Cisco

300-160 Exam

Cisco Designing Cisco Data Center Computing Exam

Questions & Answers
Demo

Version: 13.0

Question: 1

You must use one logical uplink for Fibre Channel traffic and Ethernet traffic on a Cisco UCS system. Which type of port should you use to accomplish this task?

A. FCoE storage
B. server
C. FCoE uplink
D. uplink

Answer: C

Explanation:
Server and Uplink Ports on the Fabric Interconnect
Each fabric interconnect has a set of ports in a fixed port module that you can configure as either server ports or uplink Ethernet ports. These ports are not reserved. They cannot be used by a Cisco UCS instance until you configure them. You can add expansion modules to increase the number of uplink ports on the fabric interconnect or to add uplink Fibre Channel ports to the fabric interconnect.
You need to create LAN pin groups and SAN pin groups to pin traffic from servers to an uplink port.
Each fabric interconnect can include the following types of ports:
Server Ports
Server ports handle data traffic between the fabric interconnect and the adapter cards on the servers.
You can only configure server ports on the fixed port module. Expansion modules do not include server ports.
Uplink Ethernet Ports
Uplink Ethernet ports handle Ethernet traffic between the fabric interconnect and the next layer of the network. All network-bound Ethernet traffic is pinned to one of these ports.
By default, Ethernet ports are unconfigured. However, you can configure them to function in the following ways:
Server
Uplink
FCoE
Appliance
You can configure uplink Ethernet ports on either the fixed module or an expansion module.
Uplink Fibre Channel Ports
Uplink Fibre Channel ports handle FCoE traffic between the fabric interconnect and the next layer of the network. All network-bound FCoE traffic is pinned to one of these ports.
By default, Fibre Channel ports are uplink. However, you can configure them to function as Fibre

Channel storage ports. This is useful in cases where a Cisco UCS requires a connection to a Direct-Attached Storage (DAS) device.

You can only configure uplink Fibre Channel ports on an expansion module. The fixed module does not include uplink Fibre Channel ports.

Question: 2

Which statement accurately describes the configuration requirements for disjoint Layer 2 networks on Cisco UCS?

A. The Cisco UCS fabric Interconnect must be in switch mode.
B. The VLAN IDs must overlap in both Layer 2 domains.
C. All of the uplinks most be in one port channel to keep all of the ports active.
D. The Cisco UCS Fabric Interconnect must be in end-host motto.

Answer: D

Question: 3

Which two options are reasons to use Layer 3 routing to segment a data center instead of Layer 2 switching? (Choose two)

A. Simply design
B. Ease of routing protocol configuration
C. Limit the scope of broadcast flooding
D. Cost
E. Limit the scope of spanning Tree Protocol

Answer: C, E

Question: 4

Which two options represent an access layer solution designed to accelerate server virtualization, that is managed just like other network devices in the data center? (Choose two)

A. MPIO
B. host vPC
C. VEM
D. VSS
E. VSM

Answer: C, E

Explanation:

When server virtualization is implemented, the edge of the network is pushed from the traditional location in the network access layer, implemented in physical switches, to the virtual network access layer that is implemented in software in the server hypervisor. The Cisco Nexus 1000V Switch is an intelligent virtual network access layer switch that runs Cisco NX-OS Software, Cisco's data center operating system that runs on all Cisco data center products. Operating inside the Microsoft Hyper-V hypervisor, the Cisco Nexus 1000V supports Cisco Virtual Network Link (VN-Link) server virtualization technology to provide:

Policy-based virtual machine connectivity

Mobile virtual machine security and network policy

Nondisruptive operating model for your server virtualization and networking teams

When server virtualization is implemented in the data center, servers and virtual machines are not managed the same way as physical servers. Server virtualization is treated as a special deployment, leading to longer deployment time, with more coordination needed among server, network, storage, and security administrators. With the Cisco Nexus 1000V, you have a consistent networking feature set and configuration and provisioning model for both the physical and the virtual networks. Virtual machine networks can use the same network configuration, security policy, diagnostic tools, and operating models as physical server deployments that are connected to physical switches. This unified approach provides faster deployment and troubleshooting and makes the administration of virtualization environments essentially the same as for nonvirtualized deployments.

Developed in close collaboration with Microsoft, the Cisco Nexus 1000V Switch is certified by Microsoft and integrates with Microsoft Windows Server and Microsoft System Center Virtual Machine Manager (SCVMM). You can use the Cisco Nexus 1000V to manage your virtual machine connectivity with confidence in the integrity of the server virtualization infrastructure.

Cisco Nexus 1000V Switch Components

Cisco Nexus 1000V Switches have two main components:

Virtual supervisor module (VSM)

Virtual Ethernet module (VEM)

The VSM provides the switch control and management plane, and the VEM provides the data plane for the switch (Figure 1). The VSM can run as a virtual machine on any Microsoft Hyper-V host or as a virtual service node on the Cisco Nexus 1010 and 1110. The VEM runs as a plug-in (extension) to the Microsoft Hyper-V switch in the hypervisor kernel, providing switching between virtual machines.

Cisco Nexus 1000V sees the VSMs and VEMs as modules. In the current release, a single VSM can manage up to 64 VEMs. The VSMs are always associated with slot numbers 1 and 2 in the virtual chassis. The VEMs are sequentially assigned to slots 3 through 66 based on the order in which their respective hosts were added to the Cisco Nexus 1000V Switch.

Question: 5

Which two platforms support the FCoE protocol? (Choose two)

A. Cisco MDS 9148S Series
B. Cisco MDS 9222i series
C. Cisco Nexus 2332TQ Series
D. Cisco nexus 7010 series
E. Cisco Nexus 2248TP series

Answer: C , D

Question: 6

Service graphs are used to define which option on the Cisco ACI platform?

A. a function that a contract must use to get to another contract
B. a policy that an EPG must use to get to another EPG
C. the contract between two EPGs
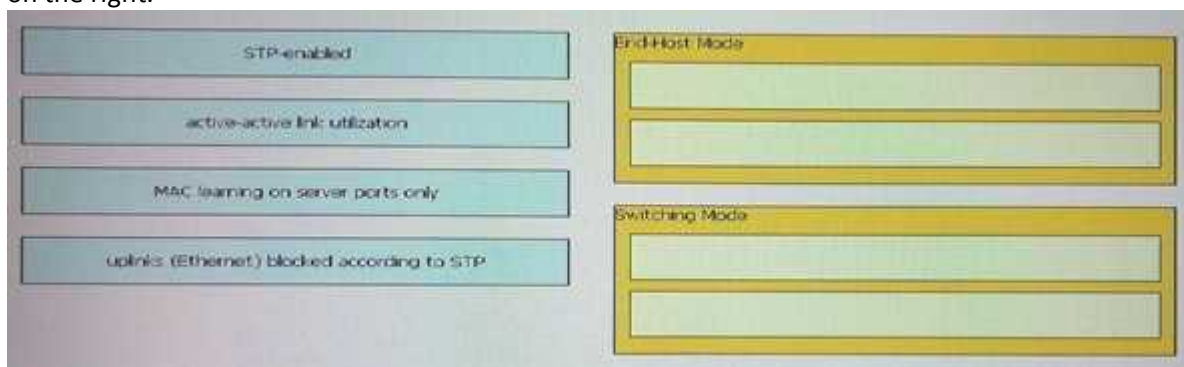D. the Cisco APIC definitions of the contracts in REST API

Answer: B

Question: 7

DRAG DROP
Drag and drop each Cisco UCS Fabric Interconnect feature on the left to the correct forwarding mode on the right.

Answer:

End Host Mode:
MAC learning on server ports only
Active-active link utilization
Switching Mode:
STP-enabled
Uplinks (Ethernet) blocked according to STP

Question: 8

Which two options are supported on Cisco UCS Fabric Interconnects that use native Fibre Channel connectivity? (Choose two)

A. iSCSI
B. NFS
C. DAS
D. SAN
E. iFCP

Answer: CD

Question: 9

if you are connecting a Cisco UCS Fabric Interconnect in it's default mode to a SAN, what is the operating mode?

A. trunk
B. NPIV mode
C. switching
D. NPV mode

Answer: D

Question: 10

You have a Cisco UCS B-Series chassis. To connect to a blade server by using a remote KVM console, you should connect to the IP address of which component?

A. mgmt0
B. CIMC
C. IPMI
D. CMP

Answer: B