Number: NCP-MCI-6.5
Passing Score: 800
Time Limit: 120
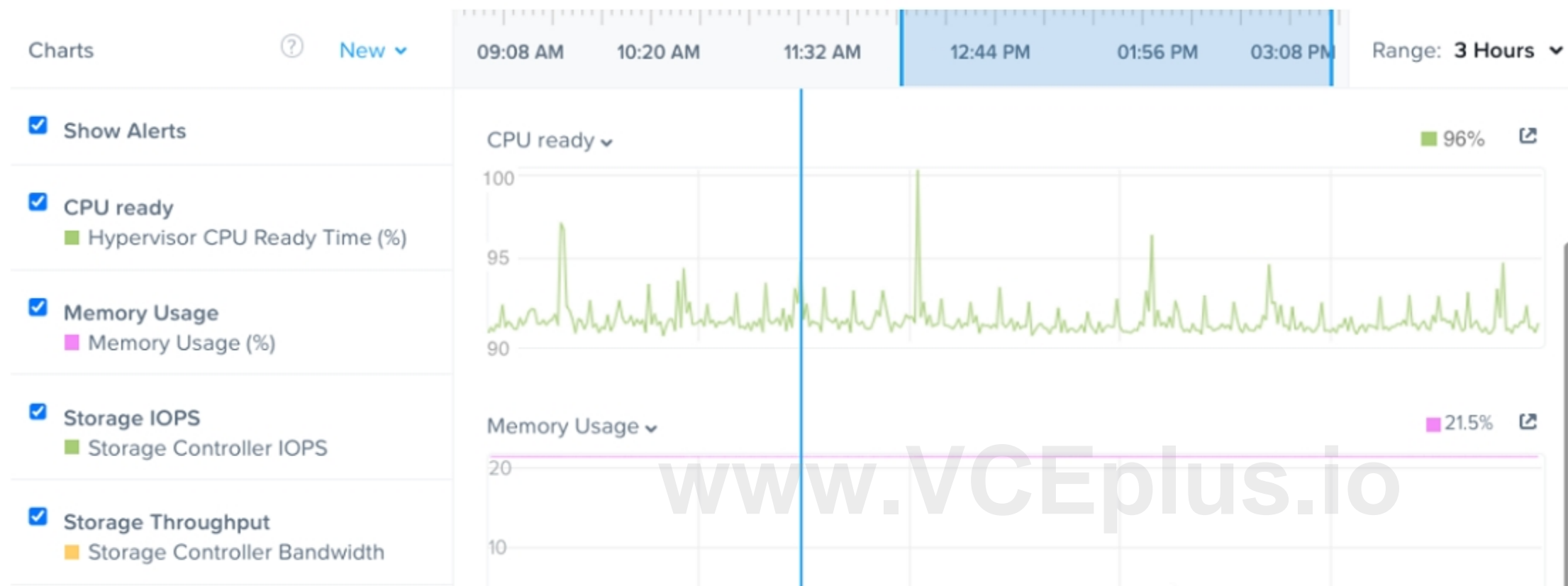File Version: 4.0

Exam Code: NCP-MCI-6.5
Exam Name: Nutanix Certified Professional-Multicloud Infrastructure (NCP-MCI) 6.5

Exam A

QUESTION 1
Refer to the Exhibit:

An administrator receives complaints of poor performance in a particular VM.
Based on the VM performance metric, what is the most likely cause of this behavior?

A. Oplog is full cannot serve IO request from this VM.

B. The host's CPU is severely overloaded.

C. SSD tier is not big enough to serve workloads' IOPS demand.

D. The VM needs more vCPUs

Correct Answer: B
Section:
Explanation:
Based on the VM performance metrics shown in the exhibit, the most likely cause of the poor performance in the particular VM is that the host's CPU is severely overloaded. This is indicated by the high percentage of Hypervisor CPU Ready Time, which is shown as 96% in the CPU ready chart. CPU Ready Time is a metric that shows the amount of time a VM is ready to run but is unable to run because the host CPU resources are not available. In a healthy environment, this value is typically low. A high percentage indicates that the VMs are waiting for available CPU cycles, which means the CPU is not able to schedule the VM effectively, often due to overcommitment or heavy CPU load.
When the CPU ready time is consistently high, it is a clear indicator that the VM is frequently waiting for CPU resources, which can lead to performance issues such as sluggishness or delays in processing. It is not related to the storage subsystem (Oplog fullness or SSD tier size), nor directly to the number of vCPUs assigned to the VM. While adding more vCPUs might seem like a solution, it could actually exacerbate the issue if the host is already CPU constrained.
To resolve this issue, an administrator should consider balancing the load across the hosts more effectively, possibly by using Nutanix's built-in automation and balancing features, or by scaling out the cluster to add more CPU resources. It is also advisable to check for any VMs with unusually high CPU demand and to adjust resource allocation as needed. Nutanix provides extensive documentation and guidelines in their Resource Management

Guide to help administrators identify and resolve such performance issues.

QUESTION 2
Refer to the exhibit.

Which two initial cluster configuration tasks were missed during the deployment process? (Choose two.)

A. Host password changes
B. Password policy changes
C. BIOS password changes
D. CVM password changes

Correct Answer: A, D
Section:
Explanation:
According to the image description, the exhibit shows a screenshot of a computer screen with a table of data. The table has 6 columns and 4 rows. The columns are labeled ''Date'', ''Time'', ''Status'', ''Details'', ''Configuration'', and ''Duration''. The rows contain information about different configurations and their statuses. The background is a light blue color. There is a pop-up message on the bottom right corner of the screen that reads ''This question has been answered. Click here to enable the edit button.''
Based on the table data, it seems that the screenshot is taken from the Prism Central web console, showing the results of a cluster health check report.The report shows that there are four failed checks: Host Password Policy, CVM Password Policy, NTP Configuration, and Cluster Time Skew2. These checks indicate that some initial cluster configuration tasks were missed during the deployment process.
The Host Password Policy check verifies that the host passwords are not set to default values and are compliant with the password policy defined in Prism Central3.The CVM Password Policy check verifies that the CVM passwords are not set to default values and are compliant with the password policy defined in Prism Central4. These checks are important for ensuring the security and compliance of the cluster. Therefore, changing the host and CVM passwords from their default values and following the password policy guidelines are two initial cluster configuration tasks that were missed.

QUESTION 3
An administrator needs to configure a new subnet on an AHV cluster and want to ensure that VMs will automatically be assigned an IP address at creation time.
Which type of network does the administrator need to create?

A. Dynamic Network
B. Unmanaged Network
C. Managed Network
D. DHCP Network

Correct Answer: C

Section:
Explanation:
A managed network is a type of network that can be created on an AHV cluster and allows VMs to automatically be assigned an IP address at creation time. A managed network uses the Nutanix IP Address Management (IPAM) service, which provides DHCP and DNS functionality for the VMs on the network. A managed network can be configured with a subnet range, a default gateway, and DNS servers. The IPAM service will allocate IP addresses from the subnet range to the VMs and register their hostnames in the DNS servers.The IPAM service will also release the IP addresses when the VMs are deleted or moved to another network1.
To create a managed network on an AHV cluster, the administrator can use Prism Element or Prism Central.The steps are as follows2:
In Prism Element, go to the Network Configuration page and click Create Network.
In Prism Central, go to the Networks page and click Create.
Enter a name and description for the network.
Select Managed as the network type.
Enter the subnet range, default gateway, and DNS servers for the network.
Optionally, enable VLAN tagging and enter a VLAN ID for the network.
Click Save.

QUESTION 4
Which two predefined views can be added to a report to identify inefficient VMs?

A. Underprovisioned VMs List

B. Zombie VMs List

C. Constrained VMs List

D. Overprovisioned VMs List

Correct Answer: B, D
Section:
Explanation:
Zombie VMs and overprovisioned VMs are two types of inefficient VMs that can waste resources and increase costs in a Nutanix environment. Zombie VMs are VMs that are powered on but have no activity or utilization for a long period of time. Overprovisioned VMs are VMs that have more resources allocated than they actually need or use. Both types of VMs can be identified by adding predefined views to a report in Prism Central.
A predefined view is a template that defines what data is displayed and how that data is represented in a report. Prism Central provides several predefined views for different purposes, such as capacity planning, performance analysis, anomaly detection, and efficiency optimization.To add a predefined view to a report, go to Operations > Reports > New Report and select the desired view from the list1.
The Zombie VMs List view shows the list of zombie VMs in the environment based on the CPU usage, memory usage, disk IOPS, and network throughput metrics.The view also shows the amount of resources wasted by these VMs and the potential savings that can be achieved by deleting or resizing them2.
The Overprovisioned VMs List view shows the list of overprovisioned VMs in the environment based on the CPU usage, memory usage, disk IOPS, and network throughput metrics.The view also shows the amount of resources wasted by these VMs and the potential savings that can be achieved by resizing them3.
By adding these two views to a report, an administrator can identify inefficient VMs and take appropriate actions to optimize resource utilization and reduce costs.

QUESTION 5
When a VM is connected to a Nutanix managed network, when is the IP addressed assigned?

A. When the vNIC is created on the VM.

B. When the VM is powered on.

C. When the guest OS sends a DHCP request.

D. When the guest OS receives a DHCP acknowledge.

Correct Answer: B
Section:
Explanation:
When a VM is connected to a Nutanix managed network, the IP address is assigned when the VM is powered on. A Nutanix managed network is a network that is created and managed by Prism Central using IP address management (IPAM). IPAM allows Prism Central to automatically assign IP addresses to VMs from a pool of available addresses in a subnet.IPAM also tracks the IP address usage and availability across clusters and networks4.
When a VM is connected to a Nutanix managed network, the administrator can choose one of the following assignment types for the IP address:

Assign Static IP: This option allows the administrator to manually specify a static IP address for the VM from the subnet range. The IP address will not change unless the administrator changes it.

Assign with DHCP: This option allows Prism Central to dynamically assign an IP address for the VM from the subnet range using DHCP. The IP address may change depending on the DHCP lease time and availability.

No Private IP: This option allows the administrator to skip assigning an IP address for the VM.This option is useful for scenarios where the administrator wants to use an external IPAM solution or assign an IP address later5.

Regardless of the assignment type, the IP address is assigned when the VM is powered on. This is because Prism Central needs to communicate with the hypervisor (AHV or ESXi) to configure the virtual NIC (vNIC) of the VM with the IP address information.This communication can only happen when the VM is in a powered on state6.

QUESTION 6

Which two capabilities does IPAM provide in a Nutanix networking configuration? (Choose two.)

A. Allows proxy server settings to be set up for a defined network

B. Allows AHV to assign IP addresses automatically to VMs using DHCP

C. Configures a VLAN with an IP subnet and assigns a group of IP addresses

D. Configures firewall rules to prevent or allow certain TCP/IP traffic

Correct Answer: B, C
Section:
Explanation:
According to theNutanix Support & Insights, IPAM enables AHV to assign IP addresses automatically to VMs using DHCP. You can configure each virtual network and associated VLAN with a specific IP subnet, associated domain settings, and group of IP address pools available for assignment.

QUESTION 7

Which three cluster operations require an administrator to reclaim licenses?(Choose three)

A. Destroy a cluster.

B. Upgrade a cluster

C. Migrate a cluster

D. Remove a Node from a cluster

E. Move Nodes between clusters.

Correct Answer: A, D, E
Section:
Explanation:
https://portal.nutanix.com/page/documents/details/?targetId=Web_Console_Guide-Prism_v4_7:lic_licensing_managing_c.html

Reclaiming Licenses (Including License Renewal)

You can reclaim and optionally re-apply licenses for nodes in your clusters:

You must reclaim licenses when you plan to destroy a cluster. First reclaim the licenses, then destroy the cluster. You do not need to reclaim Starter licenses. These licenses are automatically applied whenever you create a cluster, including after you have destroyed a cluster.

Return licenses to your inventory when you remove one or more nodes from a cluster. Also, if you move nodes from one cluster to another, first reclaim the licenses, move the nodes, then re-apply the licenses.

You can reclaim licenses for nodes in your clusters in cases where you want to make modifications or downgrade licenses. For example, applying an Ultimate license to all nodes in a cluster where some nodes are currently licensed as Pro and some nodes are licensed as Ultimate. You might also want to transition nodes from Ultimate to Pro licensing.

You must reclaim licenses when you renew licenses. First reclaim the expired licenses, then apply new licenses.

QUESTION 8

When configuring Prism Central, which two log modules are able to forward messages to an external syslog server? (Choose two.

A. API Audit

B. Flow

C. DNS

D. NTP Synchronization

Correct Answer: A, B
Section:

QUESTION 9
An administrator has been alerted to a VM that has high I/O latency and wants to determine if there are any other factors, such as insufficient network or memory resources that correlate, as part of a troubleshooting process.
Which type of chart should the administrator create to allow all relevant data to be easily exported to CSV for later analysis?

A. A VM entity chart with each of the relevant metrics.

B. A cluster metric chart for each of the relevant metrics

C. A cluster entity chart with each of the relevant metrics

D. A VM metric chart for each of the relevant metrics

Correct Answer: D
Section:

QUESTION 10
How should an administrator correct an SSL error when connecting to a Nutanix cluster?

A. Add the SSL certificate to the workstation's trusted people store

B. Create a new self-signed certificate for the cluster with a 4096 bit key

C. Create a new SSL certificate for the cluster signed by an AD certificate authority

D. Add the SSL certificate to an AD group policy applied to all computer objects

Correct Answer: C
Section:

QUESTION 11
An administrator was reviewing various AOS logs when a it was noticed that the time of the logs were off by several hours.
Which initial step was missed during the post process cluster configuration?

A. Setting the cluster time zone via PC GUI

B. Setting the cluster time zone via CVM NCLI

C. Setting the cluster time zone via PE GUI

D. Setting the cluster time zone via CVM ACLI

Correct Answer: B
Section:
Explanation:
The cluster time zone is a setting that determines the time zone used by all CVMs in the cluster. The cluster time zone affects the timestamps of Nutanix logs, events, alerts, and reports. The cluster time zone also affects the scheduling of tasks such as snapshots, replication, and upgrades.By default, the cluster time zone is set to UTC (Coordinated Universal Time) when the cluster is created3.
To change the cluster time zone, the administrator needs to use the ncli (Nutanix command-line interface) on any CVM in the cluster.The steps are as follows4:
Log in to any CVM using SSH.
Runncli cluster get-timezoneto check the current cluster time zone.
Runncli cluster set-timezone timezone=<timezone>to change the cluster time zone, where<timezone>is a valid time zone identifier (for example, America/New_York).
Runncli cluster get-timezoneagain to verify that the cluster time zone has been changed.

Note that changing the cluster time zone does not affect the time zone of Prism Element or Prism Central VMs.To change their time zone, the administrator needs to use Prism Element UI or Prism Central UI respectively5.

QUESTION 12
Which AOS process determine if an I/O from a user will be written to OpLog or to an Extent Store?

A. Stargate

B. Curtor

C. Cassandara

D. Zeus

Correct Answer: A
Section:
Explanation:
Stargate is the AOS process that handles all I/O operations for the cluster. It is responsible for determining whether an I/O from a user will be written to the OpLog or to the Extent Store, based on the type and size of the I/O.Stargate also performs data tiering, compression, deduplication, and erasure coding1.Stargate runs on every CVM and communicates with other Stargates to ensure data locality and redundancy2.

QUESTION 13
A recently configured cluster is leveraging NearSync with a recovery schedule of 15 minutes. It is noticed that the cluster is consistently transitioning in an Out of NearSyne.
What action should be taken to potentially address this issue?

A. Increase network bandwidth

B. Change the NearSync schedule to 30 minutes.

C. Add a vCPUs to the user VMs.

D. Configure a secondary schedule in the same Protection Domain.

Correct Answer: A
Section:
Explanation:
One of the possible reasons for a cluster to transition out of NearSync is insufficient network bandwidth between the source and target clusters.NearSync requires a minimum network bandwidth of 10 Mbps per VM for replication3. If the network bandwidth is lower than the required amount, the replication of recovery points may take longer than the configured RPO, resulting in an Out of NearSync condition.To address this issue, you can increase the network bandwidth between the clusters or reduce the number of VMs protected by NearSync4.

QUESTION 14
Which scenario would benefit most from Erasure Coding being enabled on a container?

A. Long term storage of data which is written once and read infrequently

B. High performance database where all is relatively hot.

C. VDI use cases where a single VM is cloned 100's of times

D. WEB and API Servers

Correct Answer: A
Section:
Explanation:
The correct answer is A. Long term storage of data which is written once and read infrequently.
Erasure Coding is a feature that increases the usable capacity on a Nutanix cluster by reducing the amount of data replication. Instead of replicating data, Erasure Coding uses parity information to rebuild data in the event of a disk failure. The capacity savings of Erasure Coding is in addition to deduplication and compression savings1.
Erasure Coding is most beneficial for scenarios where the data is written once and read infrequently, such as long term storage of archival data, backup data, or cold data. This is because Erasure Coding has some trade-offs and limitations that may affect the performance and availability of the cluster. Some of these trade-offs and limitations are2:

Erasure Coding requires more CPU and memory resources than replication, as it involves more complex calculations for encoding and decoding data.

Erasure Coding increases the network bandwidth consumption, as it involves more data transfers between nodes for encoding and decoding data.

Erasure Coding reduces the resiliency of the cluster, as it can tolerate fewer node failures than replication. For example, a cluster with redundancy factor 2 can tolerate one node failure with replication, but only two disk failures with Erasure Coding.

Erasure Coding is not effective for workloads that have many overwrites or random writes, as it involves more overhead for updating the parity information.

Erasure Coding is not supported for some features, such as volume groups, file server VMs, or Metro Availability.

Therefore, if an administrator needs to configure a container on a Nutanix cluster, they should enable Erasure Coding only if the container will store data that is written once and read infrequently. This way, they can maximize the capacity savings of Erasure Coding without compromising the performance and availability of the cluster.

QUESTION 15
A two-node ROBO cluster is configured with a witness VM.
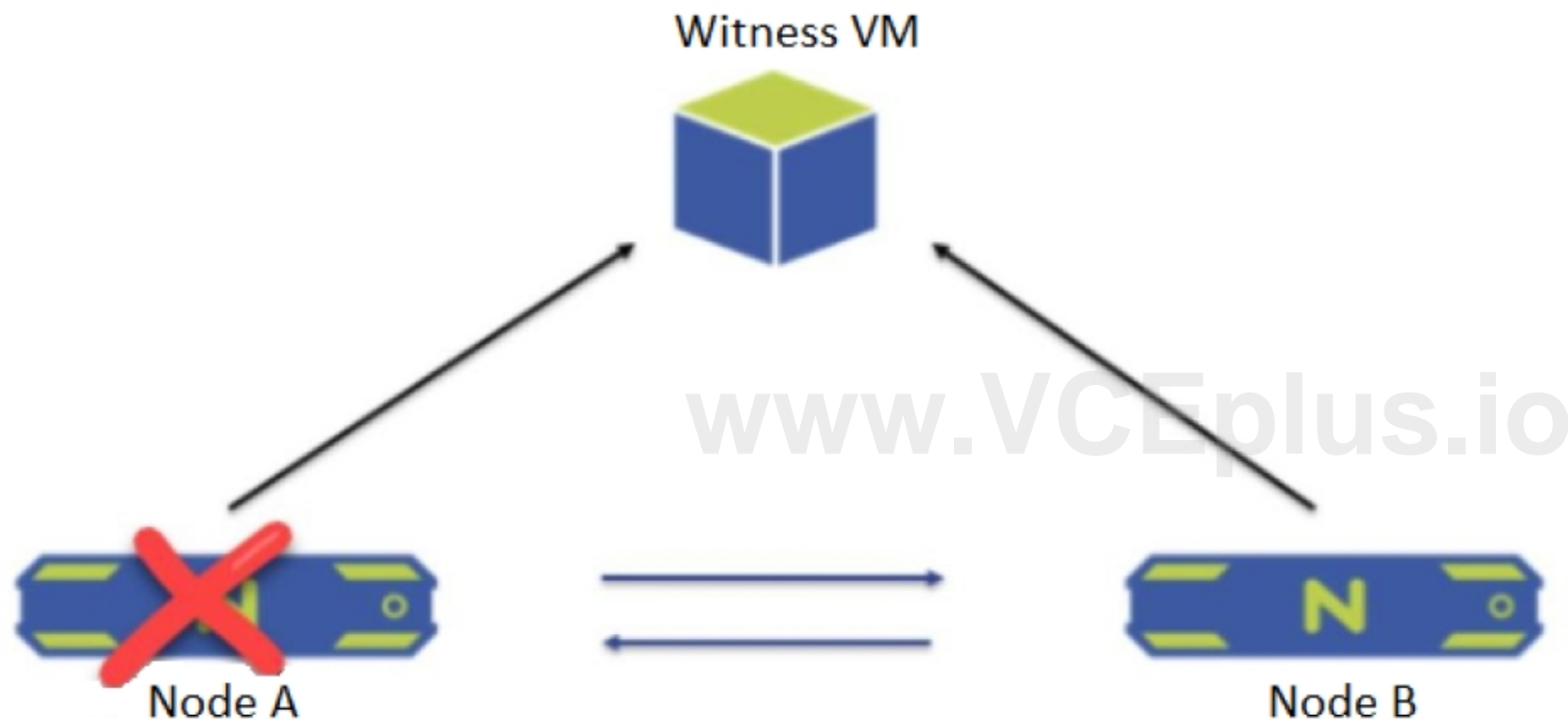
What happens when Node A goes down?

A. The- cluster becomes unavailable and goes into read-only mode.

B. All operations and services on the Node B are shut down and go into a waiting state.

C. The cluster is unaffected and no administrator intervention is required.

D. Node B sends a leadership request to the Witness VM and goes into single-node mode.

Correct Answer: D
Section:
Explanation:
According to theNutanix Support & Insights, in a two-node ROBO cluster with a witness VM, if one node goes down, the other node sends a leadership request to the witness VM and goes into single-node mode. The cluster remains available and can tolerate another failure of either the witness VM or the network link.

QUESTION 16
How will an HDD failure affect VMs with data on the failed device?

A. The VMs will crash, and will be restarted once the failed HDD has been replaced and the data has been restored.
B. A live migration will be initiated, moving the affected VMs to a host that contains the replica data.
C. The VMs will remain operational on that host and continue to function normally with no noticeable impact
D. An HA event will occur, causing the affected VMs to restart on a node that contains the replica data.

Correct Answer: D
Section:
Explanation:
According to theTroubleshooting hosted disk I/O performance problems (1008885), when using VMware hosted products, consider that both the virtual machines and host operating system often share the same disk resources and hardware. If a hard disk fails, the virtual machines that have data on the failed device will experience an HA event, causing them to restart on a node that contains the replica data.

QUESTION 17
A guest VM should be able to tolerate simultaneous failure of two nodes or drives.
What are the minimum requirements for the Nutanix cluster?

A. 3 nodes with cluster RF 3 and container RF 3
B. 3 nodes with cluster RF 3 and container RF 2
C. 5 nodes with cluster RF 2 and container RF 3
D. 5 nodes with cluster RF 3 and container RF 3

Correct Answer: D
Section:

QUESTION 18
HOTSPOT
Async DR is configured between two sites. A network outage occurs at the primary site.
Which steps must the administrator perform to bring the VMs back into service at the backup site?
Item instructions: For each procedure, indicate the order in which that procedure must take place to meet the item requirements. Not all procedures are valid. Identify any invalid procedures using the drop-down option.

Hot Area:

Procedure	Step	
Log into Prism Element at the backup site	Select	Invalid Step
		Step 1
		Step 2
		Step 3
		Step 4
Reboot VMs	Select	Invalid Step
		Step 1
		Step 2
		Step 3
		Step 4
Go to the Async DR tab	Select	Invalid Step
		Step 1
		Step 2
		Step 3
		Step 4
Log into Prism Element at the primary Site	Select	Invalid Step
		Step 1
		Step 2
		Step 3
		Step 4
Select the Protection Domain and click Activate	Select	Invalid Step
		Step 1
		Step 2
		Step 3
		Step 4
Power on VMs	Select	Invalid Step

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Procedure	Step	
Log into Prism Element at the backup site	Select	**Invalid Step**
		Step 1
		Step 2
		Step 3
		Step 4
Reboot VMs	Select	**Invalid Step**
		Step 1
		Step 2
		Step 3
		Step 4
Go to the Async DR tab	Select	Invalid Step
		Step 1
		Step 2
		Step 3
		Step 4
Log into Prism Element at the primary Site	Select	Invalid Step
		Step 1
		Step 2
		Step 3
		Step 4
Select the Protection Domain and click Activate	Select	Invalid Step
		Step 1
		Step 2
		Step 3
		Step 4
Power on VMs	Select	Invalid Step

QUESTION 19
Refer to the exhibit.
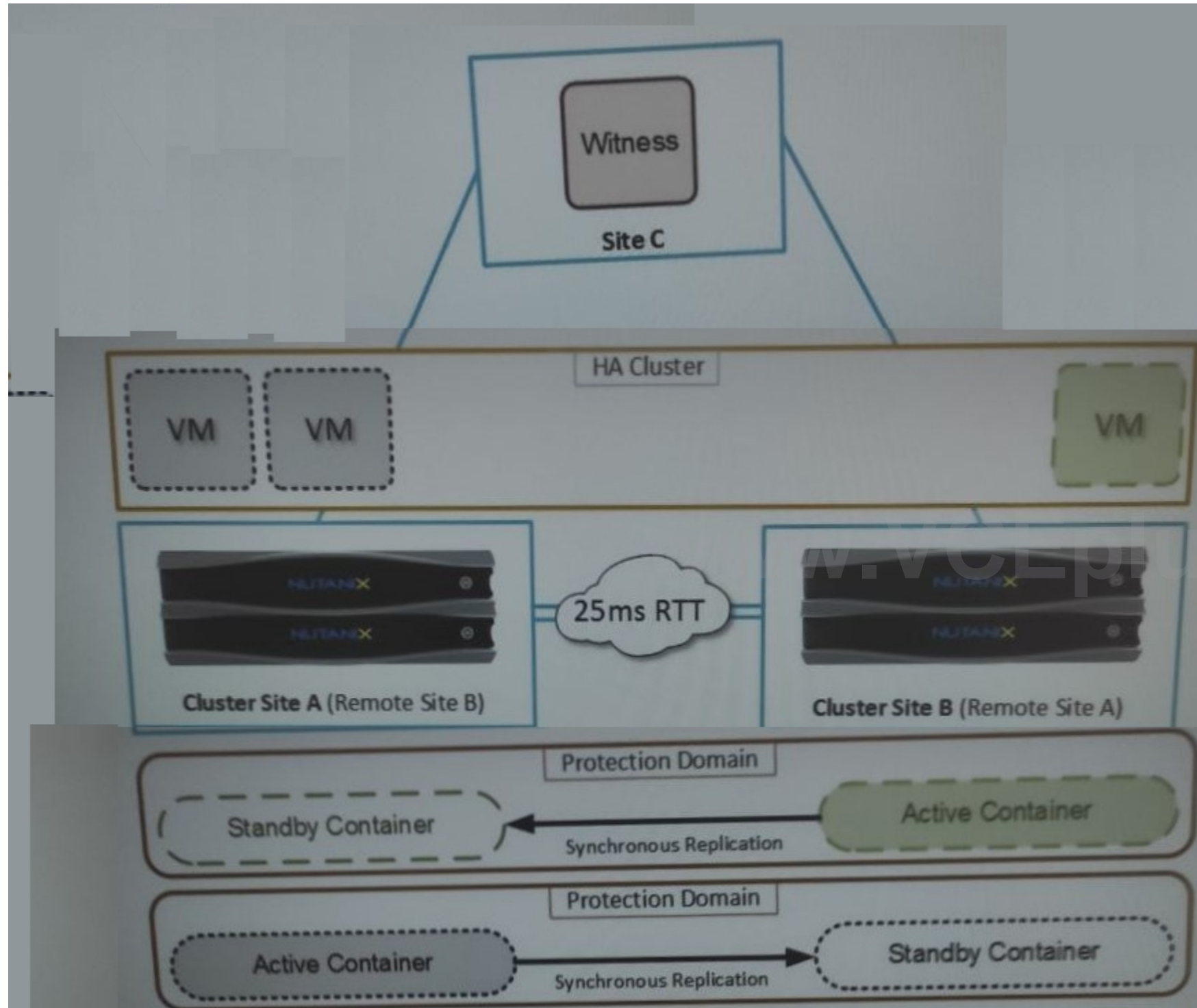
An administrator is trying to implement the solution that is shown in the exhibit, but has been unsuccessful.
Based on the diagram, what is causing the issue?

A. A remote Witness VM

B. Active containers in both sites

C. Network latency

D. Unsupported hypervisor

Correct Answer: C
Section:
Explanation:
The correct answer is C. Network latency.
The diagram shows a solution that uses synchronous replication between two remote protection domains, cluster site A and cluster site B. Synchronous replication is a feature that allows near-zero RPO (recovery point objective) by replicating data to the remote site before acknowledging writes to the local site. However, synchronous replication has some requirements and limitations that must be met for it to work properly. One of these requirements is that the network latency between the two sites must be less than or equal to 5 ms1. If the network latency is higher than 5 ms, the synchronous replication will fail and the protection policy will be suspended2.
Therefore, based on the diagram, the most likely cause of the issue is that the network latency between cluster site A and cluster site B is higher than 5 ms, which prevents the synchronous replication from working. To verify this, the administrator can use the ''ncli cluster ping'' command to measure the network latency between the two sites3. If the network latency is indeed higher than 5 ms, the administrator can either improve the network performance or switch to a different replication mode, such as near-synchronous or asynchronous.

QUESTION 20
The administrator recently had a node fail in an AHV Nutanix cluster. All of the VMs restarted on other nodes in the cluster, but they discovered that the VMs that make up a SQL cluster were running on the failed host. The administrator has been asked to take measures to prevent a SQL outage in the future.
What affinity option will prevent the SQL VMs from running on the same hos?

A. VM-VM anti-Affinity policy
B. Create Affinity Category
C. VM-Most Affinity policy
D. Create Affinity Project

Correct Answer: A
Section:
Explanation:
A VM-VM anti-Affinity policy is a rule that ensures that two or more VMs don't run on the same AHV host. It's useful when an application provides HA and an AHV host can't be an application's single point of failure1. In this case, the SQL cluster VMs should have a VM-VM anti-Affinity policy configured to prevent them from running on the same host and causing an outage if that host fails. A VM-VM anti-Affinity policy can be created using the aCLI commands2. The other options are not relevant for this scenario.

QUESTION 21
After logging into Prism Element, an administrator presses the letter A on the Keyboard.
What is the expected outcome of this input?

A. Alerts page will launch
B. Analysis will launch
C. About Nutanix page will launch
D. API Explorer page will launch

Correct Answer: D
Section:
Explanation:
API Explorer page will launchwhen an administrator presses the letter A on the keyboard after logging into Prism Element.This is one of the keyboard shortcuts that Prism Element provides for accessibility and ease of use1.API Explorer is a tool that allows users to explore and test Nutanix REST APIs within Prism Element1.
https://www.nutanixbible.com/3b-book-of-prism-navigation.html

QUESTION 22
An administrator needs to increase bandwidth available to the AHV host and to the CVM.
How should the administrator complete this task?

A. In Prism, update vs0 to change the configuration to Active-Active.

B. Use manage-ovs commands to update br0 change the configuration to Active-Active.

C. In Prism, create a vsl interface and add any remaining uplinks.

D. Use manage-ovs commands to create br1 and add any remaining uplinks

Correct Answer: B
Section:
Explanation:
The default network configuration for AHV hosts and CVMs is a bond named br0-up with two or more uplinks in active-backup mode. This means that only one uplink is active at a time, while the others are in standby mode. This provides high availability, but not load balancing or increased bandwidth. To increase the bandwidth available to the AHV host and the CVM, the administrator can change the bond mode to Active-Active, which allows all uplinks to be used simultaneously. This can be done using the manage-ovs commands on each AHV host.The steps are as follows1:
Log in to the AHV host using SSH.
Enter maintenance mode on the CVM by runningallssh 'cluster status | grep -i cvm | grep -i down'.
Change the bond mode to Active-Active by runningmanage_ovs --bond_mode active-active update_uplinks br0-up <uplink_list>, where<uplink_list>is a comma-separated list of uplink interfaces (for example, eth0,eth1).
Verify the bond mode by runningmanage_ovs show_uplinks.
Exit maintenance mode on the CVM by runningallssh 'cluster start'.

QUESTION 23
Which inefficient VM Profile can be used to identify a VM that consumes too many resources and causes other VMs to starve?

A. Over-provisioned VM

B. Inactive VM

C. Bully VM

D. Constrained VM

Correct Answer: C
Section:
Explanation:
A bully VM is a VM that consumes too many resources and causes other VMs to starve. A bully VM can affect the performance and availability of other VMs on the same host or cluster by hogging CPU, memory, disk, or network resources.A bully VM can be identified by using the VM Profile feature in Prism Central2. The VM Profile feature analyzes the resource utilization of each VM and assigns it a profile based on its efficiency and impact on other VMs.The profiles are as follows3:
Efficient: The VM is well-provisioned and has optimal resource utilization.
Over-provisioned: The VM has more resources than it needs and has low resource utilization.
Constrained: The VM has less resources than it needs and has high resource utilization.
Inactive: The VM has no resource utilization and is idle or powered off.
Bully: The VM has high resource utilization and causes contention for other VMs.
To identify a bully VM, the administrator can use Prism Central to view the VM Profile dashboard and filter by profile type. The dashboard shows the number of VMs in each profile type, as well as their resource consumption and efficiency score. The administrator can also drill down into each VM to see its detailed metrics and recommendations for optimization.

QUESTION 24
What is he recommended approach for a constrained VM?

A. Reboot the VM

B. Delete the VM.

C. Increase the VM resources.

D. Decrease the VM resources

Correct Answer: C

Section:
Explanation:
A constrained VM is one that does not have enough resources for the demand and can lead to performance bottlenecks.A VM is considered constrained when it exhibits one or more of the following baseline values, based on the past 21 days: CPU usage > 90% (moderate), 95% (severe) CPU ready time > 5%, 10% Memory usage > 90%, 95% Memory swap rate > 0 Kbps1.To provide adequate host resources, resize (increase) the constrained VMs1.

QUESTION 25
An administrator wants to expand the Failure Domain level of a cluster.
What two options are available? (Choose two.)

A. Node

B. Data Center

C. Block

D. Rack

Correct Answer: C, D
Section:
Explanation:
Nutanix clusters are resilient to a drive, node, block, and rack failures because they use redundancy factor 2 by default, allowing Nutanix clusters to self-heal2.Failure scenarios can be thought of in terms of fault domains, which are the physical or logical parts of a computing environment or location that are adversely affected when a device or service experiences an issue or outage3.There are four fault domains in a Nutanix cluster: Disk, Node, Block, and Rack4. Block and Rack are two options that are available for expanding the failure domain level of a cluster.Block fault tolerance is enabled by default and ensures that data is replicated across different blocks in a cluster5.Rack fault tolerance has to be configured manually and ensures that data is replicated across different racks in a cluster4.

QUESTION 26
What is a requirement to enable Flow Networking?

A. A dedicated virtual switch has been created for Flow Networking.

B. Flow Micro segmentation must be enabled.

C. Microservices infrastructure must be enabled.

D. Prims Central is using a three-node scale-out deployment

Correct Answer: C
Section:
Explanation:
Flow Networking is a feature that enables software-defined networking for AHV clusters. It allows users to create and manage virtual private clouds (VPCs), subnets, and network services such as NAT, DHCP, routing, and VPN. Flow Networking also supports service insertion and chaining, which enables integration with third-party network functions such as firewalls and load balancers. Flow Networking is built on top of the microservices infrastructure (MSP) in Prism Central, which provides the platform for running various Nutanix services such as Calm, Karbon, and Objects.Therefore, to enable Flow Networking, the MSP must be enabled first on Prism Central1.The MSP can be enabled from the Prism Central settings page or from the command line interface (CLI) of the Prism Central VM2. Enabling the MSP will also enable Flow Microsegmentation, which is another feature that provides network security and visibility for AHV clusters.

QUESTION 27
HOTSPOT
An administrator has created several custom alert policies, which are applied to the same entities. Prism Central displays a message that a similar policy exists.
In what order of precedence are overlapping policies evaluated?

Hot Area:

Preference   **Correct Sequence**

First Preference

Select ▼
Select
Policy is applied to a specific entity
Policy is applied to an entity type in a category
Policy is applied to an entity type in a cluster
Policy is applied to all entities of an entity type

Second Preference

Select ▼
Select
Policy is applied to a specific entity
Policy is applied to an entity type in a category
Policy is applied to an entity type in a cluster
Policy is applied to all entities of an entity type

Third Preference

Select ▼
Select
Policy is applied to a specific entity
Policy is applied to an entity type in a category
Policy is applied to an entity type in a cluster
Policy is applied to all entities of an entity type

Fourth Preference

Select ▼
Select
Policy is applied to a specific entity
Policy is applied to an entity type in a category
Policy is applied to an entity type in a cluster
Policy is applied to all entities of an entity type

Answer Area:

Preference | **Correct Sequence**

First Preference

Select ▼
Select
Policy is applied to a specific entity
Policy is applied to an entity type in a category
Policy is applied to an entity type in a cluster
Policy is applied to all entities of an entity type

Second Preference

Select ▼
Select
Policy is applied to a specific entity
Policy is applied to an entity type in a category
Policy is applied to an entity type in a cluster
Policy is applied to all entities of an entity type

Third Preference

Select ▼
Select
Policy is applied to a specific entity
Policy is applied to an entity type in a category
Policy is applied to an entity type in a cluster
Policy is applied to all entities of an entity type

Fourth Preference

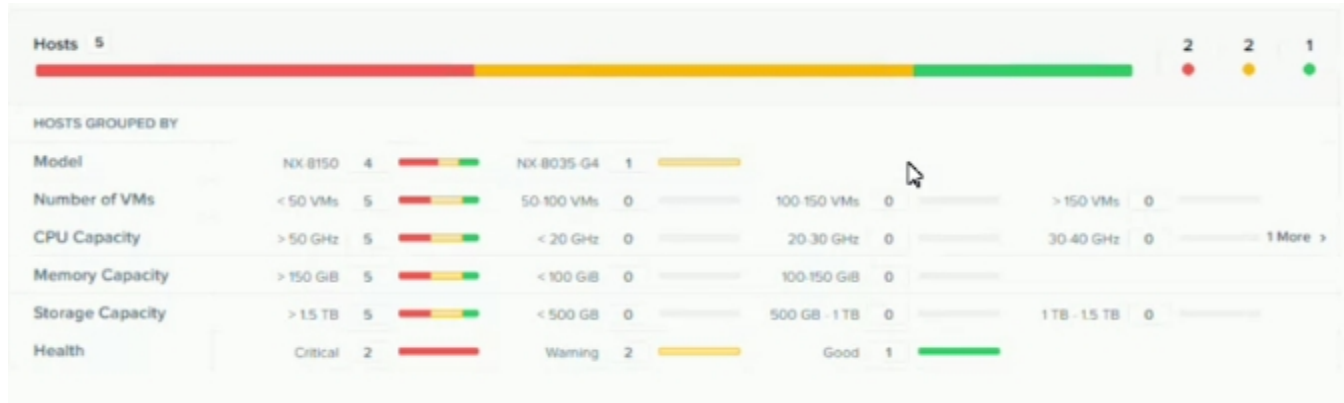| Select ▼ |
|---|
| **Select** |
| Policy is applied to a specific entity |
| Policy is applied to an entity type in a category |
| Policy is applied to an entity type in a cluster |
| Policy is applied to all entities of an entity type |

Section:
Explanation:

QUESTION 28
Refer to the exhibit.

System Non-Root Partition Usage shows a warning or critical alert The administrator needs to change the frequency of checks and alerts to respond more quickly.
Where in Prism Element should the administrator change the frequency of checks and alerts?

A. Health Dashboard > Manage Crocks > Frequency

B. Alerts Dashboard > Manage Checks > Schedule

C. Health Dashboard > Manage Checks > Schedule

D. Alerts Dashboard > Manage Checks > Frequency

Correct Answer: C
Section:
Explanation:
According to the Nutanix Support & Insights web search result1, the administrator can change the frequency of checks and alerts for the System Non-Root Partition Usage in Prism Element by going to the Health Dashboard > Manage Checks > Schedule. The administrator can select the check name, such as disk_usage_check, and click on Edit Schedule. The administrator can then choose the desired frequency, such as every 15 minutes, every hour, or every day, and click on Save. This will change how often the check runs and alerts are generated.

QUESTION 29
An administrator is setting up a Nutanix cluster and needs to configure the default VLAN.
Which configuration should the administrator choose?

A. Vlan.0

B. Vlan.1

C. Vlan.2

D. Vlan.7

Correct Answer: A
Section:
Explanation:
https://next.nutanix.com/installation-configuration-23/nutanix-vlan-34170

QUESTION 30
An administrator has been tasked with increasing security on Nutanix cluster by disabling password authentication when accessing the CVM and AHV hosts and instead moving to key-based SSH,
What is the easiest way for the administrator to meet these needs?

A. Configure LDAP authentication through a secure server,

B. Enable STIES vie commend line on SSH to CVM.

C. Enable Cluster Lockdown and provide an RSA key.

D. Restrict access with User Management in Prism.

Correct Answer: C
Section:
Explanation:
'An administrator has been tasked with increasing security on Nutanix cluster by disabling password authentication when accessing the CVM and AHV hosts and instead moving to key-based SSH, What is the easiest way for the administrator to meet these needs? Enable Cluster Lockdown and provide an RSA key.'
Cluster Lockdown mode disables password authentication when accessing the CVM and AHV hosts and instead requires key-based SSH. To enable Cluster Lockdown mode, you need to provide an RSA key.
Therefore, by enabling Cluster Lockdown mode and providing an RSA key, you can increase security on Nutanix cluster by disabling password authentication when accessing the CVM and AHV hosts and instead moving to key-based SSH with minimal effort.
https://next.nutanix.com/how-it-works-22/streamlined-login-and-increase-security-key-based-ssh-login-37397

QUESTION 31
A user is complaining about slowness of a mission-critical MSSQL Server. The administrator logs into Prism Element to investigate the VM performance and observes what is shown in the diagram.
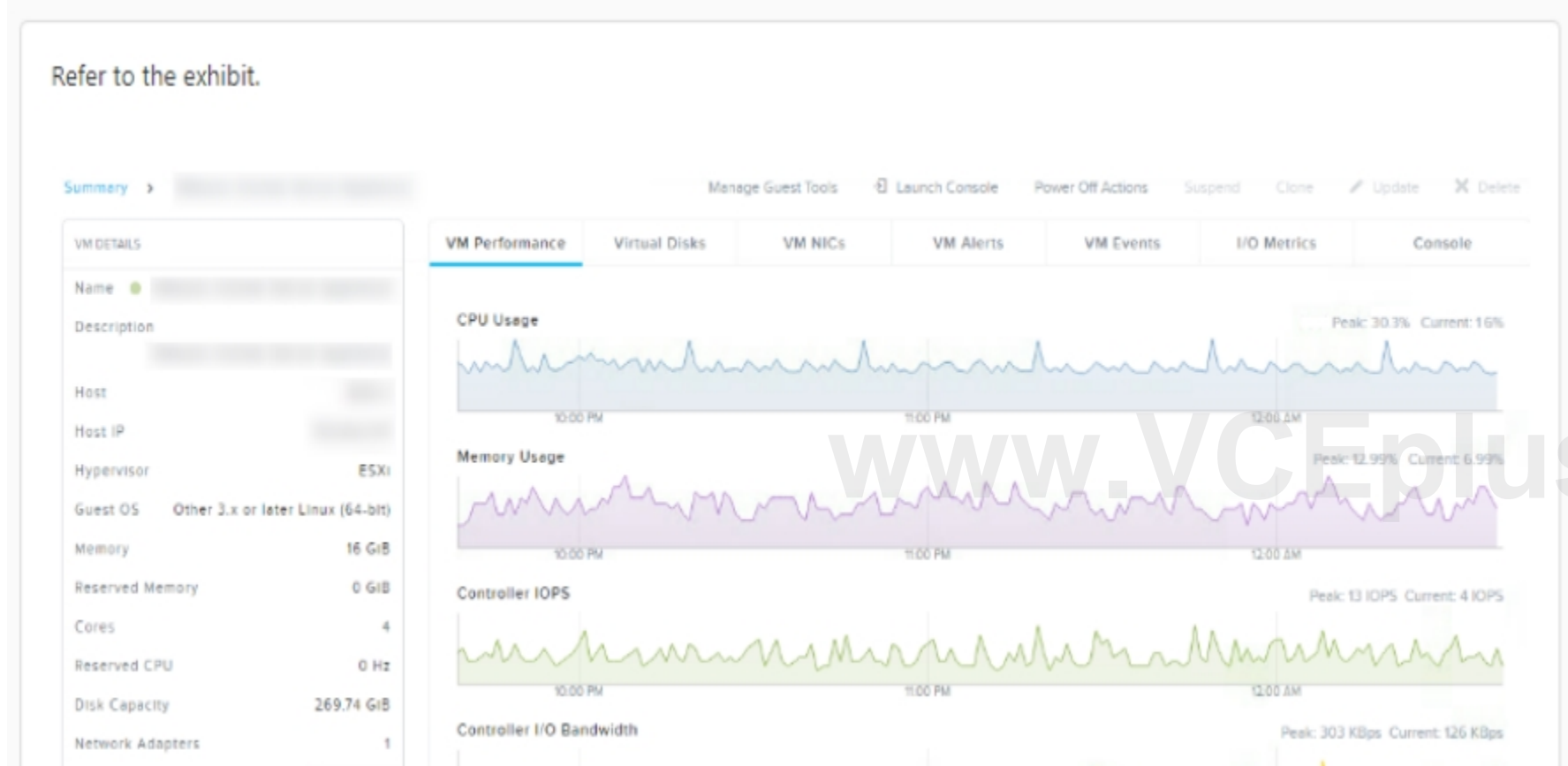
Which action would best improve VM performance?

A. Disable hyperthreading in the BIOS.
B. Add additional RAM to the user VM.
C. Add additional RAM to the host on which the VM is running.
D. Ensure the host's CPUs ere not excessively overcommitted.

Correct Answer: B
Section:
Explanation:
Prism Elementis a graphical user interface that allows you to manage Nutanix clusters1.You can use Prism Element charts to understand Nutanix cluster workloads and troubleshoot performance related issues2.
memory optimized virtual machine sizes offer the best performance for SQL Server workloads on Azure VMs. Adding more RAM to the user VM can help reduce paging and improve query execution times.
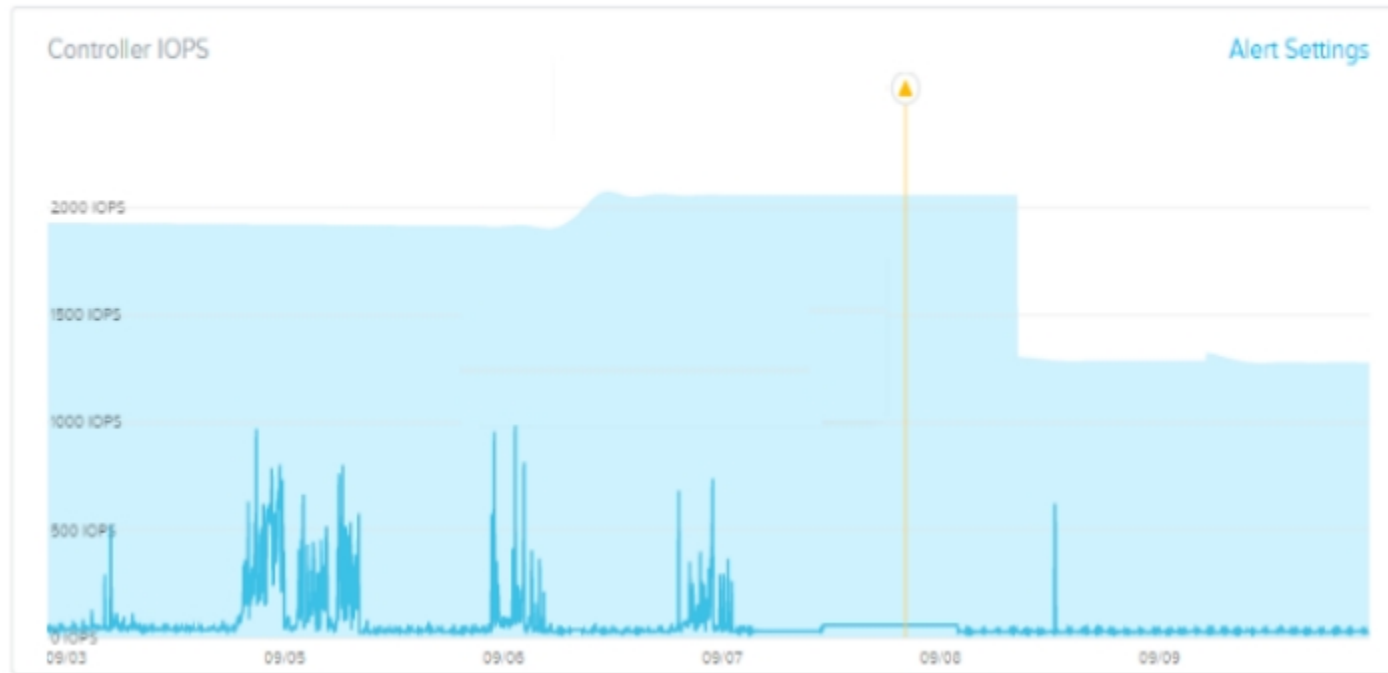SQL Server performance can be affected by disk latency and throughput. By creating separate virtual disks for data and logs, you can spread activity across multiple spindles and reduce disk contention.
https://next.nutanix.com/how-it-works-22/differences-between-prism-element-prism-central-and-prism-pro-37137

QUESTION 32
Refer to exhibit:

Refer to the exhibit.

Why has an anomaly been triggered?

A. Controller reached 2500 IOPS.
B. Observed IOPS exceed normal values.
C. Normal Controller behavior has increased.
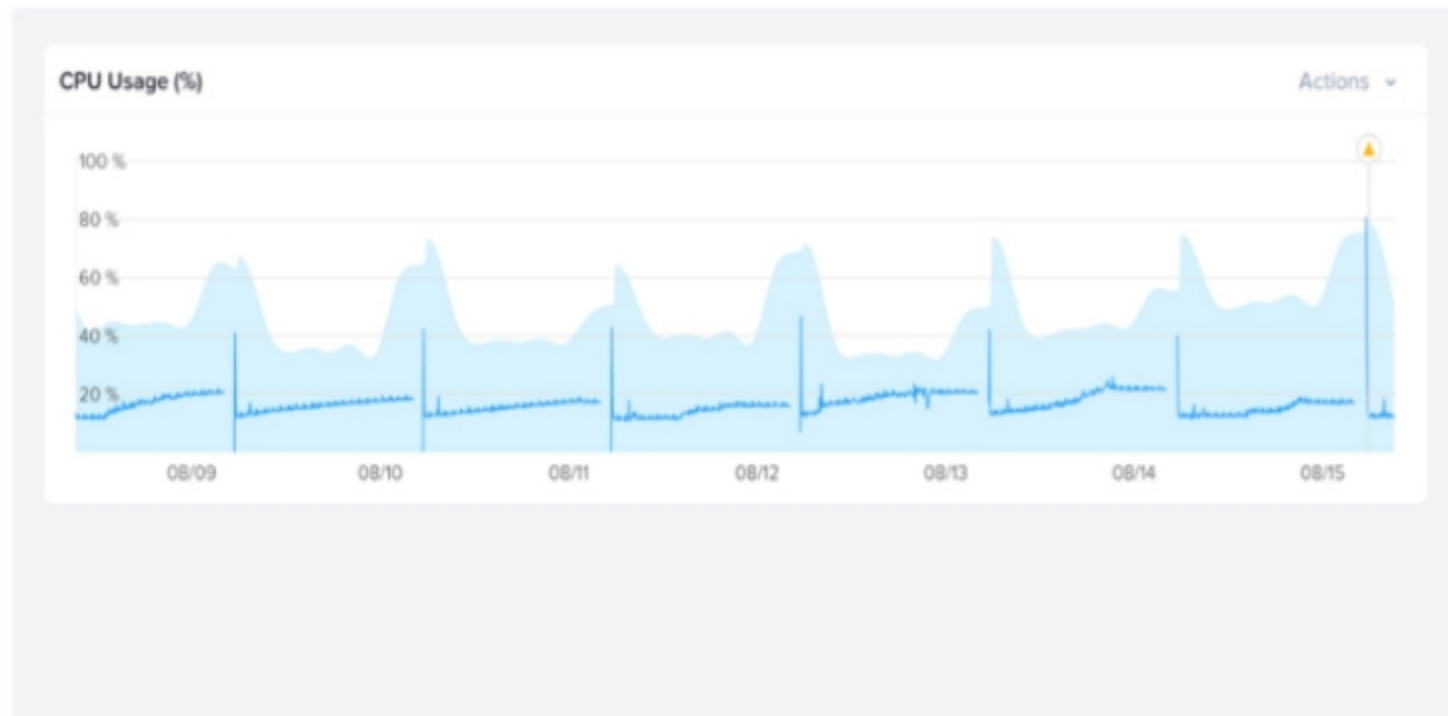D. Observed values do not match predicted values.

Correct Answer: B
Section:

QUESTION 33
Refer to Exhibit:

Refer to the exhibit.

Why has an anomaly been triggered?

A. Because the CPU usage crossed the blue band.

B. Because the blue band range increased over the last 2 days

C. Because the CPU usage dropped belon' 20%

D. Because the CPU usage reached 100%

Correct Answer: A
Section:
Explanation:
Nutanix leverages a method for determining the bands called 'Generalized Extreme Studentized Deviate Test'. A simple way to think about this is similar to a confidence interval where the values are between the lower and upper limits established by the algorithm.
Another web source3shows an example of how anomaly detection works in Nutanix Prism Central. In the video, you can see that when the observed value of a metric deviates significantly from the predicted value based on historical data, an anomaly event is triggered and displayed on a chart.
Therefore, by comparing the observed values with the predicted values based on historical data, Nutanix anomaly detection can identify abnormal behavior and alert you accordingly.

QUESTION 34
Refer to Exhibit:

STORAGE CONTAINER DETAILS

Name	▆ ▆▆
Replication Factor	1
Free Space (Logical)	▆ ▆ GiB
Used	▆ GiB
Max Capacity	▆ GiB
Reserved	0 GiB
Data Reduction Ratio	1 : 1
Data Reduction Savings	0 GiB
Effective Free	▆ ▆ GiB
Overall Efficiency	4.79 : 1
Compression	Off
Capacity Deduplication	Off
Cache Deduplication	Off
Erasure Coding	Off

An administrator needs to enable inline deduplication for a pre-existing storage container. When trying to enable deduplication on the storage container. this feature is grayed-out.
What is the reason for this behavior?

A. Replication Factor 1 is configured on the storage container.

B. The cluster has less than 5 nodes which is the minimum node-count to enable deduplication.

C. Capacity reservation is not enabled on the storage container.

D. The cluster has hybrid storage and deduplication is supported only on all-flash clusters.

Correct Answer: D
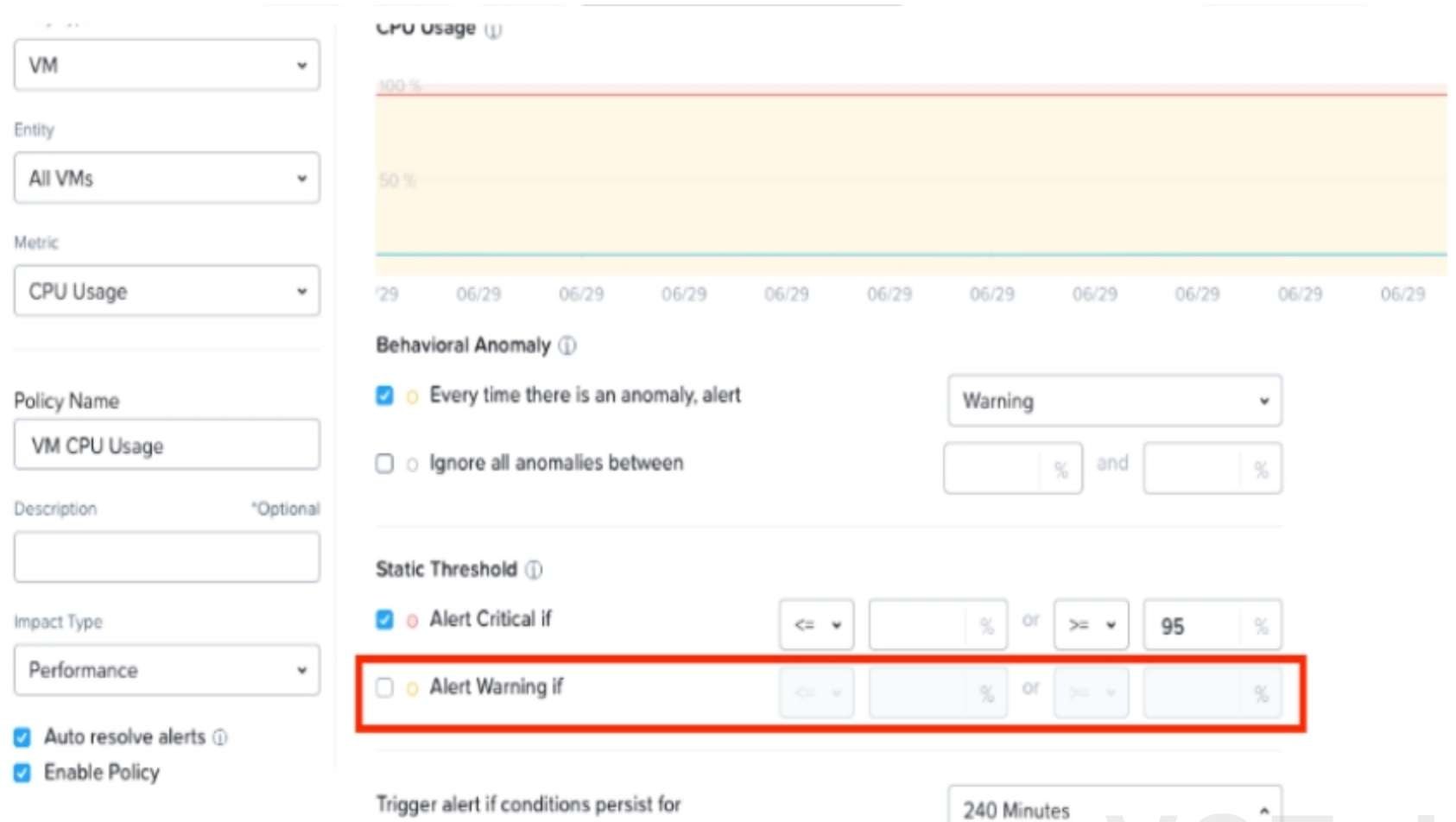**Section:**
Explanation:
Nutanix supports two types of deduplication: post-process and inline. Post-process deduplication runs periodically on a schedule and can be enabled on any cluster. Inline deduplication runs in real time before data is written to disk and can be enabled only on all-flash clusters.
Therefore, by checking the type of storage and the type of deduplication, you can determine if you can enable inline deduplication on a storage container or not.
Nutanix inline deduplicationis a feature that reduces the stored size and avoids duplicate data on a storage container1.It is recommended only on some specific scenarios, such as when using Nutanix Files or virtual desktop infrastructure (VDI) workloads12.

QUESTION 35
Refer to Exhibit:

An administrator is trying to create a custom alert policy for all VMs.
Why is the Alert warning if field greyed cut?

A. The Alert critical if threshold is set.
B. The Behavioral Anomaly threshold is set.
C. The Enable Policy option checked.
D. The Auto resolve alerts option is checked.

Correct Answer: B
Section:
Explanation:
when you create a custom alert policy, you can choose between two types of thresholds: Static Threshold and Behavioral Anomaly. Static Threshold allows you to set a fixed value for the metric that triggers the alert.
Behavioral Anomaly allows you to use machine learning to detect abnormal behavior based on historical data.
If you select Behavioral Anomaly as the threshold type, you cannot set a warning level for the alert.You can only set a critical level that indicates how much deviation from normal behavior is considered an anomaly3.
Therefore, the Alert warning if field is greyed out when you select Behavioral Anomaly.

QUESTION 36
Refer to Exhibit:
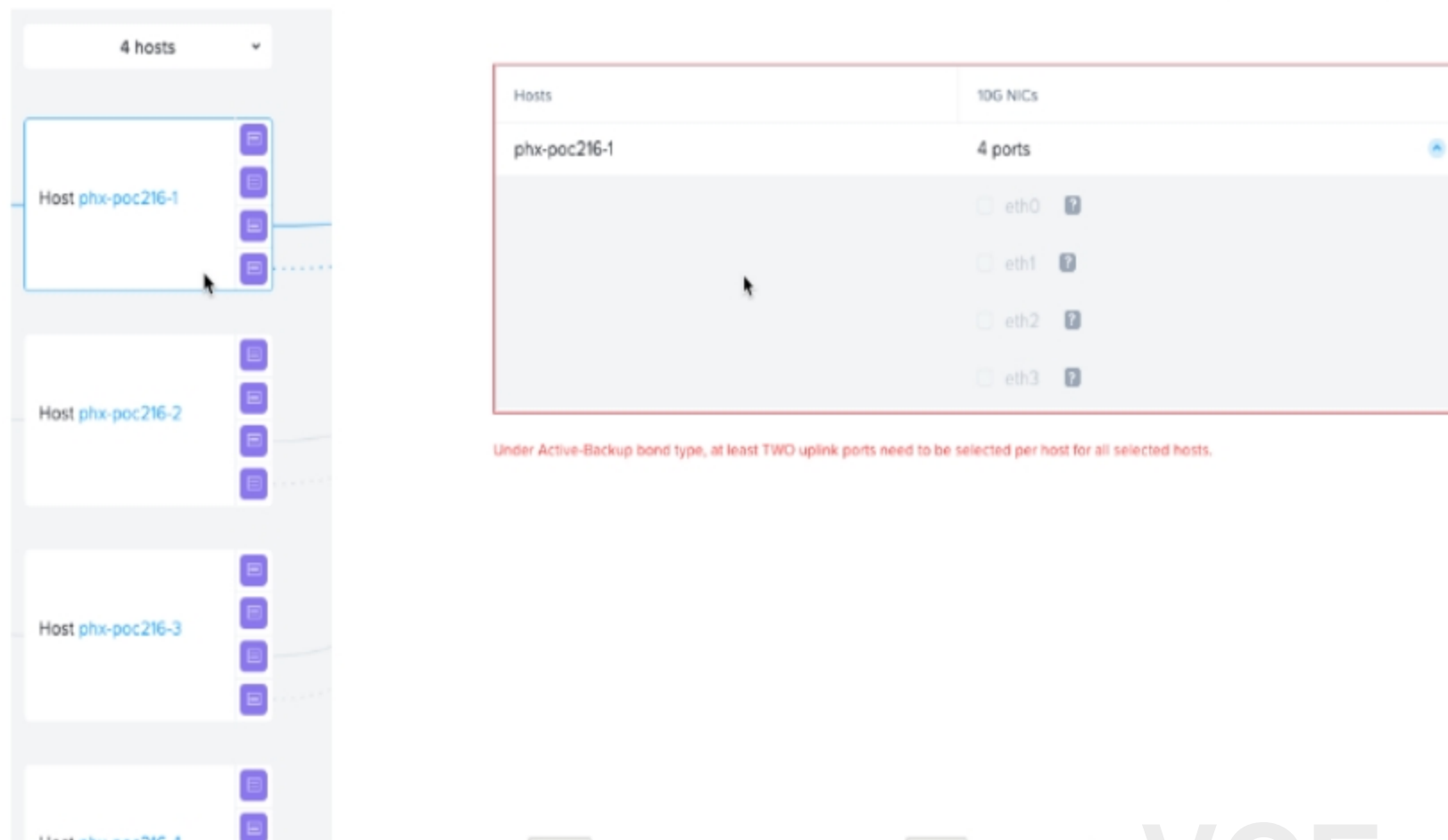
An administrator is attempting to create an additional virtual switch on a newly deployed AHV cluster, using the two currently disconnected interfaces. The administrator is unable to select the disconnected interfaces when creating the virtual switch.

What is the likely cause of this issue?

A. Only one interface is available on the selected hosts.

B. Interfaces must be connected to the network before they can be assigned.

C. The disconnected interfaces are currently assigned to virtual switch 0,

D. Interfaces must be assigned to virtual switches via the cli

Correct Answer: B
Section:
Explanation:
In Nutanix AHV, when creating a virtual switch and trying to add network interfaces (NICs) to it, the NICs must be connected to the network before they can be selected and assigned to the switch. If the interfaces are showing as disconnected, the system will not allow them to be added to a virtual switch because it cannot verify their operational status or the presence of a live network connection.
It is a standard requirement for the interfaces to have physical connectivity (i.e., network cables plugged in and connected to a live switch port) so that the AHV host can detect the link status as up. Once the interfaces are connected and recognized by the host, they can then be added to a virtual switch in the Nutanix AHV.
It's important to note that while the command-line interface (CLI) is indeed a powerful tool for managing network configurations on AHV hosts, and some configurations do indeed require CLI, the inability to select disconnected interfaces is not specifically a limitation that requires the use of CLI to overcome. The focus should be on ensuring that the physical connectivity is established for the interfaces in question.
This behavior is consistent with networking best practices and Nutanix's network configuration guidelines, as detailed in the Nutanix AHV Networking Guide. This guide explains the requirements and procedures for configuring virtual switches and managing NICs in a Nutanix AHV environment.

QUESTION 37
After configuring Active Directory as the desired authentication service, an administrator is not able to login into Prism Central using privileged account.
Which configuration must be checked first?

A. Account lock status
B. Role Mapping
C. Local user account
D. Cluster Lockdown
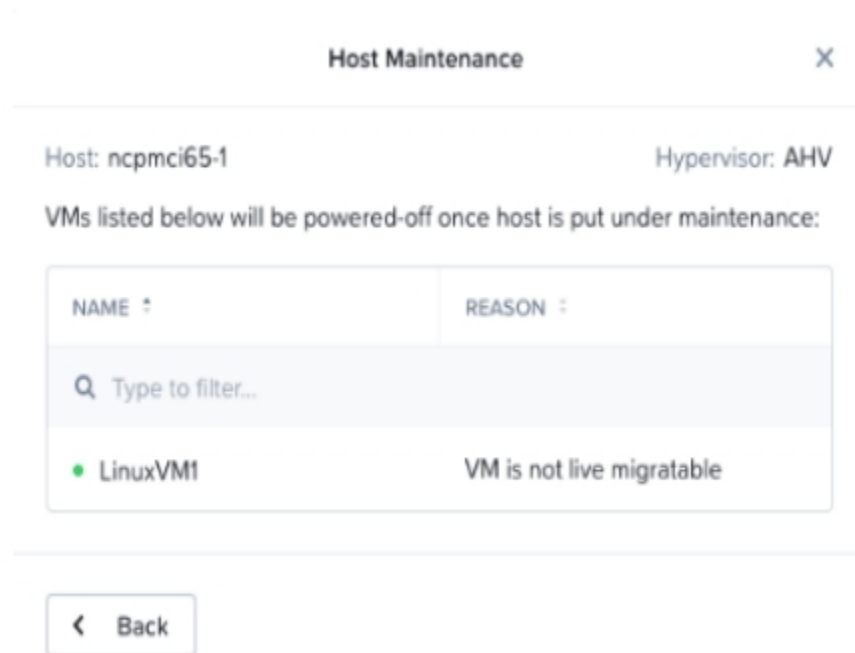
Correct Answer: B
Section:
Explanation:
According to the Nutanix Community1, users can authenticate using their Active Directory credentials when Active Directory support is enabled for Prism Central.To enable Active Directory support, you need to configure Role Mapping12, which defines how Active Directory groups map to Prism Central roles.
https://next.nutanix.com/ncm-intelligent-operations-formerly-prism-pro-ultimate-26/configuring-authentication-38051

QUESTION 38
Refer to Exhibit:

An administrator is trying to put a node into maintenance mode but receives the message shown in the exhibit.
What is a potential reason for this dialog?

A. LinuxVM1 uses a vDisks stored in a RF1 Datastore
B. LinuxVM1 uses a Volume Group
C. LinuxVM1 uses a virtual GPU.
D. LinuxVM1 uses e vDisks stored in a RF3 Datastore

Correct Answer: A
Section:
Explanation:
According to the Nutanix Community1, host maintenance mode is used to safely migrate all the user virtual machines (VMs) in the host and make sure no VMs are running on the node. If a VM can't be migrated to another host, you need to shut down the VM for the host to enter into maintenance mode.
According to The Virtualist2, a storage container is a logical segmentation of a storage pool that can be mounted as an NFS datastore on ESXi hosts. You can choose a replication factor (RF) for each storage container, which determines how many copies of data are stored across different nodes.

QUESTION 39
Refer to exhibit:

Image Configuration   ?

Manage the images to be used for creating virtual disks.

    + Upload Image

Name	Annotation	Type	State	Size	
▨ ▨	▨ ▨	DISK	ACTIVE	1 GiB	✎ · ✗
▨ ▨▨ ▨ ▨ ▨	▨ ▨ ▨ ▨	DISK	ACTIVE	10 GiB	✎ · ✗
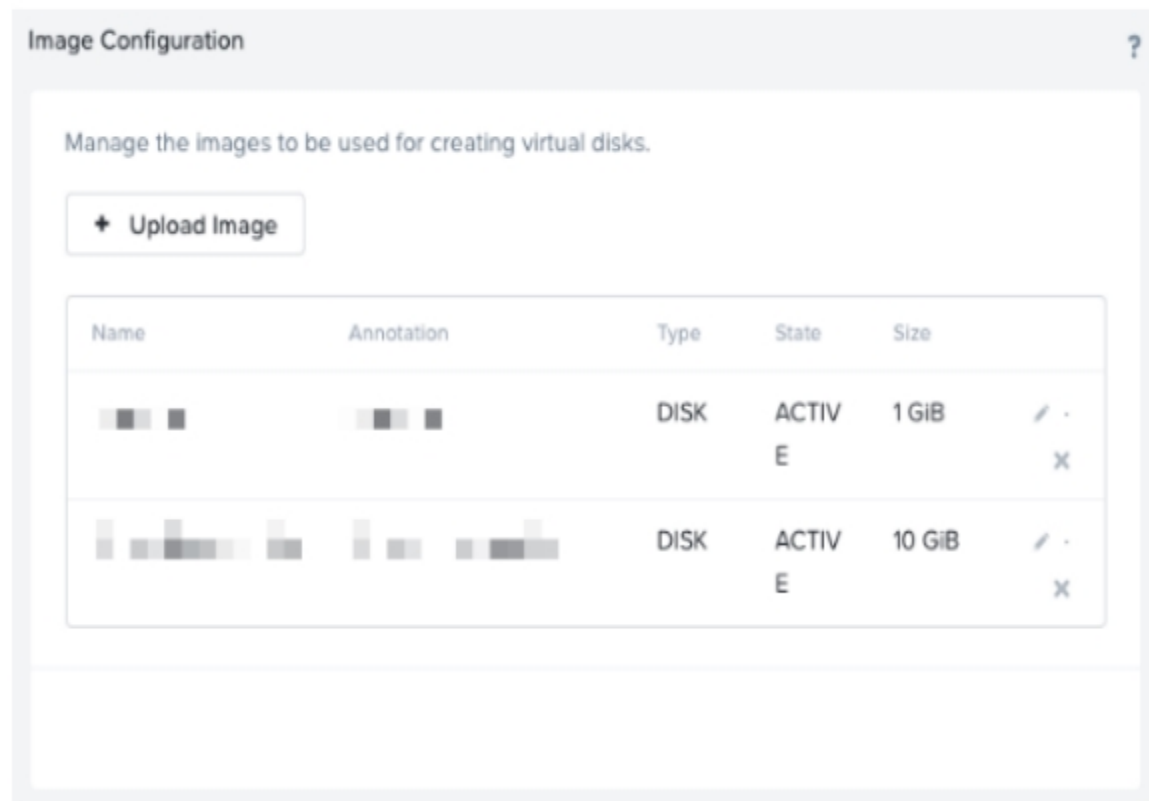
What could be the cause for this behavior?

A. RBAC is configured and the administrator's user doesn't have the right privileges.
B. The files were ISO but were uploaded as disk images hence cannot be used or edited.
C. Images are corrupted and must be re-uploaded.
D. Images were imported into Prism Central.

Correct Answer: A
Section:

QUESTION 40
Which component can be associated with a storage policy?

A. Subnet
B. Catalog
C. Vm
D. Category

Correct Answer: C
Section:
Explanation:
A storage policy can be associated with a VM. A storage policy is a set of rules that define how data objects are stored and protected. It specifies the characteristics of storage, data protection, and data placement for virtual disks that are assigned to a VM. Subnets, catalogs, and categories are not associated with storage policies.https://portal.nutanix.com/page/documents/details?targetId=Prism-Central-Guide-vpc_2022_6:mul-cluster-storage-policy-summary-view-pc-r.html

QUESTION 41
An administrator recently added new SSDs to a Nutanix cluster and knows the firmware will be out of date, Due to security constraints, the cluster does not have access to the Internet.
Which two steps must be completed to update the firmware? (Choose two.)

A. Download the disk firmware from the OEM's website.

B. Download a darksite bundle and deploy an internal webserver,

C. Select Upgrade Software, then upload the firmware bundle.

D. update the LCM Source and URL to access the firmware bundle.

Correct Answer: A, B
Section:

QUESTION 42
An administrator logs into the Nutanix Support Portal and notices there is a new version of the LCM Framework available. In an effort ensure LCM is providing the latest features, the administrator would like to upgrade LCM.
How can the LCM Framework be upgraded?

A. Perform an LCM inventory

B. Upload the latest LCM Framework as an image in the image Configuration in Prism

C. Upload the latest LCM Framework bundle via Upgrade Software in Prism

D. Upgrade AOS

Correct Answer: A
Section:
Explanation:
LCM (Life Cycle Manager) is a feature that allows Nutanix administrators to perform one-click firmware and software upgrades for Nutanix clusters and components. LCM fetches inventory and update information from a pre-configured URL that contains the latest versions of firmware and software packages. However, upgrading Nutanix AOS does not automatically update the fetch URL. To update the fetch URL, the administrator needs to update the LCM framework.The LCM framework is the core component of LCM that provides the logic and functionality for inventory, download, and upgrade operations1.
To upgrade the LCM framework, the administrator needs to perform an LCM inventory. An LCM inventory is a process that scans the cluster and its components for their current firmware and software versions and compares them with the available versions from the fetch URL. If there is a newer version of the LCM framework available, it will be shown as an update option under Cluster Software Component in the Available Updates page.The administrator can then select and apply the LCM framework update to upgrade it to the latest version2.
The administrator can perform an LCM inventory using Prism Element or Prism Central.The steps are as follows3:
In Prism Element, go to the Network Configuration page and click Life Cycle Management.
In Prism Central, go to the Services page and click Life Cycle Management.
Click Inventory in the toolbar and select Perform Inventory from the drop-down menu.
Wait for the inventory process to complete and check for any available updates.

QUESTION 43
An administrator has been asked to enable block awareness and increase the fault tolerance to FT2 on a Nutanix AHV cluster with the following configuration:
Four blocks
One node per block
Will the administrator be able to accomplish these tasks?

A. No-Fault tolerance changes are not supported.

B. Yes-FT2 requires a minimum of three nodes.

C. Yes-Block awareness requires a minimum of three blocks.

D. No-FT2 requires a minimum of five nodes.

Correct Answer: D

Section:

Explanation:

Fault tolerance (FT) is the ability of a cluster to withstand node failures and maintain data availability. FT is determined by the replication factor (RF) of the data, which is the number of copies of each data block stored on different nodes. FT = RF - 1, meaning that the cluster can tolerate as many node failures as one less than the RF. Block awareness is a feature that enhances fault tolerance by ensuring that data copies are distributed across different blocks, which are groups of nodes that share a power source and network switch. Block awareness requires a minimum of three blocks and a minimum of six nodes in the cluster.

In this scenario, the administrator has been asked to enable block awareness and increase the fault tolerance to FT2 on a Nutanix AHV cluster with the following configuration: Four blocks, One node per block. The administrator will not be able to accomplish these tasks because:

To enable block awareness, the cluster needs at least six nodes, but it only has four nodes.

To increase the fault tolerance to FT2, the cluster needs at least five nodes per RF3 or seven nodes per RF4, but it only has four nodes.

Therefore, the administrator will need to add more nodes to the cluster before enabling block awareness and increasing the fault tolerance to FT2.

QUESTION 44

What Nutanix feature provides effective caching optimization In VDI environments?

A. Remote Protection Group

B. Local Protection Group

C. Snap Clones

D. Shadow Clones

Correct Answer: D

Section:

Explanation:

Shadow Clones is a Nutanix feature that provides effective caching optimization in VDI environments. VDI stands for Virtual Desktop Infrastructure, which is a technology that allows users to access virtual desktops hosted on a centralized server. VDI environments typically have a high degree of similarity among desktop images, which means that many VMs access the same data blocks from the storage layer. Shadow Clones leverages this similarity by creating read-only copies of frequently accessed data blocks on each node's SSD tier, reducing network traffic and improving performance. Shadow Clones works automatically and transparently without any configuration or intervention from the administrator.

QUESTION 45

Which capability refers to the storage of VM data on the node where the VM is running and ensure that the read I/O does not have to traverse the network?

A. Intelligent Locally

B. Data Locality

C. Intelligent Tiering

D. Data Tiering

Correct Answer: B

Section:

Explanation:

Data locality is the capability of storing VM data on the node where the VM is running and ensuring that the read I/O does not have to traverse the network. Data locality is a unique feature of Nutanix that provides high performance and low latency for VMs by minimizing network traffic and crosstalk. Data locality works by writing one copy of the data local to the VM and the other copy (or copies) on other nodes. When a VM migrates to another node, Nutanix also moves its data to the new node and serves all I/O requests locally.Data locality also adapts to changing workloads and access patterns by dynamically moving data to where it is needed most1.

QUESTION 46

An administrator has received reports of users being disconnected from remote desktop sessions to a specific VM.

Which VM metric is most useful isolating the cause of the issue?

A. Storage Controller Bandwidth

B. Swap-Out Rate

C. Hypervisor CPU Ready time (%)

D. Virtual NIC receive packet dropped

Correct Answer: D
Section:
Explanation:
Virtual NIC receive packet dropped is the most useful VM metric for isolating the cause of users being disconnected from remote desktop sessions to a specific VM. This metric shows the number of packets that are dropped by the virtual NIC of the VM due to insufficient buffer space or other reasons. Packet drops can indicate network congestion, misconfiguration, or performance issues that can affect the quality and availability of remote desktop sessions.Packet drops can also cause retransmissions, delays, and errors in TCP-based protocols such as RDP2. To view this metric in Prism, go to Entities > Compute & Storage > VMs > Summary View and select a VM.Then, in the Details View, go to Metrics > Performance and select Virtual NIC receive packet dropped from the drop-down menu3.

QUESTION 47
What does Nutanix recommend when setting up the node networkring?

A. Include NIC models from different vendors in the same bond

B. Include at least two physically interfaces in every bond.

C. Combine NIC models from different vendors in the same bond.

D. Combine NIC models from different vendors in the same bond.

Correct Answer: B
Section:
Explanation:
A bond is a logical interface that combines two or more physical interfaces on an AHV host. A bond provides high availability and load balancing for the network traffic of the host and its VMs. A bond can have different modes that determine how the traffic is distributed and how the bond handles failures of the physical interfaces.The most common bond modes are active-backup, active-active, and LACP1.
Nutanix recommends including at least two physical interfaces in every bond to ensure high availability and redundancy. If one of the physical interfaces fails or is disconnected, the other interface can take over the traffic without affecting the connectivity of the host or its VMs.Having at least two physical interfaces in a bond also allows for maintenance operations such as firmware upgrades or cable replacements without downtime2.
Nutanix does not recommend including NIC models from different vendors in the same bond, as this may cause compatibility issues or performance degradation.Nutanix also does not recommend using only one physical interface in a bond, as this provides no redundancy or load balancing benefits3.

QUESTION 48
An administrator is not able to log into Prism Central by using a new Active Directory user account. After Logging with the local user, the administrator verified that Directory Services and Role Mapping setting are valid.
What is the most likely cause of this issue?

A. Change password at next logon attribute is set.

B. User does not belong to the Administrators group.

C. Active Directory functional level of wrong.

D. Prism Element authentication is not configured.

Correct Answer: A
Section:
Explanation:
The change password at next logon attribute is a setting that forces a user to change their password when they log on to a domain for the first time or after their password has expired.This attribute is enabled by default for new Active Directory user accounts or when an administrator resets a user's password4.
However, Prism Central does not support this attribute for Active Directory authentication. Users with this attribute enabled will not be able to log on to Prism Central using their Active Directory credentials.They will receive an error message saying ''Invalid credentials'' or ''Authentication failed'' when they try to log on5.
Therefore, if an administrator is not able to log on to Prism Central using a new Active Directory user account, the most likely cause of this issue is that the change password at next logon attribute is set for that user account.To resolve this issue, the administrator should disable this attribute for the user account or log on to a domain workstation first and change their password before accessing Prism Central6.

QUESTION 49
An administrator wants to have a VM on an AHV cluster with access to multiple VLANs. What is the most efficient way to achieve this?

A. Update a vNIC on the VM to operate in trunked mode for all desired VLANs.

B. Create a network in AHV associated with all those VLANs on all hosts.

C. Use SFPs that allow the needed VLANs.

D. Use one vNIC per VLAN for the VM.

Correct Answer: A
Section:
Explanation:
According to the Nutanix Support & Insights web search result2, VM NICs on AHV can operate in two modes: Access and Trunked. Access NICs are the default, and allow one VLAN on the NIC. Trunked NICs allow multiple VLANs on a single NIC for VMs that are VLAN aware.If you must use trunked NICs, follow the steps described in the web search result2. Therefore, the most efficient way to have a VM on an AHV cluster with access to multiple VLANs is to update a vNIC on the VM to operate in trunked mode for all desired VLANs.

QUESTION 50
Which two access protocols are supported by Files? (Choose two.)

A. ISCSI

B. SMB

C. FCOE

D. NFS

Correct Answer: B, D
Section:
Explanation:
According to the Network File System web search result3, NFS (Network File System) is a distributed file system protocol that allows a user on a client computer to access files over a network in a manner similar to how local storage is accessed. NFS is one of the access protocols supported by Files.According to the [MS-WPO]: File Access Services Protocols web search result4, SMB (Server Message Block) is a Windows file sharing protocol that enables applications to discover, access, and share files that are hosted on or made available by a file server, using a network between them, in a secure and managed environment. SMB is another access protocol supported by Files. Therefore, SMB and NFS are two access protocols supported by Files.

QUESTION 51
An administrator is adding a node with a higher AOS release to an existing cluster.
What is the most efficient action an administrator should take to ensure it is in a supported state?

A. Destroy cluster and foundation with the new node in place

B. Add the node to the cluster and leave the existing AOS version in place

C. Perform standalone reimage of the new node and then add to cluster

D. Add the node to the cluster and reboot all running VMs to use new release

Correct Answer: C
Section:
Explanation:
According to the web search results, the most efficient action an administrator should take to ensure a supported state when adding a node with a higher AOS release to an existing cluster is to perform a standalone reimage of the new node and then add it to the cluster1. This way, the new node will have the same AOS version as the existing nodes, and there will be no compatibility issues or downtime. Therefore, option C is correct, while options A, B, and D are not.

QUESTION 52

An administrator is configuring cross-hypervisor DR from an ESXi cluster to a new AHV cluster. When the administrator migrates a protection domain to the AHV cluster, the VMs fail to boot.
What should the administrator do to correct this problem?

A. Increase the snapshot frequency to more than 6 hours.

B. Uninstall VMware Tools from the VMs.

C. Install Nutanix Guest Tools in the protected VMs.

D. Add all VMs into a single consistency group.

Correct Answer: C
Section:
Explanation:
According to the web search results, one of the requirements for cross-hypervisor disaster recovery (CHDR) is to install and configure Nutanix Guest Tools (NGT) on all the VMs2. NGT configures the VM with all the required drivers for VM portability. Without NGT, the VMs may fail to boot after being migrated to a different hypervisor type.

QUESTION 53
A customer has a newly-deployed AHV cluster with nodes that have 2.x 10 GBE and 2.x interface. The customer wants to use all available network interfaces to provide connectivity to the VMs.
Which option should the administrator use to achieve this while remaining consistent with Nutanix recommendations?

A. Create separate VLANs that map 10GbE and 1GbE interfaces.

B. Createbond1 on virbr0 and add the 1GbE interfaces to it for VM use.

C. Create a second bond on br0 on each host and assign the 1 GbE interfaces to it.

D. Create a second bridge on each host and assign the 1GbE interfaces to it.

Correct Answer: D
Section:
Explanation:
According to the web search results, one of the best practices for Nutanix AHV networking is to create a second bridge on each host and assign the 1GbE interfaces to it3. This way, the customer can use both 10GbE and 1GbE interfaces for VM traffic, and also benefit from network isolation and redundancy.

QUESTION 54
How many Prism Central instances are required to deploy Leap:'

A. One per availability zone

B. One per customer environment

C. One per physical site

D. One per AHV cluster

Correct Answer: B
Section:
Explanation:
The number of Prism Central instances required to deploy Leap is one per customer environment.Prism Central is a multi-cluster manager that provides a single, centralized management interface for Nutanix environments3.Leap is a native cloud extension that provides disaster recovery as a service (DRaaS) for Nutanix environments4.To use Leap, customers need to have one Prism Central instance deployed in their primary site, and register it with their Xi Cloud Services account5.This Prism Central instance can manage multiple Nutanix clusters across different physical sites or availability zones6.

QUESTION 55
What is the default network bond setting for an AHV host configuration?

A. active-backup

B. active-active

C. balance-slb

D. balance-tcp

Correct Answer: A
Section:
Explanation:
https://next.nutanix.com/blog-40/network-load-balancing-with-acropolis-hypervisor-6463

QUESTION 56
Which best practice should be followed when creating a bond in a Nutanix cluster?

A. Place NICs of different speeds within the same bond

B. Configure the bond to use LACP

C. Only utilize NICs of the same speed within the same bond

D. Use the default bond configuration after installation

Correct Answer: A
Section:

QUESTION 57
When VM HA Reservation is enabled, what is the expected behavior for all failed VMs in the event of a host failure?

A. Restart on a best-effort basis if resources are available

B. Perform a live migration to other hosts in the AHV cluster

C. Restart on other hosts in the AHV cluster

D. Perform a live migration on a best-effort basis if resources are available

Correct Answer: C
Section:

QUESTION 58
Which three upgrades should an administrator be able to perform using Lifecycle Management? (Choose Three)

A. AOS

B. BMC

C. BIOS

D. Hypervisor

E. HBA Firmware

Correct Answer: B, C, E
Section:

QUESTION 59
An administrator has set up a local web server accessible to the Nutanix clusters.
Which two steps are required to set up LCM for an environment without Internet access? (Choose two.)

A. Download the lcai_disconnecced_version. tar.gz LCM bundle from the support portal.

B. Edit LCM Advanced Settings in Prism Element and enter the address of the web server.

C. Edit LCM Advanced Settings m Prism Central and enter the address of the web server.

D. Download the lcm_dark_site_version. tar . gz LCM bundle from the support portal.

Correct Answer: B, D
Section:

QUESTION 60
A cluster has RF2. The cluster loses two drives on different nodes in the same storage tier.
What is the effect on the replicas of the VMs?

A. Some VM data may be lost

B. No VMs lose data if the node has two or more SSDs

C. Some VMs may reboot and gain access to data

D. No VMs lose data because of RF2

Correct Answer: A
Section:

QUESTION 61
Which change can be made on a cluster with software-based Data-at-Rest Encryption enabled?

A. Disable encryption on the cluster

B. Deploy an additional Native KMS Server

C. Enable encryption for a VM

D. Change Native KMS to External KMS

Correct Answer: D
Section:

QUESTION 62
An administrator is reviewing performance of a core banking system that routinely has 20,000 concurrent users. During, business hours, the CPU on the applications servers runs at close to 100%. The administrator needs to determine if there is a performance issue specific to the app servers, the database servers, or all servers on the cluster.

Which metrics should the administrator review in Prism Analysis Graphs?

A. Cluster IO, Network, Database and App Server CPU

B. Cluster CPU and Memory Only

C. Cluster IO, CPU, Memory and Database and App Server CPU

D. Cluster IO, CPU, Memory, Network, App Server CPU

Correct Answer: D
Section:
Explanation:
In this case, the administrator wants to investigate the performance of a core banking system that consists of application servers and database servers. The application servers have high CPU utilization during business hours, which may indicate a bottleneck or a resource contention issue. The administrator needs to review multiple metrics in Prism Analysis Graphs to identify the root cause and determine if there is a problem with the app servers only, or with other components as well.

The metrics that are relevant for this analysis are:

Cluster IO: This metric shows the input/output operations per second (IOPS) and throughput (MBps) of the cluster. It can help to understand if there is a high demand for disk IO from the VMs or if there is any latency or congestion in the storage layer.

Cluster CPU: This metric shows the CPU utilization (%) and load average of the cluster. It can help to understand if there is enough CPU capacity in the cluster to handle the workload or if there is any imbalance or contention among hosts.

Cluster Memory: This metric shows the memory utilization (%) and available memory (GB) of the cluster. It can help to understand if there is enough memory capacity in the cluster to support the VMs or if there is any pressure or swapping in the memory layer.

Network: This metric shows the network throughput (MBps) and packets per second (pps) of the cluster. It can help to understand if there is enough network bandwidth in the cluster to transfer data between hosts and VMs or if there is any congestion or packet loss in the network layer.

App Server CPU: This metric shows the CPU utilization (%) and load average of each application server VM. It can help to understand if there is any variation or anomaly in the performance of each app server or if there is any correlation with other metrics.

Database Server CPU: This metric shows the CPU utilization (%) and load average of each database server VM. It can help to understand if there is any variation or anomaly in the performance of each database server or if there is any correlation with other metrics.

QUESTION 63
A VM in a 12-node Nutanix cluster is hosting an application that has specific Physical GPU requirements. Only three nodes in the cluster meet this requirement.
The administrator wants to allow a general workload to be distributed across all nodes in the cluster and must make sure that the node hosting the VM meets its requirements.
How should the administrator perform this task?

A. Create a sperate three-node cluster using the nodes that meet the requirement.

B. Configure VM-Host affinity for the nodes that meet the application's GPU requirement.

C. Over-Provision the application VM with additional virtual GPUs.

D. Configure anti-affinity rules between the application VM and the other VMs running on the cluster.

Correct Answer: B
Section:
Explanation:
Configure VM-Host affinity for the nodes that meet the application's GPU requirement.This is because VM-Host affinity allows the administrator to specify which nodes a VM can run on or must not run on1. By creating a VM-Host affinity rule that binds the application VM to the three nodes that have the physical GPU, the administrator can ensure that the VM will always run on a node that meets its requirement, regardless of any HA or migration events. This also allows the other nodes in the cluster to host other VMs without any restrictions.

QUESTION 64
What requires iSCSI initiator configuration in the guest OS to use Volumes?

A. SQL Server Always On Availability Group

B. Microsoft Windows Failover Cluster

C. Oracle RAC

D. Exchange DAG

Correct Answer: B
Section:
Explanation:
The only option that requires iSCSI initiator configuration in the guest OS to use Volumes is Microsoft Windows Failover Cluster.Volumes is an enterprise-class, software-defined block storage solution that exposes storage resources directly to virtualized guest operating systems or physical hosts using the iSCSI protocol7. To use Volumes, customers need to configure iSCSI initiators on their hosts or guest OSes. However, some applications or services can use native storage adapters instead of iSCSI initiators when running on AHV VMs. These include:
SQL Server Always On Availability Group: This is a high availability and disaster recovery solution for SQL Server databases that uses Windows Server Failover Clustering (WSFC) and Availability Groups (AGs) as its core components. When running on AHV VMs, SQL Server Always On Availability Group can use native storage adapters instead of iSCSI initiators.
Oracle RAC: This is a clustered database system that provides high availability and scalability for Oracle databases. When running on AHV VMs, Oracle RAC can use native storage adapters instead of iSCSI initiators.
Exchange DAG: This is a group of up to 16 mailbox servers that hosts a set of databases and provides automatic database-level recovery from failures that affect individual servers or databases. When running on AHV VMs, Exchange DAG can use native storage adapters instead of iSCSI initiators.

QUESTION 65
What is the name of the internal bridge used by AHV nodes and CVMs?

A. vnet0

B. br1

C. br0

D. virbr0

Correct Answer: C
Section:
Explanation:
According to the Nutanix Support & Insights web search result1, the name of the internal bridge used by AHV nodes and CVMs is br0. The internal bridge is an Open vSwitch (OVS) bridge that connects the AHV host management interface, the CVM interface, and the VM vNICs. The internal bridge also acts as a gateway for the CVM and VM traffic to reach the external network through the host physical NICs.

QUESTION 66
An administrator adds a node with older generation processors to an existing AHV cluster with newer generation processors. What is the effect on live migration?

A. Live migration continues to function as expected and VMs can move to any AHV host.

B. Live migration is prevented until the administrator enables the legacy migration option.

C. Live migration is prevented until the administrator manually changes the newer processor level.

D. Live migration of VMs is prevented between newer and older processors.

Correct Answer: D
Section:
Explanation:
According to the Migration to a different processor web search result2, live migration of VMs depends on the source and destination hosts having the same CPU functions (CPU flags). Live migration requires the source and destination hosts to have CPUs from the same manufacturer, and only CPU functions which both hosts support are provided (same CPU generation, or by using VMware Enhanced vMotion Compatibility (EVC)). If the administrator adds a node with older generation processors to an existing AHV cluster with newer generation processors, then live migration of VMs is prevented between newer and older processors, unless EVC is enabled.

QUESTION 67
A node with Erasure Coding fails.
What is the impact?

A. The node stops utilizing Erasure Coding.

B. Potentially increased amount of data stored in the SSD tier.

C. Increased Controller VM CPU Load.

D. AQS unable to do deduplication during the Erasure Coding failure.

Correct Answer: B
Section:
Explanation:
When a node with Erasure Coding fails, the cluster will automatically rebuild the missing data using replication factor (RF) 2 or 3, depending on the cluster configuration.This means that the data that was previously stored using Erasure Coding will now be stored using full copies, which may increase the amount of data stored in the SSD tier1.

QUESTION 68
Where should an administrator unregister Prism Element from Prism Central?

A. From a Host SSH session
B. From the Prism Central web console
C. From the Prism Element web console
D. From a CVM SSH session

Correct Answer: A
Section:
Explanation:
This is because there is no GUI method to unregister a cluster from Prism Central, so the process requires SSH access to the PC VM as well as to a CVM of the cluster2.The unregistration process involves getting the UUID of the cluster from the CVM and then using that to trigger de-registration from PC command line2.The unregistration process also involves cleaning up any associated metadata and configuration on both PC and PE2. Therefore, the administrator needs to use a Host SSH session to perform this task.

QUESTION 69
A Nutanix cluster is equipped with four nodes. Four VMs on this cluster have been configured with a VM-VM anti-affinity policy and are each being hosted by a different node.
What occurs to the cluster and these VMs during an AHV upgrade?

A. One node hosts two VMs while the node being upgraded is in maintenance mode.
B. One VM out of the four powers down when the node hosting it reboots.
C. The AHV pre-upgrade checks fail until the administrator disables the anti-affinity policy.
D. The AHV pre-upgrade checks fail until the four VMs are powered off.

Correct Answer: A
Section:
Explanation:
One node hosts two VMs while the node being upgraded is in maintenance mode. This is because Nutanix supports a feature calledRolling Upgradethat allows upgrading AHV on a cluster without any downtime or impact to the VMs. The Rolling Upgrade feature performs the upgrade one node at a time, by putting the node in maintenance mode, evacuating the VMs to other nodes, upgrading AHV, and then bringing the node back online. The VM-VM anti-affinity policy ensures that the four VMs are not placed on the same node during the evacuation process, so one node will host two VMs temporarily while the other node is being upgraded.

QUESTION 70
How many SSL certificates are used by Prism Element on a Nutanix cluster?

A. 1
B. 5
C. 256
D. 2048

Correct Answer: A

Section:
Explanation:
According to the Nutanix Prism Element Guide, Prism Element uses a single SSL certificate on a Nutanix cluster. The certificate is used to secure the communication between the web browser and the Prism web console. The certificate is also used to authenticate the cluster to external services, such as Active Directory, SMTP, and SNMP. The certificate can be either self-signed or signed by a trusted certificate authority (CA). The certificate can be replaced or renewed through the Prism web console or the ncli command-line interface.