



"Please note that these files may not be up to date. However, the questions will help you understand the exam format and typical question patterns."

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Question: 1

What is an advantage of using OTV as compared to VPLS for data center redundancy?

- A. prevents loops on point-to-point links
- B. provides head-end replication
- C. uses a proactive MAC advertisement
- D. provides full-mesh connectivity

Answer: A

Explanation:

Reference: <https://community.cisco.com/t5/data-center-documents/understanding-overlay-transport-virtualization-otv/ta-p/3151502#toc-hld-1043251551>

Question: 2

DRAG DROP

A failure occurs on the network between two BFD and OSPF neighbors. Drag and drop the protocol actions from the left into the correct order on the right.

BFD notifies the local OSPF process that the BFD neighbor is no longer reachable.	step 1
If an alternate path is available, routers immediately start converging on it.	Step 2
The BFD neighboring session with the OSPF peer is terminated.	Step 3
The local OSPF process tears down the OSPF neighbor relationship.	Step 4

Answer:

Explanation:

BFD notifies the local OSPF process that the BFD neighbor is no longer reachable.	The BFD neighboring session with the OSPF peer is terminated.
If an alternate path is available, routers immediately start converging on it.	BFD notifies the local OSPF process that the BFD neighbor is no longer reachable.
The BFD neighboring session with the OSPF peer is terminated.	The local OSPF process tears down the OSPF neighbor relationship.
The local OSPF process tears down the OSPF neighbor relationship.	If an alternate path is available, routers immediately start converging on it.

Reference:

https://www.cisco.com/c/en/us/td/docs/ios/12_0s/feature/guide/fs_bfd.html#wp1238898

Question: 3

Which multicast rendezvous point redundancy mode is valid for Bidirectional PIM?

- A. Embedded RP
- B. Phantom RP

C. MSDP

D. PIM anycast RP

Answer: D

Explanation:

Reference: https://www.cisco.com/c/en/us/products/collateral/ios-nx-os-software/ip-multicast/whitepaper_c11-508498.html

Question: 4

An engineer deploys LISP VM mobility. Which feature is configured on the interfaces that have VM mobility enabled?

A. IP redirects

B. flow control

C. proxy ARP

D. HSRP

Answer: C

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/switches/datacenter/sw/nx-os/lisp/configuration/guide/b_NX-OS_LISP_Configuration_Guide/b_NX-OS_LISP_Configuration_Guide_chapter_010.html

Question: 5

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 single control plane

Answer: C, D

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: 6

DRAG DROP

Drag the appropriate from the left onto the current UDLD modes of operation on the right.

Uses STP if UDLD information times out.	Normal Mode <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Detects when a port is stuck.	
Disables a port that has a high error rate.	Aggressive Mode <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Allows a port that has a high error rate.	

Answer:

Explanation:

- Uses STP if UDLD information times out.
- Detects when a port is stuck.
- Disables a port that has a high error rate.
- Allows a port that has a high error rate.

Normal Mode

- Uses STP if UDLD information times out.
- Allows a port that has a high error rate.

Aggressive Mode

- Detects when a port is stuck.
- Disables a port that has a high error rate.

Reference: <https://www.cisco.com/c/en/us/support/docs/lan-switching/spanning-tree-protocol/10591-77.html>

Question: 7

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.

Answer: A

Explanation:

Reference:

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

Question: 8

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

Answer: BC

Explanation:

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

Question: 9

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.

Answer: C

Explanation:

Question: 10

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.

Answer: A, D

Explanation:

The Cisco NX-OS software does not support direct communication between VDCs on a single physical device.

You must make a physical connection from a port allocated to one VDC to a port allocated to the other VDC to allow the VDCs to communicate.

Question: 11

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

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

Answer: B

Explanation:

Question: 12

DRAG DROP

Drag and drop the data center technologies from the left onto the correct descriptions on the right. **Not all** technologies are used.

cut-through switching	connects a classical Ethernet vPC domain and a Cisco FabricPath cloud to interoperate
OTV	extends Layer 2 domains across distributed data centers
store-and-forward switching	performs Layer 2 lookup as soon as the destination MAC is received
VPC	two separate control planes, performs device aggregation

VPC+

Answer:

Explanation:

cut-through switching	VPC+
OTV	OTV
store-and-forward switching	cut-through switching
VPC	VPC

VPC+

Question: 13

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.

Answer: CD

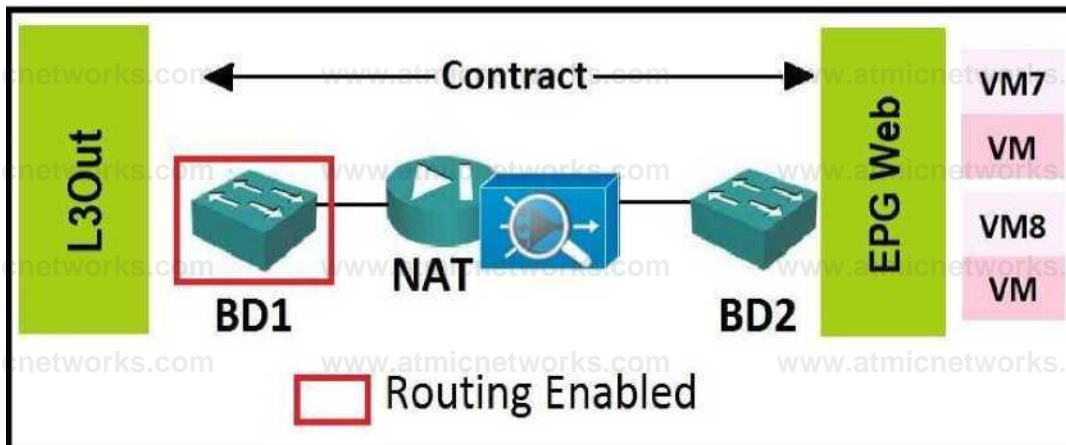
Explanation:

Reference:

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

Question: 14

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

Answer: D

Explanation:

Question: 15

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

Answer: C

Explanation:

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

Question: 16

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

Answer: C

Explanation:

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: 17

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

Answer: B

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: 18

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.

Answer: B, C

Explanation:

Reference:

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

Question: 19

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

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

Answer: D

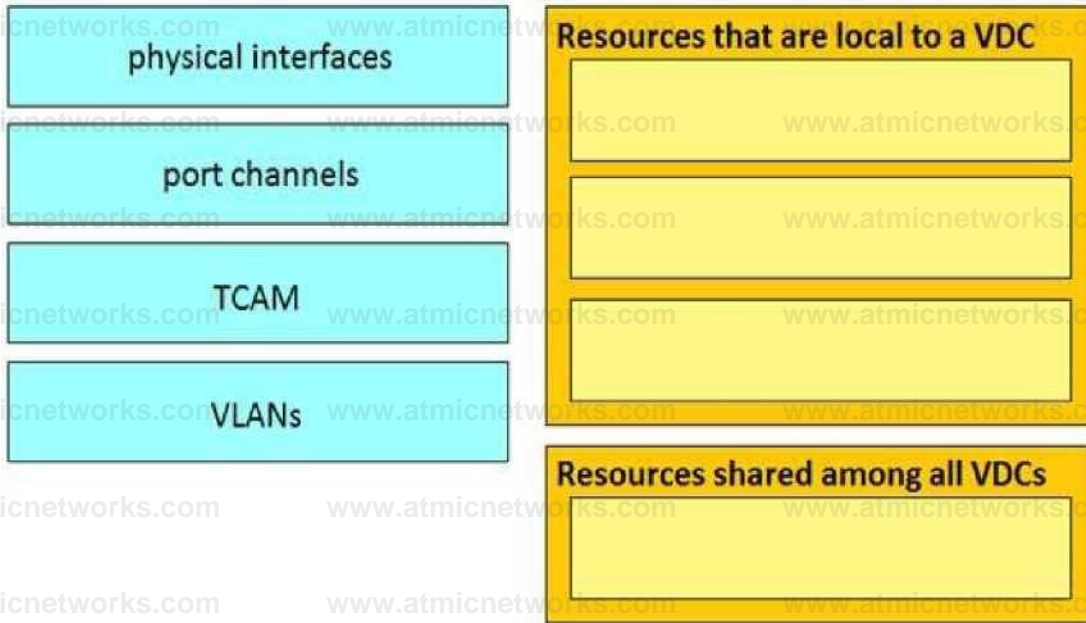
Explanation:

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

Question: 20

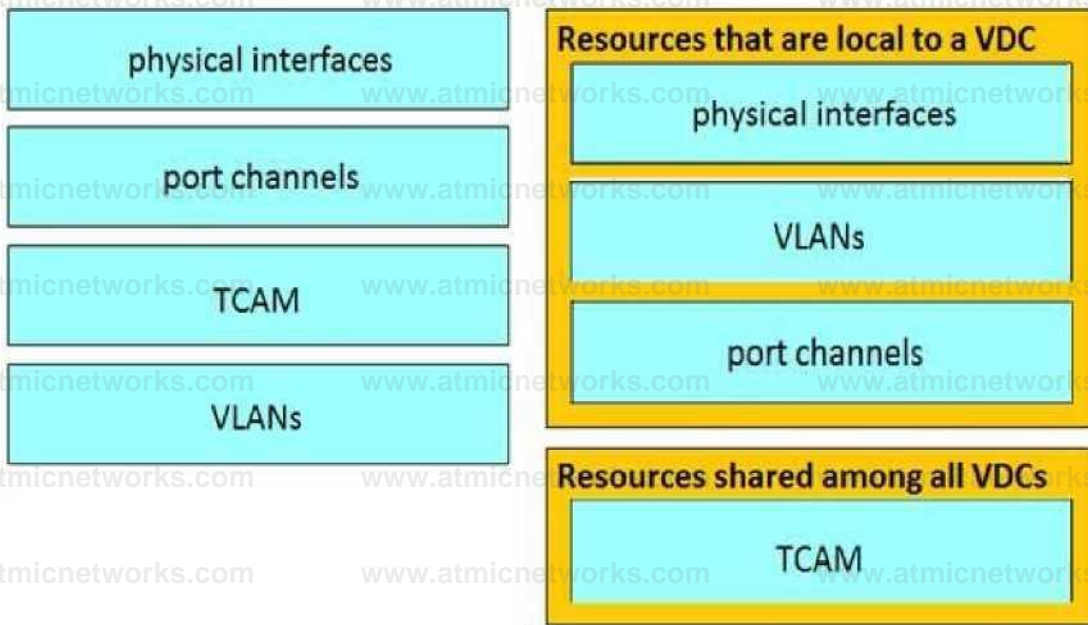
DRAG DROP

Drag and drop the Cisco Nexus 7000 Series Switch resources from the left onto the correct groups on the right.



Answer:

Explanation:

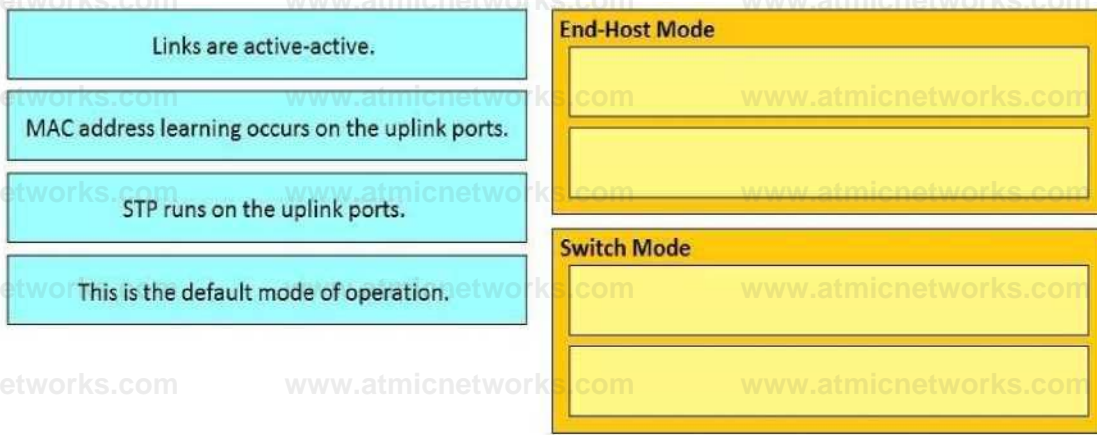


Reference: https://www.cisco.com/c/en/us/td/docs/switches/datacenter/sw/nx-os/virtual_device_context/configuration/guide/b-7k-Cisco-Nexus-7000-Series-NX-OS-Virtual-Device-Context-Configuration-Guide/creating-vdc.html

Question: 21

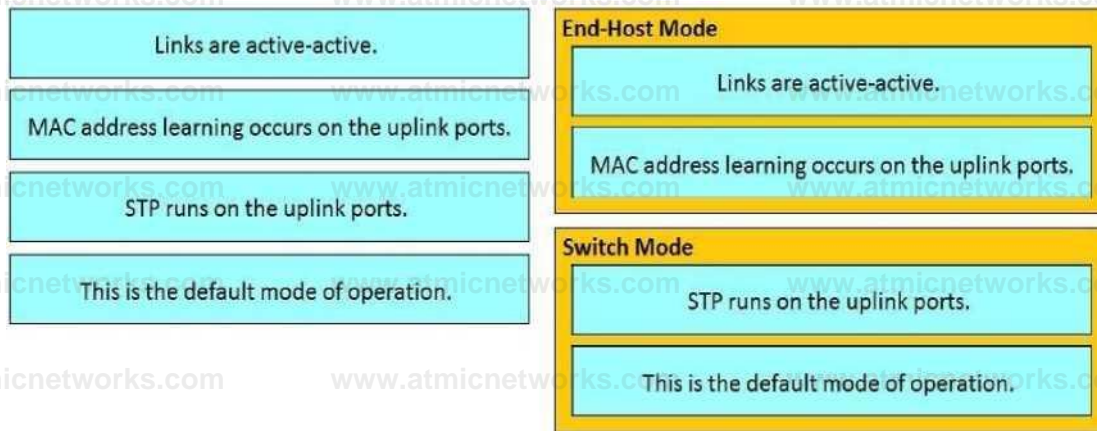
DRAG DROP

Drag and drop the feature descriptions from the left onto the correct UCS Fabric Interconnect modes on the right.



Answer:

Explanation:



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

Question: 22

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.

Answer: A, C

Explanation:

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

Question: 23

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

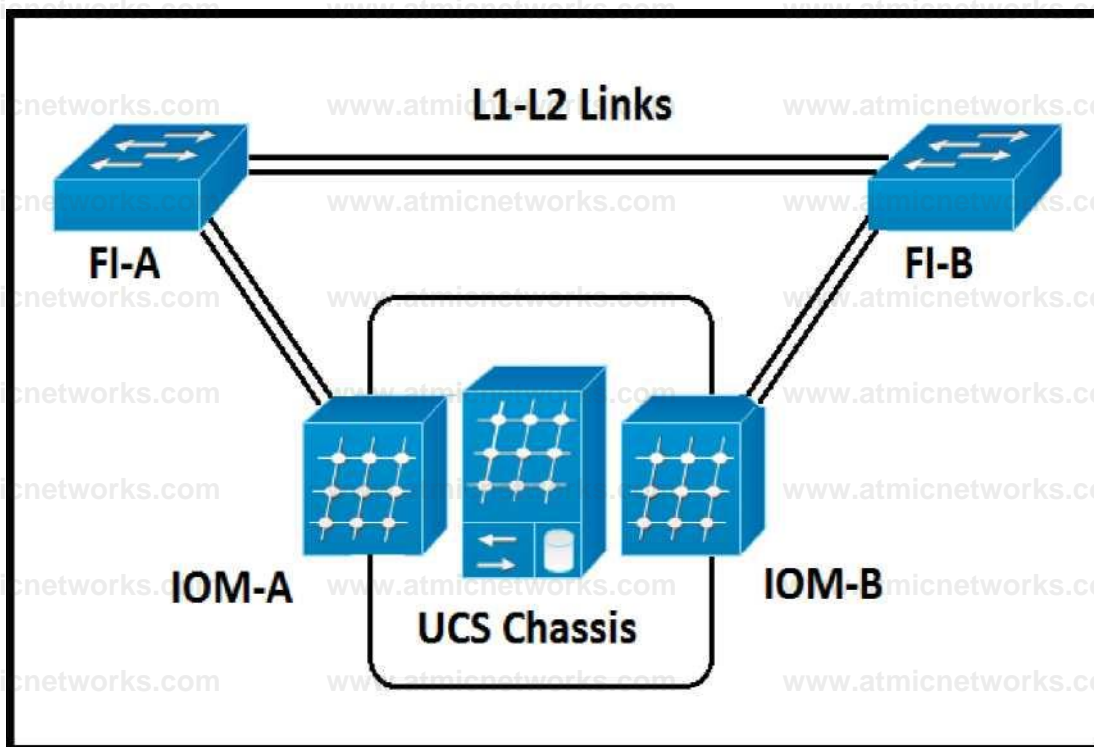
Answer: B

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: 24

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.

Answer: A

Explanation:

Question: 25

DRAG DROP

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

- Set the number of queues.
- Set the RSS hash value.
- Assign each vCon to a physical adapter.
- Assign adapter order.

vNIC/vHBA Placement Policy

Ethernet Adapter Policy

Answer:

Explanation:

- Set the number of queues.
- Set the RSS hash value.
- Assign each vCon to a physical adapter.
- Assign adapter order.

vNIC/vHBA Placement Policy

Assign each vCon to a physical adapter.

Assign adapter order.

Ethernet Adapter Policy

Set the number of queues.

Set the RSS hash value.

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: 26

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

Answer: BC

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: 27

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.

Answer: A

Explanation:

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

Question: 28

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

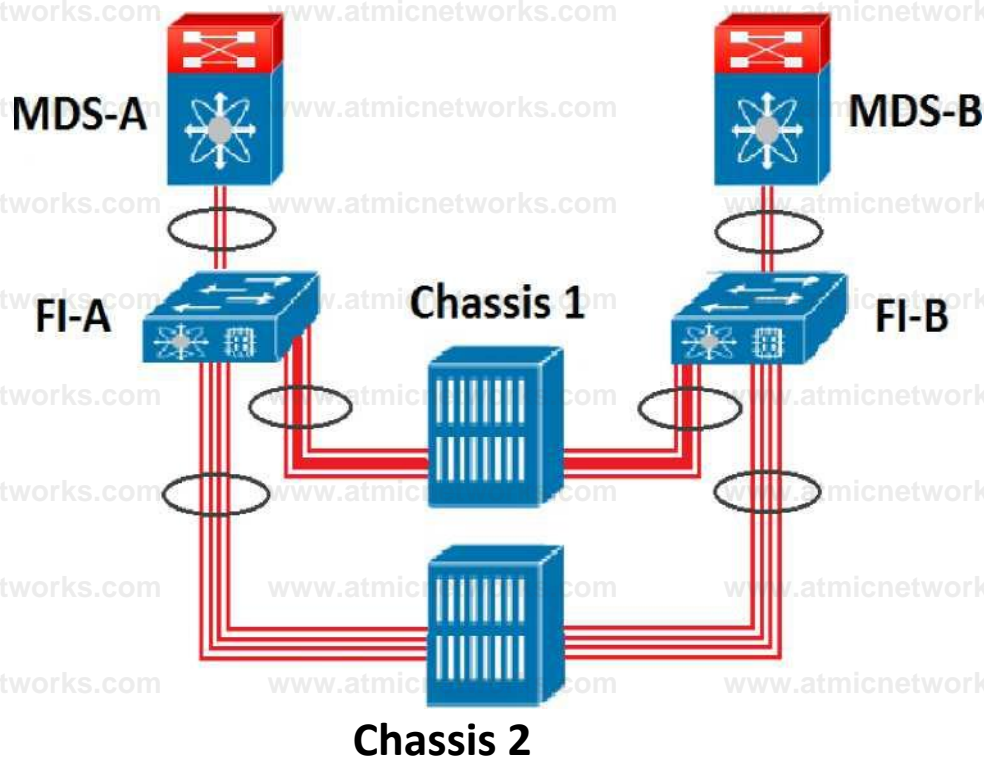
- A. Run the disable fips-mode command on each fabric interconnect.
- B. Run the connect local-management command on each fabric interconnect.
- C. Erase the configuration of both fabric interconnects.
- D. Unplug the Layer 1 and Layer 2 interfaces between the devices.

Answer: D

Explanation:

Question: 29

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

Answer: BD

Explanation:

Question: 30

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.

Answer: B

Explanation:

Reference: https://www.iol.unh.edu/sites/default/files/knowledgebase/10gec/10GbE_CI49.pdf

Question: 31

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

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

Answer: A

Explanation:

Question: 32

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

Answer: AE

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: 33

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.

fabric interconnect	The Fibre Channel fabric fails for all of the connected Cisco DCS 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.

Answer

Explanation:

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

Question: 34

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

Answer: D

Explanation:

Question: 35

Which factor determines the choice of platform designing a Cisco HyperFlex infrastructure to support computer-aided design applications?

- A. network speed
- B. GPU support
- C. storage capacity
- D. processor count

Answer: C

Explanation:

<https://www.cisco.com/c/dam/en/us/products/collateral/hyperconverged-infrastructure/hyperflex-hx-series/whitepaper-c11-740243.pdf>

<https://www.cisco.com/c/dam/en/us/products/collateral/hyperconverged-infrastructure/hyperflex-hx-series/hx-220c-m5-specsheet.pdf>

Question: 36

What is the disadvantage of asynchronous storage replication as compared to synchronous storage replication in a disaster recovery design?

- A. reduction in application performance
- B. distance limitations
- C. specific backup requirements
- D. potential data loss

Answer: D

Explanation:

Reference: <https://www.evidian.com/products/high-availability-software-for-application-clustering/synchronous-replication-vs-asynchronous-replication/>

Question: 37

Where does Cisco UCS handle Fibre Channel traffic failover?

- A. on a Cisco UCS Fabric Interconnect ASIC in Fibre Channel switching mode
- B. on the host, by using multipathing software
- C. in the hardware on the Cisco UCS VIC 12xx adapter or later
- D. in the hardware on any Cisco UCS VIC adapter

Answer: B

Explanation:

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

Question: 38

Which mode must be enabled on a Cisco UCS Fabric Interconnect to connect directly to a storage array?

- A. NPIV mode

B. FC end-host mode

C. NPV mode

D. FC switching mode

Answer: D

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-User-Guides/Storage-Mgmt/3-1/b_UCSM_GUI_Storage_Management_Guide_3_1/b_UCSM_GUI_Storage_Management_Guide_3_1_chapter_01110.html

Question: 39

DRAG DROP

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

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

Answer

Explanation:

iSCSI	ALUA
TOE	iSCSI
MPIO	MPIO
ALUA	TOE

Question: 40

Which two naming formats identify target or initiator iSCSI nodes? (Choose two.)

- A. WWPN
- B. EUI
- C. IQN
- D. WWN
- E. OUI

Answer: C, D

Explanation:

<https://docs.vmware.com/en/VMware-vSphere/5.5/com.vmware.vsphere.storage.doc/GUID-686D92B6-A2B2-4944-8718-F1B74F6A2C53.html>

Question: 41

What influences the number of ISLs that are required between Cisco MDS Series switches?

- A. FCoE protocol
- B. type of storage
- C. end-to-end oversubscription ratio
- D. N Port virtualization

Answer: C

Explanation:

Reference: <https://www.cisco.com/c/en/us/products/collateral/storage-networking/mds-9700-series-multilayer-directors/white-paper-c11-729697.html>

Question: 42

Which type fields can an engineer use to identify an iSCSI participant? (Choose two.)

- A. type
- B. preshared key
- C. port number
- D. identifying tag
- E. hostname

Answer: CE

Explanation:

Reference: <https://en.wikipedia.org/wiki/ISCSI>

Question: 43

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
```

The FCoE packets fail to be forwarded through the switch. What is the minimum MTU QoS requirement for the FCoE to work?

- A. 9000 bytes
- B. 2000 bytes
- C. 2158 bytes
- D. 2240 bytes

Answer: B

Explanation:

This policy map shows a wrong MTU config. Check "12. Do I need to enable Jumbo frames for FCOE?" in

<https://community.cisco.com/t5/data-center-documents/fibre-channel-over-ethernet-fcoe-questions-and-answers-from-live/ta-p/3108755>

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/qos/521_n1_1/b_5k_QoS_Config_521N11/b_5k_QoS_Config_521N11_chapter_0110.html

Question: 44

Which Ethernet to Cisco Fabric Interconnect connectivity configuration is supported when FCoE is implemented?

- A. VSS that has unified uplinks
- B. Ethernet and unified ports on the same port channel
- C. vPC that has unified uplinks
- D. cross-connections with pinning

Answer: C

Explanation:

Reference: <https://www.cisco.com/c/en/us/support/docs/servers-unified-computing/ucs-manager/116188-configure-fcoe-00.html#anc11>

Question: 45

Which two configuration methods can be used to deploy QoS to Cisco MDS Series switches? (Choose two.)

- A. zone-based QoS
- B. multiple QoS policies that match individual devices

- C. VSAN-based QoS
- D. FCoE VLAN-based QoS
- E. multiple QoS policies that match multiple devices

Answer: AC

Explanation:

Reference:

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/sw/7_3/configuration/qos/cisco_mds9000_qos_config_guide/configuring_qos.html

Question: 46

An engineer is designing a data center that uses FCIP. How is QoS configured in this environment?

- A. A separate DSCP value and CoPP must be configured for all FCIP traffic and another for all of the FCIP in the data connection.
- B. A separate DSCP value must be configured for all FCIP VSAN traffic.
- C. A separate DSCP value and priority queuing must be configured for all FCIP traffic.
- D. Two separate DSCP values must be configured, one of all of the FCIP frames in the control TCP connection and another for all of the FCIP frames in the data connection.

Answer: D

Explanation:

Reference:

[https://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/sw/5_0/configuration/guide s/ipsvc/nxos/ipsvc/cfcip.html](https://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/sw/5_0/configuration/guide/s/ipsvc/nxos/ipsvc/cfcip.html)

Question: 47

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.

Answer: BD

Explanation:

Reference:

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](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: 48

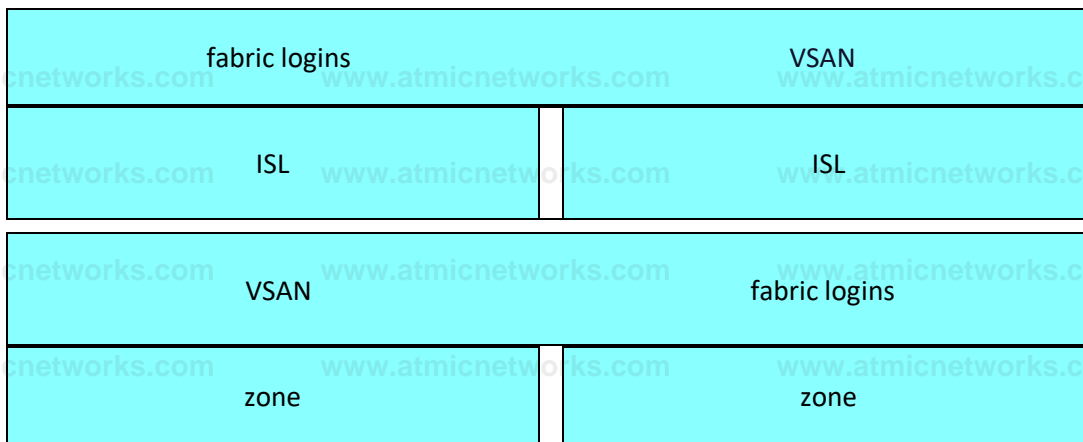
DRAG DROP

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

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

Answer:

Explanation:



Question: 49

Which two automation requirements can be met by using Puppet? (Choose two.)

- A. Push configuration updates immediately to servers.
- B. Enable clients to pull changes to configuration files.
- C. Enable clients to pull changes without installing an agent.
- D. Provide support for writing new modules in Python.
- E. Enable one-off infrastructure changes to be performed manually.

Answer: AB

Explanation:

<https://blogs.cisco.com/datacenter/cisco-nx-os-and-puppet-agentless-data-center-automation>

Question: 50

Which orchestration tool should be used for the management and analytics of servers across multiple sites?

- A. Cisco Intersight
- B. Cisco Nexus Fabric Manager
- C. Cisco UCS Manager
- D. Cisco Data Center Network Manager

Answer: A

Explanation:

Reference: https://www.cisco.com/c/en_in/products/servers-unified-computing/intersight/index.html

Question: 51

Which authentication software natively runs within the CLI of Cisco NX-OS devices?

- A. Python
- B. Ansible
- C. Puppet
- D. Chef

Answer: B

Explanation:

Question: 52

Which orchestration tool provides a graphical interface to manage LAN and SAN fabrics?

- A. Cisco Virtual Topology System
- B. Cisco Data Center Network Manager

C. Cisco Nexus Fabric Manager

D. Cisco CloudCenter

Answer: B

Explanation:

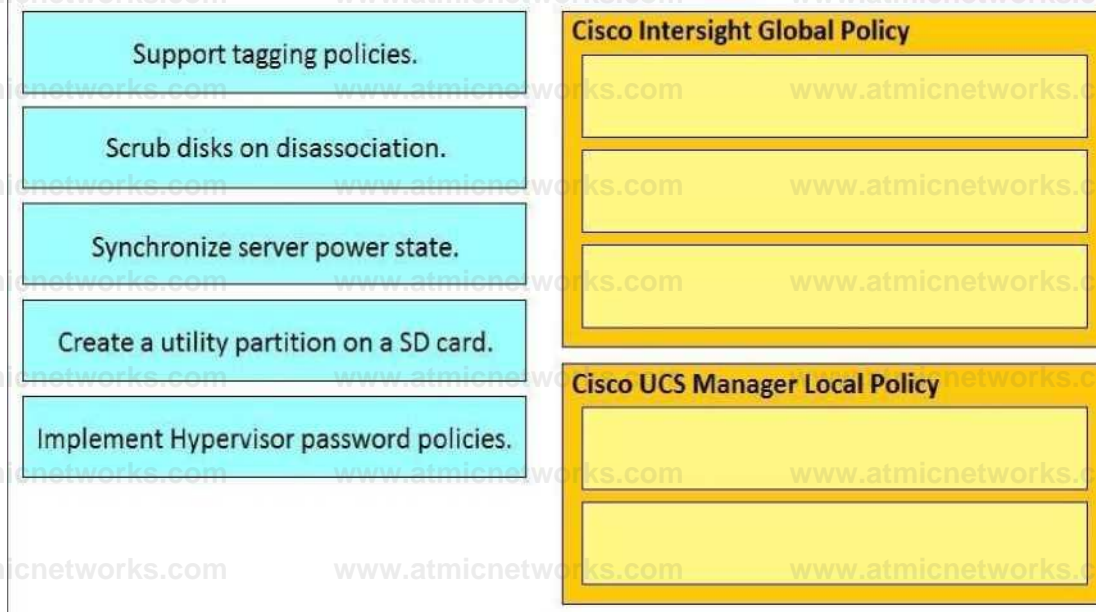
Reference:

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/sw/DCNM_OLH/SAN_Client/fmhelp/fmc.html#34479

Question: 53

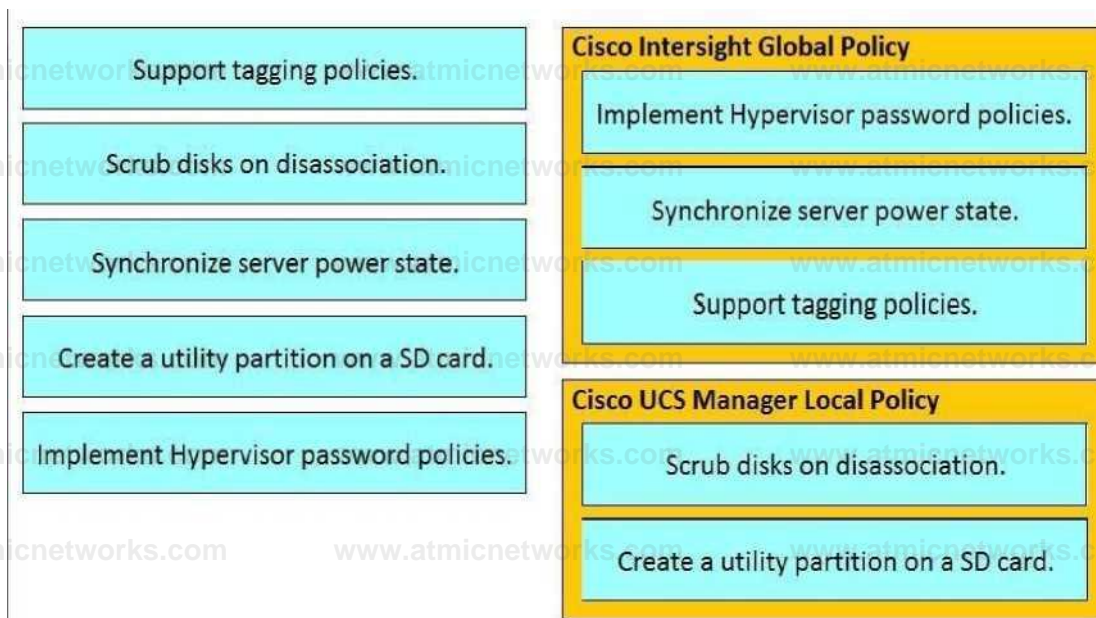
DRAG DROP

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



Answer:

Explanation:



Question: 54

Which two configurations are available by using a service profile template in Cisco UCS Manager? (Choose two.)

- A. number of vHBAs
- B. ARP entries
- C. UUID assignment
- D. VXLAN membership
- E. target server

Answer: AC

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/sw/cli/config/guide/2-2/b_UCSM_CLI_Configuration_Guide_2_2/b_UCSM_CLI_Configuration_Guide_2_2_chapter_0100000.html

Question: 55

Which two types of service profile templates does Cisco UCS support? (Choose two.)

- A. initial
- B. permanent
- C. updating
- D. temporary
- E. connected

Answer: AC

Explanation:

Reference: https://www.cisco.com/en/US/docs/unified_computing/ucs/sw/gui/config/guide/141/UCSM_GUI_Configuration_Guide_141_chapter28.html#concept_C9D27CE2AA1245EA976DAA79F5B

C6808

Question: 56

Which pools are used when a vNIC template is created in Cisco UCS Manager?

- A. WWPN
- B. UUID
- C. MAC
- D. IP

Answer: C

Explanation:

Reference: 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

Question: 57

Refer to the exhibit.

Create vHBA Template

Name :

Description :

Fabric ID : A B

Redundancy

Redundancy Type : No Redundancy Primary Template Secondary Template

Select VSAN : default

Template Type : Initial Template Updating Template

Max Data Field Size :

WWPN Pool :

QoS Policy :

Pin Group :

Stats Threshold Policy :

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

Answer: B

Explanation:

Question: 58

Which address pool is used when a vHBA template is created?

- A. MAC
- B. WWPN

C. IP

D. UUID

Answer: B

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/sw/gui/config/guide/2-1/b_UCSM_GUI_Configuration_Guide_2_1/b_UCSM_GUI_Configuration_Guide_2_1_chapter_011010.html

Question: 59

What are two functions of a Network Services Orchestrator in an NFV environment? (Choose two.)

- A. It operates at the resource-facing services layer and provides overall lifecycle management at the network service level.
- B. It provides an API-based northbound interface for transparent integration with systems that operate at the resource-facing services layer.
- C. It provides a standards-based southbound interface for transparent integration with systems that operate at the customer-facing services layer.
- D. It provides a standards-based northbound interface for transparent integration with systems that operate at the customer-facing services layer.
- E. It operates at the customer-facing services layer and provides the management interface for the virtual network devices.

Answer: AB

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/net_mgmt/msx/3_4/solution_overview/Cisco_VMS_Sol_Overview.pdf

Question: 60

Which feature provides a sandbox to convert NX-OS CLI commands to REST-based scripts on Cisco Nexus 7700 Series Switches?

- A. NX-API
- B. Postman
- C. Bash shell
- D. Guest shell

Answer: A

Explanation:

Question: 61

An engineer manages hundreds of Cisco Nexus Series and 9000 Series Switches that are installed at several data centers and wants to use one of the built-in automation tools of the Cisco NX-OS Guest Shell to automate daily activities. The engineer requires a tool that uses imperative language, has extensive support, and is object-oriented. Which automation tool should be used to meet these requirements?

- A. Python
- B. Bash
- C. YAML
- D. Perl

Answer: A

Explanation:

Python is object-oriented and imperative language.

YAML is declarative.

Question: 62

Refer to the exhibit.

A high-availability setup for iSCSI is designed with the host running iSCSI software. Each storage port on the MDS exports the same two Fibre Channel target ports with different iSCSI target names. In this design, how many iSCSI sessions are created from the host so that recovery occurs if any component fails?

- A. 2
- B. 3
- C. 4
- D. 5

Answer: C

Explanation:

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

Question: 63

An engineer must design a Cisco UCS environment that will connect to a storage area network. The solution must include support for these conditions:

- connectivity to the existing 10 Gigabit Ethernet network
- booting the server infrastructure from the network
- integration with the existing Fibre Channel storage arrays
- lossless data transfer

Which solution should be used to meet these requirements?

- A. FCP
- B. FCoE
- C. CIFS
- D. NFS

Answer: B

Explanation:

Question: 64

An engineer requires a solution that achieves Ethernet traffic forwarding on all available paths from the hosts to the Cisco Nexus Fabric Extender and from the Fabric Extenders to the Cisco Nexus 5000 Series Switches.

The NIC teaming from the Fabric Extender to a server should use an LACP EtherChannel. Which solution should be implemented to meet these requirements?

- A. Virtual Port Channel
- B. Enhanced Virtual Port Channel
- C. Virtual Port Channel Plus (vPC+)
- D. Back-to-Back Virtual Port Channel

Answer: B

Explanation:

Question: 65

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 routers. Which solution should be used to meet these requirements?

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

Answer: A

Explanation:

Load balancing can be done by having different VRRP groups and configuring different servers with different default gateways. HSRP and GLBP are Cisco proprietary.

Question: 66

A customer wants to deploy a Layer 2 extension over a transport infrastructure for multiple data centers. The data center technology should support a localized Layer 3 gateway, a separate flooding domain, and STP

isolation per data center. Which DCI technology meets these requirements?

- A. Pseudowire
- B. VXLAN EVPN
- C. E-Line
- D. E-LAN

Answer: B

Explanation:

Question: 67

An engineer designs a Cisco UCS solution that must provide guaranteed and deterministic bandwidth to a specific server in the environment. The solution must apply to network and storage traffic of C-Series and B-Series servers. Which solution should be included to meet these requirements?

- A. Pin the server ports of the service profile to dedicated uplink ports.
- B. Pin the vNICs and the vHBAs of the service profile to dedicated uplink ports.
- C. Pin the IOM ports of the service profile to dedicated server ports.
- D. Pin the vNICs and vHBAs of the service profile to dedicated server ports

Answer: B

Explanation:

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/b_UCSM_GUI_Configuration_Guide_2_2_chapter_010.html#concept_7DE33CE2E37A47C6992C012D51CA37D4

Question: 68

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. eight twinax cables from each I/O module to each fabric interconnect
- B. four twinax cables from each I/O module to each fabric interconnect

- C. Cisco UCS VIC 1225
- D. Cisco UCS M81KR
- E. Cisco UCS VIC 1280

Answer: AE

Explanation:

2208 has 8 uplinks. VIC 1225 only works on C-Series UCS. M81KR has only 2x10G ports. VIC 1280 has 8x10G ports.

Question: 69

A network architect must design a large-scale Cisco SAN topology. The customer has a limited budget, so a design that provides use of resources is required. To support this requirement, the architect to share array ports, ISL, and line card bandwidth. The customer has also presented these additional considerations:

The customer's plans to expand the network by 10% over the next two years.

The customer's policy requires physically separated infrastructure to support high availability.

Which solution should be used to meet these requirements?

- A. Collapsed-core
- B. Mesh
- C. Core-edge
- D. Edge-core-edge

Answer: C

Explanation:

Please review this question.

Question: 70

A company has several data centers with hundreds of Cisco UCS blade chassis. A network consultant plans to active Cisco Discovery Protocol to the servers to facilitate Layer 1 troubleshooting. For security reasons, the company wants to restrict the servers from sending different MAC addresses to the fabric interconnect after the MAC address from the first packet is learned. Which two policies be modified to support this design? (Choose two.)

- A. Pin Group Policy
- B. Network Control Policy
- C. vNIC Policy
- D. vNIC Template Policy
- E. Ethernet Adapter

Answer: BD

Explanation:

https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-User-Guides/Network-Mgmt/4-0/b_UCSM_Network_Mgmt_Guide_4_0/b_UCSM_Network_Mgmt_Guide_4_0_chapter_01010.html

<https://jeremywaldrop.wordpress.com/2010/05/03/how-to-enable-cdp-on-cisco-ucs-vnics/>
Creating a Network Control Policy

MAC address-based port security for Emulex converged Network Adapters (N20-AE0102) is not supported. When MAC address-based port security is enabled, the fabric interconnect restricts traffic to packets that contain the MAC address that it first learns. This is either the source MAC address used in the FCoE Initialization Protocol packet, or the MAC address in an ethernet packet, whichever is sent first by the adaptor. This configuration can result in either FCoE or Ethernet packets being dropped.

Procedure

1. In the Navigation pane, click LAN.

2. Expand LAN > Policies.

3. Expand the node for the organization where you want to create the policy.

If the system does not include multitenancy, expand the root node.

4. Right-click the **Network Control Policies** node and select **Create Network Control Policy**.

5. In the Create Network Control Policy dialog box, complete the required fields.

6. In the LLDP area, do the following:

- a. To enable the transmission of LLDP packets on an interface, click **Enabled** in the **Transmit** field.
- b. To enable the reception of LLDP packets on an interface, click **Enabled** in the **Receive** field.

7. In the **MAC Security** area, do the following to determine whether the server can use different MAC addresses when sending packets to the fabric interconnect:

- a. Click the Expand icon to expand the area and display the radio buttons.
- b. Click one of the following radio buttons to determine whether forged MAC addresses are allowed or denied when packets are sent from the server to the fabric interconnect:
 - **Allow**- All server packets are accepted by the fabric interconnect, regardless of the MAC address associated with the packets.
 - **Deny**- After the first packet has been sent to the fabric interconnect, all other packets must use the same MAC address or they will be silently rejected by the fabric interconnect. In effect, this option enables port security for the associated vNIC.

If you plan to install VMware ESX on the associated server, you must configure the **MAC Security** to **allow** for the network control policy applied to the default vNIC. If you do not configure **MAC Security** for **allow**, the ESX installation may fail because the MAC security permits only one MAC address while the installation process requires more than one MAC address.

Note: Cisco UCS Manager Release 4.0(2) introduces support for **MAC Security** on Cisco UCS 6454 Fabric Interconnects.

The next step is to apply the new policy to the ESX vNICs. If you are using updating vNIC templates then all you need to do is go to each **vNIC template for your ESX vNICs** select the new policy from the **Network Control Policy** drop down, if you are not using vNIC templates but you are using an updating Service Profile Template then you can enable it there. If you are using one-off Service Profiles are a non-updating Service Profile then you must go to every Service Profile and enable this new policy on every vNIC.

Question: 71

An engineer must build a VXLAN flood-and-learned 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. Bidirectional PIM
- C. PIM SSM
- D. PIM sparse mode

Answer: B

Explanation:

Question: 72

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. PIM sparse mode
- B. ingress replication
- C. head-end replication
- D. PIM dense mode

Answer: A

Explanation:

Question: 73

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. SVI interface
- B. SSM protocol

- C. SNMP
- D. Telnet protocol
- E. mgmt0 interface

Answer: CE

Explanation:

We are talking about management only, so SSM is out. Since we need to separate between data and control plane, we should use mgmt0 interface, so SVI interface is out. Since we need to use encryption and authentication, this can be done in SNMPv3, while telnet does not support encryption, so telnet is out.

Question: 74

A network design must include a solution to run CLI commands remotely on Cisco Nexus 9000 Series Switches. The customer's security policy requires secure login credentials and an encrypted underlying transport. The command output will be processed using tools that support XML or JSON encoding. Which two components should be included in the design? (Choose two.)

- A. SSH
- B. NX-API
- C. HTTP
- D. HTTPS
- E. Bash shell

Answer: A D

Explanation:

Question: 75

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 been access to its own VRF instance. Which interface should be used to meet these requirements?

- A. management interface

- B. lookup
- C. interface VLAN
- D. Physical interface

Answer: A

Explanation:

Question: 76

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

Answer: C

Explanation:

<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: 77

A network architect designs a high-availability architecture for the Cisco UCS Fabric interconnects that installed in a data center. The architecture must support clustering and redundancy. Which architecture meets these requirements?

- A. dual connections from port L1 to L1 and one connection from port L1 to L1 with twinax cables
- B. dual connections from port L1 to L1 and one connection from port L2 to L2 with Ethernet cables
- C. dual connections from port L1 to L2 and one connection from port L2 to L1 with Ethernet cables dual
- D. dual connections from port L1 to L2 and one connection from port L2 to L1 with twinax cables

Answer: B

Explanation:

https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/sw/gui/config/guide/1-0-2/b_GUI_Config_Guide/GUI_Config_Guide_chapter4.pdf

To use the cluster configuration, the two fabric interconnects must be directly connected together using Ethernet cables between the LI (LI-to-LI) and L2 (L2-to-L2) high availability ports, with no other fabric interconnects in between. This allows the two fabric interconnects to continuously monitor the status of each other and quickly know when one has failed.

Question: 78

A network engineer must design a Cisco HyperFlex solution based on these requirements:

- two clusters in the main data center consisting of five HyperFlex nodes
- one edge node for the remote branch
- cluster nodes that use one rack unit of space

Which two devices should be used in the remote branch cluster for this design? (Choose two.)

- A. Gigabit Ethernet Switch
- B. HX240C
- C. HX220C
- D. Fabric Interconnect 6300
- E. UCSB B200

Answer: A C

Explanation:

Question: 79

An engineer is designing a Cisco 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. FHRP localized to its own data center
- B. STP localized to its own data center
- C. CFS localized to its own data center

D. vPC localized to its own data center

Answer: A

Explanation:

Question: 80

A customer asks an engineer to develop a framework to configure Cisco services that will be used to replace process of manual device configuration. The engineer plans to use a programmatic interface and must keep these considerations in mind:

- The customer's environment requires the script to authenticate before executing further actions.
- The customer's security requirements mandate the use of HTTPS transport.
- The support staff has limited shell scripting knowledge, so the scripts should be easy to read and write and be self-documenting.

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

- A. Python scripts
- B. REST calls
- C. Bash scripts
- D. domain-based policies
- E. YAML

Answer: A B

Explanation:

Question: 81

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. cold standby
- B. warm standby
- C. active/active

Answer: C

Explanation:

Question: 82

A company must introduce a scalable network automation tool to deploy, configure, and manage thousands of network device and service. The company servers already have been security-hardened and must not have any additional software installed on team. The security policy mandates the use of a secure communication protocol that support authentication and encryption for managing the servers. Which two automation tools must be used to meet these requirements? (Choose two.)

- A. CFEngine
- B. Ansible
- C. Chef
- D. Puppet
- E. Saltstack

Answer: D E

Explanation:

Question: 83

A company runs mission -critical infrastructure in a single data center. Due to business growth It plans to open more data center 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 center. Which technology must be used to meet these requirements?

- A. Cloudsec
- B. UDLD
- C. Trustsec
- D. OTV

Answer: D

Explanation:

Question: 84

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

Answer: A

Explanation:

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

Question: 85

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

Answer: A

Explanation:

https://www.cisco.com/en/US/docs/unified_computing/ucs/sw/gui/config/guide/141/UCSM_GUI_C_onfiguration_Guide_141_chapter19.html

Ethernet adapter policy is the only policy that is having configuration that is related to CPU.

Question: 86

A network engineer is implementing Cisco UCS manager with Cisco UCS center integration. The company is 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 profile must be used to meet these requirements? (Choose two.)

- A. Global maintenance
- B. Public network control
- C. Restricted chassis
- D. Local power
- E. Local service

Answer: AE

Explanation:

https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-central/GUI-User-Guides/Operations/b_UCSC_Ops_Guide/b_UCSC_Ops_Guide_chapter_0111.html#id_16185

Question: 87

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. MACsec

C. IPsec

D. OTV

Answer: B

Explanation:

The key to solution is "Ethernet frames". Frames are layer 2. IPsec encrypts at layer 3.

Question: 88

A client in a commercial building installs a Cisco blade server in the multitenant Cisco UCS blade Infrastructure. To cut operating costs the client's data center is shared with other organizations. The client asks an engineer prevent third parties from accessing their equipment and from accessing BIOS-related information when booting a server. Which Two policies must be used to meet these requirements? (Choose two.)

A. quiet boot

B. post error pause

C. ASPM support

D. CDN control

E. front panel lockout

Answer: AD

Explanation:

https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-User-Guides/Server-Mgmt/3-2/b_Cisco_UCS_Manager_Server_Mgmt_Guide_3_2/b_Cisco_UCS_Manager_Server_Mgmt_Guide_3_2_chapter_01110.html

Quiet boot is what the BIOS displays during booting the server. If enabled, the BIOS displays the logo screen.

I believe that quiet boot and CDN control may have the customer name.

Question: 89

A customer needs to deploy a three-tier network architecture that will consist of web, and other business-critical applications. The solution will include Cisco UCS 6324 Fabric interconnects managing B and C Series servers. The Fabric interconnects will be connected to the Cisco Nexus 7706 series switch for network access. A storage array will be directly connected to the UCS deployment. Which type must be used to meet these requirements?

A. UCS Interconnect in Ethernet end-host mode

UCS Interconnect in Fibre Channel switching mode

Fabric Interconnects uplinked to the Nexus device using an LACP port-channel in active mode

B. UCS Interconnect in Ethernet switching mode

UCS interconnect to Fibre Channel switching mode

Fabric Interconnect uplinked to the Nexus device using an LACP port-channel in passive mode

C. UCS Interconnect in Ethernet end-host mode

UCS Interconnect in Fibre Channel end-host mode

Fabric Interconnect uplinked to the Nexus device using an LACP port-channel in passive mode

D. UCS Interconnect in Ethernet switching mode

UCS interconnect in Fibre Channel end-host mode

Fabric Interconnects uplinked to the Nexus device using an LACP port-channel in active mode

Answer: A

Explanation:

FC must be in switching mode for Direct Attached Storage.

Question: 90

An engineer is expanding an existing iSCSI environment and must choose an addressing scheme.

When checking one of the devices, the engineer discovers this target device naming used

{prefix}. 2019-01.com.acme.123:00. ftd0cb21.bcb389458389

Which addressing scheme was used in the environment?

- A. Extended Unique identifier
- B. Fibre Channel ID
- C. iSCSI Qualified Name
- D. Network Address Authority

Answer: C

Explanation:

Question: 91

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

Answer: B

Explanation:

Question: 92

A network engineer must design a Cisco HyperFlex solution based on these requirements:

- two clusters in the main data center consisting of five HyperFlex nodes
- one edge node for the remote branch
- cluster nodes that use one rack unit of space

Which two devices should be used in the remote branch cluster for this design? (Choose two.)

- A. HX240c
- B. Fabric Interconnect 6300
- C. HX220c
- D. Gigabit Ethernet Switch
- E. UCS B200

Answer: CD.

Explanation:

HX240 is excluded because it is 2RU, while the requirement is to have one rack unit of space.

UCS B200 and FI 6300 are excluded because the solution is required in a branch.

Question: 93

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

Answer: C

Explanation:

Source is from Cisco Press Hyperconverged Infrastructure Data Centers: Demystifying HCI.

Question: 94

An engineer finishes the initial set up of a VXLAN EVPN network. The engineer is asked to plan for 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 solution must be used to meet these requirements? (Choose two)

- A. spanning tree protocol
- B. VRF-lite
- C. Distributed anycast gateway
- D. DC interconnect
- E. Inter-site network

Answer: CD

Explanation:

https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst9300/software/release/16-12/configuration_guide/vxlan/b_1612_bgp_evpn_vxlan_9300_cg/configuring_evpn_vxlan_anycast

[gateway.html](#)

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

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!

Question: 95

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

Answer: B

Explanation:

Servers cannot support PAgP

Question: 96

An engineer must interconnect two geographically separated data centers. The service provide 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 sites requires a linerate throughput regardless of the packet size and speed. Which solution meets these requirements?

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

Answer: B

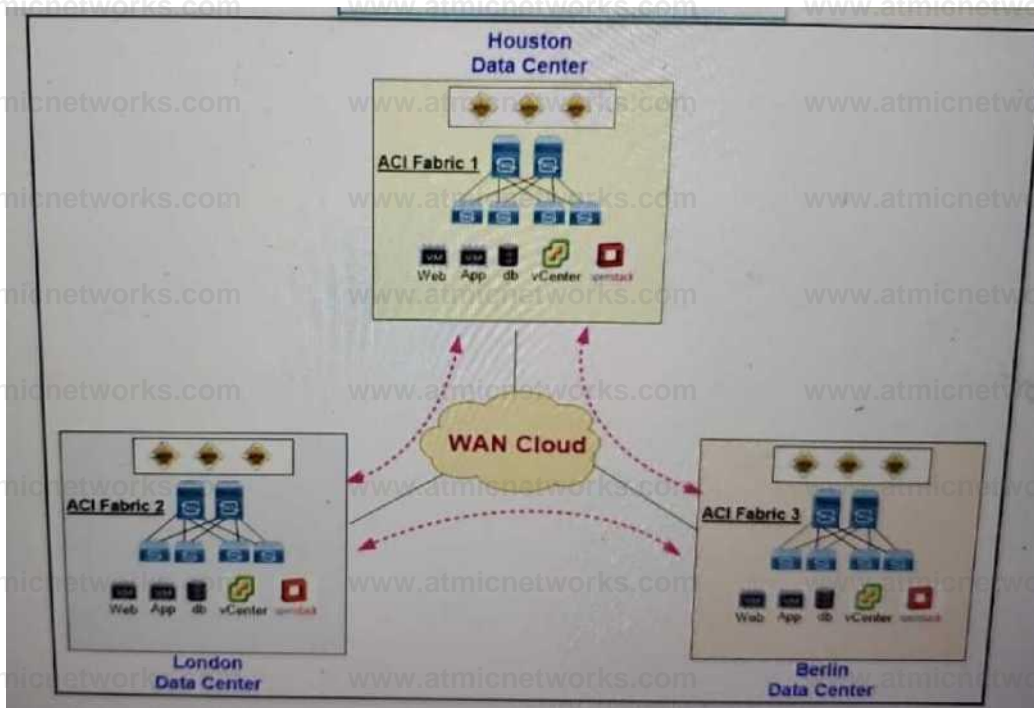
Explanation:

<https://www.cisco.com/c/dam/en/us/td/docs/solutions/Enterprise/Security/MACsec/WP-High-Speed-WAN-Encrypt-MACsec.pdf>

Furthermore, if the deployment requires that all traffic leaving/traversing the router must be encrypted, the overall throughput of the router is now restricted to the performance of the IPsec engine which, in most cases, can be a fraction of the router's aggregate forwarding capabilities. This is a huge factor from an economics perspective of cost per bit through the router and MACsec changes the encryption cost per bit through routing elements. For deployments requiring encryption and the capability of leveraging an Ethernet transport (public or private), MACsec offers a simplified, line-rate, per port encryption option for secure next-generation deployments.

Question: 97

Refer to the exhibit.



A cloud provider 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-site
- B. Multi-pod over MP-BGP EVPN
- C. Multi-cloud
- D. Multi-pod over OSPF EVPN

Answer: A

Explanation:

Each data center has its own APIC cluster. This is multi-site setup.

Question: 98

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 service to pass through the I/O module in the Cisco chassis to a specified uplink Fibre Channel port?

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

Answer: A

Explanation:

https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-User-Guides/Storage-Mgmt/3-2/b_UCSM_GUI_Storage_Management_Guide_3_2/b_UCSM_GUI_Storage_Management_Guide_3_2_chapter_0110.pdf

SAN Pin Groups

Cisco UCS uses SAN pin groups to pin Fibre Channel traffic from a vHBA on a server to an uplink Fibre Channel port on the fabric interconnect. You can use this pinning to manage the distribution of traffic from the servers.

Question: 99

An engineer configured the OSPF protocol in the vPC topology. During the catastrophic failure of one of the vPC the 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 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. auto-recovery
- B. system priority
- C. delay restore

D. ip arp synchronize

E. peer-gateway

Answer: AC

Explanation:

System priority is related to LACP, not vPC, so it is out. ARP s

<https://www.cisco.com/c/en/us/support/docs/switches/nexus-7000-series-switches/116187-configure-vpc-00.html>

<https://www.cisco.com/c/en/us/support/docs/ios-nx-os-software/nx-os-software/212589-understanding-vpc-election-process.html>

vPC Delay Restore

After a vPC peer device reloads and comes back up, the routing protocol needs time to reconverge. The recovering vPCs leg may black-hole routed traffic from access to aggregation/core until uplink Layer 3 connectivity is reestablished.

vPC Delay Restore feature delays vPCs leg bring-up on the recovering vPC peer device. vPC Delay Restore allows for Layer 3 routing protocols to converge before allowing any traffic on vPC leg. This results in a more graceful restoration and zero packet loss during the recovery phase (traffic still get diverted on the alive vPC peer device). This feature is enabled by default with a vPC restoration default timer of 30 seconds. The timer can be tuned according to a specific Layer 3 convergence baseline from 1 to 3600 seconds.

Question: 100

A engineer wants to eliminate the manual process of checking the system hardware and firmware against a specified hardware compatibility tool. The tool must be able to manage an extensive list of devices including cisco HyperFlex, MDS, and Nexus switches. The tool must manage hardware in multiple data centers so it should be deployed on public cloud infrastructure. Which tool meets these requirements?

A. Cisco intersight

B. Cisco UCS director

C. Cisco data center network manager

D. Cisco tetration

Answer: A

Explanation:

Question: 101

A storage engineer requires a solution that achieves multiple paths between a server and storage array. The

design must support complete traffic isolation and support a 50% growth in the next year. Which FCoE solution meets these requirements?

- A. single switch with multiple links
- B. at least two VSANs across the fabric
- C. at least two FC zone sets with multiple zones
- D. single VSAN across the fabric

Answer: B

Explanation:

Reference:

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/sw/5_2/configuration/guide/s/dmm/dmmcfc/toplgy.html

Question: 102

What are two advantages of using Cisco vPC as compared to 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 single control plane

Answer: CD

Explanation:

Question: 103

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

Answer: C

Explanation:

Question: 104

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

Answer: B

Explanation:

Question: 105

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

Answer: A

Explanation:

Question: 106

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

Answer: C

Explanation:

Question: 107

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. VXLANEVPN
- C. FabricPath
- D. EoMPLS

Answer: A

Explanation:

Question: 108

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

Answer: A

Explanation:

Question: 109

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

Answer: BE

Explanation:

Question: 110

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

Answer: C

Explanation:

Question: 111

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.
- D. Add an additional FCoE VLAN to the SAN network.

Answer: B

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: 112

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

Answer: D

Explanation:

Question: 113

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

Answer: D

Explanation:

Question: 114

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.

Answer: C

Explanation:

Question: 115

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.

Answer: B

Explanation:

Question: 116

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

Answer: D

Explanation:

Question: 117

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 realtime health summary for managed devices. Which tool meets these requirements?

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

Answer: D

Explanation:

Question: 118

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

Answer: C

Explanation:

Question: 119

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.

Answer: AE

Explanation:

Question: 120

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

Answer: D

Explanation:

Question: 121

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

Answer: D

Explanation:

Question: 122

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

Answer: B

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-User-Guides/Network-Mgmt/4-0/b_UCSM_Network_Mgmt_Guide_4_0/b_UCSM_Network_Mgmt_Guide_4_0_chapter_01010.html

Question: 123

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

Answer: B

Explanation:

Question: 124

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

Answer: C

Explanation:

Question: 125

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.

Answer: D

Explanation:

Question: 126

A cloud provider deploys an infrastructure based on Cisco ACI Fabric, Cisco UCS, and Cisco HyperFlex Data Platform. The storage area network will be based on Cisco MDS 9000 Series Switches with Hyper-V, VMware, and KVM used as the virtualization platform. The requirement is to deploy the overall solution by using a robust automation and orchestration tool.

Which tool meets these requirements?

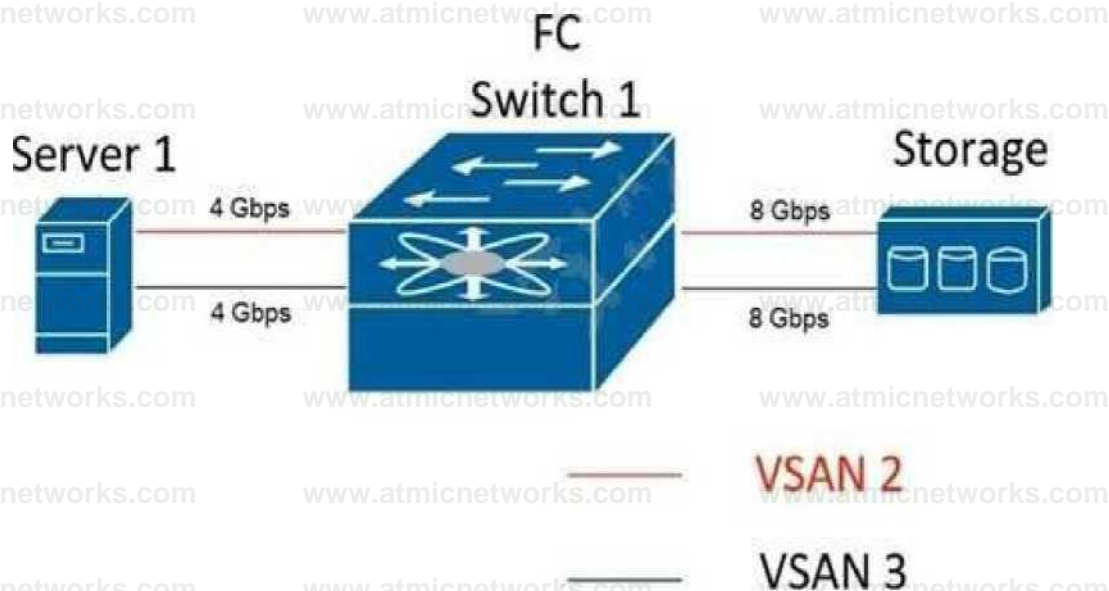
- A. Cisco Prime Infrastructure
- B. Cisco Network Assurance
- C. Cisco UCS Director
- D. Cisco Cloud Center

Answer: C

Explanation:

Question: 127

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.

Answer: D

Explanation:

Question: 128

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

Answer: C

Explanation:

Question: 129

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

Answer: A

Explanation:

Question: 130

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 port-channel 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

Answer: C

Explanation:

Question: 131

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

Answer: A

Explanation:

Question: 132

Refer to the exhibit.

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.

Answer: A

Explanation:

Question: 133

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

Answer: D

Explanation:

Question: 134

An engineer must implement an iSCSI storage connectivity in the existing Cisco UCS environment.

The environment is based on Cisco UCS C-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

Answer: AB

Explanation:

Question: 135

An engineer develops a framework for automatic repetitive tasks needed to manage a Cisco Nexus 9000 Series Switch. The engineer plans to use a programmatic interface and must keep these considerations in mind.

- The customer's environment requires the script to authenticate before executing further actions.
- The customer's security requirements mandate the use of HTTP transport.
- The automation team is familiar with parsing messages encoded in XML or JSON format.

Which solution meets these requirements?

- A. SNMPv3
- B. gRPC

C. RESTCONF

D. NX-API

Answer: D

Explanation:

Question: 136

An engineer must design a secondary site to prevent a catastrophic primary site failure. The applications must communicate across sites via the data link layer of the OSI model. The Layer 3 transport that is available for this solution consists of 10-Gb connections over Layer 3.

Which two solutions meet these requirements? (Choose two.)

A. OTV

B. vPC

C. OSPF

D. ISIS

E. VXLANEVPN

Answer: AE

Explanation:

Question: 137

An engineer enables the HSRP feature on a Cisco Nexus 7000 Series Switch. It must be ensured that the switch manages packets that are sent to the local vPC MAC address, remote vPC MAC address, and HSRP virtual MAC address.

Which command accomplishes this goal?

- A. peer-switch
- B. peer-gateway
- C. map-server
- D. hsrp preempt

Answer: B

Explanation:

Question: 138

A network engineer must design a data center network with four Cisco Nexus 7706 switches. The switches will be installed in primary and secondary data centers in vPC domains. The two data centers must be connected via Layer 2 links and provide the maximum throughput, redundancy, and avoid port-blocking spanning-tree design.

Which deployment model meets these requirements?

- A. dual-sided single vPC
- B. single-sided dual vPC
- C. dual-sided dual vPC
- D. single-sided single vPC

Answer: C

Explanation:

Question: 139

An engineer is implementing a Cisco UCS environment. The requirements for the solution are for the MAC addresses to be learned only on the server-facing ports. The use of the Spanning Tree Protocol must be avoided. Also, the engineer must have deterministic traffic handling from blades to uplink ports.

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

- A. end-host mode
- B. dynamic pinning
- C. NPIV mode
- D. static pinning
- E. switching mode

Answer: AD

Explanation:

Question: 140

An engineer is installing a Cisco Nexus 7000 Series Switch with F2-Series I/O Module. The company's strict security policy requires that the port be in-band. The engineer must also keep these considerations in mind:

The customer's security requirements mandate the use of a secure management mechanism that supports authentication and encryption.

The port should support management over IP.

Which port type must be used to meet these requirements?

- A. management port
- B. console port
- C. connectivity management port
- D. Ethernet port

Answer: B

Explanation:

Question: 141

An engineer is building a data center network with VXLAN EVPN. The requirement is to use multicast for the broadcast, unknown unicast, and multicast replication.

Which two VNI to multicast group mapping methods must be used to meet these requirements? (Choose two.)

- A. many NVE to one multicast group
- B. one VNI to one multicast group
- C. many VNI to one multicast group
- D. one NVE to many multicast groups
- E. many VNI to many multicast groups

Answer: CD

Explanation:

Question: 142

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

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

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

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

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

Answer: AE

Explanation:

Question: 143

An engineer must design a solution based on Cisco Nexus 7709 Switches. The solution must connect test and development network segments and separate the enterprise applications from the production network. The network security team requires routing instances and the IP stack to be completely separated from each other and for traffic between the environments to undergo a deep packet inspection. The development team also requests the ability to allocate additional physical interfaces from the Cisco Nexus 7709 device in each environment.

Which solution meets these requirements?

- A. 1) Create a VRF for the testing and development environments.
2) Use ACLs to control traffic between the two environments.
- B. 1) Enable new routing instances for the testing and development environments in the same VDC.
2) Control reachability by using firewall access policies.
- C. 1) Assign a separate VDC for the testing and development environments.

2. Place a firewall between the VDCs.
- D. 1) Create a separate VRF for the testing and development environments.
2) Control reachability by using firewall access policies.

Answer: D

Explanation:

Question: 144

An engineer must design a Cisco HyperFlex solution to support a virtualized environment in a single data center location. The design must consider these customer requirements:

- a large-scale cluster with eight or more nodes
- distributed high-performance file system for virtualized servers
- high fault tolerance to multiple node failures

Which action meets these objectives?

- A. Configure data destaging and deduplication
- B. Implement a replication factor of four.
- C. Enable logical availability zones.
- D. Create multiple datastores for storage of VM.

Answer: C

Explanation:

Question: 145

A Cisco UCS chassis with several blade servers, a pair of IOMs, and a pair of Cisco UCS Fabric Interconnects are installed in a data center.

Which two high-availability architectures are recommended between the IOMs and fabric interconnects?

(Choose two.)

- A. One, two, four and eight links are supported to be used between each IOM and fabric interconnect.
- B. IOM is connected to the fabric interconnect that is acting as fabric A. and IOM B is connected to the fabric interconnect that is acting as fabric B.
- C. Any combination of one to eight links are supported to be used between each IOM and fabric interconnect.
- D. The IOMs are connected with multiple straight and cross-connect links toward a pair of nonclustered fabric interconnects.
- E. Straight and cross-connect links should be used between the IOMs and fabric interconnects to offer higher availability.

Answer: A, B

Explanation:

Question: 146

A company purchased a Cisco UCS system with four 5108 Chassis populated with UCS B-Series servers. The environment consists of nine Cisco HyperFlex rack servers. An engineer must provision virtual machines using an orchestration tool to optimize overall deployment time.

Which orchestration must be used to meet this requirement?

- A. Cisco Intersight
- B. Cisco DNA Center
- C. Cisco AppDynamic
- D. Cisco Network Assurance

Answer: A

Explanation:

Question: 147

A company needs a solution to virtualize their legacy desktop computers. The solution must be highly resilient and able to withstand the loss of a data center site. Each compute node requires a minimum of 20 disk drives.

Which solution meets these requirements?

A. *thin client installed at each user's end station with a separate profile to retrieve sensitive data using the RDP protocol

*solution based on Cisco HX220 compute nodes

B. *data center site with a strict security policy that provides access to users using a bespoke software client

Answer: C

Explanation:

Question: 148

A network consultant must design a high availability interconnection of a clustered Cisco UCS Fabric Interconnect toward two upstream Layer 2 switches. The Ethernet interconnection must use all redundant links and have no impact on the STP domain size.

Which connectivity solution must be used?

A. Cisco UCS Fabric Interconnect in switch mode with dual uplinks distributed evenly to the upstream switches

B. Cisco UCS Fabric Interconnect in switch mode with a single uplink toward each upstream switch to eliminate any change to the STP domain size

C. Cisco UCS Fabric Interconnect in end host mode with a single uplink toward each upstream switch to eliminate any change to the STP domain size

D. Cisco UCS Fabric Interconnect in end host mode with dual uplinks distributed evenly to the upstream

switches

Answer: A

Explanation:

Question: 149

A network engineer must create a Fibre Channel fabric QoS design for an existing data center. The solution must provide relative bandwidth guarantees to application traffic, control latency, and prioritize application traffic.

Which mechanism must be deployed to support these requirements?

- A. traffic policing
- B. traffic shaping
- C. traffic remarking
- D. traffic classification

Answer: C

Explanation:

Question: 150

A customer connects a high-speed Fibre Channel storage array to a Cisco MDS 9000 Series Switch using an 8 Gbps interface.

Which action guarantees line rate traffic processing on the interface?

- A. Set global buffering with B2B_credits for the interface.
- B. Set local buffering with B2B_credits for the interface.
- C. Configure the interface rate mode as dedicated.
- D. Configure the interface rate mode as shared.

Answer: C

Explanation:

Question: 151

An engineer must implement a WWPN pool for the vHBA template inside the Cisco UCS Manager. The template is used to connect a Cisco UCS B-Series blade to an external storage array.

Which addressing sequence accomplishes this goal?

- A. from 20:00:00:00:00:00:00:00 to 20:FF:FF:FF:FF:FF:FF:FF
- B. from 192.168.1.1 to 192.168.1.254
- C. from iqn.2020-c41i4p21y5a165.lab.ucs-00 to iqn.2020-ceiD1pj5y135-8.lab.ucs-FF
- D. from 00:0A:E6:3E:00:00 to 00:0A:E6:3E:00:FF

Answer: A

Explanation:

Question: 152

An engineer seeks a solution to retrieve routing information from Cisco Nexus switches. The data must be exported to a web application in a JSON or XML data format for monitoring and must be encrypted during transmission. The solution must not require extensive knowledge to support and should be simple to implement.

Which technology accomplishes these goals?

- A. streaming telemetry
- B. Cisco Tetration
- C. NX-API
- D. Python scripts

Answer: C

Explanation:

Question: 153

An engineer must design a disaster recovery solution for a Cisco ACI Multi-Site network. One requirement is that the applications must have seamless IP addressing across sites. The solution

must also be highly resilient and support Layer 2 adjacency. Which design meets these requirements?

- stretched bridge domain with local subnet
- stretched Layer 2 broadcast domain
- localized bridge domain subnet, and EPG
- stretched Layer 2 broadcast domain
- stretched bridge domain, subnet, and EPG
- localized Layer 2 broadcast flooding
- localized bridge domain with local subnet
- localized Layer 2 broadcast flooding

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

Explanation:

Question: 154

A network consultant evaluates the Ethernet Adapter Policy configuration to be applied to the Cisco UCS blade servers. The policy must minimize latency and increase throughput for sensitive applications. The solution must increase the CPU data cache hit rate to meet these requirements Which policy is required?

A. AIC

B. ARFS

C. NVM-e

D. RDMA

Answer: B

Explanation:

Question: 155

A company data center requires a new disaster recovery solution to host critical services. The solution can sustain several hours of data loss because the services are routinely backed up to an offsite location. Also, the disaster recovery solution must provide 24-hour availability. Due to the strict policy requirements, the company wants to retain complete control of when the failover process occurs. Which solution meets these requirements?

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

Answer: D

Explanation:

Question: 156

An engineer must design Layer 2 connectivity for a subnet between two data centers. The engineer must ensure seamless host mobility and optimal first-hop routing. Which attribute must be synchronized across all data centers to achieve this goal?

- A. NX-OS version
- B. DCNM to manage both fabrics
- C. multicast group
- D. anycast gateway MAC

Answer: D

Explanation:

Question: 157

An ACI deployment must:

Which VRF configuration must be used?

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

Answer: C

Explanation:

Question: 158

An engineer must develop a Python tool to automate software upgrades of both data center and non-data center devices. All devices offer a RESTful API and require a JSON or XML payload. Vendor-specific libraries must be avoided. Which library must the engineer choose?

- A. requests
- B. Nornir
- C. ncclient
- D. Netmiko

Answer: A

Explanation:

Question: 159

An architect needs vendor-agnostic technology to orchestrate and automate a customer network with scripts. The technology must support running ad-hoc scripts from the CLI and support a deployment of scripts based

on a large, readily available set of support libraries. Which technology must the architect choose?

- A. Python
- B. Puppet
- C. Cisco Power Tool
- D. Cisco Intersight

Answer: B

Explanation:

Question: 160

An engineer must connect a Cisco UCS B-Series based system to an existing large storage area network fabric. The deployment must support hardware-based load balancing, prevent Fibre Channel domain ID exhaustion, and enable all blade servers to be in the same VSAN. Which set of actions meets the requirements?

- Place all interfaces that face the fabric Interconnects In the same VSAN.
- Disable zoning for the VSAN
- Connect the fabric interconnect to the E Ports on the SAN switch
- Create a SAN port channel.
- Enable Fibre Channel end-host mode on the fabric interconnect and NPIV mode on the SAN switch.
- Create an F Port channel that faces the fabric interconnect
- Configure Ethernet end-host automatic load balancing on the fabric interconnect
- Set NL port mode on the SAN switch

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

Explanation:

Question: 161

A company must integrate an iSCSI storage solution into its existing production environment. The new iSCSI network must be accessible from a limited set of network segments. The client devices follow a strict network security policy to access critical data from the storage array. Which design steps must be used to meet these requirements?

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

Explanation:

Question: 162

An engineer needs to configure multiple network devices using Ansible. Device passwords must meet these requirements:

be stored securely

not be visible as plaintext

be available to Ansible playbooks for executing scripts

Which solution must the engineer choose?

- A. Encrypt a password variable file using Ansible Vault.
- B. Store the passwords within a Git repository Secrets Manager
- C. Encrypt passwords as Ansible environment variables
- D. Encrypt the passwords within the Ansible inventory file.

Answer: A

Explanation:

Question: 163

A network architect designs the iSCSI architecture. The requirements are to achieve high performance and a low amount of oversubscription and to minimize latency. Which two actions must be taken to meet these requirements? (Choose two.)

- A. Configure the size of the payload in each frame to MTU 9000.
- B. Minimize the number of hops between the storage and the hosts.
- C. Enable iSCSI port binding on the Initiator device.
- D. Set the size of the payload in each frame to MTU 1500.
- E. Use a software-based iSCSI adapter on the client side.

Answer: A, C

Explanation:

Question: 164

An engineer manages a multi-organization Cisco UCS fabric and requires a solution to streamline the daily operational tasks of creating service profile templates. The operations team is unfamiliar with programming languages and must have a solution that is written in an easy-to-read and declarative

manner. The operations team also requires the tool to be flexible enough to support the creation of custom modules. The development team is familiar with the Python programming language and can develop these custom modules for the operations team. Which tool meets these requirements?

- A. Ansible
- B. Puppet
- C. CFEngine
- D. Chef

Answer: A

Explanation:

Question: 165

A company is using Cisco UCS and wants a network orchestration solution to meet these requirements :

centrally manage compute and storage platforms

reduce the time it takes to detect an outage

easily exchange data with TAC to reduce resolution times

The company does not have in-house knowledge about scripting. Which solution must the company choose?

- A. Cisco Intersight
- B. Cisco UCS Central
- C. Cisco HyperFlex
- D. Cisco DCNM

Answer: A

Explanation:

Question: 166

The user traffic destined to all web servers located in the data center must pass first through a set of firewalls for deep packet inspection. A network architect must design the Cisco Intelligent Traffic Director (ITD) deployment that meets these requirements:

The firewalls are connected to a set of two Cisco Nexus switches to provide stateful handling of traffic.

The ITD service is provided for inside and outside segments of the firewall.

Which ITD deployment mode must be implemented to meet these requirements?

- A. server load-balancing deployment mode
- B. server vPC deployment mode
- C. one-arm deployment mode
- D. sandwich deployment mode

Answer: C

Explanation:

Question: 167

A network engineer is using a Cisco UCS environment connected to a Fibre Channel storage array. The Cisco UCS environment must be connected to an existing SAN network, and several Cisco MDS 9000 Series Switches must be added to increase storage density. The solution must not exhaust the SAN network from the list of available domain IDs after connecting. Also, most of the SAN traffic must be mapped from the Cisco UCS blades to a specific group of the fabric interconnect ports. Which two features must be deployed to meet these requirements? (Choose two.)

- A. end host mode
- B. static PIN grouping
- C. priority flow control

- D. N-Port ID virtualization
- E. dynamic port pinning

Answer: A, C

Explanation:

Question: 168

A SAN fabric is built between a pair of Cisco MDS 9000 Series Switches. The requirement is for the ISL to use the VSAN ID to toward traffic from multiple VSANs across the same physical link. Additionally, the Fibre Channel trace feature must be supported. Which ISL interface parameters are required to meet these requirements?

switchport mode TE
switchport mode trunk

- **switchport mode TE**
- **switchport mode trunk vsan**

switchport mode E
switchport mode trunk vsan

switchport mode E
switchport mode trunk

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

Answer: D

Explanation:

Question: 169

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

Answer: C

Explanation:

Question: 170

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. FHRP
- D. VPLS

Answer: A

Explanation:

Question: 171

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?

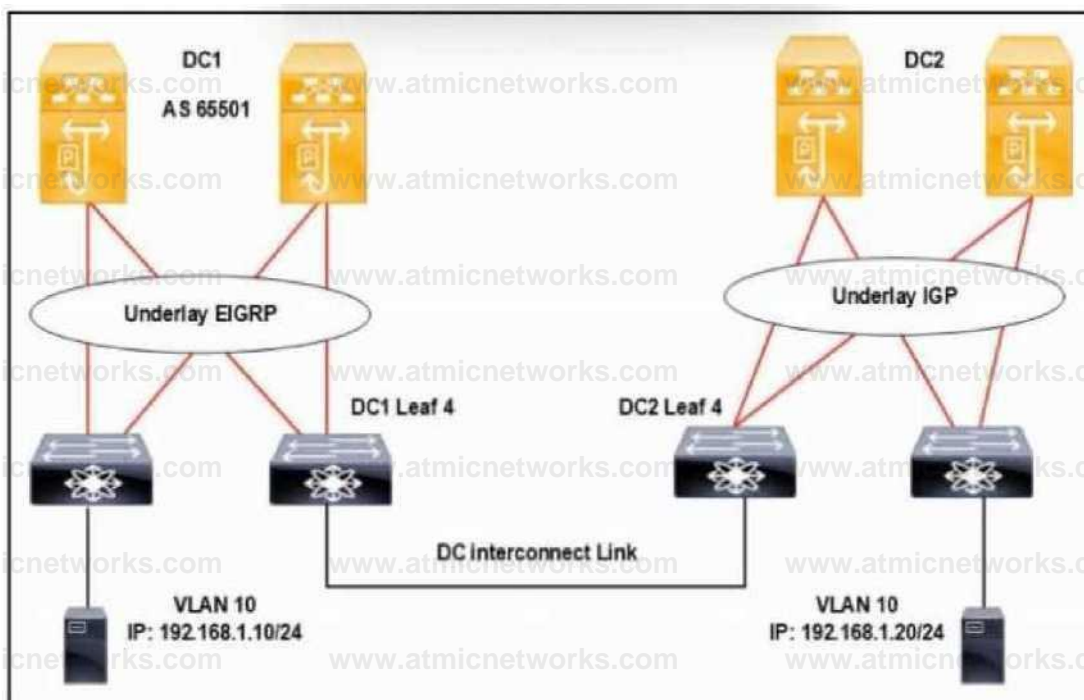
- A. HSRPv1
- B. VRRPv3
- C. VRRPv1
- D. HSRPv2

Answer: B

Explanation:

Question: 172

Refer to the exhibit.



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?

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?

A. • Set BGP AS to 65500

• Configure RIP as an underlay IGP

B. • Set BGP AS to 65501

• Configure EIGRP as an underlay IGP

- C.
 - Set BGP AS to 65501
 - Configure RIP as an underlay IGP
- D.
 - Set BGP AS to 65500
 - Configure IGRP as an underlay IGP

Answer: A

Explanation:

Question: 173

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

Answer: A

Explanation:

Question: 174

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

Answer: D

Explanation:

Question: 175

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

Answer: D

Explanation:

Question: 176

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

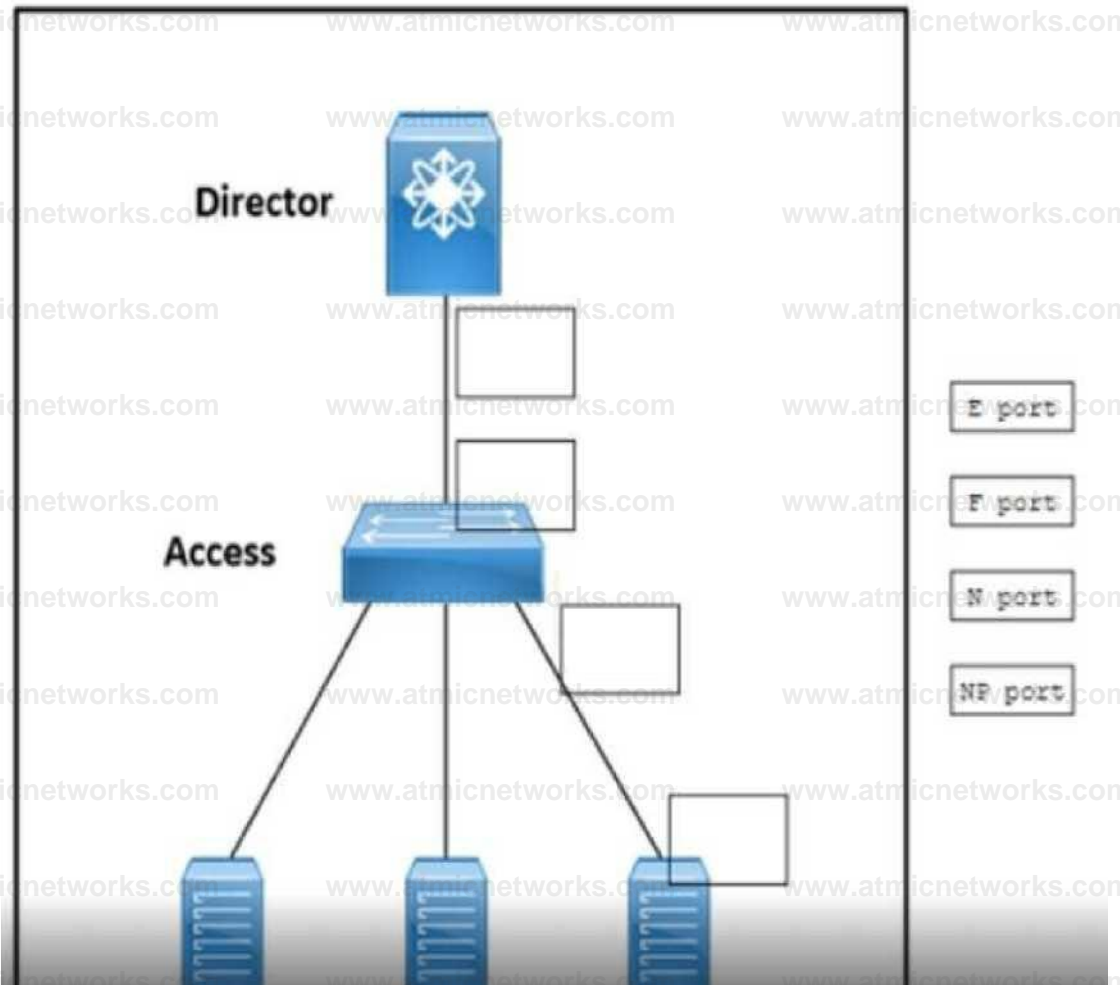
Answer: C

Explanation:

Question: 177

DRAG DROP

Refer to the exhibit.



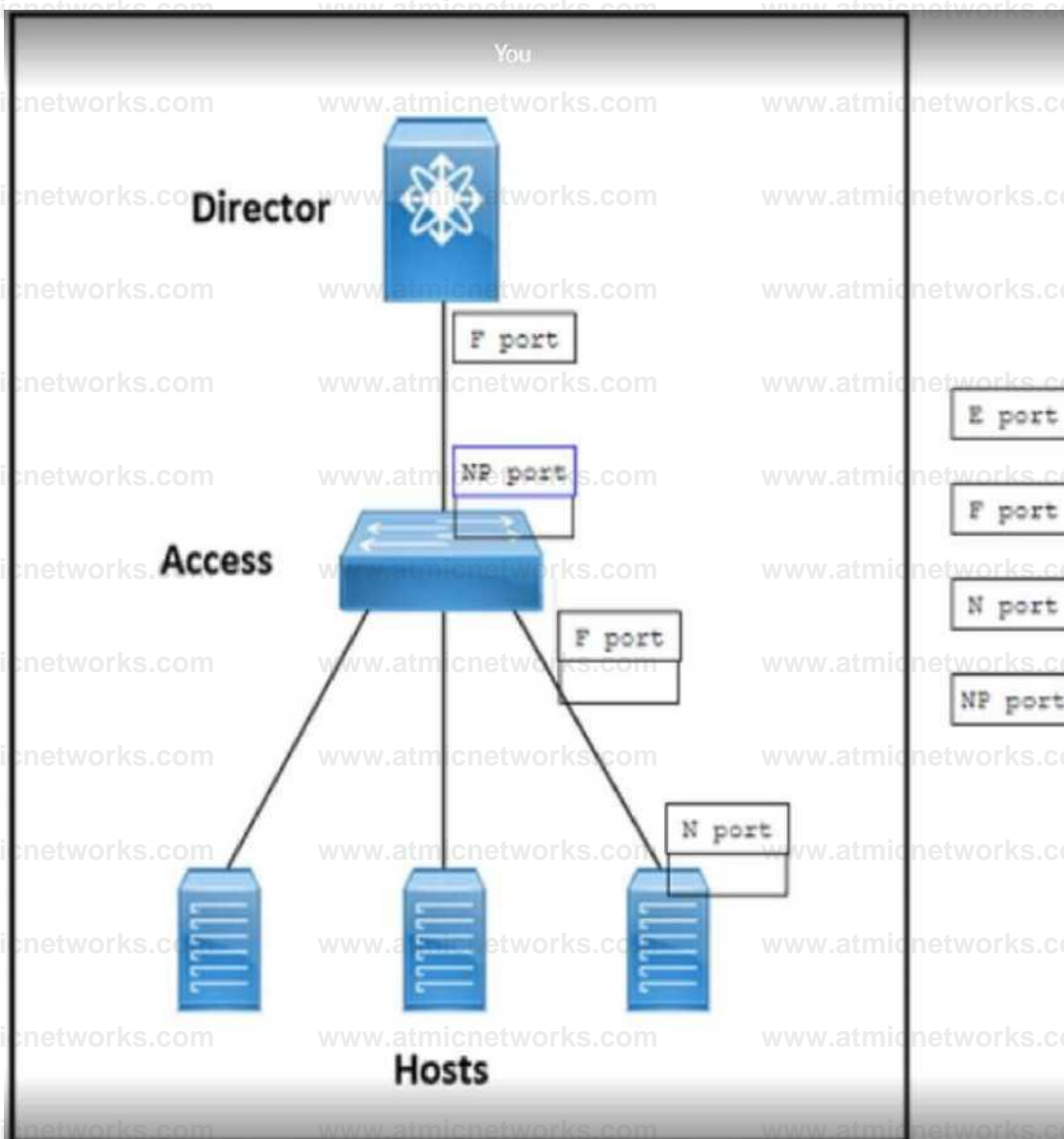
An engineer must deploy a SAN that meets these criteria:

- 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.

Answer:

Explanation:



Question: 178

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?

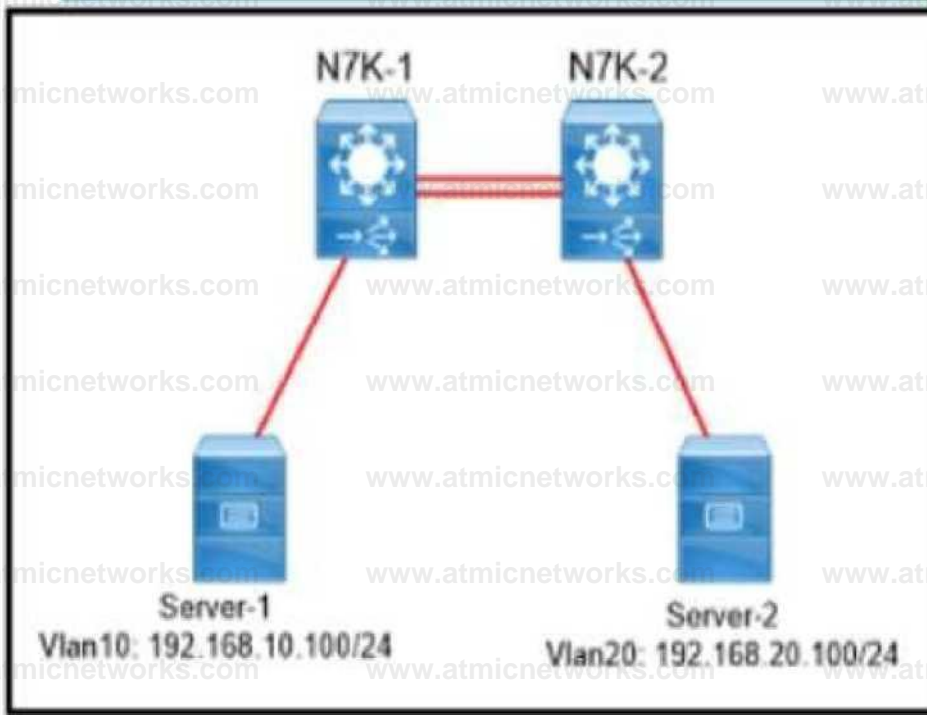
- A. Implement the round trip time latency between the sites to be lower than 20 ms
- B. Place an independent witness component at a third site
- C. Deploy the stretch cluster sites to be within the distance of 300 miles apart
- D. Configure the cluster with the maximum data replication factor

Answer: C

Explanation:

Question: 179

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

Answer: D

Explanation:

Question: 180

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

Answer: C

Explanation:

Question: 181

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

Answer: A

Explanation:

Question: 182

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?

- A. one-armed insertion from the core switch cluster
- B. inline insertion between the edge router cluster and the core switch cluster
- C. one-armed insertion from the ACI border leaf cluster
- D. inline insertion between the user network switch cluster and the core cluster

Answer: C

Explanation:

Question: 183

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?

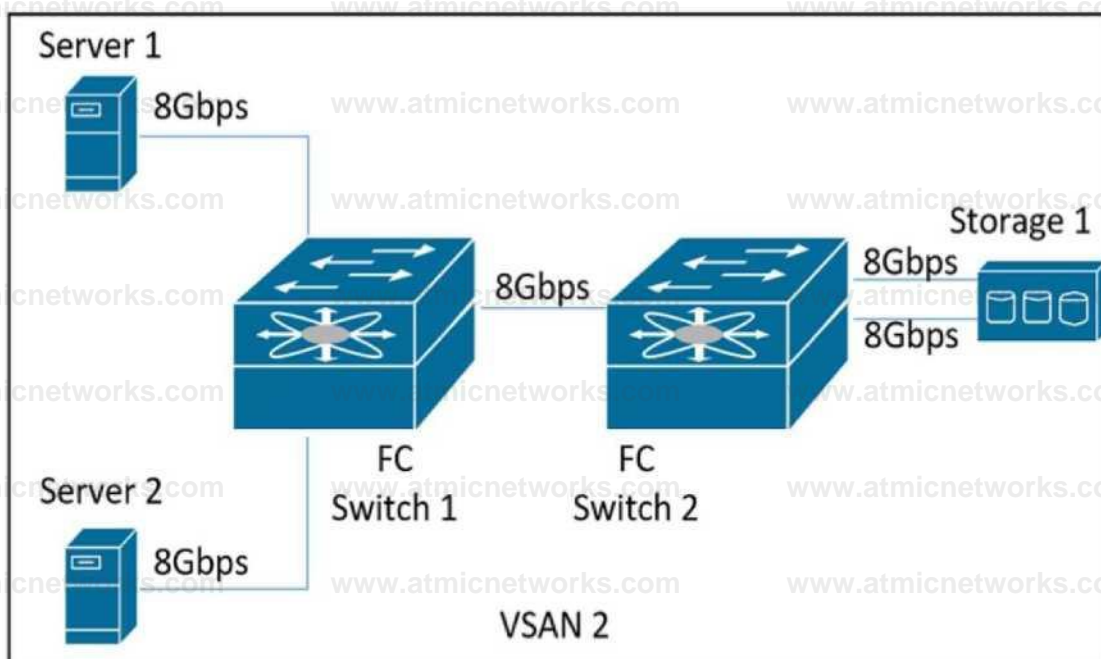
- A. single Cisco HyperFlex stretched cluster
- B. Cisco Hyperflex edge cluster
- C. Cisco Hyperflex ROBO cluster
- D. single Cisco HyperFlex standard cluster

Answer: A

Explanation:

Question: 184

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.

Answer: D

Explanation:

Question: 185

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. Which solution meets these requirements?

A. IPsec over GRE

B. OTV

C. dark fiber

D. VXLANEVPN

Answer: D

Explanation:

Question: 186

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

Answer: A

Explanation:

Question: 187

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

Answer: B

Explanation:

Question: 188

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

B. 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.

C. Use VDC for each of the environments

Configure allow feature set for both VRFs

Enable limit-resource vlan maximum for the test VRF

D. Use VRF for each of the environments

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

Enable module-type for the VRF

Answer: B

Explanation:

Question: 189

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

Answer: B

Explanation:

Question: 190

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

Answer: C

Explanation:

Question: 191

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

Answer: D

Explanation:

Question: 192

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

Answer: C

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-manager/GUI-User-Guides/Network-Mgmt/4-0/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: 193

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

Answer: D, E

Explanation:

Question: 194

Refer to the exhibit.

Group 1
CHINESEDUMPS

Total bandwidth 12.0 Gbps

Total shared bandwidth 12.0 Gbps

Allocated dedicated bandwidth is 12.0 Gbps

CHINESEDUMPS
ii&flyH

Interfaces in the Port Group 820 Credit Bandwidth Rate Mode

(Gbps)

Interface	Speed	Mode
fcS/1	16	4.0 dedicated
fcB/2	16	4.0 dedicated
fc8/3	16	4.0 dedicated
fcB/4	16	4.0 shared
fc8/5	16	4.0 shared
fcB/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 6454 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

Answer: D

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: 195

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

Answer: A

Explanation:

Question: 196

Refer to the exhibit. 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?

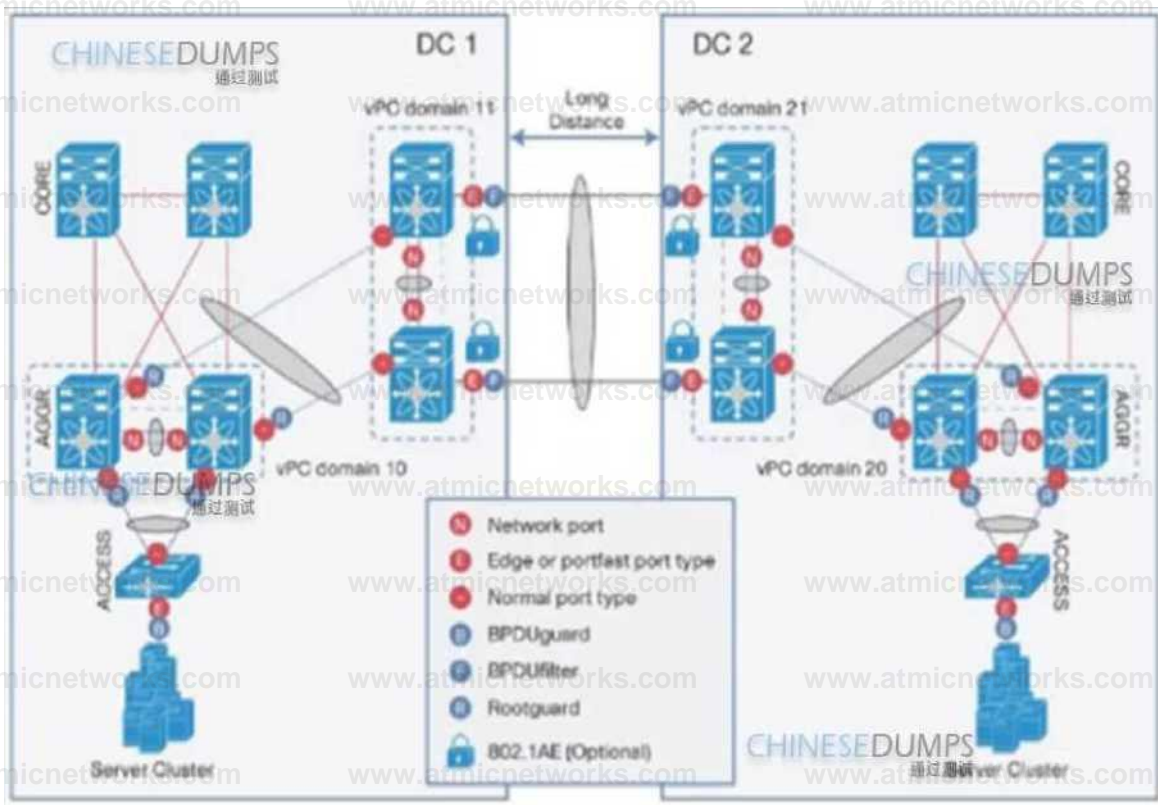
- A. Implement HSRP on the MDS IP storage ports
- B. Set up IP storage ports to export the two Fibre Channel target ports
- C. Map the Fibre Channel target ports to one IP storage port
- D. Configure FCoE between the host NICs and MDS ports

Answer: C

Explanation:

Question: 197

Refer to the exhibit.



Refer to the exhibit In this scenario a Cisco engineer is building a loop-free topology where a dedicated layer of the vPC domain adjacent to the aggregation layer which also runs vPCs is used to interconnect the two data centers together. The engineer globally configures a vPC domain identifier on both vPC devices where the domain ID is the same on both peer devices. Which action successfully forms the domain?

- A. Configure vPC-peer-keepalive link on both peer devices
- B. Put peer device interfaces into a suspended state.
- C. Enable and reuse an ISL Layer 3 trunk port channel
- D. Synchronize the MAC addresses for the member ports

Answer: A

Explanation:

Question: 198

Refer to the exhibit.

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)

B)

**policy-map type qos policy af11 class class a(11
match other set dscp 0**

C)

D)

**policy-map type qos policy af 11 class class af11
set dscp 0**

A. Option A

B. Option B

C. Option C

D. Option D

- ```
policy-map type qos policy_af41
class class-other
match dscp 0
```
- ```
policy-map type qos policy_af41
class class-default
set dscp 0
```
- ```
policy-map type qos policy_af41
class class-af41
match other set dscp 0
```
- ```
policy-map type qos policy_af41
class class-af41
set dscp 0
```

Answer: C

Explanation:

Question: 199

A customer attaches an additional storage appliance to an existing Cisco UCS domain, which contains 50 virtualization hosts that require fabric failover connectivity on fabric interconnect B. The interfaces are bound to a separate pin group to segregate traffic with a CoS value of 0 Which Cisco UCS Manager feature meets these requirements?

- A. vNIC Template
- B. storage policy
- C. SAN connectivity policy
- D. vHBA Templates

Answer: D

Explanation:

Question: 200

An engineer must provide Layer 2 adjacency between data centers that are in two locations and

separated by a routed network The adjacency must be based on Cisco Nexus 7000 Series Switches The solution must ofload learning of host reachability information to the control plane to avoid excessive flood and learn congestion Also the data center in one of the sites experiences a large volume of unknown unicast traffic that the solution must mitigate Which data center interconnect technology meets these requirements?

- A. VXLAN
- B. OTV
- C. VPLS
- D. LISP

Answer: A

Explanation:

Question: 201

A Cisco engineer is developing a custom application that can run natively in Cisco NX-OS on Nexus 9000 and Nexus 3000 platforms For the NX-SDK application to run the engineer enables the NX-SDK feature on the device Then the NX-SDK is imported into the application via an `import nx_sdk_py` statement. The engineer creates custom CLI commands and defines custom CLI command syntax within the `sdkThread` function When CLI commands originate from an NX-SDK application what class is this?

- A. `cliCmd.printConsole`
- B. `postCliCb`
- C. `pyCmdhandler`
- D. `nx_sdk_pyValid-to_int`

Answer: C

Explanation:

Question: 202

The network infrastructure team is beginning to automate routine tasks within the Cisco ACI fabric and is searching for the appropriate solution The solution must not require any additional software installed on the Cisco APIC Networking team members lack automation experience and prefer to use a tool that does not require in-depth programming knowledge Finally configuration within the Cisco ACI fabric is rarely modified or removed Which solution must the team choose?

A. Cobra SDK

B. Ansible

C. Terraform

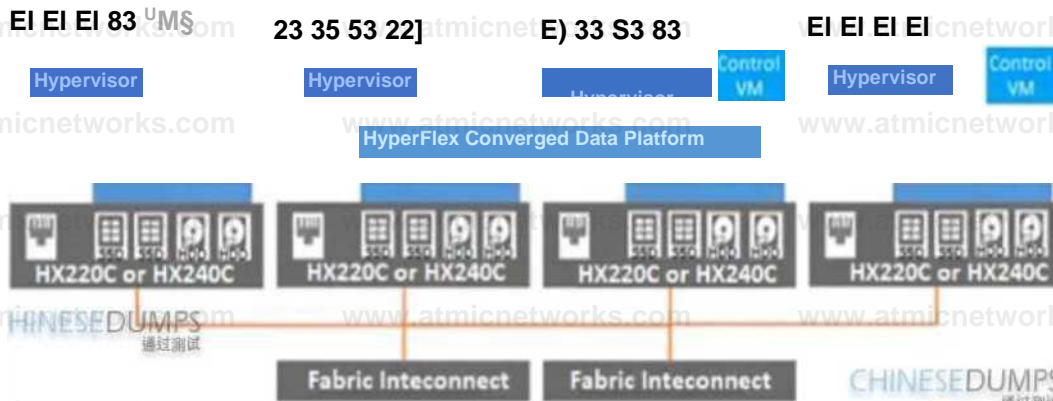
D. Puppet

Explanation:

Answer: B

Question: 203

Refer to the exhibit.



A Cisco engineer is configuring a next-generation Cisco HyperFlex HX data platform with 2 x Cisco UCS 6248UP fabric interconnects, 8 x Cisco HX-Series HX240c-M4SX servers, plus 8 x Cisco UCS B200-M4 blade servers Cisco UCS 5108 blade chassis, and Cisco UCS 2204XP fabric extenders The solution is configured with HX Release 4.5(2a) using VMware ESXi 7.0 U2 After the engineer migrates all customer VMs to the new solution platform, the engineer decides to create HX Native snapshots for all the VMs The engineer performs the operation and notices that some of the VMs are not creating snapshots. What is the most probable reason that the HX Native snapshots are not created?

- A. Virtual machines are in suspended state
- B. The servers have duplicate names
- C. The source disk is thick provisioned
- D. The node has insufficient datastore space

Answer: C

Explanation:

Question: 204

A Cisco engineer is configuring MPLS VPN BGP at a customer site that is connected to the provider site by more

than one path MPLS VPN BGP Local Convergence link protection is enabled. After the engineer installs the main forwarding path and the redundant backup path within the BGP, they assign a unique route distinguisher to each VRF table on all PE devices that serve as a backup to the link. What is a prerequisite for this local convergence to work?

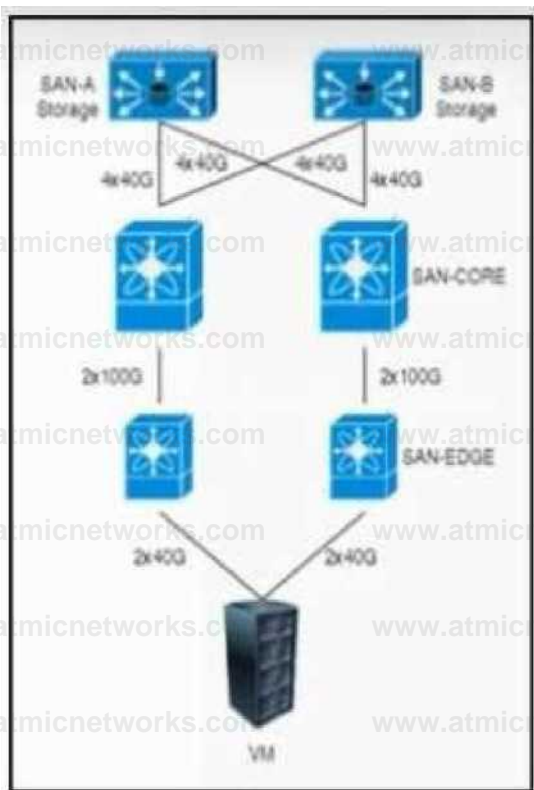
- A. Interautonomous system option A (back-to-back VRF) is active.
- B. BGP must support lossless switchover between operational paths
- C. IP/GRE is enabled.
- D. The system is performing a PE-CE link protection on both ends

Answer: B

Explanation:

Question: 205

Refer to the exhibit.



Refer to the exhibit. FCoE is used in the topology between the SAN Storage devices and SAN-Core routers.

After noticing traffic drops to hosts accessing SAN-B storage, the engineering team wants to reduce the oversubscription ratio in the topology. Which action must the team take?

- A. Increase the bandwidth between SAN-A and SAN-B Storage toward the SAN-Core devices.
- B. Configure QoS to prioritize SAN-A traffic

- C. Configure QoS to prioritize SAN-B traffic.
- D. Increase the bandwidth between the SAN-Coro and SAN-Edgo devices.

Answer: D

Explanation:

Question: 206

A network engineer needs to configure a high availability feature for a data center that uses a Cisco Nexus 7700 Series Switch that is configured with dual supervisors. The feature must meet these requirements:

- Network resilience must be ensured.
- Network instability for Layer 3 external routing protocols must be reduced.
- Neighbors must be notified when the control plane is restarting.
- Traffic must still be forwarded to peers while neighbor relationships are restarting.

What should be used to meet these requirements?

- A. graceful restart
- B. NSF
- C. NSR
- D. BFD

Answer: C

Explanation:

Question: 207

A Cisco engineer is using a PowerShell script to create a service profile template on Cisco UCS Manager. After defining the server pools and other templates, the engineer must ensure that the hosts are visible to the northbound SAN network and storage initiators. Which configuration must be applied to enable this capability?

- A. `Get-UcsApplianceCloud | Get-UcsVlan -name ApplianceVlan | Add-UcsVlanMemberPort -SwitchId A -SlotId 1 -PortId 15`
- B. `Get-UcsApplianceCloud | Get-UcsVlan -Name ApplianceVlan | Add-UcsVlanMemberPortChannel -SwitchId A -PortId $ap_pc.PortId`

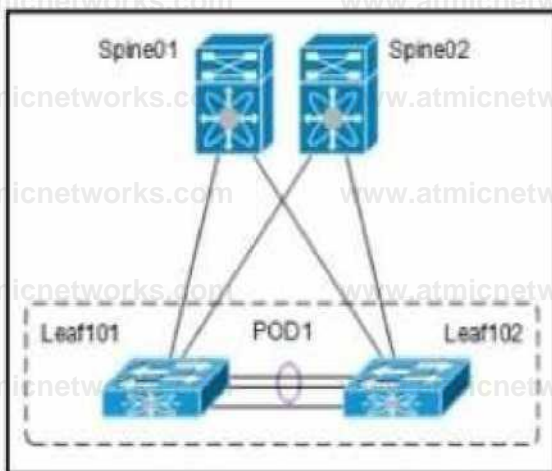
- C. Get-UcsMacPool -lies <handle or name> default | Add-UcsMacMemberBlock 00:25: B5: 00: A0:00 00:25: B5:00:A0:08
- D. Swwpn.pool | Add-UcsWwnMemberBlock -From 20:00:00:24: B5:00:00:00 -To 20:00:00:24: B5:00:00:09

Answer: D

Explanation:

Question: 208

Refer to the exhibit.



```
vrf context NEW-VRF-0001
vni 900001
ip route 0.0.0.0/0 10.10.0.254
ip pim ssm range 232.0.0.0/8
rd auto
address-family ipv4 unicast

Interface Vlan500
no shutdown
mtu 9216
mac-address 0000.2222.3333
vrf member NEW-VRF-0001
no ip redirects
ip address 10.10.0.1/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

Refer to the exhibit. An engineer must deploy NEW-VRF-001 in the data center. All hosts require full reachability with all other hosts, no matter on which pod the host deployment occurs. Which set of commands must the engineer include in the deployment?

- A. host-reachability protocol bgp

advertise I2vpn evpn

B. route-target both auto evpn

route-target both auto

C. address-family I2vpn evpn

route-target both auto

D. advertise I2vpn evpn

route-target both auto

Answer: D

Explanation:

Question: 209

An engineer must design a solution with storage reachability between too physical servers and a storage array.

The storage array connectivity is to a SAN switch that is limited to 46 ports. Which topology meets the requirements without adding more MOS switches?

A. FCIP between the servers and Lite ToR switches that passes the Fibre Channel traffic to the MOS switches

B. FCoE between the servers and the ToR switches that passes the Fcoe Channel traffic to the MDS switches

C. VXLANs between the servers and the ToR switches that passes the FCoE traffic to the MDS switches

D. iSCSI between the servers and the ToR switches that passes the FCoE traffic to the MDS switches

Answer: B

Explanation:

Question: 210

An architect is designing a storage solution for a Cisco UCS server infrastructure with these requirements:

- identical deployment of servers
- can add vHBAs to a group of servers
- configuration of servers stays synchronized

Which solution meets these requirements?

- A. service profile template
- B. global adapter policy
- C. WWPN pool
- D. updating vNIC template

Explanation:

Answer: A

Question: 211

Which programming model is vendor-agnostic and combines operational and configuration data in the same container?

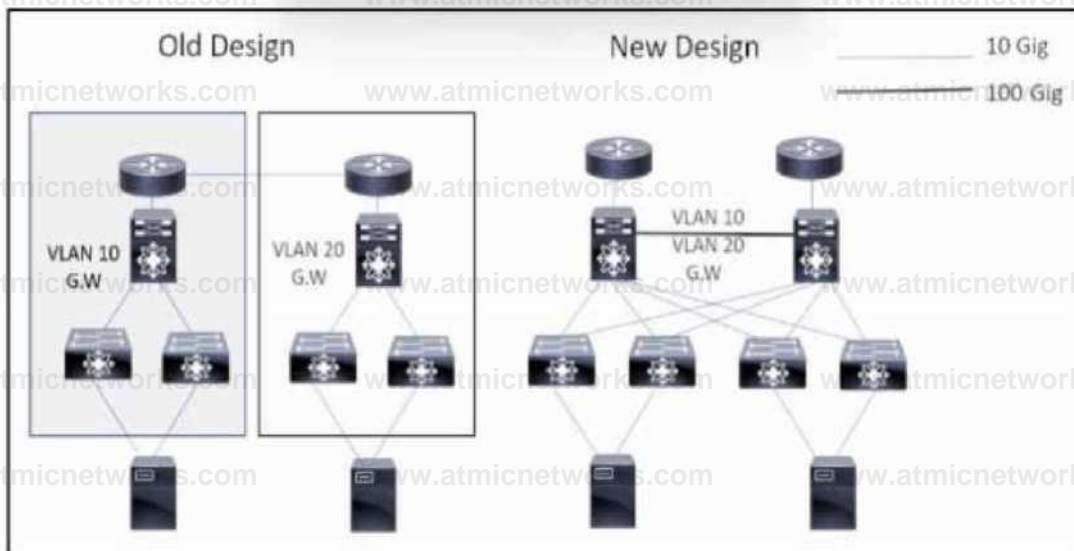
- A. OpenConfig
- B. IETF
- C. open YANG
- D. native YANG

Explanation:

Answer: A

Question: 212

Refer to the exhibit.



Refer to the exhibit. An engineer is creating a new data center design for a customer. The design must support virtual applications, enhance network resilience, and meet these requirements:

- Extend Layer 2 across all network segments to support endpoint mobility.
- Access switches will support up to 20 GB capacity for north-south and east-west traffic.
- Provide fast convergence during link failures.
- MAC address advertisement will not depend on the control plane.

Which solution must the engineer include in the design between the access and distribution switches?

- vPC
- BGP-EVPN
- DMVPN
- DVSTB

Answer: D

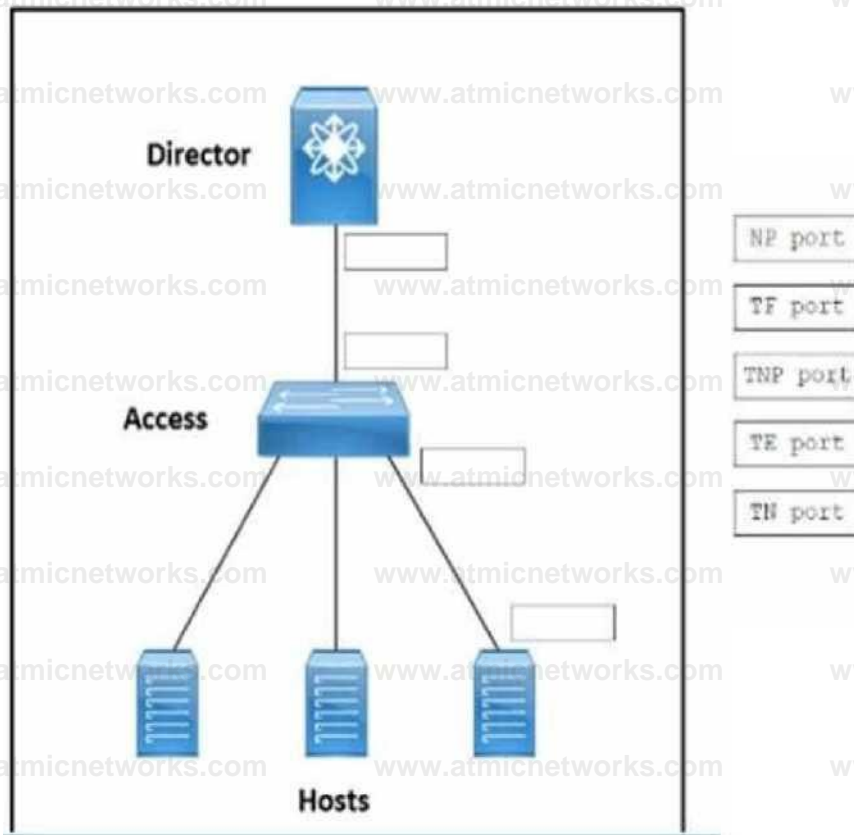
Explanation:

Question: 213

DRAG DROP

A customer is deploying a SAN based on Cisco MDS 9000 Series Switches. Each Inter-Switch Link must carry multiple VSANs at the same time. The access switch must share the same domain ID as the director switch to reduce the number of domain IDs needed in the fabric Drag and drop the

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



Answer:

Explanation:

TF Port

TF Port

TF Port

NP Port

Question: 214

Refer to the exhibit. A Cisco engineer is configuring a FlexPod data center for SAP with Cisco ACI, Cisco UCS Manager 4.0, and Net AppAFFA-Series. All systems and fabric links feature redundancy and provide end-to-end high availability. After the engineer sets the needed VLANs on the NetApp controller ports and adds them to the data broadcast domain, the engineer must make the storage

disks visible for the UCS hosts Which action must be taken on the UCS to accomplish this task?

- A. Configure ION pools for ISCSI boot.
- B. Create aggregates in ONTAP.
- C. Provide a storage virtual machine.
- D. Enable HTTPS access on the servers.

Answer: B

Explanation:

Question: 215

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

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

Answer: B, D

Explanation:

Question: 216

Refer to the exhibit. An engineer needs a solution to extend Fibre Channel traffic between multiple sites. The IPsec tunnels must be used to encrypt and secure the traffic. Which technology must be selected to meet these requirements?

- A. FCIP
- B. FCoE
- C. iSCSI
- D. VXLAN

Answer: A

Explanation:

Question: 217

An architect is gathering technical requirements for a large-scale data center with up to 3000 Ethernet ports and 70 ToR switches. The stakeholders agreed that if a ToR switch becomes compromised via its management plane, access to the production data plane must not be possible from that switch. Which type of management network must the architect recommend in the design?

- A. out-of-band dialup
- B. in-band Ethernet
- C. out-of-band Ethernet
- D. in-band dialup

Answer: C

Explanation:

Question: 218

A data center with over 4000 VLANs must be stretched to a disaster recovery site. The solution must support the migration of virtual machines to a disaster recovery site. To support the scalability of the solution, the internal fabric of the main site must be from the DCI network. The connecting network infrastructure uses a 10 Gbps link with PIM ASM supported, which will be replaced with a different overlay in the next 12 months. The solution must support head-end replication for broadcast, unknown unicast, and multicast traffic. Which solution must be used to meet these requirements?

- A. OTV
- B. LISP
- C. MPLS over GRE
- D. VXLAN Multi-Site

Answer: D

Explanation:

Question: 219

A large financial institution hosts all customer data in a critical data center with a single physical location. Top management is concerned about the risk of a single-site failure. The budget is also an issue, so the

network engineering team is working to implement a cost-effective redundancy strategy with a second data center. The new data center must use a three-tier design identical to the existing data center. Business requirements dictate that all data must always be accessible from anywhere in the world, even if a single site fails. The team purchased two Cisco Nexus 7700 Series Switches and four Catalyst 8000 Series Routers. Which action must the team take to accomplish the goal?

- A. Implement NVGRE on the Catalyst 8000 routers to create a DCI communication channel between the data centers and provide Layer 2 extension capabilities.
- B. Implement OTV with the Nexus 7700 Series devices to extend Layer 2 connectivity between the two data centers and provide disaster-recovery capabilities.
- C. Implement FabricPath on the Catalyst 8000 routers in both data centers to provide full redundancy in the event of a disaster.
- D. Implement HSRP with the Nexus 7700 Series devices to provide gateway redundancy to ensure seamless failover between the Nexus switches.

Answer: B

Explanation:

Question: 220

Refer to the exhibit. A Cisco engineer is configuring a Cisco UCS integrated infrastructure for SAP HANA that consists of 8 x Cisco UCS B/C480-M5 servers for SAP HANA and 4 x Cisco UCS C240-M5 C-Series rack mount servers for storage. The rack servers are equipped with Cisco VIC 1225T. The engineer plans to install RHEL8, but the boot process is interrupted at installation because the iSCSI LUNs are not recognized by the VIC adapter. After proper investigation, the engineer concludes that the initiator and target configuration that is programmed on the primary iSCSI vNIC to the operating system is missing. What is the reason for the issue?

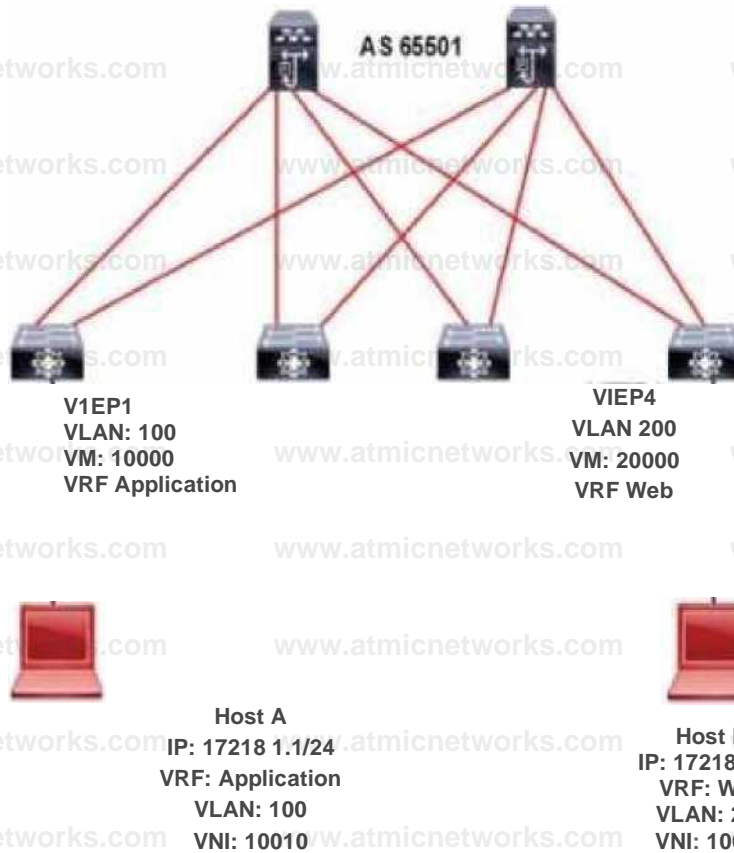
- A. The network interfaces are not configured.
- B. The Linux ISO image is not Cisco approved.
- C. The boot parameter `ip=ibft` is not set.
- D. The storage system is not reachable.

Answer: D

Explanation:

Question: 221

Refer to the exhibit.



Refer to the exhibit. An engineer deployed a VXLAN fabric with this configuration:

- interface VLAN 100 on VTEP1 with no IP address
- interface VLAN 200 on VTEP4 with no IP address

Which set of actions must the engineer take to ensure that host A communicates with host B?

A. Associate VNI 10000 to VRF Application on VTEP4.

Associate VNI 20000 to VRF Web on VTEP1.

B. Associate VNI 10000 to VRF Web on VTEP4.

Associate VNI 10000 to VRF Application on VTEP1.

C. Associate VNI 20000 to VRF Application on VTEP1.

Associate VNI 20000 to VRF Web on VTEP1.

D. Associate VNI 20000 to VRF Web on VTEP1.

Associate VNI 10000 to VRF Application on VTEP1.

Answer: C

Explanation:

Question: 222

Refer to the exhibit During a synchronization of port roles, a device receives a proposal message on one of its ports that is selected as the new root port. The logs show that Rapid PVST+ forced all other ports to synchronize with the new root information. The engineer analyzes the port states and concludes that the device is synchronized with superior root information received on the root port, and all other ports are synchronized. What happens to a designated port that is in the forwarding state and is not configured as an edge port, if Rapid PVST+ forces it to synchronize with new root information?

- A. It does not receive BPDUs for transmission.
- B. It immediately replies with its own information.
- C. It discards frames switched from another port.
- D. It transitions to the Mocking state

Answer: D

Explanation:

Question: 223

An enterprise is experiencing transmission errors and excessive delays over their WAN when backing up user workstations. A systems architect decided to resolve the problems by centralizing data storage and processing to within the confines of the data center. Which technology is most suitable to mitigate the issues?

- A. VDI
- B. QoS
- C. VDC
- D. RAS

Answer: B

Explanation:

Question: 224

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

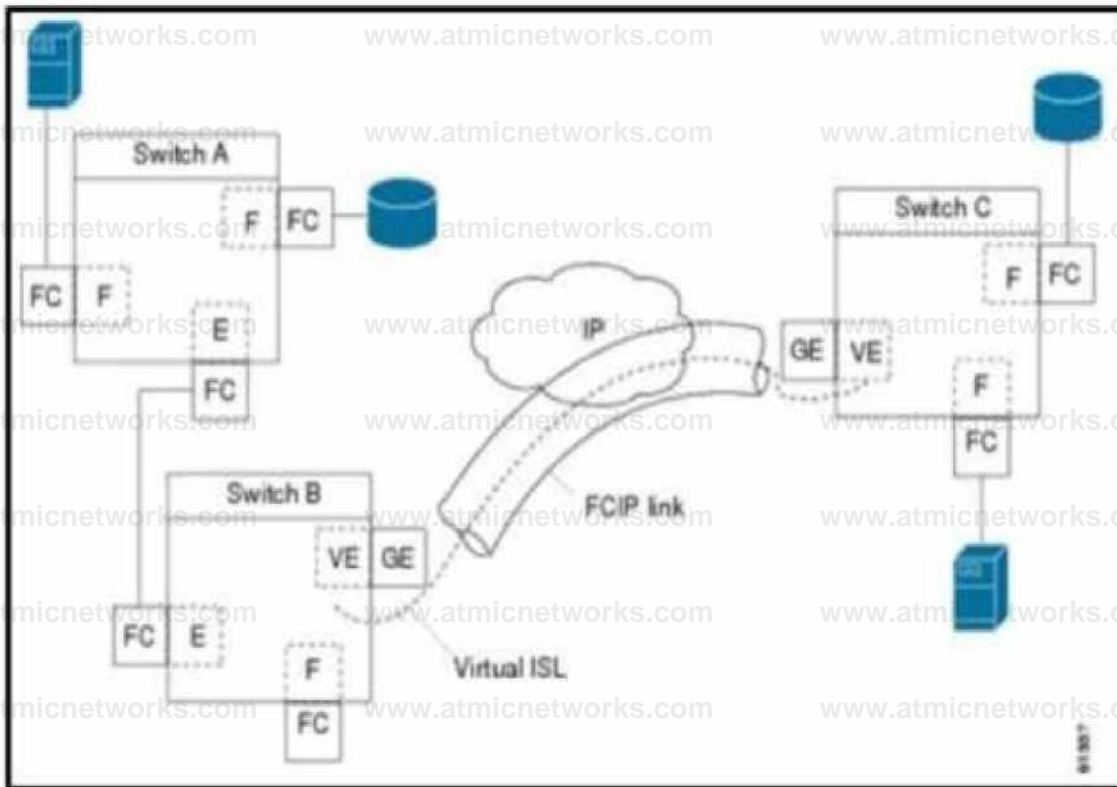
- A. encryption offload cards
- B. dedicated compute cards
- C. HyperFlex Edge support
- D. Fabric Interconnects

Answer: C

Explanation:

Question: 225

Refer to the exhibit.



Refer to the exhibit. A Cisco engineer is implementing a customer data center design and must configure Cisco MDS 9000 Series Switches. The configuration has the required IP addresses on each

SAN. The requirement is that each FCIP is a separate E(ISL), and the FCIP links must connect to different switches across the two SAN islands. Also, the Fibre Channel traffic is to be load-balanced across the FCIP link.

After the engineer configures the FCIP profiles and interfaces they want to enable QoS for the link. Which types of values are needed for the DSCP to mark the IP packets?

- A. Control and data connection

B. E(ISL) and GE peer ports speed

C. retransmit and keepalive timeout

D. port channel and F-ports

Answer: A

Explanation:

Question: 226

What must be configured in Cisco Intersight when Enum is selected as the data type in a workflow input?

A. Regex

B. Object Selector

C. Widget type

D. Secure

Answer: C

Explanation:

Question: 227

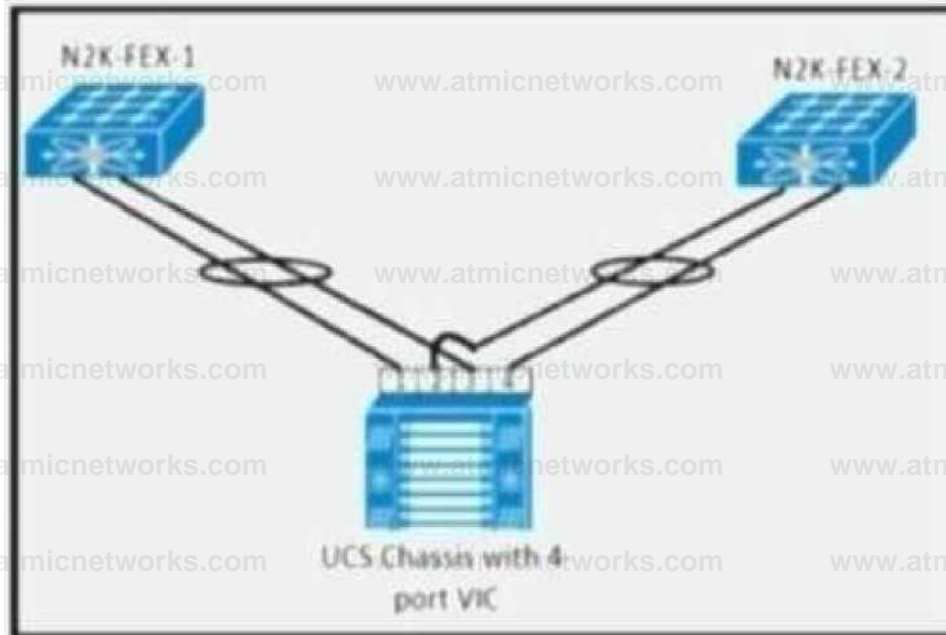
Refer to the exhibit.



An engineer must connect the four-port Cisco UCS VIC adapter to the fabric extenders. Which connectivity implements a port-channel standalone mode?

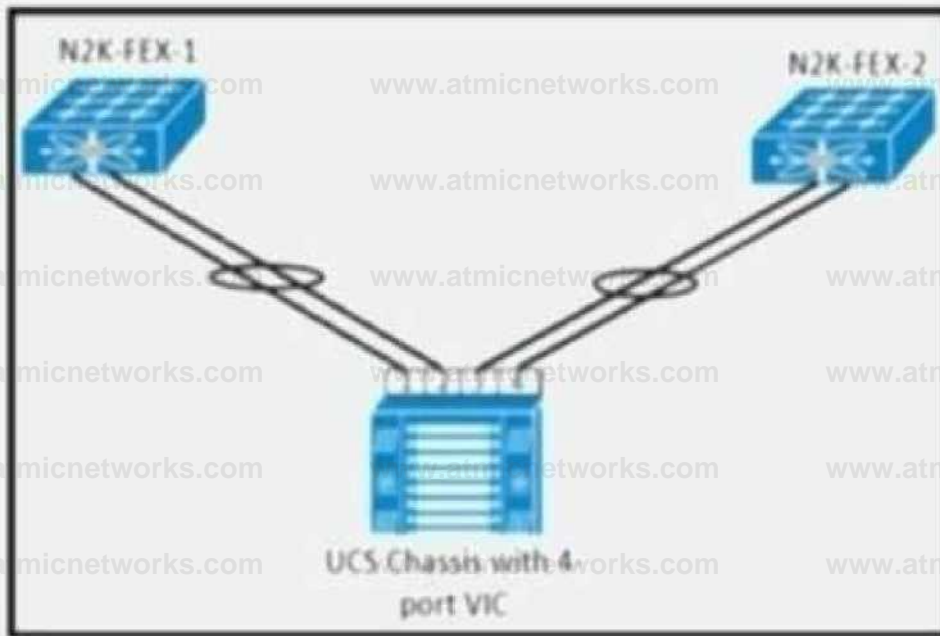
A)

B)



C)

D)



A. Option A

B. Option B

C. Option C

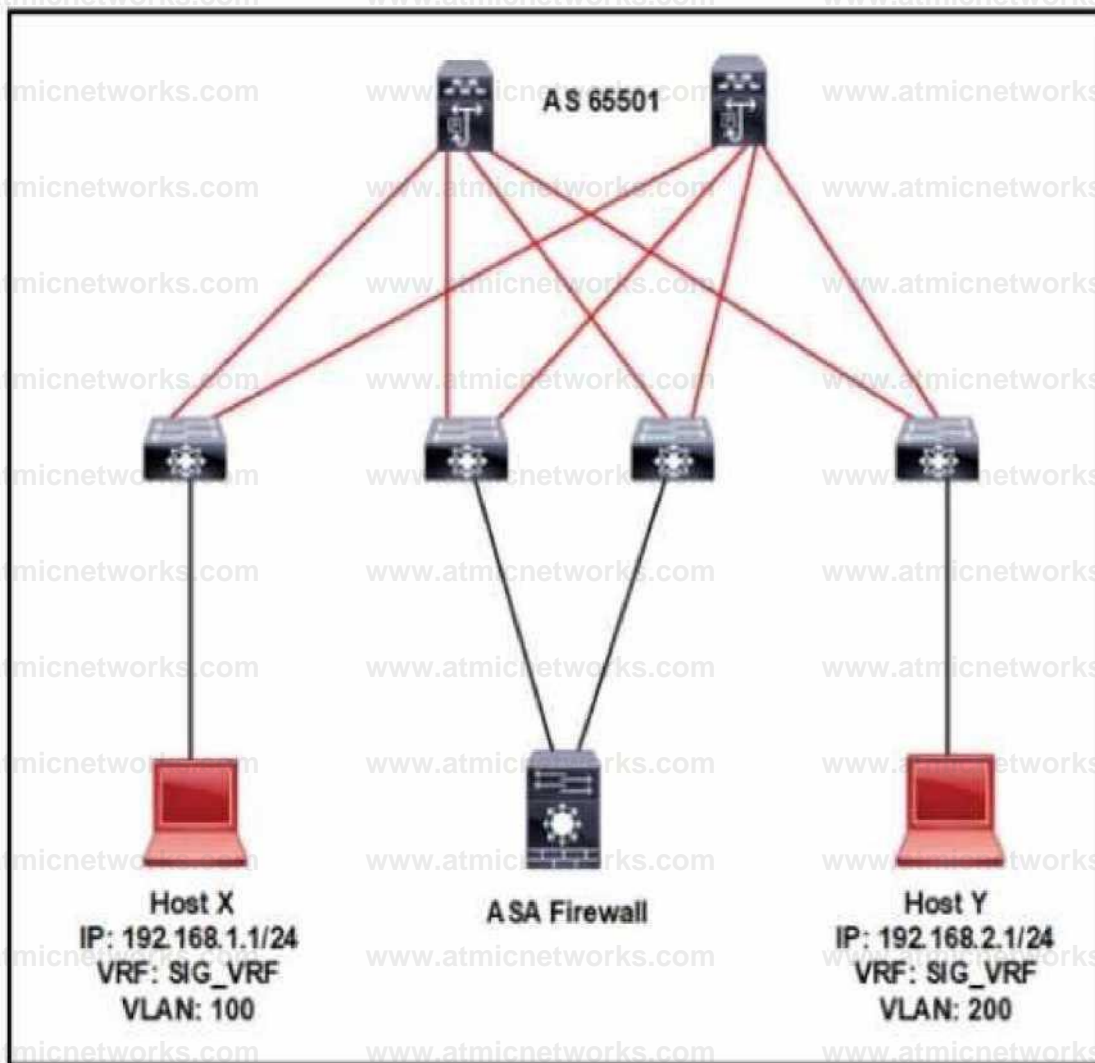
D. Option D

Answer: D

Explanation:

Question: 228

Refer to the exhibit.



Refer to the exhibit. An engineer builds a data center network design using EVPN technology. Within the design, the fabric acts as a gateway. Traffic from host X to host Y must pass through the Cisco ASA firewall for deep packet inspection and increased security. Which firewall deployment must the engineer choose to accomplish this goal?

- A. VLAN stitching
- B. VRF sandwich
- C. routed mode

Answer: B

Explanation:

Question: 229

Which orchestration tool must be used to manage VXLAN fabrics and includes a built-in dashboard

and real-time network health summary for managed devices?

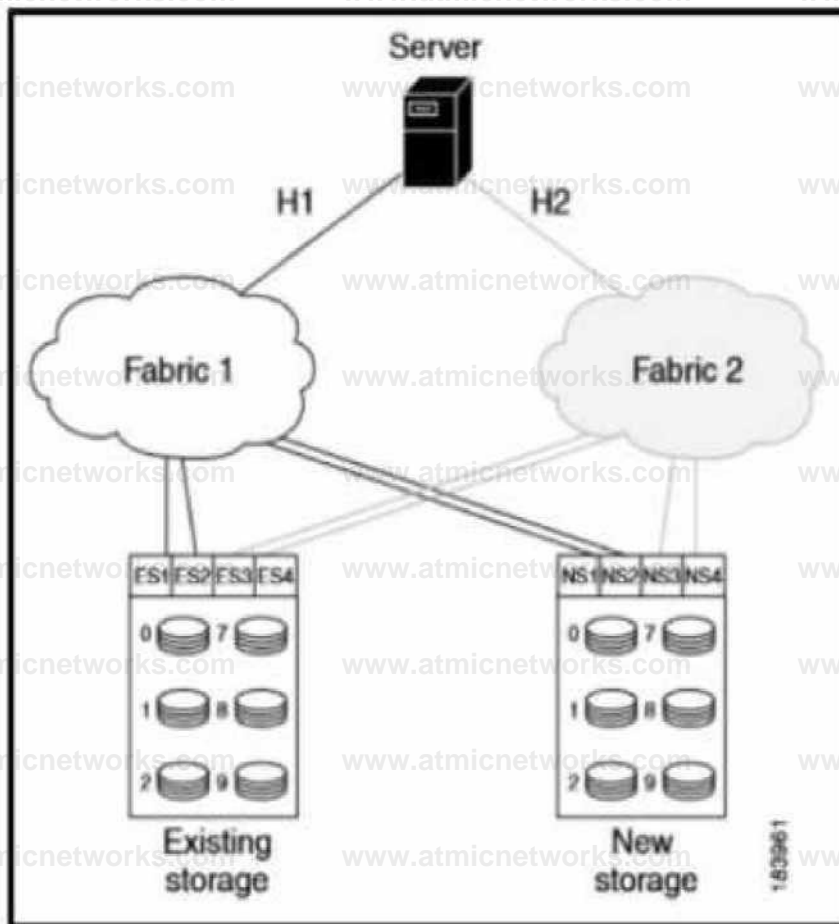
- A. Puppet
- B. Ansible
- C. Cisco Nexus Dashboard Fabric Controller
- D. Cisco Intersight

Answer: C

Explanation:

Question: 230

Refer to the exhibit.



Refer to the exhibit. A Cisco engineer is planning a data migration job in heterogeneous SANs where the existing and new storage devices for the migration are already connected to the MDS switches. All paths from the SSM to the storage-connected switch are going through the Cisco fabric. The setup is with active/active arrays and multiple LUN sets. What is the best approach to copy the LUN sets to the new location?

- A. Enable synchronous replication for the new storage array.
- B. Add all paths Fabric-A zones to Fabric-B zones.

C. Create two data migration jobs, and add two storage ponds in each job.

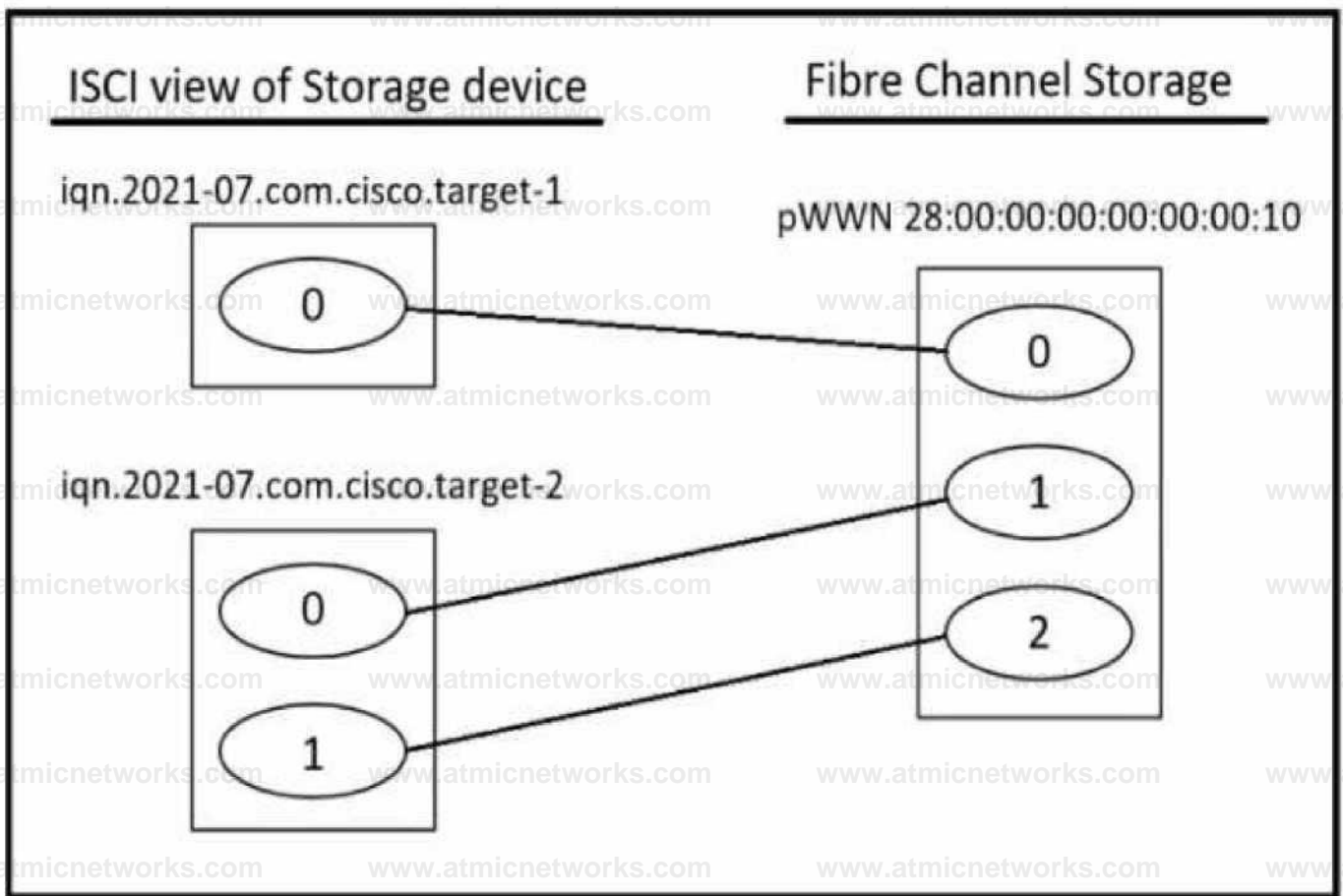
D. Grant access to all servers to the existing data sets.

Answer: B

Explanation:

Question: 231

Refer to the exhibit.



Refer to the exhibit. An engineer working for a service provider with an employee ID: 4800:35-849 must perform the mapping of Fibre Channel LUN targets to the indicated iSCSI virtual target. Which configuration shows the required mapping?

A.

B.

```
lien nrtubtit^ct niw tqn.3021-07.eea.eiseo.tar?et-i pWS 21:00:00:00:00:00:10 fc-lun 1 iicil-lun 1  
lises: virtual-tarmac nane iqn.2021-07.co*.cisco.target-2 paws 20:00:00:00:00:00:10 fc-lun 2 i*csi-lan 2 pain 3  
0:00:00:00:00:00:10 tc-lu* 2 iscsi-lun 1
```

C.

```
iscsi virtual-target name iqn.2021-07.com.cisco.target-0  
pwwn 28:00:00:00:00:00:10 fc-lun 0 iscsi-lun 0  
iscsi virtual-target name iqn.2021-07.com.cisco.target-1  
pwwn 28:00:00:00:00:00:10 fc-lun 1 iscsi-lun 1  
pwwn 28:00:00:00:00:00:10 fc-lun 2 iscsi-lun 2
```

D.

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

Answer: C

Explanation:

Question: 232

An engineer must design the compute portion of a data center environment. The environment includes:

* direct-attach Fibre Channel storage array with four 32 G Fibre Channel ports per controller

* Cisco UCS B-series servers equipped with Cisco UCS IOM 2408 Fabric Extenders

B. • UCS: four-port Port Channel from each IOM to each fabric interconnect

* Cisco 6454 Fabric Interconnects

The fabric interconnects connected to the LAN via 100G ports, the SAN via 32 G Fibre Channel ports, and the IOM 2408 via 10 G ports. Which storage connectivity strategy must the engineer choose?

A. UCS' two-port PortChannel from each IOM to each fabric interconnect.

- Storage: Qty four Fibre Channel links from each SAN controller to each fabric interconnect.

- Storage; four-port SAN-PortChannel from each SAN controller to each fabric interconnect
- C. • UCS: Qty (four 802.1q trunks from each IOM to each fabric interconnect)
- Storage: Qty two Fibre Channel links from each SAN controller to each fabric Interconnect
- D. • UCS; four-port back-to-back PortChannel between IOM and fabric interconnect
- Storage; two-port SAN-PortChannel from each SAN controller to each fabric interconnect

Answer: B

Explanation:

Question: 233

Refer to the exhibit A Cisco engineer is configuring Cisco Nexus 7000 Series Switches. To simplify initial configuration verification and vPC+/HSRP troubleshooting, the engineer configures the primary vPC+ peer device with the FHRP active router highest priority. The primary FHRP device responds to ARP requests, even though the secondary vPC+ device also forwards the data traffic. Which configuration enables the Layer 3 connectivity from each vPC* peer device?

- A. Configure a VLAN network interface for the same VLAN from both devices.
- B. Ensure that the enhanced Layer 2 license has been installed.
- C. Manually configure virtual MAC addresses for any FHRP protocol.
- D. Set a restore timer that delays the vPC+ restart.

Answer: B

Explanation:

Question: 234

A customer is evaluating a new disaster-recovery solution for their SAN, which is used for noncritical CRM purposes. The SAN is frequently backed up locally at the customer's existing single location, and several hours of data loss can be sustained. The customer wants to retain complete control of the failover process to a separate physical location. Which type of DR is most suitable for the customer?

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

D. active/active

Answer: A

Explanation:

Question: 235

An engineer is designing a Cisco UCS Central implementation for an existing Cisco UCS infrastructure, and the current policies must be reused. Which action must the engineer select?

- A. Export the policies from Cisco UCS Manager and import them in Cisco UCS Central.
- B. Connect Cisco UCS Manager to Cisco UCS Central and convert local policies to global policies.
- C. Create new policies in Cisco UCS Central and change the assignment to central.
- D. Retain existing policies in Cisco UCS Manager and use global policies for new service profiles

Answer: B

Explanation:

Question: 236

An engineer deploys a Cisco UCS environment with the storage array directly attached to the Fabric Interconnects. The operations team mandates that the solution must not require the configuration of Fibre Channel zoning. Which configuration set meets these requirements?

A. Storage facing port type: Uplink port

Fabric interconnect FC mode: End-host

B. Storage facing port type: Storage port

Fabric interconnect FC mode: Switching

C. Storage facing port type: FCoE storage port

Fabric interconnect FC mode: End-host

D. Storage facing port type: Appliance port

Fabric interconnect FC mode: Switching

Answer: B

Explanation:

Question: 237

To help automate the vHBA configuration process, a network engineer is configuring vHBA template pairs on

UCS. The engineer is creating primary and secondary templates to define how vHBAs on a server connect to the SAN. Which fact about the template pair should the engineer consider for its potential impact on service?

- A. The description configuration will be shared between the two templates.
- B. The WWPN pool configuration will not be shared between the two templates.
- C. The fabric ID configuration will be shared between the two templates.
- D. The QoS policy configuration will not be shared between the two templates.

Answer: B

Explanation:

Question: 238

Refer to the exhibit. A Cisco engineer is configuring a PBR in a Cisco ACI data center scenario and plans to insert a transparent firewall. The APIC release is 4.1. the Cisco ACI fabric is configured to be the gateway for the servers and for the PBR node, and the Layer 4/ Layer 7 devices are deployed as Layer 1/ Layer 2 mode in the physical domain. Layer 1/Layer 2 PBR node interfaces are also configured to be in a bridge domain and not in an L3out. What is required for the consumer and provider connectors of the Layer 1/Layer 2 device for this scenario to work?

- A. They must be in different BDs.
- B. PBR is used with Multi-Pod.
- C. IP-SLA Tracking is active.
- D. Active/active symmetric PBR is required.

Answer: A

Explanation:

Question: 239

Refer to the exhibit. A Cisco engineer is configuring a data center design scenario with Cisco MDS 9000 Series Switches. The cut-through routing mode is chosen for improved read operation performance. Each SCSI host requires access to storage through the IPS module. First, the engineer configures the TCP tuning parameters as enabled SACK, the maximum bandwidth of 1 Gbps, buffer size of 4096, keepalive timeout at 1s, and enables Path MTU. Then, the engineer must set the OoS of the ISCSI link. What is the maximum QoS value that must be set for the ISCSI session?

A. 3

B. 1

C. 63

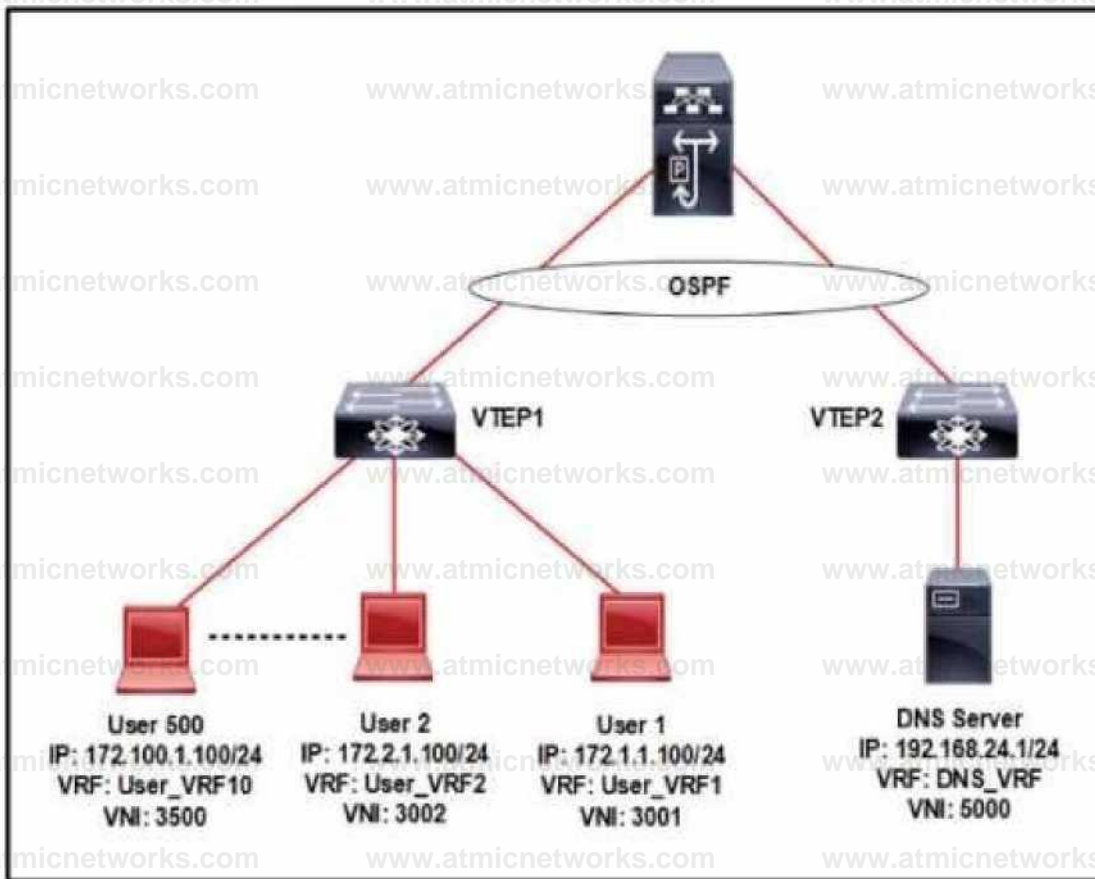
D. 5

Explanation:

Question: 240

Refer to the exhibit.

Answer: C



Refer to the exhibit. A customer requires a VXLAN fabric deployment with these requirements:

- DNS must be a shared service.
- Users will not require direct sharing of resources with other users.
- The deployment must use the least configuration intensive approach to achieve route leaking.

Which action must the customer take to meet these criteria?

- Encapsulate traffic on VTEP2 with VNI 3002.
- Encapsulate traffic on VTEP2 with VNI 5000.
- Encapsulate traffic on VTEP1 with VNI 3002.
- Encapsulate traffic on VTEP1 with VNI 5000.

Answer: D

Explanation:

Question: 241

An engineer must interconnect two data centers to support the dynamic virtual machine migration.

The data centers are currently interconnected using an IPv4 network. However, the data piano encapsulation

of the underlay network is expected to change next year. To meet the VM migration requirement, the solution must track MAC route changes, update all other remote devices simultaneously and prevent excessive MAC flapping with broadcast and unicast traffic loops. The company must also use networking equipment from different manufacturers to prevent vendorlocking. Which solution meets these requirements?

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

Answer: D

Explanation:

Question: 242

An engineer must connect a Cisco UCS Fabric Interconnect to a storage array using a Fibre Channel protocol. The SAN must be directly connected to the UCS fabric interconnects using ports 1/1 and 1/2. Which fabric interconnect configuration must be used?

- A. Fibre Channel end-host mode, and ports as Fibre Channel storage port
- B. Fcore Channel switching mode, and ports as Fibre Channel storage port
- C. Fibre Channel end-host mode, and ports as Fibre Channel uplink port
- D. Fibre Channel switching mode, and ports as Fibre Channel uplink port

Answer: A

Explanation:

Question: 243

A network engineer designs a virtual network in a Cisco UCS Manager. The traffic must be explicitly forwarded from the vNIC on the server to a specific uplink Ethernet port on the Cisco fabric interconnect. Also, the server vNIC must use the same uplink Ethernet port after reboot. Finally, the design requires a OoS policy for remote direct memory access over converged Ethernet (RoCE v2). Which set of design features meets these requirements?

- A. vNIC pool and Silver priority

- B. vNIC template and Gold priority
- C. server VLAN pool and Gold priority
- D. LAN pin group and Platinum priority

Answer: D

Explanation:

Question: 244

Which type of Cisco Intersight workflow input controls the availability of other specific workflow inputs during the execution of a workflow?

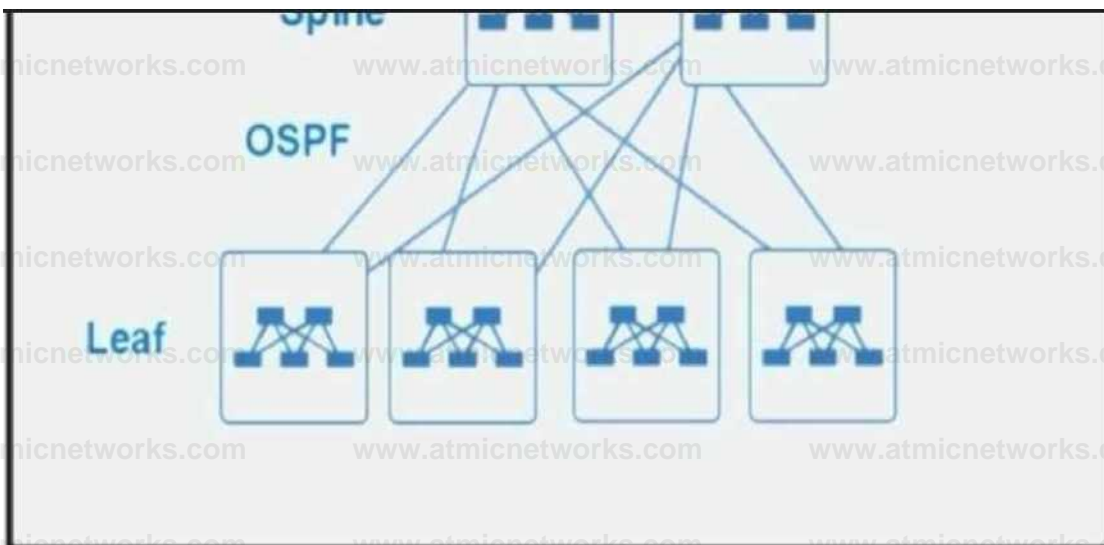
- A. Progressive Disclosure rule
- B. Parameter Set rule
- C. conditional operation
- D. String Object Selector

Answer: B

Explanation:

Question: 245

Refer to the exhibit.



Fiber links are provisioned directly between the spine and leaf switches in the given LAN topology A/30 prefix has been configured over each fiber link to provide underlay connectivity for a VXLAN network. The network-engineering team must update the network configuration to provide the shortest possible convergence time if a fiber link is cut. Which action must the team take to meet the

requirement?

- A. Configure the /30 links as OSPF point-to-point networks
- B. Enable BFD on the /30 links
- C. Enable UDLD on the GO links
- D. Configure ECMP on the /30 links

Answer: B

Explanation:

Question: 246

A midsize corporation with significant data-storage requirements is planning to deploy RFC 3720-based technology in its data center to provide efficient and reliable block-level storage access to servers. The corporation requires a robust solution with optimal performance, load-balancing, and fault tolerance. The solution must use multiple network paths to optimize bandwidth usage and provide redundancy. LACP has already been enabled on the data-center switches. Which two actions must be taken to accomplish the goal? (Choose two.)

Implement VLAN tagging in accordance with the IEEE 802.1Q standard to segregate iSCSI traffic from other data-center traffic.

- A. Disable jumbo frames on the data center switches
- B. Implement MPIO with redundant network paths
- C. Configure iSCSI MPIO software on the hosts
- D. Configure the iSCSI initiators and targets to use a single network path

Implement VLAN tagging in accordance with the IEEE 802.1Q standard to segregate iSCSI traffic from other data-center traffic.

Answer: B, E

Explanation:

Question: 247

A Cisco engineer is analyzing a customer environment where dozens of VMs are running on a physical server and UCS chassis are cascaded. The setup uses two ISLs in a port channel to the SAN switch (per fabric). The oversubscription from VM to physical SAN port is often 20 (VMs/host) x 72 (9

UCS chassis cascaded = 72 hosts): 2 (ISLs from fabric interconnect to SAN switch port on the NPV core (NPIV

enabled switch) This results to 20 x 72 2 per single ISL = 720 VMs per ISL

20 (VMs per host) x 8 (hosts per chassis) x 9 (chassis per port channel to SAN switch) / 2 (ISLs per port channel) = 20 x 8 x 9 / 2 = 720 VMs per SAN F-port What is the best way to resolve possible IOPS bottleneck?

- A. Deploy a content delivery network
- B. Enable Windows 1Gb server full duplex
- C. Configure 802.1Qbb priority flow control
- D. Remove data encryption on the SSD

Answer: C

Explanation:

Question: 248

An engineer needs to design a network environment in a data center that uses Cisco Nexus 9000 Series Switches. The solution must meet these requirements:

- interoperate with 802.1D devices
- load-balance spanning-tree traffic
- interoperate with third-party devices

Which spanning-tree protocol meets these requirements?

- A. MSTP
- B. RPVST+
- C. STP
- D. RSTP

Answer: A

Explanation:

Question: 249

An engineer working for a private data center with an employee ID 4947.57424 designs a storage area network solution. The requirement is to apply QoS to ensure that Fibre Channel data traffic for

latency-sensitive applications receives higher priority over throughput-intensive applications that are used for

data warehousing Which two attributes must be used to identify and set the Fibre Channel traffic classes?

(Choose two)

- A. egress interface
- B. source WWN
- C. destination FCID
- D. source or destination FCID
- E. source or destination WWN

Answer: DE

Explanation:

Question: 250

A network architect is designing a storage network to connect to an existing IP network over 100G Ethernet ports for multiple hosts The architect decided to require iSCSI multipathing to provide multiple routes between servers within the SAN and storage devices that reside within the IP network. Which requirement must be applied to the IP network switch that connects to the SAN environment where the hosts reside?

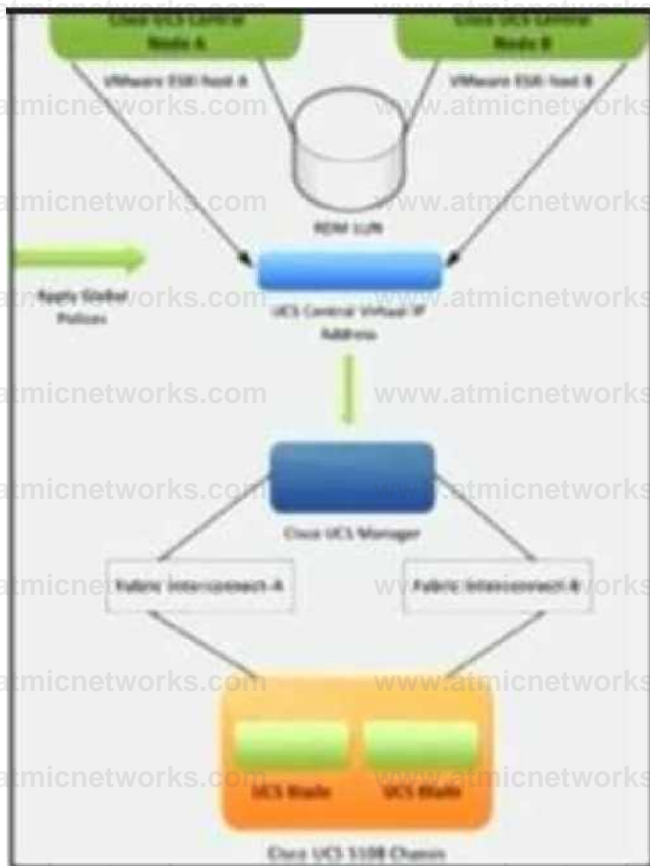
- A. ECMP routes on the IP network to facilitate load sharing
- B. VLAN load balancing to the storage devices
- C. multiple physical connections to the iSCSI SAN device
- D. trunk configuration toward the iSCSI SAN device for multiple VLANs

Answer: A

Explanation:

Question: 251

Refer to the exhibit.



Refer to the exhibit. A network engineer must improve high availability within the given UCS infrastructure. The engineer configured central nodes A and B in cluster mode to ensure that traffic fails over in the case of a network outage. Which type of redundancy will the cluster configuration provide?

- A. redundancy for the management plane only
- B. redundancy via a single fabric interconnect
- C. redundancy for the management, control, and data planes
- D. link-level redundancy via one management port

Answer: C

Explanation:

Question: 252

A network architect wants to automate data center LAN configuration by use of Kubernetes, aligned with Cisco best practices for underlay and overlay provisioning. The automation must be able to operate in high-availability mode with active/active operation between hosts in dual data centers. Which configuration approach must the architect choose?

- A. Cisco OpFlex

B. OpenFlow

C. APIC-EM CLI

D. Cisco Nexus Dashboard Fabric Controller

Answer: D

Explanation:

Question: 253

A networking team must implement a new management solution for the network devices at their organization. The solution must meet these requirements

- It must enable seamless monitoring, configuration, and troubleshooting while ensuring security and reliability.
- It must allow access to devices even if the production network is down.
- It must be easy to use and manage.

The company's budget is limited. Which implementation must the team perform to meet the requirements?

- A. in-band management solution that leverages the existing production network infrastructure for management traffic
- B. console-server solution to provide a dedicated management network
- C. out-of-band management solution to provide redundancy and flexibility
- D. remote-access VPN solution to provide secure access to the network devices

Answer: C

Explanation:

Question: 254

Refer to the exhibit.

A Cisco engineer is configuring Cisco Nexus 7000 Series Switches To simplify initial configuration verification and vPC+/HSRP troubleshooting, the engineer configures the primary vPC+ peer device with the FHRP active router highest priority The primary FHRP device responds to ARP requests, even though the secondary vPC+ device also forwards the data traffic Which configuration enables the

Layer 3 connectivity from each vPC+ peer device?

- A. Set a restore timer that delays the vPC+ restart
- B. Configure a VLAN network interface for the same VLAN from both devices
- C. Manually configure virtual MAC addresses for any FHRP protocol
- D. Ensure that the enhanced Layer 2 license has been installed.

Answer: B

Explanation:

Question: 255

A Cisco engineer is discussing a data center design scenario that consists of 24 Cisco UCS B200M6 Wade servers, 2 Cisco UCS 6454 Fabric Interconnects, and 3 Cisco UCS 5108 server chassis. In the proposed configuration, the server links, which are vNICs on the blades, are associated with a single uplink port. Server-to-server Layer 2 traffic is locally switched, server-to-network traffic goes out on its pinned uplink port, and each server MAC address must be learned before traffic can be forwarded to it. Which feature stipulates that traffic is forwarded to a server only if it is received on a pinned uplink port for this server?

- A. MAC address table visualization
- B. host F Port channeling
- C. native VLAN tagging on both sides
- D. RPF check

Answer: A

Explanation:

Question: 256

A company's data center is currently running on a traditional SAN architecture with Cisco UCS C200 M5 Blade Servers, producing 1000 IOPS. The SAN is becoming a performance bottleneck, so management decided to implement a new solution to provide better performance and scalability.

The preferred solution must meet these requirements:

- Provide at least 10x the performance of the current SAN
- Provide up to 100 Gbps of throughput per node
- Be easily scalable to meet the future needs of the enterprise

Which solution must the company deploy to meet the requirements?

- A. Cisco HyperFlex which provides a high-performance, scalable, and reliable hyperconverged infrastructure design

- B. ACI solution compatible with the current data center design to unlock workload mobility and provide flexible, effective scalability
- C. cloud-based virtual server infrastructure, which provides a scalable, easy-to-manage approach with reduced budget pressure
- D. VMware vSAN solution, which provides storage mobility while remaining compatible with the existing Cisco UCS server infrastructure

Answer: A

Explanation:

Question: 257

To help automate the vHBA configuration process, a network engineer is configuring vHBA template pairs on UCS. The engineer is creating primary and secondary templates to define how vHBAs on a server connect to the SAN. Which fact about the template pair should the engineer consider for its potential impact on service?

- A. The QoS policy configuration will not be shared between the two templates.
- B. The description configuration will be shared between the two templates.
- C. The WWPN pool configuration will not be shared between the two templates.
- D. The fabric ID configuration will be shared between the two templates.

Answer: A

Explanation:

Question: 258

When booting from iSCSI while using multipathing, which type of address must be the same on both boot vNICs?

- A. OUI
- B. EUI

C. IQN

D. WWN

Answer: C

Explanation:

Question: 259

An international corporation migrates its primary and secondary data centers to Cisco ACI. The new architecture must include a disaster recovery solution for critical applications in the primary data center with these requirements:

The secondary data center hosts dedicated workloads, which must remain isolated from the primary data center.

Critical applications must have both Layer 3 and Layer 2 connectivity between data centers.

The ACI policy must be consistent across the data centers.

Flooding between the data centers must be restricted to specific VLANs.

Which solution must be used to accomplish these goals?

- A. Deploy a pair of ACI Remote Leafs in the secondary data center.
- B. Implement the two data centers into an ACI Multi-Site solution.
- C. Deploy two independent ACI fabrics and use LISP for L3 mobility.
- D. Implement Cisco ACI using a Multi-Pod architecture.

Answer: B

Explanation:

Question: 260

An engineer is deploying a Fabric Interconnect within a data center SAN over a Fiber Channel link in end-host mode. The hosts are connected through multiple vHBAs, each of which has been hard-pinned to a specific Fibre Channel uplink. What happens to the vHBAs if the Fibre Channel uplink port fails?

- A. The vHBAs go down and remain down until the fabric interconnect mode is changed to switch mode.
- B. The system performs repinning to an active uplink, and the vHBAs remain operational.
- C. The vHBAs remain operational because SAN pin groups are ignored in end host mode.

D. The vHBAs go down and remain down until the uplink is restored because the system cannot perform repinning.

Answer: D

Explanation:

Question: 261

An organization deploys Cisco UCS-X Series servers in the data center. The deployment must have optimal BIOS configuration to maximize performance for memory-intensive applications. The organization must set the BIOS options to achieve low-latency operation and enhanced memory bandwidth. Which BIOS tuning option on Cisco UCS-X Series servers is needed for memory-intensive workloads?

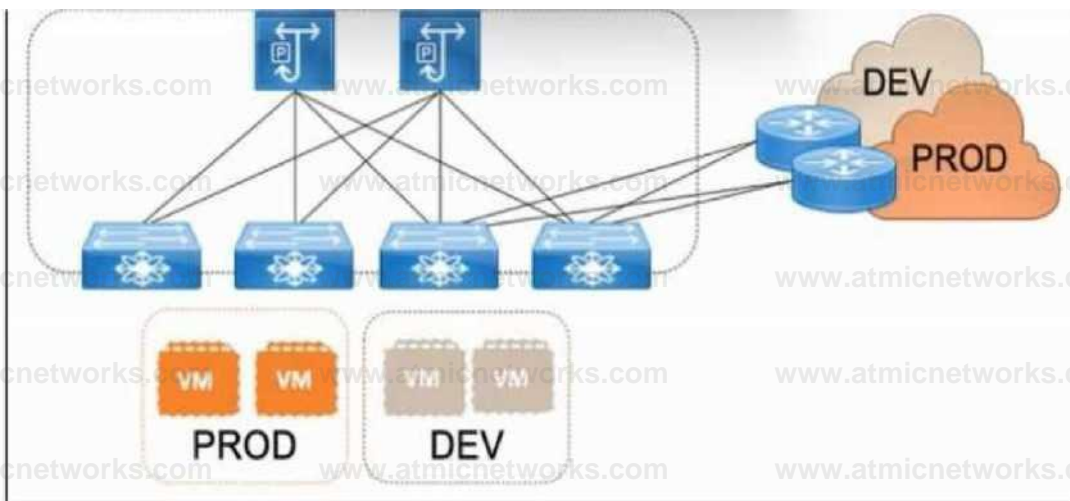
- A. Set "NUMA Optimization" to enhance memory locality for latency-sensitive applications.
- B. Enable "Processor C-States" for better power efficiency during high-performance workloads.
- C. Disable "Turbo Boost" to stabilize performance and reduce heat generation.
- D. Configure "Virtualization Extensions" to improve performance for hypervisor-based environments.

Answer: A

Explanation:

Question: 262

Refer to the exhibit.



A company must implement a multi-tenant environment for DEV and PROD application teams. The design must support end-to-end route isolation for remote external sites, overlapping IP ranges, and fast, transparent application deployment. Which solution meets the objectives?

- A. Implement dedicated ACLs between DEV and PROD.
- B. Configure separate VRFs for DEV and PROD.

- C. Configure independent routing protocols for DEV and PROD.
- D. Implement unique VLANs for DEV and PROD.

Answer: B

Explanation:

Question: 263

What should be implemented on a Cisco Nexus 9300 Series Switch to reduce oversubscription between switches within a Fibre Channel fabric?

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

Answer: B

Explanation:

Question: 264

Which statement describes differences between training and inference in AI learning models?

- A. The inference process requires high throughput to enable rapid training on large datasets.
- B. The training process is more computationally demanding because it processes new data.
- C. The training process is more optimized for low latency, which enables faster analysis of large datasets.
- D. The inference process requires continuous model adjustments to maintain accuracy with new data.

Answer: B

Explanation:

Question: 265

The Cisco UCS environment must be connected to an existing SAN network that consists of several Cisco MDS 9000 Series Switches added to increase storage density. The solution must not exhaust the SAN network from the list of available domain IDs after connecting. Most of the SAN traffic must be mapped from the Cisco UCS blades to a specific group of the fabric interconnect ports. Which configuration must be deployed to meet these requirements?

- A. Dynamic Pinning and UCS Fabric Interconnect in Fibre Channel Switching Mode

- B. Static Pinning and UCS Fabric Interconnect in Fibre Channel End Host Mode
- C. Static Pinning and UCS Fabric Interconnect in Fibre Channel Switching Mode
- D. Dynamic Pinning and UCS Fabric Interconnect in Fibre Channel End Host Mode

Answer: B

Explanation:

Question: 266

A network engineer must design a UCS SAN configuration for vNIC port eth0, which is currently configured directly via the adaptor. The engineer set the Connection Policies option to VMQ and selected a VMQ Connection Policy named Primary-Cluster. What happens to the eth0 running configuration when the configuration is applied?

- A. The existing Adaptor Policy configuration remains active until it is disabled.
- B. The existing Adaptor Policy configuration remains active until it is removed.
- C. The new policy overrides the Adaptor Policy configuration.
- D. The new policy becomes active only when the same policy is applied to vNIC port eth1.

Answer: C

Explanation:

Question: 267

A company is planning to improve the segmentation of its data center network to isolate traffic of different clients across various parts of the facility. The solution must be highly scalable and provide flexible traffic isolation for a growing number of clients. Which action must be taken to best meet the requirements?

- A. Implement VRF-Lite to segment traffic between different network environments.
- B. Configure VXLAN Multi-Tenant mode to segregate traffic by using different network identifiers.
- C. Implement VXLAN with IP-based VLAN segmentation to provide separation for each client while using standard Layer 3 routing.
- D. Enable VXLAN with Border Gateway Protocol EVPN to provide separation and granular routing control.

Answer: D

Explanation:

Question: 268

An enterprise recently provisioned multiple new servers in their data center using service profile templates on Cisco UCS. Server 2 now requires two additional vNICs. How must the engineer facilitate the change to server 2 without affecting the other servers?

- A. Create a new updating template with the additional vNICs and assign it to the server 2 service profile.
- B. Individually update the server 2 service profile with the additional vNICs.
- C. Update the vNIC configuration in an update template with the additional vNICs.
- D. Update the vNIC configuration in the initial template with the additional vNICs.

Answer: B

Explanation:

Question: 269

A network engineer must design a high-performance, lossless Ethernet network to support AI workloads in a data center. The network uses a spine-leaf topology with Cisco Nexus 9000 Series Switches. The design must ensure that critical AI traffic can move seamlessly across the fabric without being dropped due to congestion. The design requirements are:

Prevent packet drops for high-priority AI traffic flows.

Proactively manage and signal congestion to ensure continuous data flow even under heavy load.

Which design approach must be used to meet these requirements?

- A. Enable PFC across all QoS classes. Tune buffer at the spine layer for AI traffic congestion.
- B. Configure PFC on all traffic classes across the spine-leaf topology. Enable ECN only on the leaf switches.
- C. Implement PFC only on high-priority traffic. Configure ECN across both spine and leaf switches.
- D. Use ECN across the network to manage congestion. Adjust the TCP settings for AI workload resilience.

Answer: C

Explanation:

Question: 270

The network engineering team at a large corporation operates a critical data center with stringent business requirements for network reliability and high availability. EIGRP is used as an interior routing protocol. The team is planning to implement a robust new redundancy strategy that minimizes downtime and maximizes network uptime. According to the requirements, business services can tolerate 3 seconds for failover

performance. The solution must be based on RFC 2281. Which action must the team take as part of the implementation?

- A. Implement GLBP to distribute traffic across multiple gateways to provide load sharing.
- B. Implement VRRP to provide Layer 3 gateway redundancy.
- C. Implement EIGRP with equal-cost multipath routing to provide load balancing.
- D. Implement HSRP to provide gateway redundancy and failover.

Answer: D

Explanation:

Question: 271

A network engineer needs to design Layer 2 connectivity for a subnet between two data centers using VXLAN with Cisco Nexus switches. The engineer must ensure seamless host mobility and optimal first-hop routing.

Which gateway MAC attribute must be synchronized across both data centers?

- A. HSRP
- B. anycast
- C. multicast
- D. VRRP

Answer: B

Explanation:

Question: 272

Which vNIC/vHBA Placement policy should be selected in Cisco UCS Manager to ensure that only dynamic and static vNICs and vHBAs are explicitly assigned to the policy?

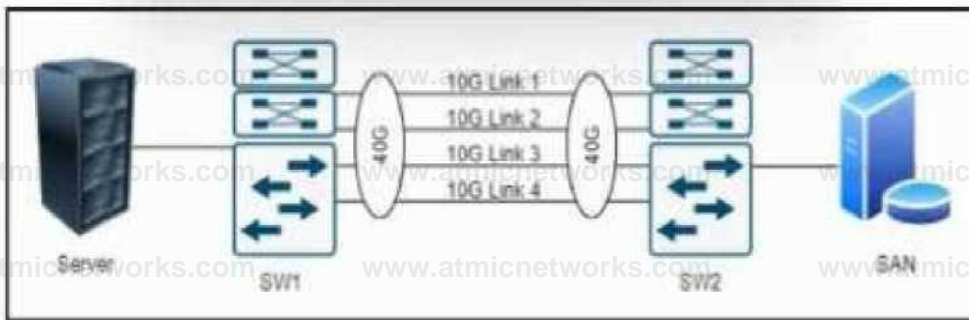
- A. Assigned Only
- B. Exclude usNIC
- C. All
- D. Exclude Unassigned

Answer: A

Explanation:

Question: 273

Refer to the exhibit.



Refer to the exhibit. A 4x10G Fibre Channel has been configured between SW1 and SW2 to carry backup traffic sourced to and from the SAN. An engineer noticed that 10G Link 1 is being used more heavily than the other links within the port channel. Which action must the engineer take on the two switches to ensure that the traffic uses all available links between SW1 and SW2?

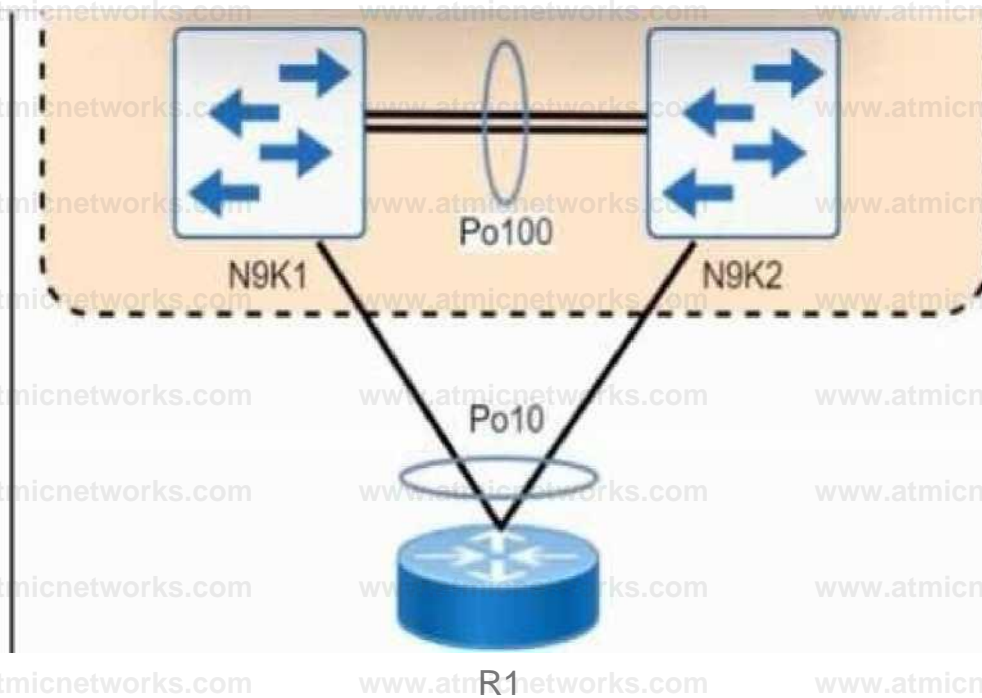
- A. Configure exchange-based load-balancing.
- B. Configure flow-based load-balancing.
- C. Configure src-dst-ip-based load-balancing.
- D. Configure dst-mac-based load-balancing.

Answer: A

Explanation:

Question: 274

Refer to the exhibit.



Refer to the exhibit. Two Cisco Nexus 9000 Series Switches exchange OSPF routing information with R1.

Which action accomplishes this goal?

- A. Add layer3 peer-router under vPC domain.
- B. Add layer3 peer-router under vPC interface link.
- C. Add peer-gateway under vPC domain.
- D. Add peer-gateway under vPC interface link.

Answer: A

Explanation:

Question: 275

An engineer must complete vNIC and vHBA allocations for 16 new servers. All servers currently have the same requirements, but the company wants to be prepared for a future update to add additional vNICs and vHBAs to servers 14, 15, and 16 only. The engineer decided to use service profile templates to complete the task. Which approach must the engineer take?

- A. Create the 16 service profiles via an initial template, and manually update servers 14, 15, and 16 with additional vNIC and vHBA when required.
- B. Create the 16 service profiles via an updating template, and update the template with the additional vNIC and vHBA when required.
- C. Create the 16 service profiles via an initial template, and then update the initial template with

additional vNICs and vHBAs for servers 14, 15, and 16.

D. Create service profiles for servers 1 through 13 via an initial template, and create separate service profiles for servers 14, 15, and 16 via an updating template that includes the additional vNIC and vHBA.

Answer: D

Explanation:

Question: 276

In this data structure, what is the XML terminology for the currency="usd" code snippet?

```
<? xml version="1.0" encoding="UTF-8"?>
```

```
<ciscopress>
```

```
<book isbn="50581730795252386">
```

```
<title>Routing TCP/IP</title>
```

```
<author>Jeff Doyle</author>
```

```
<category></category>
```

```
<year>2005</year>
```

```
<edition>2</edition>
```

```
<price currency="usd">72</price>
```

```
</book>
```

```
</ciscopress>
```

A. root element end tag

B. attribute

C. character

D. root element start tag

Answer: B

Explanation:

Question: 277

A small company hosts several critical applications on bare-metal servers connected via iSCSI protocol to

shared JBOD storage. One of the critical applications is experiencing latency issues, which the engineering team suspects is due to incorrect prioritization for iSCSI traffic. An engineer must update the network QoS settings to prioritize iSCSI traffic with these requirements:

iSCSI traffic must be prioritized.

The solution must be able to differentiate between different types of iSCSI traffic.

The solution must be scalable because iSCSI traffic is expected to increase in the future.

The solution must not disrupt other traffic.

Which two configurations must the engineer apply to the devices on the network to meet the requirements? (Choose two.)

A. `class-map match-all iSCSI`

`match access-group name iSCSI`

`policy-map QoS_Policy`

`class iSCSI`

`priority percent 50`

B. `ip access-list extended iSCSI`

`permit tcp any any eq 3260`

C. `policy-map QoS_Policy`

`class class-default`

`priority percent 100`

`police rate 100 mbps burst 5000 packets conform-action transmit exceed-action drop`

D. `ip access-list extended iSCSI`

`permit tcp any any eq 865`

Answer: A, B

Explanation:

*solution based on Cisco HX240 compute nodes

C. *virtual desktop infrastructure solution installed in multiple data centers that are close to the end users

*solution based on Cisco HX240 compute nodes

D. *dedicated virtual machine per hypervisors for each user in a centralized data center

*solution based on Cisco HX220 compute nodes