



Number: NCA-6.5 Passing Score: 800 Time Limit: 120 min

**Exam Code: NCA-6.5** 

**Exam Name:** Nutanix Certified Associate (NCA) v6.5 Website: www.VCEplus.io - www.VCEup.com













## **QUESTION 1**

In Prism Element, to which object are policies such as replication factor and storage efficiency settings applied?

A. Container

B. Virtual Machine

C. Storage Pool

D. vBlock

**Correct Answer:** A Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

In Prism Element, policies such as replication factor and storage efficiency settings are applied to Containers. A container is a logical grouping of one or more storage pools and defines the storage resources available to virtual machines. By applying policies to a container, you can set the replication factor, storage efficiency settings, and other storage-related settings for all of the virtual machines that are associated with that container. This is a fundamental concept in Nutanix Platform.

# **QUESTION 2**

What is the minimum cluster size for Redundancy Factor 3?

A. 3 nodes

B. 4 nodes

C. 5 nodes

D. 6 nodes

Correct Answer: D Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

The minimum cluster size for Redundancy Factor 3 is 6 nodes. Redundancy Factor is a measure of how many copies of the data are stored in the cluster. Redundancy Factor 3 means that there are 3 copies of the data stored in the cluster, which requires at least 6 nodes in the cluster to ensure that all data is stored.

On which entity is Replication Factor configured?

A. Host

B. Oplog

C. Volume

D. Container

Correct Answer: D Section: (none) **Explanation** 

## **Explanation/Reference:**

Explanation:

Replication Factor is configured on a Container entity. Containers group together virtual disks and files, and allow administrators to set policies on a group level. This allows for increased flexibility in managing storage resources and allows administrators to easily set policies across multiple virtual disks and files.

Replication Factor is configured on Containers. A container is a logical grouping of one or more storage pools and defines the storage resources available to virtual machines. The replication factor is a setting that determines the number of copies of data that are stored across the cluster. By configuring the replication factor on a container, you are setting the number of copies of data that will be stored for all virtual machines that are associated with that container. For example, if you have a container with a replication factor of 3, it means that three copies of data will be stored across the cluster, and two copies are required to reconstruct the data in case of a failure.

# **QUESTION 4**

Which product or feature is most suitable for deploying a Microsoft SQL cluster in a Nutanix environment?









A. Volumes

B. Objects

C. NFS shares

D. Files

Correct Answer: B Section: (none) **Explanation** 

# **Explanation/Reference:**

**Explanation:** 

In a Nutanix environment, the product or feature most suitable for deploying a Microsoft SQL cluster is Nutanix Objects is a S3-compatible object storage solution that provides a highly scalable and durable storage for unstructured data. It is built on top of the Nutanix Distributed File System (NDFS) and provides a high-performance, scalable, and highly available storage solution.

One of the key features of Nutanix Objects is its ability to support Microsoft SQL Server Always On Availability Groups (AAG) on S3 object storage. This allows you to deploy a highly available SQL cluster on Nutanix, with the ability to failover SQL services to a different node in the event of a failure, and provide high availability and disaster recovery for SQL databases.

# **QUESTION 5**

Which Prism Central feature can map images to target clusters using categories?

A. Image Replication Policies

B. Image Placement Policies

C. Protection Domain Policies

D. Storage Policies

Correct Answer: B Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

In Prism Central, Image Placement Policies can be used to map images to target clusters using categories. An Image Placement Policy is a set of rules that determine where an image should be placed on the Nutanix cluster. These rules are based on categories, such as the image's OS type, the target cluster's hardware type, and other factors. By creating image placement policies, you can ensure that images are placed on the appropriate clusters, and that they are compatible with the hardware and software requirements of those clusters.

For example, you could create a placement policy that specifies that all Windows images should be placed on a specific cluster, and that all Linux images should be placed on another cluster. You can also set image replication policies on image placement policies, to ensure that images are replicated to multiple clusters for disaster recovery purposes.

# **QUESTION 6**

An administrator wants to have a single chart with the logical usage for three storage containers. Which action should the administrator perform?

A. Create a new Metric Chart

B. See Storage usage under Prism Element Health page

C. Create a new Entity Chart

D. See Usage Summary in the Storage Containers detailed view

Correct Answer: C Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

An administrator can create an Entity Chart to view the logical usage for multiple storage containers in one chart. This chart can be created from the Prism Element dashboard, and it provides a visual representation of the logical usage of each container, allowing administrators to easily compare the usage of multiple containers at once.

What requirement needs to be considered before configuring Replication Factor of 1 (RF1)?

A. Application resiliency

B. Hypervisor









C. RAID configuration

D. Node count

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

To configure Replication Factor 1 (RF1), the cluster must have at least three nodes. In RF1, data is replicated to two other nodes within the cluster, so having at least three nodes is necessary to ensure that the data is replicated. Moreover, when you configure RF1, the cluster must have a minimum of three nodes to ensure that the data is accessible even if one of the nodes goes down.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Prism-Admin-Guidev5\_6:pr-data-protection-replication-factor-c.html

#### **QUESTION 8**

An administrator is deploying a virtual firewall on each node in an AHV cluster and wants each VM to maintain affinity to its host. How can an administrator achieve this goal most efficiently?

A. Create VM Protection Policies

B. Set the VM labels as firewalls

C. Create VM Annotations

D. Set the VMs as Agent VMs

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

An administrator can create VM Protection Policies to enforce VM to host affinity for each VM in the AHV cluster. This will ensure that the VMs are always running on the same host, even if the cluster is resized or the VMs are migrated to other nodes. This is the most efficient way to achieve the desired goal. Reference: https://portal.nutanix.com/page/documents/details?targetId=Prism-Admin-Guidev5\_ 6:pr-vmprofiles-affinity-c.html

#### **QUESTION 9**



Upon logging into Prism Element an administrator sees a red heart, as shown in the exhibit. Which dashboard in Prism will best help the administrator to isolate the cause of the red heart?

A. Health

B. Tasks

C. Analysis

D. Hardware

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

The Health dashboard in Prism Element provides an overview of the cluster's health, including alerts and notifications that can help the administrator identify and address any issues. The red heart icon is an indicator that there is an issue with the cluster, and the Health dashboard can be used to investigate the cause of the issue.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Prism-Admin-Guidev5\_6:pr-dashboard-overview-c.html



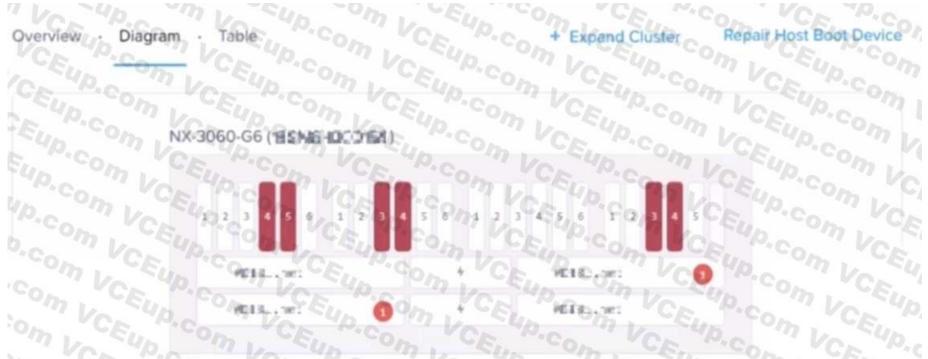






## **QUESTION 10**

Refer to the exhibit.



After an abrupt power outage, an administrator receives a number of alerts indicating disks are failed. Prism Element shows a large number of disks offline as seen in the diagram. This single block, four node cluster is configured FT1 with an RF2 container holding all user data.

What number of drive failures on different domains (node, block, or rack) could this configuration have tolerated prior to seeing data unavailability?

A. 1

B. 4

C. 3

D. 2

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

This single-block, four-node cluster is configured with Fault Tolerance 1 (FT1) and a Replication Factor of 2 (RF2). This means that the data is replicated across two domains (node, block, or rack). Thus, the cluster can tolerate up to two drive failures on different domains before seeing data unavailability.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Prism-Admin-Guidev5\_6:pr-data-protection-replication-factor-c.html

This single block, four node cluster is configured with Fault Tolerance (FT1) and a Replication Factor(RF2) container holding all user data. FT1 means that there are two copies of data stored across the cluster, and RF2 means that there are two copies of data stored in the container. This configuration can tolerate 2 drive failures on different domains (node, block, or rack) prior to seeing data unavailability.

With FT1, if a drive fails, the second copy of the data is still available and can be used to reconstruct the data. With RF2, if a drive fails, the second copy of the data is still available and can be used to reconstruct the data. However, if a drive failure occurs on a different domain (node, block, or rack) from the one containing the other copy of data, the second copy of the data is still available, but the data availability may be affected.

It's important to note that this is the maximum drive failures that the configuration can tolerate, and it's recommended to have a disaster recovery plan in place in case of a drive failure, to ensure the data availability and integrity.

You can find more information on this topic in the Nutanix Administrator Guide, which is available on the Nutanix support website https://portal.nutanix.com/#/page/docs/details?targetId=Admin-Guide-Prism-v5 24:Admin-Guide-Prism-v5 24:Admin-Guide-P

#### **QUESTION 11**

Which IP address can be used to directly access Prism Element?

A. Foundation VM IP address

B. IP address of any CVM in the cluster

C. IP address of any Prism Central VM

D. AHV host br0 IP address

Correct Answer: B









Section: (none) **Explanation** 

# Explanation/Reference:

**Explanation:** 

Prism Element is the management interface for Nutanix clusters and it can be accessed through the

IP address of any CVM (Controller Virtual Machine) in the cluster. The CVM is a virtual machine that runs on each Nutanix node and is responsible for managing the storage and compute resources of the node. Each CVM has a unique IP address, and any of these IP addresses can be used to directly access Prism Element.

Accessing Prism Element through the IP address of a CVM allows the administrator to manage the cluster, including configuring storage, creating and managing virtual machines, and monitoring the health of the cluster.

It's important to note that Prism Central is a separate application and it doesn't have the same functions as Prism Element, it's mainly used for multi-cluster management. You can find more information on this topic in the Nutanix Administrator Guide, which is available on the Nutanix support website https://portal.nutanix.com/#/page/docs/details?targetId=Admin-Guide-Prism-v5 24:Admin-Guide-Prism-v5 24

#### **QUESTION 12**

Which feature or configuration is best for securing network traffic between the management and storage replication environments?

A. Use of Firewall Rules

B. Network Segmentation

C. VM Anti-Affinity Rules

D. Different Storage Containers

Correct Answer: B Section: (none) **Explanation** 

# Explanation/Reference:

**Explanation:** 

Network segmentation is the best feature or configuration for securing network traffic between the management and storage replication environments. Network segmentation is the practice of dividing a computer network into subnets, each serving a different purpose or function. By dividing the network into different segments, it is possible to control and monitor the flow of traffic between the different segments, and to implement different security policies for each segment. For example, the management environment could be segmented from the storage replication environment, and only specific traffic, such as management traffic, would be allowed to flow between the two segments. This can help to protect the management environment from potential security threats that may originate from the storage replication environment.

Other options like firewall rules, VM anti-affinity rules, and different storage containers can also help to secure network traffic, but network segmentation provides a more comprehensive and granular way to secure the traffic between different environments.

You can find more information on this topic in the Nutanix Security Configuration Guide, which is available on the Nutanix support website:

https://portal.nutanix.com/#/page/docs/details?targetId=Security-Guide-v5\_24:Security-Guidev5\_24

# **QUESTION 13**

Where can an administrator find information about the Cluster Runway?

A. Prism Element Home Page

B. Prism Element Analysis

C. Prism Central Main Dashboard

D. Prism Central Analysis

Correct Answer: B Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

The Cluster Runway is located in the Prism Element Analysis dashboard. The Cluster Runway provides an overview of the cluster's performance, including CPU, Memory, and Disk usage, and can be used to identify any potential performance issues.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Prism-Admin-Guidev5\_6:pr-dashboard-overview-c.html

Which address allows external connections to Nutanix storage presented by the Volumes feature?

A. Prism Central IP

B. Prism Central IP

C. Data Services IP

D. IPMI IP









**Correct Answer:** C Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

The Data Services IP address is the address that allows external connections to Nutanix storage presented by the Volumes feature. This address is used to access the storage from external sources and is used for replication and external snapshotting.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Prism-Admin-Guidev5\_6:pr-storage-storage-networks-c.html

# **QUESTION 15**

Which feature enables Image Placement Policies to be mapped to target clusters?

A. YAML

B. Labels

C. JSON

D. Categories

Correct Answer: B Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

Image Placement Policies can be mapped to target clusters using labels. Labels are key-value pairs that can be used to associate arbitrary metadata with clusters and VMs. Labels can be used to define Image Placement Policies, which specify which clusters can be used for a given image.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Prism-Admin-Guidev5\_6:pr-images-placement-policies-c.html

QUESTION 16
Which technology allows applications and data to move freely between runtime environments?

A. Distributed Storage Fabric

B. Disaster Recovery

C. App Mobility Fabric

D. Nutanix Move

Correct Answer: C Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

App Mobility Fabric is a technology from Nutanix that allows applications and data to move freely between runtime environments. It allows applications and data to be moved from one environment to another without any disruption or downtime. Reference: https://www.nutanix.com/products/appmobility-fabric

# **QUESTION 17**

An administrator needs to do a manual VM in-place restore of a mission-critical VM. Which Prism Central option should the administrator use to satisfy this task?

A. Snapshot

B. Clone

C. Backup

D. Recovery Point

Correct Answer: D Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:









A manual VM in-place restore can be performed using the Recovery Point option in Prism Central.

This option enables an administrator to restore a VM to a previous state without needing to create a new VM. Reference: https://portal.nutanix.com/page/documents/details?targetId=Prism-Admin- Guide-v5\_6:pr-vms-backup-restore-c.html

## **QUESTION 18**

What does Replication Factor 2 (RF2) refer to?

- A. Number of blocks that can be lost without impact
- B. Number of nodes that can be lost without impact
- C. Number of disks that can be lost in the cluster
- D. Number of copies of data written in the cluster

Correct Answer: D Section: (none) **Explanation** 

## **Explanation/Reference:**

Explanation:

Replication Factor 2 (RF2) refers to the number of copies of data written in the cluster. When RF2 is enabled, the Nutanix Distributed File System (NDFS) will create two copies of the data, resulting in higher levels of data durability and availability.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Advanced-Administrationv5\_7:aa-ndfs-rf2-c.html

### **QUESTION 19**

What is the purpose of Discoveries within the Nutanix Support Portal?

- A. To identify clusters that are affected by known issues.
- B. To provide an audit trail of cluster logins.
- C. To identify VMs that require OS updates or patching.
- D. To provide forecasting of cluster resource utilization.

Correct Answer: A Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

Discoveries within the Nutanix Support Portal are used to identify clusters that are affected by known issues. This can help Nutanix Support quickly identify and address any potential problems that may be caused by a specific issue. Reference: https://portal.nutanix.com/page/documents/details?targetId=Support-Portal-User-Guide-v2\_0:sp-discoveries-c.html

## **QUESTION 20**

What is the effect of enabling Flash Mode?

- A. Sets the storage tier preference to HDD
- B. Sets the storage tier preference to SSD
- C. Sets the metadata tier preference to HDD
- D. Sets the metadata tier preference to SSD

Correct Answer: B Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

Enabling Flash Mode will set the storage tier preference to SSD, meaning that data will be stored on the high-performance SSD storage tier. Flash Mode is designed to speed up the performance of applications by ensuring that the most frequently used data is stored on the faster storage tier.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform-Administrator-Guide-v5\_7:pag-flash-mode-c.html

Which LCM feature simplifies upgrades on clusters without Internet access?

A. One-Click Upgrade









B. NCC

C. Direct Upload

D. FTP

Correct Answer: C Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

Direct Upload is a LCM feature that simplifies upgrades on clusters without Internet access. It allows users to upload the desired version of the software to the cluster using a USB drive or other portable storage device, and then install it without the need to access the Internet.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform-Administrator-Guide-v5\_7:pag-Icm-direct-upload-c.html

#### **QUESTION 22**

Within a Nutanix cluster an administrator is getting frequent failure alerts of the Cassandra and Stargate services for one of the nodes. What action will be taken by the cluster?

A. Put host in Maintenance Mode

B. Redirect I/O path to another CVM

C. Remove the host from cluster

D. Reboot Guest VMs to another hosts

**Correct Answer:** A Section: (none) **Explanation** 

## **Explanation/Reference:**

Explanation:

When the Cassandra and Stargate services fail frequently on a single node, the cluster will automatically put the host in Maintenance Mode to ensure the reliability and performance of the cluster. This will remove the node from the cluster's IO path and prevent any data loss or corruption.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform-Administrator-Guide-v5\_7:pag-maintenance-mode-c.html

# **QUESTION 23**

An administrator needs to deploy a two-node cluster on a new ROBO Site. What is required to maintain High Availability in the case of a node failure?

A. Witness VM

B. Metro-Availability

C. Windows Failover Clustering

D. Async Replication

Correct Answer: B Section: (none) **Explanation** 

# **Explanation/Reference:**

**Explanation:** 

Metro-Availability is a feature of Nutanix clusters that provides high availability in the case of a node failure. It requires two nodes and uses asynchronous replication between the two sites to ensure that data is replicated across the two sites in real-time. This ensures that, in the case of a node failure, the data is still available and the cluster can remain operational.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform-Administrator-Guide-v5\_7:pag-metro-availability-c.html

Which option is available for an administrator to upload a remote disk file to Image Configuration?

A. HTTP

B. FTP

C. SCP

D. SFTP

Correct Answer: D









Section: (none) **Explanation** 

# Explanation/Reference:

**Explanation:** 

SFTP (Secure File Transfer Protocol) is an option available for an administrator to upload a remote disk file to Image Configuration. SFTP is a secure protocol that ensures that the data being transferred is encrypted and is therefore more secure than other transfer protocols such as FTP or HTTP. Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform- Administrator-Guide-v5\_7:pag-remote-disk-upload-c.html

## **QUESTION 25**

When should Pulse be disabled?

- A. When the cluster is connected to the Internet with less than 1GbE.
- B. When the cluster is deployed in 3 dark-site.
- C. Before any cluster maintenance activities requiring node reboots.
- D. Only under the guidance of Nutanix Support.

Correct Answer: D Section: (none) **Explanation** 

## **Explanation/Reference:**

**Explanation:** 

Pulse should only be disabled under the guidance of Nutanix Support and not for any other reason.

Pulse is a feature of the Nutanix cluster that enables the cluster to report back health and performance data to Nutanix for troubleshooting and performance optimization purposes. Disabling Pulse without the guidance of Nutanix Support is not recommended, as it could lead to potential issues with the cluster.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform-Administrator-Guide-v5\_7:pag-pulse-c.html

#### **QUESTION 26**

Which feature in Pulse helps secure a customer's private information?

A. Security Central

B. Cluster Lockdown

C. Data-at-rest Encryption

D. Data Obfuscation

**Correct Answer:** D Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

Data Obfuscation is a feature in Pulse that helps secure a customer's private information by obfuscating the data before it is sent to Nutanix. This ensures that any data sent to Nutanix is not visible to anyone other than the customer, and helps protect sensitive data from unauthorized access or malicious actors.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform-Administrator-Guide-v5\_7:pag-pulse-c.html

Which Nutanix storage service can store Petabytes of unstructured data and supports S3 APIs?

A. DSF

B. Files

C. Volumes

D. Objects

Correct Answer: D Section: (none) **Explanation** 

## **Explanation/Reference:**

**Explanation:** 

Nutanix Objects is a storage service that can store petabytes of unstructured data and supports S3 APIs. It is a distributed object store that provides an easy-to-use interface for storing and managing objects and data. It also provides









advanced features such as versioning, replication, encryption, and access control. Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform- Administrator-Guide-v5\_7:pag-objects-c.html

What is the biggest benefit of the Redfish Protocol and LCM?

A. HBA and NIC card update twice as quickly

B. AOS and AHV update twice as quickly

C. BMC and BIOS update twice as quickly

D. SSD and HDD update twice as quickly

Correct Answer: C Section: (none) **Explanation** 

## **Explanation/Reference:**

**Explanation:** 

The Redfish Protocol and Lifecycle Manager (LCM) provide the biggest benefit of allowing BMC and BIOS updates to be done twice as quickly as before. This is because Redfish and LCM allow for updates to be done in parallel, rather than serially, which reduces the amount of time it takes for an update to be completed.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform-Administrator-Guide-v5\_7:pag-redfish-lcm-c.html

# **QUESTION 29**

Which AHV feature proactively monitors a Nutanix cluster for compute and storage I/O contention or hotspots over a period of time?

- A. Genesis
- B. ADS
- C. Prism
- D. Cluster Maintenance Utility

**Correct Answer:** A Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

Genesis is an AHV feature that proactively monitors a Nutanix cluster for compute and storage I/O contention or hotspots over a period of time. It can detect and alert administrators to any issues related to resource utilization and contention, allowing them to take proactive steps to resolve any issues before they become larger problems.

Reference: https://portal.nutanix.com/page/documents/details?targetId=Platform-Administrator-Guide-v5\_7:pag-ahv-genesis-c.html

## **QUESTION 30**

What resource should be used to ensure a successful upgrade of the hypervisors and AOS within a vSphere-based Nutanix cluster?

- A. Upgrade Paths
- B. Field Advisories
- C. Compatibility and Interoperability Matrix
- D. Hardware Replacement Documentation

Correct Answer: C Section: (none) **Explanation** 

# **Explanation/Reference:**

Explanation:

The Compatibility and Interoperability Matrix (CIM) is the resource that should be used to ensure a successful upgrade of the hypervisors and AOS within a vSphere-based Nutanix cluster. The CIM provides information about the compatibility and interoperability of the different components of the Nutanix cluster, including the hypervisors, AOS, and other related components. Reference: https://www.nutanix.com/support/compatibility-matrix/





