

# VMware

## Exam Questions 3V0-21.23

VMware vSphere 8.x Advanced Design



#### NEW QUESTION 1

A customer requests a review of its current vSphere platform design.

The following information is noted:

- > There are three different workload profiles for the virtual machines:
- > Tier-1 virtual machines operate resource-intensive applications and require dedicated allocations for CPU and RAM.
- > Tier-2 virtual machines operate internet-facing applications and require access to externally facing networks.
- > Tier-3 virtual machines operate platform management tools such as vCenter Server and have different lifecycle management requirements.
- > Tier-1, Tier-2 and Tier-3 virtual machines are all hosted on a single large vSphere cluster.
- > The Chief Information Security Officer (CISO) has raised concerns that hosting externally facing applications alongside management tools does not meet internal compliance standards.
- > The Operations team has raised concerns about Tier-1 virtual machines negatively impacting the performance of vCenter Server.
- > The Operations lead has stated that management changes have consistently been rejected by application teams.

As a result of the review, which recommendation should the architect make regarding the design of this platform?

- A. Separate Tier-1, Tier-2 and Tier-3 virtual machines using dedicated distributed virtual switches (DVS)
- B. Separate Tier-2 virtual machines onto a dedicated cluster
- C. Separate Tier-1, Tier-2 and Tier-3 virtual machines onto dedicated clusters
- D. Separate Tier-1, Tier-2 and Tier-3 virtual machines using resource pools and shares

**Answer: C**

#### NEW QUESTION 2

An architect will be taking over control of a former Linux server fleet and repurposing the hardware into a new vSphere cluster. The current environment is already connected to the network but the hosts do not have any local disks. Since the fleet hardware is uniform, the architect can use a single ESXi image. All hosts within the cluster have the same CPU and memory capacity.

Which ESXi deployment method should the architect use?

- A. Stateless cached vSphere Auto Deploy
- B. Stateless vSphere Auto Deploy
- C. Manual install of each ESXi host with an image from USB
- D. Stateful vSphere Auto Deploy

**Answer: B**

#### NEW QUESTION 3

An architect makes the design decision to install ESXi on embedded and resilient 8 GB SD cards. What is the impact of this design decision?

- A. Host profiles must be used for this kind of installation
- B. Scratch partition would need to be created on the external storage
- C. The size of the SD cards is too small and the installation will fail
- D. The vSphere Auto Deploy feature must be enabled on vCenter Server

**Answer: B**

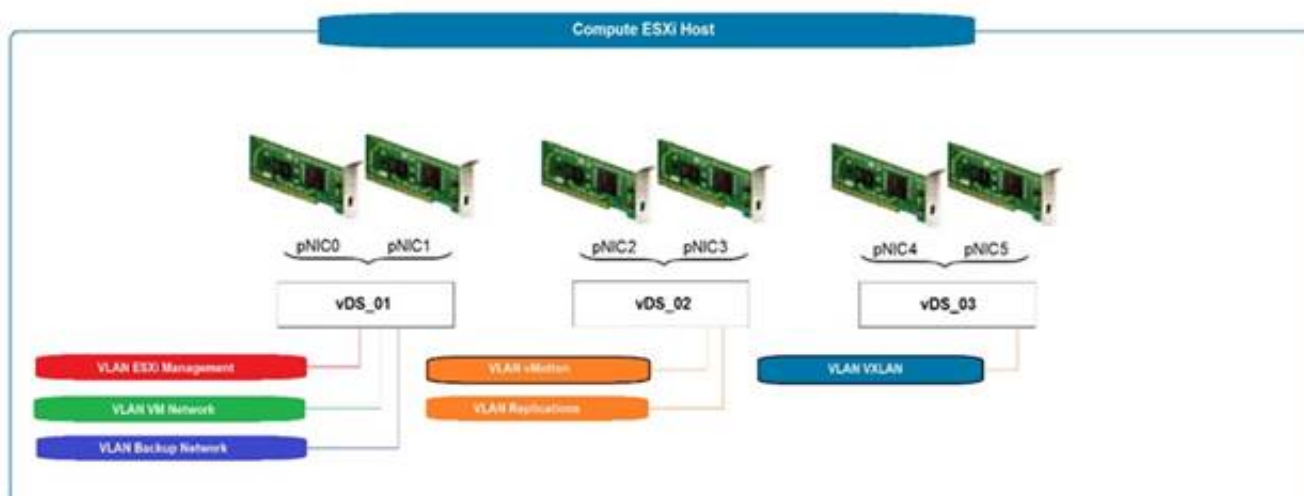
#### Explanation:

<https://kb.vmware.com/s/article/2074026> You can store coredumps on the SD boot media, but refrain from configuring the scratch partition here as the logs are write intensive and can cause the SD card to fail faster resulting in re-installation of ESXi

#### NEW QUESTION 4

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 5

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 support the concurrent running of 1,000 virtual machines
- The production environment must be delivered across two geographically dispersed data centers All virtual machines must be capable of running in either data center.
- The two data centers are currently connected to each other through a single but diversely routed, high bandwidth and low latency link.
- The link between the two data centers is capable of supporting a round-trip time (RTT) of 150 ms The existing server hardware standard document states that all virtual infrastructure hosts must be deployed using vSAN ReadyNodes
- The service owner has stated that it is critical to ensure the availability target of 99.9% All virtual machine backups must be completed using the existing backup service
- The recovery time objective (RTO) for the service is five minutes
- The recovery point objective (RPO) of the service is four hours

Which two elements represent risks to the successful delivery of this solution? (Choose two.)

- A. The use of only two data centers
- B. The network connectivity between data center sites
- C. The use of vSAN ReadyNodes
- D. The RTT on the link between the two data centers
- E. The use of the existing backup service

**Answer:** DE

#### NEW QUESTION 6

An architect is designing a new greenfield environment with 600 ESXi hosts in an automated fashion. The engineering department already has a PXE Boot server, TFTP server, and DHCP server set up with an NFS mount for their current Linux servers.

The architect must be able to demonstrate and meet a security requirement to have all infrastructure processes separated.

Which recommendation should the architect make for the ESXi host deployment?

- A. Request an isolated network segment to use and dedicate it to Auto Deploy functions
- B. Ask the business to expand the engineering environment to service the virtual environment as well
- C. Request a common shared network with flexible security measures to accommodate different auto deployment options
- D. Deploy each ESXi host individually and document it to satisfy security requirements

**Answer:** A

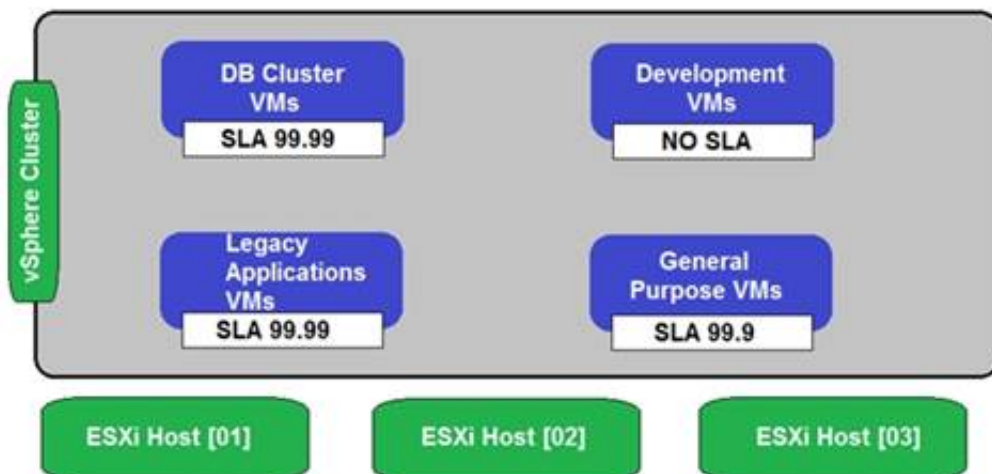
#### Explanation:

<https://docs.vmware.com/en/VMware-vSphere/7.0/com.vmware.esxi.install.doc/GUID-8DAC6FEE-0441-4072>

#### NEW QUESTION 7

Refer to the exhibit.

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



The customer states that there is no application level availability for legacy applications.

Which recommendation could the architect make to meet the customer's high availability requirements for the legacy applications virtual machines?

- A. Enable vSphere HA and add a VM Override with VM Restart Priority set to Disabled
- B. Enable Fault Tolerance
- C. Achieve application availability with snapshots
- D. Enable vSphere HA and add a VM Override with VM Restart Priority set to Lowest

**Answer:** D

#### NEW QUESTION 8

An architect is finalizing the design for a new vSphere platform based on the following information:

- All Windows virtual machines will be hosted on a dedicated cluster for licensing purposes.
- All Linux virtual machines will be hosted on a dedicated cluster for licensing purposes. All management virtual machines will be hosted on a dedicated cluster.
- A total of ten physical sites will be used to host virtual machines.
- In the event of one physical datacenter becoming unavailable, the manageability of the virtual infrastructure in the remaining data centers should not be impacted.
- Access to configure the management virtual machines via vCenter Server must be controlled through the management Active Directory domain.

- Access to configure the Windows and Linux virtual machines must be controlled through the resource Active Directory domain.
- The management and resource Active Directory domains are part of separate Active Directory forests and do not have any trusts between them.
- The design will use Active Directory with Integrated Windows Authentication.

How should the architect document the vCenter Server configuration for this design?

- A. Deploy a vCenter server for the management cluster. Deploy a vCenter Server for all remaining cluster
- B. Create a shared SSO domain for each physical site.
- C. Deploy a vCenter Server for the management cluster. Deploy a vCenter Server for all remaining cluster
- D. Create a shared SSO domain across all physical sites.
- E. Deploy a vCenter Server for the management cluster with a dedicated SSO domain. Deploy a vCenter Server for all remaining clusters and use a dedicated SSO domain for each physical site.
- F. Deploy a vCenter Server for the management cluster with a dedicated SSO domain. Deploy a vCenter Server for all remaining clusters and use a dedicated SSO domain into a single physical site.

**Answer: B**

#### NEW QUESTION 9

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 10

A customer provides the following list of requirements for their vSphere platform:

- REQ01 The solution should utilize dual network connections to eliminate single points of failure.
- REQ02 The solution should allow logs to be retained for a period of 30 days.
- REQ03 All user access to the platform should be recorded for audit purposes.
- REQ04 The solution should allow the management of multiple ESXi hosts.
- REQ05 The solution should allow users to view the remote console of virtual machines.

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

- A. The solution should utilize dual network connections to eliminate single points of failure
- B. The solution should allow the management of multiple ESXi hosts
- C. The solution should allow users to view the remote console of virtual machines
- D. All user access to the platform should be recorded for audit purposes
- E. The solution should allow logs to be retained for a period of 30 days

**Answer: AE**

#### NEW QUESTION 10

A customer has a database cluster with 40/60 read/write ratio and a high IOPs requirement with no contention on an all-flash vSAN cluster.

Which two storage settings should be configured for best performance? (Choose two.)

- A. IOPs limits enabled
- B. RAID 1
- C. Deduplication and Compression disabled
- D. RAID 5/6
- E. Deduplication and Compression enabled

**Answer: AB**

#### NEW QUESTION 13

An architect is creating a network design for a new vSphere environment.

Based on customer requirements, the environment must support the following types of traffic:

- Management
- vMotion
- vSAN
- Fault Tolerance
- Virtual machine traffic, which cannot be impacted by other types of traffic

Which design recommendation can the architect make for a resilient infrastructure with vSphere network service tiering?

- A. Use different logical networks to ensure traffic is isolated with separate VLANs
- B. Use Network I/O Control and ensure appropriate share value is defined for different types of traffic giving priority to the virtual machines traffic
- C. Use two dedicated virtual switches with a single adapter each, dedicating one virtual switch for Management, vMotion, vSAN and Fault Tolerance traffic, and the second one for virtual machine traffic
- D. Use a NIC teaming policy based on the physical NIC load



**Answer:** A

#### NEW QUESTION 18

An architect is preparing a design for a customer. Based on requirements, the architect recommends an HCI- based infrastructure with all-flash architecture. During the assessment, it is confirmed that the network throughput generated by virtual machines does not exceed 150 Mb/s. What is the minimum number and type of network adapters in each server that the architect can recommend to ensure requirements are met and there is no single point of failure?

- A. Two 1 GbE network adapters per server
- B. Four 1 GbE network adapters per server
- C. Four 10 GbE network adapters per server
- D. Two 10 GbE network adapters per server

**Answer:** C

#### NEW QUESTION 21

An organization's data scientists are executing a plan to use machine learning (ML). They must have access to graphical processing unit (GPU) capabilities to execute their computational models when needed. The solutions architect needs to design a solution to ensure that GPUs can be shared by multiple virtual machines. Which two solutions should the architect recommend to meet these requirements? (Choose two.)

- A. NVIDIA vGPU
- B. AMD MxGPU
- C. vSphere DirectPath I/O
- D. vSGA
- E. vSphere Bitfusion

**Answer:** AE

#### Explanation:

<https://blogs.vmware.com/apps/2018/07/using-gpus-with-virtual-machines-on-vsphere-part-1-overview.html>

#### NEW QUESTION 23

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 24

An architect decides to separate virtual desktops and application servers into separate vSphere clusters to meet security and management requirements. What are two implications of this design decision? (Choose two.)

- A. There will be an increase in management overhead.
- B. Identical hardware must be procured for all hosts.
- C. There will be a reduction in performance.
- D. The patching cycles will affect both clusters at the same time.
- E. There will be additional licensing and cost requirements for both clusters.

**Answer:** DE

#### NEW QUESTION 29

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 30

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 31

A new vSphere platform is being created. The platform will host virtual machines that will run management services and line-of-business applications. What should the architect consider when designing the number and type of clusters required?

- A. Maximum tolerable downtime
- B. Predicted platform growth
- C. Auditing requirements for the virtual machines
- D. The level of isolation required between virtual machine classifications

**Answer: D**

#### NEW QUESTION 34

Application owners require support of a Microsoft Windows Server Failover Cluster (WSFC). Their current environment consists of the following components:

- vSphere 7.0 and vSAN 7.0
- External array supporting NFS 3.0/4.1, Server Message Block (SMB) 2.1
- 10 GbE storage connectivity for all devices

The solution architect is tasked with coming up with a solution to meet this requirement while utilizing their existing investments. Which two recommendations could the architect make? (Choose two.)

- A. Use vSAN native support for WSFC
- B. Use NFS 4.1 shares for quorum and shared disk
- C. Use raw device mapping (RDM)
- D. Use the SMB 2.1 protocol for sharing disks
- E. Run WSFC on vSAN iSCSI Target Service

**Answer: AE**

#### Explanation:

<https://blogs.vmware.com/virtualblocks/2018/04/18/vsan-6-7-introducing-wsfc-support-vsan>

#### NEW QUESTION 39

A VMware Service Provider is tasked with delivering a solution for continuous availability for a subset of Tier 1 virtual machines (VMs) and vApps running in their vSAN environment. The VMs make up a mission-critical application and there can be no data loss in the event of an outage at their primary data center. In the event of a regional outage, they have established a 10-minute recovery point objective (RPO). Failover/failback to the third site must be automated. They have the following in place:

- Two local data centers (primary and secondary) connected with 100 Gb dedicated fiber
- 2ms round-trip time (RTT) latency between the sites
- A third data center located on another power grid
- 70ms latency between the primary and secondary data centers
- Matching storage arrays at all locations

Which two solutions could be used to meet the requirements? (Choose two.)

- A. Site Recovery Manager
- B. Snapshots
- C. vSAN Metro Cluster
- D. vSphere Data Protection
- E. vStorage APIs for Array Integration (VAAI)

**Answer: BC**

#### NEW QUESTION 41

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 44**  
.....

## 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

### 3V0-21.23 Practice Exam Features:

- \* 3V0-21.23 Questions and Answers Updated Frequently
- \* 3V0-21.23 Practice Questions Verified by Expert Senior Certified Staff
- \* 3V0-21.23 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- \* 3V0-21.23 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

**100% Actual & Verified — Instant Download, Please Click**  
**[Order The 3V0-21.23 Practice Test Here](#)**