



VMware

Exam Questions 3V0-21.21

Advanced Design VMware vSphere 7.x

NEW QUESTION 1

An architect is reviewing a physical storage design. The customer has specified that storage DRS will be used for ease of operational management for capacity and performance.

Which recommendation should the architect include in the design?

- A. Create smaller datastores to balance space with Storage DRS
- B. Use a larger number of storage profiles (varied disk speeds and RAID levels) to improve performance
- C. Create larger datastores to balance space with Storage DRS
- D. Create more datastores within each Storage DRS cluster to balance space and performance

Answer: D

NEW QUESTION 2

An architect is designing a new vSphere platform for a customer to meet the following requirements:

- The platform must be deployed into five physically separate sites.
- The sites are spread across multiple regions.
- Some sites require more than one vCenter Server.
- The platform must provide an administrator with the ability to access virtual infrastructure components across all sites from a single management tool instance.

Which single sign-on (SSO) design recommendation will meet these requirements?

- A. Use an SSO domain across all vCenter Server instances
- B. Use an SSO domain per region
- C. Use an SSO domain per vCenter Server instance
- D. Use an SSO domain per site

Answer: C

NEW QUESTION 3

An architect is designing the expansion of an existing vSphere 7 environment. The customer is requesting a design for a new cluster to support the anticipated future business growth. The requirements specified for the existing environment design must be considered when designing the new cluster.

The existing design has the following requirements:

- REQ01 The environment has an availability target of 99.5% for all infrastructure.
- REQ02 The recovery time objective (RTO) for Tier 1 virtual machines is one hour.
- REQ03 Windows and Linux virtual machines must reside on separate clusters.
- REQ04 Access to the management cluster within the environment must be controlled. Which of the listed requirements would be classified as a functional requirement?

- A. The environment has an availability target of 99.5% for all infrastructure
- B. The recovery time objective (RTO) for Tier 1 virtual machines is one hour
- C. Access to the management cluster within the environment must be controlled
- D. Windows and Linux virtual machines must reside on separate clusters

Answer: D

NEW QUESTION 4

A customer is deploying a new cluster and wants to be able to patch and update two hosts in parallel. The cluster must be able to maintain N+1 resiliency across the remaining hosts while patching activities are performed. The current expected utilization of the platform requires a minimum of two hosts to support all of the virtual machines.

What is the minimum number of hosts the customer will require in the cluster in order to meet the required resiliency level?

- A. Five
- B. Six
- C. Four
- D. Seven

Answer: A

NEW QUESTION 5

An architect is designing a new greenfield environment that will install ESXi on local disks. There is a requirement to streamline initial and future installations of ESXi hosts.

Which configuration option should the architect recommend for installing ESXi hosts to meet these requirements?

- A. Installation with kick start script
- B. Auto Deploy with stateless caching mode
- C. Manual installation using boot from SAN
- D. Auto Deploy with stateful install mode

Answer: D

NEW QUESTION 6

Following a recent acquisition, the architect learns that both companies use vSphere on-premise and will need to combine the data centers into one. The acquired company's licenses will not be renewed for cost-savings related to the acquisition. All consumed vSphere licenses must have active support to support line-of-business operations. The merged environment must maintain 25% spare capacity. The architect has a small budget remaining unallocated for hardware.

The architect has calculated that the current vSphere environment can absorb the acquired company's virtual machines but the cluster will run at 90% memory utilization and at 50% CPU utilization.

Which design decision can the architect make to incorporate the new company's virtual machines into the combined vSphere environment?

- A. Migrate the acquired company's virtual machines into the vSphere environment as it will currently fit.
- B. Use the current budget to add memory to the cluster to increase each ESXi host's capacity and add the new virtual machines.
- C. Purchase extra hosts to add to the cluster in anticipation of adding the acquired company's virtual machines.
- D. Purchase new licenses for some of the acquired company's ESXi hosts and add them to the cluster to hold the acquired company's virtual machines.

Answer: B

NEW QUESTION 7

During a requirements gathering workshop, the customer's Chief Information Security Office (CISO) provides the following requirements that are pertinent to the design of a new vSphere environment:

- > All operating system critical patches must be installed within 24 hours of release.
- > All virtual machine templates must be updated every three months in line with company policy.

Which requirement classification is being gathered for the design documentation?

- A. Security
- B. Manageability
- C. Recoverability
- D. Availability

Answer: A

Explanation:

This is lifecycle management function. The requirement is system critical patches, not system security patches.

NEW QUESTION 8

An architect is designing a new vSphere environment to meet the following requirements:

- > The environment must support 5,000 virtual machines.
- > The environment will be built initially using 350 hosts.

Which vCenter Server appliance deployment size should the architect specify for the design?

- A. Large
- B. Small
- C. Tiny
- D. Medium

Answer: A

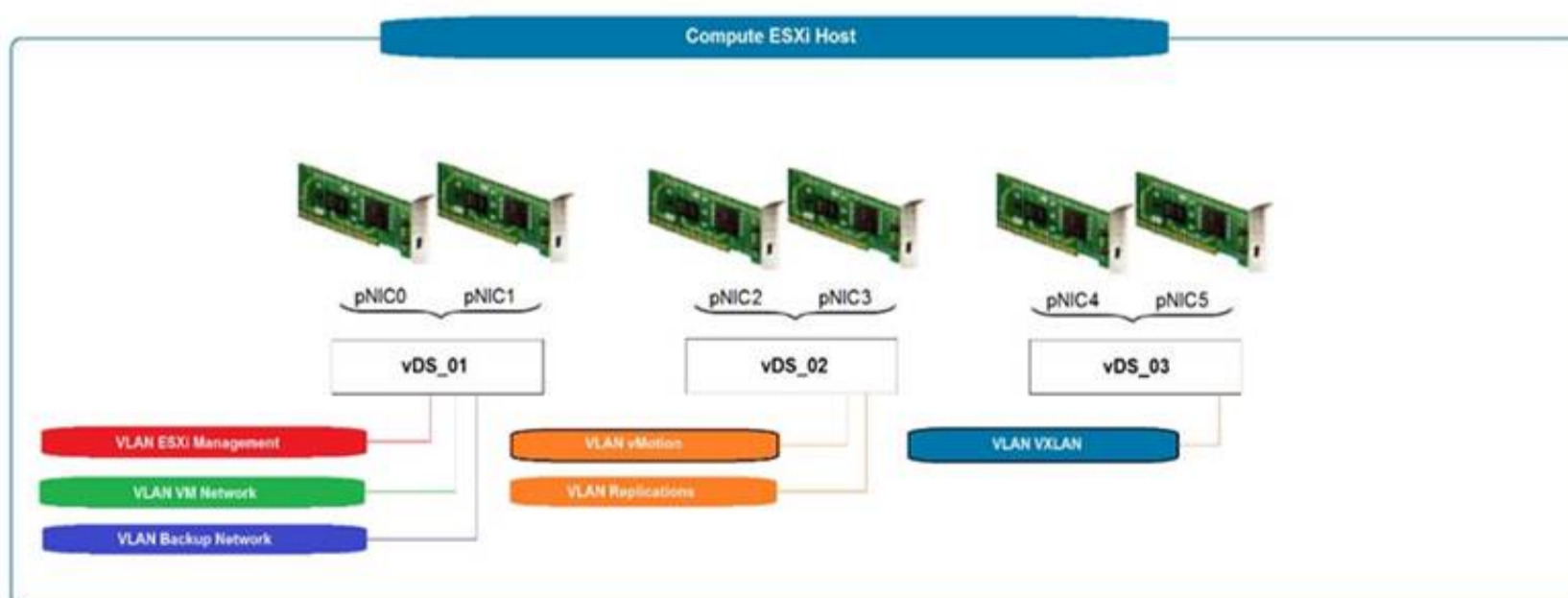
Explanation:

<https://docs.vmware.com/en/VMware-vSphere/7.0/com.vmware.vcenter.install.doc/GUID-077C7523-E0EA-492>

NEW QUESTION 9

Refer to the exhibit.

During a requirements gathering workshop, the architect shares the following diagram:



What should the architect recommend for guaranteed throughput for each service?

- A. Use explicit failover order with pNIC0 as Active for ESXi Management and VM Network Use explicit failover order with pNIC1 as Active for backup network Use explicit failover order with pNIC2 as Active for vMotion Use explicit failover order with pNIC3 as Active for replication
- B. Use the Route Based on IP Hash for ESXi management and VM network Use the Route Based on IP Hash for backup network Use the Route Based on the Originating Virtual Port for vMotion Use failover with pNIC3 as Active for replication
- C. Create a link aggregation group (LAG) for vDS_01 Use the Route Based on Physical NIC Load for vMotion Use the Route Based on Physical NIC Load for replication
- D. Use the Route Based on IP Hash for ESXi management and VM network Use failover with pNIC1 as Active for backup network Create a link aggregation group (LAG) for vDS_02

Answer: A

NEW QUESTION 10

An architect is designing an environment for a retail customer. The design will use a single small vCenter Server Appliance and a cluster of eight ESXi hosts at a remote site. There is a single 10 GbE connected network at the remote site to support all management services. It is not possible to create additional management networks at the remote site. Virtual machine backups at the site will be dependent on the vCenter Server being available. Which design decision should the architect make to maximize availability for backups?

- A. vCenter Server High Availability will be configured.
- B. The vCenter Server Appliance will be protected with vSphere Fault Tolerance.
- C. The cluster will be configured to use vSphere DRS in fully automated mode.
- D. The cluster will be configured with vSphere HA and set to restart virtual machines based on guest operating system heartbeat monitoring.

Answer: C

NEW QUESTION 10

A Cloud Service Provider wants to introduce backup as a service for a customer's vSphere-based virtual machines. The following information is noted:

- All top-of-rack (ToR) switches are 10 GbE and fully populated
- The backup traffic must not impact existing services

Which two recommendations should the architect make to help the customer incorporate the service? (Choose two.)

- A. Enable and tag traffic on the backup distributed port group
- B. Add a new two-port 10 GbE NIC per ESXi host
- C. Replace the existing NIC with a two-port 25 GbE NIC per ESXi host
- D. Match the Class of Service (CoS) and Differentiated Services Code Point (DSCP) values to the physical network
- E. Create a new virtual switch using the 1 GbE uplinks

Answer: AB

NEW QUESTION 15

An architect is tasked with designing a greenfield VMware software-defined data center (SDDC) solution that will be used to deliver a private cloud service for a customer.

During the initial meeting with the service owner and business sponsor, the customer has provided the following information to help inform the design:

- The solution must initially support the concurrent running of 300 production and 600 development virtual machines.
- The production environment should be delivered across two geographically dispersed data centers. The development environment must be vSphere-based but does not have to be deployed on-premises.
- The two data centers are connected to each other through multiple diversely routed, high bandwidth and low latency links.
- The customer's server hardware standard document states that all virtual infrastructure hosts must be based on blade architecture only.
- The service owner has said that is important to ensure that neither the availability target of 99.5% nor the resource capacity is affected when the operations team completes maintenance activities, such as the monthly software patching and ad-hoc hardware break/fix.
- All virtual machine backups must be completed using the existing backup service. The recovery time objective (RTO) for the service is four hours.
- The recovery point objective (RPO) of the service is 24 hours.

Given the information from the customer, which two would be classified as assumptions within the design? (Choose two.)

- A. The backup service will store data in a secure facility
- B. The backup service has sufficient capacity for the new requirements
- C. The customer will update their hardware standard to support rack mount servers
- D. All virtual machines will be deployed with the same resource profile for production and development
- E. The clusters will have a minimum redundancy of N+1

Answer: BE

NEW QUESTION 17

An architect is designing storage for a new vSphere environment to meet the following requirements: ➤ Asynchronous replication is required between two sites.

- The impact on the storage layer should not impact the performance of the compute layer.
- Each application tier will require different replication attributes.
- Virtual machine live migration across compute and storage must be supported.
- Virtual machine aware back up will be leveraged.
- Operational management overhead should be minimized.
- Operational automation should be supported.

Which storage design recommendations would meet the requirements?

- A. Two new Fibre Channel storage arrays will be deployed, one at either site. Each application tier will be initially provisioned a new LU
- B. Data replication will be offloaded to the new arrays.
- C. Two new vSphere clusters enabled with vSAN will be deployed, one at either sit
- D. vSAN will be used to provide policy-based management for each application tier. vSphere Replication will be used to replicate the virtual machine data in an asynchronous configuration.
- E. Two new iSCSI storage arrays will be deployed, one at either site. Each application tier will be initially provisioned a new LU
- F. Data replication will be offloaded to the new arrays.
- G. Two new storage arrays will be deployed, one at either site. vSphere Volumes (vVOLS) will be used to provide policy-based management for each application tie
- H. Data replication will be offloaded to the new arrays.

Answer: B

NEW QUESTION 20

An architect is considering placement of virtual machines within an existing VMware software-defined data center (SDDC). During the discovery phase, the following information is documented:

Cluster One

- Six ESXi hosts
- vSphere HA with host failures cluster tolerates = 1
- Proactive HA is enabled and set to automated
- Fully Automated vSphere DRS
- Transparent Page Sharing (TPS) is enabled

Cluster Two

- Eight ESXi hosts
- vSphere HA with host failures cluster tolerates = 1
- Proactive HA is disabled
- Partially Automated vSphere DRS
- Transparent Page Sharing (TPS) is disabled

Cluster Three

- Three ESXi hosts
- vSphere HA with admission control is disabled
- Proactive HA is not supported
- Transparent Page Sharing (TPS) is disabled

Virtual Machine Resource Profile 1

- Memory sharing techniques should not be used
- Virtual machines should be automatically restarted in the event of host failure if resources are available
- Automated initial virtual machine placement

Virtual Machine Resource Profile 2

- Memory sharing techniques can be used
- Virtual machines should be protected from any host hardware failures
- Automated initial virtual machine placement

Which two recommendations should the architect make for placement of the virtual machines to meet resource profile requirements? (Choose two.)

- A. All virtual machines matching Virtual Machine Resource Profile 2 should be placed on Cluster One.
- B. All virtual machines matching Virtual Machine Resource Profile 1 should be placed on Cluster One.
- C. All virtual machines matching Virtual Machine Resource Profile 2 should be placed on Cluster Two.
- D. All virtual machines matching Virtual Machine Resource Profile 1 should be placed on Cluster Two.
- E. All virtual machines matching Virtual Machine Resource Profile 2 should be placed on Cluster Three.

Answer: BD

NEW QUESTION 25

An architect is designing a VMware solution for a customer to meet the following requirements:

- The solution must use investments in existing storage array that supports both block and file storage.
- The solution must support the ability to migrate workloads between hosts within a cluster.
- The solution must support resource management priorities.
- The solution must support the ability to connect virtual machines directly to LUNs.
- The solution should use existing 32G fabric infrastructure.
- There is no budget for additional physical hardware.

Which design decision should the architect make to meet these requirements?

- A. The ESXi hosts will leverage Fibre Channel (FC).
- B. The ESXi hosts will leverage iSCSI.
- C. The ESXi hosts will leverage Fibre Channel over Ethernet (FCoE).
- D. The ESXi hosts will leverage NFS.

Answer: A

NEW QUESTION 29

Following a recent acquisition, an architect needs to merge IT assets into its current data center. The combined vSphere environment will need to run the newly acquired company's virtual machines.

Network integration work has already been completed and the current environment has capacity to host all virtual machines. The Operations team needs to identify which virtual machines belong to the acquired company and report on their usage.

How should the architect merge the company's assets and virtual machines?

- A. Leave the newly acquired company's assets in its current place
- B. Lift and shift the acquired assets into the data center
- C. Migrate the acquired company's virtual machines into the existing vSphere environment
- D. Migrate and apply vSphere tags to the acquired company's virtual machines

Answer: D

NEW QUESTION 31

An architect is designing a solution based on the following information:

- Each ESXi host has a single physical NIC with two 10 Gbps ports.
- There is a performance-based service-level agreement (SLA) that guarantees 15 Gbps bandwidth for production virtual machines at all times.
- There is no budget to purchase additional hardware.
- The hardware replacement SLA is based on a delivery agreement of two business days.

Which recommendation for the configuration of vSphere High Availability (HA) should the architect include in the design?

- A. Configure vSphere HAConfigure % based admission control Configure two isolation addresses Consider an OEM with NIC failure conditions in their Proactive HA plugin
- B. Configure vSphere HASet das.IgnoreRedundantNetWarning to trueConsider an OEM with NIC failure conditions in their Proactive HA plugin
- C. Configure vSphere HAConfigure two existing data stores for heartbeatConsider an OEM with NIC failure conditions in their Proactive HA plugin
- D. Configure Proactive HA Automation Level: Automated Remediation: Maintenance mode for all failuresConsider an OEM with NIC failure conditions in their Proactive HA plugin

Answer: A

NEW QUESTION 32

Which requirement would be classified as a functional requirement within the application design documentation?

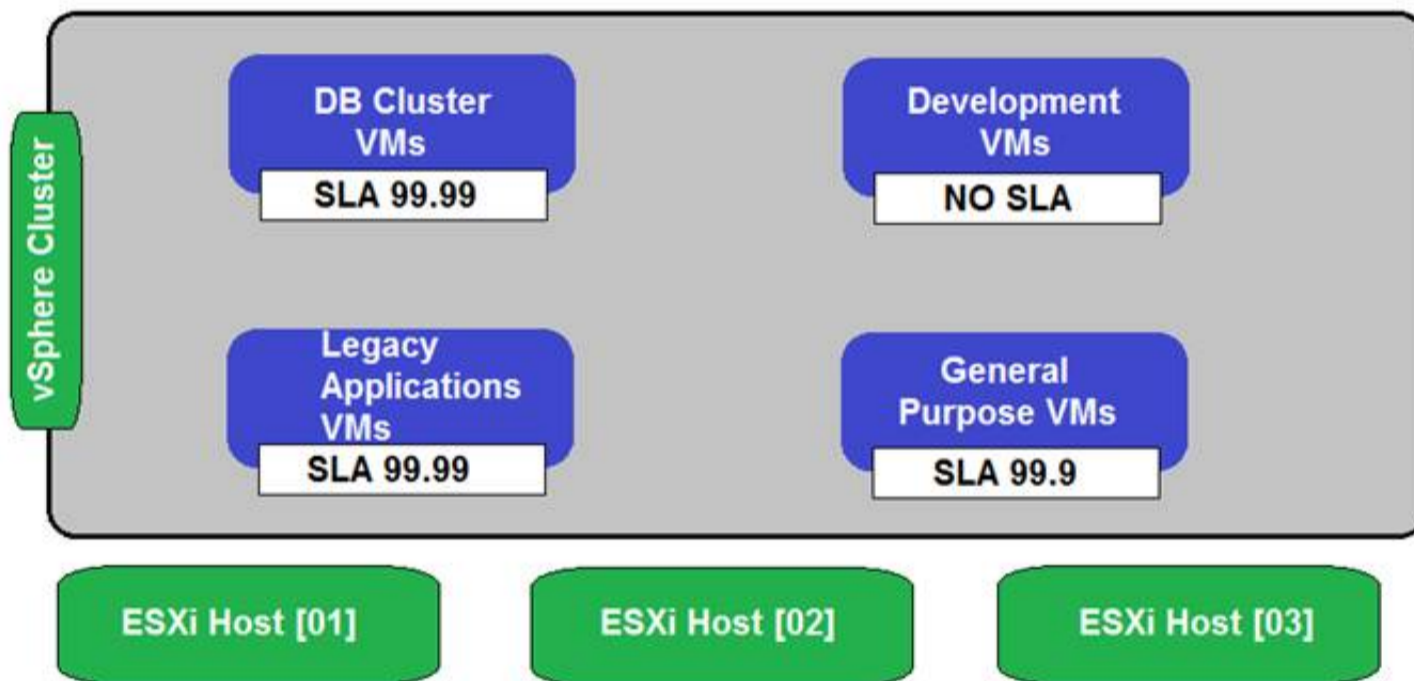
- A. The application must be hosted with redundancy levels of N+1 or better.
- B. Penetration testing must be executed quarterly with a pass rate of 80% or higher.
- C. The application must be capable of handling 200 transactions per second.
- D. Administrators must monitor the network traffic of the desired systems.

Answer: C

NEW QUESTION 34

Refer to the exhibit.

During a requirements gathering workshop, the customer shares the following diagram regarding their availability service-level agreements (SLAs):



The customer wants database application level availability to always take precedence. What should the architect recommend to meet the customer's requirement?

- A. Enable vSphere HA and add a VM Override with VM Restart Priority set to Highest.
- B. Enable Fault Tolerance.
- C. Enable Sphere HA and maintain the default settings.
- D. Enable vSphere HA and add a VM Override with VM Restart Priority set to Lowest.

Answer: D

NEW QUESTION 37

A customer defines a requirement to minimize the vMotion migration time during a maintenance period. The servers being used are equipped with eight 1 GbE network adapters.

Per the defined logical network configuration, there are two network adapters each used for:

- Management traffic
- vMotion traffic
- iSCSI traffic
- Virtual machine traffic

Which design decision should the architect make to meet the customer requirement?

- A. Use Network I/O Control to define a reservation for vMotion traffic.
- B. Implement Multi-NIC vMotion by adding additional vMotion VMkernels.
- C. Configure a dedicated TCP/IP stack for vMotion traffic.
- D. Combine vMotion and Management traffic to make use of four adapters.

Answer: A

NEW QUESTION 39

As part of a new hybrid cloud initiative for a large financial company, the customer technical team is presenting an overview of the current state of the infrastructure and their vision for a new solution.

The project team captures notes during the presentation and adds them to the discovery documentation. Which of the listed statements is a design constraint?

- A. The applications are created in-house with in-guest recovery protection
- B. The maximum tolerable data loss is 10 minutes
- C. The two data center locations have a network latency of 8 ms round-trip time (RTT)
- D. The existing storage is out of maintenance

Answer: D

NEW QUESTION 41

During a requirements gathering workshop, the customer provides the following requirement (REQ) and constraints (CON):

- REQ01: The customer is looking for a way to limit database virtual machine (VM) placement to save on CPU licensing costs.
- CON01: There is a single cluster with no budget to scale.
- CON02: All virtual machines must run on the consolidated cluster.

Which two design decisions should the architect make to meet the customer requirement? (Choose two.)

- A. The solution must use VM-VM anti-affinity rules
- B. The solution must use vSphere DRS in manual mode
- C. The solution must use a vRealize Orchestrator workflow for VM placement
- D. The solution must use VM-Host affinity rules
- E. The solution must use vSphere VM and host DRS groups

Answer: DE

NEW QUESTION 46

An architect is tasked with expanding an existing VMware software-defined data center (SDDC) solution so that it can be used to deliver a virtual desktop infrastructure (VDI) service off-shore development activities.

The production environment is currently delivered across two geographically dispersed data centers. The two data centers are currently connected to each other through multiple diversely routed, high bandwidth and low latency links. The current operations management components are deployed to a dedicated management cluster that is configured with N+1 redundancy. The current VMware software-defined data center (SDDC) has a monthly availability target of 99.5%, which includes all management components.

The customer requires that the new solution scale to support the concurrent running of 500 persistent virtual desktops. The virtual desktops must not share the same virtual infrastructure as existing virtual machines, but can be managed using the same VMware operations management components. Any new VDI service management components must be installed into the management cluster. There is no requirement to back up the virtual desktops because all relevant user data is stored centrally. The VDI service is providing business critical services and must have an availability target of 99.9%.

Given the information from the customer, which two assumptions would the architect include in the design? (Choose two.)

- A. The existing virtual infrastructure has sufficient capacity to host the new VDI workloads
- B. The existing operations monitoring tools have sufficient capacity to monitor the new VDI services
- C. The existing management cluster has enough available capacity to host any VDI service management component
- D. The management cluster has N+1 redundancy
- E. The VDI service has a higher service-level agreement (SLA) than the operations management SLA

Answer: BD

NEW QUESTION 51

An architect is tasked with designing a new VMware software-defined data center (SDDC) solution for an online retail customer who has a primary and secondary data center as well as 10 distribution hubs.

The customer has provided the following business requirements to help inform the design:

- The solution must support the running of up to 1,000 concurrent virtual machines across the primary and secondary data center.
- The solution must support the running of up to 20 concurrent virtual machines in each distribution hub.
- The solution must support the separation of management and lines-of-business application virtual machines.
- All management components (including directory services, backup, automation, operations and logging) must be deployed to the primary data center.
- All virtual infrastructure components must have redundancy of N+1.
- The solution should support a monthly uptime target of 99.9%.
- The recovery time objective (RTO) for the solution must be four hours.
- The recovery point objective (RPO) for the solution must be 24 hours.

Given the information from the customer, which assumption should the architect include in the design?

- A. All business application virtual machines can be deployed into a single cluster within the primary data center.
- B. Each distribution hub should be configured with a backup device.
- C. The wide area network has sufficient bandwidth to support centralized management.
- D. Each cluster will have a minimum of four hosts.

Answer: B

NEW QUESTION 53

An architect is designing a series of new vSphere environments for an organization. The environments will be deployed in their US-East and US-West region data centers. Each data center may have one or more dedicated vSphere environments. Only the vSphere environments within a data center will be configured with Enhanced Linked Mode. The Chief Technology Officer (CTO) has authorized the use of VMware vRealize Automation Cloud for automation. The build team creates standardized virtual machine images for various operating systems in Open Virtualization Format (OVF) and publishes the latest version on an as-needed basis to an internal HTTPS-accessible repository.

The architect must design a content library topology that meets the following requirements:

- A localized content library must be available in each data center.
- Each content library must be updated when an image is updated and released by the build team.
- It must leverage the existing build team processes.

What should the architect recommend to meet the requirements?

- A. Work with the build team to create a local content library for each vSphere environment. Import the OVF images when new image are published to the repository.
- B. Create a local content library for the primary vSphere environment in each data center. Create a subscribed content library for each additional vSphere environment in each data center.
- C. Configure the content library to download content automatically.
- D. Work with the build team to automate a JSON-based manifest to the repository when changes occur in the repository. Create a subscribed content library for each vSphere environment.
- E. Configure the content library to download content when needed.
- F. Work with the build team to automate a JSON-based manifest to the repository when changes occur in the repository. Create a subscribed content library for each vSphere environment.
- G. Configure the content library to download content automatically.

Answer: B

NEW QUESTION 57

A customer has six hosts available in a cluster. When running at full capacity, all virtual machines can be run on two hosts. How many hosts can the customer place into maintenance mode at the same time while still providing N+2 resiliency to the cluster?

- A. Two
- B. Three
- C. One
- D. None

Answer: A

NEW QUESTION 62

Which two of the listed requirements would be classified as performance non-functional requirements? (Choose two.)

- A. The vSphere platform must be able to provide a recovery time objective of 30 minutes
- B. The vSphere platform must be able to provide a minimum throughput of 400 MB/s
- C. The vSphere platform must be able to provide N+1 redundancy
- D. The vSphere platform must be able to provide a maximum read latency of 15 ms
- E. The vSphere platform must be able to provide a service-level agreement (SLA) of 99,9%

Answer: BD

NEW QUESTION 67

A customer requires the use of data encryption to ensure data is not accessible when a drive is removed from the primary storage platform. However, there is also a requirement to use deduplication and compression against all workloads in order to conserve space. Which solution meets the customer requirements?

- A. Data-in-transit encryption
- B. OS-level encryption
- C. Encrypted backups
- D. Array-based encryption

Answer: D

NEW QUESTION 72

An architect is designing a VMware software-defined data center (SDDC) solution based on the following customer requirements:

- The solution must initially support 1,000 virtual machines
- The solution must scale to support the concurrent running of up to 5,000 virtual machines
- The production environment should be delivered across two data centers
- The solution should have a maximum tolerable downtime (MTD) of four hours
- The solution should have a monthly service availability target of 99.8%

Which two assumptions could the architect make based on the information from the customer to help size the solution? (Choose two.)

- A. The number of vSphere hosts in a cluster
- B. The average resource utilization of a virtual machine
- C. The size (CPU/RAM/storage) of the average virtual machine
- D. The guest operating system for each virtual machine
- E. The size (CPU/RAM/storage) of the vSphere hosts

Answer: AE

NEW QUESTION 75

An architect is tasked with designing a new VMware software-defined data center (SDDC) using VMware vSAN. The architect uses a storage assessment tool to determine the storage requirements for the new vSAN cluster. The new SDDC is going to be deployed into the existing data center and must be connected to a shared core network switch.

The architect decides to use vSAN ReadyNodes with the following configuration:

- Two disk groups with:
- Write Intensive NVMe 800 GB drive for cache
- Four 3.84 TB Mixed Use NVMe for capacity
- Four 10 GbE ports

Which element represents a risk that should be included in this design?

- A. The number of 10 GbE capable ports in the vSAN ReadyNode
- B. The use of vSAN ReadyNodes
- C. The existing network is 10 GbE capable
- D. The use of NVMe drives for cache and capacity

Answer: C

NEW QUESTION 79

An architect has 50 ESXi hosts to deploy and DHCP servers are not allowed on any network. Which automated host deployment method should the architect use?

- A. Stateless vSphere Auto Deploy
- B. Stateful vSphere Auto Deploy
- C. Scripted installation
- D. Interactive installation

Answer: C

NEW QUESTION 80

Which two statements are true about gathering functional business and application requirements? (Choose two.)

- A. It focuses on functional requirements with C-level stakeholders
- B. It leverages a single set of QUESTION NO:s for all stakeholders
- C. It might require multiple rounds of stakeholder interviews
- D. It builds stakeholder consensus
- E. It is a non-iterative process

Answer: AC

NEW QUESTION 84

As part of a requirements gathering workshop, the customer provides the following requirements for the design of a new greenfield virtual infrastructure:

- Some applications have a latency that must be less than 5 minutes.
- The solution must be able to support a workload growth rate of 10% per year. Which requirement classification is being gathered for the design documentation?

- A. Performance
- B. Manageability
- C. Recoverability
- D. Availability

Answer: A

NEW QUESTION 86

.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

3V0-21.21 Practice Exam Features:

- * 3V0-21.21 Questions and Answers Updated Frequently
- * 3V0-21.21 Practice Questions Verified by Expert Senior Certified Staff
- * 3V0-21.21 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * 3V0-21.21 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
[Order The 3V0-21.21 Practice Test Here](#)