



300-610^{Q&As}

Designing Cisco Data Center Infrastructure (DCID)

Pass Cisco 300-610 Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

<https://www.passapply.com/300-610.html>

100% Passing Guarantee
100% Money Back Assurance

Following Questions and Answers are all new published by Cisco
Official Exam Center

-  **Instant Download** After Purchase
-  **100% Money Back** Guarantee
-  **365 Days** Free Update
-  **800,000+** Satisfied Customers





QUESTION 1

Which feature must be configured to connect a classical Ethernet network to a data center network so that the data center network appears to be one large switch.

- A. VPC+
- B. UDLD
- C. EVPN
- D. OSPF

Correct Answer: A

A vPC allows links that are physically connected to two different Nexus switches to appear as single portchannel to a server or another switch.

QUESTION 2

What are two characteristics of VRF-Lite on the Cisco NX-OS platform? (Choose two.)

- A. Layer 3 interfaces can belong to multiple VRFs.
- B. VRF-Lite interfaces can be Layer 2.
- C. Overlapping IP addresses are permitted on different VRFs.
- D. Interfaces that belong to VRFs can be physical or logical.
- E. VRF-Lite interfaces support MPLS.

Correct Answer: CD

VRF can be either physical, such as Ethernet ports, or logical, such as VLAN SVIs, but a Layer 3 interface cannot belong to more than one VRF at any time.

With the VRF-lite feature, the switch supports multiple VRFs in customer edge (CE) switches. VRF-lite allows a service provider to support two or more Virtual Private Networks (VPNs) with overlapping IP addresses using one interface.

Reference:

https://www.cisco.com/c/en/us/td/docs/routers/connectedgrid/cgr1000/ios/software/15_4_1_cg/vrf_cgr1000.html

QUESTION 3

An engineer must connect an existing Cisco Fabric Interconnect to an IP-based storage array. The connection be a channel made directly between the fabric interconnect expansion module and the storage array. The engineer must also consider that the environment is running FCoE for storage and uses QoS to prioritize traffic. Which port type should be used to meet these requirements?



- A. Network
- B. Uplink
- C. Appliance
- D. server

Correct Answer: B

<https://www.cisco.com/c/en/us/support/docs/servers-unified-computing/ucs-5100-series-blade-server-chassis/116075-ucs-app-connectivity-tshoot-00.html>

QUESTION 4

Which two methods mitigate congestion in a SAN network? (Choose two.)

- A. Configure ER_RDY to allow splitting of each ISL between switches into separate virtual links.
- B. Use the port-monitor command to detect slow drain devices.
- C. Configure the port channel to enable individual buffer-to-buffer credits.
- D. Configure the port monitor to allow categorization of a specific device as slow.
- E. Configure the flow control for the FC to use R_RDY.

Correct Answer: AD

-

Extended Receiver Ready—This feature allows each ISL between supporting switches to be split into four separate virtual links, with each virtual link assigned its own buffer-to-buffer credits. Virtual link 0 used to carry control traffic, virtual link 1 is used to carry high-priority traffic, virtual link 2 is used to carry slow devices, and virtual link 3 is used to carry normal traffic.

-

Congestion Isolation—This feature allows devices to be categorized as slow by either configuration command or by port monitor.

-

Port monitor portguard action for Congestion Isolation—Port monitor has a new portguard option to allow the categorization of a device as slow so that it can have all traffic flowing to the device routed to the slow virtual link. https://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/sw/8_x/config/interfaces/cisco_mds9000_interfaces_config_guide_8x/congestion_avoidance_isolation.html

QUESTION 5

A data center uses Cisco Nexus 7000 Series Switch and contains two tenants, tenant A and tenant B.

1.



Tenant A uses IP addresses in the 10.2.30.41/24 to 10.2.30.64/24 range.

2.

Tenant B uses IP addresses in the 10.2.30.120/24 to 10.2.30.192/24 range. The engineer must implement a solution that:

1.

Isolates the traffic for each tenant as separate routing data and control planes.

2.

Physically partitions the Cisco Nexus device into separate multiple logical devices with separate management, failure domain isolation, and resource management. Which two technologies meet these requirements? (Choose two.)

A. VDC

B. vPC

C. VXLAN

D. VLAN

E. VRF

Correct Answer: AE

QUESTION 6

Refer to the exhibit.



```
Switch(config-sys-qos)# show policy-map system
Type network-qos policy-maps
=====
policy-map type network-qos system
  class type network-qos class-fcoe
    match qos-group 1
    pause no-drop
    mtu 2000
  class type network-qos class-default
    match qos-group 0
    mtu 1500
Service-policy (qos) input: system
  policy statistics status: disabled
  Class-map (qos) : class fcoe (match-any)
    Match : cos 3
    set qos-group 1
  Class-map (qos) : class-default (match-any)
    Match: any
    set qos-group 0
```

Which template is used when a vHBA template pair is created for a specific server that inherits its attributes from an existing template?

- A. Secondary
- B. Initial
- C. Updating
- D. Primary

Correct Answer: A

https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-User-Guides/Network-Mgmt/3-1/b_UCSM_Network_Mgmt_Guide_3_1/b_UCSM_Network_Mgmt_Guide_3_1_chapter_0111.html

1.

Secondary Template- All shared configurations are inherited from the Primary template.

2.

Initial Template: vNICs created from this template are not updated if the template changes.

3.



Updating Template: vNICs created from this template are updated if the template changes

QUESTION 7

A network administrator must create a redundant vHBA for the mission-critical virtual machines (VMs) installed on a Cisco UCS Fabric Interconnect blade server. The VMs access multiple datastores using VSAN55 and VSAN95. The datastore on which the VMs are hosted must be accessible if any of the uplinks goes offline.

Which action meets these requirements?

- A. Attach VSAN55 to vHBA1 and VSAN95 to vHBA2.
- B. Assign VSAN55 and VSAN95 to vHBA1 and vHBA2.
- C. Enable failover for the vHBA with VSAN55 and VSAN95 enabled.
- D. Configure load-balancing for vHBAs with VSAN55 and VSAN95 attached.

Correct Answer: A

QUESTION 8

What can be implemented on Cisco Nexus 5600 Series Switches for link redundancy within a Fibre Channel fabric?

- A. vPC+
- B. E-Trunk
- C. SAN port channel
- D. LACP port channel

Correct Answer: C

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5600/sw/san_switching/7x/b_5600_SAN_Switching_Config_7x/m_5500_configuring_san_port_channels.html

QUESTION 9

An engineer must use OTV for layer 2 connectivity between data centers to support virtual machine between the customer sites. To support this requirement, the engineer must ensure the existence of the same default gateway on both sites. Additionally, the operations team report high bandwidth utilization on site A and wants to optimize the outbound traffic flows to use a DC exit point.

Which feature must be used to meet these requirement?

- A. FHRP filter
- B. Control group



C. Data group

D. ARP filter

Correct Answer: A

https://www.cisco.com/c/dam/en/us/products/collateral/switches/nexus-7000-series-switches/guide_c07-728315.pdf

Another capability introduced by OTV is to filter First Hop Redundancy Protocol (FHRP - Hot Standby Router Protocol [HSRP], Virtual Router Redundancy Protocol [VRRP], and so on) messages across the logical overlay. This filtering is required to allow for the existence of the same default gateway in different locations and optimize the outbound traffic flows

QUESTION 10

A company owns a large-scale compute infrastructure that consists of over 1000 servers and virtual machines. The operational complexity continues to grow with additional policies and servers added to the environment. An infrastructure engineer is looking for an automation tool to reduce the operational complexity of configuring complex infrastructure. Because of the strict security requirements, the tool must be agentless, use the secure shell for transport, and be extendable using existing Python modules.

Which tool meets these requirements?

A. Puppet

B. NSO

C. Saltstack

D. Ansible

Correct Answer: D

QUESTION 11

Refer to the exhibit.

- Only use a proxy for border leaf switches.
- Classify incoming traffic on L3OUT.
- Immediately update the endpoint database when the endpoint moves between leaf switches.

The Cisco Nexus Series Switch with hostname Nexus1 is the default gateway for server A and server B. Both servers must have reachability to the internet, however, server A internet traffic must pass through the firewall for deep packet inspection. Also, the firewall must inspect any communication between server A and server B.

Which solution must be applied to separate the data plane path for server A and server B?

A. VLAN



- B. VRF
- C. VDC
- D. VXLAN

Correct Answer: B

QUESTION 12

A Cisco UCS instance has four interfaces on a UCS VIC. Where on the fabric interconnect does each interface terminate?

- A. vPC
- B. virtual interface
- C. port channel
- D. physical port

Correct Answer: B

Reference: <https://www.cisco.com/c/dam/en/us/products/collateral/servers-unified-computing/ucs-6300-series-fabric-interconnects/cisco-unified-fabric.pdf>

QUESTION 13

An engineer working for a private telecommunication company with an employee id 4298 53 420 must evaluate connectivity to the new data centre location based on Cisco Nexus 7000 Series Switches. The IP connectivity is already supplied by the service provider. The solution must provide a Layer 2 extension and optimize the traffic localization

Which technology supports these requirements?

- A. IS-IS multi site over ACI
- B. VXLAN over EoMPLS
- C. OTV over IP and multicast
- D. BGP over VPLS

Correct Answer: B

QUESTION 14

Refer to the exhibit.



EVPN VXLAN Distributed Anycast Gateway

Distributed anycast gateway feature for EVPN VXLAN is a default gateway addressing mechanism that enables the use of the same gateway IP addresses across all the leaf switches that are part of a VXLAN network. This ensures that every leaf switch can function as the default gateway for the workloads directly connected to it. The feature facilitates flexible workload placement, host mobility and optimal traffic forwarding across the VXLAN fabric.

EVPN Multi-Site architecture allows the extension of Layer 2 and Layer 3 segments beyond a single site. Using EVPN Multi-Site architecture, you can extend Layer 2 VNIs to enable seamless endpoint mobility and address other use cases that require communication bridged beyond a single site. Use cases involving Layer 3 extension beyond a single site primarily require multitenant awareness or VPN services. With the multitenant capability in BGP EVPN and specifically in EVPN Multi-Site architecture, multiple VRF instances or tenants can be extended beyond a single site using a single control plane (BGP EVPN) and a single data plane (VXLAN).

EVPN Multi-Site architecture can also be used for DCI scenarios (Figure 3). As with the compartmentalization and scale-out within a data center, EVPN Multi-Site architecture was built with DCI in mind. The overall architecture allows single or multiple sites per data center to be positioned and interconnected with single or multiple sites in a remote data center. With seamless and controlled Layer 2 and Layer 3 extension through the use of VXLAN BGP EVPN within and between sites, the capabilities of VXLAN BGP EVPN itself have been increased. The new functions related to network control, VTEP masking, and BUM traffic enforcement are only some of the features that help make EVPN Multi-Site architecture the most efficient DCI technology.

An engineer is configuring a QoS policy with these requirements

Match-all AF11 traffic and set it to a DSCP value of 14. The committed rate must be 10 Mbps with a committed burst rate of 1000 ms Drop any AF11 traffic that violates these settings. Any traffic other than af11 must have a DSCP value of 0 The given class-map configuration already exists. Which solution must the engineer use to meet the requirements?

- A. `policy-map type qos policy_af11 class class-other match dscp 0`
- B. `policy-map type qos policy_af11 class class-af11 match other set dscp 0`
- C. `policy-map type qos policy_af11 class class-default set dscp 0`
- D. `policy-map type qos policy_af11 class class_af11 set dscp 0`

Correct Answer: C

QUESTION 15

An engineer must integrate Layer 4 to Layer 7 services within Cisco ACI Fabric. The main requirement is to have a single point of configuration for network elements and firewall policies. Which action meets these requirements?

- A. Define the service graph model as network policy mode.
- B. Deploy the firewalls in routed mode with PBR.
- C. Deploy the firewalls in transparent mode.
- D. Define the service graph model as service policy mode.

Correct Answer: D



VCE & PDF

PassApply.com

<https://www.passapply.com/300-610.html>

2024 Latest passapply 300-610 PDF and VCE dumps Download

[Latest 300-610 Dumps](#)

[300-610 VCE Dumps](#)

[300-610 Practice Test](#)