VCAP-DCV Design 2021 3V0-21.21 Exam Dumps and Certification Test Engine [Q30-Q49

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NO.30 Which two statements are true about gathering functional business and application requirements? (Choose two.)
* It focuses on functional requirements with C-level stakeholders
* It leverages a single set of Question:s for all stakeholders
* It might require multiple rounds of stakeholder interviews
* It builds stakeholder consensus
* It is a non-iterative process

NO.31 Which requirement would be classified as a functional requirement within the design documentation?
* The system must perform virtual machine backups through an API.
* Virtual machines must be patched within one month of the patch release date.
* Virtual machines must be restarted within 30 minutes of a host failure.
* The system must be able to scale to support 500 concurrent virtual machines.

NO.32 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?
* Deploy a vCenter server for the management cluster.

Deploy a vCenter Server for all remaining clusters. Create a shared SSO domain for each physical site.
* Deploy a vCenter Server for the management cluster.

Deploy a vCenter Server for all remaining clusters.

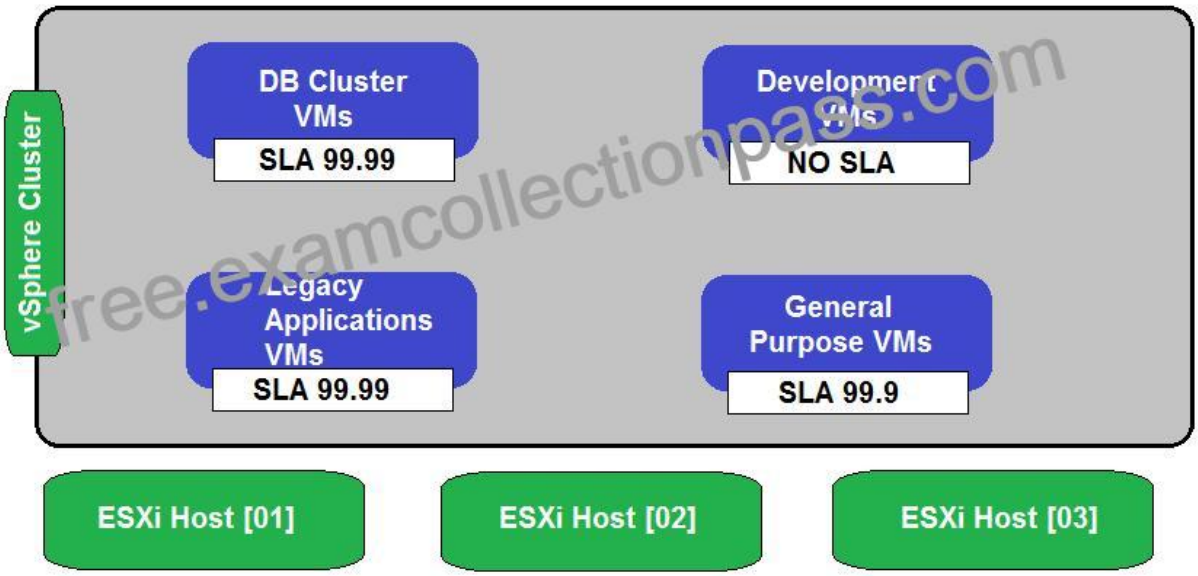
Create a shared SSO domain across all physical sites.
* Deploy a vCenter Server for the management cluster with a dedicated SSO domain.

Deploy a vCenter Server for all remaining clusters and use a dedicated SSO domain for each physical site.
* 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.

NO.33 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?
* Enable vSphere HA and add a VM Override with VM Restart Priority set to Highest.
* Enable Fault Tolerance.
* Enable Sphere HA and maintain the default settings.
* Enable vSphere HA and add a VM Override with VM Restart Priority set to Lowest.

NO.34 A architect is designing a new VMware software-designed data center (SDDC) using vSphere 7 to meet the following requirements:

The SDDC must be deployed at two locations: primary and secondary.

vSphere Replication must be used to replicate virtual machines between the two locations.

Site Recovery Manager must be used to orchestrate disaster recovery (DR) activities.

One single-sign on (SSO) domain must be used to authenticate access at both locations.

Which design decision should the architect make to meet these requirements?
* A vCenter Server Appliance will be deployed to each site. Unique SSO domains will be created per site.
* A vCenter Server will be installed on Windows virtual machines deployed to both sites.
* A vCenter Server Appliance will be deployed to each site.
* A vCenter Server Appliance will be deployed to the primary site only.

https://docs.vmware.com/en/Site-Recovery-Manager/8.4/com.vmware.srm.install_config.doc/GUID-BB0C03E4-72BE-4C74-96C3-97AC6911B6B8.html

NO.35 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.)
* Use vSAN native support for WSFC
* Use NFS 4.1 shares for quorum and shared disk
* Use raw device mapping (RDM)
* Use the SMB 2.1 protocol for sharing disks
* Run WSFC on vSAN iSCSI Target Service

Explanation/Reference:

Reference: https://kb.vmware.com/s/article/79616

NO.36 There is a request for approved virtual machine applications through a new vSphere platform’s integrated automation portal. The platform was built following all provided company security guidelines and has been assessed against Sarbanes-Oxley Act of 2002 (SOX) regulations.

The platform has the following characteristics:

vRealize Operations is being used to monitor all clusters.

There is a dedicated ESXi cluster, supporting all management services.

All network traffic is via distributed virtual switches (DVS).

There is a dedicated ESXi cluster for all line-of-business applications.

Network traffic is serviced by NSX-T.

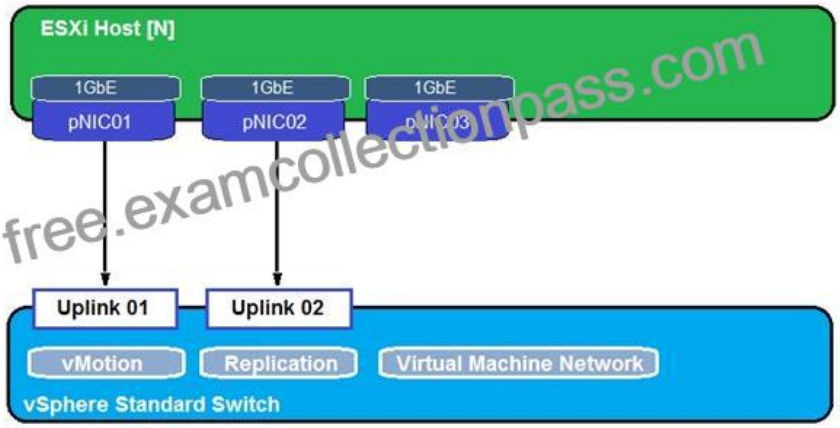
There is a dedicated ESXi cluster for virtual desktop infrastructure (VDI).

Network traffic is serviced by NSX-T.

The application owner is requesting approval to install a new service that must be protected as per the Payment Card Industry (PCI) Data Security Standard.

Which additional non-functional requirement should the architect include in the design to support the new service?
* The vSphere hosting platform and all PCI application virtual machines must be assessed against Payment Card Industry (PCI) Data Security Standard compliance.
* The vSphere hosting platform and all PCI application virtual machines must be assessed for SOX compliance.
* The vSphere hosting platform and all PCI application virtual machine network traffic must be routed via NSX-T.
* The vSphere hosting platform and all PCI application virtual machines must be monitored using the vRealize Operations Compliance Pack for Payment Card Industry.

NO.37 Refer to the exhibit.



During a requirements gathering workshop, the customer shares the following about their existing ESXi host virtual networking infrastructure:

The customer confirms that:

Each ESXi host has approximately 200 virtual machines.

They want to maximize the number of concurrent virtual machine migrations.

When placing a host in maintenance mode, it takes a long time to evacuate the virtual machines.

Which two recommendations should the architect make in order to help the customer overcome their challenge? (Choose two.)
* Configure the network to use MTU for the VMotion VMKernel to 1,600 bytes
* Configure the network to use MTU for the VMotion VMKernel to 9,000 bytes
* Create an additional standard switch with pNIC3 to use for vMotion
* Use the 3 pNICs and bundle them in a link aggregation group (LAG) configuration
* Use 10 GbE NICs instead of 1 GbE
https://docs.vmware.com/en/VMware-vSphere/7.0/com.vmware.vsphere.vcenterhost.doc/GUID-7DAD15D4-7F41-4913-9F16-567289E22977.html

NO.38 An architect is designing a solution for an environment with two types of resource profiles that must be virtualized. The first type consists of Tier 1 virtual machines that are disk I/O intensive, but do NOT require high CPU or memory. The second type consists of Tier 2 virtual machines that require a lower CPU and memory allocation and have minimal disk I/O.

Which design recommendation should the architect make for distributing the resource profiles?
* Separate the two resource profiles into two clusters. The Tier 1 cluster will have fast storage while the Tier 2 cluster will not.
* Run both resource profiles on the same cluster with the same host hardware platform.
* Separate the two resource profiles into two clusters. The Tier 2 cluster will have faster CPU and more memory while the Tier 1 cluster will have slower CPU and less memory but more disk space.
* Run both resource profiles on the same cluster with host hardware that has fast CPU, large amounts of memory, and the fastest storage platform.

NO.39 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.)
* IOPs limits enabled
* RAID 1
* Deduplication and Compression disabled
* RAID 5/6
* Deduplication and Compression enabled

NO.40 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.)
* The solution must use VM-VM anti-affinity rules
* The solution must use vSphere DRS in manual mode
* The solution must use a vRealize Orchestrator workflow for VM placement
* The solution must use VM-Host affinity rules
* The solution must use vSphere VM and host DRS groups

NO.41 Which two of the listed requirements would be classified as performance non-functional requirements? (Choose two.)
* The vSphere platform must be able to provide a recovery time objective of 30 minutes
* The vSphere platform must be able to provide a minimum throughput of 400 MB/s
* The vSphere platform must be able to provide N+1 redundancy
* The vSphere platform must be able to provide a maximum read latency of 15 ms
* The vSphere platform must be able to provide a service-level agreement (SLA) of 99,9%

NO.42 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.)
* NVIDIA vGPU
* AMD MxGPU
* vSphere DirectPath I/O
* vSGA
* vSphere Bitfusion

NO.43 An architect is planning the physical server configuration for a vSAN-based infrastructure.

Which operations mode should a RAID controller support to minimize potential server downtime during physical disk failures?
* RAID controller with Passthru mode
* RAID controller with RAID 5 mode
* RAID controller with RAID 10 mode
* RAID controller with RAID 6 mode

NO.44 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?
* Security
* Manageability
* Recoverability
* Availability

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

NO.45 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?
* Five
* Six
* Four
* Seven

NO.46 Which two of the listed requirements would be classified as performance non-functional requirements?

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

Explanation/Reference: https://technicloud.com/category/vmware/

NO.47 The Chief Operating Officer (COO) at an organization raises concerns that their virtual infrastructure environment is vulnerable. Recently, a security-related issue with a virtual machine caused all management services to become unavailable. No budget is available in the short term for additional platform investment. An architect is asked to review the current environment and make recommendations to mitigate concerns.

A virtualization administrator has provided the following details:

There is a single four node cluster of ESXi servers

There are two, Layer 2, physical network switches connecting resources

The data center network is presented as a single /16 subnet

Given the information provided, which functional requirement should the architect include in the design to mitigate the COOs concerns?
* The virtual infrastructure environment must connect application virtual machines and management services to new physical

network switches
* The virtual infrastructure environment must connect application virtual machines and management services to separate distributed virtual switches (DVS)
* The virtual infrastructure environment must connect application virtual machines and management services to separate VLANs
* The virtual infrastructure environment must connect management services to a vSphere standard switch (VSS)

NO.48 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?
* Maximum tolerable downtime
* Predicted platform growth
* Auditing requirements for the virtual machines
* The level of isolation required between virtual machine classifications

NO.49 The architect for a large enterprise is tasked with reviewing a proposed design created by a service partner. Which design elements are expected to be detailed within the physical design section of the documentation?
* A design diagram illustrating the configuration and specific attributes, such as IP addresses
* A list of requirements, constraints, and risks
* A solution architecture diagram with the components and data flow
* An entity relationship diagram describing upstream and downstream dependencies for specific service components
“The physical design is based on the logical design. The physical design includes specific hardware from specific vendors. This design also lists specific configurations for each of the components that are deployed”