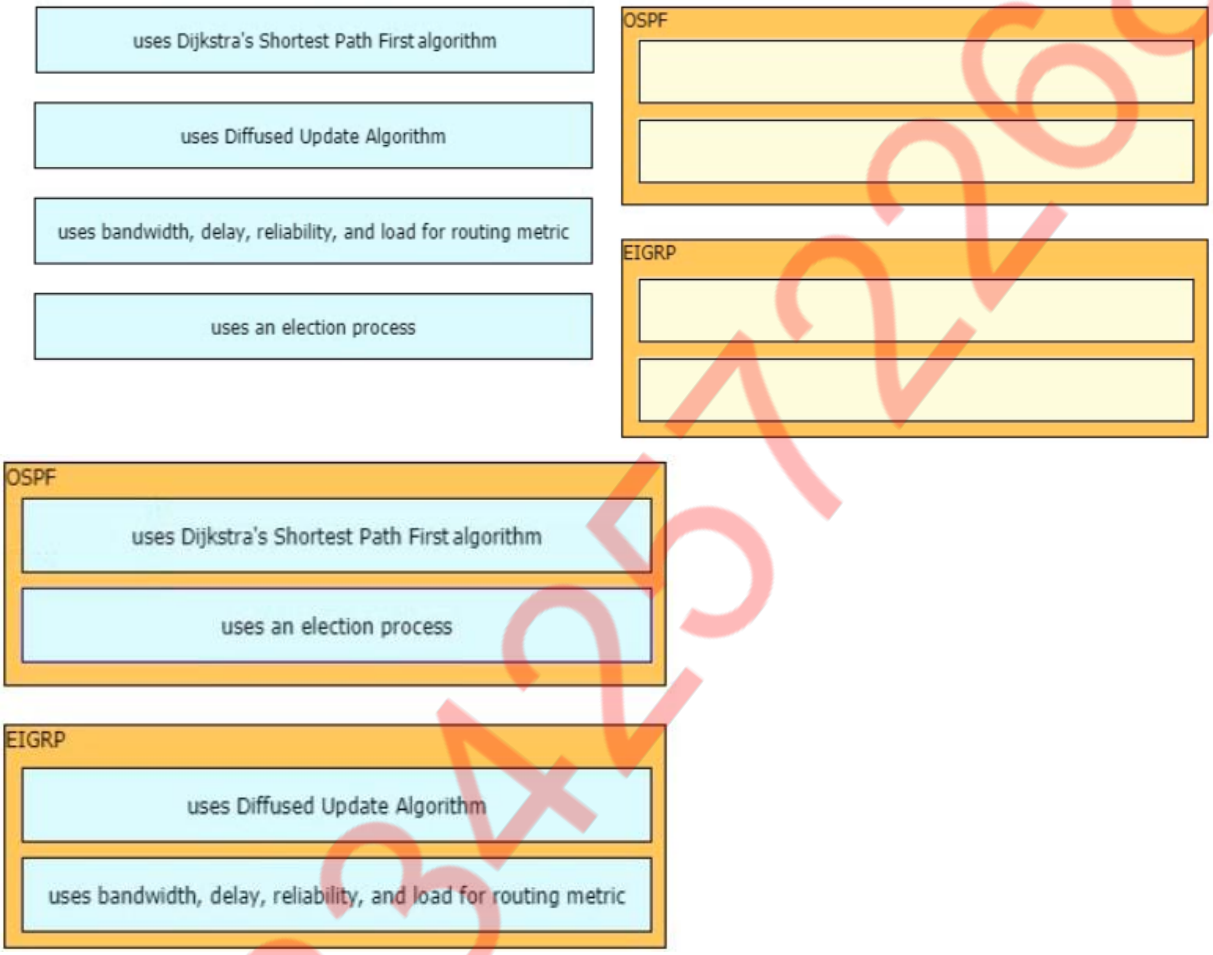
Refer to the exhibit. An engineer attempts to configure a trunk between switch SW1 and switch SW2 using DTP, but the trunk does not form. Which command should the engineer apply to switch SW2 to resolve this issue?

- switchport nonegotiate
- no switchport
- switchport mode access
- switchport mode dynamic desirable

What is a characteristic of a virtual machine?

- It is deployable without a hypervisor to host it.
- It must run the same operating system as its host.
- It relies on hypervisors to allocate computing resources for it.
- It must be aware of other virtual machines, in order to allocate physical resources for them.

Drag and drop the characteristics from the left onto the protocols they apply to on the right.



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

- 4464
- 17914
- 1500
- 9100

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?

- [x] local WLC
- [ ] RADIUS server
- [ ] ISE server
- [ ] anchor WLC

Drag and drop the characteristics from the left onto the orchestration tools that they describe on the right.

Which NTP Stratum level is a server that is connected directly to an authoritative time source?

- Stratum 0
- Stratum 1
- Stratum 14
- Stratum 15

Which characteristic distinguishes Ansible from Chef?

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

Name is Bob Johnson
Age is 75
Is alive

Favorite foods are:
• Cereal
• Mustard
• Onions

Refer to the exhibit. What is the JSON syntax that is formed from the data?

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

Drag and drop the wireless elements on the left to their definitions on the right.

beamwidth	a graph that shows the relative intensity of the signal strength of an antenna within its space
polarization	the relative increase in signal strength of an antenna in a given direction
radiation patterns	measures the angle of an antenna pattern in which the relative signal strength is half-power below the maximum value
gain	radiated electromagnetic waves that influence the orientation of an antenna within its electromagnetic field

radiation patterns

gain

beamwidth

polarization