

# Nutanix

## Exam Questions NCP-MCI-6.5

Nutanix Certified Professional - Multicloud Infrastructure (NCP-MCI) v6.5 exam



## NEW QUESTION 1

An administrator manages a cluster and notices several failed components shown in the exhibit.



What two options does the administrator have to run all NCC checks manually? (Choose two.)

- A. Using the Actions drop-down menu in the Health dashboard of Prism Element.
- B. Running `ncc health_checks run-all` on the CVM
- C. Using the action action drop-down menu in the Health dashboard of Prism Central
- D. Running `noc health_checks run_all` on the PC VM

**Answer: AB**

### Explanation:

Prism Element and NCC are two ways to run all NCC checks manually on a Nutanix cluster. Prism Element is the web console that provides management and monitoring capabilities for a single Nutanix cluster. Prism Element has a Health dashboard that shows the status of various components and services in the cluster, such as disks, nodes, CVMs, NCC, and alerts. The Health dashboard also allows the administrator to run NCC checks manually by using the Actions drop-down menu on the right side of the screen. The administrator can choose to run all NCC checks or specific checks based on the category or severity. The NCC checks will run in the background and generate a report that can be viewed or downloaded from the Summary tab. This method is easier and faster than running NCC from the command line on the CVM.

NCC stands for Nutanix Cluster Check, which is a framework of scripts that performs system checks and validations on Nutanix clusters. NCC can detect issues related to hardware, software, configuration, hypervisor, networking, and more. NCC can be run from the command line interface (CLI) of any CVM in the cluster by using the `ncc` command. To run all NCC checks manually, the administrator can use the command `ncc health_checks run_all`, which will execute all available checks and display the results on the screen. This method is more comprehensive and detailed than running NCC from Prism Element. References: : [Health Dashboard - Prism Element Guide] : [Nutanix Cluster Check (NCC) - Nutanix Support & Insights] : [Running NCC Checks - Nutanix Support & Insights]

## NEW QUESTION 2

Refer to the exhibit.

```
admin@NTNX:~$ manage_ovs show_uplinks
Bridge: br0
Bond: br0-up
bond_mode: balance-tcp
interfaces: eth3 eth2 eth1 eth0
lacp: active
lacp-fallback: false
lacp_speed: fast
admin@NTNX:~$
```

An administrator is adding a new node to a cluster. The node has been imaged to the same versions of AHV and AOS that the cluster running, configured with appropriate IP addresses, and `br0-up` has been configured the same the existing uplink bonds. When attempting to add the node to the cluster with the Expand Cluster function in Prism, the cluster is unable to find the new node. Based on the above output from the new node, what is most likely the cause of this issue?

- A. The ports on the upstream switch are not configured for LACP.
- B. The existing and the expansion node are on different VLANs.
- C. There is a firewall blocking the discovery traffic from the tlu
- D. LACP configuration must be completed after cluster expansion

**Answer: B**

### Explanation:

The correct answer is B. The existing and the expansion node are on different VLANs.

The output shows that the new node has a `br0-up` bond with four interfaces: `eth0`, `eth1`, `eth2`, and `eth3`. The bond is configured with LACP active and LACP

fallback set to false. This means that the bond will only work if the upstream switch supports LACP and is configured to form an LACP group with the four interfaces. However, the output also shows that the bond has no IP address assigned to it, which indicates that the bond is not operational. One possible reason for this is that the existing and the expansion node are on different VLANs, and the upstream switch is not configured to allow the VLAN traffic on the LACP group. This would prevent the new node from communicating with the cluster and being discovered by the Expand Cluster function in Prism. To verify this, the administrator can check the VLAN configuration on the upstream switch and compare it with the existing nodes. Alternatively, the administrator can use the `manage_ovs show_uplinks` command on an existing node and compare the output with the new node. If there is a VLAN mismatch, the administrator can either change the VLAN configuration on the switch or on the new node to match the existing nodes. Reference: Multicloud Infrastructure (NCP-MCI) v6.5 - Nutanix

### NEW QUESTION 3

An administrator is implementing a VDI solution. The workload will be a series of persistent desktops in a dedicated storage container within a four-node cluster. Storage optimizations should be set on the dedicated storage container to give optimal performance including during a node failure event. Which storage optimizations should the administrator set to meet the requirements?

- A. Compression only
- B. Deduplication and Erasure Coding
- C. Compression and Deduplication
- D. Compression, Deduplication and Erasure Coding

**Answer:** D

#### Explanation:

According to the web search results, three storage optimizations that should be set on a dedicated storage container for a VDI solution with persistent desktops are compression, deduplication and erasure coding. Compression is a technique that reduces the size of data by removing redundant information. Deduplication is a technique that eliminates duplicate copies of data blocks and stores only unique blocks. Erasure coding is a technique that increases usable capacity by reducing the replication factor of data blocks and using parity information instead<sup>7</sup>. These three optimizations can improve performance and save storage space for VDI workloads, especially during a node failure event when data needs to be rebuilt from parity information<sup>8</sup>. The administrator can enable these optimizations by using Prism Element web console or ncli command-line interface<sup>9</sup>.

### NEW QUESTION 4

The customer is seeing high memory utilization on a mission critical VM. Users report that the application is unavailable. The guest OS does not support hot add components. How should the administrator fix this issue?

- A. Access the CVM on the host that is running the VM: \*Open acli\* Run a command to increase the amount of RAM assigned to the VM
- B. From the Prism web console: \*Go to the VM dashboard\* Select the VM from the VMs list \*Choose Update\* Adjust the amount of memory assigned to the VM
- C. Go to Control Panel in the VM: \*Select the Computer Properties\* Increase the amount of RAM assigned
- D. During the next maintenance window: \*Select the VM from the VMs list\* Perform a graceful shutdown

**Answer:** B

#### Explanation:

The best way to fix this issue is to increase the amount of memory assigned to the VM from the Prism web console. This option allows the administrator to modify the VM configuration without accessing the CVM or shutting down the VM. The Prism web console provides a simple and intuitive interface for managing Nutanix clusters and VMs<sup>1</sup>. To change the memory allocation for a VM, the administrator can follow these steps<sup>2</sup>:

- ? Go to the VM dashboard
- ? Select the VM from the VMs list
- ? Choose Update
- ? Adjust the amount of memory assigned to the VM
- ? Click Save

### NEW QUESTION 5

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.

**Answer:** AB

### NEW QUESTION 6

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.

**Answer:** ADE

#### Explanation:

[https://portal.nutanix.com/page/documents/details/?targetId=Web\\_Console\\_Guide-Prism\\_v4\\_7:lic\\_licensing\\_managing\\_c.html](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.

#### NEW QUESTION 7

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. Cassandra
- D. Zeus

**Answer:** A

#### 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 coding<sup>1</sup>. Stargate runs on every CVM and communicates with other Stargates to ensure data locality and redundancy<sup>2</sup>.

#### NEW QUESTION 8

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.

**Answer:** D

#### 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.

#### NEW QUESTION 9

In Files, how many FSVMs are deployed by default?

- A. 1
- B. 2
- C. 3
- D. 5

**Answer:** C

#### Explanation:

According to the Nutanix Files Guide, Nutanix Files instances are composed of a set of VMs (called FSVMs). Files requires at least three FSVMs running on three nodes to satisfy a quorum for high availability. By default, Files deploys three FSVMs when you create a file server instance.

#### NEW QUESTION 10

An administrator is working with Nutanix Support and needs to provide logs for troubleshooting an issue. The cluster is located in a secure environment. Data such as IP addresses and VM names cannot be shared.

Which method should be used to anonymize the log data sent to Nutanix Support?

A)

Under the **User Profile** in Prism, select **Anonymize Log Output**, then run **Log Collector** from the **Health** dashboard.

B)



Run the `ncc log_collector` tool on a CVM, setting the `--enhanced_log_collector` flag to true.

C)

Run the `ncc log_collector` tool on a CVM, setting the `--anonymize_output` flag to true.

D)

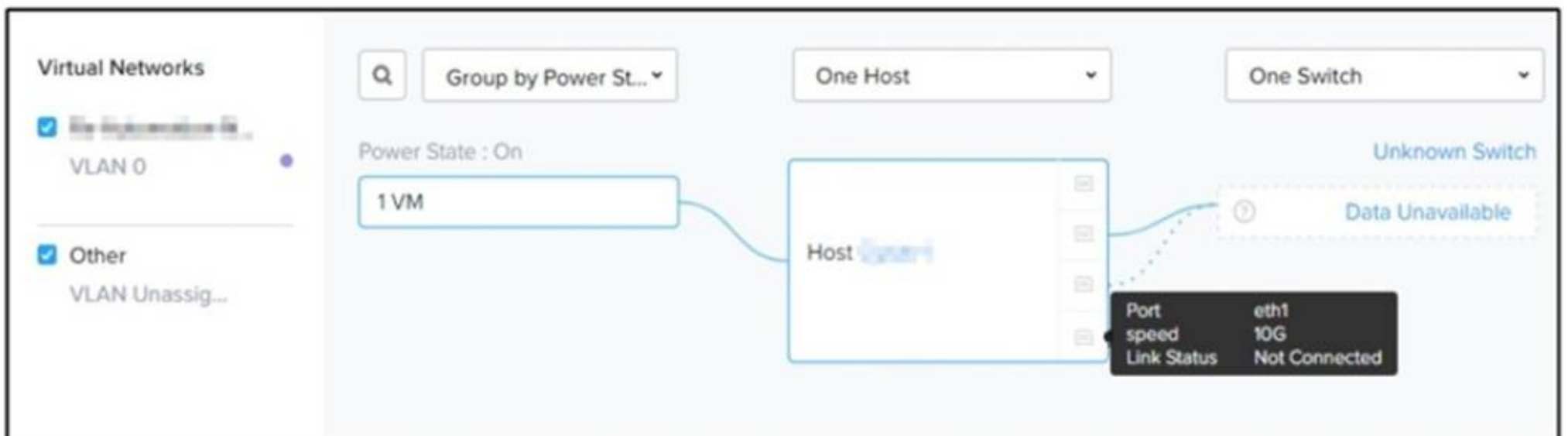
On the **Health** dashboard in Prism, use the **Log Collector** option under **Actions** and choose **Anonymize Logs**.

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: D**

#### NEW QUESTION 10

An administrator logs in to Prism Element goes to the Network view, and sees the output shown in the exhibit.



Which three steps must the administrator take to increase throughput to the host? (Choose three.)

- A. Connect the 10Gb interfaces to the physical switch.
- B. Change the bond mode to balance-slb or balance—tcp.
- C. Remove any 1Gb interfaces still connected from the default bond.
- D. Add a new switch to the network and connect 1Gb interfaces to it.
- E. Change the VLAN ID to a higher priority ID.

**Answer: ABC**

#### Explanation:

These are the three steps that the administrator must take to increase throughput to the host. According to the network diagram, the host has two 10Gb interfaces and two 1Gb interfaces in the default bond, but only one of the 10Gb interfaces is connected to a switch. The other 10Gb interface is disconnected and has a red 'X' on it. The two 1Gb interfaces are also disconnected and have dotted lines. This means that the host is using only one 10Gb interface for all its network traffic, which limits its maximum bandwidth to 10 Gbps.

To increase the throughput, the administrator should connect both 10Gb interfaces to the physical switch, preferably to different switches for redundancy and high availability. This will allow the host to use both 10Gb interfaces for network traffic, which can increase its maximum bandwidth to 20 Gbps. However, this also requires changing the bond mode from active-backup to balance-slb or balance-tcp, which are load balancing modes that distribute network traffic across multiple interfaces based on source MAC address or TCP session<sup>1</sup>. The default bond mode of active-backup only uses one interface at a time and switches to another interface only when the active one fails<sup>2</sup>.

Finally, the administrator should remove any 1Gb interfaces still connected from the default bond, as they are not needed and may cause performance issues or conflicts with the load balancing modes. The 1Gb interfaces can be used for other purposes, such as management or backup networks, by creating separate bonds or bridges for them<sup>3</sup>. Alternatively, they can be left disconnected if they are not required.

#### NEW QUESTION 15

Which node type does not deploy a Nutanix Controller VM?

- A. Storage Only
- B. Hyper Converged
- C. Compute Only
- D. All Flash

**Answer: C**

**Explanation:**

A Compute Only node is a node that does not have any local storage devices and only provides compute resources to the cluster. A Compute Only node does not run a CVM, but instead relies on the CVMs of other nodes to access the distributed storage fabric.

**NEW QUESTION 18**

An administrator has created a Nutanix managed network with a VLAN ID of 512.

Several VMs have been created, and the administrator notices that they cannot successfully communicate with other VMs on that VLAN.

Provided they are on the host, but cannot communicate with VMs that reside on different hosts in the cluster.

What is the most likely cause of this issue?

- A. There is a firewall rule blocking VLAN 512 traffic.
- B. VLAN 512 is a reserved VLAN ID, and not usable for guest VMs.
- C. The VLAN was not created on the upstream switches.
- D. The administrator did not create the VLAN on all hosts.

**Answer: C**

**Explanation:**

The correct answer is C. The VLAN was not created on the upstream switches.

A VLAN (virtual local area network) is a logical segmentation of a physical network that allows devices on the same VLAN to communicate with each other, regardless of their physical location. A VLAN also isolates the devices on different VLANs from each other, unless there is a router or a layer 3 switch that can route traffic between VLANs. To create a VLAN, the administrator needs to configure the network devices that are involved in the VLAN, such as switches, routers, and hosts. The administrator also needs to assign a unique VLAN ID to each VLAN, which is a number between 1 and 4094 that identifies the VLAN.

In Nutanix AHV, the administrator can create a Nutanix managed network with a specific VLAN ID for guest VMs. This network can be assigned to VM NICs using Prism Element or Prism Central. However, creating a Nutanix managed network does not automatically create the VLAN on the upstream switches that connect the AHV hosts. The administrator needs to manually configure the upstream switches to allow the VLAN traffic on the ports that connect to the AHV hosts. The administrator also needs to ensure that the upstream switches are interconnected physically or virtually and can forward traffic between different VLANs if needed.

Therefore, if an administrator has created a Nutanix managed network with a VLAN ID of 512 and notices that the VMs on that network can only communicate with other VMs on the same host, but not with VMs on different hosts in the cluster, the most likely cause of this issue is that the VLAN was not created on the upstream switches. This means that the switches are dropping or blocking the traffic with VLAN ID 512 and preventing it from reaching other hosts or VMs. To resolve this issue, the administrator should create the VLAN on the upstream switches and allow it on the ports that connect to the AHV hosts.

Reference: Nutanix AHV Networking Best Practices

**NEW QUESTION 21**

**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?

## Preference

First Preference

## Correct Sequence

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

- A. Mastered
- B. Not Mastered

**Answer:** A

### Explanation:

First Preference:

? Policy is applied to a specific entity 2nd Preference:

? Policy is applied to an entity type in a category 3rd Preference:

? Policy is applied to an entity type in a cluster 4th Preference:

? Policy is applied to all entities of an entity type

Comprehensive Detailed Explanation with References: In Nutanix Prism, when multiple alert policies are created and applied to the same entities, the policies are evaluated based on their specificity. The order of precedence from highest to lowest is as follows:

? Policy is applied to a specific entity: Custom alert policies that are applied to specific entities take precedence over those applied to broader categories. This is because the more specific policy is usually created with a particular context or requirement in mind for that entity.

? Policy is applied to an entity type in a category: The next level of precedence is given to policies that are applied to all entities of a certain type within a specific category. Categories allow grouping of entities based on certain criteria, and policies applied here are more specific than to an entire cluster or entity type.

? Policy is applied to an entity type in a cluster: This refers to policies that are applied to all entities of a certain type within a specific cluster. This is more general than the above two but still targets a specific cluster environment.

? Policy is applied to all entities of an entity type: The lowest precedence is given to policies that are broadly applied to all entities of a particular type across the entire Nutanix environment.

This order ensures that the most specifically targeted policies are given priority, which allows for fine-tuned control and customization of alert policies. The details of alert policy precedence are typically covered in the Nutanix Prism Central Guide and the documentation related to Prism Central's alerting and policies.

### NEW QUESTION 26

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

- A. iSCSI
- B. SMB
- C. FCOE



D. NFS

**Answer:** BD

**Explanation:**

According to the Network File System web search result<sup>3</sup>, 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 result<sup>4</sup>, 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.

**NEW QUESTION 27**

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

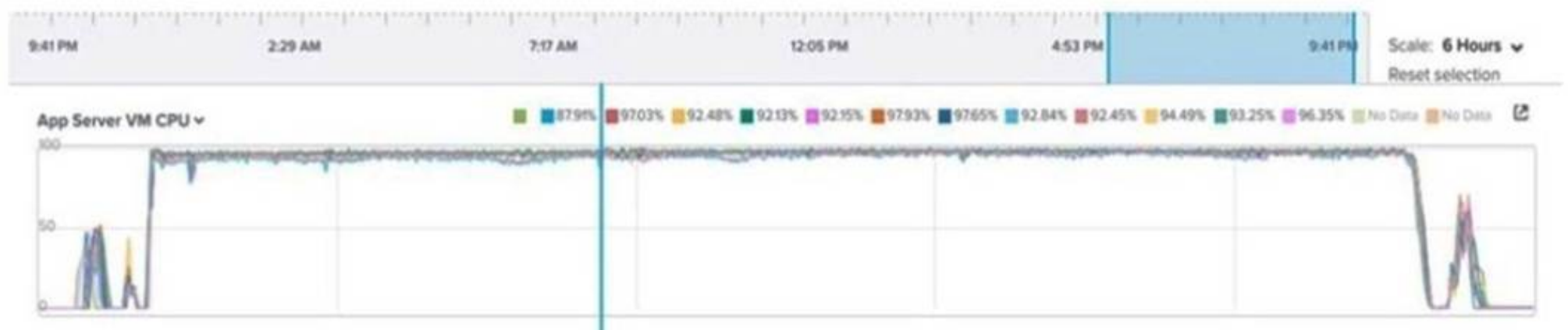
**Answer:** B

**Explanation:**

According to the Nutanix Community<sup>1</sup>, 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 Mapping<sup>2</sup>, 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>

**NEW QUESTION 32**

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

**Answer:** D

**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.

**NEW QUESTION 35**

In which two scenarios is Native Key Management Server supported? (Choose two)

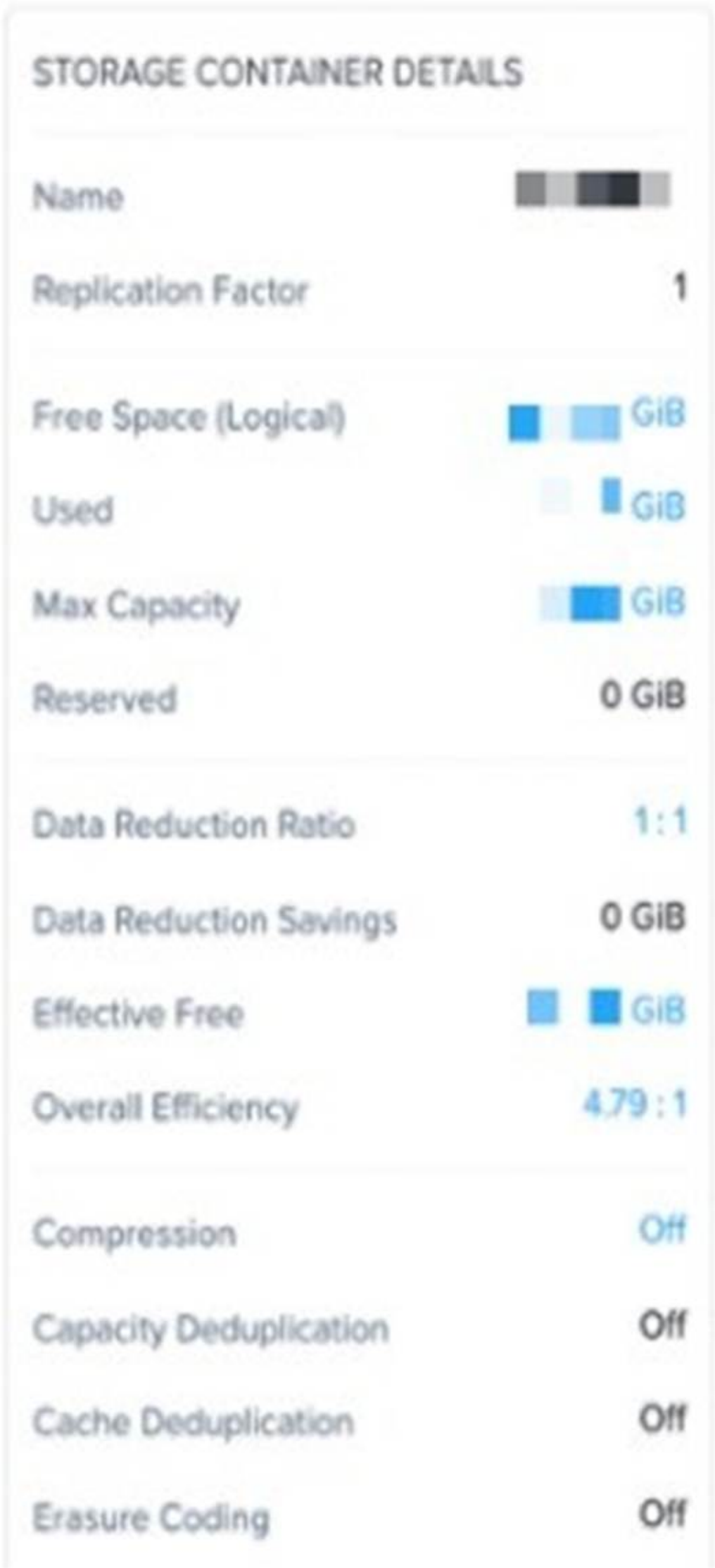
- A. XenServer and AHV mixed cluster.
- B. Hyper-V and AHV mixed cluster.
- C. KVM and AHV mixed cluster.
- D. ESXi and AHV mixed cluster.



Answer: BD

NEW QUESTION 37

Refer to Exhibit:



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.

**Answer:** D

**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 deduplication is a feature that reduces the stored size and avoids duplicate data on a storage container<sup>1</sup>. It is recommended only on some specific scenarios, such as when using Nutanix Files or virtual desktop infrastructure (VDI) workloads<sup>2</sup>.

**NEW QUESTION 40**

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.

**Answer:** B

**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 tier<sup>1</sup>.

**NEW QUESTION 44**

Where can an administrator change a CVM password?

- A. KMS Server Terminal
- B. CVM setting in Prism Element
- C. CVM setting in Prism Central
- D. Prism CVM VM Console

**Answer:** D

**Explanation:**

Reference: <https://next.nutanix.com/installation-configuration-23/modifying-passwords-in-nutanix-environment-33538>

**NEW QUESTION 46**

The Stargate service becomes unavailable on a single CVM on an AHV node. What is used to maintain I/O operations in the cluster?

- A. Route injection
- B. iSCSI redirector
- C. Hypervisor HA
- D. ha.py

**Answer:** A

**Explanation:**

According to the Nutanix Support & Insights web search result<sup>1</sup>, route injection is used to maintain I/O operations in the cluster when the Stargate service becomes unavailable on a single CVM on an AHV node. Route injection is a mechanism that allows the CVMs to communicate with each other and redirect the I/O requests to another healthy CVM in the cluster. Route injection uses the Linux kernel routing table to add or delete routes dynamically, based on the availability of the Stargate service on each CVM.

**NEW QUESTION 49**

An administrator is concerned about the amount of data that a VM reading and writing to the storage fabric. Which metric will provide that data?

- A. Host Hypervisor IO Bandwidth
- B. Host Disk IOPS
- C. VM Storage Controller IOPS
- D. VM Storage Controller Bandwidth

**Answer:** D

**Explanation:**

The correct answer is D. VM Storage Controller Bandwidth.

VM Storage Controller Bandwidth is a metric that measures the amount of data that a VM is reading and writing to the storage fabric. The storage fabric is the network of storage controllers (CVMs) that provide distributed and fault-tolerant storage services to the VMs on the Nutanix cluster. The VM Storage Controller Bandwidth metric shows the read and write bandwidth in megabytes per second (MBps) for each VM. The higher the bandwidth, the more data the VM is transferring to and from the storage fabric<sup>1</sup>.

The administrator can use Prism Central to view the VM Storage Controller Bandwidth metric for each VM in a chart or a widget. The administrator can also use Prism Central to view other metrics related to the VM's storage performance, such as VM Storage Controller IOPS, VM Storage Controller Latency, and VM Disk Usage<sup>2</sup>.

Reference: Nutanix Metrics

**NEW QUESTION 51**

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

Answer: BCE

Explanation:

Reference: <https://portal.nutanix.com/page/documents/kbs/details?targetId=kA00e000000LMglCAW>

NEW QUESTION 55

HOTSPOT

An administrator needs to shut down an AHV cluster to relocate hardware. The administrator upgrades NCC and runs health checks.

Which steps should the administrator perform next?

Item instructions: For each procedure, indicate the order in which that procedure must take place to meet the item requirements.

Procedure	Step
Shut down CVMs	<div><div></div><div>▼</div><div>Step 1</div><div>Step 2</div><div>Step 3</div><div>Step 4</div></div>
Shut down Nodes	<div><div></div><div>▼</div><div>Step 1</div><div>Step 2</div><div>Step 3</div><div>Step 4</div></div>
Shut down Guest VMs	<div><div></div><div>▼</div><div>Step 1</div><div>Step 2</div><div>Step 3</div><div>Step 4</div></div>
Stop the Cluster	<div><div></div><div>▼</div><div>Step 1</div><div>Step 2</div><div>Step 3</div><div>Step 4</div></div>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Procedure	Step
Shut down CVMs	<div>▼</div> <div>Step 1</div> <div>Step 2</div> <div>Step 3</div> <div>Step 4</div>
Shut down Nodes	<div>▼</div> <div>Step 1</div> <div>Step 2</div> <div>Step 3</div> <div>Step 4</div>
Shut down Guest VMs	<div>▼</div> <div>Step 1</div> <div>Step 2</div> <div>Step 3</div> <div>Step 4</div>
Stop the Cluster	<div>▼</div> <div>Step 1</div> <div>Step 2</div> <div>Step 3</div> <div>Step 4</div>

#### NEW QUESTION 57

Refer to the Exhibit:

```
admin@NTNX:~$ manage_ovs show_uplinks
Bridge: br0
Bond: br0-up
bond_mode: balance-tcp
interfaces: eth3 eth2 eth1 eth0
lacp: active
lacp-fallback: false
lacp_speed: fast
admin@NTNX:~$
```

An administrator is adding a new node to a cluster. The node has been imaged to the same versions of AHV and AOS that the cluster is running, configured with appropriate IP addresses, and br0-up has been configured in the same manner as the existing uplink bonds. When attempting to add the node to the cluster with the Expand Cluster function in Prism, the cluster is unable to find the new node. Based on the above output from the new node, what is most likely the cause of this issue?



- A. There is a firewall blocking the discovery traffic from the cluster.
- B. The ports on the upstream switch are not configured for LACP.
- C. The existing cluster and the expansion node are on different VLANs.
- D. LACP configuration must be completed after cluster expansion.

**Answer:** B

**Explanation:**

The output in the exhibit indicates that the node's network interfaces (eth0- eth3) are bonded together using LACP (Link Aggregation Control Protocol) with 'balance- tcp' as the bonding mode and LACP speed set to 'fast'. For LACP to function correctly, the switch ports to which the node is connected must also be configured to support LACP. If the ports on the upstream switch are not configured for LACP, the bond will not be able to establish properly, and the node will not communicate effectively on the network, making it undiscoverable when attempting to expand the cluster.

The absence of an operational LACP configuration could prevent the new node from joining the existing cluster as the node's network interfaces would not be able to pass traffic correctly. This can be verified by checking the switch configuration to ensure that the ports are set to participate in an LACP bond.

The other options, such as a firewall blocking discovery traffic (Option A) or the node being on different VLANs (Option C), are possible causes for a node not being discovered, but

given the specific command output provided, the most likely cause is related to the switch port configuration for LACP. Option D, regarding completing LACP configuration after cluster expansion, is not correct because LACP needs to be operational for the node to communicate with the cluster during the expansion process.

Proper LACP configuration is critical for network communication in a Nutanix AHV cluster, and this is covered in detail in the Nutanix AHV and Networking documentation. It outlines the steps for configuring network bonds and LACP on both the AHV hosts and the connecting network infrastructure.

**NEW QUESTION 61**

What is the expected behavior of the VMs residing on that host when a controller VM becomes unavailable?

- A. A Live Migration will be performed on the affected VMs.
- B. The host will automatically redirect I/O and VMs will continue running.
- C. The impacted host and VMs will automatically shut down.
- D. VM High Availability will restart the impacted VMs on another host

**Answer:** B

**Explanation:**

According to the Nutanix Support & Insights web search result<sup>1</sup>, if the owner Controller VM becomes unavailable, the address moves to another Controller VM, ensuring that it is always available. This IP address is also used as a cluster-wide address by clients configured as part of Nutanix Files and other products. Therefore, the host will automatically redirect I/O and VMs will continue running without any interruption.

**NEW QUESTION 65**

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

**Answer:** CD

**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-heal<sup>2</sup>. 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 outage<sup>3</sup>. There are four fault domains in a Nutanix cluster: Disk, Node, Block, and Rack<sup>4</sup>. 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 cluster<sup>5</sup>. Rack fault tolerance has to be configured manually and ensures that data is replicated across different racks in a cluster<sup>4</sup>.

References: 1: Behavioral Learning Tools - Prism Central Resource Management -Nutanix 2: How Nutanix Handles Failures | Node Failure 3: Failure Domain Considerations- Nutanix Support & Insights 4: [Understanding Fault Domains and Rack Awareness - Nutanix] 5: [Nutanix Cluster Architecture Overview - Nutanix Bible]

**NEW QUESTION 67**

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

**Answer:** B

**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 follows<sup>1</sup>:

? Log in to the AHV host using SSH.

? Enter maintenance mode on the CVM by running allssh 'cluster status | grep -i cvm | grep -i down'.

? Change the bond mode to Active-Active by running manage\_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 running manage\_ovs show\_uplinks.

? Exit maintenance mode on the CVM by running allssh 'cluster start'.

Reference: AHV Networking Best Practices

## NEW QUESTION 72

An administrator is tasked with configuring networking on an AHV cluster and needs to optimize for maximum single VM throughput. Which bond mode should the administrator select?

- A. Active-Active with Mac pinning
- B. Active-Active
- C. Active-Backup
- D. No Uplink Bond

**Answer: B**

### Explanation:

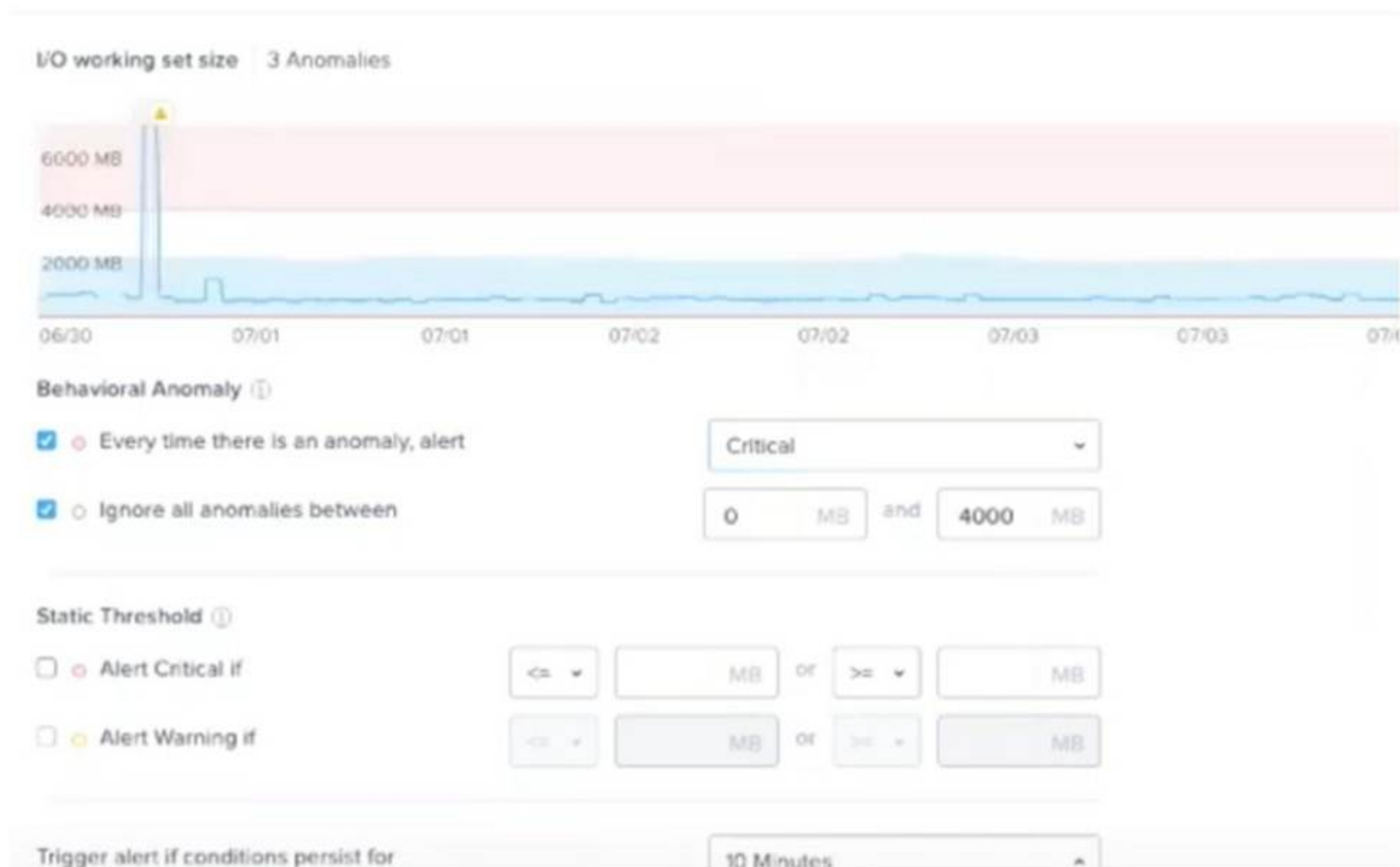
Active-Active is a bond mode that allows all uplinks in the bond to be used simultaneously for traffic transmission and reception. This bond mode provides load balancing and increased bandwidth for the AHV host and its VMs. Active-Active bond mode uses a hashing algorithm based on source MAC addresses to distribute traffic across different uplinks in the bond. Each individual VM NIC uses only a single bond member interface at a time, but multiple VM NICs are spread across different bond member interfaces. As a result, it is possible for a Nutanix AHV node with two 10 Gb interfaces to use up to 20 Gbps of network throughput, while individual VMs have a maximum throughput of 10 Gbps6.

Therefore, if an administrator needs to optimize for maximum single VM throughput, they should select Active-Active bond mode for their AHV cluster. This bond mode can be configured using Prism Element UI or manage-ovs commands on each AHV host7. No additional configuration is required on the upstream switch side, as long as the switches are interconnected physically or virtually and both uplinks trunk the same VLANs8.

Reference: Configuring Load Balancing active-backup and balance-slb modes on AHV

## NEW QUESTION 77

Refer to Exhibit:



Which statement is true?

- A. A critical alert will be triggered if I/O working set size goes over 6000 MB.
- B. A critical alert will be triggered when there is an anomaly above 4000 MB.
- C. A warning alert will be triggered after 3 anomalies have been catch.
- D. A warning alert will be triggered if I/O working set size goes over the blue band.

**Answer: B**

### Explanation:

\* A. This statement is incorrect because there is no static threshold set to trigger a critical alert at 6000 MB. The graph shows a peak that goes above 6000 MB, but the alert configuration below does not specify a static threshold at this value.

\* B. This is the correct statement. The configuration under "Behavioral Anomaly" is set to alert every time there is an anomaly, with a critical level alert set to trigger when the I/O working set size is between 0 MB and 4000 MB. The graph illustrates that the anomalies (highlighted in pink) occur when the working set size exceeds the normal range (blue band). Therefore, any anomaly detected above 4000 MB would trigger a critical alert.

\* C. This statement is incorrect because there is no indication that a warning alert is configured to trigger after 3 anomalies. The exhibit does not show any configuration that specifies an alert based on the number of anomalies.

\* D. This statement is incorrect as there's no indication that a warning alert will be triggered based on the I/O working set size exceeding the blue band. The alert settings are configured to ignore anomalies below 4000 MB and to trigger a critical alert for anomalies above this threshold.

The settings displayed in the exhibit are typically part of Nutanix's Prism infrastructure management platform, which can set various thresholds for performance metrics and trigger alerts based on those thresholds. The behavior is defined in the Prism documentation where the alert configuration is outlined.

## NEW QUESTION 81

Where are Leap Availability Zones configured?

- A. Cloud Connect
- B. Controller VM
- C. Prism Element
- D. Prism Central

**Answer:** D

**Explanation:**

Terminology

? Availability Zone – it is represented by all resources (Nutanix Clusters) connected to Prism Central or Xi Leap Availability zone. Depends on the architecture, Availability zone can represent geographic territory, datacenter or server room in the datacenter. Protection policies – in protection policies you set up (RPO, Retention), rules to auto-apply policies to virtual machines

<https://vmwaremine.com/2019/02/08/nutanix-leap-runbooks-part-1/#sthash.VwrzSzhQ.dpbs>

**NEW QUESTION 86**

A user running a Computer Aided Design (CAD) application is complaining about slow response time within the VM, particular when moving windows or rendering images.

Which VM metric will guide the administrator toward diagnosing the problem?

- A. Storage Controller Latency
- B. GPU Usage
- C. Swap in Rate
- D. Hypervisor Memory Usage (%)

**Answer:** B

**Explanation:**

A GPU (graphics processing unit) is a specialized hardware device that can accelerate graphics rendering and computation for applications that use APIs such as DirectX, OpenGL, CUDA, and OpenCL. A GPU can also offload the CPU from encoding and decoding tasks for remote display protocols such as Frame Remote Desktop Protocol (FRP). A VM can use a GPU either by directly accessing a physical GPU (pGPU) on the host or by using a virtual GPU (vGPU) that shares a pGPU with other VMs. A user running a computer aided design (CAD) application may benefit from using a GPU or a vGPU to improve the performance and responsiveness of the application, especially when moving windows or rendering images. However, if the GPU or vGPU is not properly configured or provisioned, the user may experience slow response time within the VM. Therefore, to diagnose the problem, the administrator should monitor the GPU Usage metric for the VM. The GPU Usage metric shows the percentage of GPU resources that are consumed by the VM over time<sup>3</sup>. The administrator can use Prism Central to view the GPU Usage metric for each VM in a chart or a widget<sup>4</sup>. The administrator can also use Prism Central to view other metrics related to GPU performance, such as GPU Memory Usage, GPU Encoder Usage, and GPU Decoder Usage<sup>3</sup>. By analyzing these metrics, the administrator can determine if the VM is using the GPU efficiently and optimally, or if it needs more or less GPU resources.

Reference: Nutanix Frame and GPU: Options, Tools, and Best Practices

**NEW QUESTION 88**

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.

**Answer:** C

**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 VMs<sup>2</sup>. 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.

**NEW QUESTION 89**

An administrator needs to run a mixed Exchange and SQL workload with a guaranteed amount of container space for each application.

How should the administrator meet this requirement?

- A. Create one container and set capacity reservation
- B. Create two containers and reserve space for containers
- C. Create one container and enable compression
- D. Create two containers and reserve space for vDisks

**Answer:** D

**Explanation:**

Reference: [https://portal.nutanix.com/page/documents/details?targetId=Web\\_Console\\_Guide-NOS\\_v4\\_0:wc\\_security\\_authentication\\_wc\\_t.html](https://portal.nutanix.com/page/documents/details?targetId=Web_Console_Guide-NOS_v4_0:wc_security_authentication_wc_t.html)

**NEW QUESTION 93**

Which Nutanix service control ncli, the HTML5 UI, and Rest API?

- A. Prism
- B. Cassandra

- C. Zookeeper
- D. Chronos

**Answer:** A

**Explanation:**

Prism is the central service control used by Nutanix to manage the clusters. It provides a unified view of the entire system, and it is used to control the HTML5 UI, the nCLI, and the REST API. Prism is used to manage the resources of the system, such as the nodes, storage, and networks, as well as to monitor the performance of the system and the applications running on it.

<https://www.nutanixbible.com/2f-book-of-basics-cluster-components.html> PrismKey Role: UI and API

- Prism is the management gateway for components and administrators to configure and monitor the Nutanix cluster. This includes Ncli, the HTML5 UI, and REST API.

- Prism runs on every node in the cluster and uses an elected leader like all components in the cluster. All requests are forwarded to the leader using Linux iptables. This allows access to PRISM using any CVM Ip address.

- Prism communicates with Zeus for cluster configuration data and Cassandra for statistics to present to the user. It also communicates with the ESXi hosts for VM status and related information

These are only some of the essential services that make up the CVM functionality. For more information on all the services and various Nutanix Cluster components, refer to the portal documentation.

**NEW QUESTION 98**

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

**Answer:** A

**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 operations<sup>1</sup>.

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 version<sup>2</sup>.

The administrator can perform an LCM inventory using Prism Element or Prism Central. The steps are as follows<sup>3</sup>:

- ? 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. Reference: LCM: Upgrade process and Path for LCM

**NEW QUESTION 102**

An administrator is tasked with configuring network on an AHV cluster and wants to maximize throughput for the host with many small VMs while minimizing network switch configuration.

Which bond mode should the administrator select?

- A. Active-active
- B. Active-Active with Mac Pinning
- C. Active-Backup
- D. No-Uplink Bond

**Answer:** A

**Explanation:**

According to the Nutanix AHV Networking Guide, active-active bond mode provides load balancing and fault tolerance for network traffic by distributing packets across multiple interfaces using a hashing algorithm based on source and destination MAC addresses, IP addresses, and TCP/UDP ports. This mode does not require any special configuration on the network switch and can improve throughput for hosts with many small VMs.

**NEW QUESTION 104**

Which method can be used to migrate a VM configured for UEFI-boot from a Nutanix Hyper-V cluster to AHV?

- A. Live Migration
- B. Storage vMotion
- C. Nutanix Move
- D. Cloud Connect

**Answer:** C

**Explanation:**

Nutanix Move is a tool that allows you to migrate VMs from different sources to Nutanix AHV with minimal downtime and complexity. Nutanix Move supports migration from Hyper- V to AHV, including VMs configured for UEFI-boot. UEFI stands for Unified Extensible Firmware Interface, which is a standard for the software interface between the operating system and the firmware. UEFI-boot is a mode of booting that uses UEFI instead of BIOS (Basic Input/Output System) to load the operating system. UEFI-boot offers some advantages over BIOS-boot, such as faster boot time, larger disk support, and better security features<sup>1</sup>.

To migrate a VM configured for UEFI-boot from a Nutanix Hyper-V cluster to AHV, you need to use Nutanix Move and follow these steps<sup>2</sup>:



? Download and deploy the Nutanix Move appliance on the AHV cluster.  
? Log in to the Nutanix Move web console and add the source Hyper-V environment and the target AHV environment.  
? Create a migration plan and select the VMs that you want to migrate. You can choose either automatic or manual preparation mode for the migration.  
? Start the migration plan and monitor the progress. The migration plan will perform data seeding, which is the process of copying the VM data from the source to the target in the background.  
? When the data seeding is complete, perform a cutover, which is the process of shutting down the source VMs and powering on the target VMs. The cutover will also configure the boot device for the UEFI-boot VMs on AHV.  
? Verify that the migrated VMs are working as expected on AHV.  
References: 1: UEFI Boot - Nutanix Support & Insights 2: Hyper-V to AHV and Hyper-V to Nutanix Clusters on AWS VM Migration - Nutanix Support & Insights

#### NEW QUESTION 106

An administrator has a Custom backup application that requires a 2TB disk and runs m Windows. Throughput is considerably lower than expected. The application was installed on a VM with the following configuration:

- FOU vCPUs with one core/vCPU
- 4GB of Memory
- One 50GB vDisk for the Windows installation
- One 2TB vDisk for the application

What is the recommended configuration change to improve throughput?

- A. Add 4GB of memory to the VM
- B. Increase the vCPUs assigned to the VM
- C. Span the 2TB disk across four vDisks
- D. Increase the number of cores per vCPU

**Answer: C**

#### Explanation:

According to the web search results, one recommended configuration change to improve throughput for a custom backup application that requires a 2TB disk and runs on Windows is to span the 2TB disk across four vDisks. Spanning is a technique that allows you to create a single logical disk from multiple physical disks. Spanning can improve throughput by distributing I/O requests across multiple disks and reducing contention<sup>5</sup>. To span a disk across four vDisks, the administrator should create four vDisks of equal size (500 GB each) and attach them to the VM. Then, in Windows Disk Management, create a spanned volume from the four vDisks and format it as NTFS<sup>6</sup>.

#### NEW QUESTION 107

A customer has a 24-node cluster with all containers configured with RF3. Two different nodes have incurred a simultaneous HDD failure. What is the result?

- A. The cluster runs in a degraded state until the failed drives are replaced and the data has been restored to three replicas.
- B. Sixty minutes after the failures a rebuild of the lost data can remaining HDDs begins to restore to three replicas.
- C. The VMs with data on those drives crash, and an HA event occurs, restarting them on a remaining healthy node.
- D. The Nutanix cluster recognizes the failures and immediately begins to rebuild lost data to three replicas.

**Answer: D**

#### Explanation:

This is because Nutanix uses a distributed storage fabric (DSF) that replicates data across multiple nodes and drives to ensure data resiliency. When a drive fails, the cluster detects the failure and initiates a data rebuild process to restore the replication factor (RF) of the affected containers. The data rebuild process does not affect the availability or performance of the VMs, as they can still access their data from other replicas on other nodes or drives. Therefore, there is no need to wait for 60 minutes, use a shared volume group, or trigger an HA event.

#### NEW QUESTION 110

When configuring a syslog server in Prism Central, what two pieces of information are required? (Choose two.)

- A. HTTPS URL
- B. Encryption secret
- C. Transport protocol
- D. IP address/port

**Answer: CD**

#### Explanation:

According to the Nutanix Prism Central Guide, to configure a syslog server in Prism Central, you need to specify the transport protocol (TCP or UDP) and the IP address/port of the syslog server.

#### NEW QUESTION 113

What is the expected operation during node addition when the new node has a different AOS version?

- A. The entire cluster is upgraded to the latest one-click release.
- B. The node is added and a separate upgrade operation must be performed.
- C. The addition fails and forces the administrator to image using standalone Foundation.
- D. The node is automatically re-imaged using the software currently running in the cluster.

**Answer: D**

#### Explanation:

The node is automatically re-imaged using the software currently running in the cluster. This is because Nutanix supports a feature called Auto Re-Image that allows adding nodes with different AOS versions to an existing cluster without manual intervention. The Auto Re-Image feature detects the AOS version mismatch and automatically downloads and installs the same AOS version as the cluster on the new node. This ensures that the cluster remains in a consistent state and avoids any compatibility issues.

#### NEW QUESTION 116

Which two permission assignment tasks can be accomplished via Prism Element? (Choose two.)

- A. Grant a user permission to create VMs on a specific storage container
- B. Grant a user permission to view details of all VMs on a specific cluster
- C. Grant an active directory group permission to perform back operations
- D. Grant a user permission to create and delete snapshots on a specific VM

**Answer:** BC

#### NEW QUESTION 117

What is the recommended approach for a constrained VM?

- A. Reboot the VM
- B. Delete the VM.
- C. Increase the VM resources.
- D. Decrease the VM resources

**Answer:** C

#### 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.

#### NEW QUESTION 122

An administrator has been notified by a user that a Microsoft SQL Server instance is not performing well.

When reviewing the utilization metrics, the following concerns are noted: Memory consumption has been above 95% for several months

Memory consumption has been spiking to 100% for the last five days Storage latency is 2ms.

When logging into Prism Central, how could the administrator quickly verify if this VM has performance bottlenecks?

- A. See Capacity Runway.
- B. Filter VM by Efficiency.
- C. Update Capacity Configurations.
- D. Perform Entity Sync

**Answer:** B

#### Explanation:

This will allow the administrator to quickly identify VMs that are overprovisioned or underutilized based on their performance metrics.

[https://www.nutanix.com/support-services/training-certification/certifications/certification-details-nutanix-certified-professional-multicloud-infrastructure-6\\_5](https://www.nutanix.com/support-services/training-certification/certifications/certification-details-nutanix-certified-professional-multicloud-infrastructure-6_5)

#### NEW QUESTION 126

An administrator needs to deploy an application with a large amount of data connected via Nutanix volumes.

Which two actions should the administrator take when designing the Volume Group? (Choose two.)

- A. Distribute workload across multiple virtual disks
- B. Enable RSS (Receive Side Scaling)
- C. Use multiple subnets for iSCSI traffic
- D. Enable thick provisioning on the Volume Group(s)

**Answer:** AB

#### Explanation:

According to the Nutanix Volumes - Recommendations And Best Practices web search result3, two actions that the administrator should take when designing the Volume Group are:

? Distribute workload across multiple virtual disks: Use multiple disks rather than a single large disk for an application. Consider using a minimum of one disk per Nutanix node to distribute the workload across all nodes in a cluster. Multiple disks per Nutanix node may also improve an application's performance. For performance-intensive environments, we recommend using between four and eight disks per CVM for a given workload.

? Enable RSS (Receive Side Scaling): Receive-side scaling (RSS) allows the system to use multiple CPUs for network activity. With RSS enabled, multiple CPU cores process network traffic, preventing a single CPU core from becoming a bottleneck. Enabling RSS within hosts can be beneficial for heavy iSCSI workloads. For VMs running in ESXi environments, RSS requires VMXNET3 VNICs. For Hyper-V environments, enable VMQ to take full advantage of Virtual RSS.

#### NEW QUESTION 130

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 separate 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.

**Answer:** B

#### 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 on<sup>1</sup>. 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.

**NEW QUESTION 132**

An administrator needs to provide access for a user to view real-time performance metric for all VMs on all clusters across the datacenter. Which method accomplishes this with the least effort and ongoing maintenance?

- A. Configure IDP authentication and assign the user to the Cluster Admin role in Prism Central.
- B. Configure AD authentication and assign the user to the Viewer role in Prism Element.
- C. Configure AD authentication create a custom role, assign the user to the role, and apply the role to all clusters and VMs

**Answer: C**

**Explanation:**

The best method to provide access for a user to view real-time performance metrics for all VMs on all clusters across the datacenter is to configure AD authentication create a custom role, assign the user to the role, and apply the role to all clusters and VMs. This method accomplishes this with the least effort and ongoing maintenance because:

? AD authentication allows Nutanix Prism Central to integrate with an existing Active Directory (AD) domain and use AD users and groups for authentication and authorization<sup>5</sup>. This simplifies user management and avoids creating local users on Prism Central.

? Creating a custom role allows Nutanix Prism Central to define granular permissions for different actions and entities based on specific needs<sup>6</sup>. This ensures that users only have access to what they need and nothing more.

? Assigning the user to the custom role allows Nutanix Prism Central to grant access rights for that user based on the role definition<sup>7</sup>. This avoids assigning permissions individually for each user.

? Applying the role to all clusters and VMs allows Nutanix Prism Central to propagate the access rights for that role across all entities in scope<sup>8</sup>. This ensures that users can view real-time performance metrics for all VMs on all clusters without having to configure each entity separately.

References: 1: Health Dashboard - Prism Element Guide 2: Understanding Native VLANs - Cisco 3: VMs may lose network connectivity if connected to virtual network with ?? -

Nutanix Support & Insights 4: VLAN Configuration - AHV Networking Guide 5: Active Directory Authentication - Prism Central Guide 6: Create Custom Roles - Prism Central

Guide 7: Assign Roles - Prism Central Guide 8: Apply Roles - Prism Central Guide

**NEW QUESTION 134**

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

**Answer: BC**

**Explanation:**

According to the Nutanix 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.

**NEW QUESTION 138**

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. Create bond1 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.

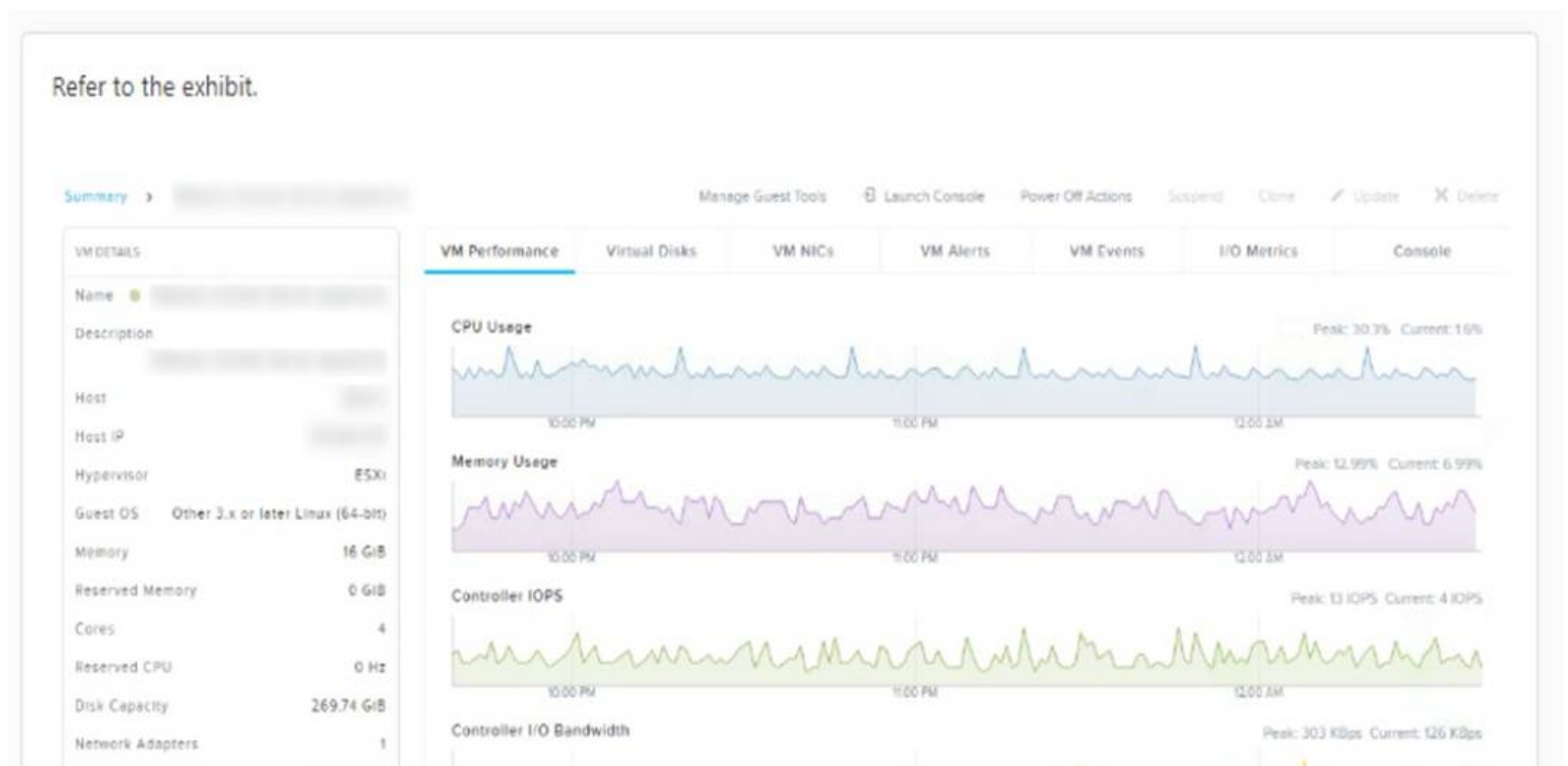
**Answer: D**

**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 it<sup>3</sup>. This way, the customer can use both 10GbE and 1GbE interfaces for VM traffic, and also benefit from network isolation and redundancy.

**NEW QUESTION 142**

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 are not excessively overcommitted.

**Answer: B**

**Explanation:**

Prism Element is a graphical user interface that allows you to manage Nutanix clusters<sup>1</sup>. You can use Prism Element charts to understand Nutanix cluster workloads and troubleshoot performance related issues<sup>2</sup>.  
 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>

**NEW QUESTION 146**

Prism Central will be installed manually on an AHV cluster.  
 Which three disk images must be downloaded from the portal for the Prism Central VM? (Choose three.)

- A. var
- B. tmp
- C. boot
- D. home
- E. data

**Answer: CDE**

**Explanation:**

[https://portal.nutanix.com/page/documents/details?targetId=Prism-Central- Guide-Prism-v5\\_10:mul-pc-install-scratch-c.html](https://portal.nutanix.com/page/documents/details?targetId=Prism-Central- Guide-Prism-v5_10:mul-pc-install-scratch-c.html)  
 According to the Nutanix Support & Insights web search result<sup>4</sup>, Prism Central can be installed manually on an AHV cluster by using three disk images: boot, home, and data. These disk images must be downloaded from the portal for the Prism Central VM and uploaded to an image service on the AHV cluster. The boot image contains the operating system and kernel for Prism Central. The home image contains the configuration files and logs for Prism Central. The data image contains the database and application files for Prism Central.

**NEW QUESTION 148**

CPU utilization climbs above 90% on several VMs. This causes performance degradation for a business-critical application.  
 How can alerts be configured to notify the administrator before VM CPU utilization hits 90%?

- A. On a CVM, use ncli to set the VM CPU Check threshold for the critical VMs to a value below 90%.
- B. On the Health dashboard, locate the VM CPU Check and lower the alert threshold below 90%.
- C. On a CVM, configure a cron job to run the VM CPU Check more frequently and email the result.
- D. On the Alerts dashboard, ensure that the VM CPU usage alert is not set to auto-resolve.

**Answer: B**

**Explanation:**

Reference: [https://portal.nutanix.com/page/documents/details?targetId=Web-Console- Guide-Prismv5\\_16:Web-Console-Guide-Prism-v5\\_16](https://portal.nutanix.com/page/documents/details?targetId=Web-Console- Guide-Prismv5_16:Web-Console-Guide-Prism-v5_16)



#### NEW QUESTION 153

When a VM is connected to a Nutanix managed network, when is the IP address 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.

**Answer: B**

#### 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 networks<sup>4</sup>.

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 later<sup>5</sup>.

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 state<sup>6</sup>.

References: 4: IP Address Management - Prism Central Guide 5: Creating a New Report - Prism Central Guide 6: IP Address Assignment - AHV Networking Guide

#### NEW QUESTION 156

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

**Answer: A**

#### 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 cluster<sup>2</sup>. The unregistration process involves getting the UUID of the cluster from the CVM and then using that to trigger de-registration from PC command line<sup>2</sup>.

The unregistration process also involves cleaning up any associated metadata and configuration on both PC and PE<sup>2</sup>. Therefore, the administrator needs to use a Host SSH session to perform this task.

#### NEW QUESTION 157

##### 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.

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 Step 1 Step 2 Step 3 Step 4

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

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



**NEW QUESTION 162**

Administrator is creating a Windows 10 VM that will be used for a virtual desktop template. After creating the VM and booting to the ISO, the administrator is unable to install Windows and receives the following error.



What steps does the administrator need to take to install the OS?

- A. Load the Nutanix VirtIO Serial Bus Driver.
- B. Load the VirtIO Network Ethernet Adapter.
- C. Load the Nutanix Virtual Balloon Driver.
- D. Load the Virtual SCSI pass-through controller.

**Answer:** D

**Explanation:**

Answer D. Load the Virtual SCSI pass-through controller.

The error message shown in the image indicates that Windows 10 setup cannot find any drives to install the OS. This is because the Nutanix AHV hypervisor uses a virtual SCSI pass-through controller to present disks to the VMs, and Windows 10 does not have a built-in driver for this device. Therefore, the administrator needs to load the Nutanix VirtIO driver for the virtual SCSI pass-through controller during the OS installation process. The Nutanix VirtIO driver package contains various drivers that are specifically used by Windows VMs hosted in the Nutanix environment to enhance their stability and performance<sup>1</sup>. The administrator can download the latest Nutanix VirtIO driver package from the VirtIO

downloads page of the Nutanix support portal. The administrator can then follow these steps to load the driver and install the OS<sup>2</sup>:

? On the Windows 10 setup screen, click Load driver.

? Insert a USB drive or mount an ISO image that contains the Nutanix VirtIO driver package.

? Browse to the location of the driver package and select the folder that matches the OS architecture (32-bit or 64-bit).

? Select the vioscsi.inf file and click Next.

? Wait for the driver to load and then click Refresh.

? Select the disk where you want to install Windows 10 and click Next. References: 1: VirtIO Driver Versions for Windows 2: Installing Windows on AHV

**NEW QUESTION 167**

Which command should an administrator run from the CLI to view the uplink state of all AHV nodes in the cluster?

- A. allssh show\_uplinks
- B. manage\_ovs show\_uplinks
- C. allssh manage\_ovs show\_uplinks
- D. manage ovs show uplinks

**Answer:** C

**Explanation:**

According to section 4 of the exam blueprint guide<sup>1</sup>, one of the topics covered is AHV networking components and configuration settings. One of these components is Open vSwitch (OVS), which is a software switch that provides network connectivity between VMs and physical networks. OVS has two types of ports:

? Uplink ports: These are physical ports that connect to external networks or switches.

? Internal ports: These are virtual ports that connect to VMs or other internal networks.

To view the uplink state of all AHV nodes in the cluster, an administrator can use the manage\_ovs command with the show\_uplinks option. This command displays information such as port name, link state, speed, duplex mode, MTU size, bond mode, and bond status. However, this command only works on a single node. To run the command on all nodes in the cluster, an administrator can use the allssh command, which executes a command on all CVMs in parallel. Therefore, the correct command is:

allssh manage\_ovs show\_uplinks

**NEW QUESTION 171**

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

**Answer:** A

**Explanation:**

<https://next.nutanix.com/installation-configuration-23/nutanix-vlan-34170>

**NEW QUESTION 176**

An administrator is configuring data protection and DR for a multi-tier application. All VMs must be protected at the same time.

What must the administrator do to meet this requirement?

- A. Create a consistency group for each VM with identical schedules
- B. Create a consistency group for the application and place all VMs in it
- C. Create a protection domain for the application and select auto-protect related entities
- D. Create a protection domain for each VM with identical schedules

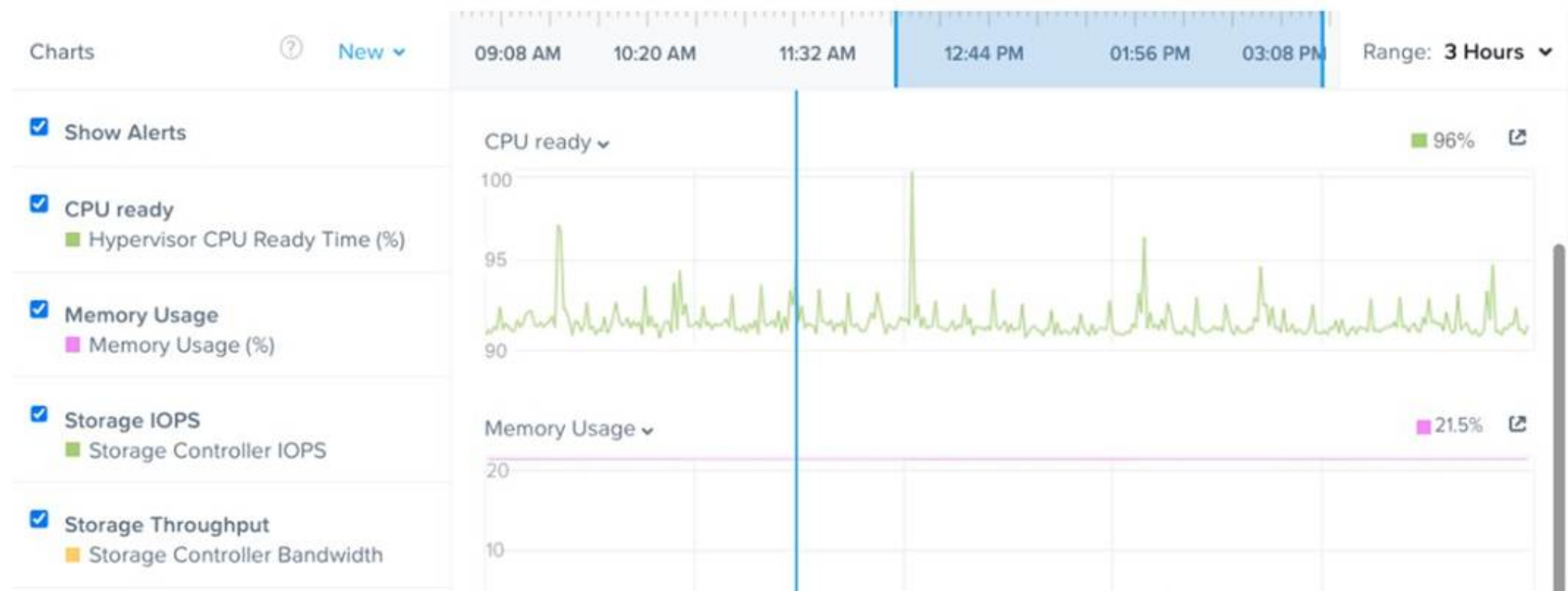
Answer: B

**Explanation:**

According to the web search results, a consistency group is a group of related applications or services that must be recovered together in order to work properly, and this means more than being recovered at the same time<sup>67</sup>. They also typically need to be recovered to the same point in time<sup>6</sup>. Therefore, to meet the requirement of protecting all VMs of a multi-tier application at the same time, the administrator must create a consistency group for the application and place all VMs in it<sup>8</sup>. This way, the administrator can apply data protection policies and schedules to the entire consistency group as a single unit<sup>8</sup>.

**NEW QUESTION 178**

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

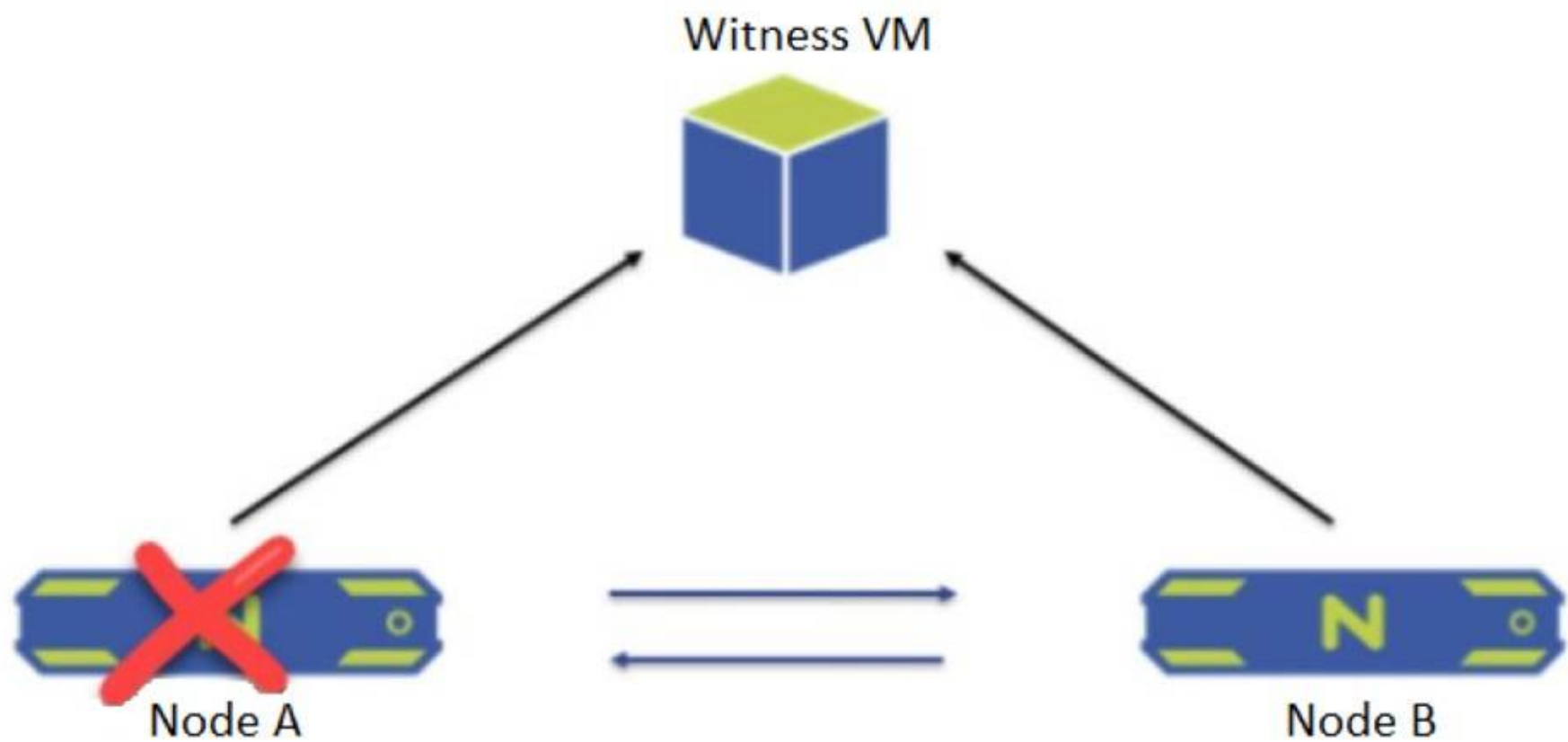
Answer: B

**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.

**NEW QUESTION 183**

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.

**Answer:** D

**Explanation:**

According to the Nutanix 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.

**NEW QUESTION 185**

**HOTSPOT**

What is the proper sequence to perform a one-click upgrade to a Nutanix cluster?

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.

## Answer Area

Procedure	Step
Select the Gear icon at top right of the page	<div>▼</div> <div> Step 1  Step 2  Step 3  Step 4  Step 5  Step 6  Invalid Step </div>
Select the component to upgrade	<div>▼</div> <div> Step 1  Step 2  Step 3  Step 4  Step 5  Step 6  Invalid Step </div>
Once the download completes, select Upgrade	<div>▼</div> <div> Step 1  Step 2  Step 3  Step 4  Step 5  Step 6  Invalid Step </div>
Log into Prism Central	<div>▼</div> <div> Step 1  Step 2  Step 3  Step 4  Step 5  Step 6  Invalid Step </div>
Select the User login name at the top right of the page	<div>▼</div> <div> Step 1  Step 2  Step 3  Step 4  Step 5  Step 6  Invalid Step </div>
On the left, select Upgrade Prism Central	<div>▼</div> <div> Step 1  Step 2  Step 3  Step 4  Step 5  Step 6  Invalid Step </div>
Click Download	<div>▼</div> <div> Step 1  Step 2  Step 3  Step 4  Step 5  Step 6  Invalid Step </div>
On the left under Settings, select Upgrade Software	<div>▼</div> <div> Step 1  Step 2  Step 3  Step 4  Step 5  Step 6  Invalid Step </div>
Log in to Prism Element	<div>▼</div> <div> Step 1  Step 2  Step 3  Step 4  Step 5  Step 6  Invalid Step </div>



- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Step 1 ---> Login into Prism Element.  
Step 2 ---> Select the Gear Icon at top right of the page.  
Step 3 ---> Click Upgrade Software.  
Step 4 ---> Select the component to upgrade.  
Step 5 ---> Click download.  
Step 6 ---> Once the download completes, select upgrade.  
Invalid:-  
1 - Select Prism Central. 2 - Select user login. 3 - On left select upgrade Prism Central.

**NEW QUESTION 188**

A configuration is single domain, single forest, and does not use SSL.  
Which port number should be used to configure LDAP?

- A. 389
- B. 3269
- C. 636
- D. 3268

**Answer:** A

**Explanation:**

Port 389 is the default port for LDAP without SSL encryption. Port 636 is used for LDAP over SSL (LDAPS). Port 3268 and 3269 are used for Global Catalog (GC) and Global Catalog over SSL (GCSSL), respectively2.

**NEW QUESTION 192**

An administrator needs to periodically send information about cluster efficiency via email to a set of users.  
What should be configured to accomplish this task?

- A. Configure Efficiency widget in Prism Central.
- B. Create a new' prism Central project.
- C. update Capacity Configurations in Prism Central.
- D. Add a schedule to Prism Central reports.

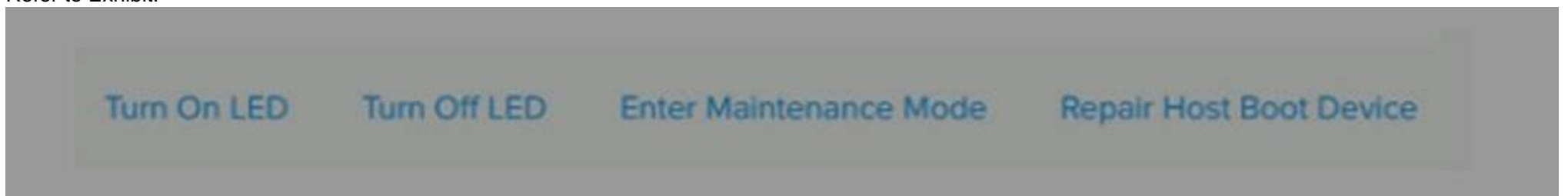
**Answer:** D

**Explanation:**

To periodically send information about cluster efficiency via email to a set of users, the administrator can follow these steps:  
? Create a report in Prism Central that contains the relevant information about cluster efficiency.  
? Add a schedule to the report to generate and send the report via email to the set of users at a specified frequency.  
This will ensure that the users receive regular updates about the cluster efficiency without the need for manual intervention.

**NEW QUESTION 194**

Refer to Exhibit:



An administrator wants to replace an old node with a node of newer generation in a 3- node cluster. The administrator has already chosen the appropriate node.  
But unable to remove it from the cluster.  
Why is the Remove Host option not shown in the exhibit?

- A. The host needs to be placed into maintenance Mode before.
- B. It is only possible to remove a host from a cluster using CLI.
- C. It is not possible to remove a node from a the cluster using Prism Central
- D. It is not possible to remove a host from a 3-node cluster.

**Answer:** D

**Explanation:**

A Nutanix cluster requires a minimum of three nodes to maintain quorum and data availability. Removing a node from a 3-node cluster would violate the redundancy factor and cause data loss. Therefore, it is not possible to remove a host from a 3-node cluster using Prism or CLI. The only way to replace a node in a 3-node cluster is to use the Foundation tool, which will erase the existing cluster configuration and create a new cluster with the new node1.

**NEW QUESTION 198**

An administrator manages an AHV cluster that is dedicated to a dev/test environment. The administrator receiving complaints from users that they are unable to create new VMs on the cluster.

After the reviewing the cluster, the administrator finds that the memory resources are almost fully utilized, with many VMs over-provisioned on memory. What option is the most efficient resolution to enable additional VMs to be created?

- A. Enable Memory Overcommit on the over-provisioned VMs.
- B. Enable Memory HA on the over-provisioned VMs.
- C. Upgrade the nodes with additional memory DIMMs.
- D. Disable HA Reservation on the cluster.

**Answer:** A

**Explanation:**

Enable Memory Overcommit on the over-provisioned VMs is the most efficient resolution to enable additional VMs to be created. Memory overcommit allows VMs to use more memory than physically available on a host by compressing and swapping memory pages to storage<sup>1</sup>. This can improve memory utilization and increase VM density on a cluster<sup>1</sup>. However, memory overcommit is not supported when HA is configured to use reserved hosts, so you may need to disable HA reservation on the cluster before enabling memory overcommit<sup>1</sup>.

**NEW QUESTION 201**

What does Nutanix recommend when setting up the node networking?

- 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.

**Answer:** B

**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 LACP<sup>1</sup>.

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 downtime<sup>2</sup>.

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 benefits<sup>3</sup>.

Reference: Nutanix AHV Networking Best Practices

**NEW QUESTION 204**

Refer to Exhibit.

## Data Resiliency Status

FAULT DOMAIN TYPE: HOST

COMPONENT	FAILURES TOLERABLE	MESSAGE
Static Configuration	1	
Erasure Code Strip Size	1	
Stargate Health	1	
Metadata	1	
Oplog	1	
ZooKeeper	1	
Extent Groups	1	

An administrator increases the cluster RF to 3. The containers are not modified.  
What will the new values in the data resiliency dashboard be for FAILURES TOLERABLE for the Zookeeper and Extent Groups components?

- A. Zookeeper = 1 and Extent Groups = 1
- B. Zookeeper = 2 and Extent Groups = 2
- C. Zookeeper = 2 and Extent Groups = 1
- D. Zookeeper = 1 and Extent Groups = 2

Answer: C

Explanation:

According to the web search results, the cluster redundancy factor (RF) determines how many copies of the cluster metadata and configuration data are stored on different nodes. By default, the cluster RF is 2, which means that there are three copies of the Zookeeper and Cassandra data on the cluster. If the cluster RF is increased to 3, then there will be five copies of the Zookeeper and Cassandra data on the cluster12. This means that the Zookeeper component can tolerate two failures, as it can still operate with a quorum of three nodes out of five3. However, the container replication factor (RF) determines how many copies of the VM data and oplog are stored on different nodes. The container RF can be set independently for each container, and it can be different from the cluster RF. For example, a container can have RF 2 even if the cluster has RF 34. In this case, the container will only have two copies of the VM data and oplog on the cluster, regardless of the cluster RF. This means that the Extent Groups component can only tolerate one failure, as it needs at least one copy of the VM data and oplog to be available5. Therefore, if the administrator increases the cluster RF to 3, but does not modify the containers, then the new values in the data resiliency dashboard will be Zookeeper = 2 and Extent Groups = 1.

NEW QUESTION 205

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

**Answer:** C

**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. Reference: Flow Networking Overview

**NEW QUESTION 207**

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

**Answer:** A

**Explanation:**

Reference: <https://next.nutanix.com/blog-40/maximum-performance-from-acropolis-hypervisor-and-openvswitch-6312>

**NEW QUESTION 208**

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

**Answer:** C

**Explanation:**

Reference: <http://www.nutanixpedia.com/p/configuring-ha.html>

**NEW QUESTION 211**

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 via command line on SSH to CVM.
- C. Enable Cluster Lockdown and provide an RSA key.
- D. Restrict access with User Management in Prism.

**Answer:** C

**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>

**NEW QUESTION 216**

An Administrator is working on a one-node ROBO cluster configurations Which statement is true for this configuration?

- A. Witness vm required to break cluster quorum
- B. Supported hardware is NX-1175-G5 and G6
- C. witness vm should be 8vcp and 20gb ram
- D. the minimum RPO 8 hours required

**Answer:** B

**Explanation:**

Reference: <https://www.nutanix.com/blog/unlocking-the-roboedge-it-landscape-with-the-launch-of-nutanix-1-node-cluster>

**NEW QUESTION 217**

An Administrator has been asked to deploy VMs using a specific image. The image has been configured with settings and applications that will be used by engineering to develop a new product by the company.



The image is not available on the desired cluster, but it is available in other cluster associated with Prism Central.  
Why is not the image available?

- A. The image bandwidth policy has prevented the image upload.
- B. The cluster should be removed from all categories.
- C. The cluster has not been added to the correct category
- D. The image placement policy was configured with enforcement.

**Answer: C**

#### NEW QUESTION 221

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

- A. vnet0
- B. br1
- C. br0
- D. virbr0

**Answer: C**

#### Explanation:

According to the Nutanix Support & Insights web search result<sup>1</sup>, 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.

#### NEW QUESTION 224

How should an administrator configure a custom alert for a specific VM in Prism?

- A. Modify an existing alert to only alert on the specific VM.
- B. Modify VM settings to add the custom alert.
- C. Modify the alerts to add a new custom alert policy.
- D. Modify node settings to add the custom alert.

**Answer: C**

#### Explanation:

<https://portal.nutanix.com/page/documents/details/?targetId=Prism-Central-Guide-Prism-v510:mul-alert-policies-user-defined-configure-pc-c.html>

#### NEW QUESTION 228

What is the minimum time a newly created Deduplication storage policy takes to apply to the VMs in the container?

- A. 5 Minutes
- B. 10 minutes
- C. 30 minutes
- D. 60 minutes

**Answer: C**

#### Explanation:

[https://portal.nutanix.com/page/documents/details?targetId=Prism-Central-Guide-vpc\\_2023\\_3:mul-cluster-storage-policy-pc-c.html](https://portal.nutanix.com/page/documents/details?targetId=Prism-Central-Guide-vpc_2023_3:mul-cluster-storage-policy-pc-c.html)

#### NEW QUESTION 229

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

**Answer: A**

#### Explanation:

Reference: <https://next.nutanix.com/how-it-works-22/disk-fault-tolerance-8822>

#### NEW QUESTION 233

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.

**Answer: A**

#### Explanation:

One node hosts two VMs while the node being upgraded is in maintenance mode. This is because Nutanix supports a feature called Rolling Upgrade that 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.

#### **NEW QUESTION 237**

Upon logging into Prism Central, an administrator notices high cluster latency. How can the administrator analyze data with the least number of steps or actions?

- A. Modify Data Density in the main Prism Central dashboard.
- B. Click on the chart in the widget to expand the data elements.
- C. Take note of the cluster name and create a new Analysis chart.
- D. Click the cluster name in the cluster quick access widget.

**Answer:** B

#### **Explanation:**

According to the Nutanix Prism Central Guide, you can click on any chart in a widget to expand it and view more details about the data elements.

#### **NEW QUESTION 239**

.....

## Thank You for Trying Our Product

### We offer two products:

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

2nd - Questions and Answers in PDF Format

### NCP-MCI-6.5 Practice Exam Features:

- \* NCP-MCI-6.5 Questions and Answers Updated Frequently
- \* NCP-MCI-6.5 Practice Questions Verified by Expert Senior Certified Staff
- \* NCP-MCI-6.5 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- \* NCP-MCI-6.5 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

**100% Actual & Verified — Instant Download, Please Click**  
**[Order The NCP-MCI-6.5 Practice Test Here](#)**