

Cisco

Exam 300-165

Implementing Cisco Data Center Infrastructure

Version: Demo

[Total Questions: 10]

Topic break down

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Topic 1, Main Questions Set

Question No : 1 DRAG DROP - (Topic 1)

Drag and drop the types of spanning tree ports from the left onto the correct descriptions on the right

edge	supports 802.1Q to a host immediately
edge trunk	moves through the regular STP transitions
network	transitions to the forwarding state immediately
normal	enables Bridge Assurance

Answer:

edge	edge trunk
edge trunk	normal
network	edge
normal	network

Explanation:

Edge = edge port interface immediately transitions to the forwarding state

Edge trunk = supports 802.1Q to a host immediately

Network = enables Bridge Assurance

Normal = moves through the regular STP transactions

Question No : 2 - (Topic 1)

You configure STP on a switch that is attached to a Cisco Fabric Path domain and that has the vPC feature deployed. How do you configure STP on the switch in the Cisco FabricPath domain on VL AN 10?

- switch(config)# spanning-tree vlan 10 priority 4096
switch(config)# spanning-tree pseudo-information
switch(config-pseudo)# vlan 10 root priority 8192
- switch(config)# spanning-tree vlan 10 priority 0
switch(config)# spanning-tree pseudo-information
switch(config-pseudo)# vlan 10 root priority 0
- switch(config)# spanning-tree vlan 10 priority 8192
switch(config)# spanning-tree pseudo-information
switch(config-pseudo)# vlan 10 root priority 4096
- switch(config)# spanning-tree vlan 10 priority 0
switch(config)# spanning-tree pseudo-information
switch(config-pseudo)# vlan 10 root priority 4096

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

Question No : 3 - (Topic 1)

Which action limits the maximum number of routes that are allowed in the routing table?

- A. Use a BGP filter.
- B. Use only static routes.
- C. Use the maximum routes command inside address family.
- D. Use a route map to filter routes.

Answer: C

Question No : 4 - (Topic 1)

Refer to the exhibit.

```
switch(config)# spanning-tree mst 0 root primary diameter 5
switch(config)# spanning-tree mst configuration
switch(config-mst)# instance 1 vlan 5-9
switch(config-mst)# name region1
switch(config-mst)# revision 1
switch(config-mst)# show pending
Pending MST configuration
Name [region1]
Revision 1
Instances configured 2
Instance Vlans Mapped
-----
0 1-4,10-4094
1 5-9
-----
```

What does the diameter command specify?

- A. the maximum number of hops between any two bridges on a network.
- B. the number of VLANs that were removed from the MSTI.
- C. the VLAN that becomes the root of the MSTI
- D. the maximum number of hops between any two MST instances on a network

Answer: D

Topic 3, Data Center Infrastructure Security

Question No : 5 - (Topic 3)

The Connectivity Management Processor monitors the active supervisor module on a Cisco Nexus 7000 switch and will reboot the device in the event of a lights-out management issue. However, which option includes features that provide similar benefits in the absence of the Connectivity Management Processor?

- A. high-availability functionality from features such as vPC and NSF
- B. traditional system connectivity models like SNMP, GUI, or SSH
- C. Cisco FabricPath
- D. VDC failover

Answer: A

Explanation:

vPC uses the vPC peer-keepalive link to run hello messages that are used to detect a dual-active scenario. A Gigabit Ethernet port can be used to carry the peer-keepalive messages. A dedicated VRF is recommended to isolate these control messages from common data packets. When an out-of-band network infrastructure is present, the management interfaces of the Cisco Nexus 7000 supervisor could be also used to carry keep-alive

connectivity using the dedicated management VRF. When the vPC peer-link is no longer detected, a dual-active situation occurs, and the system disables all vPC port channel member on the "secondary" vPC peer (lower vPC role priority value). Also SVI interfaces associated to a vPC VLAN are suspended on the secondary switch. As a result, in this condition only the "primary" vPC peer actively forwards traffic on the vPC VLANs. Multiple peer-keepalive links can be used to increase resiliency of the dual-active detection mechanism.

Both the Cisco Catalyst 6500 and the Cisco Nexus 7000 offer a variety of high-availability features. Some of the primary features to highlight are In Service Software Upgrade (ISSU), Stateful Switchover (SSO), and Nonstop Forwarding (NSF). The operation and the behavior of these features are unique to the respective platform and can be independently executed without affecting the interoperability between the two platforms.

Reference: http://www.cisco.com/c/en/us/products/collateral/switches/catalyst-6500-series-switches/white_paper_c11_589890.html

Topic 4, Implement Routing and Switching Protocols

Question No : 6 - (Topic 4)

Instructions

- Go through NX-OS CLI captures in Exhibits 1 through 5 to answer the questions.
- THIS TASK DOES NOT REQUIRE DEVICE CONFIGURATION.
- To access the multiple-choice questions, click the numbered boxes at the left of the top panel.
- There are four multiple-choice questions with this task. Be sure to answer all four questions before selecting the Next button.

Scenario

Customer is deploying Cisco FabricPath in their new data center as shown in the topology diagram. Go through NX-OS CLI captures in Exhibits 1 through 5 to answer the questions.

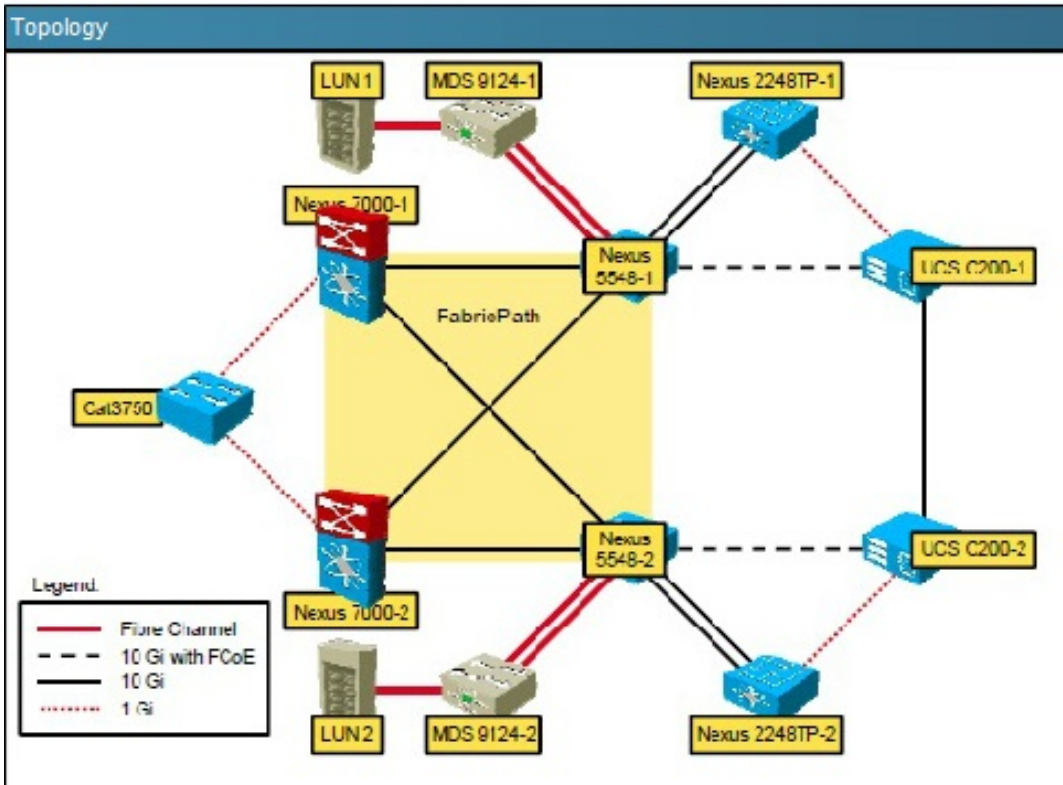


Exhibit 1

```
Nexus7000-1#show feature-set
Feature Set Name      ID      State
-----
fabricpath            2       enabled
fex                   3       disabled
Nexus/000-1#
```

Exhibit 2

```
Nexus7000-1# show feature-set services fabricpath
u2rib
drap
isis_l2mp
3 services 1r feature set fabricpath
Nexus7000-1#
```

Exhibit 3

```
Nexus7000-1# config terminal
Nexus7000-1#(config)# fabricpath switch-id 25
Nexus7000-1#(config)#
```

Exhibit 4

```
Nexus7000-1# config terminal
Nexus7000-1#(config)# fabricpath timer allocate-delay 600
Nexus7000-1#(config)#
```


Exhibit 5

```
Nexus7000-1# config terminal
Nexus7000-1#(config)# fabricpath load-balance unicast layer3
Nexus7000-1#(config)#

Nexus7000#(conf'g)# sh fabricpath load-balance
ECMP load-balancing configuration:
L3/L4 Preference: Mixed
Rotate amount: 14 bytes
Use VLAN: TRUE

Ftag load-balancing configuration:
Rotate amount: 3 bytes
Use VLAN: TRUE
```

On a Cisco Nexus7000 switches what is true regarding Cisco FabricPath requirements?

- A. Ensure that you have installed the Enhanced Layer 2 license and that you have installed an F Series module
- B. Ensure that you have installed the Enhanced Layer 2 license and that you have installed an M Series module
- C. Ensure that you have installed the Enhanced Layer 3 license and that you have installed an M Series module
- D. Ensure that you have installed the Scalable Feature License license and that you have installed an F Series module

Answer: A

Explanation:

FabricPath switching has the following prerequisites:

-

You should have a working knowledge of Classical Ethernet Layer 2 functioning.

-

You must install the FabricPath feature set on the default and nondefault VDC before you enable FabricPath on the switch. See Configuring Feature Set for FabricPath for information on installing the FabricPath feature set.

-

You are logged onto the device.

-

set of system resources. You can use the **switchto vdc** command with a VDC number.

•

You are working on the F Series module.

Reference: http://www.cisco.com/en/US/docs/switches/datacenter/sw/5_x/nx-os/fabricpath/configuration/guide/fp_switching.html

Topic 5, Implement Data Center Protocols

Question No : 7 - (Topic 5)

Which two items are required components of VN-Link in software? (Choose two.)

- A. VDC
- B. VEM
- C. vPC
- D. VSM
- E. VRRP

Answer: B,D

Explanation:

The Cisco Nexus 1000V Series consists of two main types of components that can virtually emulate a 66-slot modular Ethernet switch with redundant supervisor functions:

- Virtual Ethernet module (VEM)-data plane: This lightweight software component runs inside the hypervisor. It enables advanced networking and security features, performs switching between directly attached virtual machines, provides uplink capabilities to the rest of the network, and effectively replaces the vSwitch. Each hypervisor is embedded with one VEM.
- Virtual supervisor module (VSM)-control plane: This standalone, external, physical or virtual appliance is responsible for the configuration, management, monitoring, and diagnostics of the overall Cisco Nexus 1000V Series system (that is, the combination of the VSM itself and all the VEMs it controls) as well as the integration with VMware vCenter. A single VSM can manage up to 64 VEMs. VSMs can be deployed in an active-standby model, helping ensure high availability.

Reference: http://www.cisco.com/c/en/us/solutions/collateral/switches/nexus-1000v-switch-vmware-vsphere/white_paper_c11-525307.html

Question No : 8 - (Topic 5)

Which three options are capabilities of the Cisco Nexus 7000 Series Supervisor Module? (Choose three.)

- A. hardware forwarding on the supervisor module
- B. fully decoupled control plane and data plane with no forwarding on the supervisor module
- C. Sup2 requires Cisco NX-OS 5.1 or later.
- D. Sup2 requires Cisco NX-OS 6.1 or later.
- E. Sup2E supports 8+1 VDC with the N7K-VDC1K9 license per chassis.
- F. Sup2 supports 8+1 VDCs with the N7K-VDC1K9 license per chassis.

Answer: B,D,E

Question No : 9 - (Topic 5)

Which four statements about reserved VLANs in Cisco NX-OS are true? (Choose four.)

- A. The range of reserved VLANs cannot be changed.
- B. The number of reserved VLANs is 96.
- C. A change to the range of reserved VLANs can be performed only in the VDC default.
- D. A write-erase procedure restores the default reserved VLAN range.
- E. The number of reserved VLANs is 128.
- F. A reload is needed for changes to take place.
- G. The configuration must be saved for changes to take place.

Answer: C,E,F,G

Question No : 10 - (Topic 5)

Which three options are capabilities of the Cisco Nexus 7000 Series Switch? (Choose three.)

- A. All interface and supervisor modules are accessible from the front.
- B. All interface and supervisor modules are accessible from the rear.

- C. single power supply only
- D. multiple power supply option for redundancy
- E. up to 180.7 Tbps forwarding capacity with Fabric-2 modules with 10-slot switches
- F. up to 18.7 Tbps forwarding capacity with Fabric-2 modules with 18-slot switches

Answer: A,D,F