200-155

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200-155

Introducing Cisco Data Center Technologies

Exam A

QUESTION 1
Which two Cisco Nexus 1000V Series Switch features exceed the functionality of the VMware vNetwork Distributed Switch? (Choose two.)

A. access control lists
B. QoS marking
C. Network vMotion
D. port state migration
E. DV Port Groups

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 2
When using a Cisco UCS Director, a typical workflow consists of which two items? (Choose two.)

A. Resource Manager
B. Workflow Designer
C. Scheduler
D. Activity Planner
E. Predefined Tasks

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

A typical workflow consists of the following elements:
• Workflow Designer (GUI interface)
• Predefined Tasks

Reference: http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-director/orchestration-guide/5-3/b_UCS_Director_Orchestration_Guide_5_3/understanding___workflows.pdf

QUESTION 3
Which model is a deployment model in cloud computing?

A. automatic cloud
B. layered cloud
C. private cloud
D. collapsed cloud

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Cloud Deployment ModelsA cloud deployment model represents a specific type of cloud environment, primarily distinguished by ownership, size, and access. There are four common cloud deployment models:

- Public Clouds
- Community Clouds
- Private Clouds
- Hybrid Clouds
- Other Deployment Models

Reference: http://whatiscloud.com/cloud_deployment_models/index

QUESTION 4
Which statement about a bridge domain is true?

A. A bridge domain must be linked to one internal network and one external network.
B. A bridge domain must be linked to a physical domain.
C. A bridge domain typically has at least one subnet that is associated with it.
D. A bridge domain must have at least one external network that is associated with it.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 5
Which two options are primary elements of a tenant? (Choose two.)

A. firewall rules
B. contracts
C. EPG
D. access policies
E. switch domains

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Tenants can be isolated from one another or can share resources. The primary elements that the tenant contains are filters, contracts, outside networks, bridge domains, contexts, and application profiles that contain endpoint groups (EPGs). Entities in the tenant inherit its policies.

Reference: http://www.cisco.com/c/en/us/td/docs/switches/datacenter/aci/apic/sw/1-x/basic-config/b_ACI_Config_Guide/b_ACI_Config_Guide_chapter_0100.html

QUESTION 6

```
Nexus-7K1# config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Nexus-7K1(config)# vdc Nexus-7K1-VDC2
Note: Creating VDC, one moment please ...
Nexus-7K1(config-vdc)# allocate interface e4/1-12
Moving ports will cause all config associated to them in source vdc to be
removed. Are you sure you want to move the ports (y/n)? [yes] yes
```

Refer to the exhibit. A network engineer allocates 12 physical ports to a new VDC. Which command is used to verify VDC port allocation on a Cisco Nexus switch?

A. show vdc port-membership
B. show vdc port-allocation
C. show vdc allocation
D. show vdc membership

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

show vdc membership
To display the interface membership information for the virtual device contexts (VDCs), use the show vdc membership command.
show vdc membership [status]

Reference: http://www.cisco.com/en/US/docs/switches/datacenter/sw/5_x/nx-os/virtual_device_context/command/reference/vdc_commands.html

QUESTION 7
Which two protocols are encapsulated in FCoE? (Choose two.)

A. iSCSI
B. Fibre Channel
C. CIFS
D. NFS
E. SCSI

Correct Answer: BE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Explanation: FCoE virtual links replace the physical Fibre Channel links by encapsulating Fibre Channel frames in Ethernet frames, and an FCoE virtual link is identified by the MAC addresses of the two FCoE endpoints.

Reference: http://www.cisco.com/c/en/us/products/collateral/switches/nexus-7000-series-switches/white_paper_c11-560403.html

QUESTION 8
What are two advantages to running FabricPath in the data center over using Spanning Tree? (Choose two.)

A. provides multichassis EtherChannel capabilities
B. allows every switch to send BPDUs to each other to ensure the L2 topology is synchronized
C. has L2 multipath forwarding capabilities
D. uses 802.1q trunks to ensure VLANs are propagated through the topology
E. uses TTL field to provide loop mitigation

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Efficiency and high performance − Because equal-cost multipath (ECMP) can be used the data plane, the network can use all the links available between any two devices. The first-generation hardware supporting Cisco FabricPath can perform 16-way ECMP, which, when combined with 16-port 10-Gbps PortChannels, represents bandwidth of 2.56 terabits per second (Tbps) between switches.

Loop prevention and mitigation is available in the data plane, helping ensure safe forwarding that cannot be matched by any transparent bridging technology. Cisco FabricPath frames include a timeto-live (TTL) field similar to the one used in IP, and a reverse-path forwarding (RPF) check is also applied

Reference: http://www.cisco.com/c/dam/en/us/products/collateral/switches/nexus-7000-series-switches/at_a_glance_c45-605626.pdf

QUESTION 9
Which privilege is assigned by default to the UCS Manager Storage Administrator user role?

A. service-storage-security-config
B. service-admin-config
C. service-admin
D. service-profile-storage

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Privilege	Description	Default Role Assignment
service-profile-storage	Service profile storage	Storage Administrator
service-profile-storage-policy	Service profile storage policy	Storage Administrator

Reference:
http://www.cisco.com/en/US/docs/unified_computing/ucs/sw/gui/config/guide/141/UCSM_GUI_Configuration_Guide_141_chapter9.html#concept_842995A3D6954CDDBC07EAB7EE6E74B5

QUESTION 10
Which two standards enable Ethernet to support FCoE? (Choose two.)

A. Priority Flow Control
B. Virtual Extensible LAN
C. Enhanced Transmission Selection
D. Address Resolution Protocol
E. virtual port channel and virtual device context

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Enhancements to Ethernet The T11 organization's FC-BB-5 standard defines FCoE, and also defines running FC over other media types. The IEEE 802.1 organization facilitates FCoE by defining enhancements to Ethernet. These enhancements fall under the DCB umbrella, specifically, three enabling standards for Ethernet to support FCoE:
1. Priority-based Flow Control (PFC)
2. Enhanced Transmission Selection (ETS)

3. Data Center Bridging Exchange (DCBX)

Reference: http://www.cisco.com/c/dam/en/us/products/collateral/storage-networking/mds-9700-series-multilayer-directors/guide-c07-733622.pdf

QUESTION 11
The APIC is responsible for which two processes? (Choose two.)

A. network policy configuration
B. fabric segmentation
C. BGP end-node emulation
D. ISL blocking per STP implementation
E. switch firmware management

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

The APIC is responsible for fabric activation, switch firmware management, network policy configuration, and instantiation. While the APIC acts as the centralized policy and network management engine for the fabric, it is completely removed from the data path, including the forwarding topology. Therefore, the fabric can still forward traffic even when communication with the APIC is lost.

Reference: http://www.cisco.com/c/en/us/td/docs/switches/datacenter/aci/apic/sw/1-x/aci-fundamentals/b_ACI-Fundamentals/b_ACI-Fundamentals_chapter_010000.pdf

QUESTION 12
What are two main benefits of standardized open API's in a multi-vendor environment? (Choose two.)

A. automation
B. clustering
C. interoperability
D. centralized management
E. configuration management

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 13
Which device connects Cisco UCS B-Series to Cisco Fabric Switches?

A. Fabric Extender
B. a host bus adapter
C. Fabric Interconnects
D. a fabric switch

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 14
Which item in Cisco Unified Computing System is subject to finite state machine validation?

A. SNMP get
B. server boot
C. firmware downloads
D. server discovery

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

An FSM is a workflow model, similar to a flow chart, that is composed of the following:
• A finite number of stages (states)
• Transitions between those stages
• Operations
The current stage in an FSM is determined by past stages and the operations performed to transition between the stages. A transition from one stage to another is dependent on the success or failure of an operation.

Cisco UCS Manager uses FSM tasks that run in the Data Management Engine (DME) to manage end points in the Cisco UCS object model, including the following:
• Physical components (chassis, I/O module, servers)
• Logical components (LAN cloud, policies)
• Workflows (server discovery, service profile management, downloads, upgrades, backups)

Reference: http://www.cisco.com/en/US/docs/unified_computing/ucs/ts/Frame-Files-Converted-to-DITA--Do-Not-Use/TS_FSM.html

QUESTION 15
Which management platform reduces server provisioning time by automatically performing an inventory and deep discovery when new devices are attached?

A. UCS Manager
B. UCS Server
C. CDP Manager
D. Enterprise Manager

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Explanation: One of the main solution benefits is the reduction in server provisioning time. Whenever additional chassis are racked, stacked, and cabled and their server ports are configured, the Cisco UCS Manager will automatically perform an inventory and deep discovery of any subsequently attached equipment, without requiring manual intervention. Regardless of how many new chassis are connected, the discovery process would take about 10 minutes to discover all chassis in parallel and bring their physical resources in to the information tree under the Equipment tab.

Reference: http://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-manager/whitepaper_c11-697337.html

QUESTION 16
Which two are benefits of Cisco Unified Fabric? (Choose two.)

A. SNMPv3 strong authentication
B. reduced cabling
C. zone port distribution
D. consolidation of LAN and SAN over a common transport
E. native AES-256 encryption of data in flight

Correct Answer: BD
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 17
A customer has two Cisco UCS 6248 Fabric Interconnects in a cluster connected to one Cisco UCS 5108 Chassis via:
- 2 ports from the primary fabric interconnect to chassis 1, I/O module A
- 2 ports from the secondary fabric interconnect to chassis 1, I/O module B

The customer wants to ensure maximum redundancy and bandwidth. Within Cisco UCS Manager, how should the chassis discovery policy and link grouping be configured before the new chassis is discovered?

A. 4-link, none
B. 2-link, none
C. 2-link, port channel
D. 4-link. port channel

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Link: http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/sw/gui/config/guide/2-0/b_UCSM_GUI_Configuration_Guide_2_0/b_UCSM_GUI_Configuration_Guide_2_0_chapter_01100.html

QUESTION 18
A network engineer is migrating the server farm from 1 Gb/s Ethernet connectivity to 10 Gb/s Ethernet connectivity. What two Cisco Nexus Fabric Extenders support 10 Gb/s server connectivity? (Choose two.)

A. Nexus 2148T
B. Nexus 2232PP
C. Nexus 2248TP
D. Nexus 2248PQ
E. Nexus 2224TP

Correct Answer: AE

Section: (none)
Explanation

Explanation/Reference:
Explanation:

Reference:http://www.cisco.com/c/en/us/products/collateral/switches/nexus-2000-series-fabric-extenders/data_sheet_c78-507093.html

QUESTION 19
Which statement about EPGs is true?

A. EPGs can both provide and consume a contract.
B. EPGs can provide, but cannot consume a contract.
C. EPGs can consume, but cannot provide a contract.
D. EPGs neither provide or consume contracts.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Contracts define inbound and outbound permit, deny, and QoS rules and policies such as redirect. Contracts allow both simple and complex definition of the way that an EPG communicates with other EPGs, depending on the requirements of the environment. Although contracts are enforced between EPGs, they are connected to EPGs using provider-consumer relationships. Essentially, one EPG provides a contract, and other EPGs consume that contract.

Reference: http://www.cisco.com/en/US/prod/collateral/netmgtsw/ps13004/ps13460/white-paper-c11-729906_ns1261_Networking_Solutions_White_Paper.html

QUESTION 20
Which option is a benefit of Unified Fabric Delivery to an IT organization?

A. lower total cost of ownership
B. reduced memory requirements
C. increased storage capacity
D. improved security

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Cisco Unified Fabric is the interconnection point for applications, stored data, and users that can help you:
• Build an intelligent, high-performing infrastructure with multidimensional scalability for the data center network
• Simplify your data center architecture and reduce costs with LAN and SAN convergence, helping you reduce capital costs with fewer devices, simpler management, and more flexible configuration policies
• Create an open, programmable network backbone that is easier and faster to deploy and manage

Reference: http://www.cisco.com/c/dam/en/us/products/collateral/switches/nexus-7000-series-switches/at_a_glance_c45-617345.pdf

QUESTION 21
Which two options are control plane protocols? (Choose two.)

A. BGP
B. ARP
C. NAT
D. SMTP
E. CoPP

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Explanation: The control plane: The control plane is the brain of the router. It consists of dynamic IP routing protocols (that is OSPF, IS-IS, BGP, and so on), the RIB, routing updates, in addition to other protocols such as PIM, IGMP, ICMP, ARP, BFD, LACP, and so on. In short, the control plane is responsible for maintaining sessions and exchanging protocol information with other router or network devices.

Reference: http://www.ciscopress.com/articles/article.asp?p=2272154&seqNum=3

QUESTION 22
Which tool organizes workflows to automate simple and complex actions on infrastructure?

A. Cisco UCS Manager
B. Cisco UCS Director
C. Cisco DCNM
D. Cisco UCS server

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

You can build Cisco UCS Director workflows to automate simple or complex provisioning and configuration processes.

Reference: https://www1.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-director/HP-OA-Mgt-Guide/6-0/b_Cisco_UCS_Director_HP_OA_Management_Guide_60/b_Cisco_UCS_Director_HP_OA_Management_Guide_60_chapter_010.html

QUESTION 23
Which two components are part of the Cisco Unified Computing System 2104 I/O Module? (Choose two.)

A. multiplexer
B. chassis management console
C. finite state machine
D. data management engine
E. chassis management controller

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 24
Where does the data plane operate on a Cisco Nexus 7000 Series Switch?

A. supervisor module
B. unified crossbar fabric
C. unified port controller
D. Connectivity Management Processor

Correct Answer: B
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 25
Which option describes Cisco's virtual device context feature?

A. logical virtualization of a single physical switch
B. logical switches aggregated into a single physical switch
C. logical switches aggregated into multiple physical switches
D. multiple physical switches partitioned to a single virtual switch

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Cisco NX-OS introduces support for virtual device contexts (VDCs), which allows the switches to be virtualized at the device level. Each configured VDC presents itself as a unique device to connected users within the framework of that physical switch. The VDC runs as a separate logical entity within the switch, maintaining its own unique set of running software processes, having its own configuration, and being managed by a separate administrator.

Reference: http://www.cisco.com/c/en/us/products/collateral/switches/nexus-7000-10-slot-switch/White_Paper_Tech_Overview_Virtual_Device_Contexts.html

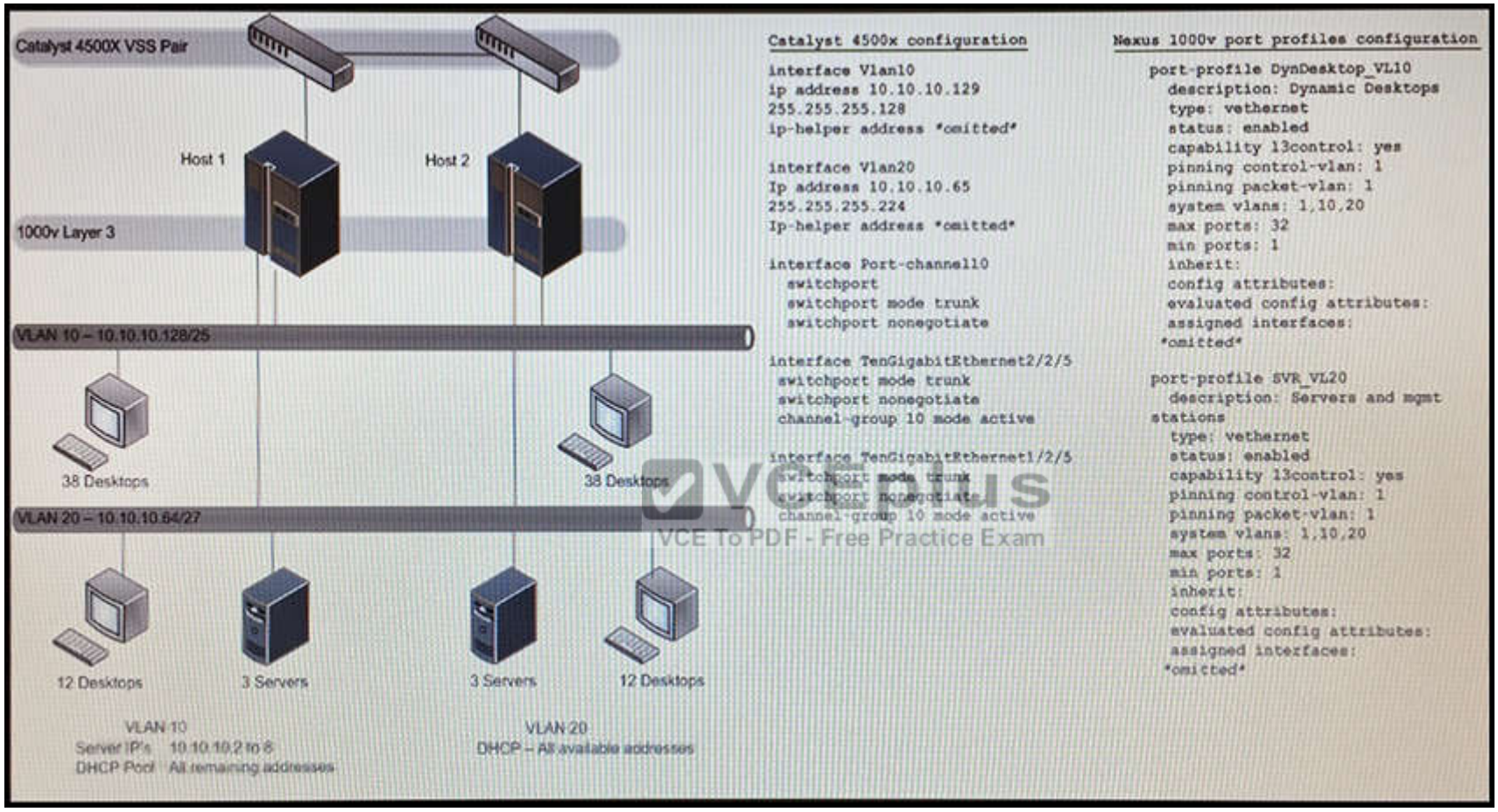
QUESTION 26
Layer 3 networks can be logically separated by which technology?

A. bridge domain
B. VRF
C. VLAN
D. tenant

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 27



Refer to the exhibit. An engineer is presented with a VMware ESX cluster consisting of two VMware ESX hosts running Nexus 1000v. The guest system inventory consists of 100 static virtual desktops. What change will permit all 100 guests to be online at the same time?

A. increase the subnet size for VLAN 10 on the 4500x core
B. increase the max-ports setting for the VLAN 10
C. increase the global max-ports setting in the Nexus 1000v
D. increase the max-ports setting for both VLAN 10 and 20

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 28
FCoE interfaces are defined as which two port types? (Choose two.)

A. VZ Port
B. VE Port
C. VF Port
D. VI Port
E. VS Port

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

VF PortBeginning in Cisco NX-OS Release 5.0(2)N1(1), vFC interfaces always operate in trunk mode; vFC interfaces do not operate in any other mode. You can configure allowed VSANs on a vFC by using theswitchport trunk allowed vsan command under the vfc interface (which is similar to FC TF and TE ports). For vFC interfaces that are connected to hosts, port VSAN is the only VSAN that supports logins (FLOGI). We recommend that you restrict the allowed VSANs for such vFC interfaces to the port VSAN by using theswitchport trunk allowed vsan command in the interface mode to configure a VF port.
Cisco NX-OS Release 5.0(2)N1(1) includes support for 160 vFC interfaces.
The vFC VSAN assignment and the global VLAN-to-VSAN mapping table enables the Cisco Nexus 5000 Series switch to choose the appropriate VLAN for a VF port.
The VF port support over 10G-FEX interfaces feature is supported only in Cisco Nexus 2000 Series Fabric Extender straight-through topologies where each Fabric Extender is directly connected to a Cisco Nexus 5000 Series switch.
VE PortsA virtual E port (VE port) is a port that emulates an E port over a non-Fibre Channel link. VE port connectivity between Fibre Channel Forwarders (FCFs) is supported over point-to-point links. These links can be individual Ethernet interfaces or members of an Ethernet port-channel interface. For each of the FCF connected Ethernet interfaces you must create and bind an vFCinterface to the Ethernet interface. Configure vFC interfaces as VE ports by using the switchport mode e command in interface mode.
VE ports have the following guidelines:

- Auto mode on the vFC is not supported.
- VE Port trunking is supported over FCoE-enabled VLANs.

- VE Port interface binding to MAC addresses is not supported.
- By default the VE Port is enabled for trunk mode.

You can configure multiple VSANs on the VE port. You must configure the FCoE VLANs that correspond to the VE port's VSANs on the bound Ethernet interface.

- The Spanning Tree Protocol is disabled on the FCoE VLANs on any interface that a vFC interface is bound to, which includes the interfaces that the VE ports are bound to.

Reference: http://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/san_switching/502_n2_1/b_Cisco_n5k_nxos_sanswitching_config_guide_rel502_n2_1/Cisco_n5k_nxos_sanswitching_config_guide_rel502_n2_1_chapter3.html

QUESTION 29
What is an advantage of cloud computing?

A. minimal downtime
B. limited control
C. vendor lock-in
D. cost savings

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Reference:
http://www.levelcloud.net/why-levelcloud/cloud-education-center/advantages-and-disadvantages-of-cloud-computing/

QUESTION 30
DRAG DROP

Drag the Network virtualization technology on the left to the correct definition on the right.

Select and Place:

Chassis FEX	Consolidates network management and presents physical switchports as a member of the parent switch
Adapter FEX	Consolidates the virtual and physical network and provides a virtual interface on the physical switch
FEX	Consolidates multiple IO module interfaces between fabric extenders and servers
VM FEX	Consolidates multiple physical interfaces and extends the network into the server

Correct Answer:

FEX

VM FEX

Chassis FEX

Adapter FEX

Section: (none)
Explanation

Explanation/Reference:

QUESTION 31

Which policy is typically required for communication between two EPGs within an ACI fabric?

A. contracts
B. VRF
C. bridge domain
D. VLAN

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 32
Which two devices are supported for connecting a server to the Cisco UCS 6248 Fabric Interconnect? (Choose two.)

A. Cisco UCS 5108
B. Cisco Nexus 5548P
C. Cisco Nexus 2248TP
D. Cisco UCS 2208XP
E. Cisco Nexus 2232PP

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 33
How many VRFs are present in Cisco Nexus OS by default?

A. 0
B. 1
C. 2
D. 4

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Management VRF and Default VRF
Each router has a management VRF and a default VRF:
Management VRF
- The management VRF is for management purposes only.
- Only the mgmt 0 interface can be in the management VRF.
- The mgmt 0 interface cannot be assigned to another VRF.
- The mgmt 0 interface is shared among multiple VDCs.
- No routing protocols can run in the management VRF (static only).

Default VRF
- All Layer 3 interfaces exist in the default VRF until they are assigned to another VRF.
- Routing protocols run in the default VRF context unless another VRF context is specified.
- The default VRF uses the default routing context for all show commands.
- The default VRF is similar to the global routing table concept in Cisco IOS.

Reference: https://supportforums.cisco.com/document/133711/vrf-configuration-and-verification-nexus-7000

QUESTION 34
Which two adapters for Cisco UCS B-Series blade servers and C-Series rack servers allow configuration of virtual interfaces? (Choose two.)

A. M81-KR
B. P71E
C. VIC-1225
D. P61E
E. VIC-1280

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 35
A network engineer is configuring a pair of 6248 Fabric Interconnects, each with dual 10G uplinks to a parent switch. One design requirement is to ensure a specific server is able to use 10G of throughput to the LAN without contention from other servers within the 5108 chassis. Which technology will accomplish this?

A. Port-Channels
B. Unified Ports
C. LAN Pin Groups
D. System QoS Policy

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 36
A UCS administrator has been tasked with creating a new server profile. Which two pools can be used to assign Layer 2 interface information? (Choose two.)

A. Server
B. Mac Address
C. IP address
D. UUID
E. WWN

Correct Answer: BE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 37
An engineer is configuring the UCS Fabric Interconnects for network connectivity to the data center LAN and SAN. Which two ports types need to be configured to allow traffic to flow properly? (Choose two.)

A. Ethernet uplink
B. server uplink
C. appliance
D. Fibre Channel uplink
E. Fibre Channel storage

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Cisco UCS Fabric Interconnects provide these port types:
- Server Ports—Server Ports handle data traffic between the Fabric Interconnect and the adapter cards on the servers.

You can only configure Server Ports on the fixed port module. Expansion modules do not support Server Ports.
- Uplink Ethernet Ports—Uplink Ethernet Ports connect to external LAN Switches. Network bound Ethernet traffic is pinned to one of these ports.

You can configure Uplink Ethernet Ports on either the fixed module or an expansion module.
- Uplink Fibre Channel Ports—Uplink Fibre Channel Ports connect to external SAN Switches. Network bound Fibre Channel traffic is pinned to one of these ports.

Reference: http://www.cisco.com/c/en/us/support/docs/servers-unified-computing/ucs-6120xp-20-port-fabric-interconnect/110267-ucs-uplink-ethernet-connection.html

QUESTION 38
Which vPC connection creates the illusion of a single control plane?

A. vPC keepalive link
B. vPC control link
C. vPC management link
D. vPC peer link
E. vPC overlay link

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:
The vPC peer link is the most important connectivity element in the vPC system. This link is used to create the illusion of a single control plane by forwarding Bridge Protocol data units (BPDUs) or Link Aggregation Control Protocol (LACP) packets to the primary vPC switch from the secondary vPC switch.

Reference: http://www.cisco.com/c/en/us/products/collateral/switches/nexus-5000-series-switches/design_guide_c07-625857.html

QUESTION 39
Which two installation models are supported by Cisco virtual interfaces? (Choose two.)

A. pass-through switching
B. store-and-forward switching
C. channeled uplink
D. hypervisor controlled
E. native switching

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 40
A network design engineer is asked to design a SAN for a company. Which two underlying principles of SAN design should be considered? (Choose two.)

A. fault isolation, consolidation while maintaining isolation
B. future growth in LAN infrastructure
C. security management, preferential network security
D. scalability of LAN infrastructure, reduced Ethernet QoS complexity
E. short and long term port density and topology requirements

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Principles of SAN Design
The underlying principles of SAN design are relatively straightforward: plan a network topology that can handle the number of ports necessary now and into the future; design a network topology with a given end-to-end performance and throughput level in mind, taking into account any physical requirements of a design (for example, whether the data center is or will in the future be located on multiple floors of a building or in multiple buildings or locations); and provide the necessary connectivity with remote data centers to handle the business requirements of business continuity and disaster recovery.
These underlying principles fall into five general categories:
• Port density and topology requirements-Number of ports required now and in the future
• Device performance and oversubscription ratios-Determination of what is acceptable and what is unavoidable
• Traffic management-Preferential routing or resource allocation

• Fault isolation-Consolidation while maintaining isolation
• Control plane scalability-Reduced routing complexity

Reference: http://www.cisco.com/c/en/us/products/collateral/interfaces-modules/storage-networking-modules/prod_white_paper0900aecd8044c807.html

QUESTION 41
A user is trying to create a new VDC in NX-OS in global configurations mode, but receives an error message. What issue prevents the user from creating Virtual Device Context?

A. VDCs cannot be created in global configuration mode.
B. The user is not a vdc-admin.
C. The user is not a member of the VDC Power Admin group.
D. The user is not a network-admin.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

VDCs have the following configuration guidelines and limitations:
- Standard VDCs cannot share interfaces, VLANs, Virtual Routing and Forwarding (VRF) tables, or port channels.
- Only users with the network-admin role can create VDCs.

Reference: http://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#concept_967368376CF246FA8B200C78081B389A

QUESTION 42
What are two features of a Cisco Nexus 2232TM Fabric Extender? (Choose two.)

A. 10 Gigabit uplinks
B. RJ45 host interfaces
C. unified ports
D. 4 uplink ports
E. side-to-back airflow

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Reference: http://www.cisco.com/c/en/us/products/collateral/switches/nexus-2000-series-fabric-extenders/data_sheet_c78-507093.html

QUESTION 43
Which two chassis discovery policy settings allow for a UCS chassis to be connected to a pair of Fabric Interconnect using only two physical connections? (Choose two.)

A. 4-link
B. 2-link
C. 8-link
D. 1-link
E. Platform-max

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Number of Links Wired for the Chassis	1-Link Chassis Discovery Policy	2-Link Chassis Discovery Policy	4-Link Chassis Discovery Policy	8-Link Chassis Discovery Policy	Platform-Max Discovery Policy
2 links between IOM and fabric interconnects	Chassis is discovered by Cisco UCS Manager and added to the Cisco UCS domain as a chassis wired with 1 link. After initial discovery, acknowledge the chassis and Cisco UCS Manager-recognizes and uses the additional links.	Chassis is discovered by Cisco UCS Manager and added to the Cisco UCS domain as a chassis wired with 2 link.	Chassis cannot be discovered by Cisco UCS Manager and is not added to the Cisco UCS domain.	Chassis cannot be discovered by Cisco UCS Manager and is not added to the Cisco UCS domain.	Chassis cannot be discovered by Cisco UCS Manager and is not added to the Cisco UCS domain.

Reference: http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/sw/gui/config/guide/2-0/b_UCSM_GUI_Configuration_Guide_2_0/b_UCSM_GUI_Configuration_Guide_2_0_chapter_01100.html

QUESTION 44
Which Layer 3 protocol is used within the ACI fabric?

A. OpenFlow
B. EIGRP
C. OSPF
D. IS-IS

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 45
Policies that are applied by the APIC are typically based on which type of infrastructure?

A. application-centric
B. performance-specific
C. leaf-specific
D. network-centric

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:
The Cisco Application Policy Infrastructure Controller (APIC) is a key component of an Application Centric Infrastructure (ACI), which delivers a distributed, scalable, multi-tenant infrastructure with external end-point connectivity controlled and grouped via application centric policies. The APIC is the key architectural component that is the unified point of automation, management, monitoring and programmability for the Application Centric Infrastructure. The APIC supports the deployment, management and monitoring of any application anywhere, with a unified operations model for physical and virtual components of the infrastructure.

Reference: https://developer.cisco.com/media/apicDcPythonAPI_v0.1/understanding.html

QUESTION 46
Which feature monitors state transitions of components and processes in Cisco Unified Computing System?

A. logical state arbiter
B. discovery
C. finite state machine

D. state monitor

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

A finite state machine (FSM) is a workflow model, similar to a flow chart, that is composed of the following:
• Finite number of stages (states)
• Transitions between those stages
• Operations
The current stage in the FSM is determined by past stages and the operations performed to transition between the stages. A transition from one stage to another stage is dependent on the success or failure of an operation.
Cisco UCS Manager uses FSM tasks that run in the Data Management Engine (DME) to manage end points in the UCS object model, including the following:
• Physical components (chassis, I/O module, servers)
• Logical components (LAN cloud, policies)
• Workflows (server discovery, service profile management, downloads, upgrades, backups)
Reference: http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ts/faults/reference/ErrMess/FaultsIntroduction.html#wp1082815

QUESTION 47
Which option describes the STP requirements for Cisco FabricPath?

A. MST must be configured on every Cisco FabricPath VLAN.
B. STP is required only to resolve border link failures.
C. RPVST must be configured on every Cisco FabricPath VLAN.
D. STP is not required on Cisco FabricPath interfaces.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 48
What are two key components of the Cisco Application Centric Infrastructure architecture? (Choose two.)

A. access switch

B. Application-Centric Infrastructure Controller
C. distribution switch
D. spine switch
E. Application Policy Infrastructure Controller

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Reference: http://www.cisco.com/c/en/us/solutions/data-center-virtualization/application-centric-infrastructure/index.html

QUESTION 49
An engineer wants to restore a Cisco Nexus 1000v switch to factory default settings. Which two commands accomplish this action? (Choose two.)

A. write erase running-config
B. reboot
C. write erase boot
D. reload
E. copy running-config startup-config

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Erasing a Configuration Use this procedure to erase a startup configuration.
BEFORE YOU BEGIN Before using this command, you must know or do the following:

Caution The write erase command erases the entire startup configuration with the exception of loader functions, the license configuration, and the certificate extension configuration.

• You are logged in to the CLI.

• The following parameters are used with this command:
– boot: Erases the boot variables and the mgmt0 IP configuration.
– debug: Erases the debug configuration.
DETAILED STEPS

	Command	Description
Step 1	**write** **erase** [boot | de-bug]	The existing startup configuration is completely erased and all settings revert to their factory de-faults. The running configuration is not affected.

Reference: http://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus1000/sw/4_0/system_management/configuration/guide/n1000v_sys_manage/system_3config.html#wp1087208

QUESTION 50
Which two Cisco data center devices can participate in FabricPath? (Choose two.)

A. Cisco MDS 9500 Series directors
B. Cisco Nexus 7000 Series Switches
C. Cisco Nexus 5500 Series Switches
D. Cisco Nexus 1000V
E. Cisco Nexus 4900 Series Switches

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 51
A Cisco UCS administrator is ready to cable two newly racked Fabric Interconnects. Which two cabling configurations should be used for the heartbeat connectivity? (Choose two.)

A. Connect the Layer 1 port of Fabric Interconnect A to the Layer2 port of Fabric Interconnect
B. Connect the Layer 2 port of Fabric Interconnect A to the Layer2 port of Fabric Interconnect
C. Connect the Layer 1 port of Fabric Interconnect A to the Layer1 port of Fabric Interconnect
D. Keep the Layer 2 port of both Fabric Interconnects disconnected.
E. Connect the Layer 2 port of Fabric Interconnect A to the Layer1 port of Fabric Interconnect

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 52
What are the two default user roles in Cisco UCS Manager RBAC? (Choose two.)

A. Operations
B. AAA Administrator
C. Root
D. Local
E. Sudo

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Explanation: Default User Roles The system contains the following default user roles:
AAA Administrator
Read-and-write access to users, roles, and AAA configuration. Read access to the rest of the system.
Administrator
Complete read-and-write access to the entire system. The default admin account is assigned this role by default and it cannot be changed.
Facility Manager
Read-and-write access to power management operations through the power-mgmt privilege. Read access to the rest of the system.
Network Administrator
Read-and-write access to fabric interconnect infrastructure and network security operations. Read access to the rest of the system.

Operations
Read-and-write access to systems logs, including the syslog servers, and faults. Read access to the rest of the system.
Read-Only
Read-only access to system configuration with no privileges to modify the system state.
Server Equipment Administrator
Read-and-write access to physical server related operations. Read access to the rest of the system.
Server Profile Administrator
Read-and-write access to logical server related operations. Read access to the rest of the system.
Server Security Administrator
Read-and-write access to server security related operations. Read access to the rest of the system.
Storage Administrator
Read-and-write access to storage operations. Read access to the rest of the system.

Reference: http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/sw/gui/config/guide/2-0/b_UCSM_GUI_Configuration_Guide_2_0/b_UCSM_GUI_Configuration_Guide_2_0_chapter_01001.html#concept_B9CBEEDAF1FA4E26B5613525C107FD56

QUESTION 53
An engineer is deploying a Cisco Nexus 1000v into VMware vSphere using the OVA file. The engineer deployed the VSM virtual machine in vCenter and completed the initial setup script of the VSM. Which two additional configuration steps are needed to implement the 1000v? (Choose two.)

A. Configure an SVC connection to vCenter in the console of the 1000v.
B. Add hosts to the distributed virtual switch in the console of the 1000v.
C. Configure an SVC connection to vCenter using the vCenter wizard.
D. Add hosts to the distributed virtual switch in vCenter.
E. Add the 1000v as a virtual distributed switch in vCenter.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 54
Which two options are advantages of a spire and leaf architecture? (Choose two.)

A. robust multipathing
B. traffic that is optimizes for east-west communication
C. star topology
D. traffic that is optimized for north-south communication

E. exponential scalability

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 55
After configuring a vPC between the core Nexus 7000 and the middle of row Nexus 5548, the network administrator notices that one of the port channel interfaces is 90% utilized, while the other interface in the port channel is rarely used. Further analysis reveals that the overutilized port has traffic coming from a single server that is accessing an SQL database. What configuration on the Nexus 5548 will help rebalance the vPC?

A. port-channel load-balance ethernet source-destination-ip
B. port-channel load-balance ethernet source-destination-mac
C. port-channel load-balance ethernet destination-port
D. port-channel load-balance ethernet source-destination-port

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 56

```
Nexus-5596UP-01# show running-config vpc

!Command: show running-config vpc
!Time: Mon Apr 13 15:00:53 2015

version 7.1(0)N1(1a)
feature vpc

vpc domain 30
     role priority 15000
     system-priority 30000
     peer-keepalive destination 10.22.22.21 source 10.22.22.20
     delay restore 40
     auto-recovery reload-delay 250
     ip arp synchronize
```


Refer to the exhibit. Which statement is correct regarding this vPC environment?

A. The vPC peer keepalive uses a non-VRF path.
B. ip arp synchronizeis automatically configured when a vPC domain is created.
C. The role priority uses its default value.
D. The system priority has been configured to a lower number than its default value.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Explanation: the system priority that you want for the specified vPC domain. The range of values is 1 to 65535. The default value is 32667.

Reference: http://www.cisco.com/c/en/us/products/collateral/switches/nexus-5000-series-switches/configuration_guide_c07-543563.html

QUESTION 57
In an ACI fabric, which two statements about contexts are true? (Choose two.)

A. A VRF defines a Layer 3 address domain.
B. A tenant can contain multiple VRFs.
C. In traditional networking, a VRF is equivalent to a VDC.
D. A tenant can contain only a single VRF.
E. A VRF defines a Layer 2 address domain.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:
A bridge domain must be linked to a VRF (also known as a context or private network). It must have at least one subnet (fvSubnet) associated with it. The bridge domain defines the unique Layer 2 MAC address space and a Layer 2 flood domain if such flooding is enabled. While a VRF defines a unique IP address space, that address space can consist of multiple subnets. Those subnets are defined in one or more bridge domains that reference the corresponding VRF.

Reference: http://www.cisco.com/c/en/us/td/docs/switches/datacenter/aci/apic/sw/1-x/aci-fundamentals/b_ACI-Fundamentals/b_ACI-Fundamentals_chapter_010001.html

QUESTION 58
What is the purpose of Fibre Channel over Ethernet?

A. FCoE maps native Fibre Channel onto Layer 2 Ethernet, Converging IP storage networks.
B. FCoE encapsulates native Fiber Channel traffic inside GRE tunnels.
C. Data Center Bridging uses FCoE to transport IP traffic over native Fiber Channel.
D. FCoE encapsulates native Fiber Channel inside IP packets.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

FCoE maps Fibre Channel onto Layer 2 Ethernet, allowing the combination of LAN and SAN traffic onto a link and enabling SAN users to take advantage of the economy of scale, robust vendor community and roadmap of Ethernet.

Reference: https://www.cisco.com/en/US/solutions/collateral/ns340/ns517/ns224/ns945/ns1060/at_a_glance_c45-578384.pdf

QUESTION 59
Which Cisco Nexus 2000 Series Fabric Extender supports FCoE?

A. 2232TM
B. 2148T
C. 2248TP
D. 2232PP
E. 2248T

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Reference: http://www.cisco.com/c/en/us/products/switches/nexus-2000-series-fabric-extenders/models-comparison.html#~10gfx

QUESTION 60
A network engineer wants to configure switch ports on Cisco Nexus 2000 and 2200 Fabric Extender switches that are connected to a Cisco Nexus 5500 Series Switch. Which two options allow this configuration? (Choose two.)

A. Connect to each of the Cisco Nexus 2200/2000 switches using Telnet, then configure the FEX switch ports.
B. Connect to a Cisco Nexus 5500 using Telnet, then configure the FEX switch ports.
C. Connect to each of the Cisco Nexus 2200/2000 switches using a console cable, then configure the FEX switch ports.
D. Connect to each of the Cisco Nexus 2200/2000 switches using SSH, then configure the FEX switch ports.
E. Connect to a Cisco Nexus 5500 switch using SSH, then configure the FEX switch ports.

Correct Answer: BE
Section: (none)
Explanation

Explanation/Reference:
Explanation: