



Nutanix

Exam Questions NCP-MCI-6.5

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

NEW QUESTION 1

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

- A. Disable encryption on the cluster
- B. Deploy an additional Native KMS Server
- C. Enable encryption for a VM
- D. Change Native KMS to External KMS

Answer: D

Explanation:

Reference: <https://next.nutanix.com/blog-40/security-with-simplicity-encryption-for-your-data-with-1-click-28225>

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

What is Prism Central primarily used for?

- A. Multi-cluster network configuration
- B. Container creation
- C. Multi-cluster Single Sign On
- D. Data reduction configuration

Answer: C

Explanation:

According to the web search results, Prism Central is a multi-cluster manager that provides a single, centralized management interface for Nutanix environments¹². One of the features of Prism Central is multi-cluster Single Sign On (SSO), which allows users to log in once and access multiple clusters without re-entering credentials³.

NEW QUESTION 4

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

- A. API Audit
- B. Flow

- C. DNS
- D. NTP Synchronization

Answer: AB

NEW QUESTION 5

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

- A. Over-provisioned VM
- B. Inactive VM
- C. Bully VM
- D. Constrained VM

Answer: C

Explanation:

A bully VM is a VM that consumes too many resources and causes other VMs to starve. A bully VM can affect the performance and availability of other VMs on the same host or cluster by hogging CPU, memory, disk, or network resources. A bully VM can be identified by using the VM Profile feature in Prism Central2. The VM Profile feature analyzes the resource utilization of each VM and assigns it a profile based on its efficiency and impact on other VMs. The profiles are as follows3:

? Efficient: The VM is well-provisioned and has optimal resource utilization.

? Over-provisioned: The VM has more resources than it needs and has low resource utilization.

? Constrained: The VM has less resources than it needs and has high resource utilization.

? Inactive: The VM has no resource utilization and is idle or powered off.

? Bully: The VM has high resource utilization and causes contention for other VMs. To identify a bully VM, the administrator can use Prism Central to view the VM Profile dashboard and filter by profile type. The dashboard shows the number of VMs in each profile type, as well as their resource consumption and efficiency score. The administrator can also drill down into each VM to see its detailed metrics and recommendations for optimization.

Reference: VM Profile

NEW QUESTION 6

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 7

A vDisk is read by multiple VMs. The cluster creates immutable copies of the vDisk. What are these vDisk copies called?

- A. Disk Clones
- B. Golden Images
- C. Volume Groups
- D. Shadow Clones

Answer: D

Explanation:

According to the Nutanix Support & Insights web search result3, shadow clones are vDisk copies that are created by the cluster when a vDisk is read by multiple VMs. Shadow clones are immutable copies of a vDisk that are stored in different nodes in the cluster, and are used to improve read performance and reduce network traffic. Shadow clones are automatically created and deleted by the cluster, based on the demand and availability of resources.

NEW QUESTION 8

After running an LCM inventory it is noticed that there are a number of firmware and software updates available. The administrator would like to avoid any host reboots, but would like to apply some of the available updates?

Which two updates can be done while avoiding a host reboot? (Choose two.)

- A. M.2 Drives
- B. AHV
- C. Data Drives
- D. AOS

Answer: CD

NEW QUESTION 9

In the event of a disk failure, which process will immediately and automatically scans Cassandra to find all data previously hosted on the failed disk, and all disks in that node?

- A. Curator
- B. Stargate
- C. Genesis
- D. Prism

Answer: A

Explanation:

Curator is the process that runs on every node in a Nutanix cluster and is responsible for data management tasks such as deduplication, compression, erasure coding, and replication factor compliance. Curator also handles disk failure recovery by scanning Cassandra to find all data previously hosted on the failed disk, and all disks in that node. Curator then rebuilds the data on other nodes in the cluster using the distributed storage fabric1.

NEW QUESTION 10

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 | Correct Sequence |
|-------------------|---|
| First Preference | <div> <div>Select</div> <div> <div>Select</div> <div>Policy is applied to a specific entity</div> <div>Policy is applied to an entity type in a category</div> <div>Policy is applied to an entity type in a cluster</div> <div>Policy is applied to all entities of an entity type</div> </div> </div> |
| Second Preference | <div> <div>Select</div> <div> <div>Select</div> <div>Policy is applied to a specific entity</div> <div>Policy is applied to an entity type in a category</div> <div>Policy is applied to an entity type in a cluster</div> <div>Policy is applied to all entities of an entity type</div> </div> </div> |
| Third Preference | <div> <div>Select</div> <div> <div>Select</div> <div>Policy is applied to a specific entity</div> <div>Policy is applied to an entity type in a category</div> <div>Policy is applied to an entity type in a cluster</div> <div>Policy is applied to all entities of an entity type</div> </div> </div> |
| Fourth Preference | <div> <div>Select</div> <div> <div>Select</div> <div>Policy is applied to a specific entity</div> <div>Policy is applied to an entity type in a category</div> <div>Policy is applied to an entity type in a cluster</div> <div>Policy is applied to all entities of an entity type</div> </div> </div> |

- 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 10

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

NEW QUESTION 12

What Nutanix feature provides effective caching optimization In VDI environments?

- A. Remote Protection Group
- B. Local Protection Group
- C. Snap Clones
- D. Shadow Clones

Answer: D

Explanation:

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

References: : [Fault Tolerance - Nutanix Bible] : [Block Awareness - Nutanix Bible] : [Block Awareness - Nutanix Support & Insights] : [Shadow Clones - Nutanix Bible] : [Shadow Clones - Nutanix Support & Insights] : [Shadow Clones - Nutanix Community]

NEW QUESTION 13

When installing Nutanix Guest Tools (NGT) on an ESXi-hosted VM, which port should be enabled on the VM to allow communication with the NGT-Controller VM service?

- A. 2000
- B. 2074
- C. 8080
- D. 9943

Answer: D

Explanation:

NGT is a software package that enables advanced VM management features provided by Nutanix, such as file-level restore, VM mobility, and application-consistent snapshots¹². To use NGT, you need to enable the NGT feature for a VM in the Prism Element web console, mount the NGT installer (ISO disk file) in the VM, and install NGT in the VM¹. However, before installing NGT, you need to ensure that the VM can communicate with the NGT-Controller VM service, which runs on the Controller VM (CVM) of each Nutanix node³. The NGT-Controller VM service listens on port 9943 for incoming requests from the guest VMs³. Therefore, you need to enable port 9943 on the ESXi-hosted VM to allow communication with the NGT-Controller VM service.

NEW QUESTION 17

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 18

Which three configuration scenarios are valid for the deployment of Prism Central? (Choose three.)

- A. Environments use Network Address Translation.
- B. Prism Elements and Prism Central art in different subnets.
- C. Environments do not have Internet access.
- D. Prism Elements and Prism Central have proxy configured.
- E. Environments use the 192.168.5.0/24 CVM management network.

Answer: ABC

Explanation:

Prism Central is a multi-cluster manager that provides a single, centralized management interface for Nutanix environments¹. Prism Central can be deployed in different configuration scenarios, depending on the network and security requirements of the environment. Some of the valid scenarios are:

? Environments use Network Address Translation (NAT): NAT is a method of mapping one IP address space to another by modifying network address information in IP datagram packet headers while they are in transit across a traffic routing device². NAT can be used to enable communication between Prism Central and Prism Elements that are in different networks or subnets³. For example, Prism Central can be deployed in a public cloud and use NAT to access Prism Elements that are in a private data center³.

? Prism Elements and Prism Central are in different subnets: A subnet is a logical subdivision of an IP network that allows multiple networks to share a single physical network⁴. Prism Elements and Prism Central can be in different subnets as long as they can communicate with each other through routing or NAT³. For example, Prism Central can be deployed in a management subnet and access Prism Elements that are in different application subnets³.

? Environments do not have Internet access: Internet access is not required for the deployment of Prism Central, as long as the environment meets the prerequisites and considerations for installing or upgrading Prism Central. For example, Prism Central can be deployed in a dark site, which is an environment that does not have Internet access or has restricted Internet access. In this case, the administrator needs to manually enable microservices infrastructure and download the required software packages from another source.

NEW QUESTION 22

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 tier¹.

NEW QUESTION 25

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 fabric¹.

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 Usage².

Reference: Nutanix Metrics

NEW QUESTION 28

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

- A. Live migration continues to function as expected and VMs can move to any AHV host.
- B. Live migration is prevented until the administrator enables the legacy migration option.
- C. Live migration is prevented until the administrator manually changes the newer processor level.
- D. Live migration of VMs is prevented between newer and older processors.

Answer: D

Explanation:

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

NEW QUESTION 33

An administrator needs to create a new Linux image and will do the following as part of the VM deployment:

- * Set the OS hostname
- * Add custom users
- * Add keys
- * Run custom scripts

What package needs to be installed in the Linux image to facilitate this automation?

- A. CloudInit

- B. Sysprep
- C. Kickstart
- D. NGT

Answer: A

Explanation:

CloudInit is a package that contains utilities for early initialization of cloud instances. It allows you to customize virtual machines provided by a cloud vendor by modifying the generic OS configuration on boot. You can use CloudInit to set the OS hostname, add custom users, add keys, run custom scripts, and more². CloudInit is supported by most major Linux and FreeBSD operating systems and works across different cloud platforms³. Sysprep is a tool for Windows operating systems that prepares an installation for cloning, auditing, and customer delivery⁴.

References: 1: Replacing Nodes in Nutanix Cluster - Nutanix Support & Insights 2: Customize a Linux VM with cloud-init in Azure - Azure Virtual Machines 3: Cloud-Init - The standard for customising cloud instances 4: Sysprep (Generalize) a Windows installation

NEW QUESTION 36

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

- A. Add the SSL certificate to the workstation's trusted people store
- B. Create a new self-signed certificate for the cluster with a 4096 bit key
- C. Create a new SSL certificate for the cluster signed by an AD certificate authority
- D. Add the SSL certificate to an AD group policy applied to all computer objects

Answer: C

NEW QUESTION 37

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-heal². Failure scenarios can be thought of in terms of fault domains, which are the physical or logical parts of a computing environment or location that are adversely affected when a device or service experiences an issue or outage³. There are four fault domains in a Nutanix cluster: Disk, Node, Block, and Rack⁴. Block and Rack are two options that are available for expanding the failure domain level of a cluster. Block fault tolerance is enabled by default and ensures that data is replicated across different blocks in a cluster⁵. Rack fault tolerance has to be configured manually and ensures that data is replicated across different racks in a cluster⁴.

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 39

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 42

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

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

Answer: D

Explanation:

Reference: https://portal.nutanix.com/page/documents/details?targetId=Web-Console-Guide-Prism-v5_16:arcredundancy-factor3-c.html

NEW QUESTION 46

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 47

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 features¹.

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 steps²:

? 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 51

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

- A. Long term storage of data which is written once and read infrequently
- B. High performance database where all is relatively hot.
- C. VDI use cases where a single VM is cloned 100??s of times
- D. WEB and API Servers

Answer: A

Explanation:

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

Erasure Coding is a feature that increases the usable capacity on a Nutanix cluster by reducing the amount of data replication. Instead of replicating data, Erasure Coding uses parity information to rebuild data in the event of a disk failure. The capacity savings of Erasure Coding is in addition to deduplication and compression savings¹.

Erasure Coding is most beneficial for scenarios where the data is written once and read infrequently, such as long term storage of archival data, backup data, or cold data. This is because Erasure Coding has some trade-offs and limitations that may affect the performance and availability of the cluster. Some of these trade-offs and limitations are²:

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

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

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

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

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

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

Reference: Erasure Coding | Nutanix Community

NEW QUESTION 52

In which two scenarios is an automated live migration likely to occur? (Choose two)

- A. Cluster resource hotspot
- B. AOS upgrade

- C. Network upgrade
- D. Hypervisor upgrade

Answer: AB

Explanation:

Automated live migration is a feature of Nutanix that allows the cluster to automatically move VMs from one host to another without any downtime, in order to optimize the performance and availability of the cluster. According to the Nutanix documentation¹, automated live migration can occur in the following scenarios:

- ? Cluster resource hotspot: When a host or a group of hosts experience high resource utilization, such as CPU, memory, or network, the cluster can automatically migrate some VMs to other hosts with lower utilization, in order to balance the load and avoid performance degradation.
- ? AOS upgrade: When upgrading the Nutanix software (AOS), the cluster can automatically migrate the VMs from the host that is being upgraded to another host in the same availability zone, in order to maintain the VM availability and minimize the impact of the upgrade process.
- ? AHV host maintenance mode: When putting an AHV host into maintenance mode, the cluster can automatically migrate all the VMs from that host to another host in the same availability zone, in order to prepare the host for maintenance operations such as hardware replacement or firmware update.

NEW QUESTION 57

When a configuring a syslog server in Prism Central, what two pieces 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 61

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 65

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 67

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

- A. Intelligent Locally
- B. Data Locality
- C. Intelligent Tiering
- D. Data Tiering

Answer: B

Explanation:

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

NEW QUESTION 69

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

- A. Create a sperate three-node cluster using the nodes that meet the requirement.
- B. Configure VM-Host affinity for the nodes that meet the application's GPU requirement.
- C. Over-Provision the application VM with additional virtual GPUs.
- D. Configure anti-affinity rules between the application VM and the other VMs running on the cluster.

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 on¹. By creating a VM-Host affinity rule that binds the application VM to the three nodes that have the physical GPU, the administrator can ensure that the VM will always run on a node that meets its requirement, regardless of any HA or migration events. This also allows the other nodes in the cluster to host other VMs without any restrictions.

NEW QUESTION 71

During an AHV upgrade, an administrator finds that a critical VM was powered off rather than migration to another host. Which scenario explains this behavior?

- A. NO AHV hosts were able to be scheduled.
- B. The VM OS hung during migration.
- C. The VM was on the same host as the acropolis leader.
- D. The VM was marked as an agent VM.

Answer: D

Explanation:

An agent VM is a special type of VM that is used for running services or applications that are not affected by high availability (HA) events or host maintenance. An agent VM is never migrated to any other host in the cluster. If an HA event occurs or the host is put in maintenance mode, agent VMs are powered off and are powered on on the same host once that host returns to a normal state. This behavior is different from regular VMs, which are migrated to another host in the cluster if possible, or restarted on the same host if not possible¹.

Therefore, during an AHV upgrade, an administrator may find that a critical VM was powered off rather than migrated to another host if the VM was marked as an agent

VM. This can be done either from the Prism web console by selecting the Use this VM as an agent VM option in the Update VM dialog box, or from the aCLI by using the vm.create or vm.update commands with the agent_vm=true parameter². To avoid this situation, the administrator should ensure that any critical VMs are not marked as agent VMs before starting the AHV upgrade.

Reference: AHV Networking Best Practices

NEW QUESTION 75

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.

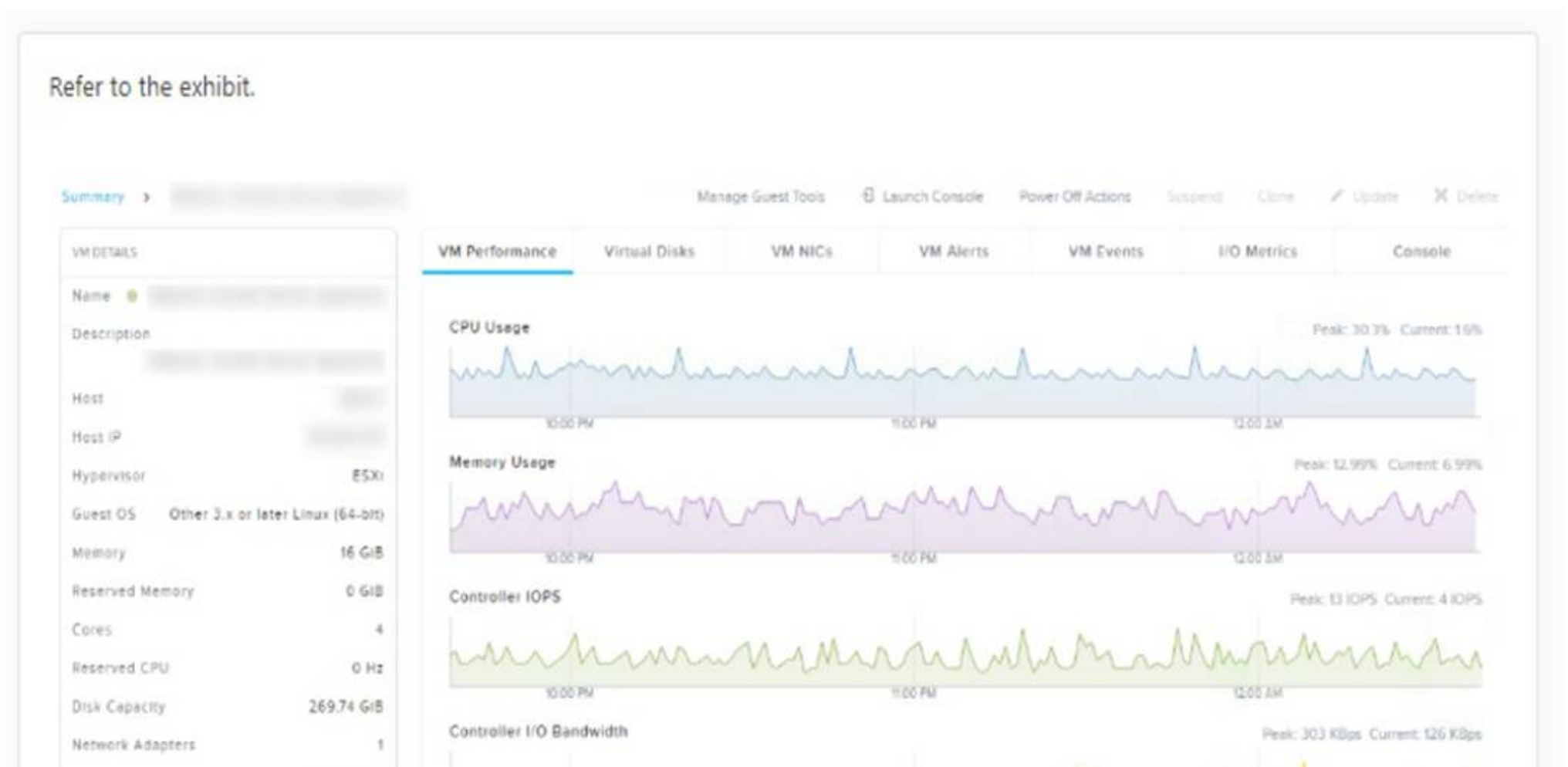
Answer: D

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 it³. This way, the customer can use both 10GbE and 1GbE interfaces for VM traffic, and also benefit from network isolation and redundancy.

NEW QUESTION 78

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

NEW QUESTION 79

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

- A. Setting the cluster time zone via PC GUI
- B. Setting the cluster time zone via CVM NCLI
- C. Setting the cluster time zone via PE GUI
- D. Setting the cluster time zone via CVM ACLI

Answer: B

Explanation:

The cluster time zone is a setting that determines the time zone used by all CVMs in the cluster. The cluster time zone affects the timestamps of Nutanix logs, events, alerts, and reports. The cluster time zone also affects the scheduling of tasks such as snapshots, replication, and upgrades. By default, the cluster time zone is set to UTC (Coordinated Universal Time) when the cluster is created³.
 To change the cluster time zone, the administrator needs to use the ncli (Nutanix command-line interface) on any CVM in the cluster. The steps are as follows⁴:
 ? Log in to any CVM using SSH.
 ? Run `ncli cluster get-timezone` to check the current cluster time zone.
 ? Run `ncli cluster set-timezone timezone=<timezone>` to change the cluster time zone, where <timezone> is a valid time zone identifier (for example, America/New_York).
 ? Run `ncli cluster get-timezone` again to verify that the cluster time zone has been changed.
 Note that changing the cluster time zone does not affect the time zone of Prism Element or Prism Central VMs. To change their time zone, the administrator needs to use Prism Element UI or Prism Central UI respectively⁵.
 Reference: KB-1050 Procedure to Change Timezone

NEW QUESTION 80

While installing Windows 2019 on a new VM on an AHV cluster, an administrator notices there aren't any drives listed for the install.
 What might the problem be?

- A. VirtIO drivers have not yet been installed and the disks are IDE disks.
- B. VirtIO drivers have not yet been installed and the disks are SCSI disks.
- C. VirtIO drivers must be installed on AHV for installations of Windows.
- D. VirtIO drivers aren't supported on this version of Windows 2019.

Answer: B

Explanation:

VirtIO drivers are device drivers that are specifically designed for virtualized environments. They allow the guest operating system to communicate directly with the underlying hardware, bypassing the emulation layer. This improves the performance and efficiency of the virtual machines. VirtIO drivers are supported by various hypervisors, including Nutanix AHV1.

Nutanix AHV uses SCSI disks for VMs by default. However, Windows does not have native support for SCSI disks and requires VirtIO drivers to recognize them. Therefore, if an administrator is installing Windows 2019 on a new VM on an AHV cluster, they need to install the VirtIO drivers before selecting the destination disk for the installation. Otherwise, they will not see any drives listed for the install2.

To install the VirtIO drivers during Windows installation, the administrator can use one of the following methods3:

? Use a VirtIO ISO image that contains the driver files. The administrator can

download the VirtIO ISO image from the Nutanix support portal and upload it to the

AHV image service. Then, they can attach the VirtIO ISO image to the VM as a CD-ROM device and load the driver from it during Windows installation.

? Use a Nutanix Guest Tools (NGT) ISO image that contains the driver files and

other tools. The administrator can download the NGT ISO image from Prism Element or Prism Central and attach it to the VM as a CD-ROM device. Then, they can load the driver from it during Windows installation.

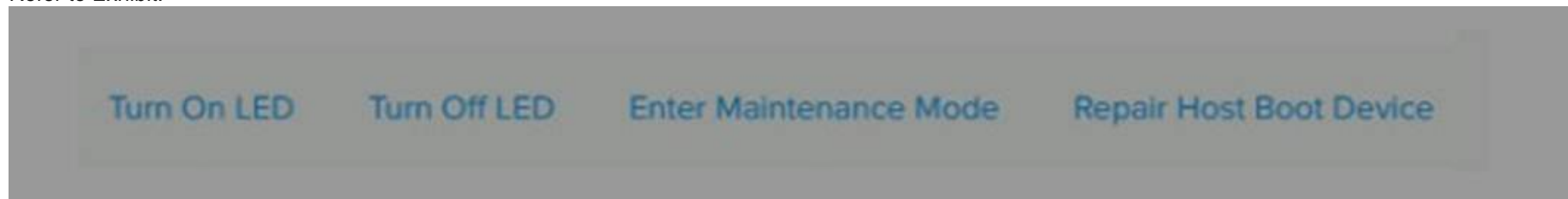
? Use a floppy disk image that contains only the driver files. The administrator can

create a floppy disk image using tools such as WinImage or WinRAR and upload it to the AHV image service. Then, they can attach the floppy disk image to the VM as a floppy device and load the driver from it during Windows installation.

Reference: Nutanix AHV Networking Best Practices

NEW QUESTION 82

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 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 84

An administrator has set up a local web server accessible to the Nutanix clusters.

Which two steps are required to set up LCM for an environment without Internet access? (Choose two.)

- A. Download the lcai_disconnected_version
- B. tar.gz LCM bundle from the support portal.
- C. Edit LCM Advanced Settings in Prism Element and enter the address of the web server.
- D. Edit LCM Advanced Settings in Prism Central and enter the address of the web server.
- E. Download the lcm_dark_site_version
- F. tar . gz LCM bundle from the support portal.

Answer: BD

NEW QUESTION 89

The administrator wants a container to be displayed and limited to 1TB in the hypervisor. What advanced container setting must the administrator set?

- A. Advertised Capacity
- B. Reserved Capacity
- C. Advertised Quota
- D. Reserved Quota

Answer: A

Explanation:

According to the Nutanix Support & Insights web search result3, advertised capacity is an advanced container setting that allows the administrator to reserve an advertised storage space for a storage container. An advertised capacity setting gives the hypervisor a maximum storage size that the storage container can use. This setting can be any arbitrary value greater than or equal to the resiliency required. The hypervisor ensures that the storage container storage doesn't go beyond the advertised capacity. If the administrator wants a container to be displayed and limited to 1TB in the hypervisor, they should set the advertised capacity to 1TB.

NEW QUESTION 90

AHV IPAM assigns an IP address from the address pool when creating a managed VM NIC.

At which two instances does the address release back to the pool? (Choose two)

- A. The IP address lease expires
- B. The VM NIC is deleted.
- C. The IP address is changed to static.
- D. The VM is deleted.

Answer: BD

Explanation:

https://portal.nutanix.com/page/documents/solutions/details/?targetId=BP-2029_AHV:BP-2029_AHV

Administrators can use Acropolis with IPAM to deliver a complete virtualization deployment, including network management, from the unified Prism interface. This capability radically simplifies the traditionally complex network management associated with provisioning VMs and assigning network addresses. To avoid address overlap, be sure to work with your network team to reserve a range of addresses for VMs before enabling the IPAM feature. The Acropolis master assigns an IP address from the address pool when creating a managed VM NIC; the address releases back to the pool when the VM NIC or VM is deleted.

NEW QUESTION 92

After the initial configuration and upgrade of NCC, the administrator notices these critical alerts:

- . IPMI 10.7.133.33 is using default password
- . Host 10.7.133.25 is using default password
- . CVM 10.7.133.31 is using default password

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

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

Answer: AC

Explanation:

The critical alerts listed are indicating that the default passwords are still in use for IPMI, the host, and the Controller Virtual Machine (CVM). This suggests that the passwords for these components were not changed from the default during the initial cluster configuration and deployment process, which is a critical security practice.

* A. CVM password changes: The alert for the CVM using the default password indicates that the CVM password has not been changed. It is a standard security measure to change

default passwords to prevent unauthorized access.

* C. Host password changes: Similarly, the alert for the host using the default password indicates that the default password for the host has not been updated. This applies to the passwords used to access the hypervisor host directly.

Changing default passwords is a critical step in securing the Nutanix environment. This is highlighted in Nutanix's best practices and security guidelines, which recommend changing default passwords as part of the initial configuration to ensure that the environment is not left vulnerable to unauthorized access due to known default credentials. This process is typically part of the initial setup procedures outlined in the Nutanix documentation for cluster deployment and security configuration.

The IPMI alert also points to the need for changing default passwords, but since IPMI (Intelligent Platform Management Interface) is not specifically mentioned in the provided options, it falls under the broader category of host-level password changes, which would be covered by option C.

BIOS password changes (Option B) and Password policy changes (Option D) are also important but were not directly flagged by the alerts mentioned. BIOS password changes are usually a separate task and not indicated by the alerts given, while password policy changes are related to the policies governing password complexity and rotation rather than the initial password setup.

NEW QUESTION 97

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

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

Answer: A

Explanation:

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

NEW QUESTION 101

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 103

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

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

Answer: D

Explanation:

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

NEW QUESTION 108

Which baseline is used to identify a Zombie VM?

- A. VM is powered off for the past 21 days.
- B. Memory usage is less than 1% and memory swap rate is equal to 0 Kbps for the past 21 days.VM has no logins for the past 21 days
- C. VM has no logins for the past 21 days
- D. Fewer than 30 I/Os and less than 1000 bytes per day of network traffic for the past 21 days

Answer: D

Explanation:

The correct answer is D. Fewer than 30 I/Os and less than 1000 bytes per day of network traffic for the past 21 days.

A zombie VM is a type of inactive VM that is powered on but does very little activity. A zombie VM wastes host resources such as CPU, memory, disk, and network that could be used by other VMs. A zombie VM can be identified by using the VM Profile feature in Prism Central. The VM Profile feature analyzes the resource utilization of each VM and assigns it a profile based on its efficiency and impact on other VMs. The profiles are as follows1:

? Efficient: The VM is well-provisioned and has optimal resource utilization.

? Over-provisioned: The VM has more resources than it needs and has low resource utilization.

? Constrained: The VM has less resources than it needs and has high resource utilization.

? Inactive: The VM has no resource utilization and is idle or powered off.

? Bully: The VM has high resource utilization and causes contention for other VMs. A zombie VM is a subtype of an inactive VM that meets the following criteria2:

? The VM is powered on for the past 21 days.

? The VM does fewer than 30 read or write I/Os (total) per day for the past 21 days.

? The VM receives or transfers fewer than 1000 bytes per day of network traffic for the past 21 days.

To identify a zombie VM, the administrator can use Prism Central to view the VM Profile dashboard and filter by profile type. The dashboard shows the number of VMs in each profile type, as well as their resource consumption and efficiency score. The administrator can also drill down into each VM to see its detailed metrics and recommendations for optimization.

Reference: VM Profile

NEW QUESTION 112

.....

Thank You for Trying Our Product

We offer two products:

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

2nd - Questons 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](#)