Cisco Certified Network Professional Enterprise (CCNP 2025)

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

Demo Questions

CISCO

CISCO CERTIFIED CCNP

(350-401) Implementing Cisco Enterprise Network Core Technologies

注意：題目有 ☆ 標記只代表近期出過的題目，☆ 數量越多，代表過去多個月出的次數越多，但同學必須溫習“整份”題目才可提升考試合格機會。 (☆=Oct, ☆=Nov,☆ =Dec,☆ =Jan,☆ =Feb)

QUESTION 1 ☆☆☆☆

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

Answer: B

QUESTION 2

How do cloud deployments differ from on-premises deployments?

A. Cloud deployments are more customizable than on-premises deployments
B. Cloud deployments have lower upfront cost that on-premises deployments
C. Cloud deployments require longer implementation times than on-premises deployments
D. Cloud deployments require less frequent upgrades than on-premises deployments

Answer: B

QUESTION 3 ☆☆

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 through 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

Answer: A

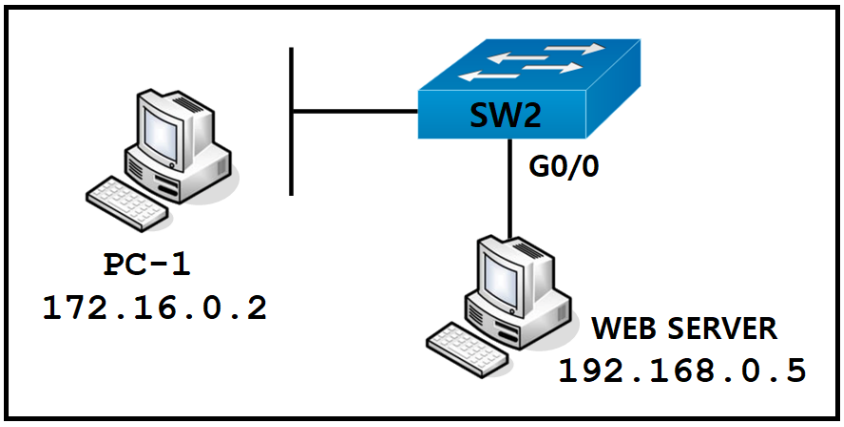
QUESTION 4 ☆☆

Which definition describes JWT in regard to REST API security?

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

Answer: C

QUESTION 5



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 192.168.0.5 eq 8080 host 172.16.0.2`

C. `permit tcp host 192.168.0.5 host 172.16.0.2 eq 8080`

D. `permit tcp host 172.16.0.2 host 172.16.0.2 eq 8080`

Answer: B

QUESTION 6

```
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?

A. No further action is required. The configuration is complete

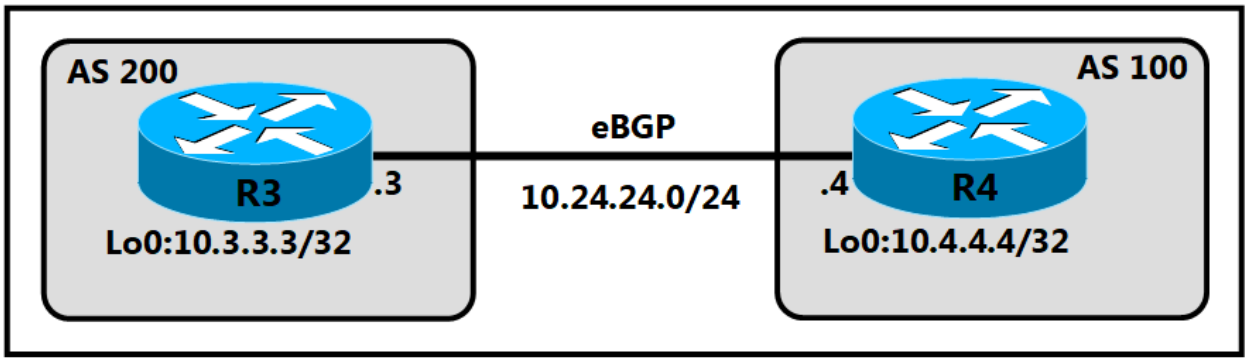
B. Add the **username admin privilege 15 common-criteria-policy Administrators password 0 Cisco13579!** command

C. The password expiry mechanism is on the AAA server and must be configured there

D. Add the **aaa authentication enable default Administrators** command

Answer: B

QUESTION 7



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)# **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**

B. R3(config)# **router bgp 200**
R3(config-router)# **neighbor 10.24.24.4 remote-as 100**
R3(config-router)# **bgp router-id 10.3.3.3**

R4(config)# **router bgp 100**
R4(config-router)# **neighbor 10.24.24.3 remote-as 200**
R4(config-router)# **bgp router-id 10.4.4.4**

C. R3(config)# **router bgp 200**
R3(config-router)# **neighbor 10.4.4.4 remote-as 100**
R3(config-router)# **bgp router-id 10.3.3.3**

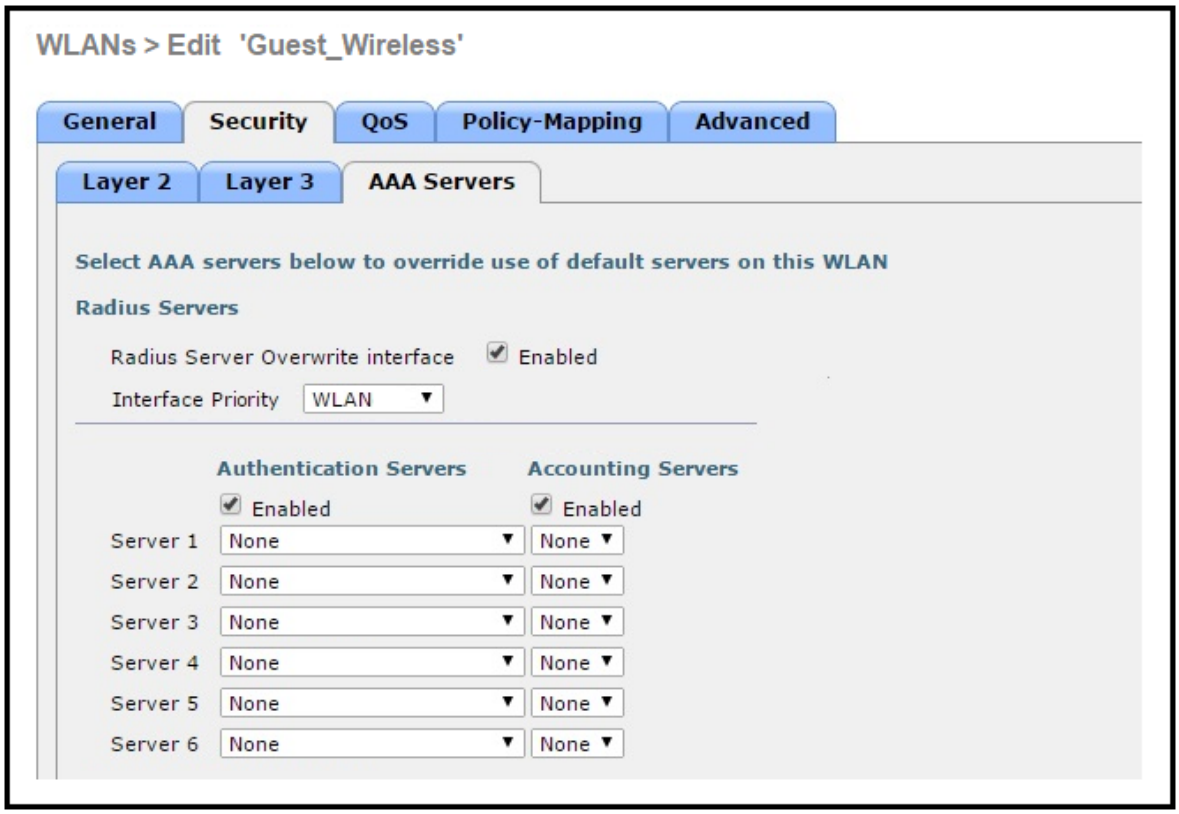
R4(config)# **router bgp 100**
R4(config-router)# **neighbor 10.3.3.3 remote-as 200**
R4(config-router)# **bgp router-id 10.4.4.4**

D. 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**

Answer: B

QUESTION 8



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

A. the interface specified on the WLAN configuration

B. any interface configured on the WLC

C. the controller management interface

D. the controller virtual interface

Answer: A

QUESTION 9

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

Answer: D

QUESTION 10

Which command set configures RSPAN to capture outgoing traffic from VLAN 3 on interface GigabitEthernet0/3 while ignoring other VLAN traffic on the same interface?

A.
```
monitor session 2 source interface gigibitethernet0/3 tx
monitor session 2 filter vlan 1 - 2, 4 - 4094
```

B.
```
monitor session 2 source interface gigibitethernet0/3 rx
monitor session 2 filter vlan 1 - 2, 4 - 4094
```

C.
```
monitor session 2 source interface gigibitethernet0/3 tx
monitor session 2 filter vlan 3
```

D.
```
monitor session 2 source interface gigibitethernet0/3 rx
monitor session 2 filter vlan 3
```

Answer: C

QUESTION 11

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’, ‘Video games’},{‘First Name’: ‘Billy’, ‘Last Name’: ‘Smith’, ‘Hobbies’: ‘Napping’, ‘Reading’}]}

D. {‘Person’:[{‘First Name’: ‘Johnny’, ‘Last Name’: ‘Table’, ‘Hobbies’:[‘Running’, ‘Video games’]}, {‘First Name’: ‘Billy’, ‘Last Name’: ‘Smith’, ‘Hobbies’:[‘Napping’, ‘Reading’]}]}

Answer: D

QUESTION 12

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

A. **event manager applet ondemand**
event manual
action 1.0 syslog priority critical msg 'This is a message from ondemand'

B. **event manager applet ondemand**
event none
action 1.0 syslog priority critical msg 'This is a message from ondemand'

C. **event manager applet ondemand**
action 1.0 syslog priority critical msg 'This is a message from ondemand'

D. **event manager applet ondemand**
event register
action 1.0 syslog priority critical msg 'This is a message from ondemand'

Answer: B

QUESTION 13

```
>>> 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["description"])
```

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["enabled"])
        print(interface["description"])
```

Answer: A

QUESTION 14

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']['output']['body']['kickstart_ver_str'])
```

HTTP JSON Response:

```
{
 "ins_api":{
 "type": "cli_show",
 "version": "1.0",
 "sid": "eoc",
 "outputs": {
  "output": {
   "input": "show version",
    "msg": "Success",
    "code": "200",
    "body": {
     "bios_ver_str", "07.61",
     "kickstart_ver_str": "7.0(3)I7(4)",
     "bios_cmpl_time": "04/06/2017",
     "kick_file_name": "bootflash:///nxos.7.0.3.I7.4.bin",
     "kick_cmpl_time", "6/14/1970 2:00:00",
     "kick_tmstmp": "06/14/1970 09:49:04",
     "chassis_id": "Nexus9000 93180YC-EX chassis",
     "cpu_name": "Intel(R) Xeon(R) CPU @ 1.80GHz",
     "memory": 24633488,
     "mem_type": "kB",
     "rr_usecs": 134703,
     "rr_crime": "Sun Mar 10 15:41:46 2019",
     "rr_reason": "Reset Requested by CLI command reload",
     "rr_sys_ver": "7.0(3)I7(4)",
     "rr_service":"",
     "manufacturer": "Cisco Systems, Inc.",
     "TABLE_package_list": {
      "ROW_package_list": {
       "package_id": {}
      }
     }
    }
   }
  }
 }
}
```

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

A. NameError: name 'json' is not defined

B. 7.61

C. 7.0(3)I7(4)

D. KeyError: 'kickstart_ver_str'

Answer: C

QUESTION 15

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

A. Cisco aWIPS polices on the WLC

B. Cisco aWIPS polices on Cisco DNA Center

C. malicious rogue rules on the WLC

D. malicious rogue rules on Cisco DNA Center

Answer: B

https://www.cisco.com/c/en/us/td/docs/wireless/controller/9800/17-1/config-guide/b_wl_17_11_cg/b_wl_17_11_cg_chapter_010001100.html

QUESTION 16

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"
          }
}
```

Answer: B

QUESTION 17

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

A. both supervisors must be configuring separately

B. the multicast state is preserved during switchover

C. requires synchronization between supervisors in order to guarantee continuous connectivity

D. must be combined with NSF to support uninterrupted Layer 2 operations

E. must be combined with NSF to support uninterrupted Layer 3 operations

Answer: C, E

QUESTION 18

```
SwitchC# show vtp status
VTP Version                     : 2
Configuation Revision           : 0
Maximum VLANs supported locally : 255
Number of existing VLANs        : 8
VTP Operating Mode              : Transparent
VTP Domain Name                 : cisco.com
TP Pruning Mode                 : Disabled
TP V2 Mode                      : Disabled
VTP Traps Generation            : Disabled
MD5 digest                      : 0xE5 0x28 0x5D 0x3E 0x2F 0xE5 0xAD 0x28
Configuration last modified by 0.0.0.0 at 1-10-19 09:01:38

SwitchC# show vlan brief
VLAN Name                              Status    Ports
---- --------------------------------- --------- -------------------------------
1    default                           active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                 Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                 Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                 Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                 Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                 Fa0/23, Fa0/24, Po1
110  Finance                           active
210  HR                                active    Fa0/1
310  Sales                             active    Fa0/2
[...output omitted...]

SwitchC# show int trunk
Port        Mode         Encapsulation     Status        Native vlan
Gig1/1      on           802.1q            trunking      1
Gig1/2      on           802.1q            trunking      1

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

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

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

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

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

A. SwitchC(config)# **vtp purning vlan 110**

B. SwitchC(config)# **interface port-channel 1**
SwitchC(config-if)# **switchport trunk allowed vlan add 210,310**

C. SwitchC(config)# **interface port-channel 1**
SwitchC(config-if)# **switchport trunk allowed vlan remove 110**

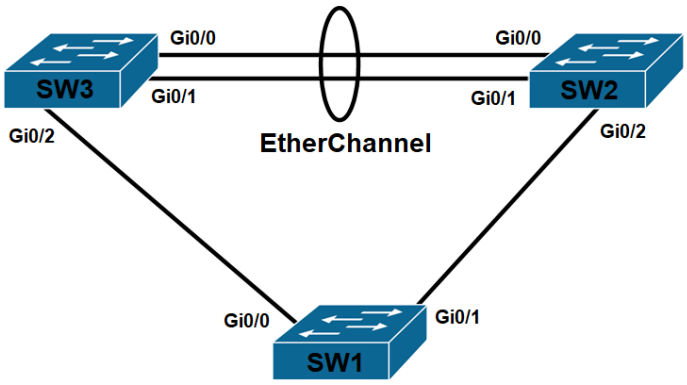
D. SwitchC(config)# **vtp pruning**

Answer: C

QUESTION 19

```
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
```

```
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 0/0
Building configuration...
Current configuration : 151 bytes
!
interface GigabitEthernet0/0
switchport trunk encapsulation isl
switchport mode trunk
switchport nonegotiate
channel-group 1 mode passive
end
```

```
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 channel-group mode on SW3 Gi0/1 to active
B. Configure the channel-group mode on SW2 Gi0/1 to on
C. Configure the mode on SW2 Gi0/1 to access
D. Configure the mode on SW2 Gi0/0 to trunk

Answer: D

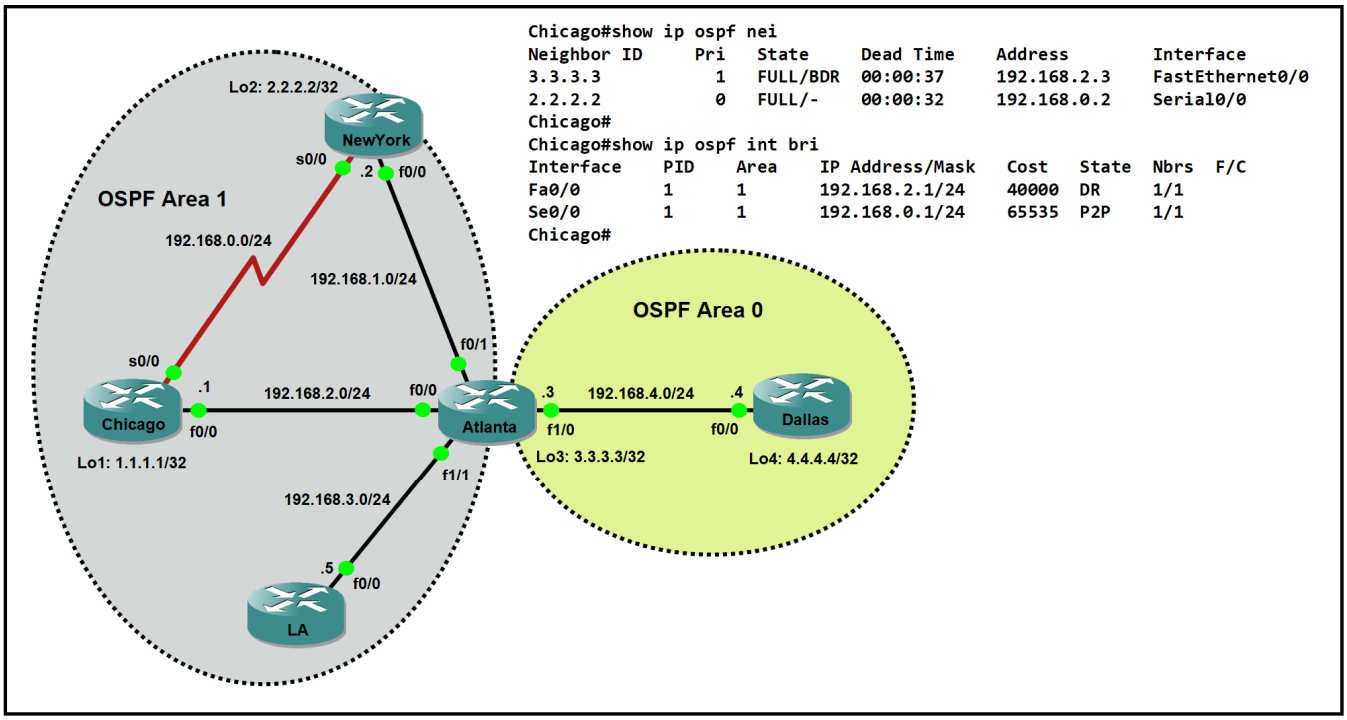
QUESTION 20

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

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

Answer: B

QUESTION 21



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 non-broadcast network type.

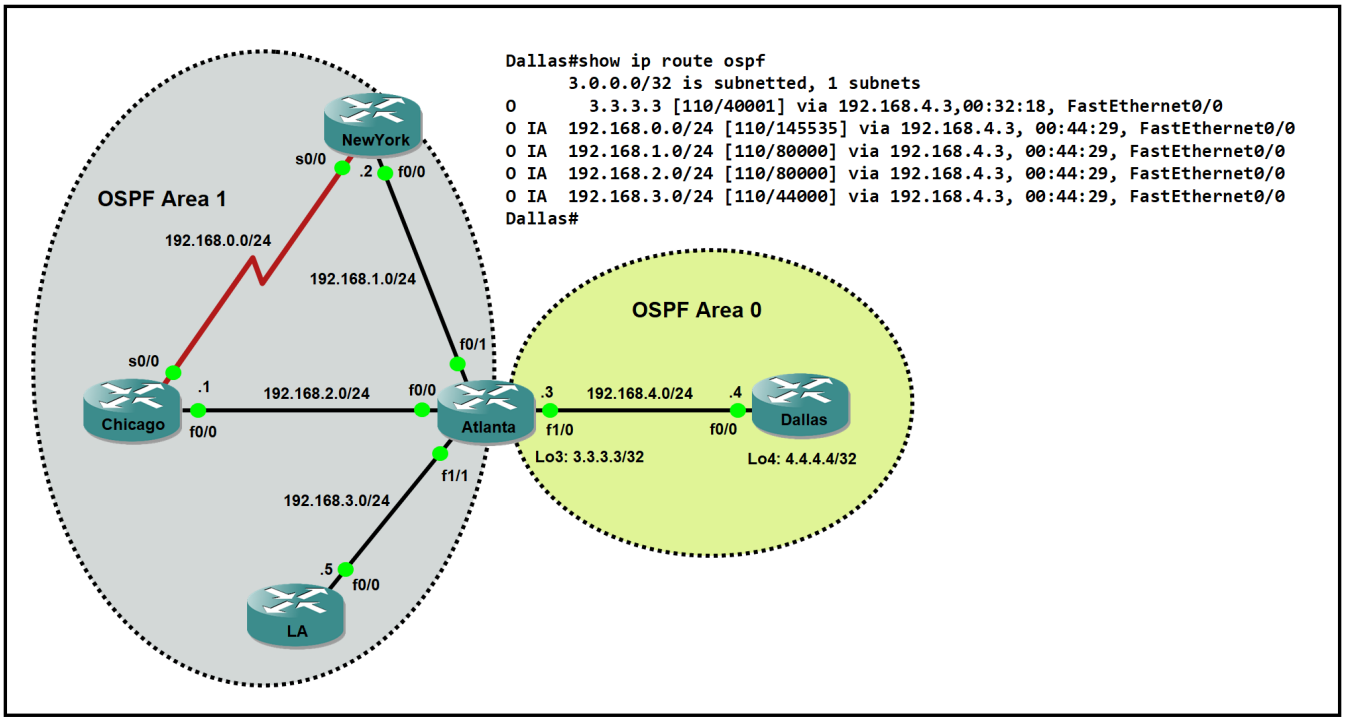
C. This segment has no designated router because it is a p2p network type.

D. Router Chicago because it has a lower router ID

Answer: C

OSPF Point-to-Point 網絡類型下，是不會和另一方 Router 做 DR 選舉。根據 Chicago 的 show ip ospf nei 的顯示和 NewYork router 2.2.2.2 是 **Full / -** 狀態，即大家已建立鄰接關係，但沒有角色之分。

QUESTION 22



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?

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

Answer: D

QUESTION 23

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

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

Answer: A

Multivendor Support (Southbound)

Cisco DNA Center allows customers to manage their non-Cisco devices through the use of a Software Development Kit (SDK) that can be used to create Device Packages for third-party devices.

Encapsulation of third-party components allows for an integrated view of the network consistent with the DNA Center abstraction. A Device Package enables Cisco DNA Center to communicate to third-party devices by mapping Cisco DNA Center features to their southbound protocols.

https://developer.cisco.com/docs/dna-center/#!cisco-dna-center-platform-overview/multivendor-support-southbound

QUESTION 24

When a wireless client roams between two different wireless controllers, a network connectivity outage is experience 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.

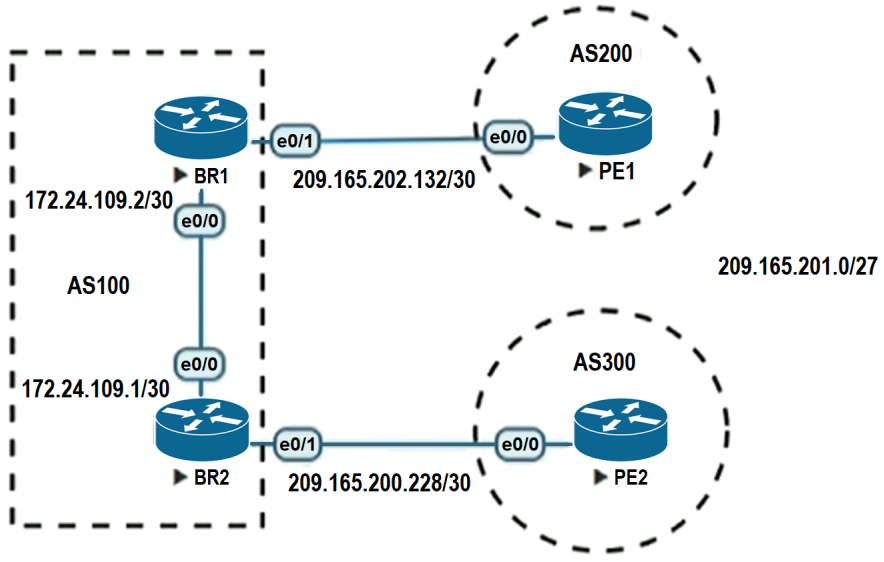
Answer: B

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 25



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

PE1
router bgp 200
bgp log-neighbor-changes
neighbor 209.165.202.133 remote-as 100

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

PE2
router bgp 300
bgp log-neighbor-changes
neighbor 209.165.200.229 remote-as 100

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

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

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

Answer: A

QUESTION 26

Which AP mode allows a support 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

Answer: C

QUESTION 27

```
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. only GigabitEthernet0/1

B. only GigabitEthernet0/0

C. GigabitEthernet0/1 and GigabitEthernet0/1.40

D. GigabitEthernet0/1 and GigabitEthernet0/1

Answer: B

GigabitEthernet0/1.40 和 GigabitEthernet0/1 都顯示 **No Hello (Passive Interface)**。不會傳送 Hello Packet 繼而不會和鄰接 Router 建立 OSPF adjacency。

QUESTION 28

```
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 protocol is unreachable

B. The probe timed out

C. The destination port is unreachable

D. The destination server reported it is too busy

Answer: B

probe timed out 時間係 3000 milliseconds (即是 3 秒)，如果在 3 秒內收不到回覆，便會出 * 代表 timed out

QUESTION 29

```
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
```

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 running-config`**. Which command completes the configuration?

A. Device(config)# **netconf max-sessions 100**

B. Device(config)# **netconf max-message 1000**

C. Device(config)# **netconf lock-time 500**

D. Device(config)# **no netconf ssh acl 1**

Answer: B

QUESTION 30

Which deployment option of Cisco NGFW provides scalability?

A. tap

B. clustering

C. high availability

D. inline tap

Answer: B

QUESTION 31

```
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
 network 10.0.0.0
 network 172.16.0.0
 network 192.168.1.0
```

Refer to the exhibit. An engineer attempts to configure a router on a stick to route packets between Clients, Server, and Printers; however, initial tests show that this configuration is not working. Which command set resolves this issue?

A. **interface Vlan10**
no ip vrf forwarding Clients
!
interface Vlan20
no ip vrf forwarding Servers
!
interface Vlan30
no ip vrf forwarding Printers

B. **interface Vlan10**
no ip vrf forwarding Clients
ip address 192.168.1.1 255.255.255.0
!
interface Vlan20
no ip vrf forwarding Servers
ip address 172.16.1.1 255.255.255.0
!
interface Vlan30
no ip vrf forwarding Printers
ip address 10.1.1.1 255.255.255.0

C. **router eigrp 1**
network 10.0.0.0 255.0.0.0
network 172.16.0.0 255.255.0.0
network 192.168.1.0 255.255.0.0

D. **router eigrp 1**
network 10.0.0.0 255.255.255.0
network 172.16.0.0 255.255.255.0
network 192.168.1.0 255.255.255.0

Answer: B

QUESTION 32

What are two characteristics of VXLAN? (Choose two)

A. It extends Layer 2 and Layer 3 overlay networks over a Layer 2 underlay

B. It uses VTEPs to encapsulate and decapsulate frames

C. It allows for up to 16 million VXLAN segments

D. It lacks support for host mobility

E. It has a 12-bit network identifier

Answer: B, C

* VXLAN uses VTEP devices in order to map tenants end devices to VXLAN segment and in order to perform VXLAN encapsulation and decapsulation.

* 802.1Q VLAN identifier space is only 12 bits. The VXLAN identifier space is 24 bits. This doubling in size allows the VXLAN ID space to increase over 400000 percent to 16 million unique identifiers.

Virtual Extensible LAN and Ethernet Virtual Private Network

https://www.cisco.com/c/en/us/support/docs/lan-switching/vlan/212682-virtual-extensible-lan-and-ethernet-virt.html

QUESTION 33

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 list):
  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

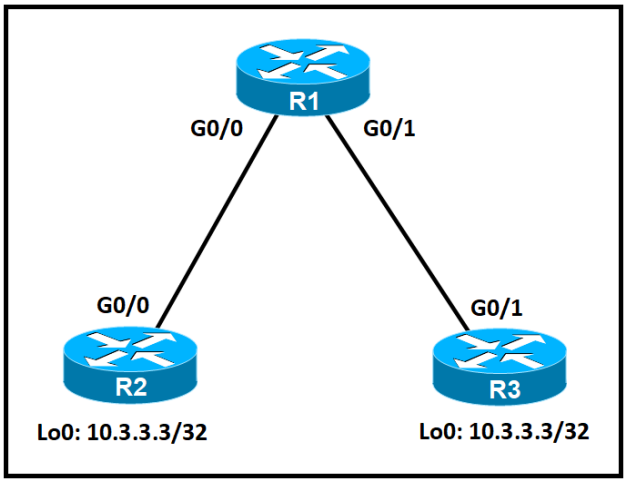
B. import manager

C. from ncclient import *

D. ncclient manager import

Answer: C

QUESTION 34



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 interface of routers R3 and R2 must be allowed at all times. Which command set accomplishes this task?

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

B. 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**

C. 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**

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**

Answer: B

QUESTION 35

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

Refer to the exhibit. Only administrator 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 protocol. Which configuration achieves this goal?

A. access-list 23 permit 10.10.10.0 0.0.0.255
line vty 0 15
access-class 23 in
transport input ssh

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 out
transport input all

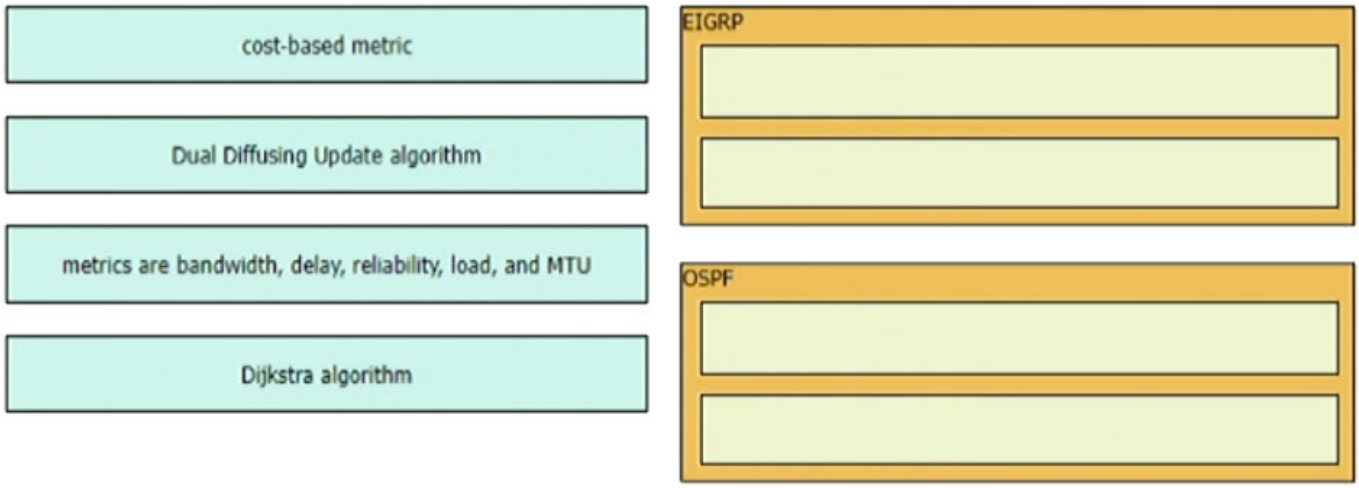
Answer: A

要用安全和加密的協定一定是 Secure Shell，所以答案 D 的 transport input all 是錯。
因為 Router 的 VTY 介面分別是 0-4 和 5-15，所以執行 access list 的範圍要覆蓋 0-15，所以答案 C 是錯。
答案 B 的 access list 指令中錯誤使用了 subnet mask 255.255.255.0，應該用 wildcard 0.0.0.255 代表。
所以最後只有答案 A 是全正確。

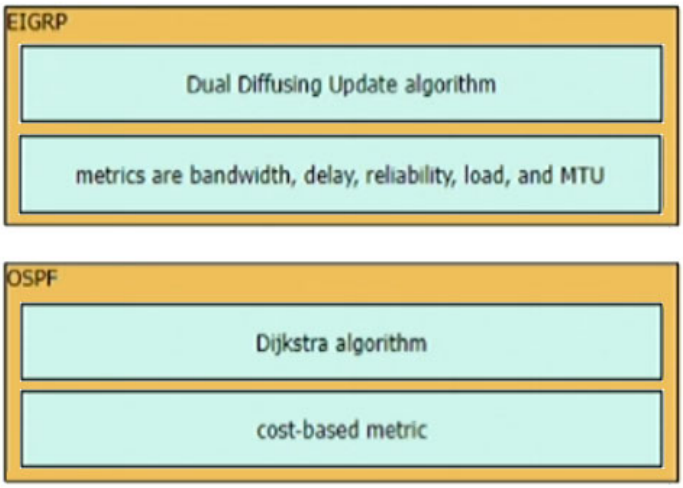
Drag and Drop Questions

QUESTION 1

Drag and drop the characteristics from the left onto the routing protocols they describe on the right.

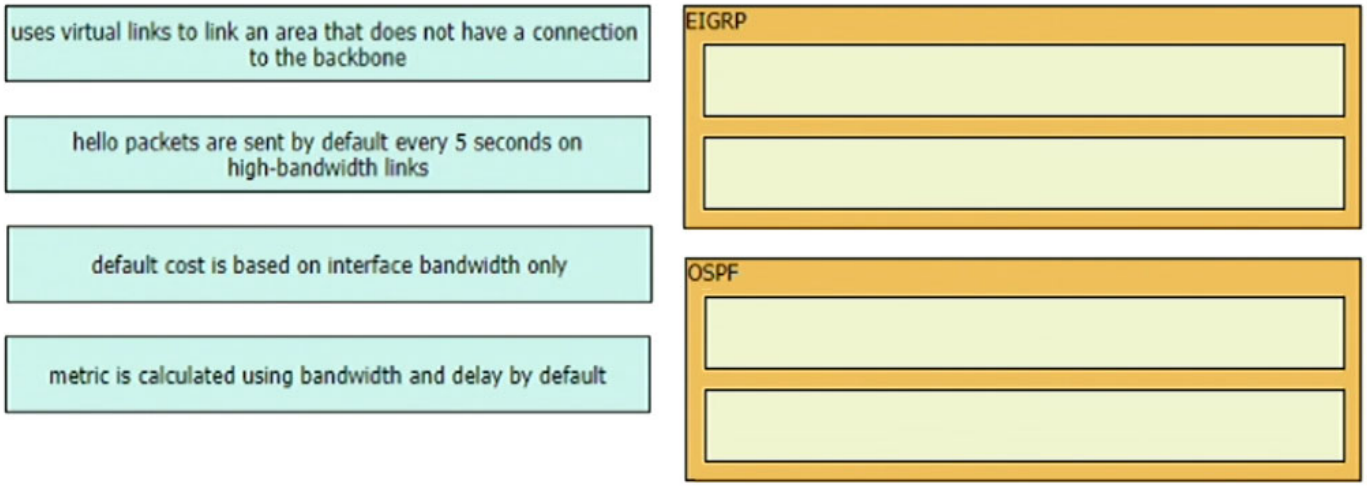


Answer:

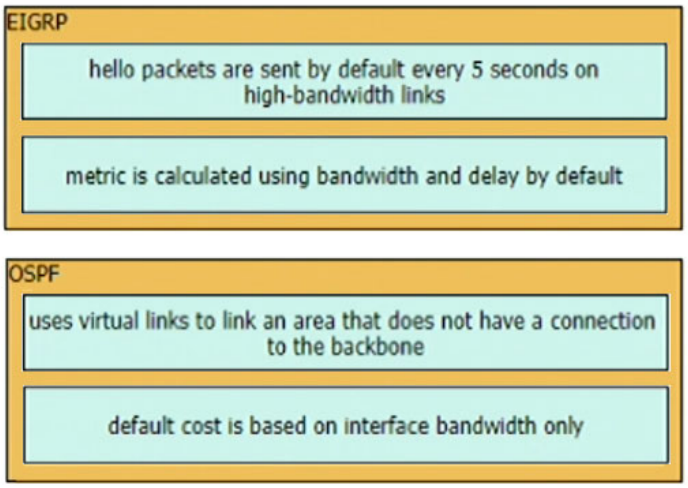


QUESTION 2

Drag and characteristics from the left onto the routing protocols they describe on the right.

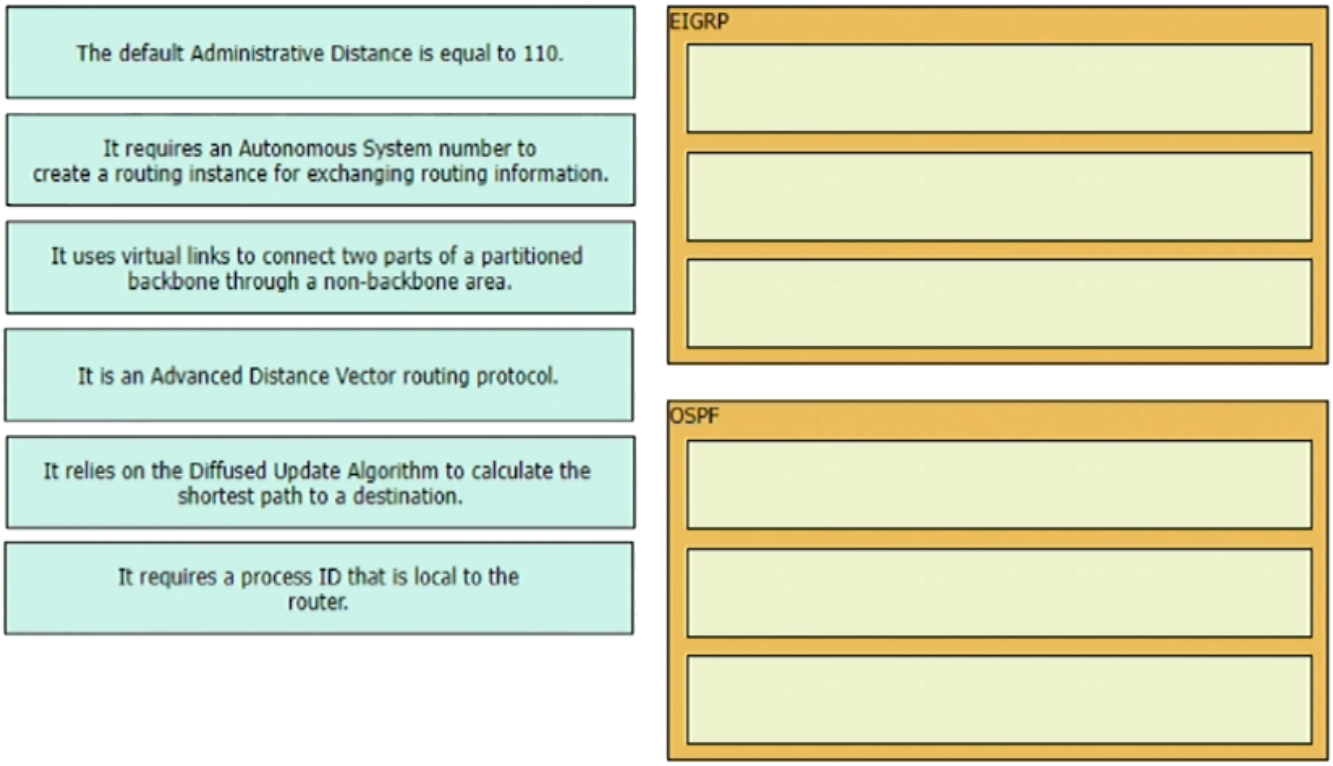


Answer:

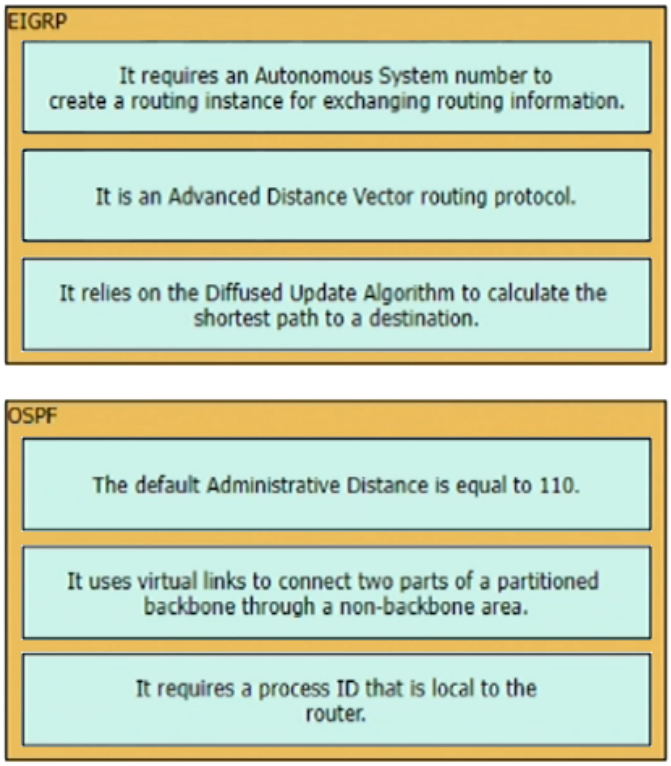


QUESTION 3

Drag and drop the characteristics from the left onto the routing protocols they describe on the right.

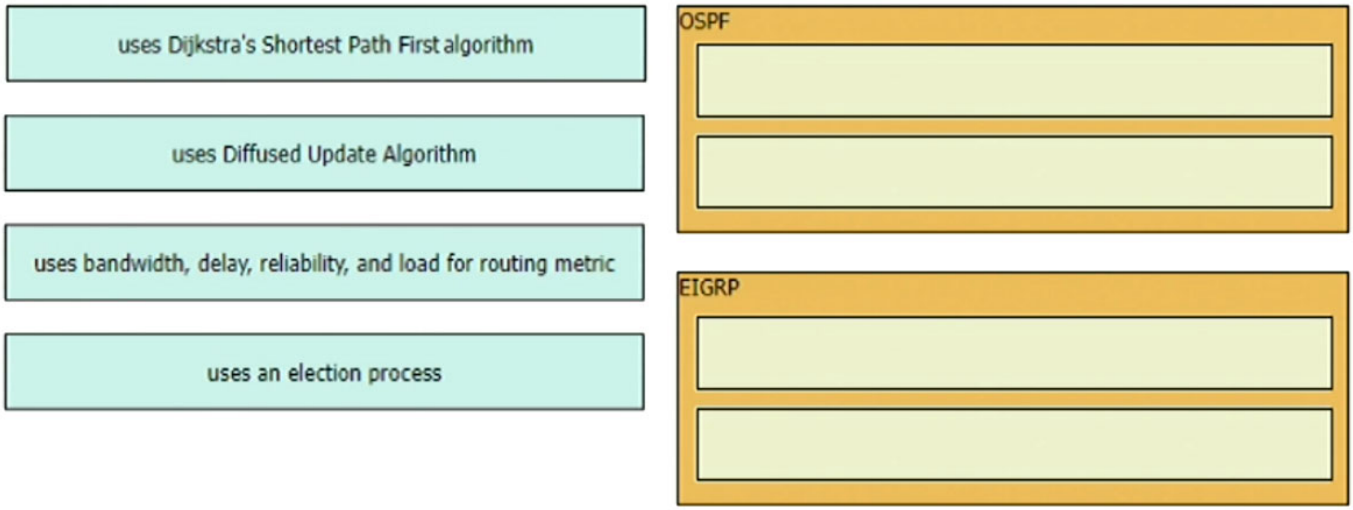


Answer:

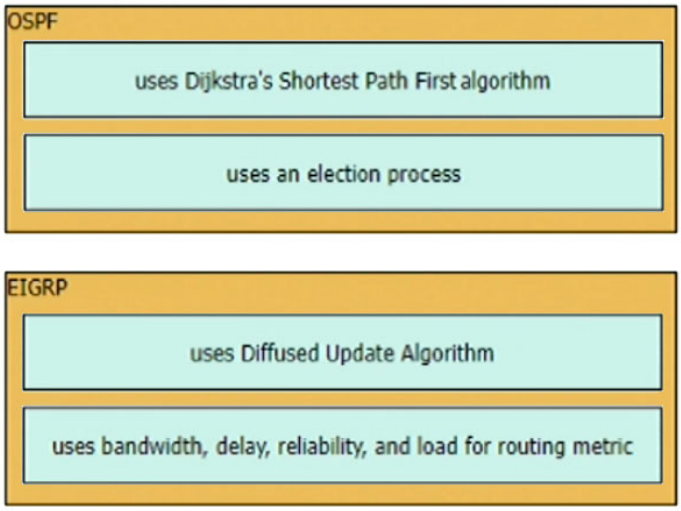


QUESTION 4

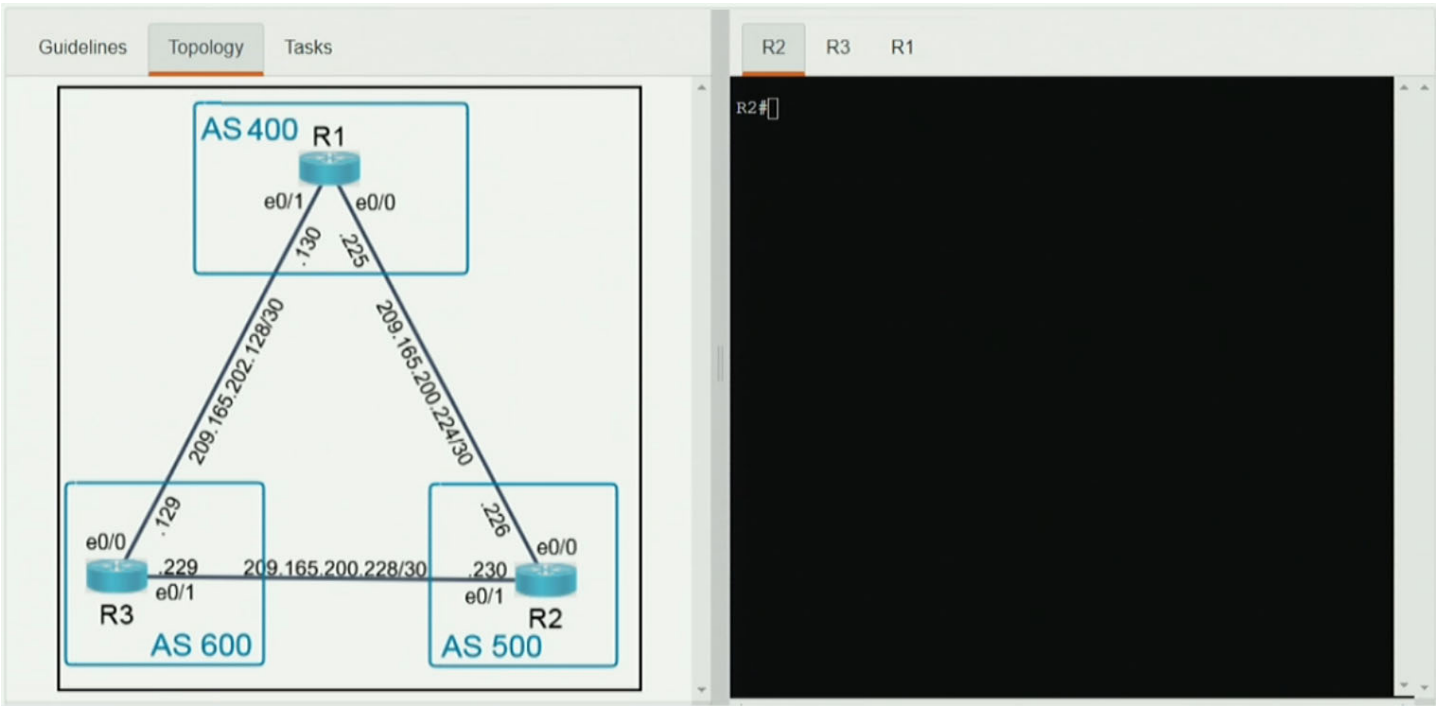
Drag and drop the characteristics from the left onto the protocols they apply to on the right.

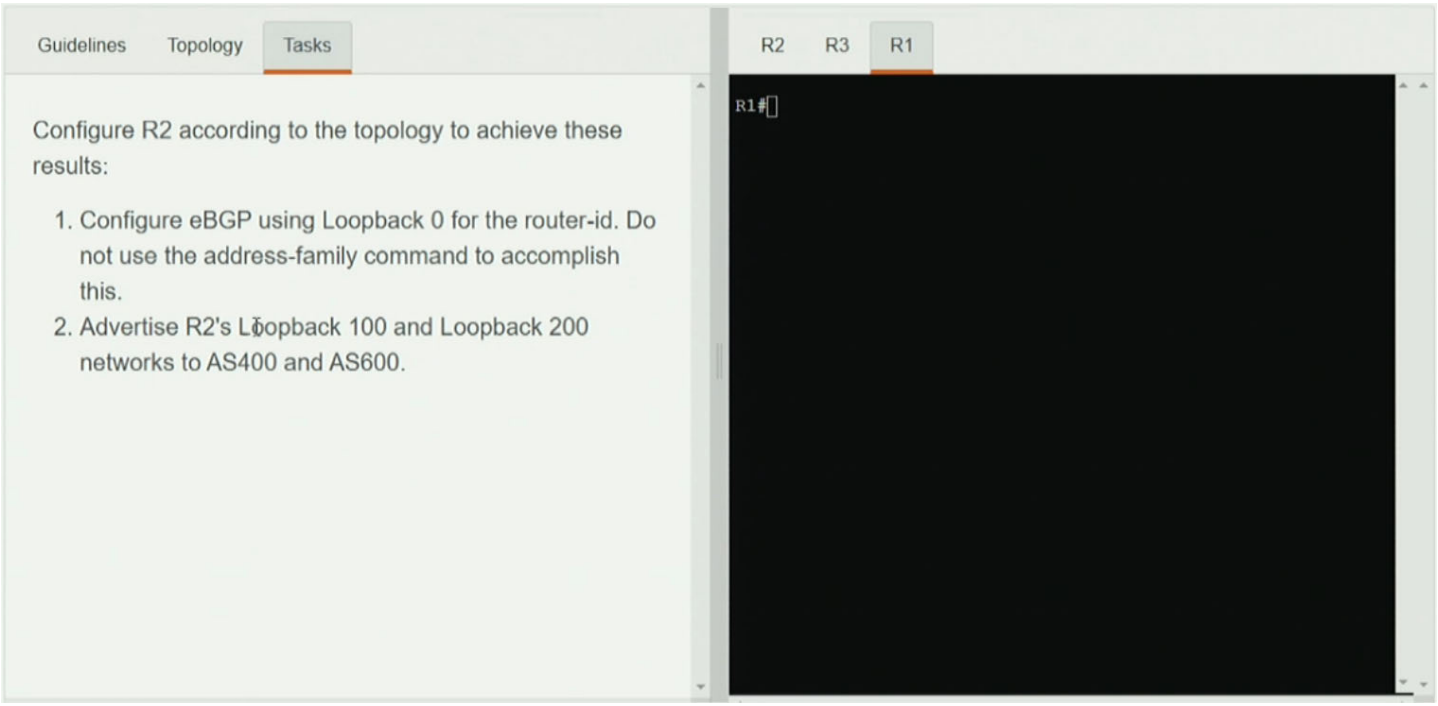


Answer:



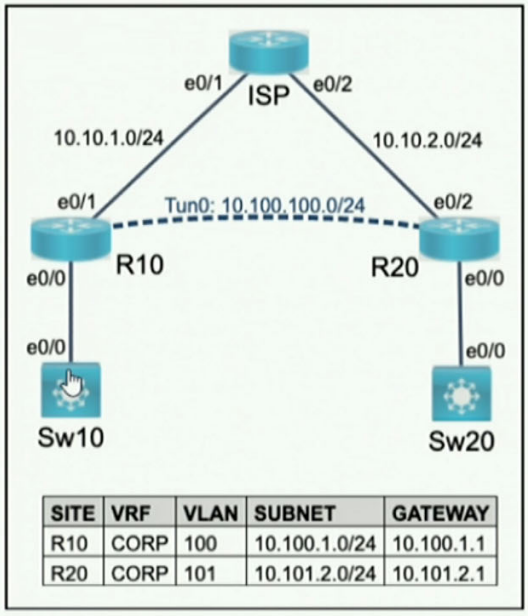
Simulation 1





Simulation 2

Guidelines | Topology | Tasks



SITE	VRF	VLAN	SUBNET	GATEWAY
R10	CORP	100	10.100.1.0/24	10.100.1.1
R20	CORP	101	10.101.2.0/24	10.101.2.1

R10 | R20 | ISP | Sw10 | Sw20

```
R10>
```

Guidelines | Topology | Tasks

The operations team started configuring network devices for a new site. R10 and R20 are preconfigured with the CORP VRF. R10 has network connectivity to R20. Complete the configurations to achieve these goals:

1. Extend the CORP VRF between R10 and R20 using Tunnel0.
2. Protect Tunnel0 using the preconfigured profile

R10 | R20 | ISP | Sw10 | Sw20

```
R10>
```

Simulation 3