

HPE0-Y53.exam

Number: HPE0-Y53
Passing Score: 800
Time Limit: 120 min



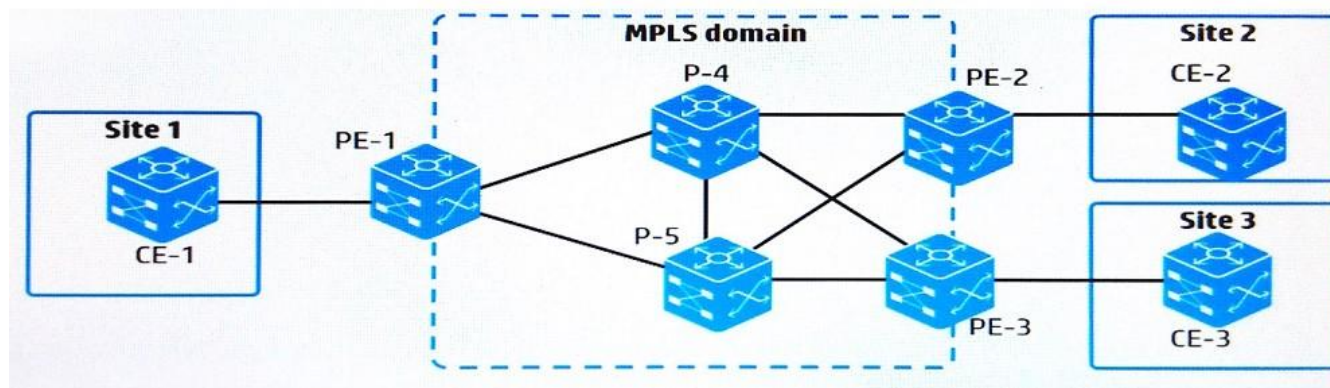
HPE0-Y53

Building HPE SDN and FlexNetwork Solutions

Exam A

QUESTION 1

Refer to the exhibit.



A network administrator has set up MPLS on the switches shown in the exhibit. The administrator wants to verify that PE-1 can use MPLS to forward traffic to Site 3, as well as see the labels used along the path. Which step should the administrator take to obtain this information?

- A. Run a traceroute to an IP address at Site 3 using the MPLS option.
- B. Use the `display` command to view MPLS LDP neighbors.
- C. Debug LDP and ping an IP address at Site 3.
- D. Use the `display` command to view MPLS Label Forwarding Information Base (LFIB).

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

<http://blog.ine.com/2008/11/24/mpls-ping-and-traceroute/>

QUESTION 2

A company is using MCE to create a multi-tenant data center solution. Network administrators want to isolate all management functions in a VPN instance "Management". Each switch has an IP address in 10.0.2.0/24 on its Management Ethernet port, and HP IMC manages the switches on these IP addresses. Administrators assign the Management Ethernet interfaces to the "Management" VPN instance. IMC begins losing data from the switches.

How should administrators fix the problem on each switch?

- A. Enable route leaking globally.
- B. Create a static or dynamic route to 10.0.2.0/24 in the public VPN table.
- C. Specify VPN instance "Management" for management settings such as SNMP trap destination.
- D. Set VPN instance "Management" as the default VPN instance.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 3

A customer has five data centers. Each data center hosts 10 tenants and separates the tenants using VLAN assignments.

The network administrator is connecting the data centers using EVI.

How should the administrator separate the tenant traffic over the EVI links?

- A. Set up a QinQ subinterface for each tenant on the EVI tunnel interfaces.
- B. Set up a unique EVI network ID for each tenant and extend that tenant's VLANs over that EVI network.
- C. Set up a routed subinterface for each tenant on the EVI tunnel interfaces.
- D. Extend all VLANs over the same EVI network. Use EVI VLAN mapping to map each tenant's VLANs to a unique S-VLAN.

Correct Answer: B

Section: (none)

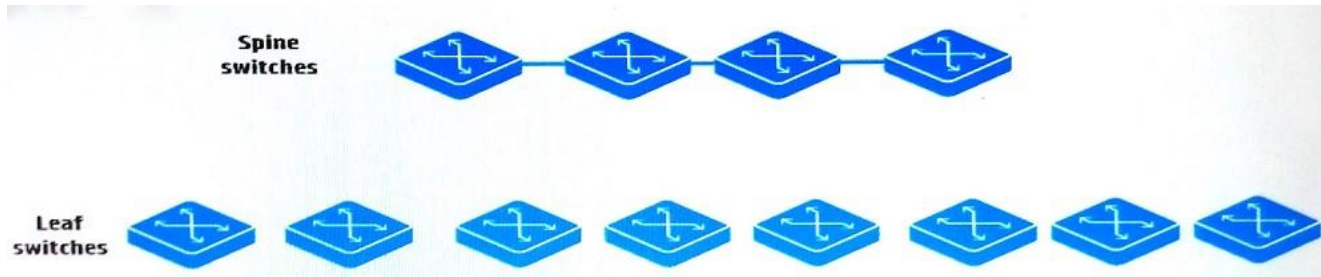
Explanation

Explanation/Reference:

Explanation:

QUESTION 4

Refer to the exhibit.



A network administrator wants to create a leaf and spine topology. How should the administrator connect the switches for the best latency and load-balancing?

- A. Connect each leaf switch to each spine switch, and run a protocol such as EVI.
- B. Connect each leaf switch to half of the spine switches, and run a protocol such as TRILL.
- C. Connect each leaf switch to each spine switch, and run a protocol such as TRILL.
- D. Connect each leaf switch to half of the spine switches, and run a protocol such as EVI.

Correct Answer: C

Section: (none)

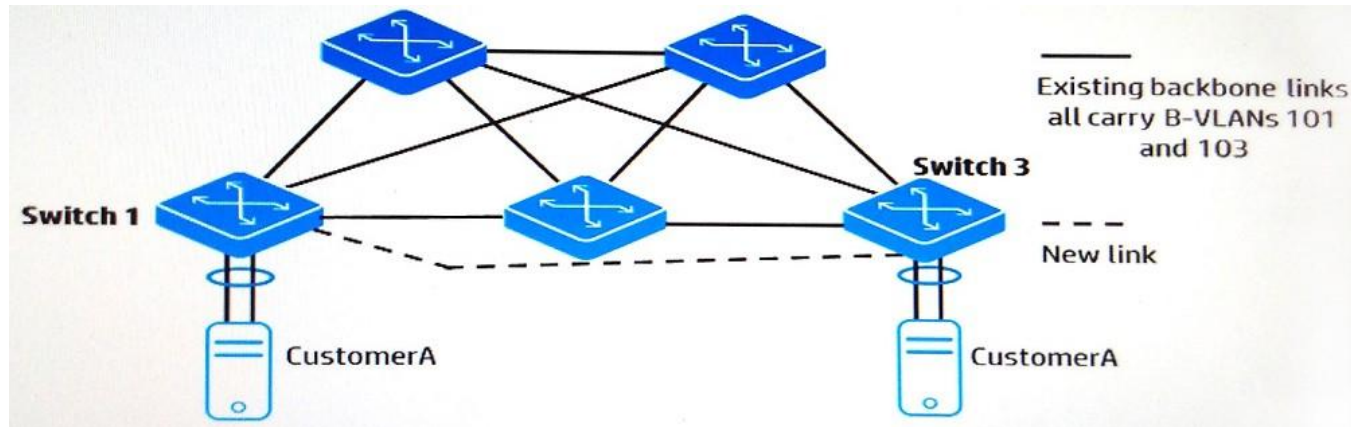
Explanation

Explanation/Reference:

Explanation:

QUESTION 5

Refer to the exhibit.



The switches in the exhibit are using SPBM. An administrator wants to send CustomerA traffic directly over the new link, shown by the dotted line in the exhibit, as a premium service for that customer. The existing links will be used for backup. The new link is reserved for CustomerA traffic.

How does the administrator set up Switch 1 to help to achieve this goal?

- A. by assigning the CustomerA interfaces and the specific links in the path to the same S-VLAN ID
- B. by creating a PW connection between Switch 1 and Switch 3, and mapping the CustomerA service instance to that PW
- C. by setting up a new B-VLAN and assigning it to the new link and the backup links, and mapping the CustomerA I-SID to that B-VLAN
- D. by changing the CustomerA I-SID 255 and defining the interface for the reserved link as the priority path int-SID 255

Correct Answer: C

Section: (none)

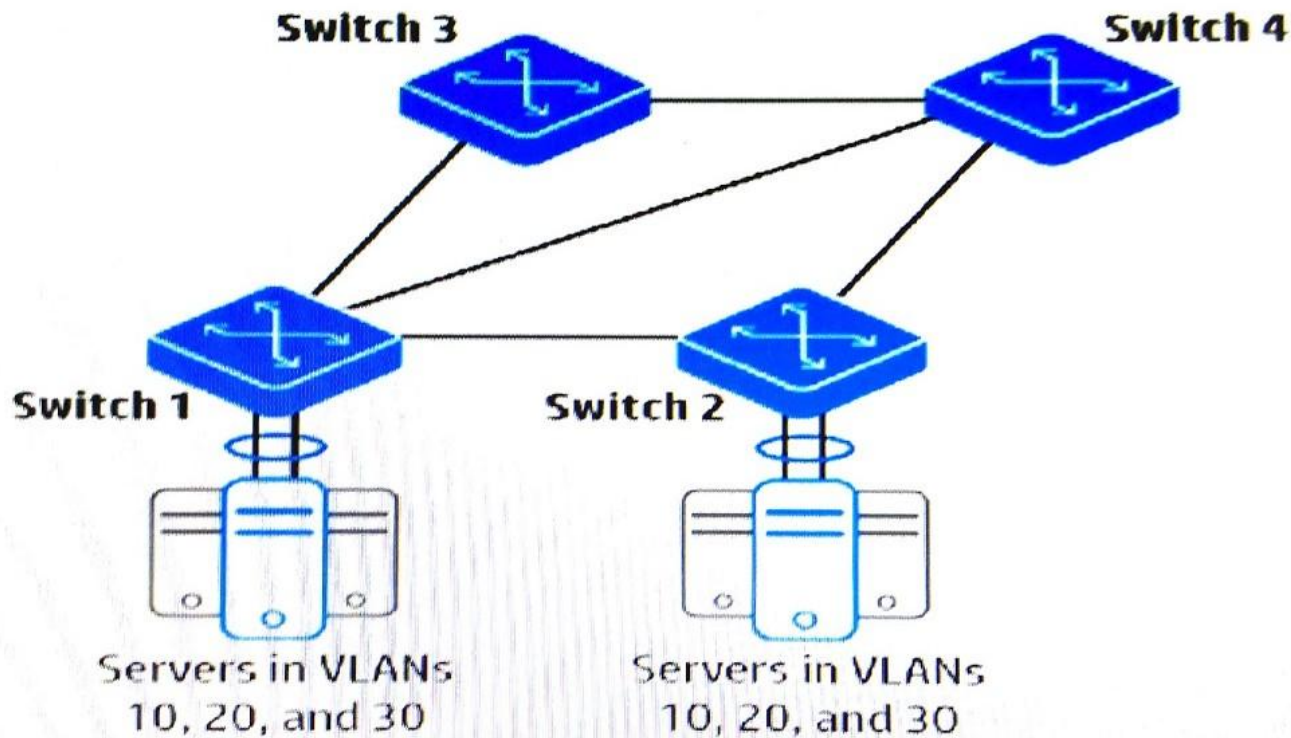
Explanation

Explanation/Reference:

Explanation:

QUESTION 6

Refer to the exhibit.



The switches shown in the exhibit form a TRILL region. The network administrator has enabled TRILL. What helps to ensure that Switch 2 sends multicasts and broadcasts over both of its switch-to-switch links?

- A. Configure a switch to be the tree root bridge and allow the creation of multiple trees.
- B. Configure Switch 3 and Switch 4 with the same designated routing bridge (DRB) priority.
- C. Configure Switch 2 with multiple MSTP instances, which are mapped to TRILL access VLANs.
- D. Configure Switch 2 to enable TRILL Equal Cost Multi-Path (ECMP) globally.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

https://en.wikipedia.org/wiki/Equal-cost_multi-path_routing

QUESTION 7

A network administrator has installed an SDN application from the HP SDN AppStore on the HP VAN SDN Controller. If the application is running and ready to service requests, which status should the administrator see in the controller's Applications window?

- A. RUNNING
- B. ACTIVE
- C. STARTED
- D. UP

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 8

A company has a data center that hosts multiple tenants. The company is adding a second and third data center. The core of each data center is an IRF virtual switch.

These are the IRF connections:

- IRF 1 is the core of the first data center.
- IRF 2 is the core of the second data center.
- IRF 3 is the core of the third data center.
- The three data centers are fully interconnected with dark fiber.
- IRF 1, IRF 2, and IRF 3 have connections to a WAN and to the Internet.

Which option for the connections between the data centers provides the best resiliency and stability?

- A. a link aggregation that consists of all of the links
- B. MSTP running on the links
- C. IRF 1,IRF 2,and IRF 3 combined into a single IRF virtual device
- D. SPBM configured across IRF 1, IRF 2, and IRF 3

Correct Answer: C

Section: (none)

Explanation

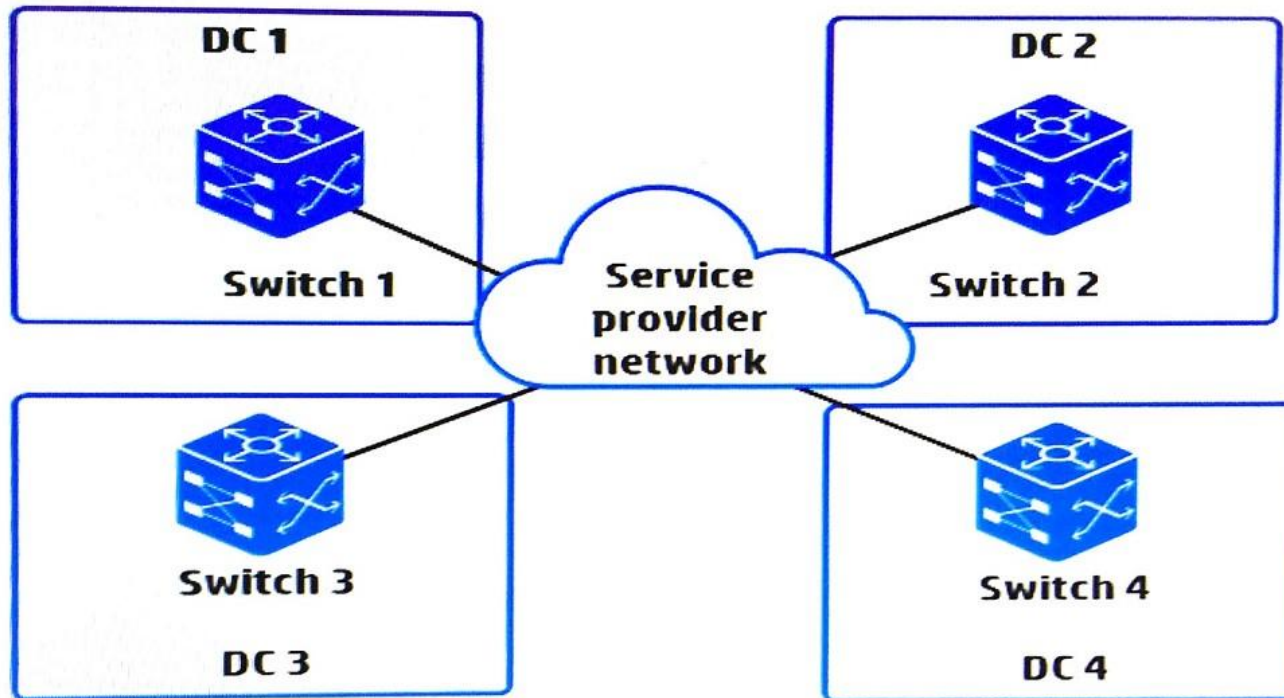
Explanation/Reference:

Explanation:

References:
<http://h17007.www1.hp.com/docs/reports/irf.pdf>

QUESTION 9

Refer to the exhibit.



A network administrator wants to connect four data centers using HP EVI. What is the correct setup for the EVI tunnel interfaces?

- A. three EVI tunnel interfaces on each EVI edge device—one EVI tunnel interface is required for each GRE tunnel in the mesh
- B. three EVI tunnel interfaces on Switch 1, which will act as the hub, and one EVI tunnel interface each on the other switches
- C. one EVI tunnel interface on each EVI edge device—the devices automatically establish GRE tunnels between these interfaces
- D. one EVI tunnel interface on Switch 1, which will be configured as the ENDP server, and no interfaces on the other switches

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 10

Refer to the exhibits on the Exhibit 1 and Exhibit 2 tabs.

Exhibit 1

```
[5900]display openflow instance 1 flow-table
```

Flow entry 3 information:

```
cookie: 0x0, priority: 31000, hard time: 0, idle time: 60, flags: none,  
byte count: --, packet count: 0
```

Match information:

```
Ethernet type: 0x0800  
IPv4 source address: 10.1.2.0, mask: 255.255.255.0  
IPv4 destination address: 10.1.3.0, mask: 255.255.255.0
```

Instruction information:

Write actions:

Output interface: _____

Exhibit 2

```
[5900]display ip routing-table
```

```
Destinations : 17
```

```
Routes : 18
```

Destination/Mask	Proto	Pre	Cost	Next Hop	Interface
0.0.0.0/32	Direct	0	0	127.0.0.1	InLoop0
10.1.2.0/24	Direct	0	0	10.1.2.1	Vlan2
10.1.2.0/32	Direct	0	0	10.1.2.1	Vlan2
10.1.2.1/32	Direct	0	0	127.0.0.1	InLoop0
10.1.2.255/32	Direct	0	0	10.1.2.1	Vlan2
10.1.3.0/24	Static	60	0	10.1.101.2	Vlan101
10.1.101.0/24	Direct	0	0	10.1.101.1	Vlan101
10.1.101.0/32	Direct	0	0	10.1.101.1	Vlan101
10.1.101.1/32	Direct	0	0	127.0.0.1	InLoop0
10.1.101.255/32	Direct	0	0	10.1.101.1	Vlan101
127.0.0.0/8	Direct	0	0	127.0.0.1	InLoop0
127.0.0.0/32	Direct	0	0	127.0.0.1	InLoop0
127.0.0.1/32	Direct	0	0	127.0.0.1	InLoop0
127.255.255.255/32	Direct	0	0	127.0.0.1	InLoop0
224.0.0.0/4	Direct	0	0	0.0.0.0	NULL0
224.0.0.0/24	Direct	0	0	0.0.0.0	NULL0
255.255.255.255/32	Direct	0	0	127.0.0.1	InLoop

Network clients are configured to use the switch as their default gateway in VLAN 2. The HP Comware switch places VLAN 2 in OpenFlow instance 1. An SDN application has created the flow entry shown in Exhibit 1 to route traffic from 10.1.2.0/24 to 10.1.3.0/24. Exhibit 1 does not show the output interface for the flow.

Which output interface supports the needs of this scenario?

- A. CONTROLLER
- B. ANY
- C. NORMAL

D. TABLE

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

<https://www.opennetworking.org/images/stories/downloads/sdn-resources/onf-specifications/openflow/openflow-spec-v1.3.3.pdf>Page: 13

QUESTION 11

Refer to the exhibits on the Exhibit 1 and Exhibit 2 tabs.

Exhibit 1

```
<Switch> display openflow instance 1 flow-table
```

```
Instance 1 flow table information:
```

```
Table 0 information:
```

```
Table type: Extensibility, flow entry count: 6, total flow  
entry count: 5
```

```
MissRule flow entry information:
```

```
cookie: 0xffff000000000000, priority: 0, hard time: 0, idle  
time: 0, flags: flow_send_rem, byte count: --, packet count: 4435
```

```
Match information: any
```

```
Instruction information:
```

```
Write actions:
```

```
Output interface: Normal
```

```
Flow entry 1 information:
```

```
cookie: 0xabab014e29d5834a, priority: 60000, hard time: 0, idle time: 0, flags: none, byte count: -  
-, packet count: 24
```

```
Match information:
```

```
Ethernet type: bddp
```

```
Instruction information:
```

```
Apply actions:
```

```
Output interface: Controller, send length: 65509 bytes
```

```
Flow entry 2 information:
```

```
cookie: 0xabab014e29d5b83a, priority: 31000, hard time: 0, idle time: 0, flags: none, byte count: --  
, packet count: 100
```

```
Match information:
```

```
Ethernet type: arp
```

```
Instruction information:
```

```
Apply actions:
```

```
Output interface: Controller, send length: 65509 bytes
```

```
Write actions:
```

```
Output interface: Normal
```

```
Flow entry 3 information:
```

```
cookie: 0xabab014e29daab1a, priority: 31500, hard time: 0, idle time: 0, flags: none, byte count: --  
, packet count: 1200
```

```
Match information:
```

```
Ethernet type: 0x0800
```

```
IP protocol: 17
```

```
UDP source port: 68, mask: 0xffff
```

```
UDP destination port: 67, mask: 0xffff
```

```
Instruction information:
```

```
Apply actions:
```

```
Output interface: Controller, send length: 65509 bytes
```

```
Write actions:
```

```
Output interface: Normal
```

```
Flow entry 4 information:
```

Exhibit 2

```
<Switch> display openflow instance
Instance 1 information:
Configuration information:
  Description : --
  Active status : Active
  Inactive configuration:
    None
Active configuration:
  Classification: VLAN, total VLANs(1)
    20
In-band management VLAN, total VLANs(0)
  Empty VLAN
Connect mode: Multiple
MAC address learning: Enabled
Flow table:
  Table ID(type): 0(Extensibility), count: 5
  Flow-entry max-limit: 65535
  Datapath ID: 0x0001784859392f96
Port information:
  Ten-GigabitEthernet1/0/2
  Bridge-Aggregation1
Active channel information:
  Controller 1 IP address: 192.168.56.11 port: 6633
```

A network administrator has set up an HP VAN SDN Controller to operate in hybrid mode. The administrator wants to confirm that the controller has properly configured an HP Comware switch to be controlled by it in hybrid mode. Which output in the exhibit indicates that the controller is using hybrid mode.

- A. Active configuration
- B. MissRule flow entry information
- C. Flow entry 1 information
- D. Flow table

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 12

What correctly describes the role of OpenFlow in an SDN solution?

- A. OpenFlow regulates the communications among teamed SDN controllers, as well as between an SDN controller and a network infrastructure device.
- B. OpenFlow integrates the SDN controller into a larger management suite, such as the one provided in the HP Helion CloudSystem solution.
- C. OpenFlow is an open standard technology that regulates how the SDN control plane and the application plane communicates.
- D. OpenFlow is a communication protocol that an SDN controller can use to control how network devices forward traffic.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 13

Refer to the exhibit.


```
<Router1> display ip routing-table vpn-instance TenantA
Routing Tables: TenantA
      Destinations : 5           Routes : 5

Destination/Mask    Proto   Pre  Cost NextHop         Interface
10.1.1.1/32         Direct   0    0   127.0.0.1       InLoop0
10.1.1.0/30         Direct   0    0   10.1.1.1        RAGG 10
10.1.255.1/32       Direct   0    0   127.0.0.1       InLoop0
127.0.0.0/8         Direct   0    0   127.0.0.1       InLoop0
127.0.0.1/32        Direct   0    0   127.0.0.1       InLoop0
#
[Router1-vpn-instance-TenantA] display this
      ip vpn-instance TenantA
      route-distinguisher 65000:10
#
[Router1-ospf-10] display this
      ospf 10 router-id 10.1.255.1
      area 0.0.0.0
      network 10.1.0.0 0.0.255.255
```

A network administrator is setting up the OSPF routing for VPN instance "TenantA." The configuration shown in this exhibit is not functioning as expected. What must the administrator do to correct the configuration?

- A. Recreate the OSPF instance and bind it to the VPN instance.
- B. Change the OSPF process ID to match the VPN instance Route Distinguisher.
- C. Tag the OSPF advertisements with the VPN instance Route Distinguisher.
- D. Enable route leaking on the VPN instance.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 14

A company is using HP Network Visualizer to monitor traffic transmitted and received by users in specific Active Directory user groups. The company wants to send traffic to a different server from the controller and have that server store the captured packets in PCAP format. How would the network administrator configure this solution to meet these requirements?

- A. by setting up a remote mirroring session
- B. by setting the destination server's IP address in the capture session
- C. by setting up a managed remote destination
- D. by setting up a remote syslog server to receive controller log messages

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

http://h20565.www2.hp.com/hpsc/doc/public/display?sp4ts.oid=8241931&docId=emr_na-c04724330&docLocale=en_USPage: 12

QUESTION 15

An SDN application submits a username and password to authenticate to the HP VAN SDN Controller, which is configured for local authentication. If the username and password are valid, what does the controller do?

- A. creates a security hash, which the application uses to generate a valid X-Auth-Token
- B. sends the application an X-Auth-Token
- C. forwards the application an Access-Accept packet
- D. requests the last valid token the application used

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 16

Which technology is best suited for isolating tenants within a data center that must support many tenants?

- A. TRILL
- B. MDC
- C. SPBM
- D. EVI

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 17

A network administrator is setting up OpenFlow settings on an HP ProVision switch with VLANs 1, 2, 3, and 4. The switch reaches the HP VAN SDN Controller on VLAN 1. The administrator wants to enable OpenFlow on VLANs 2 and 3 but not on VLAN 4.

What is a valid configuration for the OpenFlow instances?

- A. OpenFlow instance 1 mapped to VLAN 1; OpenFlow instance 2 mapped to VLAN 2; OpenFlow instance 2 mapped to VLAN 3
- B. OpenFlow instance 1 mapped to VLAN 2; OpenFlow instance 2 mapped to VLAN 3
- C. OpenFlow instance 1 mapped to VLAN 1 and 2; OpenFlow instance 2 mapped to VLAN 1 and 3
- D. AggregateOpenFlow instance

Correct Answer: B

Section: (none)

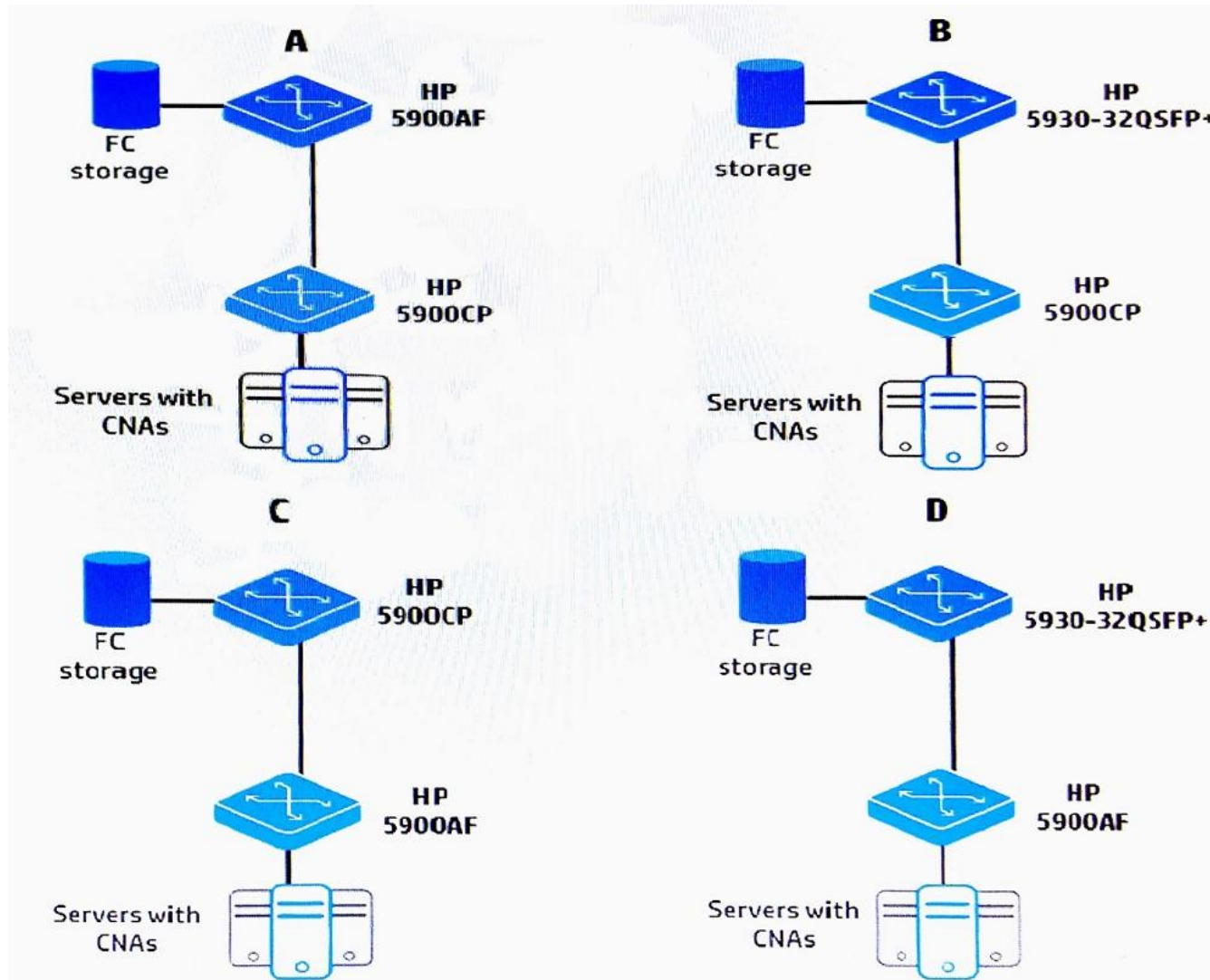
Explanation

Explanation/Reference:

Explanation:

QUESTION 18

Refer to the exhibit.



Which design in the exhibit shows valid choices for HP switches?

- A. A
- B. B
- C. C

D. D

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

<http://h10032.www1.hp.com/ctg/Manual/c04214037>

QUESTION 19

Refer to the exhibits.

□

Exhibit 1

```
[Comware-1]display interface vfc 1 brief
```

```
Brief information on VFC interface(s):
```

```
Admin Mode: auto - auto; E - e port; F - f port; NP - n port proxy
```

```
Oper Mode: E - e port; F - f port; NP - n port proxy;
```

```
TE - trunking e port; TF - trunking f port;
```

```
TNP - trunking n port proxy
```

Interface	Admin Mode	Admin Trunk Mode	Oper Mode	Status	Bind Interface
Vfc1	E	on	--	Down	XGE1/0/2

```
[Comware-1]display interface ten 1/0/2 brief
```

```
Brief information on interface(s) under bridge mode:
```

```
Link: ADM - administratively down; Stby - standby
```

```
Speed or Duplex: (a)/A - auto; H - half; F - full
```

```
Type: A - access; T - trunk; H - hybrid
```

Interface	Link	Speed	Duplex	Type	PVID	Description
XGE1/0/2	Up	10G(a)	F(a)	T	1	

Exhibit 2

```
[Comware-2]display interface vfc 1 brief
Brief information on VFC interface(s):
Admin Mode: auto - auto; E - e port; F - f port; NP - n port proxy
Oper Mode: E - e port; F - f port; NP - n port proxy;
            TE - trunking e port; TF - trunking f port;
            TNP - trunking n port proxy
Interface Admin      Admin      Oper Status  Bind
           Mode      Trunk      Mode         Interface
           Mode
Vfc1       F         on         --    Down    XGE1/0/2
```

```
[Comware-2]display interface ten 1/0/2 brief
Brief information on interface(s) under bridge mode:
Link: ADM - administratively down; Stby - standby
Speed or Duplex: (a)/A - auto; H - half; F - full
Type: A - access; T - trunk; H - hybrid
Interface      Link      Speed      Duplex      Type PVID Description
XGE1/0/2       Up        10G(a)     F(a)        T      1
```

A network administrator has connected Comware-1 and Comware-2 on their Ten-GigabitEthernet 1/0/2 interfaces. The administrator configured both switches to support FCoE FCF mode and configured the connecting interfaces to carry FCoE traffic. However, the configuration is not working.

The exhibit shows the output for several display commands. Based on this output, which step should the administrator take to fix the problem?

- A. Change the port link type on both Ten-GigabitEthernet 1/0/2 interfaces to hybrid.
- B. Change the port link type on both Ten-GigabitEthernet 1/0/2 interfaces to access.
- C. Change the FC mode on the Comware-2 Ten-GigabitEthernet 1/0/2 interfaces to E.
- D. Change the FC mode on the Comware-1 Ten-GigabitEthernet 1/0/2 interface to NP.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 20

An OpenFlow controller controls several switches that operate in pure OpenFlow mode. Based on this scenario, what is the controller required to do?

- A. Configure a table miss entry with the Normal action for each switch.
- B. Configure flow entries to handle any loops in the topology.
- C. Use either OpenFlow 1.0 or OpenFlow 1.3, but not both versions.
- D. Ensure that each switch uses a single OpenFlow table.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 21

A company has deployed the HP Network Protector SDN Application solution. The network administrator wants to use this application to prevent clients from accessing specific devices on the private network, including other clients. Which HP Network Protector feature should the administrator use to configure this policy?

- A. ACL Manager
- B. blacklists
- C. greylists
- D. Redirection server

Correct Answer: A

Section: (none)

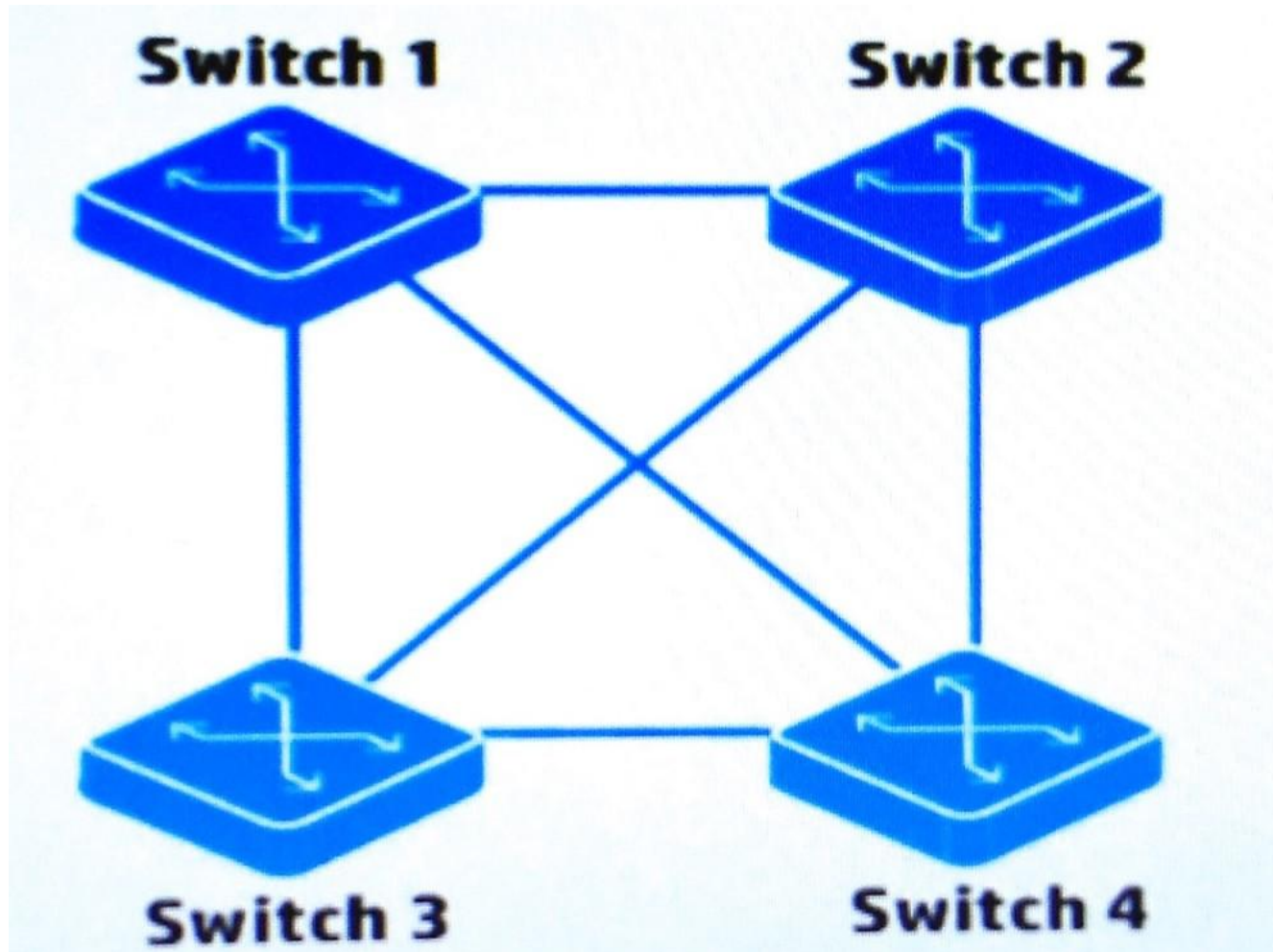
Explanation

Explanation/Reference:

Explanation:

QUESTION 22

Refer to the exhibit.



The switches shown in the exhibit use the HP VAN SDN Controller as the OpenFlow controller. They connect to the controller on their out-of-band management (OOBM) ports, but these connections are not shown in the exhibit. The switches also run spanning tree protocol.

An SDN supplication installed on the HP VAN SDN Controller is programmed to discover live ports, find redundant paths, and create loopfree paths for traffic for the infrastructure shown in the exhibit. However, the application is not able to complete these functions because the switches are reporting some ports as blocked.

What should the network administrator do to let the application create the loopfree paths?

- A. Disable spanning tree on the OpenFlow-enabled switches and do not configure link aggregation.
- B. Enable spanning tree on the OpenFlow-enabled switches but set the application as the spanning tree flood parameter controller.
- C. Enable spanning tree on the OpenFlow-enabled switches and configure all of the redundant links as egress-only-ports.
- D. Disable spanning tree on the OpenFlow-enabled switches and configure the redundant links as static link aggregations.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 23

Which HP IMC module helps companies to manage TRILL and SPBM solutions, as well as converged LAN/SAN solutions?

- A. HP VAN Resource Manager
- B. HP VAN SDN Manager
- C. HP VAN Fabric Manager
- D. HP VAN Connection Manager

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 24

Refer to the exhibit.

Flows for Data Path ID: 00:1e:14:58:d0:f0:db:80

Summary Ports Flows

Table ID	Priority	Packets	Bytes	Match	Actions/Instructions	Flow Class ID
▶ 0	0	0	0		goto_table:100	com.hp.sdn.hp
▶ 100	31500	0	0	eth_type:ipv4 ip_proto:udp udp_src:67 udp_dsl:68	goto_table:200	com.hp.sdn.dh
▶ 100	31500	0	0	eth_type:ipv4 ip_proto:udp udp_src:68 udp_dsl:67	goto_table:200	com.hp.sdn.dh
▶ 100	60000	0	0	eth_type:bddp	apply_actions: output: CONTROLLER	com.hp.sdn.bd
▶ 100	31000	0	0	eth_type:arp	goto_table:200	com.hp.sdn.arp
▶ 100	0	2542	0		apply_actions: output: NORMAL	com.hp.sdn.ip.
▶ 200	31500	0	0	eth_type:ipv4 ip_proto:udp udp_src:67 udp_dsl:68	apply_actions: output: CONTROLLER output: NORMAL	com.hp.sdn.dh
▶ 200	31500	0	0	eth_type:ipv4 ip_proto:udp udp_src:68 udp_dsl:67	apply_actions: output: CONTROLLER output: NORMAL	com.hp.sdn.dh
▶ 200	31000	0	0	eth_type:arp	apply_actions: output: CONTROLLER output: NORMAL	com.hp.sdn.arp
▶ 200	0	0	0		apply_actions: output: NORMAL	com.hp.sdn.ip.

A standard ARP packet arrives on the switch with the flows shown in the exhibit. How does the switch handle the packet? (Select two.)

- A. It encapsulates the packet and sends it to the controller.
- B. It forwards the packet normally.
- C. It drops the packet.
- D. It transmits the packet on port 200.
- E. It transmits the packet on the ports in group table 200.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 25

An HP ProVision switch supports VLANs 1, 10, 20, and 30. A network administrator wants to create an OpenFlow instance on the switch. This instance should only apply to VLAN 10. The switch reaches the HP VAN SDN Controller in VLAN 20.

How should the administrator begin to set up the instance?

- A. as a named instance with member VLAN 20
- B. as an aggregate instance that excludes VLAN 1 and 30
- C. as a named instance with member VLAN 10
- D. as an aggregate that excludes VLAN 1, 20, and 30

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 26

Refer to the exhibits.

Exhibit 1

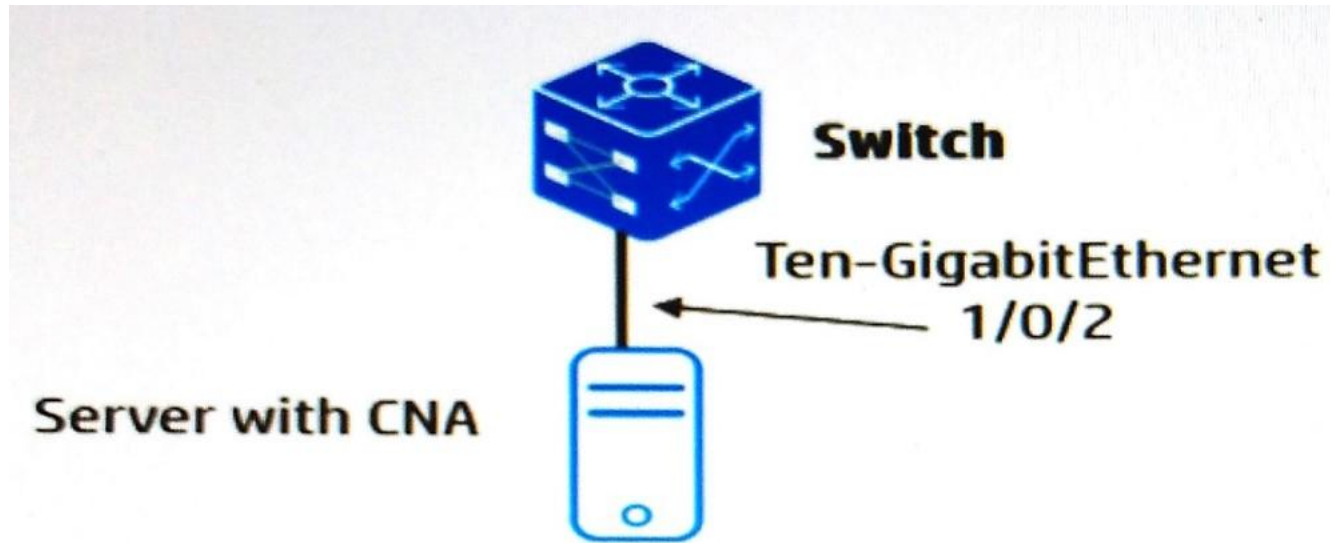


Exhibit 2


```
#Switch partial running configuration
lldp global enable
#
qos map-table dot1p-lp
    import 0 export 0
    import 1 export 0
    import 2 export 0
    import 3 export 1
    import 4 export 0
    import 5 export 0
    import 6 export 0
    import 7 export 0
#
interface TenGigabit1/0/2
    lldp tlv-enable dot1-tlv dcbx
    qos wrr 0 group 1 byte-count 4
    qos wrr 1 group 1 byte-count 6
```

The server and the switch are forwarding traffic on the Ethernet link shown in the exhibit. How do the server and switch handle traffic with 802.1p value 3?

- A. The switch provides 40 percent of bandwidth for this traffic. The server uses its local configuration to determine how to prioritize this traffic.
- B. Both the server and the switch provide 40 percent of bandwidth for this traffic.
- C. The switch provides 60 percent of bandwidth for this traffic. The server uses its local configuration to determine how to prioritize this traffic.
- D. Both the server and the switch provide 60 percent of bandwidth for this traffic.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 27

A company is deploying the HP Network Visualizer SDN Application. The HP switches already have the correct OpenFlow settings for the HP VAN SDN Controller to control them. How should the network administrator further configure the HP switches to work with this application?

- A. Configure the OpenFlow VLANs as remote traffic mirror source.
- B. Configure the HP VAN SDN Controller as a remote traffic mirror destination.
- C. Configure SNMP settings that match those on the application.
- D. Configure SSH settings that match those on the application.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 28

Refer to the exhibit.


```
<Router1> display ip routing-table vpn-instance SharedServices
```

```
Routing Tables: SharedServices
```

```
Destinations : 7
```

```
Routes : 7
```

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
10.0.1.1/32	Direct	0	0	127.0.0.1	InLoop0
10.0.1.0/30	Direct	0	0	10.0.1.1	RAGG 3
10.0.5.0/24	OSPF	10	20	10.0.1.2	RAGG 3
10.255.0.1/32	Direct	0	0	127.0.0.1	InLoop0
10.255.0.2/32	OSPF	10	10	10.0.1.2	RAGG 3
127.0.0.0/8	Direct	0	0	127.0.0.1	InLoop0
127.0.0.1/32	Direct	0	0	127.0.0.1	InLoop0

```
<Router1> display ip routing-table vpn-instance TenantA
```

```
Routing Tables: TenantA
```

```
Destinations : 8
```

```
Routes : 8
```

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
10.1.10.0/24	OSPF	10	20	10.1.1.2	RAGG 10
10.1.1.1/32	Direct	0	0	127.0.0.1	InLoop0
10.1.1.0/30	Direct	0	0	10.1.1.1	RAGG 10
10.1.20.0/24	OSPF	10	20	10.1.1.2	RAGG 10
10.255.1.1/32	Direct	0	0	127.0.0.1	InLoop0
10.255.1.2/32	OSPF	10	10	10.1.1.2	RAGG 10
127.0.0.0/8	Direct	0	0	127.0.0.1	InLoop0
127.0.0.1/32	Direct	0	0	127.0.0.1	InLoop0

```
<Router1> display ip routing-table vpn-instance TenantB
```

```
Routing Tables: TenantB
```

```
Destinations : 8
```

```
Routes : 8
```

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
------------------	-------	-----	------	---------	-----------

A network administrator wants to route all external traffic from VPN instances “TenantA” and “TenantB” to a firewall at 10.0.5.5 in VPN instance “SharedServices.” In addition to setting up the routes between the instances, what is another requirement for this scenario?

- A. The RAGG 3 interface must be added to VPN instances “TenantA” and “TenantB.”
- B. A router must implement Network Address Translation (NAT) to translate overlapping tenant network addresses.
- C. Route leaking must be enabled globally on Router1, as well as on each of the VPN instances.
- D. The routes must be redistributed between the different VPN instances.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 29

What is a benefit of using the HP Network Visualizer SDN application for capturing traffic on HP ProVision switches?

- A. This application can correlate captured traffic with user information based on information synced with Microsoft Active Directory.
- B. This application can configure mirroring on switches that do not support OpenFlow using traditional methods, eliminating the needs for upgrades.
- C. This application can forward the captured traffic to HP DV Labs for deeper inspection as to whether the traffic poses a threat to the network.
- D. This application can integrate with VMware vCenter, which uses the captured traffic to determine the correct policies to deploy to virtual hosts.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

<https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA6-3816ENW.pdf>

QUESTION 30

A company needs a team of HP VAN SDN Controllers. What is the correct process to install the controllers?

- A. Install two controllers in teaming mode.
- B. Install three controllers as standalone controllers. Then set up teaming on the controllers.
- C. Install one controller as a standalone controller. Then install two more controllers in teaming mode.
- D. Install two controllers in recovery mode. Then set up teaming on the controllers.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

http://h20565.www2.hp.com/hpsc/doc/public/display?sp4ts.oid=5443866&docId=emr_na-c03998700&docLocale=en_USPage: 11

QUESTION 31

Refer to the exhibit.

```
curl --noproxy 192.168.56.10 --header "X-Auth-Token:$token" \
--header "Content-Type:application/json" --fail -kiss \
--request POST \
--url https://192.168.56.10:8443/sdn/v2.0/owners/ \
--data-binary
{
  "region": {
    "name": "Region252",
    "prioritizedControllerIps": [
      "192.168.56.14",
      "192.168.56.15"
    ],
    "deviceIps": [
      "192.168.56.251",
      "10.1.1.252"
    ]
  }
}
```

A network administrator sends the cURL command shown in the exhibit to an HP VAN SDN Controller team in order to add a region to that team. The addresses are as follows:

- The team IP address is 192.168.56.10.
- The team members IP addresses are 192.168.56.14, 192.168.56.15, and 192.168.56.16.

The administrator receives an error in response. How can the administrator fix the configuration?

- A. by configuring the region on the northbound team interface
- B. by configuring the region before combining the controllers in a team
- C. by specifying three controllers for the region rather than two
- D. by assigning the devices' IP addresses in the same subnet as the controllers

Correct Answer: C

Section: (none)

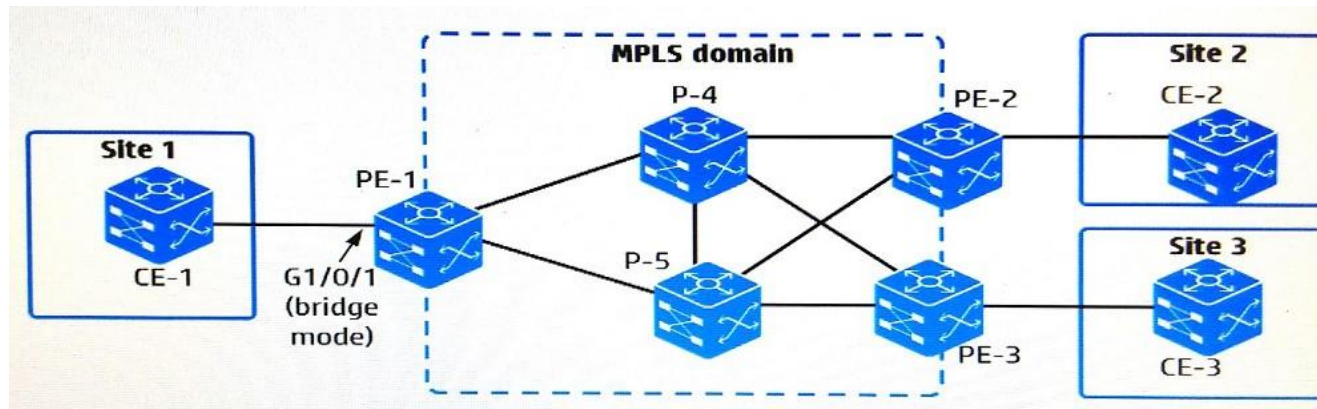
Explanation

Explanation/Reference:

Explanation:

QUESTION 32

Refer to the exhibit.



A network administrator is configuring an MPLS and VPLS Martini to connect customer Sites 1, 2, and 3. The administrator has created Virtual Switch Instance (VSI) "CustomerA" for this purpose. How should the administrator connect customer Site 1 to the VPLS solution?

- A. Create a service instance on g1/0/1. Also create a global cross-connect group, and bind the CustomerA VSI and the service instance in that group.
- B. Create a service instance on the VLAN assigned to g1/0/1. Also create a global cross-connect group, and bind the CustomerA VSI and the service instance in that group.
- C. Create a service instance on the VLAN assigned to g1/0/1. Bind (cross-connect) that instance to the CustomerA VSI.
- D. Create a service instance on g1/0/1. Bind (cross-connect) that instance to the CustomerA VSI.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 33

An HP Comware switch is controlled by a team of HP VAN SDN Controllers. The controllers have these roles within the region that contains the switch.

Controller 1 = Master

Controller 2 Primary slave

Controller 3 =Secondary slave

A failed network connection causes Controller 1 to lose contact with the switch. Controller 2 and Controller 3 can still reach all the controlled devices. Controller 1 is still up and has contact with other controllers and switches. How does the team handle this situation?

- A. Controller 1, as master, contacts OpenFlow-enabled devices near the switch and attempts to repair the connection.
- B. Controller 2 becomes the master for this switch, although Controller 1 remains master for other switches.
- C. Controller 1, as master, removes the switch from any active flows and sends updated flows to Controller 2 and Controller 3.
- D. Controller 2 becomes the master for all switches in the region, and Controller 1 becomes the primary slave for the region.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

http://h22208.www2.hp.com/eginfolib/networking/docs/sdn/sdnc2_6/5998-8472admin/content/s_curl-team-config.html#s_region-failover

QUESTION 34

A company is deploying the HP Network Protector SDN Application. The network administrators should be able to see information about user identity in the Network Protector interface and logs. The log should provide the name of the user on that endpoint.

Which additional component is needed to meet the company's requirements?

- A. HP User Behavior Audit (UBA) that uses RESTful APIs to integrate with Network Protector
- B. HP Network Protector extensible user license that adds identity tracking capabilities to Network Protector
- C. HP authentication solution with User Access Manager (UAM) that uses RESTful APIs to integrate with Network Protector
- D. HP Guest Management Software (GMS) that integrates with Network Protector

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 35

Refer to the exhibit.

```
zoneset name zoneset1
  member 1
  member 2
  active
```

```
zoneset name zoneset2
  member 3
  member 4
```

```
zone name 1
  member zone-alias pWWN1
  member zone-alias pWWN2
  member zone-alias pWWN3
  member zone-alias pWWN4
```

```
zone name 2
  member zone-alias pWWN5
  member zone-alias pWWN6
  member zone-alias pWWN7
```

```
zone name 3
  member zone-alias pWWN8
  member zone-alias pWWN9
  member zone-alias pWWN10
```

```
zone name 4
  member zone-alias pWWN11
  member zone-alias pWWN12
  member zone-alias pWWN13
```


The exhibit shows the Fibre Channel (FC) zones that are members of zonesets on an HP Comware switch. How does this zoning affect the FC fabric operation?

- A. A server pWWN in zone 1 can discover target pWWNs in zone 1. A server pWWN in zone 2 can discover target pWWNs in zone 2.
- B. The switch matches a host bus adapter (HBA) pWWN to entries in zone 1 to determine whether an HBA can connect to a port. If it does not find a match, it checks zone 2.
- C. Server pWWNs in zone 1 can discover targets pWWNs in zone 2. Server pWWNs in zone 3 can discover target pWWNs in zone 4.
- D. Host bus adapter (HBA) pWWNs in zoneset 1 belong to VSAN 1, which is currently active. HBA pWWNs in zoneset 2 belong to VSAN 2, which is inactive.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 36

Refer to the exhibits on the Exhibit 1 and Exhibit 2 tabs.

Exhibit 1

← 🔑 https://192.168.4.73:8443/sdn/ui/app/index#oftopo 🔍 Search ☆ 📁 📌 ⬇

hp HP VAN SDN Controller 32

General / OpenFlow Topology

⌘ Src ⌘ Dst +/- Shortest Path View ? 🔍 Search Reload

Alerts
Applications
Configurations
Audit Log
Licenses
Team
Support Logs

OpenFlow Monitor
OpenFlow Topology
OpenFlow Trace
OpenFlow Classes
Packet Listeners

```
graph TD; A[192.168.0.221:1] ---|2| B[192.168.0.249:1]; A ---|3| C[192.168.0.252:1]; B ---|1| A; C ---|1| A;
```

Exhibit 2

HP VAN SDN Controller

32 sdn

General

Alerts

Applications

Configurations

Audit Log

Licenses

Team

Support Logs

OpenFlow Monitor

OpenFlow Topology

OpenFlow Trace

OpenFlow Classes

Packet Listeners

Ports for Data Path ID: 00:01:d0:bf:9c:d0:c4:c0

Port ID	Port Name	H/W Address	State	Current Features
1	1	d0:bf:9c:d0:c4:ff	live	rate_1gb_fd, aut.
2	2	d0:bf:9c:d0:c4:fe	blocked	rate_1gb_fd, aut.
3	3	d0:bf:9c:d0:c4:fd	link_down	
4	4	d0:bf:9c:d0:c4:fc	link_down	
5	5	d0:bf:9c:d0:c4:fb	link_down	
6	6	d0:bf:9c:d0:c4:fa	link_down	
7	7	d0:bf:9c:d0:c4:f9	link_down	
8	8	d0:bf:9c:d0:c4:f8	link_down	
9	9	d0:bf:9c:d0:c4:f7	link_down	
10	10	d0:bf:9c:d0:c4:f6	link_down	
11	11	d0:bf:9c:d0:c4:f5	link_down	
12	12	d0:bf:9c:d0:c4:f4	link_down	
13	13	d0:bf:9c:d0:c4:f3	link_down	
14	14	d0:bf:9c:d0:c4:f2	link_down	
15	15	d0:bf:9c:d0:c4:f1	link_down	

Three HP switches are controlled by an HP VAN SDN Controller. The exhibits show the topology that the controller has discovered for the switches and the port status on the 192.168.0.252 switch. All the interswitch links carry the same VLANs.

The 192.168.0.249 switch and the 192.168.0.252 switch also connect on a link that is not shown in the topology. The network administrator wants to make all of the links between the switches available for SDN applications to use. What should the administrator do to accomplish this?

- A. Check all the links and ensure they have the same link speed, link media, and duplex mode.
- B. Enable OpenFlow on the ports that connect the 192.168.0.249 and 192.168.0.252 switches.
- C. Ensure that all the switches are running the same OpenFlow version.
- D. Disable spanning tree on all of the switches and ensure SDN applications block loops.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 37

Which common data center requirement does an HP EVI solution meet?

- A. It simplifies the configuration of an MPLS Layer 2 VPN between multiple data centers by automating the establishment of label switched paths (LSPs).
- B. It helps to ensure disaster recovery by automating backups and VM migration between two data centers.
- C. It enhances multi-data center solutions by extending Layer 2 connectivity across data centers connected at Layer 3.
- D. It strengthens security for Layer 2 communications between data centers by automatically establishing MAC encryption between sites.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

<http://h17007.www1.hp.com/docs/814/factsheet.pdf>

QUESTION 38

What is a benefit of the HP Network Protector SDN Application as opposed to a traditional IDS/IPS?

- A. HP Network Protector uses anomaly-based threat detection so that it can detect zero-day threats.
- B. HP Network Protector detects threats based on custom blacklists exclusively, preventing false positives.
- C. HP Network Protector is deployed on a hardware appliance that sits inline between a protected and unprotected zone.

D. HP Network Protector dynamically programs the network to drop malicious traffic at the point of connection.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

References:

<http://h20195.www2.hp.com/V2/getpdf.aspx/4AA5-7852ENW.pdf?ver=1.0>Page: 9

QUESTION 39

Refer to the exhibits.

Exhibit 1

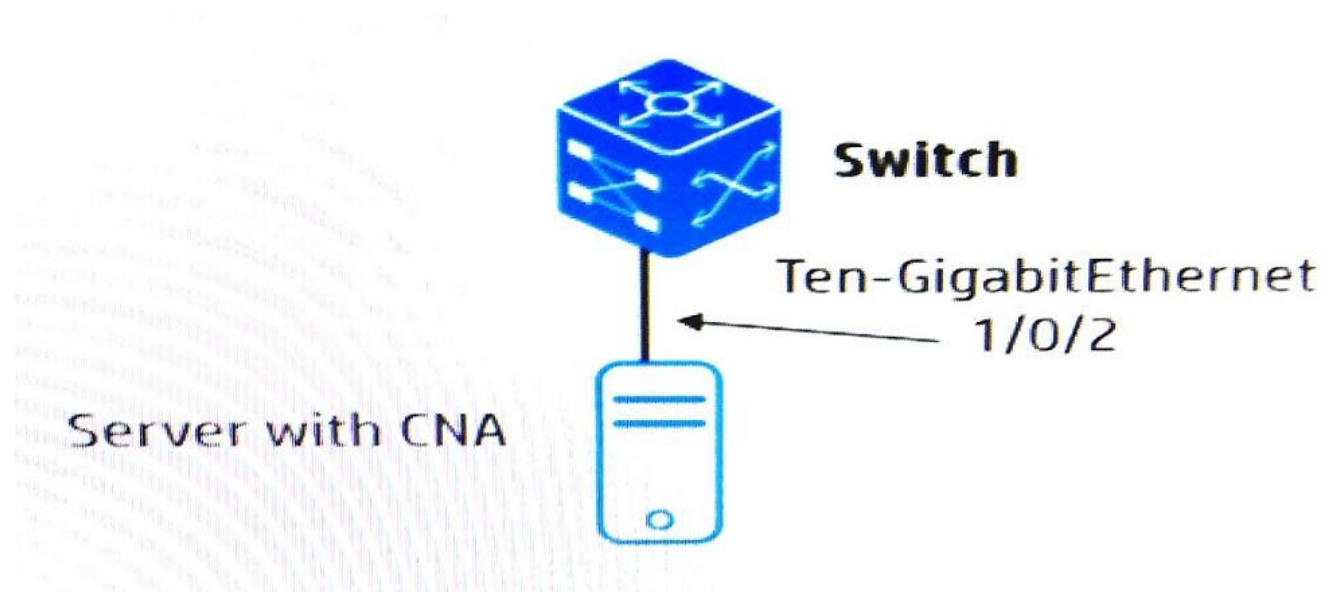


Exhibit 2


```
#
lldp global enable
#
qos policy fcoe
  classifier fcoe behavior dot1p3 mode dcbx
traffic classifier fcoe
  if-match acl 4000
traffic behavior dot1p3
  remark dot1p 3
acl number 4000 name fcoe
  rule 5 permit type 8906 ffff
#
interface TenGigabitEthernet1/0/2
  lldp tlv-enable dot1-tlv dcbx
  qos apply policy fcoe outbound
  priority-flow-control auto
```

The switch and server will transmit Fibre Channel over Ethernet (FCoE) traffic on the Ethernet link. If congestion occurs, the devices should pause the FCoE transmissions rather than drop them. What must the network administrator do on interface Ten-GigabitEthernet 1/0/2 to enable this behavior?

- A. Enable Enhanced Traffic Selection (ETS) TLVs.
- B. Assign the QoS policy as an inbound policy.
- C. Set the priority flow control no-drop queue to 802.1p3.
- D. Configure queue3 as a strict priority (sp or group0) queue.

Correct Answer: C

Section: (none)

Explanation**Explanation/Reference:**

Explanation:

QUESTION 40

An HP Comware switch has four MDCs defined on it. Network administrators need to set up SSH access to each MDC and want to use the Management-Ethernet interface for that purpose. What is a valid configuration?

- A. The same Management-Ethernet interface is assigned to each MDC. Each MDC assigns the same IP address to this interface.
- B. The Management-Ethernet interface is divided into four subinterfaces, each of which is assigned to an MDC. Each MDC assigns a different IP address to its subinterface.
- C. The same Management-Ethernet interface is assigned to each MDC. Each MDC assigns a different IP address to this interface.
- D. The Management-Ethernet interface is divided into four subinterfaces, each of which is assigned to an MDC. Each MDC assigns the same IP address to its subinterface.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation: