

Cisco.300-610.by.John.108q

Number: 300-610
Passing Score: 800
Time Limit: 120
File Version: 12.0

Exam Code: 300-610
Exam Name: Designing Cisco Data Center Infrastructure



Exam A

QUESTION 1

What are two advantages of using Cisco vPC over traditional access layer designs? (Choose two.)

- A. supports Layer 3 port channels
- B. disables spanning-tree
- C. no spanning-tree blocked ports
- D. uses all available uplink bandwidth
- E. maintains a single control plane

Correct Answer: C, D

Section:

Explanation:

Reference: https://www.cisco.com/c/dam/en/us/td/docs/switches/datacenter/sw/design/vpc_design/vpc_best_practices_design_guide.pdf

QUESTION 2

What is a design consideration when implementing FSPF?

- A. Routes are based on the domain ID.
- B. Routes are based on the distance vector protocol.
- C. FSPF runs only on F Ports.
- D. FSPF runs on a per-chassis basis.



Correct Answer: A

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/sw/5_0/configuration/guides/fabric/nxos/cli_fabric/fspf.html

QUESTION 3

Which two features are provided by deploying an OOB management network in a Cisco Nexus data center? (Choose two.)

- A. Layer 3 path for monitoring purposes
- B. Layer 2 path for server traffic
- C. Layer 2 path for a vPC peer link
- D. Layer 3 path for vPC keepalive packets
- E. Layer 3 path for server traffic

Correct Answer: B, C

Section:

Explanation:

Reference: <https://www.cisco.com/c/dam/en/us/td/docs/solutions/CVD/Aug2014/CVD-DataCenterDesignGuide-AUG14.pdf>

QUESTION 4

The management of the Cisco Nexus switches is provided over an isolated out-of-band network. The VDC feature is configured on the Cisco Nexus core switches.

How is out-of-band management access provided for each VDC?

- A. All the VDC have the same out-of-band IP address.
- B. Each VDC has a dedicated out-of-band Ethernet management port.
- C. Each VDC has a unique out-of-band IP address from the same IP subnet.
- D. Each VDC has a unique out-of-band IP address from different IP subnets among VDCs.

Correct Answer: C

Section:

QUESTION 5

Which two configurations allow for routing traffic between two VDCs? (Choose two.)

- A. Connect the VDCs to an external Layer 3 device.
- B. Cross-connect the ports between the VDCs.
- C. Create VRF-aware software infrastructure interfaces.
- D. Create a policy map in the default VDC that routes traffic between the VDCs.
- E. Create interfaces in the VDC that can be accessed by another VDC.

Correct Answer: A, D

Section:

QUESTION 6

Which protocol prevents fiber failures from causing a Layer 2 loop in a dark fiber DCI?

- A. BFD
- B. UDLD
- C. MCP
- D. LLDP

Correct Answer: B

Section:

QUESTION 7

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: C, D

Section:

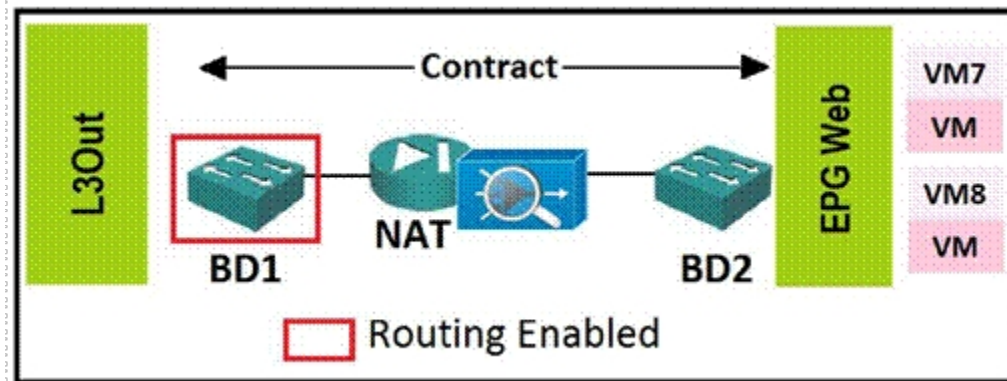
Explanation:

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



QUESTION 8

Refer to the exhibit.



What must be the default gateway of the servers in EPG Web?

- A. subnet address of BD1
- B. subnet address of L3Out
- C. subnet address of BD2
- D. NAT appliance

Correct Answer: D

Section:

QUESTION 9

Which element is the main functional component of the architecture that separates the internal fabric and the external network that connects sites when VXLAN EVPN is deployed multisite?

- A. border leaf
- B. service leaf
- C. border gateway
- D. service gateway

Correct Answer: C

Section:

Explanation:

Reference: https://dcloud-cms.cisco.com/demo_news/cisco-dcnm-11-3-for-vxlan-evpn-multi-site-deployments-lab-v1

QUESTION 10

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: C

Section:

QUESTION 11

When planning to deploy a load-balancing service as a managed node, which ACI configuration must be included?

- A. BGP ECMP
- B. Layer 4 to Layer 7 device package
- C. inline load-balancing device
- D. ITD

Correct Answer: B

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/switches/datacenter/aci/apic/sw/1-x/ACI_Best_Practices/b_ACI_Best_Practices/b_ACI_Best_Practices_chapter_0110.html

QUESTION 12

What are two reasons to select OTV as the DCI solution to connect multisite topologies? (Choose two.)

- A. It propagates hosts reachability without support of traffic flooding.
- B. Layer 3 failures do not propagate beyond the OTV edge device.
- C. It extends the spanning tree between data centers.
- D. It is an open standard.
- E. It constrains HSRP hello messages to each data center.

Correct Answer: B, C

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Data_Center/DCI/whitepaper/DCI3_OTV_Intro/DCI_1.html

QUESTION 13

Which technology enables Layer 2 extension between remote data center sites?

- A. FCIP
- B. GRE
- C. DMVPN
- D. OTV

Correct Answer: D

Section:

Explanation:

Reference: <https://netcraftsmen.com/spanning-layer-2-between-data-centers/>

QUESTION 14

An engineer must use OTV for Layer 2 connectivity between data centers to support virtual machine mobility 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 reports high bandwidth utilization on site A and wants to optimize the outbound traffic flows to use a local DC exit point. Which feature must be used to meet these requirements?

- A. data group
- B. FHRP filter
- C. ARP filter
- D. control group

Correct Answer: D

Section:

QUESTION 15

An engineer is designing a disaster recovery solution. In the event of a node failure, the solution should either direct all of the traffic to another node, or load-balance the traffic across the remaining nodes. Which solution should be implemented in the design?

- A. active/active
- B. cold standby
- C. active/passive
- D. warm standby

Correct Answer: A

Section:

QUESTION 16

A company runs mission-critical infrastructure in a single data center. Due to business growth, it plans to open more data centers in the coming years. A network engineer is asked to recommend a network technology for data center interconnection that allows scalability and seamless VM mobility while providing maximum security and fault isolation between data centers.

Which technology must be used to meet these requirements?

- A. TrustSec
- B. OTV
- C. CloudSec
- D. UDLD

Correct Answer: B

Section:

QUESTION 17

An engineer must design a multitenant solution using Cisco 7709 switches. The solution must support separate routing instances, separate spanning tree domains, and separate firewalls for each tenant. Which solution meets these requirements?

- A. vPC
- B. VDC
- C. CFS
- D. VRF

Correct Answer: B

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Data_Center/VMDC/2-2/design_guide/vmdcDesign22/VMDC_2-2_DG_2.htm

QUESTION 18

An engineer is designing a Cisco Nexus 7000 Series disaster recovery site using the data center interconnect solution to provide gateway redundancy and needs to ensure that devices use gateways in their own data centers. Which design approach should be used to accomplish this goal?

- A. CFS localized to its own data center
- B. vPC localized to its own data center



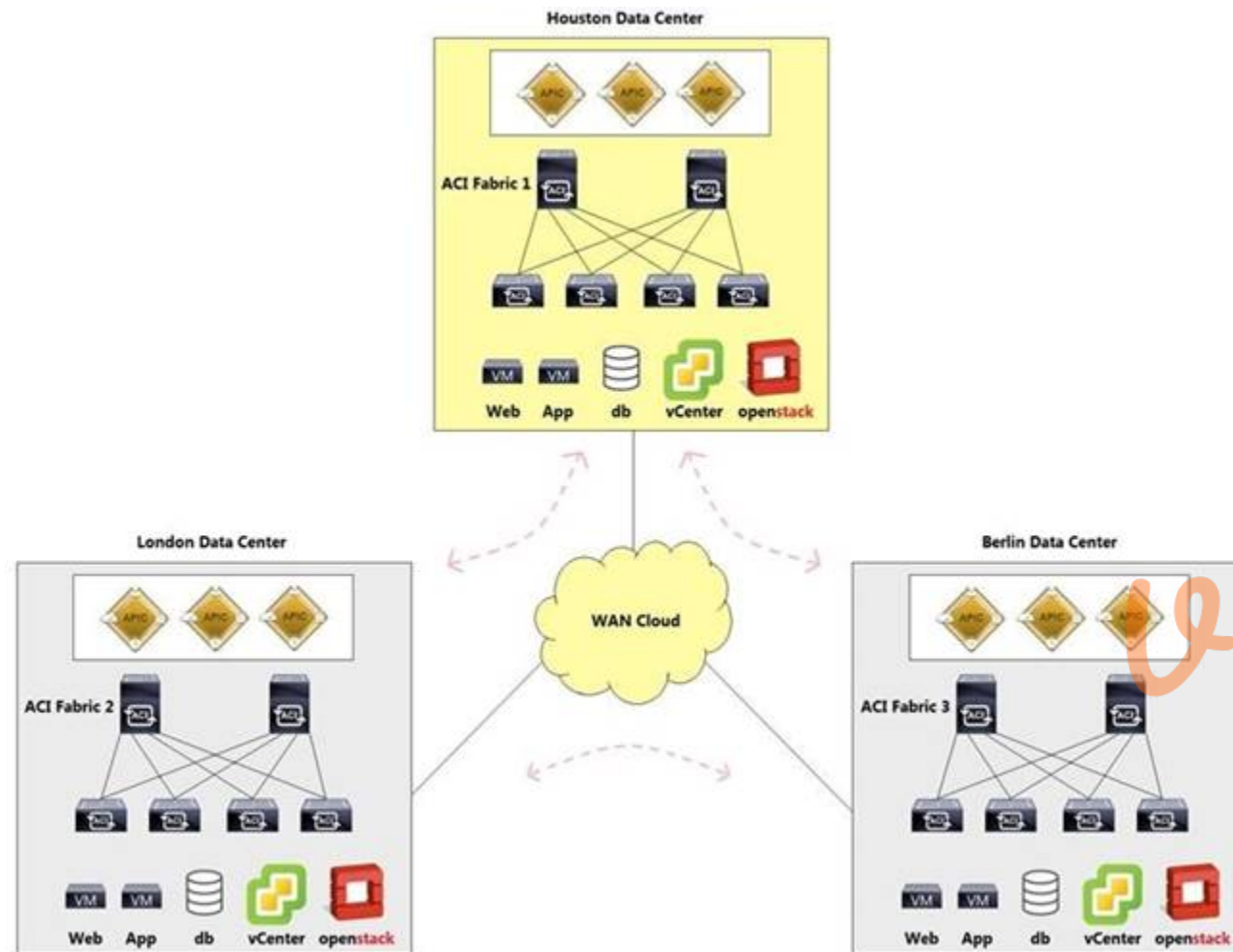
- C. FHRP localized to its own data center
- D. STP localized to its own data center

Correct Answer: C

Section:

QUESTION 19

Refer to the exhibit.



A cloud service provider deployed three geographically separated Cisco ACI data centers. One of the customers needs to host a clustered application that is spread across the three data centers. The cluster nodes that host the application need a Layer 2 topology to communicate with each other.

Which Cisco ACI topology design meets these requirements?

- A. Multi-Cloud
- B. Multi-Site
- C. Multi-Pod over OSPF EVPN
- D. Multi-Pod over MP-BGP EVPN

Correct Answer: D

Section:

QUESTION 20

An engineer finishes the initial set up of a VXLAN EVPN network. The engineer is asked to plan for external connectivity that supports redundancy and extends multiple virtual routing and forwarding domains. The requirement is to use the same default gateway addressing across all leaf switches that belong to the VXLAN network.

Which two solutions must be used to meet these requirements? (Choose two.)

- A. Distributed Anycast Gateway
- B. VRF-Lite
- C. Inter-Site Network
- D. DC Interconnect
- E. Spanning Tree Protocol

Correct Answer: A, D

Section:

Explanation:

Reference: <https://www.cisco.com/c/en/us/td/docs/switches/datacenter/pf/configuration/guide/b-pf-configuration/Introducing-Cisco-Programmable-Fabric-VXLAN-EVPN.html>

QUESTION 21

An engineer must configure an interface for managing and orchestrating a Cisco Nexus device. The interface must be operational if the data and control planes crash, support IPv4 and IPv6 addressing, and have access to its own VRF instance.

Which interface should be used to meet these requirements?

- A. physical interface
- B. interface VLAN
- C. management interface
- D. loopback interface

Correct Answer: C

Section:

QUESTION 22

An engineer is implementing management access to a Cisco Nexus platform. The customer requires a solution that provides isolation between the data and control planes, in addition to management that uses encryption and authentication.

The customer will manage the device using both IPv4 and IPv6.

Which two components should be used to meet these requirements? (Choose two.)

- A. mgmt0 interface
- B. SSH protocol
- C. SNMP
- D. SVI interface
- E. Telnet protocol

Correct Answer: B, C

Section:

QUESTION 23

An engineer must design a VXLAN EVPN network. The solution should optimize broadcast, unknown unicast, and multicast (BUM) and short BUM replication, and use PIM anycast RP.

Which solution should be included in the design?

- A. head-end replication
- B. PIM sparse mode
- C. PIM dense mode



D. ingress replication

Correct Answer: D

Section:

Explanation:

Reference: <https://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-series-switches/white-paper-c11-739942.html>

QUESTION 24

A network engineer designs a Cisco Nexus data center network for a client-server farm using a pair of Nexus 9000 Series Switches in a vPC setup. Each server connects with two interfaces to both Nexus switches. The Nexus switches must always initiate the negotiation with the server.

Which feature should be used in this design to ensure traffic is forwarded from the server to the data center network?

- A. PAgP mode desirable
- B. LACP mode auto
- C. LACP mode active
- D. PAgP mode auto

Correct Answer: C

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/ios/12_2sb/feature/guide/gigeth.html

QUESTION 25

After experiencing traffic disruptions from the failure of a single router, a customer asks an engineer to design a solution that will prevent this from occurring in the future. While examining the customer's environment, the engineer discovers that the routers are manufactured by a variety of different vendors, and they have varying amounts of CPU and memory resources. Additionally, several of the customer's applications require the ability to fine-tune the load-balancing parameters between multiple gateway routers.

Which solution should be used to meet these requirements?

- A. VRRP
- B. FHRP
- C. HSRP
- D. GLBP

Correct Answer: A

Section:

QUESTION 26

An engineer must build a VXLAN flood-and-learn network. The customer requires the solution to be based on the IETF documented practice in RFC 7348. The solution must use broadcast, unknown unicast, and multicast (BUM) and include the efficient BUM and short BUM replication modes that use only shared trees.

Which technology meets these requirements?

- A. MVPN
- B. PIM sparse mode
- C. PIM SSM
- D. Bidirectional PIM

Correct Answer: B

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/UCS_CVDs/flexpod_esxi70_vxlan_evpn_design.html

QUESTION 27

An engineer must secure the payload traversing across the DCI. The solution must support confidentiality and integrity and it must be open standard. The solution must encrypt Ethernet frames regardless of the upper layer protocol used.

Which technology must be used to support these requirements?

- A. GRE
- B. OTV
- C. MACsec
- D. IPsec

Correct Answer: C

Section:

Explanation:

Reference:

<https://developers.redhat.com/blog/2016/10/14/macsec-a-different-solution-to-encrypt-network-traffic/>

QUESTION 28

An engineer must interconnect two geographically separated data centers. The service provider offers a Layer 2 Metro Ethernet link. The strict security policy requires that the information that is shared between two sites must be sent encrypted. The application deployed between two sites requires a line-rate throughput regardless of the packet size and speed.

Which solution meets these requirements?

- A. L2TPv2
- B. IPsec
- C. MACsec
- D. L2TPv3



Correct Answer: C

Section:

QUESTION 29

An engineer configured the OSPF protocol in the vPC topology. During the catastrophic failure of one of the vPC member switches, the traffic was routed to a black hole. This route was caused by the long convergence time caused by the delay of the vPC member switch reboot. After the failure, the engineer rebooted both switches, but the secondary switch powered on before the primary one. It caused all the vPCs to be shut down due to consistency-check violations.

Which two features must be used to prevent these situations from happening in the future? (Choose two.)

- A. peer-gateway
- B. ip arp synchronize
- C. delay restore
- D. auto-recovery
- E. system priority

Correct Answer: C, D

Section:

QUESTION 30

Which two statements describe Ethernet switching mode on Cisco UCS 6100 Series Fabric Interconnects? (Choose two.)

- A. STP runs on the uplink ports of each VLAN, as defined by PVSTP+.
- B. STP runs on the uplink ports of each VLAN, as defined by MSTP.
- C. The STP parameter configuration is unsupported.
- D. The STP parameter configuration is supported.
- E. STP runs on the server ports.

Correct Answer: A, C

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/solutions/collateral/data-center-virtualization/unified-computing/whitepaper_c11-701962.html

QUESTION 31

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

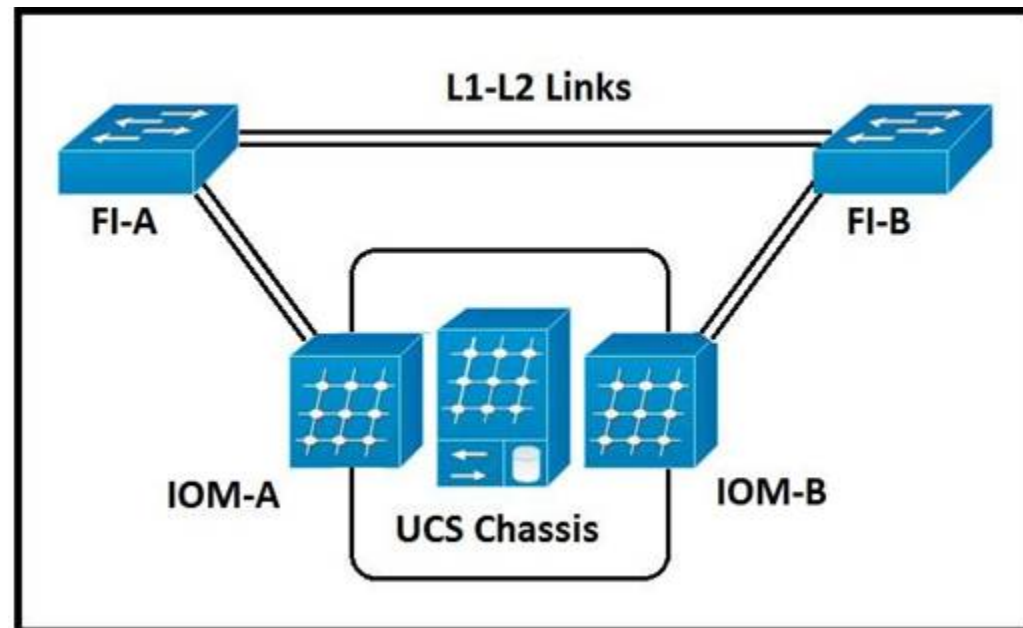
Section:

Explanation:

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

QUESTION 32

Refer to the exhibit.



A Cisco UCS chassis that has two IOMs is discovered. The chassis discovery policy creates a fabric port channel. What is the result of this policy?

- A. Cisco UCS Manager creates two separate fabric port channels.
- B. Cisco UCS Manager creates a single fabric port channel.
- C. The port channel is disabled until an administrator enables it manually.
- D. Each uplink that connects an IOM is configured as a discrete link.

Correct Answer: A

Section:

QUESTION 33

An engineer is designing a Multichassis EtherChannel topology in which two switches must appear as a single device to a third downstream switch. Which two technologies meet this requirement? (Choose two.)

- A. HSRP
- B. VSS
- C. vPC
- D. 802.1q
- E. FEX

Correct Answer: B, C

Section:

Explanation:

Reference: https://www.cisco.com/c/dam/en/us/products/collateral/switches/nexus-7000-series-switches/C07-572835-00_NX-OS_vPC_DG.pdf

QUESTION 34

What is an advantage of Cisco HyperFlex Edge as compared to Cisco HyperFlex Standard Clusters?

- A. Cisco Intersight automatically creates an invisible cloud witness.
- B. Cisco UCS 5108 Blade Server chassis provides SEEPROM connectivity to solve split-brain scenarios.
- C. Cisco UCS Manager provides service profile portability across nodes.
- D. Cisco HyperFlex Edge provides native container support through the KVM hypervisor.

Correct Answer: A

Section:

Explanation:

Reference: <https://www.cisco.com/c/dam/en/us/products/collateral/hyperconverged-infrastructure/hyperflex-hx-series/whitepaper-c11-741999.pdf>

QUESTION 35

Which approach splits a pair of clustered fabric interconnects into two standalone devices?

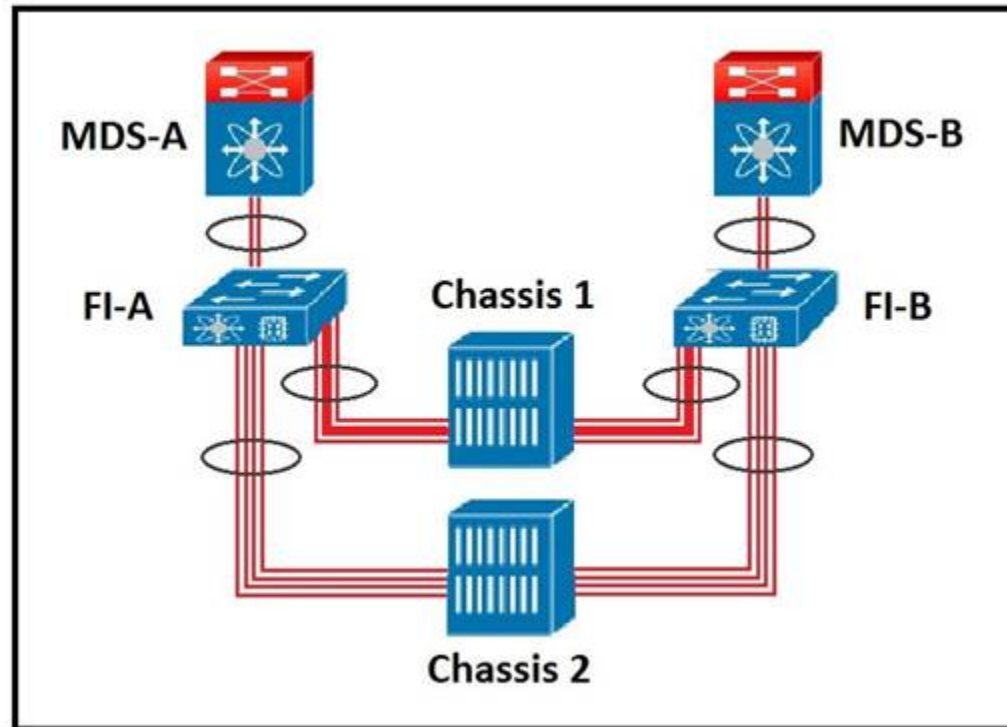
- A. Run the disable fips-mode command on each fabric interconnect.
- B. Run the connect local-management command on each fabric interconnect.
- C. Erase the configuration of both fabric interconnects.
- D. Unplug the Layer 1 and Layer 2 interfaces between the devices.

Correct Answer: D

Section:

QUESTION 36

Refer to the exhibit.



An engineer must assign multiple Fibre Channel IDs to a single port channel. Which two features must be enabled this goal? (Choose two.)

- A. SAN Pin Groups on the Cisco UCS Fabric Interconnects.
- B. NPV feature on the Cisco MDS Series.
- C. end-host mode feature on the Cisco UCS Fabric Interconnects
- D. NPIV feature on the Cisco MDS Series
- E. Smart Zoning feature on the Cisco UCS Fabric Interconnects

Correct Answer: B, D

Section:

QUESTION 37

Which type of encoding is used on 8-Gbps links as compared to 10-Gbps links?

- A. 8-Gbps links use 64B/66B encoding, and 10-Gbps links use 8B/10B encoding.
- B. 8-Gbps links use 8B/10B encoding, and 10-Gbps links use 64B/66B encoding.
- C. 8-Gbps links and 10-Gbps links use 8B/10B encoding.
- D. 8-Gbps links and 10-Gbps links use 64B/66B encoding.

Correct Answer: B

Section:

Explanation:

Reference: https://www.iol.unh.edu/sites/default/files/knowledgebase/10gec/10GbE_C149.pdf

QUESTION 38

Which Cisco HyperFlex feature provides virtual machine-level cost scaling for desktop virtualization growth?



- A. HyperFlex Edge support
- B. encryption offload cards
- C. dedicated compute nodes
- D. fabric interconnects

Correct Answer: A

Section:

QUESTION 39

Which two vSphere features must be included in the design of a Cisco HyperFlex systems stretched cluster? (Choose two.)

- A. HA
- B. VSS
- C. FT
- D. VDP
- E. DRS

Correct Answer: A, E

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/hyperconverged_systems/HyperFlex_HX_DataPlatformSoftware/HyperFlex_Stretched_Cluster/3_5/b_HyperFlex_Systems_Stretched_Cluster_Guide_3_5.pdf

QUESTION 40

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: D

Section:

QUESTION 41

A network architect proposes a distinct Fibre Channel fabric to be used for a Cisco UCS blade server that hosts critical applications.

Which action should be implemented for the Fibre Channel traffic from the vHBA of this server to pass through the I/O Module in the Cisco UCS chassis to a specified uplink Fibre Channel port?

- A. Update the applied global QoS policy.
- B. Update the applied Fibre Channel adapter policy.
- C. Enable Persistent Binding in the vHBA policy.
- D. Include a SAN pin group in the vHBA policy.

Correct Answer: B

Section:

QUESTION 42

An engineer is experiencing performance issues on a Cisco UCS blade server. The B-Series blade server contains four CPUs, most of which are idle. The engineer notices that the CPU is suffering from too many requests sent

by the NIC.

Additionally, the number of queues appears to be insufficient and only a single CPU is processing the network traffic.

Which policy must be used to alleviate these issues?

- A. LAN connectivity
- B. dynamic vNIC connection
- C. Ethernet adapter
- D. vNIC placement

Correct Answer: B

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-User-Guides/Server-Mgmt/3-1/b_Cisco_UCS_Manager_Server_Mgmt_Guide_3_1/server_related_policies.html

QUESTION 43

A network engineer is designing a Cisco Hyperflex infrastructure. The infrastructure will be connected to an external SAN fiber channel array and must support Microsoft clustering.

Which storage connectivity method must be used to meet these requirements?

- A. Fibre Channel over Ethernet
- B. Internet Small Computer Systems Interface
- C. raw device mapping
- D. server message block

Correct Answer: A

Section:

Explanation:

Reference:

https://www.cisco.com/c/en/us/td/docs/hyperconverged_systems/HyperFlex_HX_DataPlatformSoftware/Network_External_Storage_Management_Guide/b_HyperFlex_Systems_Network_and_External_Storage_Management_Guide_3_0/b_HyperFlex_Systems_Network_and_External_Storage_Management_Guide_3_0_chapter_010.html

QUESTION 44

An engineer installs a B-Series server in a Cisco UCS chassis that contains a pair of UCS-IOM-2208XP I/O modules. The full bandwidth of the I/O module must be utilized.

Which two elements should be used in this environment? (Choose two.)

- A. four twinax cables from each I/O module to each fabric interconnect
- B. Cisco UCS VIC 1225
- C. eight twinax cables from each I/O module to each fabric interconnect
- D. Cisco UCS M81KR
- E. Cisco UCS VIC 1280

Correct Answer: C, E

Section:

Explanation:

Reference: <https://www.connection.com/product/cisco-vic-1280-dual-40gb-capable-2nd-gen-virtual-interface-card/ucs-vic-m82-8p/13785476>

QUESTION 45

A network engineer is implementing Cisco UCS Manager with Cisco UCS Central integration. The company's strict security policies require that the logical profile of virtual network adapters and logical addressing assigned to Cisco UCS servers be managed by the Cisco UCS Manager. The users must also be prevented from being able to acknowledge pending activities in the Cisco UCS Manager. Which two profiles must be used to meet these requirements? (Choose two.)



- A. global maintenance
- B. local service
- C. local power
- D. restricted chassis
- E. public network control

Correct Answer: B, E

Section:

QUESTION 46

DRAG DROP

Drag and drop the configurations from the left onto the correct policies on the right.

Select and Place:

Set the number of queues.	vNIC/vHBA Placement Policy <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Set the RSS hash value.	
Assign each vCon to a physical adapter.	
Assign adapter order.	
	Ethernet Adapter Policy <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>

Correct Answer:

	vNIC/vHBA Placement Policy <div style="border: 1px solid black; background-color: #e0ffff; padding: 5px;">Assign each vCon to a physical adapter.</div> <div style="border: 1px solid black; background-color: #e0ffff; padding: 5px;">Assign adapter order.</div>
	Ethernet Adapter Policy <div style="border: 1px solid black; background-color: #e0ffff; padding: 5px;">Set the number of queues.</div> <div style="border: 1px solid black; background-color: #e0ffff; padding: 5px;">Set the RSS hash value.</div>

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/sw/gui/config/guide/2-2/b_UCSM_GUI_Configuration_Guide_2_2/configuring_network_related_policies.html#task_7F03A03C719A4A44B8ACFAD73AADC73C

QUESTION 47

DRAG DROP

Drag and drop the components from the left onto the descriptions on the right that indicate what occurs to Fibre Channel fabric when that component fails.

Select and Place:

fabric interconnect	The Fibre Channel fabric fails for all of the connected Cisco UCS chassis.
FEX	The Fibre Channel fabric fails for one Cisco UCS chassis.
FEX link of the fabric interconnect	The Fibre Channel fabric fails for some of the servers within a Cisco UCS chassis.
converged network adapter	The Fibre Channel fabric fails for one server.

Correct Answer:

	converged network adapter
	FEX link of the fabric interconnect
	fabric interconnect
	FEX

Section:

Explanation:

QUESTION 48

DRAG DROP

Drag and drop the technologies from the left onto the correct descriptions on the right.

Select and Place:

iSCSI	allows the storage system to tell the client which paths are optimized
TOE	provides block-level access to the storage
MPIO	host software has visibility into different iSCSI ports
ALUA	offloads device CPU from encapsulation / decapsulation

Correct Answer:

	ALUA
	iSCSI
	MPIO
	TOE

Section:

Explanation:

QUESTION 49

DRAG DROP

Drag and drop the SAN components from the left onto the correct design considerations on the right.

Select and Place:

fabric logins	used to logically separate a SAN fabric
ISL	must be considered for the end-to-end oversubscription ratio
VSAN	these exchanges increase as a result of server virtualization
zone	must be considered when implementing access control

Correct Answer:

	VSAN
	ISL
	fabric logins
	zone

Section:

Explanation:

QUESTION 50

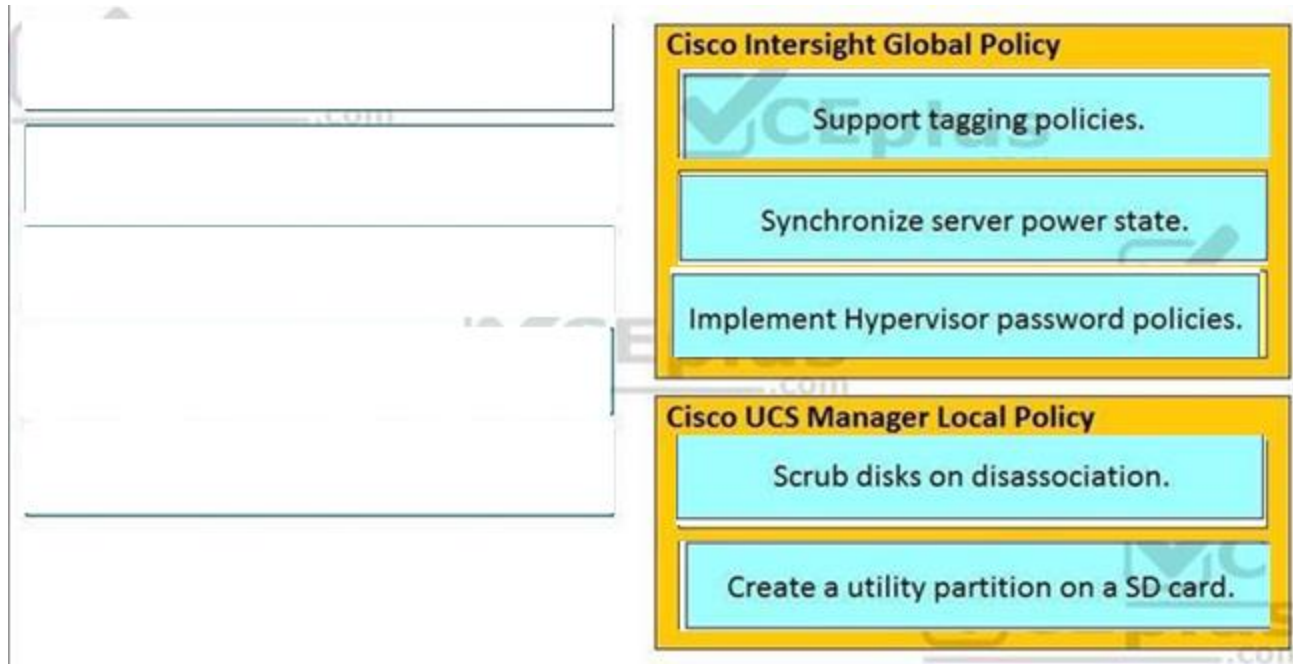
DRAG DROP

Drag the requirements from the left onto the correct policy types on the right.

Select and Place:

Support tagging policies.	Cisco Intersight Global Policy
Scrub disks on disassociation.	
Synchronize server power state.	
Create a utility partition on a SD card.	
Implement Hypervisor password policies.	Cisco UCS Manager Local Policy

Correct Answer:



Section:

Explanation:

QUESTION 51

A network engineer must select a high availability feature for their data center. The solution must ensure network resilience, reduce network instability for Layer 3 routing protocols, and meet these requirements:

- The device must notify its neighbors when the control plane is undergoing a restart.
- The solution must suppress routing flaps in case of stateful switchovers.

Which solution must be implemented?

- A. BFD
- B. HSRP
- C. NSF
- D. ISSU

Correct Answer: C

Section:

QUESTION 52

An engineer must logically partition two Cisco Nexus 7000 Series Switches into two environments called Test_39919596 and Production_59423879. The environments must use only F2-Series line cards and be limited to a maximum of 265 port-channels. Which Cisco Nexus feature must be used?

- A. vPC
- B. VDC
- C. vFC
- D. VRF

Correct Answer: B

Section:

QUESTION 53

An engineer is implementing a storage area network where an NPV is used. The engineer notices that the servers in a storage farm are experiencing heavy traffic contention. The engineer needs to migrate traffic from heavily loaded server interfaces to interfaces with less load. When the new links are deployed, the existing traffic is not rebalanced as expected. Which feature must be used to meet these requirements?



- A. NPIV
- B. multiple VSAN support
- C. DVM
- D. disruptive load balancing

Correct Answer: A

Section:

QUESTION 54

A customer needs a design for a new data center network that meets these requirements:

- Logically partition the environment into separate security domains.
- Cut costs related to purchasing additional equipment.
- Separate routing processes, TCAM, QoS tables, and data planes.

Which technology must be used?

- A. VLAN
- B. vPC
- C. VDC
- D. VRF

Correct Answer: C

Section:

QUESTION 55

A company has several data centers around the world that must be interconnected over Layer2. The service provider supports MPLS services to all the locations. The proposed solution must be vendor agnostic and scalable enough to support the rapid growth of the company. Which data center technology is recommended to achieve this goal?

- A. OTV
- B. VXLAN EVPN
- C. FabricPath
- D. EoMPLS

Correct Answer: A

Section:

QUESTION 56

A network consultant evaluates the Cisco UCS Fabric Interconnect SAN configuration, which must meet these requirements:

- All traffic must pass over the upstream device for switching and domain IDs must be preserved in the fabric.
- Each server should be pinned to one designated upstream interface and for the traffic to pass through the pinned port.

Which Fabric Interconnect SAN operational mode meets these requirements?

- A. end host
- B. switch
- C. NPIV
- D. Fibre Channel



Correct Answer: A

Section:

QUESTION 57

An engineer is implementing a Cisco UCS environment. The system must aggregate all vNICs into a single policy and consistently enforce node disassociation across the cluster. Which two UCS policies meet these requirements? (Choose two.)

- A. scrub policy
- B. vNIC policy
- C. boot policy
- D. firmware policy
- E. LAN connectivity policy

Correct Answer: B, E

Section:

QUESTION 58

A cloud service provider is managing day-2 operations of over 200 blade servers installed in the Cisco UCS environment. This pool of network resources is providing virtual networks to their customers. To successfully operate this environment, frequent changes to vNICs and other operational policies are required across multiple UCS domains. The operations team must streamline these repetitive tasks. Which orchestration tool must be used to meet this requirement?

- A. Cisco ACI Multisite Orchestrator
- B. Cisco DAN Center
- C. Cisco UCS Director
- D. Cisco UCS Manager



Correct Answer: A

Section:

QUESTION 59

A company has added a new FCoE storage array to increase the performance of datastore access for end users. This storage array is directly connected to the Cisco Nexus 5672UP switches using four 10G port-channel interfaces. After deployment, the end users fail to access the datastore compared to the older solution. A network engineer verified the port-channel interface and finds that the congestion occurs when PFC frames are generated at the FCoE ingress interface. Which action must be taken to resolve the congestion issue?

- A. Reserve bandwidth for FCoE VLAN on the port-channel interface connected with storage.
- B. Enable the FCoE class in QoS on Cisco Nexus 5672UP switches.
- C. Increase the queuing buffer in the port-channel interface connected to the storage array. Add an additional FCoE VLAN to the SAN network.
- D. Add an additional FCoE VLAN to the SAN network.

Correct Answer: B

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/qos/513_n1_1/b_cisco_nexus_5000_qos_config_gd_513_n1_1/b_cisco_nexus_5000_qos_config_gd_513_n1_1_chapter_011.html

QUESTION 60

A database administrator experiences delay when performing storage replication between primary and secondary data centers. The data centers are located 20 kilometers apart and are connected using a 500 Mbps link. The deployment was implemented using an FCIP tunnel and a pair of Cisco MDS 9250 Series Switches. The network engineer decided to enable QoS to prioritize replication traffic. Which QoS model must be used to resolve the performance issues?

- A. Resource Reservation Protocol
- B. weighted round robin
- C. differentiated services
- D. strict priority queuing

Correct Answer: D

Section:

QUESTION 61

A customer must install a new Hyperflex Stretched cluster in two sites. Low latency and predictable high performance are the top priorities for this setup due to the extensive usage of data-intensive applications across the cluster. Which HyperFlex storage solution is recommended to meet these requirements?

- A. All-HDD
- B. Hybrid
- C. All-SAN
- D. All-Flash

Correct Answer: D

Section:

QUESTION 62

The end users report issues with datastore reachability between the newly installed virtual machines (VMs) and the storage array. The VMs are deployed on a Cisco C-Series server, directly connected with Cisco Nexus 5672UP switches over FCoE VLAN. The data traffic on VLAN 99, which is designated as a native VLAN, reaches its default gateway, but FCoE VLAN 99 fails to access the datastore. Which action resolves the problem?

- A. Implement FCoE traffic on VLAN 10 and data traffic on VLAN 99.
- B. Implement host-facing FCoE ports as spanning-tree port type edge.
- C. Configure the FCoE VLAN in the VSAN database before including it in the trunk port.
- D. Configure the FCoE VLAN traffic on a separate interface from any other VLANs that traverse the network.

Correct Answer: C

Section:

QUESTION 63

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: B

Section:

QUESTION 64

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

Section:

QUESTION 65

An engineer needs an orchestration and monitoring tool that should be used for managing the storage networks and VXLAN fabrics. The tool should also allow support built-in dashboard and real-time health summary for managed devices.

Which tool meets these requirements?

- A. Cisco Intersight
- B. Ansible
- C. Puppet
- D. Cisco DCNM

Correct Answer: D

Section:

QUESTION 66

A customer requires a tool to manage Cisco network hardware. The solution must use secure communication using a secure network protocol, support the use of declarative language to manage the state of resources, and periodically pull changes to the controlled nodes. Which tool meets these requirements?

- A. Ansible
- B. SaltStack
- C. Puppet
- D. Nomir

Correct Answer: C

Section:

QUESTION 67

A cloud service provider provisioned four active/active data centers in various locations within the country at 50 miles between each data center. The data centers must provide redundant network infrastructure and always be available to customers.

Which two data center design steps must be used to meet these requirements? (Choose two.)

- A. Provide application hosting services to customers from the closest data center.
- B. Implement active cluster in data centers 1 and 2 and backup in 3 and 4.
- C. Use asynchronous replication between data centers 1 and 2.
- D. Deploy database services in data center 1 and application layer to other data centers.
- E. Configure application data replication to all backup data centers.

Correct Answer: A, E

Section:

QUESTION 68

An engineer must design a DNS service available to multiple network zones as a shared service. The network zones are deployed as VRFs within the data center network and no firewall is available for communication between VRFs.

Which protocol is needed to implement the shared services?

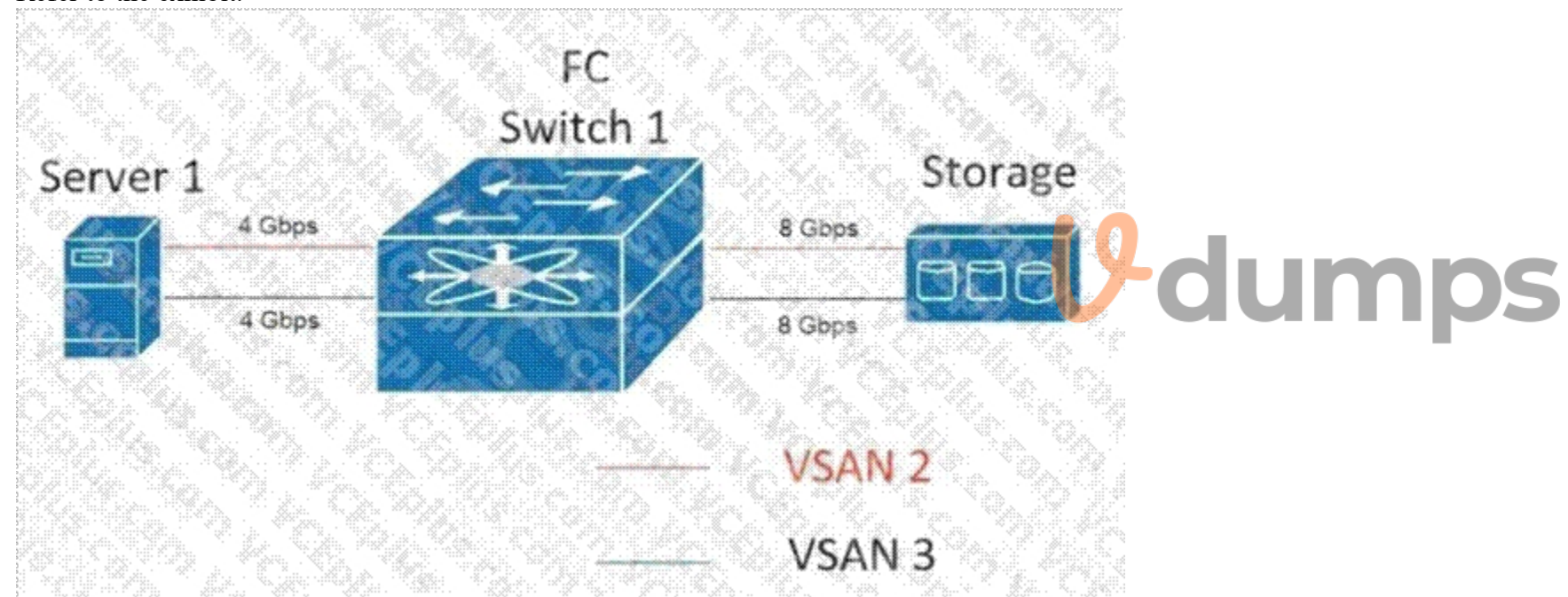
- A. BGP
- B. OSPF
- C. ISIS
- D. VXLAN

Correct Answer: D

Section:

QUESTION 69

Refer to the exhibit.



Server 1 fails to connect to the storage array over the Storage Area Network (SAN) of the Cisco NDS 9000 Series Switch.

The requirements are to redesign the storage network and keep these considerations in mind:

The traffic from each of the server must be redundant and isolated.

The design must tolerate hardware and software failures and upgrades of SAN fabric devices.

Which action must be taken to meet these requirements?

- A. Enable NPV and F-Port-channel on ports that face Server 1 on the Fibre Channel switch to create redundant paths.
- B. Create a SAN port channel that faces the storage device to sustain a link failure.
- C. Add an additional supervisor to the Fibre Channel switch to support nondisruptive upgrades.
- D. Place an additional Fibre Channel switch to create two physically independent storage fabrics.

Correct Answer: D

Section:

QUESTION 70

A network architect designs the iSCSI-based storage area network solution. The iSCSI datastore must be designed with high availability, minimal downtime, and no single point of failure. The requirement is to fail over I/O to alternate paths based on SCSI sense codes without reliance on network failures. Which feature must be deployed to meet these requirements?

- A. hardware-based flow control
- B. port security
- C. iSCSI multipath
- D. NIC teaming

Correct Answer: C

Section:

QUESTION 71

A network consultant reviews the requirements for the Storage Area Network (SAN) design. The proposed solution must offer a very efficient port usage and eliminate the need for a separate physical layer of switches and their associated ISLs.

The design is not expected to require future expansion.

Which SAN topology must be used to meet these requirements?

- A. core-edge
- B. collapsed-core
- C. core-distribution-access
- D. edge-core-edge

Correct Answer: A

Section:

QUESTION 72

A storage administrator receives reports of network delays when database software attempts to access the storage array.

The virtual machines that host the database software are installed on different rack servers connected to the Cisco UCS

Fabric Interconnect domain. The existing SAN switches are connected to the Fabric Interconnects using two 8 Gb portchannel interfaces to connect the storage array.

The storage administrator has decided to deploy iSCSI storage with four 10 Gbps interfaces connected to the Cisco UCS

Fabric Interconnects.

Which deployment type resolves the problems with storage contention?

- A. iSCSI storage with Cisco UCS Fabric Interconnect in the virtual port-channel mode
- B. iSCSI storage with Cisco UCS Fabric Interconnect using an appliance port
- C. iSCSI storage appliance on Cisco UCS Fabric Interconnect uplink trunk port
- D. iSCSI storage appliance on Cisco UCS Fabric Interconnect in the storage end-host mode

Correct Answer: C

Section:

QUESTION 73

An end user is experiencing network latency when accessing a database in a disaster recovery site. The monitoring team concluded that the database was writing simultaneously to the storage arrays on the primary and disaster recovery sites.

Which design resolves this issue?



- A. asynchronous replication between data centers
- B. synchronous replication between data centers
- C. FCoE tunnel between data center
- D. FCIP tunneling between data center

Correct Answer: A

Section:

QUESTION 74

Refer to the exhibit.

```
switch# show interface fc 1/1
fc1/1 is up
Hardware is Fibre Channel, SFP is short wave laser w/o OFC (SN)
Port WWN is 22:01:00:05:30:01:1f:02
Admin port mode is F
snmp traps are enabled
Port mode is F, FCID is 0xec0002
Port vsan is 1
Speed is 4 Gbps
Rate mode is shared
Transmit B2B Credit is 64
Receive B2B Credit is 16
Receive data field Size is 2112
Beacon is turned off
5 minutes input rate 0 bits/sec, 0 bytes/sec, 0 frames/sec
5 minutes output rate 0 bits/sec, 0 bytes/sec, 0 frames/sec
213 frames input, 17311 bytes
0 discards, 0 errors
0 CRC, 0 unknown class
0 too long, 0 too short
332 frames output, 22344 bytes
0 discards, 0 errors
0 input OLS, 0 LRR, 1 NOS, 0 loop inits
1 input OLS, 0 LRR, 0 NOS, 0 loop inits
16 receive B2B credit remaining
64 transmit B2B credit remaining
```

A customer must ensure that the interface on a switch has enough resources to sustain the line rate traffic during peak load. Which action meets this requirement?

- A. Change the rate mode to dedicated.
- B. Set Transmit B2B credit to 16.
- C. Change the port mode to NL.
- D. Increase the data field size to 9000 bytes.

Correct Answer: A

Section:

QUESTION 75

An engineer must choose the World Wide Port Name for the Cisco UCS Fibre Channel virtual host bus adapter. Which identifier must be used?

- A. naa.600a09840691712159764d
- B. fe80::314e:4566:8702:bf3d
- C. iqn.2021-08.com.acme:3xxx
- D. 20:00:00:25:B5:97:c3:ac

Correct Answer: D

Section:

QUESTION 76

An engineer must implement an iSCSI storage connectivity in the existing Cisco UCS environment. The environment is based on Cisco UCS D₁-Series rack server, Cisco Nexus 1000V Series Switches, and VMware ESXi hosts. The implementation must meet these requirements:

Provide multipathing and high availability in the event of a critical path failure. Be cost-effective and not require the purchase of new equipment.

Which two components must be selected to meet these requirements? (Choose two.)

- A. software iSCSI adapter
- B. storage binding
- C. uplink pinning
- D. system VLAN
- E. hardware iSCSI NIC

Correct Answer: A, B

Section:

**QUESTION 77**

An engineer deploys VMware ESXi hypervisor on blade servers. The virtual networking is managed by Cisco Nexus 1000V Series Switches.

Which configuration aligns with Cisco recommended practices for providing high availability and a maximum throughput to the VMware ESXi hosts?

- A. dual vNICs with static EtherChannel link aggregation
- B. dual vNICs with hardware fabric failover on the fabric interconnects
- C. dual vNICs with MAC pinning link aggregation
- D. dual vNICs with LACP link aggregation

Correct Answer: D

Section:

QUESTION 78

An engineer is operating data center environment that hosts data-intensive financial applications. The applications are mostly processing HTTP/HTTPS data with large data segments, which results in a CPU contention due to the significant network processing.

Which set of the Ethernet adapter policies must be selected to resolve the issue?

- A. Receive Checksum Offload field set to Disabled TCP Segmentation Offload field set to Disabled Transmit Queues field: 32 Ring Size field: 256
- B. Receive Checksum Offload field set to Enabled TCP Segmentation Offload field set to Disabled Transmit Queues field: 64 Ring Size field: 128
- C. Receive Checksum Offload field set to Enabled TCP Segmentation Offload field set to Enabled Transmit Queues field: 128 Ring Size field: 64

D. Receive Checksum Offload field set to Disabled TCP Segmentation Offload field set to Enabled Transmit Queues field: 256 Ring Size field: 128

Correct Answer: B

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-User-Guides/Network-Mgmt/40/b_UCSM_Network_Mgmt_Guide_4_0/b_UCSM_Network_Mgmt_Guide_4_0_chapter_01010.html

QUESTION 79

An engineer must deploy a Cisco HyperFlex system at two data centers. For redundancy reasons, the setup must achieve data protection in case of an entire site failure. The data must be available on both sites at all times to keep the recovery time objective to a minimum.

Which Cisco HyperFlex deployment model meets these requirements?

- A. ROBO cluster
- B. stretched cluster
- C. edge with four nodes or more
- D. standard with eight nodes

Correct Answer: B

Section:

QUESTION 80

A network consultant proposes that the configuration of the Cisco UCS servers be based on service templates to facilitate the UCS infrastructure operation. The service profiles must remain connected to the template and be modified when the template settings are changed.

Which configuration meets these requirements?

- A. service profile with type set to Global
- B. service profile with type set to Local
- C. service profile template with type set to Updating
- D. service profile template with type set to Initial



Correct Answer: C

Section:

QUESTION 81

A customer deploys 32 virtualization hosts in a Cisco UCS domain. All hosts run in the same cluster and have identical hardware specifications. The operating system requires that all firmware is consistent across the hosts (or driver support). The customer must provision additional interfaces later for expandability. Which feature of Cisco UCS Manager meets these requirements?

- A. Initial Service Profile Template
- B. Initial vNIC Template
- C. Updating Service Profile Template
- D. Updating vNIC Template

Correct Answer: C

Section:

QUESTION 82

A set of virtual machines must be live migrated from a data center to a disaster recovery site. The data center and disaster recovery sites are connected through an Inter-Pod Network topology. The gateway address of the virtual machine is the same across the data center and disaster recovery.

Which Cisco Nexus feature supports this requirement?

- A. VXLAN EVPN
- B. FabricPath
- C. FHRR
- D. VPLS

Correct Answer: A

Section:

QUESTION 83

The data center aggregation layer that uses IPv4 and IPv6 address space must act as a redundant Layer 3 gateway The solution must support a minimum of 240 virtual groups for an interface The data center aggregation layer hosts network devices from different vendors Which FHRP solution meets these requirements?

- A. HSRPv1
- B. VRRPV3
- C. VRRPv1
- D. HSRPv2

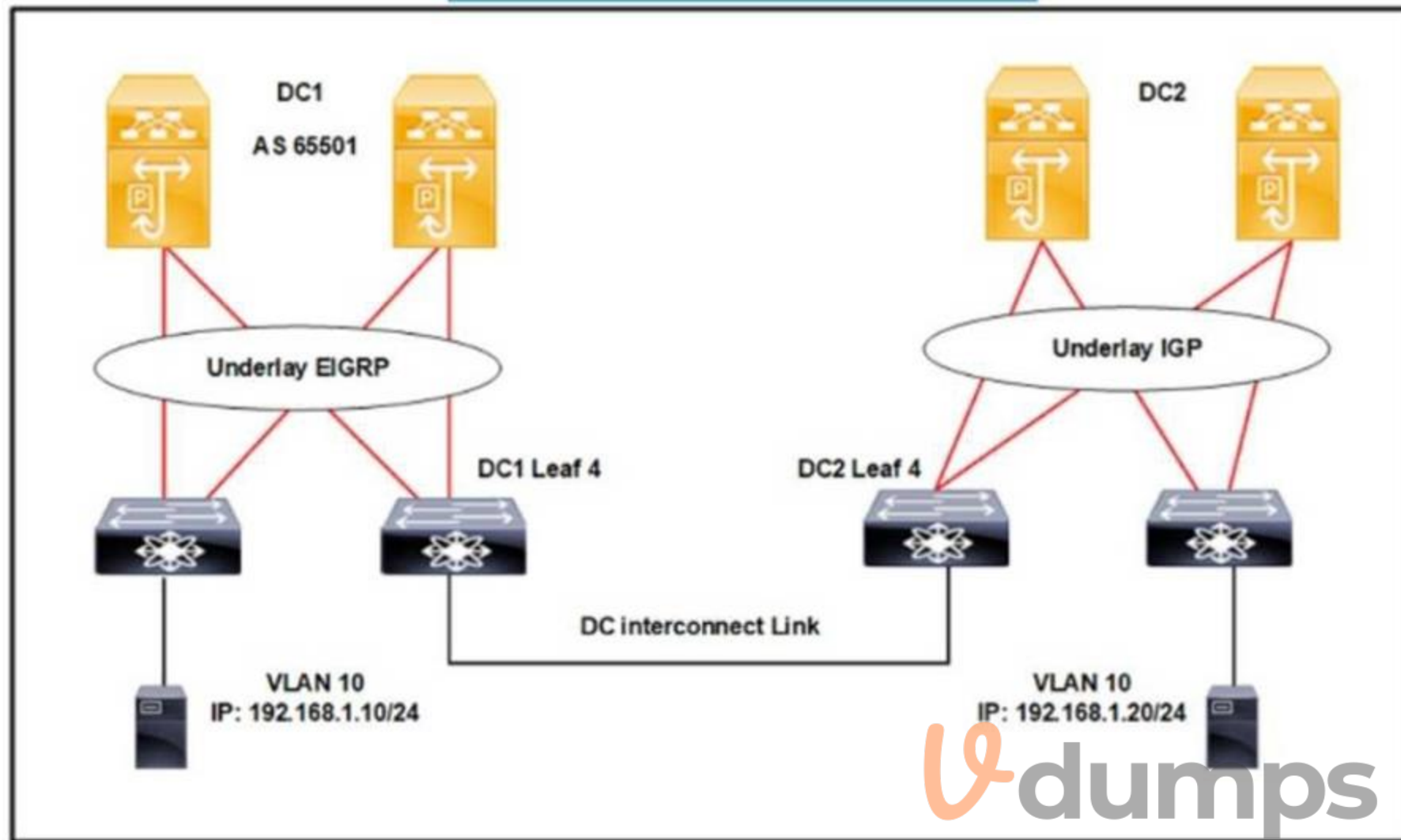
Correct Answer: B

Section:

QUESTION 84

Refer to the exhibit.





The data center DC1 uses VXLAN technology. The company asked a service provider to design another data center called DC2 and stretch EVPN information between the data centers based on the same technology. The fabric requires

- endpoint information propagated end-to-end across both data centers
- misconfiguration replicated from DC1 to DC2

Which actions must the design include in DC2 to meet these criteria?

- Set BGP AS to 65500
• Configure RIP as an underlay IGP
- Set BGP AS to 65501
• Configure EIGRP as an underlay IGP
- Set BGP AS to 65501
• Configure RIP as an underlay IGP
- Set BGP AS to 65500
• Configure IGRP as an underlay IGP

Correct Answer: A

Section:

Explanation:

- misconfiguration replicated from DC1 to DC2

QUESTION 85

A customer is implementing a business continuity solution for the current data centers. The new location must mitigate the impact of a disaster in any existing data centers by providing an acceptable level of service. The

solution must support

- fully segregated Layer 2 and 3 fault domains
- low or no human intervention for service restoration
- medium to high RPO/RTO for a subset of applications
- asynchronous storage replication for application data

Which disaster recovery solution must the customer select to meet these requirements?

- A. identical infrastructure facility ready to provide service
- B. mirrored inactive infrastructure facility with fully stretched resources
- C. cold infrastructure facility with basic infrastructure
- D. partially equipped infrastructure facility for on-demand activation

Correct Answer: A

Section:

QUESTION 86

An engineer must configure a new maintenance policy that will apply to multiple Cisco UCS domains. The policy must be available for use by service profiles and service profile templates created and managed in either Cisco UCS Manager or Cisco UCS Central. Changes to this policy must be allowed only in Cisco UCS Central. Which policy type must the engineer select to accomplish these goals?

- A. hybrid policy
- B. local policy
- C. central policy
- D. global policy

Correct Answer: D

Section:



QUESTION 87

A customer needs a design for a new network. VLANs must be dynamically provisioned based on the information received from connected hosts. No Layer 2 or Layer 3 configuration must be performed on the related switch ports. Which feature must be used?

- A. iPXE
- B. Network PnP
- C. POAP
- D. VM Tracker

Correct Answer: C

Section:

QUESTION 88

An engineer working for a private telecommunication company with an employee ID 4298 53 420 must evaluate connectivity to the new data center 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: C

Section:

QUESTION 89

A customer must deploy a new Cisco HyperFlex stretched cluster solution to ensure virtual server availability in case the data center fails. The current network environment provides multiple geographic locations. Which action must be taken to meet these objectives?

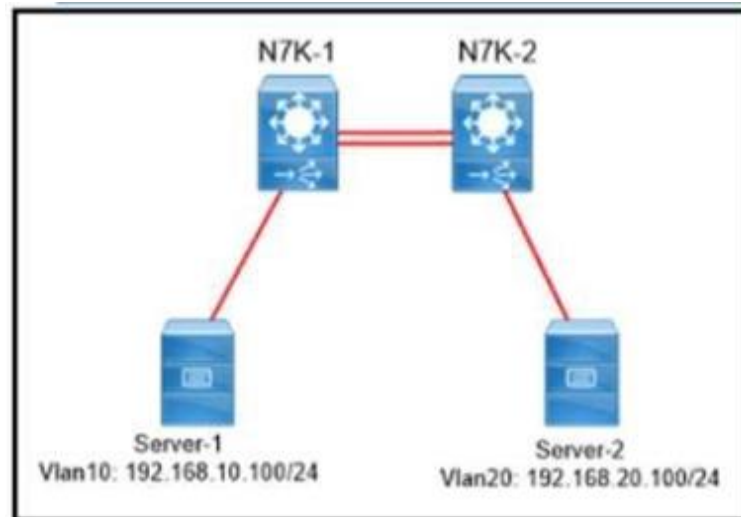
- A. Implement the round trip time latency between the sites to be lower than 20 ms
- B. Place an independent witness component at a third site
- C. Deploy the stretch cluster sites to be within the distance of 300 miles apart
- D. Configure the cluster with the maximum data replication factor

Correct Answer: C

Section:

QUESTION 90

Refer to the exhibit.





A system administrator needs a solution to manage random packet drops between two Cisco UCS C240 M4 servers

The servers are connected to a pair of Cisco Nexus 7009 switches using 10G fibre interfaces

Both servers are generating too many east-west traffic flows from TCP-based applications which causes significant latency that impacts the customer

Also the transfer of files from Server-1 to Server-2 larger than 10 GB results in multiple retransmits

Which design solution resolves this issue?

- A. Add a second uplink to each server NIC
- B. Increase the amount of memory in both servers
- C. Apply rate-limit on the server 1 VLAN interface per application flow.
- D. Connect both servers in the same VLAN

Correct Answer: D

Section:

QUESTION 91

A network engineer must perform a VMM integration for the VMWare vCenter platform with the Cisco ACI Fabric. The vCenter is already installed in one of the rack servers connected to ACI leaf switches in a vPC mode. Which type of management network must be used to integrate vCenter with ACI?

- A. ARC infra
- B. VLAN infra
- C. out-of-band management
- D. In-band management

Correct Answer: C

Section:

QUESTION 92

An engineer is configuring a Cisco UCS Service Profile template for an environment that will host Windows servers. Some of the servers require access to a Fibre Channel storage network. The design requires the server HBA to send the maximum number of commands to a Fibre Channel disk using a single transmission. Which action must be taken to meet these requirements?

- A. Set LUN Queue Depth to 240
- B. Decrease Link Down Timeout to 20.000
- C. Disable 10 Timeout Retry
- D. Increase Max Data Field Size to 2096

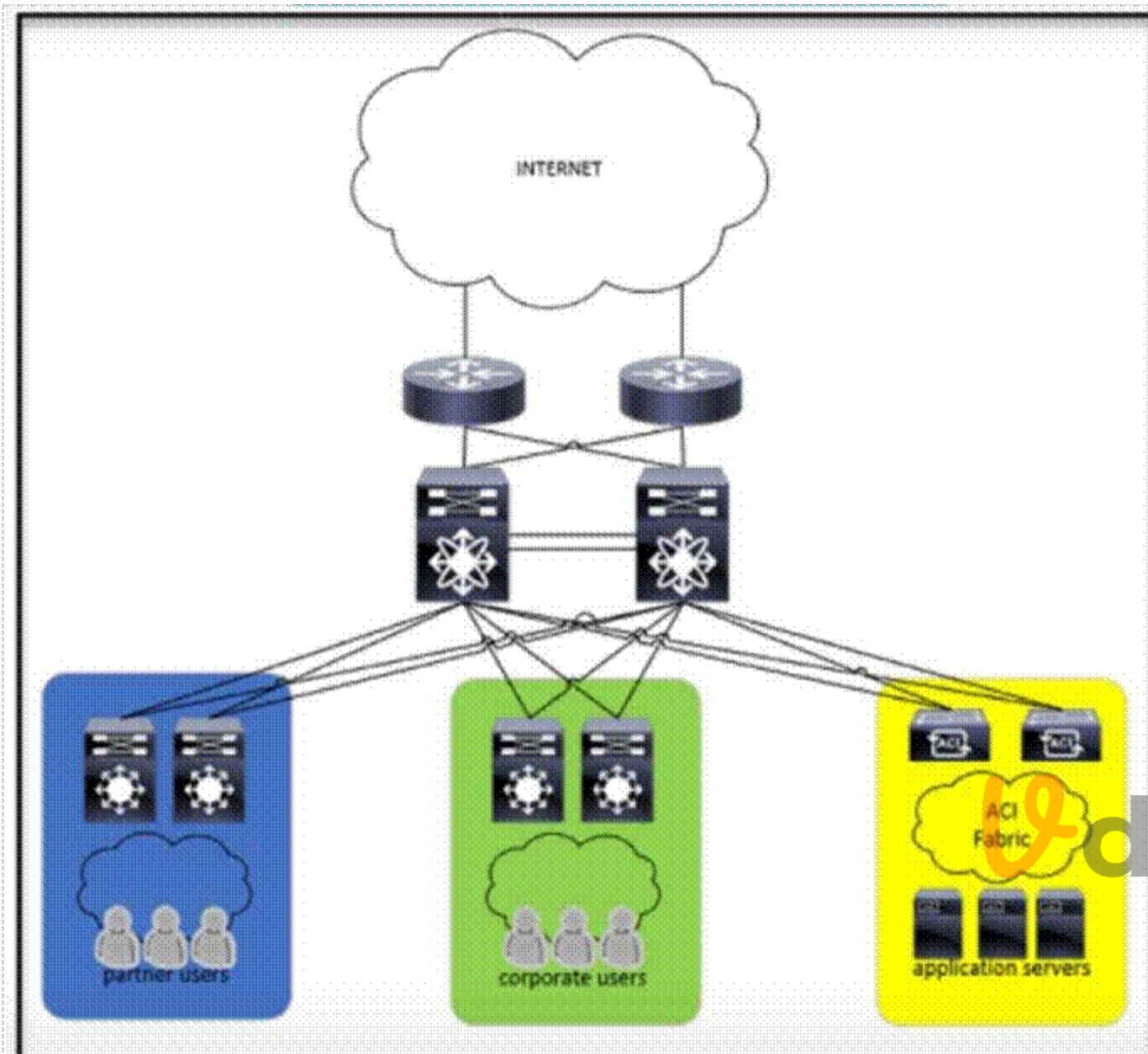
Correct Answer: A

Section:

QUESTION 93

Refer to the exhibit.





The security team created a new security policy that requires certain types of traffic to be subject to deep packet inspection. The traffic types are:

- internet traffic to application servers
- internet traffic to corporate users
- partner network traffic to application servers
- partner network traffic to corporate users

Where must the next-generation firewalls be inserted to implement the new policy?

- one-armed insertion from the core switch cluster
- inline insertion between the edge router cluster and the core switch cluster
- one-armed insertion from the ACI border leaf cluster
- inline insertion between the user network switch cluster and the core cluster

Correct Answer: C

Section:

QUESTION 94

An engineer must design a solution to divide the workload across two different data centers and achieve redundancy in case of the failure of either data center. Which solution must the engineer choose?

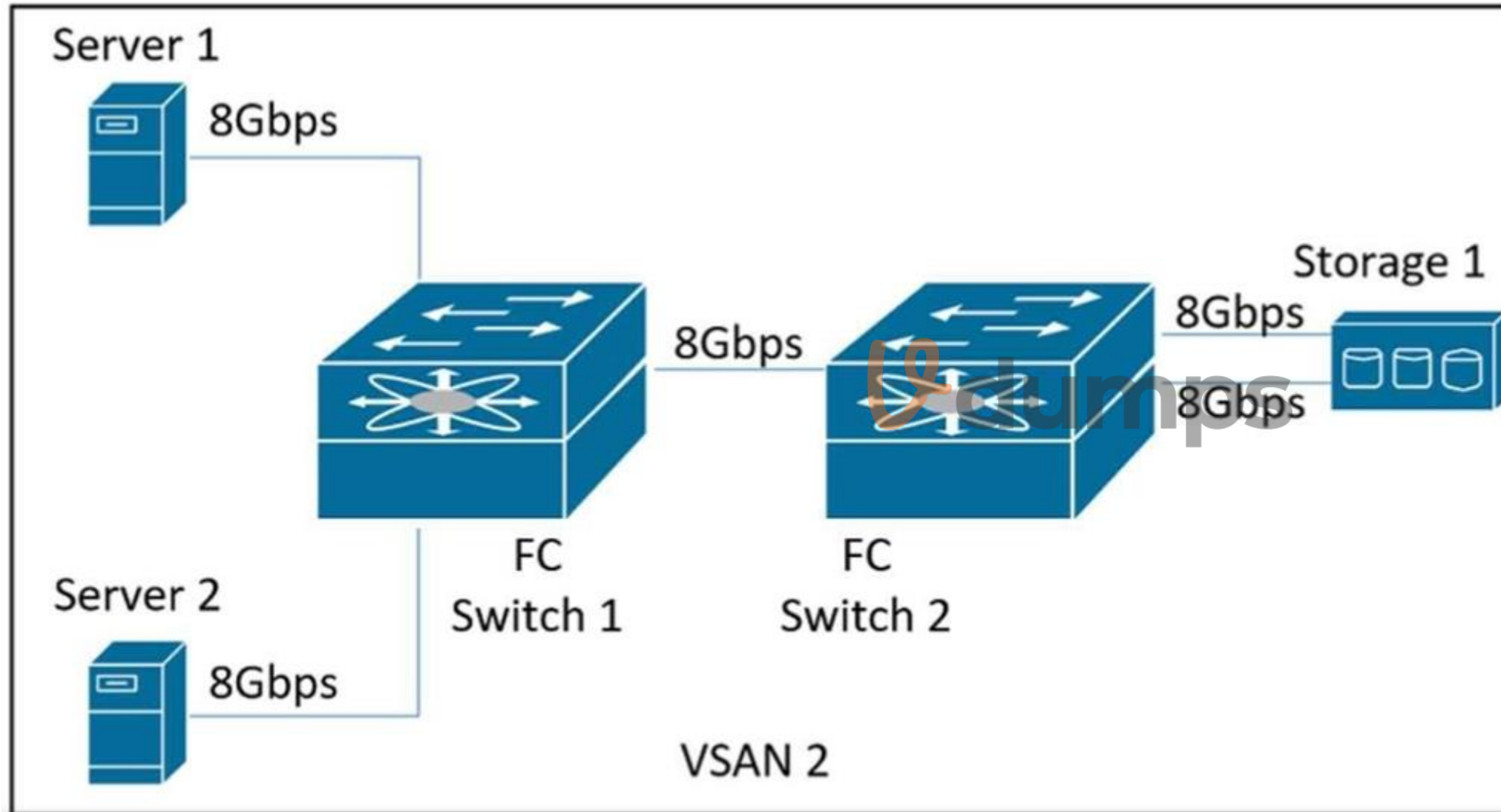
- A. single Cisco HyperFlex stretched cluster
- B. Cisco Hyperflex edge cluster
- C. Cisco Hyperflex ROBO cluster
- D. single Cisco HyperFlex standard cluster

Correct Answer: A

Section:

QUESTION 95

Refer to the exhibit.



A customer runs an Online Transaction Processing (OLTP) application on Server1. The application generates a small number of transactions and requires low storage latency. Server2 is a backup server that performs backups twice a day

During the backup window, the OLTP application experiences high-latency spikes that affect the application performance The customer must meet these requirements

- Maintain consistent low I/O latency for the OLTP server.
- Guarantee I/O throughput for the OLTP server during backup time
- Allow the customer to keep the existing hardware.

Which action must be taken to meet these requirements?

- A. Apply a traffic shaper to the FC Switch 1 interface that is facing the server

- B. Create a SAN port channel between FC Switch1 and FC Switch2.
- C. Add another 8G link to the Server1 and create F-Port-channel
- D. Configure QoS and scheduler for data traffic on both Fibre Channel switches

Correct Answer: D

Section:

QUESTION 96

An engineer must interconnect customer data centers by using a 10-Gbps. unicast-only, Layer 3 circuit The requirement is to stretch the Layer 2 connection over the tunnel isolate STP traffic and create more than two million logical network segments Much solution meets these requirements?

- A. IPsec over GRE
- B. OTV
- C. dark fiber
- D. VXLANEVPN

Correct Answer: A

Section:

QUESTION 97

An engineer must connect a storage array directly to an existing Cisco UCS Fabric Interconnect. The customer requires a solution that provides IP-based storage that does not need to be connected through an external switch Also, the operations team wants to have the ability to have direct access to the files stored on the storage array from their Linux hosts. Which storage technology meets these requirements?

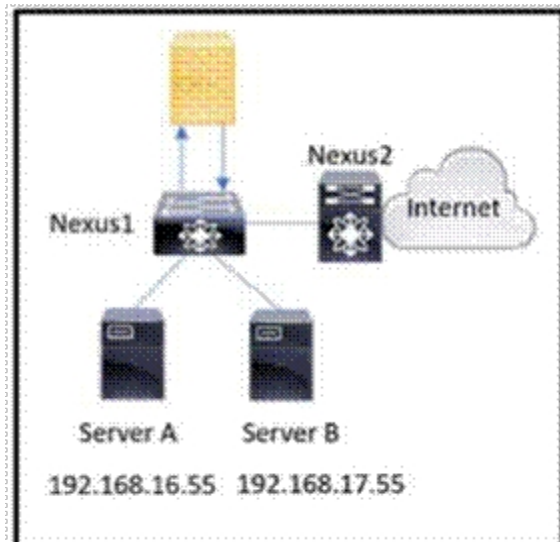
- A. NAS
- B. SCSI
- C. FCoE
- D. SAN

Correct Answer: A

Section:

QUESTION 98

Refer to the exhibit.



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

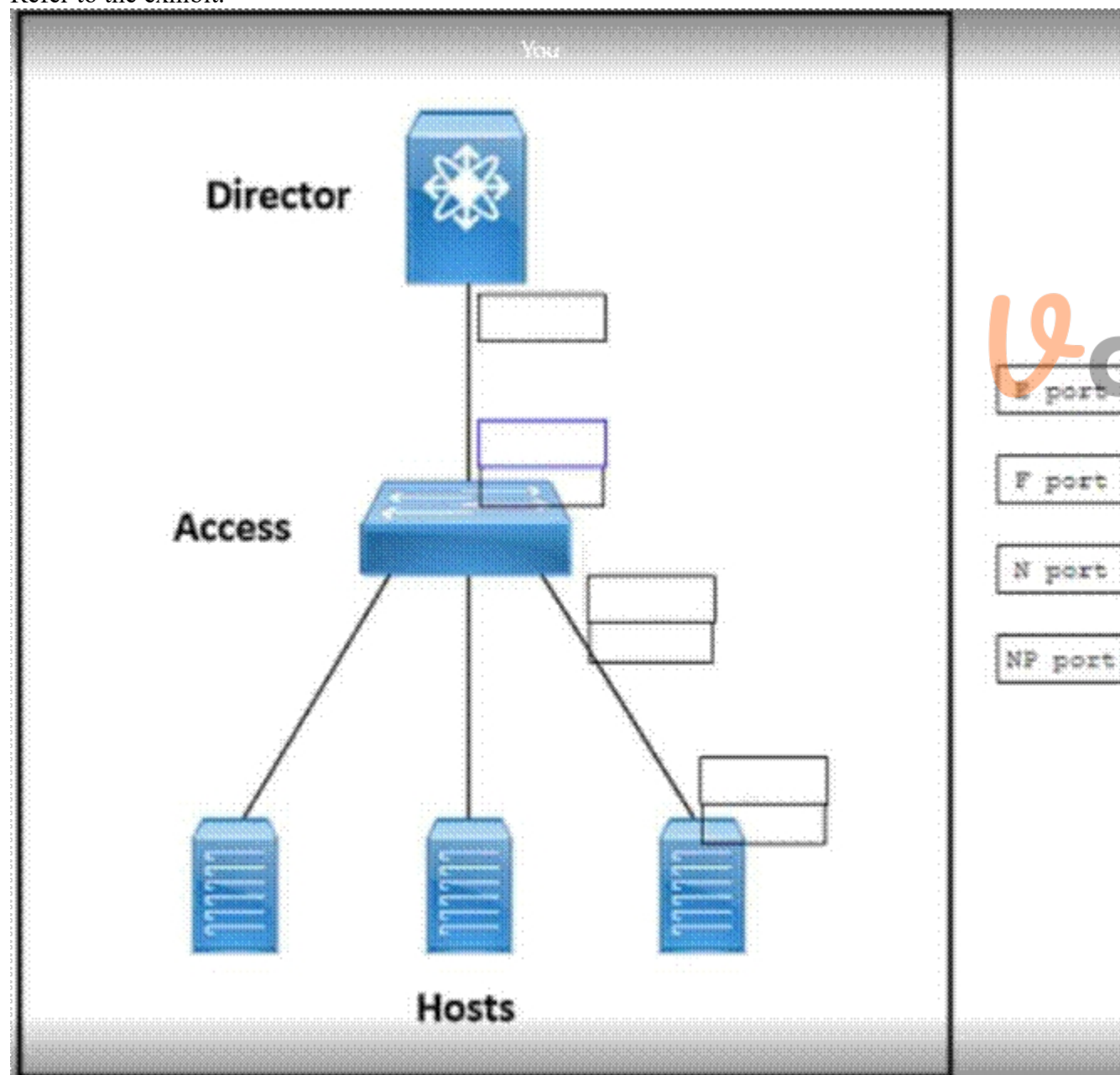
Correct Answer: B

Section:

QUESTION 99

DRAG DROP

Refer to the exhibit.

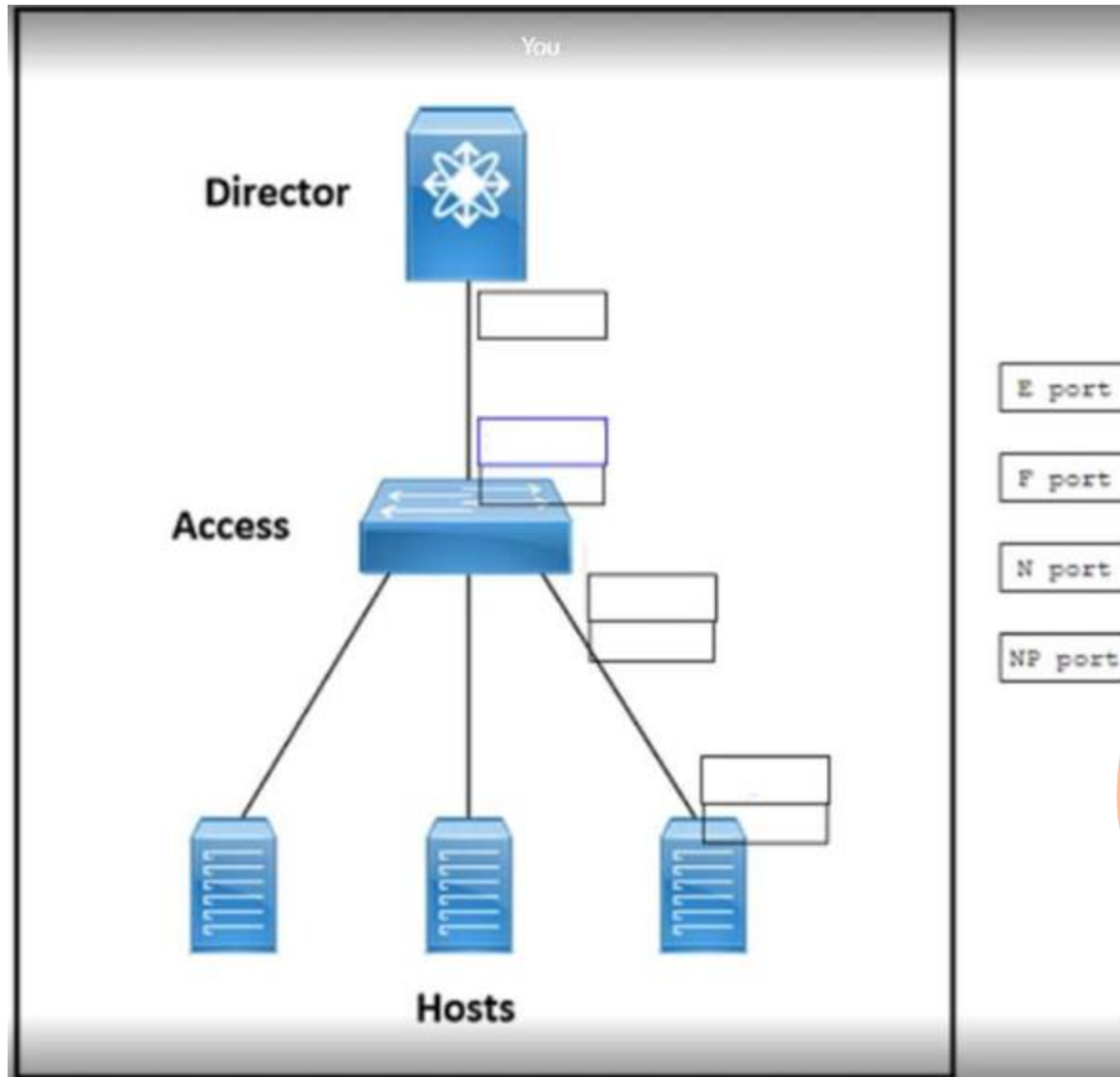


An engineer must deploy a SAN that meets these criteria:

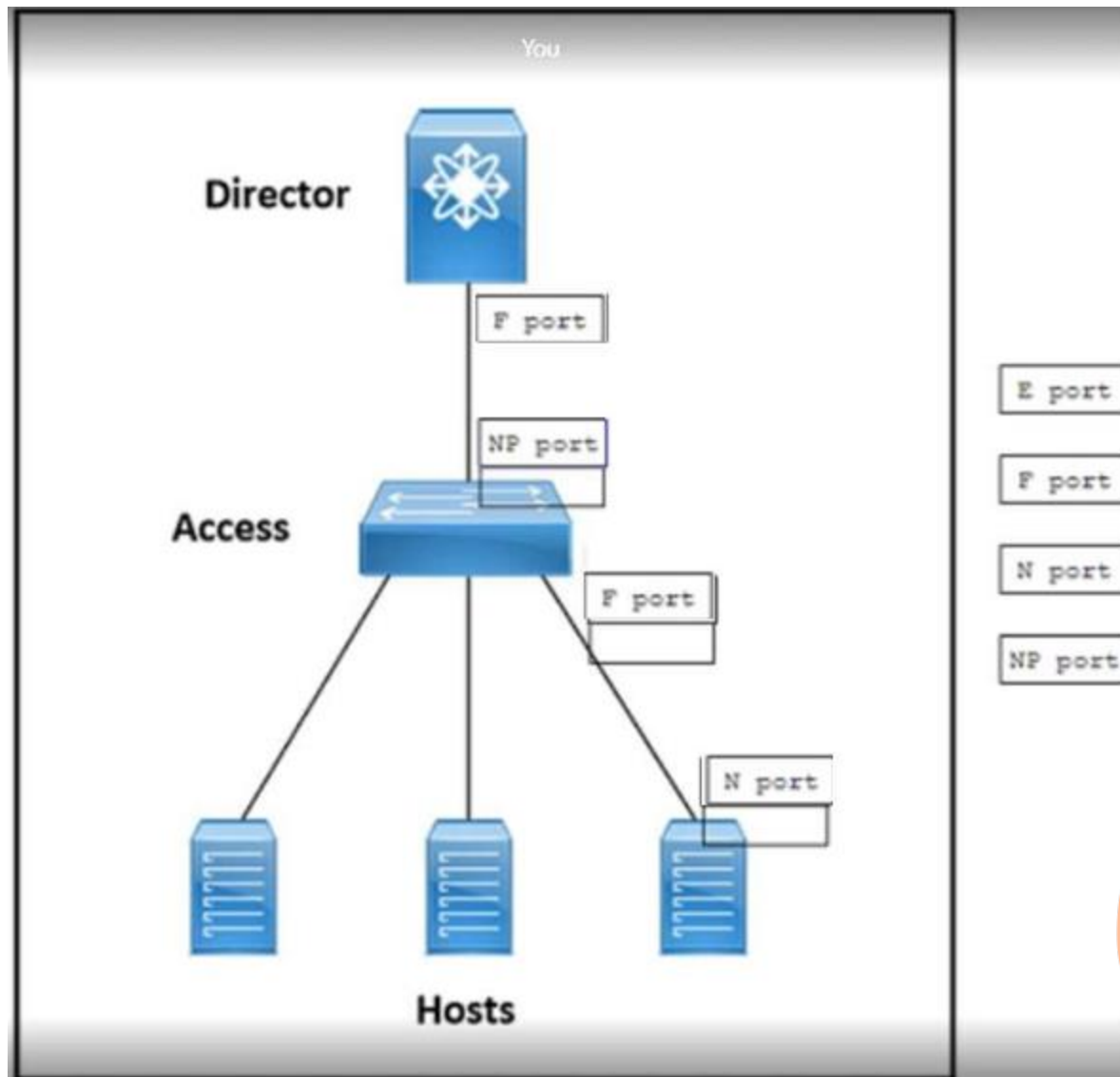
- The upstream director switch must be configured to minimize the number of issued domain IDs
- The access switch must aggregate multiple locally connected ports not a single uplink that shares the same domain ID as the upstream switch.

Drag and drop the port types from the right onto the boxes on the left to create a SAN topology that meets these requirements Not all port types are used Port types are used more than once

Select and Place:



Correct Answer:



 Vdumps

Section:

Explanation:

QUESTION 100

An engineer working for a private telecommunication company with an employee ID 4419 90 979 is installing a pair of Nexus 7000 Series Switches and must deploy the solution with these requirements

- The environment must be separated for test and production purposes
- The separation should include control, data and management plane with fault domain isolation and improved security
- The test environment needs only F2 series line cards and a maximum of 256 VLANs

Which set of actions meets these requirements?

A. Use VRF faQUmlife environments

Configure allow feature set for both VRFs

Enable limit-resource vlan minimum for the test VRF

A. Use VDC for each of the environments

Configure limit-resource module-type functionality for the test VDC

Enable limit resource vlan for the test VDC.

B. Use VDC for each of the environments

Configure allow feature set for both VRFs

Enable limit-resource vlan maximum for the test VRF

C. Use VRF for each of the environments

Configure limit-resource module-type functionality for the test VDC.

Enable module-type for the VRF

Correct Answer: B

Section:

QUESTION 101



Refer to the exhibit Due to power limitations at the customer data center, the engineering team must decommission one of the modular switches In the new design the customer must ensure that the OSPF process is fully protected on the remaining switch and minimize OSPF flapping in case of any module failure. Which solution fulfills the requirements for the new design?

- A. routing summarization
- B. graceful restart
- C. OSPF area separation
- D. LSA aging timer change

Correct Answer: A

Section:

QUESTION 102

A network architect needs secure access to the organization's perimeter routers and firewalls. The administrator must access network devices from a remote location that is reachable from the WAN cloud Which action meets these requirements?

- A. Create a secure IPsec tunnel interface using an internet link for device management purposes
- B. Enable the SSH protocol with a strong username and password using an internet link for management purposes
- C. Create an out-of-band network management network
- D. Create an in-band network management network

Correct Answer: C

Section:

QUESTION 103



A Cisco engineer is preparing a service profile template for a design, which consists of 20 x UCS B200M6 blade servers 2 x UCS 6454 Fabric Interconnect in End Host Mode, and 3 x UCS 5108 server chassis with 2408 Fabric Extenders



The blade servers are equipped with VIC 1480 adapters. The engineer does not configure a vNIC/vHBA placement policy in the service profile and the vNICs and vHBAs are assigned to the vCon in a particular order. What is the mapping scheme in which Cisco UCS assigns the vCons based on the type of server and the selected virtual slot?

- A. linear ordered
- B. network mesh
- C. cross match
- D. round robin

Correct Answer: D

Section:

QUESTION 104

An engineer must design a Cisco UCS environment for a customer. The design requires the most efficient use of available bandwidth with active-active uplinks. The upstream Cisco Nexus 9000 Series Switch must automatically initiate the port-channel connectivity to the fabric interconnects. Which configuration must the engineer choose to meet these requirements?

- A. • fabric interconnects in Ethernet switching mode • LACP port-channel from fabric interconnects and Cisco Nexus 9000 switches
- B. • fabric interconnects in Ethernet switching mode • static port-channel from fabric interconnects and Cisco Nexus 9000 switches
- C. • fabric interconnects in Ethernet end-host mode • LACP port-channel from fabric interconnects and Cisco Nexus 9000 switches
- D. • fabric interconnects in Ethernet end-host mode • static port-channel from fabric interconnects and Cisco Nexus 9000 switches

Correct Answer: C

Section:

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-UserGuides/Network-Mgmt/40/b_UCSM_Network_Mgmt_Guide_4_0/b_UCSM_Network_Mgmt_Guide_4_0_chapter_011.html
Cisco

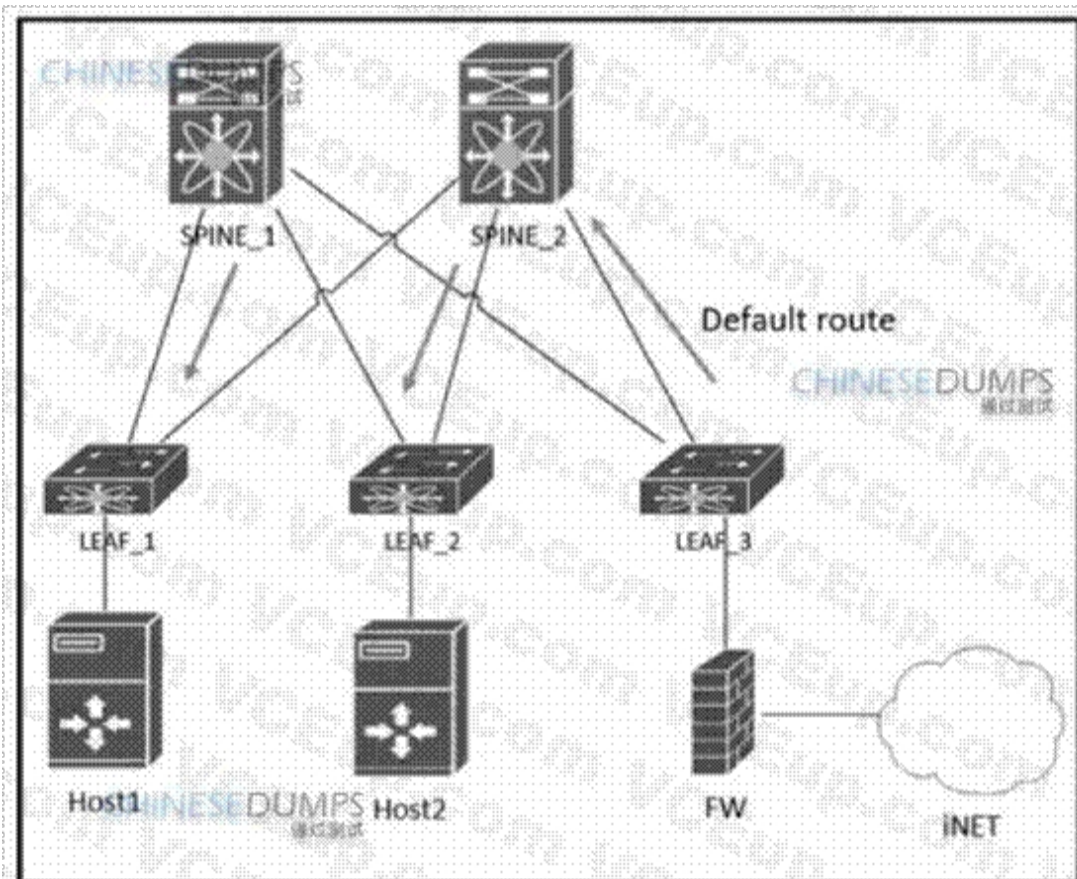
UCS Fabric Interconnect in Switch Mode with Cisco MDS 9000 Family Fibre Channel Switching

Modules

When the Cisco UCS Fabric Interconnect is in switch mode, the port channel mode can only be in ON mode and not Active. However, to get the peer wwn information for the Fabric Interconnect, the port channel must be in Active mode.

QUESTION 105

Refer to the exhibit.



A default route must be advertised into the VXLAN fabric for internet access. The engineer must use a static route because the edge firewall does not support any dynamic routing protocol. Which two features must the engineer use to allow learning and withdrawing of the default route without any manual intervention? (Choose two)

- A. IP forwarding
- B. HMM tracking
- C. Network Address Translation
- D. policy-based routing
- E. anycast gateway

Correct Answer: D, E

Section:

QUESTION 106

```
Port-Group 1
CHINESEDUMPS
Total bandwidth is 12.0 Gbps
Total shared bandwidth is 0.8 Gbps
Allocated dedicated bandwidth is 12.0 Gbps
-----
Interfaces in the Port-Group      828 Credit Bandwidth Rate Mode
                                Buffers      (Gbps)
-----
fc8/1                            16          4.0 dedicated
fc8/2                            16          4.0 dedicated
fc8/3                            16          4.0 dedicated
fc8/4                            16          4.0 shared
fc8/5                            16          4.0 shared
fc8/6                            16          4.0 shared
```



Refer to the exhibit. A Cisco engineer is configuring a customer scenario with 2 x MDS 9000 switches 24 x UCS B200M6 blade servers. UCS 64S4 Fabric Interconnect in end-host mode and 3 x UCS 5108 server chassis with 2408 Fabric Extenders The engineer installs 6 x SQL Server 2019 on all blades and then notices that there are read and write latencies What is the best way to balance the utilization across the shared ports?

- A. Enable "Only dedicate rate mode
- B. Change the assigned speed to 8 Gbps Auto.
- C. Set 4 Gbps performance buffers
- D. Disable restrictions on oversubscription ratios

Correct Answer: D

Section:

Explanation:

Reference:

https://www.cisco.com/en/US/docs/storage/san_switches/mds9000/sw/rel_3_x/configuration/guides/fm_3_2/gen2.html#wp1392649

When restrictions on oversubscription ratios are disabled, the bandwidth allocation among the shared ports is proportionate to the configured speed. (If the configured speed is auto, then bandwidth is allocated assuming a speed of 4 Gbps.) For example, if you have three shared ports configured at 1, 2, and 4 Gbps, then the allocated bandwidth ratio is 1:2:4. In Cisco SAN-OS Release 3.0 and later (or when restrictions on oversubscription ratios are enabled), port bandwidths are allocated in equal proportions, regardless of port speed, so, the bandwidth allocation for the same three ports mentioned in the example would be 1:1:1.

QUESTION 107

An architect must automate routine tasks within a data center The data center exclusively uses Cisco Nexus Series Switches The networking team lacks proper programming knowledge and prefers an automation solution that leverages

NXOS commands Any configuration change must use HTTPS for transport due to a security compliance requirement. Which solution must the architect choose?

- A. NX-API
- B. Python-API
- C. Chef
- D. Terraform

Correct Answer: A

Section:

QUESTION 108

A company plans to implement high availability between the iSCSI host and the Fibre Channel target. Which solution must the company implement to recover from a failure of a host NIC. MDS IP storage port or Fibre Channel target port?

- A. Implement HSRP of the MDS IP storage ports
- B. Set up IP storage ports to export the two Fibre Channel target ports
- C. Map the Fibre Channel target ports to one IP storage port
- D. Configure FCoE between the host NICs and MDS ports

Correct Answer: C

Section:

