Nutanix

NCS-CORE Exam

Nutanix Certified Services Core Infrastructure Professional

Questions & Answers
(Retail Version – Full Questions Set)

Product Questions: 302

Version: 5.0

Question: 1

An administrator responsible for a VDI environment needs to investigate reports of slow logins. The administrator finds that increasing the number of vCPUs from 2 to 4 will reduce the login times. Production workloads are consuming 75% of the host CPU on the cluster. The administrator increases the vCPU count on all of the VDI VMs.

What are two impacts on the cluster? (Choose two.)

A. Increase CPU utilization%

B. Increase CPU ready%

C. Increase memory utilization%

D. Increasing CPU counts will decrease memory utilization

Answer: AB

Explanation:

Increasing the number of vCPUs from 2 to 4 can indeed reduce login times by providing more processing power to handle the login requests. However, this action will have two main impacts on the cluster:

A . Increase CPU utilization%: By increasing the number of vCPUs, you are effectively increasing the

demand for CPU resources. This will result in a higher percentage of the CPU being utilized.

B . Increase CPU ready%: CPU Ready is a measure of the amount of time a virtual machine is ready to run against the pCPU, but is waiting to be scheduled on the physical CPU. By increasing the number of vCPUs, you are increasing the number of virtual machines that are ready to run, which can increase the CPU Ready percentage.

Increasing the vCPU count does not directly affect memory utilization, so options C and D are not correct.

Reference:

The conclusions above are based on general virtualization principles covered in resources like the Nutanix Bible (https://www.nutanixbible.com/) and the Nutanix University training materials for NCS-Core certification (https://university.nutanix.com/). These sources explain the impact of CPU allocation and utilization in detail, particularly in the context of cluster performance and virtual desktop infrastructure.

Additionally, practical insights into these dynamics are discussed in various video tutorials from the Nutanix official YouTube playlist for NCS-Core learning (https://www.youtube.com/playlist?list=PLAHgaS9IrJecs_AcQT3Y7vSsKT2mjz3Iu), which provide visual and step-by-step breakdowns of how CPU resources are managed in a Nutanix environment.

Question: 2

An administrator is using Nutanix Move to migrate a Windows VM from ESXi to AHV. Automated guest preparation is failing with an error:

Account has UAC enabled error

The administrator is using the local built-in administrator account for the Windows VM Admin approval mode must remain enabled.

What should the administrator do to continue with the migration with Nutanix Move?

A. Use a Domain Admin account for the Windows VM

B. Reboot the Windows VM and try the migration again

C. Follow manual VM preparation guidelines

D. Place Windows VM in Maintenance Mode

Answer: C

Explanation:

https://next.nutanix.com/move-application-migration-19/nutanix-xtract-validation-failed-user-must-belong-in-a-group-with-restore-files-and-directories-security-policy-31303

Solution:

If local built in "administrator" user is being used for guest preparation, **disable** the following Local Secu

Computer Configuration\Windows Settings\Security Settings\Local Policies\Security Options\User Acc for the Built-in Administrator account

https://docs.microsoft.com/en-gb/windows/security/threat-protection/security-policy-settings/user-acc for-the-built-in-administrator-account

Or use manual guest preparation from elevated PowerShell.

Question: 3

A VM is exhibiting one or more of the following baseline values based on the past 30 days:

- CPU usage < 20%

- CPU ready time < 5%

- Memory usage < 50% (moderately) or < 20% (severely)

- Memory swap rate = 0 Kbps

Which type of VM is being described?

A. Constrained VM

B. Inactive VM

C. Bully VM

D. Over-Provisioned VM

Answer: D

Explanation:

Finding Waste and Right-Sizing VMs

The VM efficiency features in Prism Pro recommend VMs within the environment that are candidates for reclaiming unused resources that you can then return to the cluster. Click each tab to learn more.

Overprovisioned

➔ An overprovisioned VM is the opposite of a constrained VM, meaning it is a VM that is over-sized and wasting resources which are not needed. A VM is considered over-provisioned when it exhibits one or more of the following baseline values, based on the past 30 days: CPU usage < 50% (moderate) or < 20% (severe) and CPU ready time <5%, Memory usage < 50% (moderate) or < 20% (severe), and memory swap rate = 0 Kbps.

Inactive

➔ A VM is inactive in either of the following states:A VM is considered dead when it has been powered off for at least 30 days.A VM is considered a zombie when it is powered on but does fewer than 30 read or write I/Os (total), and receives or transfers fewer than 1000 bytes per day for the past 30 days.

Constrained

➔ 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 30 days: CPU usage > 90% (moderate), 95% (severe) CPU ready time > 5% , 10% Memory usage > 90%, 95%, Memory swap rate > 0 Kbps (no moderate value).

Bully

➔ A bully VM is one that consumes too many resources and causes other VMs to starve. A VM is considered a bully when it exhibits one or more of the following conditions for over an hour: CPU ready time > 5%, memory swap rate > 0 Kbps, host I/O Stargate CPU usage >85%.

Question: 4

An administrator receives reports that VDI desktop performance in an 8-node Nutanix VDI environment is poor. Opening applications takes between 1 and 2 minutes.

When investigating the issue, the following conditions are found:

• Cluster memory utilization: 80%

• Cluster SSD utilization: 70%

• Average VM CPU Wait Time: 11%

• CVM CPU utilization: 75%

Which action should be taken to improve VDI performance?

A. Increase the amount of SSD storage in the cluster.

B. Add memory to the nodes in the cluster.

C. Add CPU resources to the cluster.

D. Increase the number of vCPU cores allocated to the CVM.

Answer: C

Explanation:

Question: 5

An administrator has a custom backup application that requires a 2TB disk and runs in Windows. Throughput is considerably lower than expected.

The application was installed on a VM with the following configuration:

• Four 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. Increase the number of cores per vCPU

B. Increase the vCPUs assigned to the VM

C. Span the 2TB disk across four vDisks

D. Add 4GB of memory to the VM

Answer: C

Explanation:

Question: 6

A customer recently set up Async Replication between Site A and Site B. The customer wants to conduct a planned failover and clicks Activate on Site B.

The customer then runs the following command on Site A:

ncli pd deactivate_and__destroy_vms name=<protection_domain_name>

What does this do to the customer environment?

A. VMs get deleted from Site B. and the protection domain is now Active.

B. VMs are powered off on Site A and must be manually powered on at Site B.

C. VMs get deleted from Site A and the protection domain is no longer active.

D. Customer must then manually power off VMs at Site A and power them on at Site B.

Answer: C

Explanation:

https://portal.nutanix.com/page/documents/details?targetId=Web-Console-Guide-Prism-v5_10:wc-protection-domain-failback-disaster.html

```
<ncli> pd deactivate_and_destroy_vms name=DataProtection
Use this command only when you are preparing to do a failback from an unplanned
failover. Executing this command will delete the VMs from this site and might ca
use data loss when used incorrectly. Are you sure (y/N)?: Error: Mode change for
 protection domain DataProtection failed with error: Canno
t deactivate protection domain DataProtection because 1 VM(s) (POC_DEMO) are Pow
ered ON
```

The command ncli pd deactivate_and__destroy_vms name=<protection_domain_name> is a critical operation in managing Nutanix environments, particularly in scenarios involving disaster recovery and replication.

This command deactivates the protection domain and deletes all VMs associated with that protection domain from the source site (Site A in this case). This operation is generally part of a planned migration or failover process where the VMs are intended to be run from the remote site (Site B).

After this operation, the protection domain at Site A is no longer active, meaning it has been effectively removed along with its associated VMs, thus clearing the way for Site B to take over operations without conflict from the original site.

Reference:
This action and its implications are covered under Nutanix disaster recovery and high availability strategies, detailed in both the Nutanix Bible and official Nutanix NCS-Core training materials, which discuss the management of protection domains and replication processes.

Question: 7

An administrator needs to forecast infrastructure requirements for a new program and its associated applications. Prior to the projected start of the new program, all existing applications will be decommissioned.

How should the administrator perform this task?

A. Check the Disregard Existing Workloads radio button in the Runway scenario.

B. Check the Disregard Existing Nodes radio button in the Runway scenario.

C. Add up the recovered workloads and manually remove from the Runway configuration.

D. Power down the workloads during a maintenance window and run the Capacity Runway.

Answer: A

Explanation:

When forecasting infrastructure requirements for a new program in a Nutanix environment where all existing applications will be decommissioned, the most straightforward method is to disregard any workload calculations that include existing applications. This ensures that the analysis focuses solely on the needs of the new program.

Option A, "Check the Disregard Existing Workloads radio button in the Runway scenario," is the correct choice. Nutanix Runway is a tool designed to help administrators forecast and plan infrastructure requirements based on upcoming needs without being skewed by current utilizations that are scheduled to be decommissioned.

This method allows for a cleaner, more accurate projection of resources needed for the new applications, disregarding any resources currently in use that will no longer be relevant.

Reference:
This approach is detailed in Nutanix planning and forecasting documentation, ensuring administrators can plan accurately for infrastructure changes and needs without the interference of outgoing workloads.

Question: 8

A customer has a primary datacenter with 12 Nutanix blocks distributed across three racks. The customer wants to achieve the most resiliency possible. They also have a datacenter in a branch office that is 400 kilometers away from the primary datacenter.

Which two solutions should be used? (Choose two.)

A. Time Stream to a remote site

B. Async DR to a remote site

C. Rack awareness

D. Block awareness

Answer: BC

Explanation:

For a customer with 12 Nutanix blocks distributed across three racks and an additional datacenter 400 kilometers away, achieving the highest level of resiliency involves ensuring both local and remote data protection.

Option B, "Async DR to a remote site," is essential for protecting against site failures by asynchronously replicating data to a branch office. This method is suitable for long-distance replication where latency and bandwidth are concerns.

Option C, "Rack awareness," is crucial in a multi-rack setup to ensure that data is distributed in such a way that a failure of a single rack does not lead to data loss or significant downtime. Rack awareness configures the placement of data replicas across different racks, improving fault tolerance within the primary datacenter.

Reference:
Nutanix documentation on disaster recovery and data resilience strategies, such as those found in the Nutanix Bible and official Nutanix training materials, supports these recommendations, emphasizing the importance of both remote site replication and local redundancy configurations.

Question: 9

An administrator inherits a new Nutanix environment and logs in to a CVM to check the network configuration. The configuration is as follows:

```
nutanix@NTNX-16xxxxxxxx5-A-CVM:xx.xx.xx.76:~$ manage_ovs show_uplinks

Bridge: br0
  Bond: br0-up
      bond_mode: active-backup
      interfaces: eth3 eth2
      lacp: off
      lacp-fallback: True
      lacp_speed: slow
    Bridge: br1
      Bond: eth0
        bond_mode: active-backup
        interfaces: eth0
        lacp: off
        lacp-fallback: false
        lacp_speed: slow
Bridge: br2
Bridge: br5

nutanix@NTNX-16xxxxxxxx5-A-CVM:xx.xx.xx.76:~$ manage_ovs show_interfaces
name    mode   link    speed
eth0    1000   True    1000
eth1    1000   True    1000
eth2    10000  True    10000
eth3    10000  True    10000
  :            :
nutanix@NTNX-16xxxxxxxx5-A-CVM:xx.xx.xx.76:~$
```

Which action should the administrator take to improve network performance?

A. Configure VLAN tagging both on br0 and br1 and their physical interfaces.

B. Add eth0 and eth1 to the br0-up bond

C. Configure balance-sib or balance-tcp mode for br0-up if switch configuration allows

D. Remove one 10 Gbs interface from br0-up to make sure all 10 Gbs can be used.

Answer: C

Explanation:

Upon reviewing the network configuration in the provided image and considering the setup in a Nutanix environment, the best action to improve network performance is to adjust the bonding mode for the bridge that includes multiple high-bandwidth interfaces.

Option C, "Configure balance-sib or balance-tcp mode for br0-up if switch configuration allows," is

the most effective choice. The bonding mode "balance-sib" (source IP-based load balancing) or "balance-tcp" (TCP/IP layer balancing) can optimize the distribution of network traffic across multiple interfaces, thereby enhancing throughput and redundancy.

This approach utilizes the capabilities of multiple network interfaces more efficiently, distributing the load to prevent any one interface from becoming a bottleneck while providing failover redundancy.

Reference:
This configuration strategy aligns with best practices for network setup in high-performance virtualized environments, as detailed in Nutanix's networking configuration guides and the Nutanix Bible, ensuring optimal performance and reliability.

Question: 10

An administrator is concerned that Prism will be inaccessible if Active Directory is unable to process logins. Which method should the administrator use to access the cluster in the event of this type of outage?

A. Manage the cluster by using the "nutanix" user on the Prism leader CVM

B. Create and use an emergency local account on the cluster

C. Deploy an Active Directory server locally on the cluster

D. Manage the cluster remotely by downloading ncli to a remote workstation

Answer: B

Explanation:

In the event of an Active Directory outage that prevents login to Prism, the recommended approach is to have a contingency plan that allows for local management of the cluster. Option B, "Create and use an emergency local account on the cluster," is the correct choice. This approach ensures that administrators can still access and manage the cluster even if external authentication services are down.

An emergency local account provides a direct, reliable means to access Prism and perform necessary administrative tasks without depending on external systems. This is a critical backup strategy for maintaining access control and managing the cluster during outages.

Reference:
This method is in line with best practices for system availability and disaster recovery, ensuring administrators retain access to manage and troubleshoot without interruption, as detailed in Nutanix's documentation and security configuration guidelines.

Question: 11

A customer has NearSync configured. When the administrator tries to restore a snapshot from 3 minutes ago, it is not available. The snapshots are happening at 15-minute intervals instead of at the 5-minute configured interval. When the protection domain was initially set up, the snapshots were happening at the expected 5-minute interval.

What should the customer do to enable the snapshots to happen at the expected interval?

A. Utilize Metro Availability to meet this requirement

B. Change the protection domain to use Async DR

C. Fix a connectivity issue because the protection domain reverted to Async

D. Configure the protection domain to take snapshots on 15-minute intervals

Answer: C

Explanation:

If the administrator observes that the snapshot intervals have changed from the initially configured 5-minute intervals to 15-minute intervals, it indicates a potential issue with the setup. Option C, "Fix a connectivity issue because the protection domain reverted to Async," addresses the likely cause—a connectivity problem that caused the system to revert to longer, asynchronous DR snapshot intervals.

NearSync typically allows for very frequent snapshots, but if there is a connectivity or configuration issue, it might fall back to less frequent asynchronous DR settings. Identifying and resolving any connectivity issues would allow the NearSync configuration to operate as initially intended.

Reference:
The mechanics of NearSync and its behavior under connectivity issues are discussed in detail in Nutanix's documentation and troubleshooting guides, which describe how the system handles

fallback scenarios and how to rectify them.

Question: 12

An administrator deploys Exchange on a Nutanix cluster. The administrator creates two containers with RF2 configuration:

• One container for Exchange

• One container for the other VMs

The Exchange VM is experiencing I/O performance issues.

Which changes to Storage Optimization should be used on the Exchange container to enhance I/O performance?

A. No data reduction

B. Post process Deduplication only

C. Inline compression and EC-X

D. Inline compression and Deduplication

Answer: A

Explanation:

For the Exchange VM experiencing I/O performance issues, the recommended storage optimization change is Option A, "No data reduction." Exchange, as an application, is highly sensitive to latency and typically does not benefit significantly from data reduction technologies like deduplication or compression, which can introduce additional processing overhead and potentially worsen performance issues.

By configuring the container for Exchange with no data reduction, the system maximizes I/O performance by eliminating any additional processing that could delay data access. This setup ensures that Exchange has the fastest possible access to its data, which is crucial for its performance.

Reference:
This recommendation aligns with best practices for Exchange storage on Nutanix, as detailed in the

Nutanix best practices guide for deploying Microsoft Exchange, where it advises against using data reduction features for databases requiring high I/O throughput.

Question: 13

While creating an image placement policy on the organizations AOS 5.15-based Nutanix cluster, the administrator wants to ensure there are no restrictions on using the selected images on clusters outside of the identified set.

What type of Policy Enforcement must the administrator choose?

A. Soft

B. Internal

C. Hard

D. External

Answer: A

Explanation:

Policy Enforcement

Soft enforcement will allow you to manually place images on other clusters if needed. Hard enforcement will ensure these images are only placed on the selected clusters.

Enforcement

| Soft | ⌄ |

| Cancel | Save |

Question: 14

An alert about RX errors on eth2 on a node is reported in the cluster. The administrator logs in to the CVM in question, checks the ping_* files in the data/logs/syststats folder, and notices intermittent ping loss.

The node in question has the following network configuration:

```
nutanix@NTNX-16xxxxxxxxx5-A-CVM:xx.xx.xx.76:~$ manage_ovs show_uplinks


Bridge: br0
  Bond: br0-up
    bond_mode: active-backup
    interfaces: eth3 eth2
    lacp: off
    lacp-fallback: True
    lacp_speed: slow
Bridge: br1
  Bond: eth0
    bond_mode: active-backup
    interfaces: eth0
    lacp: off
    lacp-fallback: True
    lacp_speed: slow
Bridge: br1
  Bond: eth0
    bond_mode: active-backup
    interfaces: eth0
    lacp: off
    lacp-fallback: false
    lacp_speed: slow
Bridge: br2
Bridge: br5
nutanix@NTNX-16xxxxxxxxx5-A-CVM:xx.xx.xx.76:~$ manage_ovs show_interfaces
name  mode link speed
eth0  1000 True  1000
eth1  1000 True  1000
eth2 10000 True 10000
eth3 10000 True 10000

nutanix@NTNX-16xxxxxxxxx5-A-CVM:xx.xx.xx.76:~$
```

Which action should be used to troubleshoot without disrupting the VMs running on this node?

A. Replace the cable from eth2 to the switch

B. Remove eth3 from br0-up and monitor for new alerts

C. Check the port on the switch side for any errors

D. Enable balance-s1b on br0-up and monitor if a problem persists

Answer: C

Explanation:

Given the reported RX errors on eth2 and the intermittent ping loss as observed from the CVM logs, the best initial troubleshooting step that avoids VM disruption is to inspect the switch port for errors. Option C, "Check the port on the switch side for any errors," is the most direct and non-invasive approach to determining if the issue lies with the network infrastructure rather than the server hardware itself or the configuration.

This action helps identify whether the problem is related to the physical connection (e.g., port issues, switch configuration errors) without altering the current active network setup on the Nutanix node. If errors are found on the switch port, adjustments or repairs can be made accordingly, potentially resolving the RX errors without impacting the running VMs.

Reference:
This recommendation follows Nutanix's best practices for network troubleshooting, focusing first on external network components before altering host configurations.

Question: 15

An administrator protected a DB VM running on a Nutanix cluster with NearSync Replication, which schedules to repeat every 15 minutes □ to a second site. The daily change rate is low. During nightly backups, the replication window is missed due to write volume.

Which two options describe the expected behavior? (Choose two.)

A. NearSync stops working and fails over to the remote site.

B. Protection Domain transitions back to the hourly schedule.

C. The Administrator needs to re-enable it manually.

D. The system continuously tries to get to the NearSync schedule.

Answer: BD

Explanation:

When a NearSync Replication window is missed due to high write volume during nightly backups, the expected behavior of the system is to adjust the replication schedule temporarily and continuously attempt to return to the configured NearSync schedule. The correct answers are:

Option B, "Protection Domain transitions back to the hourly schedule." If the NearSync cannot maintain the 15-minute schedule due to excessive write volume, it may temporarily fall back to a less frequent schedule, such as hourly, to stabilize.

Option D, "The system continuously tries to get to the NearSync schedule." NearSync is designed to handle transient high-load situations by trying to catch up and revert to the pre-set NearSync schedule as conditions allow.

Reference:
These behaviors are outlined in the Nutanix documentation for NearSync, which describes how the system manages periods of high I/O and missed replication windows.

Question: 16

An administrator is deploying a three-tier application on a Nutanix Enterprise Cloud consisting of web, application, and database VMs. Traffic between the servers must be limited to specific services/ports. There is an application layer firewall VM deployed on one host in the cluster.

In which way should the administrator meet this requirement?

A. Create a network for each type of VM, and use policy-based routing to control the traffic flow

B. Configure a security policy and service chain redirecting the server traffic through the firewall

C. Separate the web. application and database VMs on to dedicated VLANs

D. Categorize the VMs in Prism Central and utilize Flow to set a security policy

	Answer: D

Explanation:

For a multi-tier application where traffic must be limited to specific services and ports across web, application, and database VMs, the optimal approach is to use microsegmentation features provided by Nutanix. Option D, "Categorize the VMs in Prism Central and utilize Flow to set a security policy," is the correct choice.

Nutanix Flow allows for detailed security policies that control VM-to-VM traffic within the same cluster, effectively managing access and communication based on specified criteria like VM category, service, or application type. This solution enables precise control over traffic flows, enhancing security without requiring additional physical or virtual network segmentation.

Reference:
Nutanix Flow capabilities are detailed in Nutanix Prism Central's documentation, which explains how to implement microsegmentation and security policies for application-specific traffic management.

Question: 17

Refer to the exhibit.
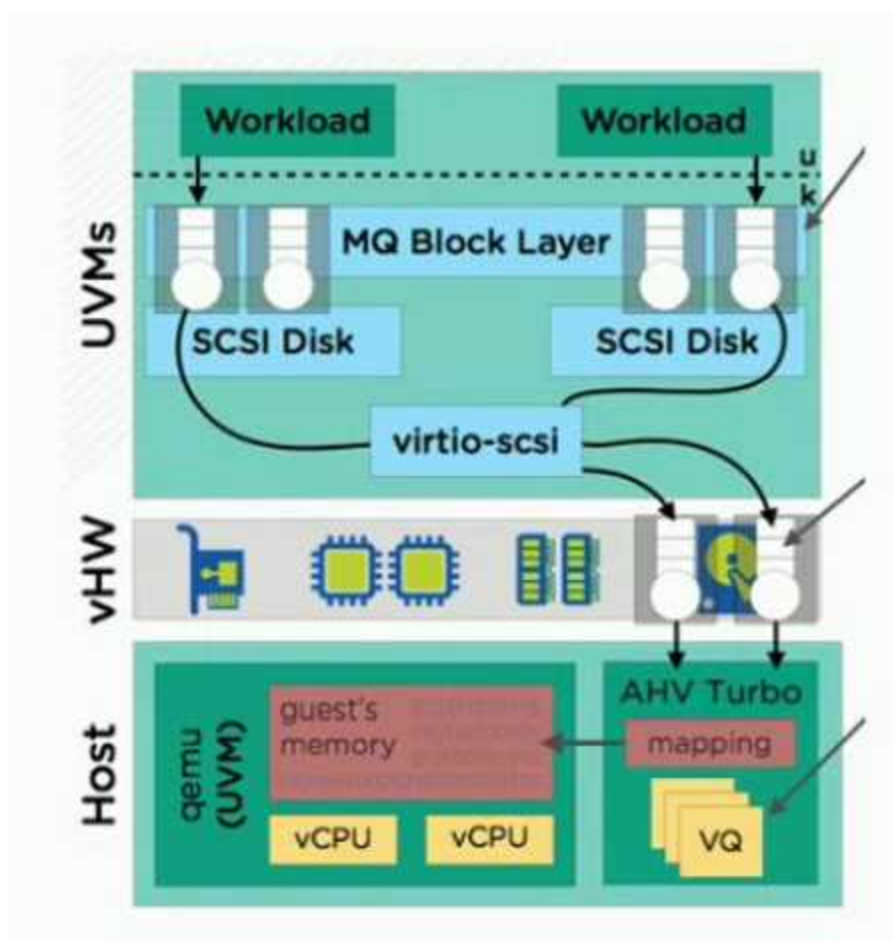
An administrator has an existing cluster and needs to improve performance using AHV Turbo. Which two items are required to achieve even greater performance? (Choose two.)

A. Workloads are multi-threaded.

B. VMs have one vCPU configured.

C. VMs have multi-queue disabled.

D. VMs have more than one vCPU.

Answer: AD

Explanation:

 To maximize the performance benefits of AHV Turbo, which is designed to optimize network and storage I/O operations for VMs, certain VM configurations are advantageous. The correct answers

are:

Option A, "Workloads are multi-threaded." Multi-threaded applications can better utilize the improvements in I/O processing efficiency provided by AHV Turbo, leading to better overall performance.

Option D, "VMs have more than one vCPU." This configuration allows VMs to handle multiple processes or threads simultaneously, which is particularly beneficial when combined with AHV Turbo's enhanced I/O operations.

Reference:
The benefits of configuring VMs with multiple vCPUs and supporting multi-threaded applications are discussed in Nutanix's documentation on AHV and performance optimization, where AHV Turbo is highlighted for its ability to accelerate VM operations in a Nutanix environment.

AHV Turbo technology recommendations

AHV Turbo technology is transparent to the VMs, but you can achieve even greater performance if:

- The VM has multiqueue enabled. Consult your Linux distribution documentation to make sure that the guest operating system fully supports multiqueue before you enable it, as well as for instructions on how to enable it. One common method for enabling multiqueue is to add one of the following lines to the kernel command line:

```
scsi_mod.use_blk_mq=y
```

```
scsi_mod.use_blk_mq=1
```

- You have installed virtIO 1.1.2 or newer for Windows-based VMs. No additional configuration is required.
- The VM has more than one vCPU.
- The workloads are multi-threaded.

Question: 18

An administrator is performing a set of routine checks and notes that Prism Central is running with 4 vCPUs and 21 GB RAM. The organizations environment is based on two Nutanix clusters with 170 VMs plus a Legacy vSphere infrastructure. No manual changes have been done on Prism Central VM.

Which configuration justifies the current Prism Central configuration?

A. Nutanix Move is running on Prism Central to import VMs from the Legacy Cluster.

B. Prism Central was installed for Large Deployment environments.

C. Prism Central is running on the legacy duster and requires more RAM.

D. Nutanix Leap and Nutanix Flow have been enabled on Prism Central

	Answer: D

Explanation:

Question: 19

An administrator finds that home shares cannot be configured in a new Files 3.5 deployment. Why is this happening?

A. NFS default access is set to Read Only.

B. Multi-protocol access is not configured.

C. Access Based Enumeration is not enabled.

D. The system is deployed as a single FSVM.

	Answer: D

Explanation:

A distributed (home) share is the repository for the user's personal files, and a standard share is the repository shared by a group. A home share is distributed at the top-level directories while standard shares are located on a single file server VM (FSVM). Users have the following permissions in distributed and standard shares.

Note:

- Distributed shares are only available on deployments of three or more FSVMs.

Question: 20

Refer to the exhibit.

A Microsoft SQL 2016 deployment is shown in the exhibit. The administrator receives user reports that database queries take too long to return.

Which optimization should be made to this configuration to improve performance?

A. Combine both of the OS and SQL Binaries disks

B. Add a second SCSI controller for the Database.

C. TempDB, and Logs disk Separate the Database. TempDB, and Logs onto their own disks

D. Configure the VM to use a PCI disk controller

Answer: C

Explanation:

Question: 21

An administrator of a Nutanix Enterprise Cloud has microsegmentation enabled and a firewall VM installed. The security team notifies the administrator that one of the VMs hosted in the environment has been exhibiting suspect network activity. The administrator wants to isolate the VM from the production network, but must still be able to access it to perform diagnostics.

What should the administrator do to meet the requirement?

A. Disable the vNIC on the affected VM

B. Quarantine the VM using the Forensic Method

C. Create a firewall rule that blocks VM traffic but permits diagnostic access

D. Create a security policy with a service chain directing that VMs traffic to the firewall VM

Answer: B

Explanation:

Ref https://portal.nutanix.com/page/documents/kbs/details?targetId=kA00e000000LIelCAG

Nutanix flow – Quarantine security policy

Quarantine policy in Nutanix flow is predefined and build into the product. You cannot modify it or change it or create a new quarantine policy.

Quarantine policy in Nutanix Flow has two methods:

- Forensic – VM cannot talk to anything in the network, except to the specific forensic tools configured in the policy
- Strict – VM cannot talk to anything in the network

Question: 22

An administrator migrates a VM onto a new Nutanix cluster. After the migration, the administrator observes the following conditions:

- Cluster memory utilization: 64%

- Cluster CPU utilization: 19%

- Cluster storage utilization: 32%

- Average VM CPU utilization: 25%

- Average VM CPU ready%: 24%

- Average VM memory utilization: 60%

Which two changes should the administrator make to improve VM performance? (Choose two.)

A. Add more memory to the VMs.

B. Reduce the number of vCPUs assigned to VMs.

C. Replace high core count CPUs with high clock rate CPUs. (also can be but is physical invas)

D. Reduce the number of VMs on the hosts.

Answer: B D

Explanation:

ref http://www.joshodgers.com/tag/cpu-ready/

Question: 23

An administrator is supporting a business critical environment and deploys metro availability to achieve a zero data loss configuration. The two clusters are connected by a 1GbE connection. A new workload is going to be deployed to this cluster. This workload requires a sustained 150MB/S of write throughput and 20MB/s of read throughput.

Which change must be made to deploy the workload successfully on this cluster?

A. The bandwidth must be increased to support this workload.

B. The workload must be configured to read at greater than 12.5MB/S.

C. The replication frequency must be less than 60 minutes.

D. Zero data loss nearsync must be used to support this workload.

Answer: A

Explanation:

Ref:

6.3. Nutanix Recommendations

- Redundant remote replication links between clusters.
- Similar performance characteristics between the clusters used for Metro Availability:
  - Similar number of nodes.
  - Similar server memory configuration.
  - Similarly sized oplog.
  - Similar dive count for oplog draining to the extent store.
- Adequate bandwidth to support peak write workloads.

Question: 24

A systems administrator needs to add more VMs to their Nutanix cluster.

Which two actions should the administrator perform to determine if the current cluster can accommodate the new VMs? (Choose two.)

A. Perform an Inventory with Life Cycle Management.

B. Determine utilization with Cluster Runway.

C. Enable Deduplication and Erasure Coding.

D. Utilize Optimize Resources for VM efficiency.

Answer: B D

Explanation:

Ref:

ONE-CLICK PLANNING
Prism includes a powerful application and VM-centric capacity planning engine that is powered by Nutanix's patent-pending X-Fit technology.

- **Capacity Behavior Analytics:** Predictive analysis of capacity usage and trends based on workload behavior enabling pay-as-you-grow scaling.
- **Capacity Optimization Advisor:** Infrastructure optimization recommendations to improve efficiency and performance based on VM behavioral analysis.
- **Just In Time Forecast:** Capacity expansion forecast to meet future workload growth.

Question: 25

A guest VM is reported to have poor storage performance. It has an I/O profile of 80% read. 20% write, and the HDDs form more than 50% of the read source.

What should an administrator do to resolve this issue?

A. Increase SSD capacity

B. Increase the OPLOG

C. Increase the write cache

D. Use HDDs with higher RPM

Answer: A

Explanation:

Ref: https://portal.nutanix.com/page/documents/solutions/details?targetId=BP-2126-SAS-on-Nutanix:BP-2126-SAS-on-Nutanix

Question: 26

An administrator receives an alert in Prism indicating that interface eth2, on an AHV host is receiving

many CRC errors. After togging into the problematic host, the following command is run to show the indicated output:

```
[root@AHV-Host ~]# ethtool -S eth2 | grep error
rx_errors: 0
tx_errors: 0
rx_over_errors: 0
rx_crc_errors: 478593
rx_frame_errors: 0
rx_fifo_errors: 0
rx_missed_errors: 0
tx_aborted_errors: 0
tx_carrier_errors: 0
tx_fifo_errors: 0
tx_heartbeat_errors: 0
rx_long_length_errors: 0
rx_short_length_errors: 0
rx_csum_offload_errors: 0

   -    -       -
```

What is causing this issue?

A. Incorrect link speeds on the switch

B. The interface is incorrectly configured with Jumbo Frames

C. A misconfigured bond

D. A physical layer network problem

Answer: B

Explanation:

Ref:

rx_crc_errors are caused either by faults in layer 1 (in the past, we have seen failed twinax cables and

incorrect types of fibre being used), or issues with jumbo frames on the network. In an environment with 10 Gig switches that use cut-through forwarding (Cisco Nexus, Arista, Cisco devices using IOS default to Store and Forward switching), any packets that come into the switch will get forwarded out the destination interface once the switch has read the destination MAC address. If that packet has an MTU over what is configured on the interface, it will cut off the packet at the designated MTU, causing the server to receive a malformed packet, which will throw a CRC error.

If you have a layer 1 issue, you will see rx_crc_errors, not on all but one or two nodes.

Question: 27

An administrator deletes a large amount of data from a Volume Group presented to a Linux VM. The administrator notices that the deleted data has not been reclaimed as usable storage.

What action should be taken to reclaim the storage capacity?

A. Shrink the Volume Group that is associated with the Linux VM

B. Unmount the Volume Group and then Remount the Volume Group

C. Enable the unman operation on the Linux VM

D. Run Defrag on the Linux VM

Answer: B

Explanation:

https://next.nutanix.com/how-it-works-22/vm-capacity-and-prism-capacity-are-different-33134

Question: 28

A customer has two mission-critical applications and needs to have them backed up to a remote location. The remote location is connected using a leased line and has an average latency of 7 ms.

Which Nutanix technology will provide the shortest RPO possible?

A. NearSync

B. Leap

C. Metro Availability

D. Asyn&DR

Answer: B

Explanation:

Ref: https://portal.nutanix.com/page/documents/solutions/details?targetId=BP-2005_Data_Protection:BP-2005_Data_Protection

Question: 29

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. Use multiple subnets for iSCSI traffic

B. Enable RSS (Receive Side Scaling)

C. Enable thick provisioning on the Volume Group(s)

D. Distribute workload across multiple virtual disks

Answer: B D

Explanation:

9. Recommendations

- Use the Data Services IP method for external host connectivity to VGs.
- For backward compatibility, you can upgrade existing environments nondisruptively and continue to use MPIO for load balancing and path resiliency.
- For security, use at least one-way CHAP.
- Leave ADS enabled. (Enabled is the default setting.)
- 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.
- Use dedicated network interfaces for iSCSI traffic in your hosts.
- Place hosts that use Nutanix Volumes on the same subnet as the iSCSI data services IP.
- Use a single subnet (broadcast domain) for iSCSI traffic. Avoid routing between the client initiators and CVM targets.
- 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.

Question: 30

Microsegmentation was recently enabled in a Nutanix environment. The administrator wants to leverage Prism Central to create a policy that will block all traffic, regardless of direction, between two groups of VMs identified by their category.

Which policy should be used to meet this requirement?

A. A Quarantine Policy

B. An Isolation Environment Policy

C. An Application Security Policy

D. A Whitehst-Based Policy

Answer: B

Explanation:

Creating an Isolation Environment Policy

An isolation environment policy identifies two groups of VMs and blocks communications between the groups. The two groups are identified by category. You can specify an additional category to restrict the scope of the policy to that category.

About this task

To create an isolation environment, do the following:

Procedure

1. On the **Explore** tab of the main menu, click **Security Policies** from the entities list (left column). See Security Policies Summary View.

2. Click **Create Security Policy**, and then click **Isolate Environments**.

Question: 31

An administrator configures authentication in Prism Central (PC) for the NTNX-Admins group. Users report that they are unable to log in. The administrator confirms that the Active Directory (AD) settings in PC are correct.

Which condition could result in this behavior?

A. A role mapping needs to be associated with the AD group.

B. The users must be added to the Domain Admins AD group.

C. The Local authentication type must also be selected in PC.

D. A client chap certificate must also be added in PC.

Answer: B

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Prism-Central-Guide-Prism-v5_10:mul-security-role-permissions-pc-t.html

Question: 32

An organizations Nutanix Cluster is based on VMware vSphere. The cluster is configured to download

software updates automatically. The administration needs to verify and eventually upgrade VMware hypervisor via Prism Ul.

After logging in to Prism, the administrator receives the message shown:

No available versions for upgrade

What is causing the current state?

A. VMware support has expired, so downloads are not available.

B. vSphere binaries need to be manually uploaded.

C. The environment is running the latest vSphere version, so no update is required.

D. The cluster is unable to connect to reIease-api.nutanix-ccm:8D.

Answer: C

Explanation:

ref: https://portal.nutanix.com/page/documents/details?targetId=Web-Console-Guide-Prism-v510:upg-hypervisor-upgrade-esxi-c.html

Question: 33

An administrator receives an error indicating that the CVMs in the cluster are not syncing to any NTP servers. An investigation of the issue finds:

- The NTP servers are configured in Prism

- The time on all CVMs is the same

- Both the CVMs and AHV hosts are configured for the UTC time zone

Which two steps can be taken to troubleshoot this issue? (Choose two.)

A. Confirm that the NTP servers are reachable from the CVMs.

B. Restart genesis on all CVMs.

C. On a CVM. run the command a Hash ntpq -pn.

D. Restart the chronos service on all CVMs.

Answer: A, C

Explanation:

Ref:
https://portal.nutanix.com/page/documents/kbs/details?targetId=kA032000000bmjeCAA#Review_n
tpq

Question: 34

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, Deduplication, and Erasure Coding

B. Deduplication and Erasure Coding

C. Compression and Deduplication

D. Compression only

Answer: B

Explanation:

Ref:

Use Case	Example	Recommendation
User data	File server, user data vDisk	Post-process compression with 4–6 hour delay
VDI	VMware View, Citrix XenDesktop	VCAI snapshots, linked clones, full clones with inline deduplication No compression
Data processing	Hadoop, data analytics, data warehousing	Inline Compression
Transactional applications	Exchange, Active Directory, SQL Server, Oracle	Native application compression where available, otherwise inline compression
Archive or backup	Handy Backup, SyncBack	Inline compression unless data is already compressed

11

Question: 35

Refer to the exhibit.
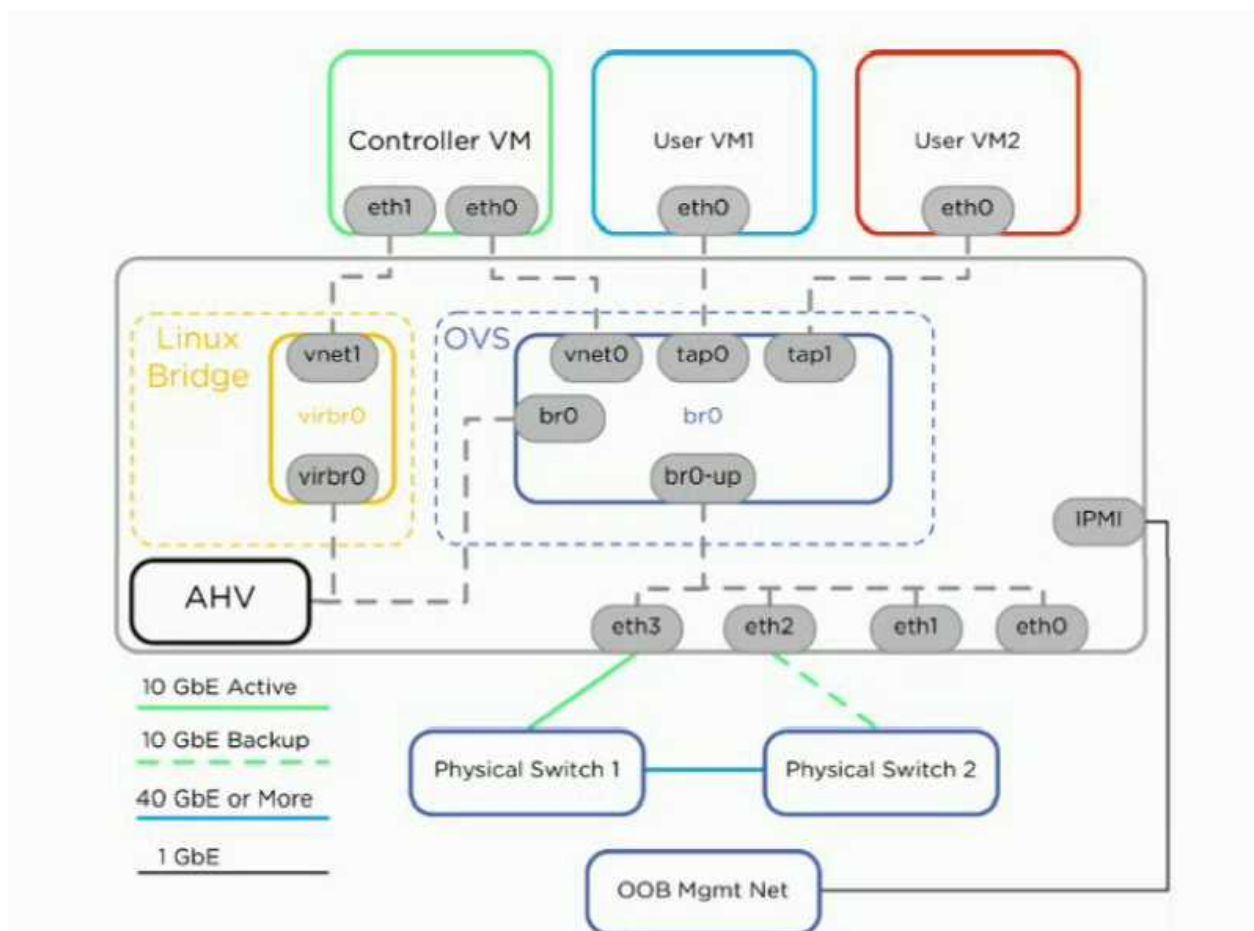
A Nutanix host is connected as shown in the exhibit with br0-up set to active/backup. Physical Switch 1 experiences a power outage causing br0-up to failover to using eth2. The CVM and host become inaccessible. User VMs restart on other hosts in the cluster, which causes a disruption to those VMs.

Which configuration issue likely caused this outage?

A. Bridge br0-up should be configured to use balance-tcp rather than active/backup.

B. The CVM should have eth1 connected to the OVS.

C. The upstream port for eth2 is missing a VLAN.

D. The user VMs only have one NIC

Answer: C

Explanation:

Ref: https://portal.nutanix.com/page/documents/solutions/details?targetId=BP-2071-AHV-Networking:top_ahv_networking_best_practices.html

Question: 36

An administrator is configuring software only. Data-at-Rest Encryption on their Nutanix cluster. They are planning to deploy a third-party key management server (KMS).

Where should this server be hosted?

A. As a single VM on the Nutanix cluster

B. On hardware external to the Nutanix duster

C. As a clustered VM setup on the Nutanix cluster

D. As a single VM deployed on the host that contains the Prism leader CVM

Answer: B

Explanation:

Nutanix supports any KMIP 1.0 compliant key management system, but others have not yet been certified. The key management system can even be a VM running on another Nutanix cluster, and since Nutanix leverage hardware encryption using the self-encrypting drives the performance impact on the cluster is minimal.

Nutanix clusters do not come with data-at-rest encryption turned on by default and it has to be turned on by the administrator using the PRISM UI or nCLI. The PRISM UI provides a simple and easy way to management Key Management Device details and Certificate Authorities.

Question: 37

An administrator recently added VLAN 205 CRM in Prism Element. The workloads attached to the associated NICs are unable to establish network connectivity.

Which Layer 2 protocol allows the administrator to troubleshoot this issue from Prism Element?

A. HDLC

B. SUP

C. LACP

D. LLDP

Answer: D

Explanation:

Switch information on Nutanix AHV

Managing and troubleshooting virtual guests network connectivity issues is quite difficult, if you do not have right information about upstream switches. It is crucial to understand how Nutanix hosts are connected, hosting switch name, location, switch port number. Nutanix AHV leverages OVS (Open VSwitch) to manage AHV hosts and Guest OS network connectivity. OVS can use LLDP (Link Layer Discovery Protocol) to pull information from physical switches. LLDP is automatically enabled on Nutanix AHV. To have LLDP discovery working you have to enable it on the network port switches as well. Nutanix AHV will automatically pull switch information and present it in the Prism.

In Prism Element, on main dashboard click on **Home -> Network**

Question: 38

An administrator is deploying an application that requires maximum I/O throughput for scratch dat

a. The administrator is concerned that the throughput requirement is greater than what can be provided by a single cluster node.

What should the administrator do to meet this requirement?

A. Create a volume group with several virtual disks and attach to the VM

B. Create a volume group with one virtual disk attached to the VM

C. Create a virtual disk attached to the VM's PCI interface

D. Create several virtual disks attached to the VM's virtual SCSI controller

Answer: A

Explanation:

Ref: https://next.nutanix.com/community-blog-40/scaling-up-vm-storage-performance-on-ahv-volume-group-load-balancer-28063

Question: 39

An administrator is deploying several new application VMs to a Nutanix cluster. The application is very transactional with a 28/72 random, read/write ratio.

What should the administrator do?

A. Add a minimum of four SSDs to each node to ensure all writes go to the SSDs.

B. Add a minimum of four virtual disks to each VM, and aggregate them on guest OS level.

C. Add one large SSD to each node and enable Flash Mode for the VMs.

D. Add one large virtual disk to each VM. and use it for all application data.

Answer: B

Explanation:

Ref: https://next.nutanix.com/server-virtualization-27/iops-latency-issue-1168

>Multiple vdisks should be attached (they can be unified with LVM for example) to get more performance from VM's, as Nutanix OS limiting oplog size per vdisk (to avoid "noisy neighbour" problem)

Question: 40

An administrator needs to relocate an AHV cluster to a new datacenter during a maintenance window. The cluster will use the same IPs in the new datacenter.

Which two steps should be taken to prepare for this task? (Choose two.)

A. Stop all Nutanix Files clusters

B. Relocate the linked LDAP servers

C. Shut down all user VMs in the cluster

D. Reconfigure IPMI for the new datacenter

Answer: A C

Explanation:

Ref: https://next.nutanix.com/installation-configuration-23/physical-relocation-of-nutanix-clusters-38403

- Disable any "Protection Domains" in the cluster and make sure there is no ongoing replication occurring.
- Make sure no "Fail" message appears when performing the NCC health check on the cluster.
- Power off all the VMs running in the cluster.
- Stop "Files" (previously AFS) if you are using it in the cluster.

Question: 41

Refer to the exhibit.
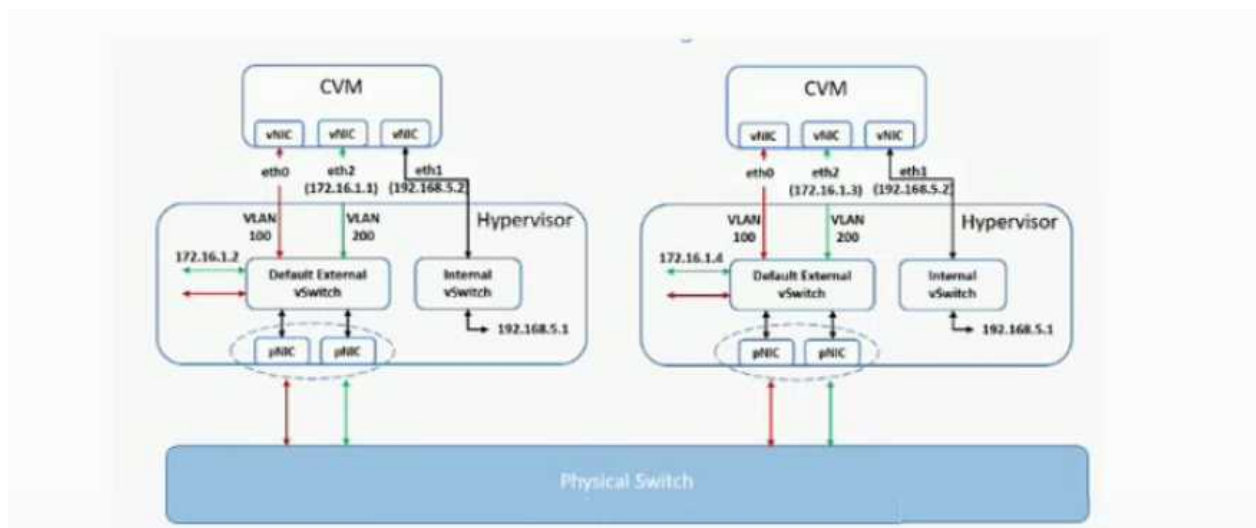
What is the purpose of eth2 on the CVMs?

A. RDMA Network Segmentation

B. iSCSI connectivity

C. Remote site connectivity

D. Network Segmentation

Answer: D

Explanation:

Ref: https://next.nutanix.com/installation-configuration-23/backplane-network-in-aos-5-5-27291

Question: 42

An administrator wants to utilize Network Visualization to monitor the physical and logical network on the Nutanix cluster. The first-hop switch has LLDP enabled. The network switch information is still not being displayed.

What is causing this problem?

A. The ISL between switches is not configured.

B. SNMP is not configured properly.

C. br0 and br1 are not defined.

D. The cluster is using RDMA-enabled NICs.

Answer: B

Explanation:

ref: https://portal.nutanix.com/page/documents/details?targetId=Web-Console-Guide-Prism-v55:wc-network-visualization-intro-c.html

Question: 43

An administrator is migrating 5MB shares from a third-party platform to Nutanix Files with the following characteristics:

• Shares contain user profile directories

• DFS-N will be used

How should the administrator create target shares for this migration?

A. Create multiple general purpose shares and distribute migrated data as evenly as possible.

B. Create multiple distributed shares and distribute migrated data as evenly as possible.

C. Create standard shares with multiple top-level directories and distribute migrated data.

D. Create distributed shares with multiple top-level directories and distribute migrated data.

Answer: D

Explanation:

Ref: https://portal.nutanix.com/page/documents/details/?targetId=Files-v3_6:Files-v3_6

Question: 44

An administrator manages the following two Nutanix AOS 5.15 cluster environment:

• Corp-cluster-01

• Corp-cluster-02

The VM images must be available only on Corp-cluster-01, but cannot be checked out to cluster Corp-cluster-02. The images also cannot be checked out to any other clusters that are registered with Prism Central in the future.

Which two configuration settings must the administrator choose when creating the image placement policy that satisfies the stated requirements? (Choose two.)

A. Create an image placement policy that identifies cluster Corp-cluster-01 as the target cluster

B. Set the policy enforcement to Soft.

C. Set the policy enforcement to Hard.

D. Create an image placement policy that identifies cluster Corp-cluster-02 as the target cluster.

Answer: A C

Explanation:

Ref: https://next.nutanix.com/community-blog-40/nutanix-just-made-ahv-image-management-painless-33144

Question: 45

A customer has a Nutanix cluster with 10Gb connectivity via switch fabric extenders. The administrator receives NCC health check errors of latency greater than 200ms.

Which action should the administrator take to resolve the NCC errors?

A. Replace the switch fabric extenders with 10G line rate switches

B. Upgrade NCC and increase the CVM memory by 4Gb

C. Add 2 additional 10G uplinks from the switch fabric extenders per node

D. Upgrade NCC and increase the vCPU of the CVM

Answer: A

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=System-Specs-G6-Single-Node:set-block-connect-c.html

- Nutanix does not recommend the use of Fabric Extenders (FEX) or similar technologies for pro and other issues might occur as implementations scale upward (see Knowledge Base article K

Question: 46

For several days, an administrator notices the following alerts:

- CVM NIC Speed Low Warning Alerts

- Warning Alerts of CVM NIC not performing at optimal speed

- CVM is disconnected from the network Critical Alert

- Network Visualization page shows excessive dropped packets on CVM/Host

Which steps should be taken to determine which problem should be addressed first?

A. • Access the Hardware Page to verify resources are available

- Analyze ail CVM Speed Alerts in the Alerts/Events page

- Analyze output for the network and interface properties and connectivity issues

B. • Verify Host/CVM connectivity on the Network Visualization page

- Use to verify the bridge and bond configuration

- Review alerts/events page for the CVM disconnected error

C. • Review Alerts page for NIC speed alerts and alert timing

- Analyze the genesis.out log file for process failures

- Assess the NIC properties in the Network Visualization > Host Properties page

D. • Restart networking services on the CVM

- Determine the current configuration of the affected CVM via output

- Access the Alerts/Events page for the CVM network connection failures
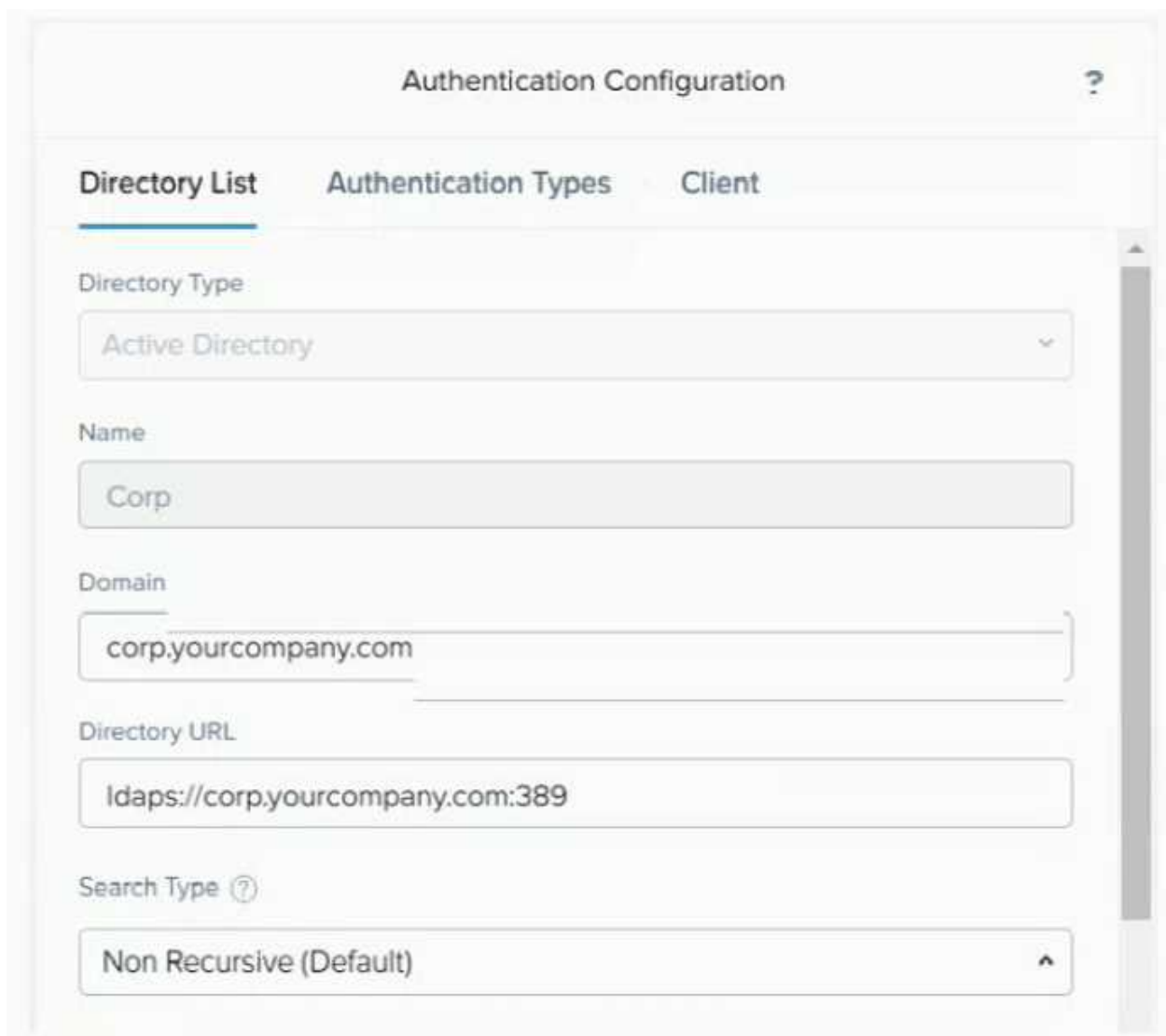
Answer: B

Explanation:

Ref: https://portal.nutanix.com/page/documents/kbs/details?targetId=kA00e000000CuaDCAS

Question: 47

Refer to the exhibit.

An administrator configures Active Directory authentication as shown in the exhibit. Upon finishing setup, users are not able to log in.

What configuration change should be made to fix this issue?

A. Change leaps to https

B. Change the Directory URL to use an IP rather than a name

C. Change the plct from 389 to 636

D Change the Domain to use an IP rather than a name

Answer: C

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Prism-Central-Guide-Prism-v510:mul-security-authentication-pc-t.html

Question: 48

In a Nutanix cluster, a Protection Domain contains 50 entities that are replicated to a remote Single Node Replication Target.

The current schedule configuration is as follows:

• Repeat every 6 hours

• Local Retention Policy 1

• Remote Retention Policy 8

• Starting time 12 am

At 8 am on Monday, the administrator discovers that a protected VM is corrupted. The latest good state was Sunday 2 pm. The administrator needs to maintain current protection.

Which strategy should the administrator use to meet these requirements?

A. From the Remote site, activate the Protection Domain, then re-protect the entity.

B. From the Remote site, restore the VM from the local snapshot by selecting the correct snapshot

C. From the local site, retrieve the correct remote snapshot, then restore the VM locally.

D. From the local site, restore the VM from the local snapshot by selecting the correct snapshot.

Answer: C

Explanation:

Question: 49

A customer with a four-node RF2 cluster is adding application VMs to their system. After adding these VMs, the Prism dashboard shows 81% storage utilization.

What is the consequence of running the cluster at 81% storage utilization?

A. The customer has the ability to add more VMs up to the 100% storage utilization.

B. There is available capacity in the storage fabric and the cluster is resilient.

C. Node failure is imminent due to storage utilization.

D. The cluster is not resilient in the storage fabric

Answer: D

Explanation:

https://next.nutanix.com/how-it-works-22/recommended-maximum-storage-utilization-37234

Question: 50

A company needs to replicate their VMs to a remote site and must have an RPO of less than 1 hour.

When creating a protection domain, what should an administrator do to meet this requirement?

A. Enable Async Replication with an RPO of 60 minutes

B. Enable Near-Sync Replication with an RPO of 15 minutes

C. Enable Entity Sync on the designated VMs

C. Enable Availability Zones and send the VM to multiple targets

Answer: A

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Web-Console-Guide-Prism-v5_10:sto-pd-guidelines-r.html

Question: 51

A customer needs a DR solution designed around the following requirements:

• There are 8 ms of latency between Sites A and B

• The administrator needs the shortest RPO/RTO possible

• Application consistent snapshots are required

• Use of Nutanix VSS

Which Data Protection Method should be used?

A. Async

B. Metro Availability

C. Near Sync

D. Cloud Connect

Answer: C

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Prism-Element-Data-Protection-Guide-v5_18:wc-dr-application-consistent-snapshots-wc-r.html

Question: 52

An administrator needs to replace the self-signed certificate on a cluster. Which two requirements must be met as part of the process? (Choose two.)

A. The cluster administrator must restart the interface gateway.

B. The signed, intermediate and root certificates are chained.

C. The existing certificate must be deleted prior to replacement.

D. The imported files for the custom certificate must be PEM encoded.

Answer: B D

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Prism-Central-Guide-Prism-v55:mul-security-ssl-certificate-pc-t.html

Question: 53

An administrator needs to evaluate if the existing configuration of Protection Domains meets the specified corporate recovery policy for SQL Dat

a. The corporate policy requires that all SQL Servers be recoverable at the DR site within 30 minutes, and must result in a maximum of 60 minutes of data loss. SQL data must be required.

The protection domain is configured as follows:

• Application consistent snapshots are enabled

• The SQL server VMs are assigned to the Protection Domain as their own Consistency Group

• The Protection Domain schedule is configured as snapshots taken every 90 minutes from 7 am until 8 pm

What must be changed to meet the required policy?

A. Revise the schedule tc be 15 minutes

B. Revise the schedule to be 60 minutes

C. Revise the schedule to be 30 minutes

D. Revise the schedule to be 45 minutes

Answer: B

Explanation:

Question: 54

An administrator is monitoring the Nutanix v5.15-based AOS cluster performance logs and notices that a SQL server VM is greatly exceeding its intended maximum IOPS. The administrator has confirmed that a QoS policy was previously created for the group of VMs this server is a member of.

What are two reasons that this VM would exceed its maximum configured IOPS from the QoS Policy? (Choose two.)

A. The VM is missing the required snapshot needed to implement the QoS Policy.

B. The VM was not created as an AFS virtual machine.

C. The SQL Server VM has volume groups attached.

D. It was cloned from another SQL Server VM that was a member of the QoS Policy.

Answer: B C

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Prism-Central-Guide-Prism-v5_18:mul-storage-qos-pc-c.html

Question: 55

An administrator needs to make sure an RF3 cluster can survive a failure of two complete racks

without negatively affecting performance. The current cluster configuration consists of the following:

• 30 All Flash Nodes: distributed 10 nodes per rack across three 42U racks

• Each node is configured with 20TB usable storage all flash (Cluster Total 600TB Usable)

• Current cluster utilization is 500TB storage

• Storage containers have Erasure Coding enabled

Which configuration changes should be made to make sure the cluster meets the requirements?

A. Expand the cluster to 50 nodes distributed evenly across 5 racks

B. Expand the cluster to 48 nodes distributed evenly across 6 racks

C. Expand the cluster to 60 nodes distributed evenly across 6 racks

D. Expand the cluster to 40 nodes distributed evenly across 5 racks

Answer: C

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Web-Console-Guide-Prism-v5_17:arc-configure-fault-tolerance-rack-prism-c.html

Before you begin

• You must have information on the actual physical mapping of racks and blocks in the datacenter.

• Minimum cluster requirements:

    • Replication factor 2 - 3 racks (4 with Erasure Coding)

    • Replication factor 3 - 5 racks (6, with Erasure Coding) 1 node in each rack

Question: 56

An administrator is managing multiple Windows and Linux VMs connected to Nutanix Volumes. The

Linux VMs are experiencing intermittent connectivity issues. The Windows VMs do not experience the same issue.

Which option should the administrator use to resolve this issue?

A. Utilize Jumbo Frames

B. Add additional disks to the Volume Group

C. Set the SCSI timeout value to 60

D. Utilize a separate subnet for the Linux VMs

Answer: C

Explanation:

Ref: https://kb.vmware.com/s/article/1009465

Question: 57

An administrator has two clusters: Site A and Site B.

Async DR is configured between the clusters as follows:

• Site A is the Primary Site

• Site B is the Secondary inactive Site, no VMs running

• Site A is fully in Production

• Site B used as Backup/Disaster Recovery

The customer wants to perform a planned failover between the sites.

How should the administrator accomplish this?

A. Click Activate on the Secondary site within the Data Protection Dashboard

B. Click Activate on the Secondary site and run deactive NCLI command on Primary site

C. Choose Migrate on the Secondary site within the Data Protection Dashboard

D. Choose Migrate on the Primary site within the Data Protection Dashboard

Answer: D

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Web-Console-Guide-Prism-v510:wc-protection-domain-failover-wc-t.html

3. Select the target protection domain and click the **Migrate** action link.
   The Migrate Protection Domain dialog box appears. Select the site where you wa
   displayed. Click **Learn more** for additional information.

Question: 58

Refer to the exhibit.

After performing ESXi to AHV conversion on a cluster, the alerts shown in the exhibit display on Prism. What should the administrator do to resolve this issue efficiently?

A. Remove the VMs. create a new Protection Domain, and add VMs to it

B. Remove VMs from the Protection Domain and add them back in.

C. Delete the Protection Domain, create a new Protection Domain, and add the VMs to it

D. Create a new Protection Domain and add the VMs to rt.

Answer: B

Explanation:

Question: 59

HOTSPOT

An administrator is configuring an All Flash cluster to support the following workloads:

• Full clone virtual desktops

• Hadoop

• Write heavy databases

Which three correct configuration options should the administrator use to meet the item requirements? (Choose three.)

For each procedure, indicate whether it is a correct or incorrect procedure that must be configured to meet the item requirements using the drop-down option.

Procedure	Correct/Incorrect
One container with compression and deduplication enabled for full clone virtual desktops	Select ▼ Select Correct Incorrect
One container with compression and Erasure Coding enabled for Hadoop	Select ▼ Select Correct Incorrect
One container with compression enabled for heavy databases	Select ▼ Select Correct Incorrect
One container with deduplication enabled for full clone virtual desktops	Select ▼ Select Correct Incorrect
One container with Erasure Coding enabled for Hadoop	Select ▼ Select Correct Incorrect
One container with deduplication enabled for Hadoop	Select ▼ Select Correct Incorrect

Answer:

Explanation:

Ref:

Use Case	Example	Recommendation
User data	File server, user data vDisk	Post-process compression with 4–6 hour delay
VDI	VMware View, Citrix XenDesktop	VCAI snapshots, linked clones, full clones with inline deduplication No compression
Data processing	Hadoop, data analytics, data warehousing	Inline Compression
Transactional applications	Exchange, Active Directory, SQL Server, Oracle	Native application compression where available, otherwise inline compression
Archive or backup	Handy Backup, SyncBack	Inline compression unless data is already compressed

Question: 60

HOTSPOT

A system administrator needs to shut down an AHV node in a Nutanix cluster without causing service disruption. The administrator checks data resiliency and verifies that the cluster can tolerate a node down.

Which three steps should the administrator perform next? (Choose three.)

Procedure	Step
Put the host in maintenance mode	Step 1 ▼
	Step 2 ▼
	Step 3 ▼
	Invalid Step ▼
Shut down the CVM	Step 1 ▼
	Step 2 ▼
	Step 3 ▼
	Invalid Step ▼
Shut down the node	Step 1 ▼
	Step 2 ▼
	Step 3 ▼
	Invalid Step ▼
Power off the node	Step 1 ▼
	Step 2 ▼
	Step 3 ▼
	Invalid Step ▼
Allow VMs to start on the remaining nodes	Step 1 ▼
	Step 2 ▼
	Step 3 ▼
	Invalid Step ▼

Answer:

Explanation:

      1 allow vms
      2 sd CVM
      3 sd node

Question: 61

An administrator needs to initiate a new VDI project within a couple of months. Prism Central reports there are no storage resources to accommodate such workloads.

The administrator sees many powered-off VMs and has the authority to delete test VMs powered off at least for 30 days. Test VMs belong to the Test category.

Using Prism Central, which steps are required to identify the correct VMs to be deleted?

A. Use Capacity Runway to filter by Test and Powered-off VMs

B. Filter VMs list, choose Test category and Inactive under Efficiency

C. Create a new Scenario selecting Test VMs. filter by uptime

D. Create a new Project selecting Test VMs, sorting by power state

Answer: B

Explanation:

Question: 62

Refer to the exhibit.

User 1 and User 2 belong to the AAPM group

What are two descriptions of how Files perform quota management? (Choose two.)

A. User 2 can continue to add another 3GB file but will receive a daily notification email.

B. User 1 can continue to add another 5GB file but will receive a daily notification email.

C. User 1 can add an 8GB file to the share without receiving notification.

D. User 2 can add an 8GB file without receiving a notification email.

Answer: B D

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Files-v3_6:fil-file-server-quotas-c.html#nconcept_amp_xsm_bx

Question: 63

A customer wants to run SAP HANA on a Nutanix cluster with the following characteristics:

• AHV nodes

• SAP HANA version 2

• Production database files

Which configuration should be recommended to the customer?

A. Start with a cluster containing three or more nodes

B. Enable only compression for the container that contains the Production database

C. Do not enable compression, deduplication. or erasure coding on the storage container

D. Plate the SAP HANA Database on the same socket as CVM

Answer: C

Explanation:

Ref:

NUTANIX.   SAP HANA on Nutanix

- Don't configure storage saving functionalities such as compression, deduplication, or erasure coding (EC-X) on a storage container that holds production database files.

Question: 64

An administrator knows that the disks in a cluster are out of date and a new firmware is available. For security reasons, these clusters do not have access to the Internet.

Which two steps must be completed to update the firmware? (Choose two.)

A. Configure LCM with a URL to access the firmware bundle.

B. Download a dark site bundle and stage it on an internal webserver.

C. Download the updated firmware .tgz file from the Nutanix portal.

D. Select Upgrade Software, then select disks and upload the updated firmware.

Answer: AB

Explanation:

Question: 65

A three-node cluster has a Nutanix Files instance with three FSVMs.

What happens after a node failure?

A. The affected FSVM will get live-migrated to another node.

B. The affected FSVM will not be restarted on another node due to its agent VM setting.

C. The affected FSVM will not be restarted on another node due to its VM-to-VM anti-affinity settings.

D. The affected FSVM will be restarted on another node.

Answer: D

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Files-v3_6:fil-files-high-availability-c.html

HIGH AVAILABILITY

Fail over for file server VMs (FSVMs).

High Availability (HA) for Files insures that during a disruption of service a file server VM (FSVMs), on clusters of two or more FSVMs, can fail FSVMs.

When an FSVM experiences an issue, Files reassigns the IP of the FSVM to another FSVM in the cluster. The IP of the out-of-service FSVM re several minutes during a failover.

Affinity rules do not affect HA; multiple FSVMs can share a single host during a HA event.

Question: 66

A VDI environment based on AHV Cluster is not performing well. The current environment is using only one bridge (Bridge0). The administrator needs to verify if nodes are using all network cards associated to Bridge0.

Which two menus should be used to check the current configuration? (Choose two.)

A. Network Configuration item in Settings menu

B. Host view in Network menu

C. Host NICs tab in Hardware menu

D. I/O Metrics tab in VM menu

Answer: B C

Explanation:

Question: 67

An administrator needs to create and start five new VMs for a Data Analytics Project (OLAP). The VM Profile is as follows:

• vCPU:4

• vRAM: 64 GB

• vDisk: 1.5 TB

Each of the four nodes of the Nutanix cluster has the following:

• 24 vCPU. 20% overall usage

• 192 GB RAM, 60% overall usage

• 2xl920GBSSD

• 4x 2 TB HDD

At cluster level, there is a single RF2 container that is 30% utilized and has an extent store capacity of 13.5 TB.

Which component requires administrator attention?

A. Physical RAM, because it is not enough to power on all of the new VMs.

B. Physical Cores, because they are not enough to power on all of the new VMs.

C. Storage, because the capacity is not enough to create VMs.

D. Flash Tier because it is not enough to accommodate the workloads.

Answer: A

Explanation:

Question: 68

Refer to the exhibits.

An administrator has reported that a new VM is not performing well.

Prism Element, VM Table Metrics

• VM Name	Host	IP Address	Cores	Memory Capacity	Storage	CPU Usage	Memory Usage	Controller Read IOPS	Controller Write IOPS	Controller IO Bandwidth	Controller Avg IO Latency	Backup	Host Mode
	PHX-POC034-												

VM Name: NCNCAPVM
Cores: 4
Memory Capacity: 8GiB
Storage: 9.86 GiB / 40 GiB
CPU Usage: 25.85%
Memory Usage: 0%
Controller Read IOPS: 0
Controller Write IOPS: 0
Controller I/O Bandwidth: 13 KBps
Controller Avg IO Latency: 2.33ms
Backup ...: Yes
Flash Mode: No

Prism Element, Analysis Chart

NCNCAPVM: Memory Usage ▾   ■25.3% ■0%

After analyzing the information presented in the exhibits, which option shows the best conclusion regarding this workload?

A. VM is CPU constrained since the hypervisor cannot provide the required resources.

B. VM is CPU constrained because more CPU needs to be added to the VM.

C. VM is Storage constrained, because the workload is waiting for storage access.

D. VM is not CPU constrained, because the VM is not running, a multithreaded application.

Answer: C

Explanation:

Question: 69

An administrator is notified that a bare metal database server is down. This database server is being served storage using a Nutanix Volume Group. Upon investigating, the administrator finds that the

disks in the database server that map to the vDisks in the volume group have gone offline.

What is causing this issue?

A. The Volume Group Load Balancer has been disabled.

B. Port 9443 is blocked in the server firewall.

C. Port 3260 has been blocked in the server firewall.

D. A CVM serving the Volume Group has gone offline.

	Answer: D

Explanation:

Question: 70

Refer to the exhibit.
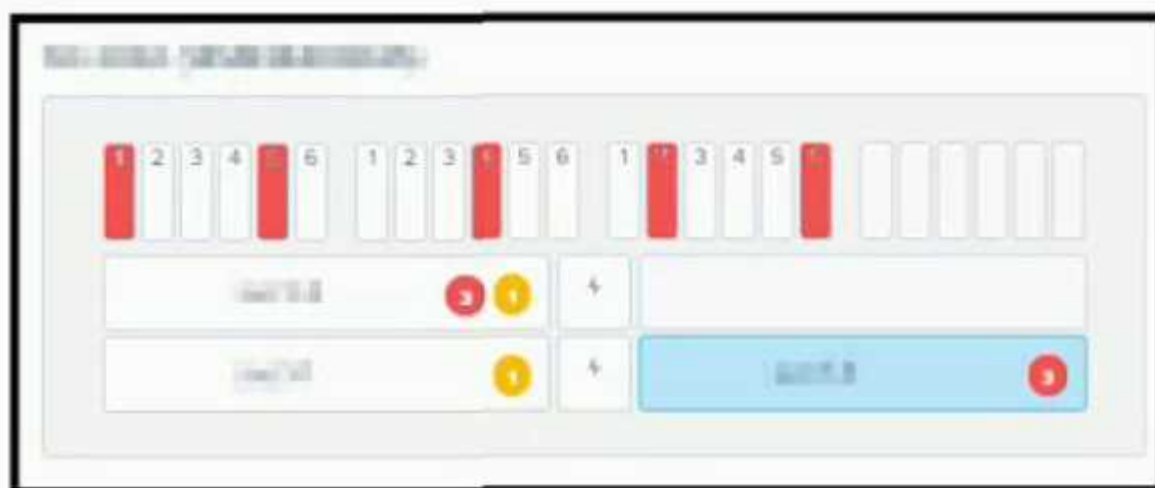
An administrator logs in to Prism and sees the status shown in the exhibit within the Hardware Diagram section.

What should the administrator do?

A. Resolve all alerts and re-import the disks to make sure there is no service disruption.

B. Restart all CVMs for the cluster to check, confirm health and repartition and add the disks.

C. Reseat all disks immediately. If this does not help, reseat the nodes.

D. Check status of applications running on the cluster and call support

Answer: D

Explanation:

Question: 71

An administrator needs to migrate workloads from a Nutanix cluster running VMware ESXi to Nutanix AHV. The migration process needs to be completed in multiple VM groups and support roll back in case any problems are found during user acceptance testing.

Which action should the administrator perform?

A. Use Cross Hypervisor DR to replicate VMs from ESXi to AHV

B. Use VMware Converter

C. Use Nutanix one-click cluster conversion from ESXi to AHV

D. Use storage live migration

Answer: C

Explanation:

Ref: https://next.nutanix.com/installation-configuration-23/convert-existing-nutanix-vmware-

cluster-to-nutanix-only-37600

Question: 72

An administrator needs to expand a cluster based on AHV and running on Nutanix G5 hardware with a new Nutanix G7 system. The cluster is running AOS 5.10 but the operation fails when expanding the cluster. AOS is running on the new system. There are no issues discovering the node.

Why is the operation failing?

A. AOS version running on G7 is older than the version on the cluster.

B. Foundation software has not been updated on the cluster.

C. G7 hardware cannot be added to a G5 cluster.

D. EVC needs to be configured before cluster expansion

Answer: A

Explanation:

Ref: https://next.nutanix.com/installation-configuration-23/product-mixing-restrictions-37231

Question: 73

Refer to the exhibit.
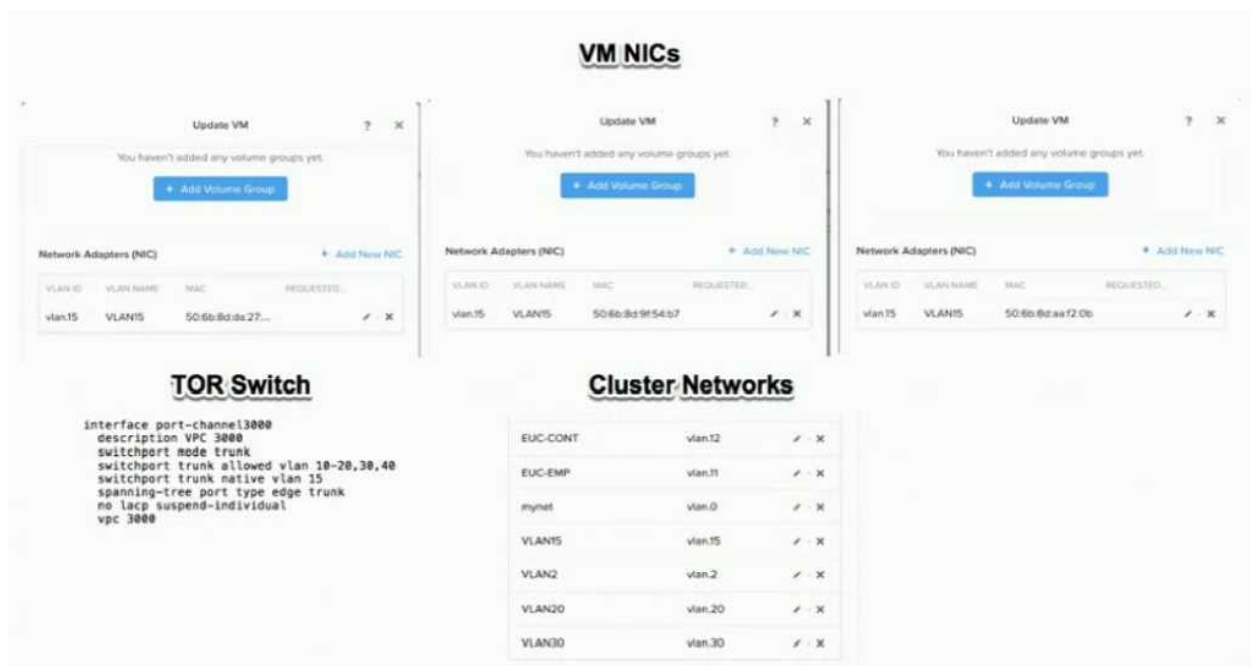
An administrator is commissioning a Nutanix Enterprise Cloud. Once the user VMs have been deployed and are running, the administrator finds that VMs on the same host are able to communicate, but are unable to communicate between hosts.

What must be changed to enable full inter-VM communications?

A. Change the network the VMs are connected to

B. Change the spanning-tree port type on the switch

C. The VMs need to have static IP addresses

D. Update the switch to specifically allow VLAN 15

Answer: D

Explanation:

Ref: https://hyperhci.com/2019/11/09/nutanix-ahv-enable-vlan-trunk-mode-on-guest-vm/

Question: 74

An administrator is deploying Nutanix Files 3.5 and needs to configure the sizing of the FSVMs for an increased number of concurrent SMB connections over the default 750.

What should the administrator do?

A. Deploy the Files VMs. power down the three FSVMs. change the CPU and RAM via Prism, and then power the three FSVMs back up

B. During installation, click Customize on the File Server Installation screen, change the number of connections, and finish the installation

C. Complete the default installation change the CPU and RAM m Prism, and then log into the File Server dashboard and change the Filer Server Properties

D. During installation, input the correct number of connections in the File Server Installation screen and complete the installation

Answer: B

Explanation:

Ref: https://portal.nutanix.com/page/documents/details?targetId=Files-v3_6:fil-file-server-manage-c.html

Question: 75

An administrator receives a notification that storage in a Nutanix cluster is unavailable. The cluster consists of five nodes and is configured with a Fault-Tolerance level of 1 (FT-1).

Upon investigation, the administrator finds the following:

• All AHV hosts are powered on and the CVMs are running

• Nodes A, B, and C are connected to one top of rack switch

• Nodes D and E are connected to a second top of rack switch

• The cluster status command run on Node A shows that CVM services on nodes D and E are down

Which issue is causing the storage outage?

A. The default gateway for the CVMs and AHV hosts is down.

B. The switch connecting Nodes D and E is down.

C. The genesis process is down on both Nodes D and E.

D. Nodes D and E are in maintenance mode.

Answer: B

Explanation:

https://hyperhci.com/2020/07/29/nutanix-cluster-services-down-troubleshooting/

Question: 76

Refer to the exhibit.
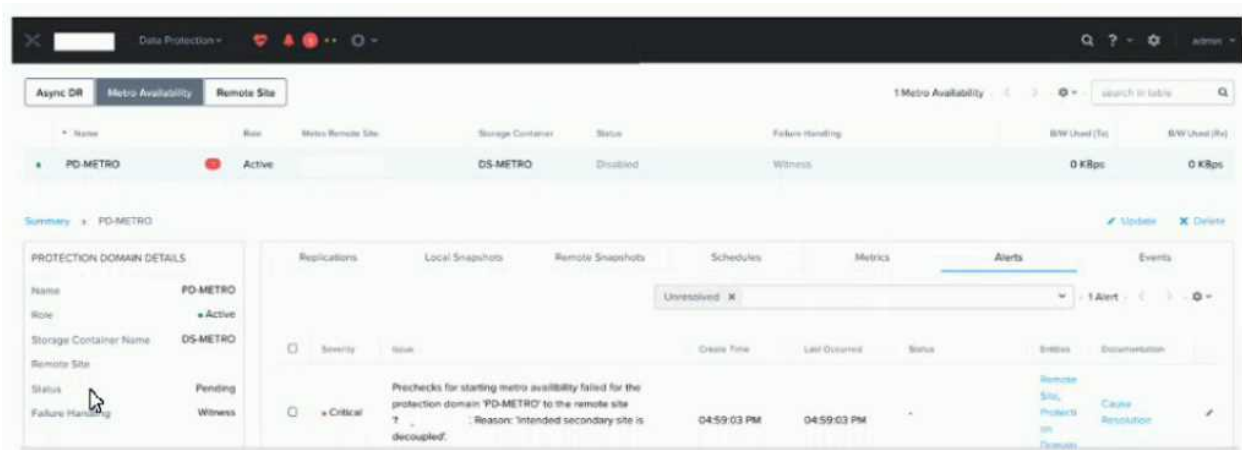
An administrator notices a critical alert on the Metro Availability Protection Domain What is causing this alert?

A. Metro Availability Protection domain is active on the remote site.

B. VMware Site Recovery Manager is handling a failover event

C. Metro Availability did not fail over and caused an outage.

D. vSphere moved VMs to the remote container, and the VMs must be moved back.

Answer: A

Explanation:

Ref: https://www.vvlsystems.com/wp-content/uploads/2016/11/BP-2009_Metro_Availability.pdf

Question: 77

An organization is planning an upgrade to AOS 5.15 and wants to understand which cluster products and/or services are supported for physical traffic isolation.

Which Nutanix component supports its network traffic being isolated onto its own virtual network?

A. Volumes

B. Objects

C. Containers

D. Files

Answer: A

Explanation:

Question: 78

An administrator is planning to deploy a Nutanix cluster to support a few high-performance VMs. This deployment will have the following considerations:

• Individual VMs will likely generate network throughputs in the range of 90-100Mbps

• Due to the configuration of the VMs, it is unlikely that a node will host more than one or two of them at a time

• Individual VMs will communicate with only a few (one or two) remote hosts at a time

• Multicast will not be used in the environment

• The hosts are connected via two 1GbE network connections

How should the administrator configure the network bonds to meet this requirement while maintaining the simplest switch configuration?

A. Configure bond0 as balance-sib

B. Configure bond0 as active-backup

C. Configure bond0 as balance-tcp

D. Configure bond0 as balance-lacp

Answer: A

Explanation:

Ref: https://portal.nutanix.com/page/documents/solutions/details?targetId=BP-2071-AHV-Networking:top_ahv_networking_best_practices.html

Question: 79

An administrator needs to replace an aging SAN and move to a hyper-converged infrastructure. The existing environment consists of the following hosts that are connected to the SAN:

• 5xAIX hosts

• 3x Hyper-V hosts

• 9xESXi hosts

• 2x physical SQL Clusters (Windows Server 2012R2 hosts)

After deploying a Nutanix AHV cluster, which two actions should the administrator take to meet the requirements? (Choose two.)

A. Deploy Volumes to support the AIX and SQL workloads.

B. Migrate the ESXI workloads to AHV using Move.

C. Deploy Files to support the AIX hosts.

D. Migrate the ESXi and Hyper-V workloads using Move.

Answer: A, D

Explanation:

Ref: https://portal.nutanix.com/#page/kbs/details?targetId=kA00e000000Cr7GCAS

Question: 80

Refer to the exhibit.
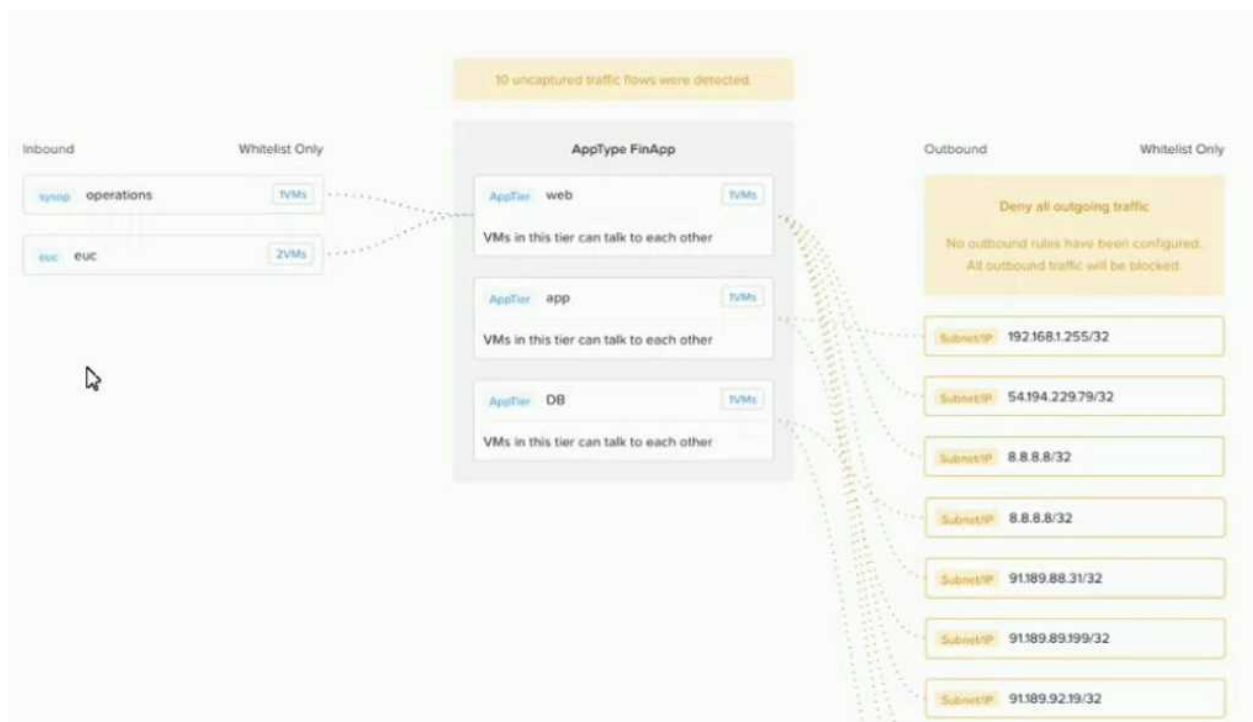
An administrator creates a security policy that isolates their financial application from accessing the Internet When viewing the policy in Prism Central, several connections from the application are outbound to the Internet.

What is causing this issue with the policy?

A. The 0.0.0.0 address was not specified in the outbound rule.

B. The blocked connections are illustrated for information only.

C. The Activate box was not checked in the rule, so it is not enforcing.

D. The policy has been left in monitor mode instead of enforcing mode.

Answer: D

Explanation:

https://portal.nutanix.com/page/documents/details?targetId=Prism-Central-Guide-Prism-v510:mul-security-policy-management-pc-c.html

Question: 81

An administrator is updating disk firmware using LCM and receives the following message:

"there have been 10 or more cluster services restarts within 15 minutes in the Controller VM"

The message appears as each drive is upgraded.

What is the reason this message is being generated?

A. A node has been rebalanced

B. A drive has been reformatted

C. A node has been rebooted

D. A drive has been ejected

Answer: C

Explanation:

Ref: https://portal.nutanix.com/page/documents/kbs/details?targetId=kA032000000TT8DCAW

Question: 82

A new Nutanix cluster is ready for production on a remote site with no IT staff. Changes to the infrastructure will cost money and probably cause a cluster stop. The administrator needs to perform a health check on the environment that should include:

• Network connectivity checks

• Network performance status

• Storage performance status

Which tool should be used to perform this test?

A. X-Ray

B. clurator_cli

C. NCC

D. diagnostic, py

Answer: C

Explanation:

Question: 83

An administrator is deploying an application using Nutanix Volumes. After configuring the volume group and connecting the guest's iSCSI initiator to the volume group, they begin performance testing.

The administrator learns that performance on the virtual disk attached to the iSCSI initiator is far less than that of a virtual disk connected directly to the VM.

Which situation is causing this condition?

A. The VM's iSCSI traffic is being routed to the data services IP subnet

B. The performance test is generating small block random 10.

C. The duster data services IP address is a bottleneck, shared with other iSCSI traffic

D. Data Locality ensures that VM attached disks are always faster than iSCSI volumes.

Answer: C

Explanation:

Question: 84

An administrator learns that some security settings in a cluster have been changed. The environment is out of compliance with required policies.

Which function should be used to revert any settings that have changed from the defaults and prevent further violations?

A. Cluster Lockdown with strong password enforcement

B. Advanced Intrusion Detection Environment (AIDE)

C. Security Configuration Management Automation (SCMA)

D. Defense Information Systems Agency STIG enforcement

Answer: C

Explanation:

Ref: http://myvirtualcloud.net/nutanix-scma-the-security-feature-that-could-save-your-organization/

Question: 85

An administrator receives reports about a Nutanix environment. The investigation finds the following;

• VMs are experiencing very high latency

• Each node is equipped with a single SSD, utilized at 95%

• Each node is equipped with three HDDs, utilized at 40%

Why are the guest VMs experiencing high latency?

A. CVMs are overwhelmed by disk balancing operations.

B. All VM write operations are going to HDD.

C. All VM read operations are coming from HDD.

D. VMs are unable to perform write operations.

Answer: C

Explanation:

Ref: https://next.nutanix.com/prism-infrastructure-management-26/disk-space-usage-high-alert-in-prism-38199

Latency Variables in a Nutanix Cluster

The following points provide you with the information regarding latency on a Nutanix cluster.

- All-flash-array nodes are provided by Nutanix, but the focus of this KB is on the two-tier (SSD and HDD) nodes. This two-tier design aims to keep frequently read data in the host (SSD) tier and Information Life Cycle Management (ILM) promotes and demotes the data from the hot tier. This provides a cost-effective solution that has variable latency response.

- Extent store : HDD and SSD together makes the extent store. However some portion of the SSDs is used for Oplog.

- Oplog: This is used for random writes where data is temporarily written and provides quick acknowledgement. This is eventually drained to an extent store.

- Cluster that are correctly sized will have a Working Set Size (WSS) that fits within the SSD tier. This ensures that the commonly accessed data on the cluster is available from the SSD. If ILM is moving data from hot to cold tier and back, it implies that the cluster is under sized and higher latencies will be experienced due to the higher cold-tier hit rate for the data reads.

- Data that is read from the cold tier (HDD - spinning disk) will have higher latency than the data that is read from the hot tier.

Question: 86

An administrator has an existing Nutanix seven-node cluster running at RF2 that must be changed to have the following capabilities:

- RF3 set for the cluster

- Performance tier deduplication

What is the minimum memory needed on the CVMs to allow for these capabilities?

A. 24GB

B. 28GB

C. 32GB

D. 20G?

Answer: B

Explanation:

Ref: https://next.nutanix.com/how-it-works-22/rf2-rf3-requirements-37206#:~:text=Controller%20VMs%20must%20be%20configured,for%20the%20feature)%20of%20memory.

Question: 87

A customer has Metro Availability configured in Automatic Resume Mode between Site A and Site B
What happens to VMs if Primary Site A has full network failure?

A. Automatic protection domain promotion in Site B. VMs automatically restart in Site B

B. VMs continue to run on Site A following an automatic disable of protection domains.

C. An administrator must unwitness in Site B and promote protection domains in Site B for VMs to restart

D. An administrator must promote protection domains in Site B for VMs to restart.

Answer: A

Explanation:

Ref: https://support-portal.nutanix.com/page/documents/details/?targetId=Web-Console-Guide-Prism-v55:sto-metro-availability-witness-c.html

Question: 88

An administrator is responsible for the following Nutanix Enterprise Cloud environment:

• A central datacenter with a 20-node cluster with 1.5PB of storage

• Five remote sites each with a 4-node cluster with 200TB storage

The remote sites are connected to the datacenter via 1GB links with an average latency of 6 ms RTT. What is the minimum RPO the administrator can achieve for this environment?

A. 0 minutes

B. 15 minutes

C. 1 hour

D. 6 hours

Answer: B

Explanation:

Ref: https://support-portal.nutanix.com/page/documents/details?targetId=Web-Console-Guide-Prism-v5_10:wc-protection-domain-wc-c.html

Question: 89

A VM does not have enough resources for the demand, which leads to performance bottlenecks. The VM is exhibiting one or more of following baseline values, based on the past 30 days:

• CPU usage > 90% (moderate), 95% (high)

• CPU ready time > 5%, 10%

• Memory usage > 90%, 95%

• Memory swap rate > 0 Kbps (no moderate value)

Which type of VM is being described?

A. Constrained VM

B. Bully VM

C. Inactive VM

D. Over-provisioned VM

Explanation:

Constrained VM

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 30 days:

- CPU usage > 90% (moderate), 95% (high)
- CPU ready time > 5% , 10%
- Memory usage > 90%, 95%
- Memory swap rate > 0 Kbps (no moderate value)

Question: 90

A Nutanix cluster is deployed with the following configuration:

- Three four-node blocks (A, B, and C)

- All Flash Redundancy Factor 2

What is the effect of simultaneous disk failures on two nodes located in block A?

A. VMs are migrated off of the nodes with disk failures.

B. Each node with a failed disk is marked as degraded.

C. VM read and write operations continue normally.

D. VMs on the nodes with failed disks are unable to write data

Answer: C

Explanation:

Ref: https://next.nutanix.com/how-it-works-22/redundancy-factor-vs-replication-factor-37486

Dual Disk Failures :

with Replication Factor = 2, we have two copies of each data block. **Also, with a 4TB Disk which is only 1TB utilised, we will have 1TB worth of blocks/data across the cluster (shorter rebuild times as we factor in the capacity utilised)**- plus with AOS proactive disk alerting, so, unless two disks are pulled at the same time, this can be a very rare occurrence of two drives failing at the same time.

Question: 91

An administrator has a VM that consumes large amounts of storage and has the following characteristics:

• Create large / sequential writes

• Data must be kept for years

• Data is normally only accessed at the end of the year to run report

The administrator decides to use Erasure Coding to save space.

Which feature should the administrator utilize to save space for this VM?

A. Inline Compression

B. Flash Mode

C. Cache Dedup

D. Post-Process Compression

Answer: D

Explanation:

Erasure coding is a method of data protection in which data is broken into fragments, expanded and

encoded with redundant data pieces, and stored across a set of different locations or storage media. The goal of erasure coding is to enable data that becomes corrupted at some point in the disk storage process to be reconstructed by using information about the data that's stored elsewhere in the array1.

In the context of Nutanix, erasure coding increases the usable capacity on a cluster. Instead of replicating data, erasure coding uses parity information to rebuild data in the event of a disk failure1. The capacity savings of erasure coding is in addition to deduplication and compression savings1.

Given the characteristics of the VM in the question (large/sequential writes, data kept for years, data accessed only at the end of the year), Post-Process Compression would be the most suitable feature to utilize to save space. This is because Post-Process Compression, as the name suggests, compresses data after it has been written to the storage, which is suitable for data that is not accessed frequently2.

Reference:

Erasure Coding | Nutanix Community

Nutanix Support & Insights

Introducing AOS 6.6: Enhanced data services and simplified … - Nutanix

Question: 92

An administrator needs to make sure an RF2 cluster can survive a complete rack failure without negatively effecting workload performance. The current cluster configuration consists of the following:

• 30 nodes: distributed 10 nodes per rack across three 42U rack

• Each nodes is configured with 40TB usable storage all flash (Cluster Total 1.2 PB Usable)

• Current cluster utilization is 900TB storage

Which configuration changes should be made to make sure that the cluster meets the requirements?

A.   Expanse the cluster by adding 3 additional nodes per rack, 9 nodes total.

B.   Expanse the cluster by adding 2 additional nodes per rack, 6 nodes total.

C.   Expanse the cluster by adding 9 nodes to a new 42U rack

D.   Expanse the cluster by adding 8 nodes to a new 42U rack

Answer: A

Explanation:

 In Nutanix, a cluster with RF2 (Redundancy Factor 2) can tolerate the failure of a single node or drive1. However, to ensure that the cluster can survive a complete rack failure without negatively affecting workload performance, we need to consider rack awareness. When rack fault tolerance is enabled, the cluster has rack awareness and the guest VMs can continue to run with failure of one rack (RF2) or two racks (RF3). The redundant copies of guest VM data and metadata exist on other racks when one rack fails2.

Given the current cluster configuration (30 nodes distributed 10 nodes per rack across three 42U racks), adding 3 additional nodes per rack (9 nodes total) would increase the redundancy of the cluster and improve its ability to withstand a complete rack failure. This is because the additional nodes would provide more storage capacity and compute resources, allowing the cluster to continue running workloads even if one rack fails.

Reference:

Understanding Fault Domains and Rack Awareness | Nutanix Community

RF2 -> RF3 | Requirements | Nutanix Community

Question: 93

An administrator needs to maximize storage potential in a six-node cluster. The container is configured with the following:

Post-process compression

Capacity deduplication

What should the administrator configure to increase space savings?

A.   Erasure coding

B.   Inline compression

C.   Reserve capacity

D.   Cache dedupe

Answer: A

Explanation:

The administrator's goal is to maximize storage potential in a cluster already configured with post-process compression and capacity deduplication. Erasure Coding (EC-X) is an effective method to further increase space savings by reducing the amount of redundancy data required for fault tolerance. It splits data into multiple chunks, which are distributed across the cluster, and parity is calculated and stored. This method is more space-efficient compared to traditional RAID or mirroring techniques, especially in environments where large data volumes need efficient storage.

Reference:

Nutanix Bible: Storage Efficiency

Nutanix University: Storage Configuration and Optimization

Question: 94

An administrator is currently using both 10g uplink with LACP and balance-tcp. A single VM should not be allowed to use more than a single 10G uplink, and both uplinks should be utilized.

Which two command should be used to configure the bond? (choose two)

A.   Ovs-vsctl set port br0-up bond_mode=balance-slb

B.   Ovs-vsctl set port br0-up bond_mode=balance-tcp

C.   Ovs-vsctl set port br0-up bond_mode=active-backup

D.   Ovs-vsctl set port br0-up other_config: bond-rebalance-interval=30000

Answer: AD

Explanation:

For a configuration where a single VM should not exceed the bandwidth of a single 10G uplink and both uplinks need to be utilized, the correct bonding mode is balance-slb (Source Load Balancing). This mode allows both uplinks to be utilized while ensuring that a single VM will not exceed the

capacity of one uplink, as traffic from each VM or "source" is assigned to one of the links in the bond. The other_config: bond-rebalance-interval=30000 command is used to set the interval at which the bonding driver will rebalance the assignment of sources to links in the bond. This helps in maintaining optimal distribution of load across the links as network conditions change.

Reference:

Nutanix Bible: Network Configuration

Nutanix University: Advanced Network Configuration

Question: 95

An organization is running a Nutanix Cluster based on AOS 5.10.x and VMware vSphere 6.7. Currently, the CVM network is segmented and Storage only nodes not present.

A new security project based on NSX is coming. VMware Distributed Virtual Switches are required. The administrator needs to prepare the environment for the new project.

Which step should the administrator use to initiate the project?

A.   Enable Nutanix Flow at the Prism Central Level

B.   Manually disable CVM network Segmentation

C.   Convert storage only nodes into vSphere nodes

D.   Enable Jumbo Frames to accommodate network frames

Answer: B

Explanation:

In preparing for the VMware NSX security project, the administrator should consider the network infrastructure and how the NSX will interact with the existing Nutanix environment. VMware NSX requires the use of VMware Distributed Virtual Switches. In the given scenario, where the CVM (Controller Virtual Machine) network is segmented and storage-only nodes are not present, the key step is to ensure that the network settings are compatible with NSX. Disabling the CVM network

segmentation allows for a unified network that supports the requirements of NSX for network virtualization and security, making it the crucial first step before any further NSX-specific configurations are applied.

Reference: Nutanix Bible, Nutanix Community discussions, VMware NSX documentation.

Question: 96

Over the period of 2 to 3 weeks, a cluster displays the following:

- Periods where Warning Alerts of memory usage over 75% are asserted

- Periods where Critical Warnings of memory usage over 90% are asserted

- Periods of slow of frozen VDI desktops have caused work stoppage or slowdown

- VDI clones have periodically not powered up when called, causing work stoppage

Which steps should be used to prioritize the administrator's troubleshooting efforts?

A. • Assess resource health on Hardware page

- Review the Analysis page for memory usage demand

- Determine the VDI workload-to-host affinity across the cluster

B. • Analyze Alert Pages for a root cause of memory problem

- Analyze VM table page to access the VM functionality

- Analyze the VDI Clone properties for possible VDI Workload stress

C. • Check Analysis page for CPU demand

- Verify VDI workload property for memory subscription

- Review the Hardware page to determine if the cluster has sufficient RAM

D. • Review Analysis Page for memory use pattern

- Alert with VDI workload demand

- Analyze current and future workload in the Capacity Runaway tab for sufficient resources

Answer: D

Explanation:

For the scenario with memory usage warnings and VDI performance issues, the best approach is to

analyze and understand the memory usage patterns and demands on the system. Option D focuses on reviewing the Analysis page to monitor memory use trends and patterns, which is crucial for identifying peak usage times or processes consuming excessive memory. The mention of alerting with VDI workload demand implies the need to monitor and possibly adjust the VDI workload to better fit within available resources. Finally, analyzing current and future workload in the Capacity Runaway tab helps in understanding if the cluster resources are sufficient for the demand, which is critical in planning for capacity management and ensuring that such issues are mitigated moving forward.

Reference: Nutanix Prism User Guide, Nutanix Community resources, VDI performance troubleshooting practices.

Question: 97

After the migration, some SQL queries take longer to execute than prior to migration.

The following SQL best practices were applied while creating the SQL VM on Nutanix:

- 8 vDisks per SQL server VM

- Database and Log files on separate vDisk

- 2 TempDB database drives and 1 TempDB log drive

What should the administrator to do improve the SQL Server performance?

A.   Redistribute existing data by creating additional database file and enable autogrowth

B.   Create multiple TempDB data files and enable autogrowth

C.   Create multiple SQL log files and disable autogrowth

D.   Redistribute existing data by creating additional database files and disable autogrowth

Answer: B

Explanation:

In the scenario where SQL queries are running slower post-migration, creating multiple TempDB data files is a recognized best practice for optimizing SQL Server performance, especially when dealing with high transaction rates or complex queries. This approach helps in distributing the I/O load across multiple files and drives, reducing the contention and wait times associated with TempDB, which is a common bottleneck in SQL Server environments. Enabling autogrowth ensures that these files can dynamically grow as needed, which helps in handling unexpected increases in database

activity without manual intervention.
Reference: Nutanix Best Practices for SQL Server, SQL Server performance tuning guidelines.

Question: 98

Refer to the exhibit.
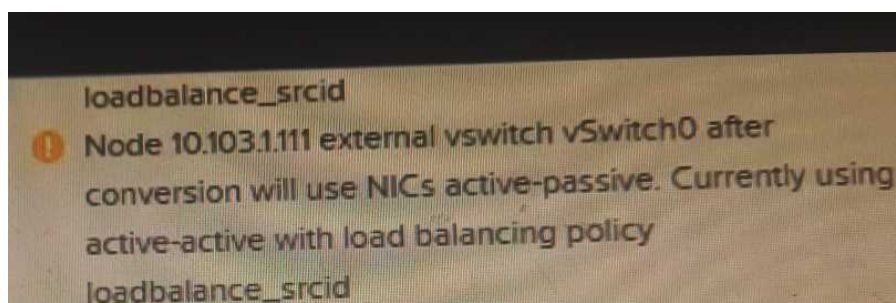
An administrator receive the warning massages shown in the exhibit while validating cluster conversion from EXSi to AHV.

What should the administrator do to address this warning in v Center Server?

A.   Keep active adapters od different speeds as active standby

B.   Remove adapters that are active but not homogeneous.

C.   Keep homogeneous adapter as active and standby

D.   Remove the standby adapters under Teaming and Failover.

Answer: C

Explanation:

When converting a cluster from ESXi to AHV and encountering warnings about network adapter configurations in VMware vCenter, it is crucial to ensure that the network adapters are homogeneous to avoid issues with network performance and reliability. Keeping homogeneous adapters as active and standby ensures that all active and standby adapters operate at the same speed and capabilities, which is essential for maintaining consistent network performance and failover capabilities. This setup helps in avoiding conflicts or performance penalties that can arise from using mixed adapter types under the same virtual switch environment.
Reference: VMware vCenter documentation, Nutanix AHV Networking Guide.

Question: 99

An administrator configure Active Directory (AD) authentication for their Nutanix environment. When login in using an AD user account, the login process takes more than one minute to complete. No delay occurs when logging a local account.

What should the administrator confirm to resolve this issue?

A.   The user search base for the group is configured correctly

B.   The domain controller being used is configured as a global catalog server.

C.   Active directory lookups are configured to use Non-Recursive mode.

D.   The service Account Username is correct for the domain.

Answer: C

Explanation:

 In a Nutanix environment, if the login process using an Active Directory (AD) user account takes more than a minute to complete, it could be due to the configuration of the AD lookups.

Active Directory lookups can be configured to use either Recursive or Non-Recursive mode. In Recursive mode, the system will look up each group that a user is a member of, then each group that those groups are members of, and so on. This can lead to a large number of lookups and potentially slow down the login process1.

On the other hand, in Non-Recursive mode, the system only looks up the direct groups that a user is a member of. This can significantly reduce the number of lookups and speed up the login process1.

Therefore, the administrator should confirm that Active Directory lookups are configured to use Non-Recursive mode to resolve this issue.

Reference:

Active Directory Authentication is slow - Takes minutes to Logon | Nutanix Community

Configuring Authentication | Nutanix Community

Solving Slow Logon Issues in Active Directory Environments

Question: 100

A customer has the following requirement for a Nutanix cluster:

Must support high-performance Nutanix Volumes iSCSI workloads

Must utilize AHV nodes

Must use 10 GbE interface

How should the customer optimize networking?

A.   Enable Jumbo Frame on just the Host

B.   Convert Cluster to ESXi and enable Jumbo Frame on Host and CVM

C.   Enable Jumbo Frames on just the CVM

D.   Enable the use of Jumbo Frame on Host and CVM

Answer: D

Explanation:

For high-performance iSCSI workloads, especially in a Nutanix environment using AHV nodes and a 10 GbE interface, enabling Jumbo Frames on both the Host and the Controller Virtual Machine (CVM) is recommended. Jumbo Frames allow for a larger payload per network packet, which reduces the overhead required to send large amounts of dat

a. Enabling Jumbo Frames on both the host and the CVM ensures that both ends of the communication channel can handle larger packets, thereby optimizing throughput and reducing latency for high-performance workloads.

Reference:

Nutanix Bible: Networking Best Practices

Nutanix University: Nutanix Network Optimization

Question: 101

A customer has a four-node cluster and is using Volume Groups to provide storage services to a SQL cluster.

In the event of a CVM failure in the cluster, what is the expected IO path of the volume group's iSCSI targets?

A.   vDisk directed at failure CVM are redirected to Data Services IP until CVM is reconnected

B.   vDisk directed to CVM that failed to disconnect and will not reconnect without manual intervention

C.   vDisk directed to failed CVM are redirected to another CVM and automatically reconnect

D.   vDisk directed at failed CVM will disconnect and reconnect when the failed CVM comes back online

Answer: C

Explanation:

In a Nutanix cluster, when a Controller Virtual Machine (CVM) fails, the iSCSI targets for the volume groups managed by that CVM are not left inoperable. Instead, the volume group's iSCSI targets (vDisks) are automatically redirected to another operational CVM in the cluster. This failover mechanism ensures that there is no interruption in service or data availability. The redirection is seamless and does not require manual intervention, allowing for continuous access to the volume group by the SQL cluster.

Reference:

Nutanix Bible: Data Protection and High Availability

Nutanix University: Resiliency and Disaster Recovery

Question: 102

Refer to the exhibit.
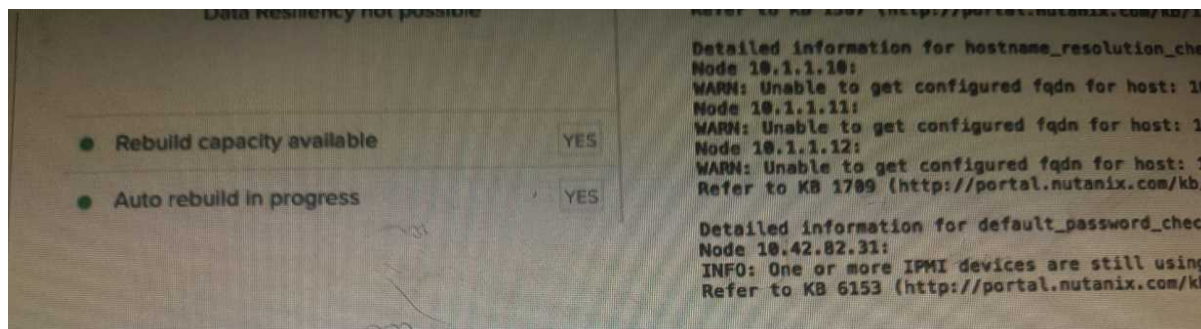
An administrator logged into Prism Element, notices the following in the home dashboard, and showing the exhibit.

Which action should the administrator take next?

A.   Configure the fqdn for the hosts indicated

B.   Troubleshoot the zookeeper server issue

C.   Re-run NCC specifying data_resiliency_check

D.   Check the hardware page for disk failures

Answer: A

Explanation:

The exhibit shows a screenshot of a Prism Element home dashboard with a notification that "Data Resiliency not possible" and warnings about the inability to get configured fully qualified domain names (fqdn) for hosts identified by their node numbers.

In this scenario, the administrator should take action A: Configure the fqdn for the hosts indicated. This is because the warnings on hostname resolution indicate issues with fully qualified domain names (fqdn) configuration for specific nodes. Configuring the fqdn for these hosts can help resolve these issues and improve the data resiliency of the Nutanix cluster1.

Reference:

Nutanix Prism Guide

Nutanix Community

Nutanix Documentation

Question: 103

The networking team makes changes to the Top of Rack switches to which the Nutanix cluster are attached. A few VMs are able to communicate with each other on the same node but are unable to connect to other parts of the network.

What is the likely cause of this issue?

A.   There is a VLAN misconfiguration on the VMs.

B.   The vNIC port is disconnected on the affected VMs.

C.   There is a VLAN misconfiguration on the switch.

D.   Jumbo Frame are misconfigured across ports.

Answer: C

Explanation:

When VMs on the same node can communicate but fail to connect to other parts of the network following changes made to Top of Rack switches, the issue often stems from a VLAN configuration error on the switches. VMs on the same node communicating successfully indicates that the local switch configuration is intact, but inability to reach external network segments points to an incorrect VLAN setup on the broader network, likely introduced during the recent changes to the Top of Rack switches.
Reference: Nutanix Networking Guide, Troubleshooting Network Connectivity in Nutanix.

Question: 104

An administrator has a 32-node hybrid cluster with CPU, RAM and storage utilization of 80%. A database VM is configured with VM Flash.

What is causing this IO latency?

A.   Controller VM is experiencing high CPU ready time.

B.   Curator scans causes by ILM constantly moving data.

C.   VM Flash Mode reduces SSD tier capacity for VMs.

D.   Database VM is experiencing high CPU ready time.

Answer: B

Explanation:

In a Nutanix cluster, I/O latency can be affected by several factors. Given the scenario where a 32-node hybrid cluster is experiencing I/O latency, one possible cause could be the Information Life Cycle Management (ILM) constantly moving data due to curator scans1.

In a Nutanix cluster, ILM is responsible for managing data placement across different storage tiers. It promotes frequently accessed data to higher-performance tiers (like SSDs) and demotes less frequently accessed data to lower-performance tiers (like HDDs)1. This process involves moving data around, which can cause I/O operations to take longer, leading to increased latency1.

If the working set size (WSS) exceeds the SSD tier capacity, ILM will have to constantly move data between the SSD and HDD tiers to accommodate new dat

a. This constant data movement can lead to increased I/O latency1.

Therefore, if curator scans caused by ILM are constantly moving data, it could be the reason for the observed I/O latency in this scenario.

Reference:

Disk I/O Latency on a Nutanix Cluster | Nutanix Community

Nutanix Volumes - Recommendations And Best Practices

Nutanix Support & Insights

Expand Cluster with Nodes with Higher NIC SPEED (25 GBPS) | Nutanix …

[Scaling Up VM Storage Performance on AHV – Volume Group … - Nutanix]

[About support for Nutanix segmented iSCSI network | Managing AHV …]

Question: 105

An administrator is deploying a new application to a Nutanix Enterprise Cloud. The application requires a security to prevent unauthorized access. The application also uses many non-standard ports that are unique to it. Security should not be changed for existing applications.

What should the administrator do to meet these requirement?

A.   Use existing categories for the VMs. and create new security policies to use the existing categories.

B.   Use existing categories for the VMs and modify existing security policies to include the specific port.

C.   Create new categories for the VMs, and create new security policies that include the new categories.

D.   Create new categories for the VMs, and modify existing security policies to include the new categories.

Answer: C

Explanation:

To ensure the new application is securely deployed without affecting existing applications, the administrator should create new categories for the VMs hosting the new application. This approach allows for targeted application of security policies without impacting other applications. After creating these new categories, the administrator should then create new security policies that incorporate these categories and specify the unique, non-standard ports used by the application, ensuring that security is tailored specifically to the new application's needs.
Reference: Nutanix Prism Central Guide, Nutanix Security Configuration Best Practices.

Question: 106

A CEO asks the IT administrator to provide a list of required resources to protect current workloads and the two new SQL servers from a disaster. The Nutanix environment is managed by Prism Central.

Which option explains how to meet the CEO's request?

A.   In Capacity Runway, select Optimize Resources and select all VMs that must be protected.

B.   Create a new project and assign the VMs to it to get compute and storage requirements.

C.   Create a new scenario based on a new cluster based on a VM Profile and select Recommend.

D.   Create a new Recovery policy by selecting the VM that needs to be protected and get hardware requirements.

Answer: D

Explanation:

  In a Nutanix environment managed by Prism Central, protecting workloads and SQL servers from a disaster involves creating a recovery policy. A recovery policy in Nutanix is a set of rules that define how data is protected and recovered in the event of a disaster1.

Creating a new recovery policy involves selecting the virtual machines (VMs) that need to be protected and specifying the hardware requirements for the recovery environment1. This includes the compute and storage resources needed to run the protected VMs in the recovery site1.

Once the recovery policy is created, Nutanix's built-in data protection and disaster recovery

capabilities can ensure that the protected VMs can be quickly and efficiently recovered in the event of a disaster2. This includes capabilities such as efficient snapshot, cloning, and replication capabilities to provide a higher level of protection at a lower cost2.

Therefore, to meet the CEO's request, the IT administrator should create a new Recovery policy by selecting the VM that needs to be protected and get hardware requirements.

Reference:

Designing, Optimizing and Scaling Microsoft SQL Server - Nutanix

Nutanix Data Disaster Recovery - Protect Apps & Data | Nutanix

Recommendations For Leap And Supported Service-level … - Nutanix

Cloud Disaster Recovery Services | Nutanix

Nutanix – High Availability and Data Protection

Question: 107

An administrator is trying to correct high cluster IOPs and Cluster Controller Latency. Networking is the suspected issue.

Which networking parameters should be configured in the Nutanix cluster?

A. Bond State and network latency

B. Number of NICs connected and network latency.

C. Number of NICs connected and frame size

D. Number of NICs connected and bond state.

Answer: C

Explanation:

When addressing high cluster IOPS and Cluster Controller Latency where networking is suspected to be the issue, it is essential to check the network configuration settings that can directly impact data transfer and latency. The correct answer is to adjust the "Number of NICs connected" and "frame size." Increasing the number of Network Interface Cards (NICs) connected can improve the network throughput and distribute the load more evenly. Adjusting the frame size, particularly setting larger

frames (Jumbo Frames), can reduce overhead and improve network efficiency by allowing more data to be transmitted with fewer packets.

Reference:

Nutanix Bible: Networking Considerations

Nutanix University: Network Performance Optimization

Question: 108

An administrator needs to configure snapshots for DR scenarios. The databases get refreshed on Friday nights regularly. The search service application re-indexes the new application on Saturday nights regularly. The remaining front-end and middle tier VMs are static but do get minor version updates weekly.

The administrator needs to have 2 weeks of daily snapshots for all the VMs in an app group and 2 weeks application consist local snapshots only on Fridays, Saturdays and Sundays on the same group of VMs.

Which two options should the administrator use to configure snapshots?

A. Create a schedule in a protection domain for all applicable VMs to snap daily with application consistency enabled with 6 days of retention and with no application consistency and 14 days local retention.

B. Create two consistency groups in a protection domain, one for front-end and middle tier apps with no application consistency, one for database and Search apps with application consistency, and apply the correct schedule to both groups.

C. Create one protection domain for all VMs in an application group with scheduled daily non-application consistent snapshots and another protection domain for all VMs in an application group with scheduled Friday. Saturday, Sunday application consistent snapshots.

D. Create a protection domain for all VMs

Answer: C

Explanation:

To meet the requirement of having two weeks of daily snapshots and application-consistent snapshots on specific days (Friday, Saturday, Sunday), the best approach is to use two separate protection domains. This setup allows for greater flexibility in managing retention policies and ensuring application consistency. One protection domain will handle daily snapshots without application consistency for regular backups, and the other will handle application-consistent snapshots for critical times when databases and applications are updated, ensuring data integrity during these operations.

Reference:

Nutanix Bible: Data Protection and DR

Nutanix University: Creating and Managing Protection Domains

Question: 109

An administrator needs to install prism central for their 2550 multi-cluster environment.

How should they deploy the application?

A. Deploy a large 3-VM Prism Central instance

B. Deploy a large 1-VM Prism Central instance.

C. Deploy a small 3-VM Prism Central instance.

D. Deploy a small 1-VM Prism Central instance.

Answer: A

Explanation:

For managing a multi-cluster environment with a total of 2550 VMs, deploying a large 3-VM Prism Central instance is advisable. This setup provides the necessary scalability, redundancy, and performance to efficiently manage such a large number of VMs across multiple clusters. A 3-VM configuration ensures high availability and fault tolerance, crucial for maintaining consistent operations and management across the clusters.

Reference:

Nutanix Bible: Prism Central Deployment

Nutanix University: Scaling and Managing Large Environments

Question: 110

An administrator recently added in 3 nodes to an existing 5 node cluster. While 1 node came with its own block, the other 2 nodes where added to an existing share. After adding the nodes, the administrator sees that the hardware tab displays the correct number of nodes, but incorrect position in the diagram tab.

What should the administrator do to resolve the issue?

A. Check the factory_config.json for all 3 nodes

B. SSH into CVM and perform genesis restart on each CVM

C. SSH into the CVMs and run genesis acropolis stop; cluster start

D. Check the factory_config. json for the two single nodes.

Answer: A

Explanation:

When nodes are added to a Nutanix cluster and there is a discrepancy in the position or configuration as shown in the hardware diagram tab, it's essential to check the factory_config.json file on all newly added nodes. This file contains important configuration details that define how each node is

identified and operates within the cluster. Incorrect or inconsistent settings in the factory_config.json can lead to display and configuration errors in the Prism interface. Correcting any discrepancies in this file will help resolve issues with node identification and display in the diagram tab.

Reference:

Nutanix Bible: Cluster Expansion and Configuration

Nutanix University: Troubleshooting Hardware Configuration Issues

Question: 111

The following critical Availability Alert displays in prism Central:

Availability Zone configured in Protection Policy PP-BCA-1HR is not accessible.

The protection Policy PP-BCA-1HR includes a business critical application with a 1-hour snapshot frequency.

What is causing this issue?

A. There is a scheduled outage for the Availability Zone referenced in Protection Policy PP-BCA-1HR.

B. Workloads included in PP-BCA-1HR are no longer within their intended RPO.

C. Prism Central in the Availability Zone for PP-BCA-1HR is unavailable.

D. NearSync replication between the Availability Zones has fallen out of scope.

Answer: B

Explanation:

The alert for Protection Policy PP-BCA-1HR indicating critical availability issues is most likely due to the workloads included in the policy no longer meeting their intended Recovery Point Objective (RPO). A 1-hour snapshot frequency implies a stringent RPO, which if not maintained, could result in data loss beyond acceptable business limits. This scenario typically generates a critical alert in Prism

Central, especially when the snapshots required to meet the RPO are not completed as scheduled
due to any number of issues such as resource constraints or network issues.
Reference: Nutanix Prism User Guide, Nutanix Data Protection Best Practices.

Question: 112

The following alert appears on the file server alerts tab in the file server dashboard:

File Server FS47-SS has multiple VMs on a single node

Which two events can generate this alert? (choose two)

A. A three-node duster hosting the file server is undergoing AOS upgrade.

B. A node failed in a three-node cluster.

C. A Nutanix file with four hie server VMs is deployed on a three-node duster.

D. A node is set to the maintenance mode in a three node cluster.

Answer: B D

Explanation:

An alert of this nature in the file server dashboard usually indicates issues related to node availability
within a cluster. Specifically, the failure of a node in a three-node cluster (Option B) can lead to
insufficient resources to handle all tasks, which might trigger such an alert. Additionally, setting a
node to maintenance mode in a three-node cluster (Option D) also disrupts service availability and
could generate a similar alert, as the remaining nodes might struggle to handle the load or maintain
data redundancy.
Reference: Nutanix AOS User Guide, Nutanix Files Documentation.

Question: 113

A systems administrator configures a protection domain replication between two Nutanix clusters. After the first successful replication , the administrator tests DR by clicking activate on the remote cluster.

While VMs are active on the remote cluster, the protection domain is marked as active on both clusters.

What steps are required to return both clusters to their original state?

A. 1. On the remote site, deactivate the Protection Domain using ncli

2. On the primary site, select the Protection Domain and dick migrate

B. 1. On the remote site, promote the Protection Domain

2. On the primary site, change the Protection Domain state from Decoupled to Disabled

3 Enable the original primary site as remote site

C. 1. On the prima7 site, suspend replications

2. On the remote site, deactivate the Protection Domain using ncli

3. On the remote site, migrate the protection domain back to the primary site

D. 1 On the remote site, restore the snapshots from the Protection Domain

2. On the remote site, select the Protection Domain and migrate to the primary site

Answer: C

Explanation:

To revert both clusters to their original state after testing DR by activating VMs on the remote cluster,

the administrator needs to ensure that replications are suspended to prevent any further changes
during the process. The steps include suspending the replications on the primary site to prevent any
conflicts or data loss (Step 1), deactivating the Protection Domain on the remote site using ncli to
stop the DR environment (Step 2), and then migrating the protection domain back to the primary site
(Step 3). This sequence ensures that both clusters return to their original states with minimal
disruption.
Reference: Nutanix Disaster Recovery Guide, Nutanix Administration Guide.

Question: 114

An organization subscribes to field advisories from the Nutanix support portal. An administrator
receives an email about a rare problem that could cause cluster instability and affect the entire AOS
cluster. The organization is running Vmware vsphere 6.x on Nutanix.

What action should be taken to resolve this issue?

A. Open Prism Element and select Upgrade Software to update AOS.

B. File a ticket to Nutanix Support and provide the Field Advisory ID.

C. Use VMware Update Manager to update the cluster.

D. In Prism Central, select Life Cycle Management and perform LCM update.

Answer: A

Explanation:

When receiving a field advisory from Nutanix support regarding a rare problem that could destabilize
the cluster, the recommended action is to update AOS. This can be done via Prism Element by
selecting "Upgrade Software." This method ensures that any patches or updates that address the
identified issue are applied directly to the AOS environment, mitigating any potential risks associated
with the reported problem. Since the organization uses VMware vSphere, the update specifically
targets the AOS to ensure the underlying infrastructure supporting vSphere remains stable.
Reference: Nutanix Support Portal, Nutanix Field Advisories, Prism Element Guide.

Question: 115

During the Knowledge Transfer, the customer askes where to find the details about their Nutanix environment, such as IP addresses, storage containers, and configuration.

Where can the consultant find this information?

A. Support Portal

B. As-Built Guide

C. Test Plan

D. Tech Checklist

Answer: B

Explanation:

The As-Built Guide is a comprehensive document typically prepared at the end of a Nutanix deployment project. It includes detailed information about the Nutanix environment, such as IP addresses, storage container settings, hardware and software configurations, and other deployment specifics. This document serves as a reference for the customer to understand their deployed infrastructure and for any future modifications or troubleshooting needs.

Reference:

Nutanix Bible: Documentation and Reporting

Nutanix University: Deployment Best Practices

Question: 116

A customer is deploying Nutanix AHV clusters over hundreds of remote sites worldwide. Prism Central will be used to centrally manage all clusters. Customer security policy requires the use of MS Active Directory (AD).groups to authenticate all network devices.

Which method should be consultant use to meet the requirements?

A. Integrate AD authentication on all CVMs.

B. Integrate AD authentication on Prism Central Only.

C. Proxy Prism Element traffic through Prism Central.

D. Integrate AD authentication on all Prism Element Clusters.

Answer: D

Explanation:

When managing multiple Nutanix AHV clusters across various locations with a centralized management through Prism Central, it is essential to secure each cluster individually. Integrating Microsoft Active Directory authentication directly on all Prism Element clusters allows each site to independently authenticate users while still being centrally managed. This method aligns with security policies that require network devices to authenticate via AD groups, ensuring that local administrative actions at each site are also secured under the same policy.

Reference:

Nutanix Bible: Security and Authentication

Nutanix University: Security Configuration

Question: 117

Where can a consultant find Nutanix Enablement Starter Packs (ESPs)?

A. In the Partner Portal

B. In the Nutanix .NEXT Community Forum

C. In the Support Portal

D. In the Services section of the Nutanix website.

Answer: A

Explanation:

Nutanix Enablement Starter Packs (ESPs) are resources designed to aid Nutanix partners in ramping up their knowledge and capabilities with Nutanix solutions. These packs typically include training materials, guides, promotional materials, and more. They are most commonly found in the Nutanix Partner Portal, which is designed to support Nutanix partners in their sales and technical education efforts.

Reference:

Nutanix Bible: Partner Resources

Nutanix University: Partner Enablement Programs

Question: 118

A consultant has deployed a Nutanix cluster with AOS 5.10.x, then discovers the customer's environment is running on AOS 5.6.x. The consultant decides to re-image the cluster using the foundation Java applet. During the Foundation discovery, all cluster nodes display a status of Unavailable.

What should the consultant do to resolve the issue?

A. Use the Phoenix ISO

B. Destroy the cluster.

C. Restart the Genesis service on the cluster.

D. Reset the IPMI IP addresses.

Answer: A

Explanation:

When a Nutanix cluster needs to be re-imaged and nodes are showing as 'Unavailable' during the discovery process in the Foundation tool, it is often due to a deeper issue with the nodes' existing configuration or software state. Using the Phoenix ISO to re-image the nodes is the recommended approach. The Phoenix ISO can be used to completely reinstall the software on the nodes, ensuring that any problematic configurations or software issues are wiped clean, allowing for a fresh

installation with the desired version of AOS.

Reference:

Nutanix Bible: Re-imaging Clusters

Nutanix University: Troubleshooting Installation Issues

Question: 119

A consultant needs to verify the make and model of the systems that will be imaged with Foundation. The consultant does not have the Bill of Materials (BOM) available to review.

When should the consultant verify the make and model to prepare for the cluster deployment?

A. During the Foundation Process

B. While conducting the Tech Review Call

C. Upon arriving on-site

D. When reviewing the Statement of Work (SOW)

Answer: B

Explanation:

The make and model of the systems should be verified during the Tech Review Call. This step is essential to ensure that all necessary information is collected and verified before any physical interaction with the hardware. Verifying these details during the call helps in preparing adequately for the cluster deployment, allowing the consultant to anticipate and mitigate any compatibility or configuration issues before arriving onsite.
Reference: Nutanix Foundation Guide, Pre-installation Checklist Documents.

Question: 120

A consultant is onsite with a customer running Foundation VM (FVM) and discovers that there is no connectivity between the FVM and their laptop. The consultant verifies the following:

* The consultant's laptop and Nutanix nodes are plugged into a flat switch.

* The laptop, switch and nodes are plugged into supported power supplies.

* The laptop network adapters and FVM are configured with their corresponding IP addresses.

What is the cause for the connectivity failure to the FVM?

A. The switch is not plugged into the power supply.

B. Desktop Firewall is blocking ping requests.

C. Network cables are not connected.

D. Laptop WiFi configured to use DHCP.

Answer: B

Explanation:

If there is no connectivity between the Foundation VM (FVM) and the consultant's laptop despite all devices being properly powered and correctly configured, the likely cause is the desktop firewall on the consultant's laptop blocking ping requests. This is a common issue that can prevent communication over the network even when all other network configurations are correct. The consultant should check the firewall settings and allow the necessary permissions for network communications to establish connectivity.
Reference: Nutanix Network Troubleshooting Guide, Nutanix Installation and Configuration Documentation.

Question: 121

Refer to the exhibit.
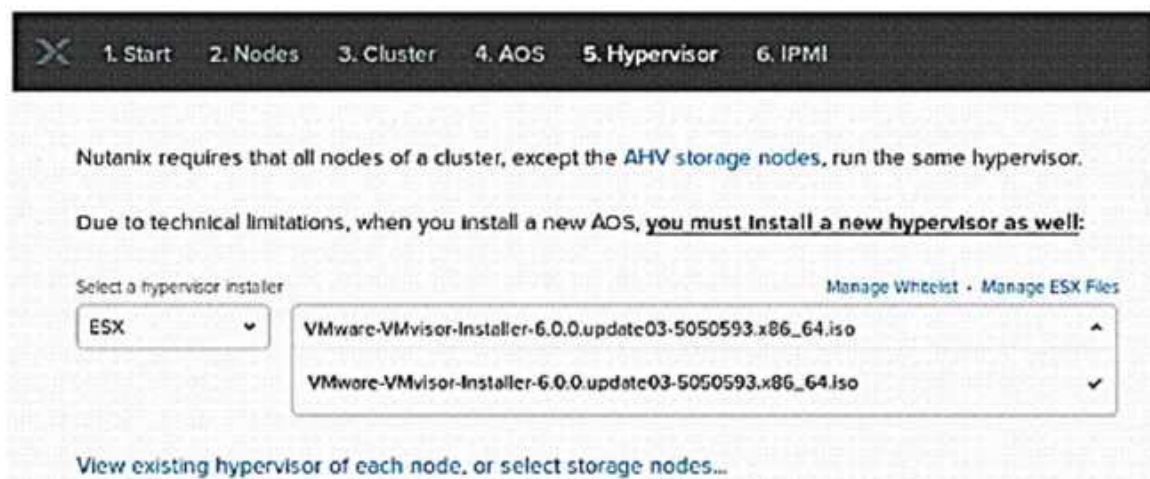
A consultant is installing AOS 5.10 and ESXi 6.5 on three nodes. During the Foundation process, ESXi 6.5 is not available as one of the choices for hypervisor.

Which solution should the consultant use?

A. Upload ESXi image to /home/Nutanix/foundation/nos/hypervisor/esx.

B. Restart Foundation VM and refresh Foundation page.

C. Update the Foundation whitelist from the support portal.

D. Upload ESXi image to /home/Nutanix/foundation/isos/hypervisor/esx.

Answer: D

Explanation:

If ESXi 6.5 is not available as one of the choices for hypervisor during the Foundation process, the consultant should upload the ESXi image to the specific directory where Foundation expects to find hypervisor images. The correct path for this operation is /home/Nutanix/foundation/isos/hypervisor/esx. This allows the Foundation tool to detect and use the ESXi image for installation on the nodes.
Reference: Nutanix Foundation Guide, Nutanix Support Documentation.

Question: 122

A consultant is planning an installation and needs to collect configuration items to be used during the install. The data needed from the customer are IP addresses, Gateway, DNS servers, and NTP Servers.

Which Cluster Deployment document must be completed with the customer?

A. Project Plan

B. Operations Guide

C. Questionnaire

D. Technical Checklist

Answer: D

Explanation:

The document that needs to be completed with the customer to collect configuration items such as IP addresses, Gateway, DNS servers, and NTP Servers is the Technical Checklist. This checklist is designed to ensure all necessary technical information is gathered prior to the installation, enabling a smooth and efficient setup process.
Reference: Nutanix Cluster Deployment Guide, Pre-installation Planning Documentation.

Question: 123

A consultant is deploying a Nutanix cluster at a customer location. The consultant will be deploying the latest AOS along with the latest Nutanix hardware.

Which three references should the consultant review prior to this installation? (Choose three.)

A. Release Notes

B. Software Product Interoperability

C. Field & Security Advisories

D. End-Of-Life (EOL) Information

E. Acropolis Advanced Administration Guide

Answer: A, B, C

Explanation:

When deploying the latest AOS along with the latest Nutanix hardware, it is essential for the consultant to review multiple sources of information to ensure a successful installation. Release Notes provide details about new features, improvements, and known issues in the latest version of AOS. Software Product Interoperability outlines compatibility between different software versions, ensuring that the AOS and any integrated applications or environments will function correctly. Field & Security Advisories inform about potential security issues and recommended practices to avoid common pitfalls or security risks.

Reference:

Nutanix Bible: Documentation and Release Information

Nutanix University: Installation and Security Best Practices

Question: 124

A consultant is performing a Nutanix Cluster installation on Dell XC Core hardware. The consultant decides to use Foundation Portable for Mac to perform the installation. When the consultant arrives onsite, Foundation Portable is unable to locate the new nodes.

Which log should the consultant check to troubleshoot this issue?

A. /home/nutanix/foundation/log

B. ~/data/logs/foundation.out

C. foundation.app/contents/resouces/log

D. ~/data/logs/foundation

Answer: B

Explanation:

For troubleshooting issues with Foundation Portable on Mac not locating new nodes, the consultant should check the ~/data/logs/foundation.out log. This log file contains detailed operational entries that describe the activities of the Foundation tool, including any errors encountered during the node discovery process. This can provide insights into why the nodes are not being detected and guide the consultant on the necessary corrective actions.

Reference:

Nutanix Bible: Foundation Deployment and Troubleshooting

Nutanix University: Foundation Tool Usage

Question: 125

A consultant is imaging a Nutanix cluster with VMware ESXi. Foundation returns an error that the media is not a supported ISO. The consultant checks the whitelist file in Foundation and confirms that the version of the ISO is not listed.

Which three actions should the consultant take to resolve this issue? (Choose three.)

A. Replace and save whitelist file in Foundation

B. Obtain the MD5 checksum of the ISO and confirm MD5 checksum of ISO is listed.

C. Download the iso_whitelist.json from the Support portal.

D. Edit the whitelist file in Foundation.

E. Restart the imaging process in Foundation.

Answer: A, D, C

Explanation:

When encountering an error related to unsupported ISO media during the imaging process, and the ISO version is not listed in the whitelist file, the consultant should take several steps to resolve the issue. Replacing and saving the whitelist file in Foundation ensures that the latest compatibility data is used. Downloading the iso_whitelist.json from the Support portal provides the most recent and comprehensive list of supported ISO versions. Editing the whitelist file in Foundation allows the consultant to manually add or update entries to include the ISO in question, ensuring the imaging

process can proceed.

Reference:

Nutanix Bible: Foundation Imaging and Compatibility

Nutanix University: Handling Foundation Errors

Question: 126

To prepare for a new Nutanix installation, a consultant downloads the Foundation VM, imports the VM to their Desktop Virtualization Solution, and powers on the VM. The IPv4 static address on the host workstation and the Foundation VM have been configured, but pings between them fail.

Which two troubleshooting steps should the consultant perform? (Choose two.)

A. Remove and re-import the Foundation VM to ensure the virtual NIC is set to Host-Only.

B. Verify the virtual NIC in the Foundation VM is bound to the correct physical Host adapter.

C. Confirm the IP addresses and subnet masks are correct.

D. Verify the virtual NIC in the Foundation VM is bound to the correct wireless network adapter.

Answer: A C

Explanation:

When facing connectivity issues between the host workstation and the Foundation VM, ensuring proper network configuration is crucial. Removing and re-importing the Foundation VM can help reset any configuration issues, particularly ensuring that the virtual NIC is set to the correct mode, such as Host-Only, to facilitate direct communication with the host. Confirming the IP addresses and subnet masks ensures that both the host and the VM are on the same network segment, which is essential for successful communication. This step verifies that there are no IP configuration errors causing the connectivity issue.

Reference:

Nutanix Bible: Foundation VM Setup and Configuration

Nutanix University: Foundation VM Networking Configuration

Question: 127

A customer wants to use NIC teaming on an ESXi host using a vSphere Standard Switch configured with the Route based on physical NIC load load balancing option. The customer does not see the option when editing the Teaming and Failover settings for the switch.

How should the consultant resolve this issue?

A. Change the load balancing option on the switch.

B. Add a vSphere Distributed Switch

C. Add another physical NIC to the team.

D. Install a vCenter server to manage the switch

Answer: D

Explanation:

For a customer to use NIC teaming with the "Route based on physical NIC load" load balancing option on an ESXi host using a vSphere Standard Switch, they need vCenter Server. This specific load balancing method is not available on a vSphere Standard Switch without vCenter management, as it requires vSphere Distributed Switch capabilities that are managed via vCenter Server. By installing a vCenter server, the customer can upgrade from vSphere Standard to Distributed Switches and access more advanced features including the desired NIC teaming option.
Reference: VMware vSphere Documentation, Nutanix Bible.

Question: 128

Refer to the exhibit.

A system administrator is using Range-Autofill tool to assign IP addresses to setup a multi-block cluster based on the following configuration:

Block Serial #	Node ID	Hypervisor Host Name (FQDN)	Hypervisor Mgmt IP	IPMI IP	CVM IP
18GM3E430018	A	RW-P-NX1A	10.100.9.161	10.100.9.181	10.100.9.171
	B	RW-P-NX1B	10.100.9.162	10.100.9.182	10.100.9.172
18GM3E430027	A	RW-P-NX2A	10.100.9.163	10.100.9.183	10.100.9.173
	B	RW-P-NX2B	10.100.9.164	10.100.9.184	10.100.9.174

Which additional changes must be made during the Foundation process to configure the cluster correctly?

A. Change host names

B. Reorder block serial

C. Change IP address

D. Reorder blocks

Answer: A

Explanation:

Referring to the exhibit and considering the setup of a multi-block cluster, the necessary change during the Foundation process would be to adjust the host names (Option A). The hostnames provided in the range Autofill seem to be out of order or incorrectly assigned based on the block serial numbers and node arrangement. Correctly naming the hostnames according to a logical or systematic naming convention during the setup helps in cluster management and operations post-deployment.
Reference: Nutanix Foundation Tool Guide, Cluster Configuration Best Practices.

Question: 129

After uploading a hypervisor ISO during the Foundation process, a consultant sees a message that the MD5 sum for the hypervisor is not found in the Whitelist file.

Which step should the consultant take next to resolve this issue?

A. Download the hypervisor ISO again from the vendor website.

B. Restart the Foundation process and upload the hypervisor again.

C. Download the latest hypervisor ISO whitelist file from Nutanix portal.

D. Check the hypervisor version in the Nutanix Compatibility Matrix.

Answer: C

Explanation:

When a consultant sees a message indicating that the MD5 sum for the hypervisor is not found in the Whitelist file after uploading it during the Foundation process, the appropriate step is to download the latest hypervisor ISO whitelist file from the Nutanix portal (Option C). This file contains the approved checksums for various ISO images, ensuring that the hypervisor ISO being used is verified for compatibility and integrity.
Reference: Nutanix Foundation Guide, Nutanix Support Portal.

Question: 130

A consultant is viewing an ESXi host via console without external network connectivity.

Which two IP addresses can be used to connect to the CVM (Choose two.)

A. 192.168.5.253

B. 192.168.5.2

C. 192.168.5.254

D. 192.168.5.1

Answer: A C

Explanation:

In the scenario where a consultant is viewing an ESXi host via console without external network connectivity and needs to connect to the Controller Virtual Machine (CVM), the typical IP addresses used for such connections in a Nutanix environment are in the 192.168.5.x range. Specifically, the IP addresses for CVMs often set by default or during initial configuration, such as 192.168.5.253 and 192.168.5.254 (Options A and C), can be used. These addresses are generally reserved for internal CVM communications and can be accessed through the host's internal network configurations. Reference: Nutanix Cluster Installation Guide, Default Nutanix Network Configurations.

Question: 131

A customer wants to expand an existing cluster with three additional nodes. After running the Foundation process on the new nodes, the customer realizes that the wrong IPs where used and the nodes are configured on a different network. The customer decides to create a new cluster instead.

Which method should be used to recreate the cluster?

A. Log into IPMI and use cluster create command to create the cluster.

B. Log into CVM and use cluster create command to create the cluster.

C. Log into Hypervisor and use cluster create command to create the cluster.

D. Foundation all nodes again and create the cluster.

Answer: D

Explanation:

When nodes are mistakenly configured with incorrect IP addresses and are on a different network, the most effective way to address this is to re-run the Foundation process. By using Foundation, the nodes can be completely re-imaged with the correct network settings and then properly integrated into a new cluster. This ensures that all hardware and software configurations align with the intended network and cluster settings, avoiding potential conflicts and issues that might arise from manual adjustments.

Reference:

Nutanix Bible: Cluster Initialization and Foundation

Nutanix University: Using Foundation for Node Deployment

Question: 132

A consultant successfully installs the Foundation VM on a laptop and needs to ensure the VM can communicate externally.

Which two configuration changes should the consultant make next? (Choose two.)

A. Ensure the vNIC is set to bridged adapter.

B. Configure the static IP address through the desktop virtualization software.

C. Open terminal and configure via ifconfig command.

D. Run the set_foundation_ip_address application on the VM desktop.

Answer: A, D

Explanation:

To ensure that the Foundation VM can communicate externally, the virtual network interface card (vNIC) should be set to a bridged adapter. This setting allows the VM to appear as a unique entity on the network, receiving its own IP address accessible from outside the host machine. Additionally, running the 'set_foundation_ip_address' application on the VM desktop enables the consultant to configure a specific, reachable IP address for the Foundation VM, ensuring it can communicate effectively with external network resources and devices.

Reference:

Nutanix Bible: Networking Setup for Foundation

Nutanix University: Foundation VM Configuration

Question: 133

A consultant is setting up a new vSphere cluster. Customer requirements are as follows:

* VMs should automatically failover to another host if the host crashes

* Host CPU and Memory resources should be evenly balanced

* New VMs should be placed on the host with the most resources available

Which two settings should be turned on to meet the requirements? (Choose two.)

A. vShpere DRS

B. vSphere HA

C. vSphere vMotion

D. vSphere Power Management

Answer: A, B

Explanation:

To meet the customer requirements for automatic failover and resource balancing in a vSphere environment, two specific features need to be enabled: vSphere High Availability (HA) and

Distributed Resource Scheduler (DRS). vSphere HA ensures that VMs automatically restart on other hosts in the event of a host failure, providing high availability. vSphere DRS balances computing workloads with available resources in a vSphere environment, ensuring that resources are used efficiently and that new VMs are placed on hosts with the most available resources.

Reference:

Nutanix Bible: vSphere Integration

Nutanix University: Configuring vSphere Features

Question: 134

A consultant configures an ESXi cluster which will utilize a vSphere Distributed Switch (vDS). The consultant has just migrated the first host to the dvSwitch when several alerts appear within Prism Element regarding Host-to-CVM connectivity.

What is causing these alerts?

A. The consultant migrated the CVM Backplane and VM network adapter over to the vDS.

B. The consultant migrated the CVM svm-iscsi-pg network adapter over to the vDS.

C. The consultant migrated the CVM Backplane network adapter over to the vDS.

D. VLAN tags are incorrectly configured on the vDS port groups.

Answer: A

Explanation:

When migrating an ESXi host to a vSphere Distributed Switch (vDS), it's crucial to correctly configure network adapters, including those for the Controller Virtual Machine (CVM). If the consultant migrated both the CVM backplane and the VM network adapter to the vDS, this could disrupt host-to-CVM connectivity if not configured correctly on the vDS. Such a setup requires precise configuration of network settings and VLAN tags to maintain seamless connectivity and avoid communication alerts in Prism Element.

Question: 135

Which Nutanix feature creation is described in the Knowledge Transfer?

A. Calm Blueprints

B. REST API

C. Self Service Portal

D. Data Protection Domain

Answer: A

Explanation:

The Nutanix feature that involves creation as described in the Knowledge Transfer is "Calm Blueprints." Nutanix Calm provides application automation and lifecycle management capabilities that are reflected in Calm Blueprints. These blueprints define the application's architecture, such as services, dependencies, and associated metadata, and are used to automate the provisioning and scaling of applications across multiple environments, making them a critical component in the Nutanix ecosystem for simplifying management and operations of applications.
Reference: Nutanix University, Nutanix Calm User Guide.

Question: 136

A consultant is unable to install virtualization software on a laptop.

Which two versions of Foundation can be used to resolve this issue? (Choose two.)

A. Foundation VM

B. Foundation Portable

C. Foundation Central

D. Foundation Applet

Answer: B, D

Explanation:

When a consultant is unable to install virtualization software on a laptop, the most suitable versions of Foundation to resolve this issue would be Foundation Portable (Option B) and Foundation Applet (Option D). Both these versions are designed to be used in environments where installing additional virtualization software might not be feasible. Foundation Portable can be run from a USB drive, and the Foundation Applet is a Java-based tool that can run directly on a host machine without the need for a full virtual machine environment.
Reference: Nutanix Foundation Installation Guide, Nutanix Support Portal.

Question: 137

Refer to the exhibits.

Nutanix Node	Node Network Port	Patch Panel Port	Switch Name & Port
A	10GE port 1	E1/19	TOS-HQ-N5K-1
	10GE port 2	E1/19	TOS-HQ-N5K-2

A consultant is trying to test port failover on the node shown in the first exhibit. A continuous ping test is performed to the host. The consultant shuts down one of the links, after which the host ping request times out. The consultant tries to troubleshoot the issue with the customer and sees the information shown in the second exhibit on their Cisco Switches:

```
TOS-HQ-N5K-1                              TOS-HQ-N5K-2

Interface Ethernet1/17                    Interface Ethernet1/18
    switchport mode trunk                     switchport access vlan 8
    switchport trunk allow vlan 7-9
                                          Interface Ethernet1/19
Interface Ethernet1/18                        switchport mode trunk
    switchport access vlan 8                  switchport trunk native vlan 9

Interface Ethernet1/19                    Interface Ethernet1/20
    switchport mode trunk                     switchport mode trunk
    switchport trunk native vlan 3            switchport trunk allow vlan 3

Interface Ethernet1/20                    Interface Ethernet1/21
    switchport mode trunk                     switchport mode trunk
    switchport trunk allow vlan 9             switchport trunk allow vlan 7

Interface Ethernet1/21                    Interface Ethernet1/22
    switchport mode trunk                     switchport mode trunk
    switchport trunk native vlan 7            switchport trunk native vlan 7-9
```

What is causing the issue?

A. There is a Native VLAN mismatch on the switchport.

B. The wrong VLAN is tagged on the host.

C. Bad SPF+ cables are on the active interface.

D. PortFast is not enabled on the port connected to the host.

Answer: A

Explanation:

In the scenario where a consultant observes ping timeouts after shutting down one of the links during a port failover test, the issue is likely due to a Native VLAN mismatch on the switchport. The configuration settings shown in the second exhibit indicate different native VLANs for the switch ports connected to the Nutanix node. This mismatch can cause connectivity issues when one of the links is down, as VLAN tagging inconsistencies prevent proper fallback and routing of traffic. Reference: Cisco Networking Troubleshooting Guide, Nutanix Network Configuration Best Practices.

Question: 138

A customer would like to re-image an existing cluster. The Foundation Applet and Foundation VM is unavailable to them.

How can the consultant access Foundation-as-a-Service (FaaS)?

A. Through <cluster-IP> :9443

B. Through <cluster-IP> :8000

C. Through <CVM-IP> :9443

D. Through <CVM-IP> :8000

Answer: C

Explanation:

If a customer needs to re-image an existing cluster and both the Foundation Applet and Foundation VM are unavailable, the consultant can access Foundation-as-a-Service (FaaS) through the CVM IP address followed by port 9443, as indicated in Option C. FaaS allows for the re-imaging of Nutanix nodes through a web interface hosted directly on the CVM, making it an effective tool for deploying and managing clusters without needing additional installation media or virtual machines.
Reference: Nutanix Foundation as a Service (FaaS) Documentation, Nutanix Support Portal.

Question: 139

A consultant is deploying a two-node cluster at a remote branch office.

Which component must be available to complete cluster configuration?

A. Prism Central

B. Witness VM

C. Remote Site

D. Protection Domain

Answer: B

Explanation:

In the deployment of a two-node cluster at a remote branch office, the presence of a Witness VM is essential to manage the cluster quorum and data integrity in case one of the nodes fails or becomes unreachable. The Witness VM acts as an external arbitrator that helps prevent data unavailability and split-brain scenarios in a situation where the cluster nodes cannot communicate with each other. This configuration is necessary because with only two nodes, there isn't a third node to maintain quorum natively.
Reference: Nutanix Bible, Nutanix University

Question: 140

A consultant is installing Nutanix AOS on Cisco UCS.

Which method should be used to install AOS on UCS hardware platforms?

A. Foundation Central

B. Foundation Applet

C. Foundation VM

D. Foundation as a Service

Answer: C

Explanation:

When installing Nutanix AOS on Cisco UCS hardware platforms, the recommended method is to use the Foundation VM. This approach allows for the deployment of Nutanix software onto bare metal hardware from a virtual machine that can manage the installation process across multiple nodes simultaneously. The Foundation VM simplifies the installation and initial configuration process, ensuring that all nodes are correctly configured and integrated into the Nutanix ecosystem.

Reference: Nutanix Bible, Nutanix University

Question: 141

In a 20-node ESXi deployment, the customer needs additional resiliency to survive the loss of two nodes concurrently.

Which configuration should the consultant use to ensure that the appropriate resources are available?

A. Storage reservation for 10%; HA admission control for 10%, cluster RF3

B. Storage reservation for 5%; HA admission control for 5%, cluster RF2

C. Storage reservation for 5%; HA admission control for 5%, cluster RF3

D. Storage reservation for 10%; HA admission control for 10%, cluster RF2

Answer: C

Explanation:

To ensure additional resiliency in a 20-node ESXi deployment capable of surviving the concurrent loss of two nodes, the consultant should configure the system with a storage reservation and HA (High Availability) admission control each set to 5%, combined with a cluster redundancy factor (RF) of 3. RF3 provides the capability to tolerate the failure of up to two nodes without data loss, thus enhancing the cluster's resilience. This configuration is optimal for maintaining cluster availability and integrity during multiple node failures.
Reference: Nutanix Bible, Nutanix University

Question: 142

A consultant is running the Foundation VM using desktop virtualization software. No nodes are discovered.

What should the consultant verify first?

A. NAT

B. Host-only Adapter

C. Bridged Adapter

D. Internal Network

Answer: C

Explanation:

When using the Foundation VM in a desktop virtualization environment and nodes are not being discovered, the first setting that the consultant should verify is the network adapter configuration, specifically ensuring it is set to a Bridged Adapter. This setting allows the virtual machine hosting the Foundation VM to connect directly to the physical network, making other network nodes visible and reachable during the discovery process. This direct network connection is critical for the Foundation tool to function correctly and discover other nodes.
Reference: Nutanix Bible, Nutanix University

Question: 143

A consultant creates a four-node AHV cluster with two 1GbE (eth0, etc1) and two 10GbE (eth2, eth3) NICs per node. The 1GbE NICs will not be placed into service, but the customer wants the network to be preconfigured for their eventual use.

The consultant removes the 1GbE NIC from the default bond and creates a second bridge(br1), but is unable to add the 1GbE NIC using the below command:

manage_ovs –bridge_name br1 –interfaces 1g –bond_name br1-up update_uplinks

Which parameter is missing from this command?

A. --bond_duplex full

B. --require_link=false

C. --interfaces eth0

D. --bridge_duplex full

Answer: C

Explanation:

The manage_ovs command requires specific interface names to be added or configured under a bridge or bond. In the provided scenario, the command failed because it generically referred to '1g' which is not a recognized interface or valid parameter syntax. For the command to work correctly, each individual interface name must be specified. In this case, the missing parameter was the specific interface name 'eth0' for one of the 1GbE NICs. The corrected command should explicitly include the NIC names, e.g., --interfaces eth0,eth1.
Reference:

Nutanix Bible

Nutanix University NCS-Core Materials

Question: 144

A consultant creates a Windows VM after installing a new Nutanix cluster running AHV. The consultant has statically assigned an IP address to the VM but it is unable to communicate on the network.

Which action should the consultant take to resolve this issue?

A. Confirm that IPv6 is enabled on the guest VM.

B. Confirm that the VM vNIC is tied to the correct VLAN in Prism Element.

C. Mount and install the Nutanix Guest Tools.

D. Set a Group Policy to make sure the Windows Firewall is disabled.

Answer: B

Explanation:

When a VM is unable to communicate on the network despite having an IP address assigned, one common issue is incorrect network configuration in terms of VLAN assignment. In the Nutanix AHV, VLANs are configured and managed within Prism Element. The consultant should verify that the virtual NIC (vNIC) of the VM is correctly configured to the intended VLAN that corresponds with the rest of the network. This ensures that the VM can communicate with other devices on the same network segment.
Reference:

Nutanix Bible

Nutanix University NCS-Core Materials

Question: 145

A customer needs to meet the following requirements for their business critical application:

* SQL Servers must be on specific hosts to lower licensing costs.

* Oracle RAC servers must be on separate hosts for licensing reasons

Which policy or policies should be implemented to meet these requirements?

A. Configure VM-VM anti-affinity policy.

B. Configure VM-VM affinity policy.

C. Configure both VM-Host and VM-VM affinity policy.

D. Configure VM-Host affinity policy.

Answer: D

Explanation:

For licensing reasons and to ensure compliance with software license terms, particularly for databases like SQL and Oracle RAC, VM-Host affinity policies are used. These policies help in pinning VMs to specific hosts. In this scenario, SQL Servers must be confined to specific hosts to manage licensing costs effectively, and similarly, Oracle RAC servers must be on separate hosts. The VM-Host affinity policy allows for such configuration by defining rules that keep VMs on specific hosts or separate them as needed.

Reference:

Nutanix Bible

Nutanix University NCS-Core Materials

Question: 146

For a new AHV cluster installation, a customer has 20 NX-8155-G6 nodes with quad port SFP NICs.

The customer wants to meet the following guidelines:

* Take advantage of all available 10GbE links

* Achieve maximum throughput per VM

* Use of redundant ToR switches

* Fastest reconvergence during link failure

How should the load balancing be configured on the host?

A. ovs-vsctl set port br0-up bond_mode=balance-slb

ovs-vsctl set port br0-up other_config:bond-rebalance-interval=30000

ovs-vsctl set port br0 tag=10

B. ovs-vsctl set port br0-up bond_mode=active-backup

ovs-vsctl set port br0-up other_config:bond-rebalance-interval=30000

C. ovs-vsctl set port br0-up bond_mode=balance-slb

D. ovs-vsctl set port br0-up other_config:lacp-fallback-ab=true

ovs-vsctl set port br0-up lacp=active

ovs-vsctl set port br0-up bond_mode=balance-tcp

Answer: D

Explanation:

In a Nutanix AHV cluster configuration with multiple NICs and ToR switches, achieving high throughput and maintaining link redundancy are critical. The configuration provided in Option D

utilizes LACP (Link Aggregation Control Protocol) with active mode, which allows for aggregating multiple network connections in parallel to increase throughput and provide redundancy. The balance-tcp mode of the bonding ensures optimal traffic distribution based on the TCP session, ensuring each session can utilize maximum available bandwidth across multiple links. This setting is crucial for environments requiring high network performance and reliability.
Reference:

Nutanix Bible

Nutanix University NCS-Core Materials

Question: 147

Where in the Support Portal is the Best Practices guide for vSphere Networking located?

A. Product Notices

B. Solutions Documentation

C. Software Documentation

D. Knowledge Base

Answer: C

Explanation:

The Best Practices guide for vSphere Networking can be found under the "Software Documentation" section of the Nutanix Support Portal. This section typically houses comprehensive guides and detailed documentation on various software components, including best practices for configuring and managing vSphere networking in a Nutanix environment.

Reference:

Nutanix Support Portal: https://portal.nutanix.com

Nutanix Documentation on vSphere Integration: Nutanix Software Documentation

Question: 148

A consultant needs to review a customer's switch port configuration to identify any issues. Other customer requirements are as follows:

* Leverage LACP

* Native VLAN will not be used

* Use Multiple Upstream switches

* Use VLANs 20-25 and 30

* LACP Fallback has been Enabled

* vPC or MLAG has been configured

What must be included in a configuration in order to meet these requirements?

A. Native VLAN set to default

Ports trucked to allow all necessary VLANs

B. Native VLAN set to default

Ports in access mode to allow all necessary VLANs

C. Native VLAN set to 30

Ports Trunked to allow all necessary VLANs

D. Native VLAN set to 30

Ports in access mode to allow all necessary VLANs

Answer: A

Explanation:

The requirements specify the use of LACP with multiple VLANs and without the use of a native VLAN. Trunk ports must be configured to carry multiple VLANs, which is necessary for scenarios involving LACP across multiple switches (MLAG or vPC). Setting the native VLAN to default and not using it in traffic management while trunking the ports meets these needs effectively. Reference: Nutanix Bible (https://www.nutanixbible.com/), Nutanix Official YouTube Training Series

Question: 149

Which two components must be identified to validate that software compatibility requirements are met for Nutanix Cluster Installation? (Choose two.)

A. Guest OS

B. AOS

C. Firmware

D. Hypervisor

Answer: B, D

Explanation:

Validating software compatibility for a Nutanix cluster installation necessitates the identification of the AOS version and the type of Hypervisor in use. AOS is central to the Nutanix infrastructure, governing storage, compute, and networking functions. The hypervisor layer is critical as it supports the virtual machines running on the cluster. Compatibility between these components ensures stable operation and support for all features. Reference: Nutanix Certified Services - Core (NCS-Core) Learning Documents

Question: 150

Which subnet is reserved for internal connectivity within a Nutanix Cluster?

A. 192.168.5.0/24

B. 192.168.254.0/24

C. 192.168.5.0/23

D. 192.168.5.0/26

Answer: A

Explanation:

Within a Nutanix cluster, the subnet 192.168.5.0/24 is typically reserved for internal connectivity.

This subnet is used for the internal communication between Nutanix Controller VMs (CVMs) and other cluster components. It ensures isolated and efficient network traffic management that is crucial for cluster operations.

Reference:

Nutanix Network Configuration Guide: Nutanix Networking Guide

Nutanix Best Practices for Network Configuration: Nutanix Community

Question: 151

A consultant runs the Foundation Applet and discovers all the nodes. The consultant wants to use the latest version of Foundation for imaging for support purposes and to cover the latest hardware and software hypervisor support.

What should the consultant do to upgrade Foundation on a node?

A. Use crash cart and manually upgrade Foundation files on one node.

B. Use latest version of Foundation to reimage all the nodes.

C. Use the Foundation VM to upgrade Foundation on all nodes.

D. Use the Foundation Applet to upgrade Foundation on a single node.

Answer: C

Explanation:

To ensure that the Foundation Applet is up-to-date across all nodes, the best approach is to use the Foundation VM. The Foundation VM allows consultants to manage and upgrade Foundation on all nodes centrally. This method avoids the necessity of manual upgrades on each node individually, thus ensuring a more efficient and error-free process, aligning with Nutanix's best practices for scalability and management of infrastructure.
Reference: The Nutanix Bible, the Nutanix University's NCS-Core 6.8 materials, and official Nutanix documentation on the Foundation VM.

To ensure the latest version of Foundation is used for imaging to support the latest hardware and software hypervisor configurations, the consultant should utilize the Foundation VM. This tool allows

for upgrading the Foundation on all nodes simultaneously, ensuring consistency across the cluster. It streamlines the process by leveraging the existing Foundation infrastructure rather than requiring manual updates via a crash cart or the limited capabilities of the Foundation Applet for single node upgrades.

Reference:

Nutanix Foundation Documentation: https://portal.nutanix.com

Nutanix Upgrade Guide: Nutanix Foundation Upgrade Process

Question: 152

While preparing for a new four-node cluster installation, the consultant has a Tech Review Call with the customer. The hardware is as follows:

* 4 nodes in 1 Block

* 8 x 10 GbE Ports

* 4 x 1 GbE IPMI Ports

* Adequate Ethernet ports are available

* Ethernet cables are correct and available

* Adequate rack space is available

Which remaining item must be confirmed as available onsite?

A. Crash Cart

B. Fibre Channel switches

C. Redundant 208v power

D. Redundant 110v power

Answer: C

Explanation:

In the preparation for a new cluster installation, after ensuring that the basic physical requirements such as space, cabling, and hardware connectivity are met, it's crucial to confirm power requirements. For enterprise installations, particularly where high-powered equipment like a four-node cluster is involved, ensuring redundant power is critical. The question specifically mentions "redundant" power, suggesting the need for a high-capacity solution typically found in 208v configurations in data centers, which provides more power efficiently and is standard for high-density computing hardware. Therefore, redundant 208v power should be confirmed as available onsite to support the new cluster's power needs effectively. Reference: Nutanix Certified Services - Core (NCS-Core) training materials and installation best practices available through Nutanix University and the Nutanix Bible.

Question: 153

After a consultant runs Foundation, the imaging process fails.

In which two locations can the consultant find the logs? (Choose two.)

A. On the Hypervisor - /home/nutanix/foundation/logs

B. Logs link on the Foundation Imaging Screen

C. On the Foundation VM - /home/nutanix/foundation/logs

D. On the CVM - /home/Nutanix/foundation/logs

Answer: B, C

Explanation:

When encountering issues during the Foundation process, such as an imaging failure, consultants need to access detailed logs to diagnose the problem. Two primary locations for these logs include the direct link accessible via the Foundation Imaging Screen, which provides real-time logs during the imaging process, and the Foundation VM directory at /home/nutanix/foundation/logs. These locations offer comprehensive log data essential for troubleshooting and resolving imaging issues. Reference: Nutanix Foundation documentation and troubleshooting guides from the Nutanix Bible and Nutanix University training resources.

Question: 154

During a technical call with a customer, it is identified that this installation will be software only on Dell servers. The out-of-band management interfaces will not be given IP addresses until the consultant is onsite.

Which Foundation method should be used for this type of installation?

A. Bare metal using iDRAC MAC addresses.

B. Bare metal using LAN MAC addresses.

C. Bare metal using block serial numbers.

D. Bare metal using node serial numbers.

Answer: A

Explanation:

In scenarios where a software-only installation is planned on Dell servers without pre-configured IP addresses for out-of-band management interfaces, the iDRAC MAC addresses are crucial. Using iDRAC (Integrated Dell Remote Access Controller), a consultant can perform a bare metal installation remotely and manage the servers effectively. This method is preferable when IP addresses are not initially available, allowing the consultant to utilize the out-of-band management network for setup. Reference: Nutanix Installation and Configuration guides, especially those pertaining to Dell hardware, available through the Nutanix Bible and official Nutanix training materials.

Question: 155

A customer wants to know the details of network validation testing.

Where can the consultant find this information?

A. Handover checklist

B. Test plan

C. Operations Guides

D. As-Built Guide

Answer: B

Explanation:

The Test Plan is the most appropriate resource for detailed information on network validation testing. This document typically outlines the specific tests to be conducted to ensure the network meets the required specifications and performance standards necessary for a stable and efficient Nutanix environment. The Test Plan provides a structured approach to validate each network component and interaction, ensuring all aspects are tested and meet design and operational requirements. Reference: Nutanix Installation and validation procedures as described in Nutanix official documentation and training modules from Nutanix University.

Question: 156

A customer has an ESXi Cluster with two 10GbE NICs on each node with the following requirements:

* Solution must follow Nutanix Best Practices

* Network configuration should be redundant

* A vSphere Standard Switch must be utilized

Which load balancing method should be used?

A. Route based on originating port ID

B. Route based on physical NIC load

C. Route based on IP hash

D. Route based on source MAC hash

Answer: A

Explanation:

According to Nutanix best practices for ESXi clusters, using a vSphere Standard Switch with "Route based on originating port ID" is recommended for load balancing. This method ensures that the same virtual port ID within a vSwitch uses the same uplink from the vSwitch. This load balancing policy provides an even distribution of traffic and redundancy by utilizing both NICs effectively without requiring any specific physical switch configurations, such as EtherChannel or LACP.
Reference: The Nutanix Bible, NCS-Core 6.8 course content, and VMware's documentation on vSphere Standard Switch load balancing methods.

Question: 157

A consultant creates three storage containers (container-1, container-2, container-3). The customer requires that only container-1, which will be utilized as an NFS datastore, be presented to external hosts.

However, users are able to mount all three containers.

What is causing this problem?

A. Compression was turned on for all containers.

B. A Container-level whitelist entry was configured.

C. Deduplication was turned on for all containers.

D. A Global whitelist entry was configured.

Answer: D

Explanation:

The issue where users can mount all three storage containers despite the intention to restrict access to just container-1 typically stems from a Global whitelist entry. A global whitelist allows all entities to access all containers unless more specific restrictions are applied at the container level. To correct this, specific whitelist entries need to be configured for each container to define and restrict access appropriately.
Reference: Nutanix NCS-Core 6.8 training resources, the Nutanix Bible, and Nutanix technical documentation on storage container management.

Question: 158

What reference materials should be provided to the customer during the Knowledge Transfer?

A. Questionnaire, technical slides and checklist, links to documentation and resources

B. As-Built Guide, technical slides and checklist, Network Diagram

C. As-Built Guide, Project Plan, links to documentation and resources

D. As-Built Guide, technical slides and checklist, links to documentation and resources

Answer: D

Explanation:

During the Knowledge Transfer phase, providing the customer with the As-Built Guide, technical slides and checklists, along with links to documentation and resources, is optimal. This set of materials ensures the customer receives both detailed and high-level information, supporting a thorough understanding of the deployment and operational procedures, and it allows for easy reference to official resources for ongoing needs.
Reference: The Nutanix Bible, NCS-Core 6.8 learning documentation, and best practices in IT project documentation.

Question: 159

A consultant is planning a new cluster installation and needs to locate the Shared IPMI port for each of the specific nodes that the customer has bought.

Which Support Portal location contains the document that would identify the port?

A. Solutions Documentation

B. Hardware Replacement Documentation

C. Software Documentation

D. Knowledge Base

Answer: B

Explanation:

When looking for documents that identify specific ports such as the Shared IPMI port on nodes, the best location within the Nutanix Support Portal is the Hardware Replacement Documentation. This section specifically deals with physical components and their configurations, making it the most appropriate resource for identifying physical port locations and specifications related to specific Nutanix hardware models.
Reference: Nutanix Support Portal, Nutanix Bible, and NCS-Core 6.8 materials specifically mentioning hardware documentation.

Question: 160

A consultant is using the Foundation applet to create a cluster. During the process the consultant refreshes the progress bar web page and is concerned when nothing loads.

What should the consultant do to verify that Foundation has completed successfully?

A. Return to the Foundation configuration page and start over.

B. Update Java on the Foundation VM.

C. Connect to any CVM IP address from a web browser.

D. Restart the Foundation process.

Answer: C

Explanation:

If the Foundation applet's progress bar webpage does not load after a refresh during a cluster creation, the consultant should verify if the Foundation process has completed by attempting to connect to any CVM (Controller Virtual Machine) IP address using a web browser. Accessing the CVM will confirm whether the nodes are operational and part of the cluster, thus indicating whether the

Foundation process has successfully completed or not.
Reference: Nutanix Bible, NCS-Core 6.8 official documentation on the Foundation process.

Question: 161

A consultant is setting up a new Hyper-V cluster. The customer requirements are as follows:

* VMs should automatically failover to another host if the host crashes

* Host CPU and Memory resources should be evenly balanced

* New VMs should be placed on the host with the most resources available

Which two Hyper-V features can be used to meet the requirements? (Choose two.)

A. Performance Resource Optimization

B. Failover Clustering

C. High Availability

D. Distributed Resource Scheduler

Answer: B C

Explanation:

The customer's requirements for automatic failover and resource balancing in a new Hyper-V cluster can be met with the use of Failover Clustering and High Availability. Failover Clustering allows VMs to automatically failover to another host in the event of a host failure, fulfilling the requirement for resilience. High Availability ensures that VMs restart on available hardware in the cluster, maintaining service continuity and balancing CPU and memory resources across the hosts.
Reference: Microsoft Hyper-V documentation, Nutanix Bible, and NCS-Core 6.8 course materials on virtualization platforms.

Question: 162

A consultant creates an AHV cluster and connects the Intel X550T NICs to the top of rack switch using

Twinax cables. The activity and link lights are green. The cluster cannot communicate over the 10GbE link.

What is the first command the consultant should perform to troubleshoot the issue?

A. manage_ovs show_bridges

B. manage_ovs show_interfaces

C. manage_ovs update_uplinks

D. manage_ovs show_uplinks

Answer: B

Explanation:

When facing issues with network communication over 10GbE links, the first command to troubleshoot is manage_ovs show_interfaces. This command allows the consultant to review the operational status and settings of each network interface, including those connected via Twinax cables to the top of rack switch. This will show whether the interfaces are correctly configured and functioning, which is essential for establishing a successful network link.

Reference:

Nutanix Command Reference Guide: https://portal.nutanix.com

Nutanix Community Network Troubleshooting Tips: Nutanix Community

Question: 163

A customer has a G6 AHV cluster with 4x10GbE NICs on each node and the following configuration:

* Networking is set to default

* Only two NICs are connected

The customer receives the following critical message:

The NIC is disconnected from the switch, or the switchport is failing.

What should the consultant verify to resolve the issue?

A. The NICs are configured for active-backup.

B. The VLANs are configured correctly on the switch or tagged on the cluster.

C. The other two 10GbE connections are removed from the default bond.

D. The NICs are connected for balance-slb.

Answer: A

Explanation:

Given the critical message about the NIC being disconnected or the switchport failing, the consultant should first verify the bonding mode of the NICs, especially since only two out of four 10GbE NICs are connected. In an AHV cluster, the NICs can be configured in different bonding modes such as active-active or active-backup. Ensuring that the NICs are configured for active-backup can provide redundancy by allowing one NIC to take over if the other fails, which seems to be necessary given the critical error indicating a possible disconnection or switchport failure. Reference: Nutanix Bible (https://www.nutanixbible.com/), Nutanix University (https://university.nutanix.com/)

Question: 164

A consultant deploys a four-node VMware ESXi cluster and vCenter server. An HA/DRS cluster is configured for all four nodes. The customer deploys five new VMs on the cluster.

During the knowledge Transfer, a network cable on one node is removed to demonstrate HA and migration of the VMs to another host. In the HA/DRS cluster settings, the VM Restart Priority for all CVMs is set to Disabled. The customer observes warnings that the CVM on the ejected host is no longer powered on.

Which ESXi HA/DRS cluster setting is missing?

A. Enable EVC for the cluster.

B. Disable VM Monitoring on all CVMs.

C. Disable Automation Level on all CVMs.

D. Enable Host Monitoring.

Answer: D

Explanation:

The issue indicated is that the VMs, specifically the CVMs (Controller VMs), do not restart on the remaining nodes after a network cable is removed, demonstrating a failure of HA (High Availability). The setting that should be verified is "Host Monitoring" within the ESXi HA/DRS settings. This setting enables the host to monitor the state of other hosts in the cluster and take necessary actions like VM restarts on other hosts in the event of failures. If it's disabled, the cluster wouldn't automatically manage the failover of VMs upon host disconnection. Reference: Nutanix Bible (https://www.nutanixbible.com/), Nutanix Official YouTube Training Series

Question: 165

Refer to the exhibit.

Hypervisor Host Name	Hypervisor Mgmt IP	IPMI IP	CVM IP	vMotion IP
DC1-NTX-01	10.20.44.11	10.20.20.31	10.20.44.21	10.20.55.171
DC1-NTX-02	10.20.44.12	10.20.20.32	10.20.44.22	10.20.55.172
DC1-NTX-03	10.20.44.13	10.20.20.33	10.20.44.23	10.20.55.173
DC1-NTX-04	10.20.44.14	10.20.20.34	10.20.44.24	10.20.55.174

A consultant is deploying a cluster using the customer-provided IP addressing information.

Which option in Foundation must be configured to ensure connectivity during the deployment?

A. Link Aggregation

B. Range Autofill

C. Network Segmentation

D. Multi-homing

Answer: B

Explanation:

During the deployment of a cluster using the Nutanix Foundation, ensuring all IP ranges are correctly configured is crucial for successful connectivity and deployment. "Range Autofill" is a feature in Foundation that automatically populates IP address fields based on the first IP provided, ensuring consistency and correctness across multiple nodes being deployed simultaneously. This feature helps avoid manual entry errors and ensures all nodes are configured with appropriate IP addresses that fall within the specified range. Reference: Nutanix University (https://university.nutanix.com/)

Question: 166

After imaging the nodes and creating the cluster successfully, the consultant connects the cluster to the customer network. When logging into Prism, the events dashboard is full of errors.

What is causing the issue?

A. The cluster was not stopped prior to connecting to the customer network.

B. The Cluster Virtual IP Address (VIP) was not set up during the process.

C. Foundation did not create the cluster successfully.

D. The consultant did not run Nutanix Cluster Check (NCC)

Answer: B

Explanation:

After creating a cluster and connecting it to the customer's network, if the events dashboard in Prism is full of errors, a likely cause could be that the Cluster Virtual IP Address (VIP) was not properly set up. The VIP is crucial for accessing the Nutanix Prism interface and for the proper functioning of the cluster's management operations.

Question: 167

A consultant is preparing to add new nodes into an existing cluster. The current cluster AOS version is 5.8. The new expansion node is currently running AOS 5.9 code. The cluster must continue to run at its current AOS version.

Which method can be used to successfully add the node?

A. Upgrade the cluster to 5.9 and add the node through Prism Element.

B. Use Prism Element to Expand the cluster and select the re-image option.

C. Use the CLI and enter cluster add-node node-serial="node_serial".

D. Use Prism Element, which will downgrade the node by default during the node add process.

Answer: B

Explanation:

When adding a new node with a higher AOS version (5.9) into an existing cluster running an older version (5.8), the recommended method is to use Prism Element to expand the cluster and select the re-image option. This process involves re-imaging the new node to the AOS version currently running in the cluster (5.8), ensuring compatibility and stability across the cluster without requiring an overall upgrade to a newer version. This approach maintains the cluster's operational integrity while integrating the new hardware.
Reference: Nutanix Bible, NCS-Core 6.8 official training materials, and Nutanix support documentation on cluster expansion.

Question: 168

While trying to upgrade AOS in a cluster, a consultant receives a warning message that there are two powered-on VMs that need to be powered off for the upgrade to proceed.

What would cause this warning to be issued?

A. Upgrading a single-node cluster requires the VMs to be shut down.

B. Upgrading a two-node cluster requires the VMs to be shut down.

C. There are not enough resources left in the single-node cluster.

D. There are not enough resources left in the two-node cluster.

Answer: B

Explanation:

The warning message about powering off VMs during an AOS upgrade in a two-node cluster is issued because, in smaller clusters such as two-node configurations, resource availability and redundancy are limited. To safely perform an upgrade without risking service disruption, the VMs need to be powered down to free up resources and ensure that there is sufficient capacity to handle the cluster operations during the upgrade process.
Reference: Nutanix Bible, NCS-Core 6.8 course content, and Nutanix upgrade best practices.

Question: 169

A consultant successfully completes a Foundation using a flat switch. The consultant then works with the customer to move the cluster over to their production network. After the move, the CVMs and hypervisors can no longer communicate, which prevents the cluster from starting.

Which option should be used to resolve this issue?

A. If the IPMI is in use, check that the IPMI can ping the default gateway over IPv6.

B. Make sure that the IPMI and CVM VLAN is manually tagged on the Host and CVM.

C. Verify that IPv6 Link Local and DHCP is enabled on all switch ports.

D. If using VLANs, confirm the hypervisor/CVM VLAN is set as Native on the switch ports.

Answer: D

Explanation:

The inability of CVMs and hypervisors to communicate after moving a cluster to the production network typically points to a VLAN configuration issue. The correct action is to confirm that the VLAN

designated for hypervisor/CVM communication is set as the Native VLAN on the switch ports to which the nodes are connected. This setting ensures that traffic from these VLANs is properly prioritized and handled by the network, thereby restoring communication between CVMs and hypervisors and allowing the cluster to start.
Reference: Nutanix Bible, NCS-Core 6.8 official documentation on networking configurations, and troubleshooting VLAN issues.

Question: 170

A customer racks all nodes in the new cluster. The customer does not allow IPv6 for node discovery.

The consultant is not allowed to use the consultant's own flat switch in the customer's environment.

Which step should the consultant take to resolve this issue?

A. Bare metal image all nodes with Foundation VM.

B. Image each node individually with Foundation VM.

C. Connect to the top of rack switch and discover the nodes with IPv4.

D. Open a console to all nodes and statically assign IP addresses.

Answer: C

Explanation:

In environments where IPv6 is not allowed for node discovery and the use of an external flat switch by the consultant is also restricted, the viable approach is to connect to the top of rack switch and discover the nodes using IPv4. This method aligns with the customer's networking policies and leverages the existing network infrastructure to facilitate the discovery and configuration of the nodes within the Nutanix cluster.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 resources, and Nutanix official guidelines on node discovery using IPv4.

Question: 171

A consultant configures a Nutanix cluster and integrates the hosts into vCenter using VMware best practices. The customer has requested that the Nutanix cluster only have a single datastore.

Upon configuring the cluster per the customer requirements, vCenter displays an alert regarding the heartbeat datastore. The consultant adds the das.ignoreInsufficientHbDatastore value = true rule. The container can be seen from each host, but the alert remains active.

What should the consultant do to resolve this issue?

A. Turn off and then turn back on HA.

B. Make sure the DRS setting is turned on.

C. Create a second container.

D. Whitelist the vCenter IP address within Prism.

Answer: A

Explanation:

 The alert regarding the heartbeat datastore in vCenter, despite setting das.ignoreInsufficientHbDatastore to true, suggests that HA has not acknowledged the updated configuration. The effective solution is to restart HA on the cluster, which involves turning off HA and then turning it back on. This reset will allow vCenter to re-evaluate the datastore configuration and recognize that the insufficient heartbeat datastore alert should be suppressed as per the updated setting.

Reference:

VMware Documentation on HA Configuration: VMware Support

Nutanix and VMware Integration Guide: Nutanix Documentation

Question: 172

After finishing foundation on an AHV cluster, a consultant is preparing to plug into the customer network given the following set of requirements:

* All network traffic on trunks is tagged

* Customer is using LACP

* A native VLAN is not in use

Which set of commands should the consultant use to ensure cluster connectivity on customer equipment?

A. change_cvm_vlan 0

ovs-vsctl set port br0 tag=0

ovs-vsctl set port br0-up bond_mode=balance-tcp

B. change_cvm_vlan 10

ovs-vsctl set port br0 tag=10

ovs-vsctl set port br0-up bond_mode=balance-tcp

C. change_cvm_vlan 0

ovs~vsctl set port br0 tag=0

ovs~vsctl set port br0-up bond_mode=active-backup

D. change_cvm_vlan 10

ovs-vsctl set port br0 tag=10

ovs-vsctl set port br0-up bond_mode=balance-slb

Answer: B

Explanation:

Considering the network configuration requirements—where all trunk traffic is tagged and a native VLAN is not used—the consultant must set up the CVM and bridge to operate with a specific VLAN tag. The command change_cvm_vlan 10 configures the Controller VM (CVM) to communicate over VLAN 10. The command ovs-vsctl set port br0 tag=10 applies VLAN 10 tagging to the bridge interface br0, ensuring all traffic through it is appropriately tagged. The command ovs-vsctl set port br0-up bond_mode=balance-tcp sets the bonding mode to balance-tcp, which is suitable for environments using LACP to optimize traffic distribution and redundancy across multiple physical links.
Reference: Nutanix Community Documentation, Nutanix University Networking Best Practices.

Question: 173
After installation, network ports are properly configured with the default active-backup bonding.

One 10GbE port goes to switch 1. Another 10GbE port goes to switch 2. A consultant tests failover by manually pulling one of the cables and notices it is taking too much time to failover, which is causing excessive packet loss.

What should the consultant enable to resolve this issue?

A. LACP on switch

B. PAgP

C. Portfast

D. Jumbo frames

Answer: C

Explanation:

In this scenario, the delay and packet loss during failover when one of the network cables is disconnected can be addressed by enabling "Portfast" on the switch ports connected to the Nutanix nodes. Portfast is a Cisco network switch feature that allows network switches to immediately bring ports into the forwarding state during connectivity changes, bypassing the usual listening and learning states of Spanning Tree Protocol (STP). This significantly reduces the time to re-establish network connectivity, thereby minimizing the packet loss during such failover events. Enabling Portfast is crucial for endpoints like servers where quick recovery from disconnections is necessary. Reference: Cisco Networking Academy materials on STP and Portfast, Nutanix Bible.

Question: 174

A consultant creates a new cluster using ESXi as the hypervisor. After creating the cluster, the consultant begins to run Life Cycle Manager (LCM) updates. During the LCM upgrade pre-checks, an error is returned.

Which configuration is causing this issue?

A. ESXi cluster admission control is disabled.

B. ESXi cluster DRS is enabled.

C. ESXi cluster HA is enabled.

D. ESXi cluster admission control is enabled.

Answer: D

Explanation:

The error during LCM pre-checks in an ESXi-based Nutanix cluster with HA enabled is most likely due to the ESXi cluster admission control being enabled. Admission control is a feature in VMware ESXi that reserves resources for HA purposes to ensure that sufficient resources are available in the event of host failures. When admission control is enabled, it can interfere with Nutanix LCM operations, which may require resource reallocation or reconfiguration that conflicts with the reserved capacities set by admission control. Disabling admission control during LCM updates would typically resolve this issue.

Reference: VMware documentation on HA and Admission Control, Nutanix LCM documentation.

Question: 175

A customer has engaged a Nutanix consultant to deploy a cluster consisting of two NX-3460-G6 blocks. The consultant arrives at the customer site and fines the following:

* One rack with a total of 5U available

* Two ToR switches with 14 total available ports

* Dual PDUs with six available sockets

What will prevent the consultant from successfully installing the cluster?

A. Insufficient sockets for power allocation.

Rack space may not be continuous.

B. Insufficient rack space for block installation.

Insufficient sockets for power allocation.

C. Insufficient network ports for communication.

Insufficient sockets for power allocation.

D. Insufficient network ports for communication.

Insufficient sockets for power allocation.

E. Insufficient network ports for communication.

Rack space may not be continuous.

Answer: B

Explanation:

To determine the correct answer, you must evaluate the requirements for installing a Nutanix NX-3460-G6 block. Each block typically occupies 2U of rack space. Since the customer has two blocks, a total of 4U is required, which fits within the available 5U rack space. Additionally, each block requires two power sockets (one for each node in the block), totaling four sockets. Since there are six available sockets, there is enough power availability. Therefore, the primary constraints are adequately met in terms of rack space and power sockets. The mention of network ports and their sufficiency is not required here, as it isn't the limiting factor based on the details provided.

Reference:

Nutanix Bible (https://www.nutanixbible.com)

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com)

Nutanix Deployment Guide

Nutanix Hardware and Installation Guide

Question: 176

During a six-node cluster deployment, one node fails to image successfully and Foundation is unable to automatically configure the cluster. The consultant decides to manually complete cluster formation with the successful nodes, then expand the cluster with the remaining unconfigured node.

Which command should be used to begin the process?

A. cluster status

B. cluster create

C. cluster start

D. cluster expand

	Answer: B

Explanation:

When deploying a multi-node Nutanix cluster, if one node fails to image and the Nutanix Foundation tool cannot configure the cluster automatically, the consultant can manually create the cluster with the nodes that were successfully imaged. The correct command to initiate this process is cluster create. This command starts the cluster services and allows for further expansion once the cluster is operational, which would include adding the node that initially failed to image.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically the section on manual cluster creation.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), videos on manual cluster operations.

Question: 177

After a recent installation using a flat switch, a consultant notices issues migrating the Nutanix nodes to the customer's network. The customer states that they are using VLANs on the production switch but not on the dedicated switch for IPMI. The customer does not require a manual configuration of the host and CVM.

What network changes need to be made to correct the issues?

A. Us untagged VLANs for the CVM and host and trunk mode for IPMI.

B. Use Native VLANs for the CVM and host and access mode for IPMI.

C. Use tagged VLANs for the CVM and host and access mode for IPMI.

D. Use Native VLANs for the CVM and host and trunk mode for IPMI.

	Answer: C

Explanation:

The proper network configuration to solve the described issue involves using tagged VLANs for the

CVM (Controller Virtual Machine) and host, allowing these components to correctly interact with the customer's VLAN-configured network. For the IPMI (Intelligent Platform Management Interface), which is used for out-of-band management and does not require connectivity to multiple VLANs, setting it to access mode is appropriate. This configuration ensures that the IPMI only communicates over a single, untagged VLAN, effectively isolating its traffic from the production network.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections on networking and VLAN configurations.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), where VLAN and network settings are covered.

Question: 178

A Nutanix cluster has 10TB usable storage. The customer wants to create a 100GB datastore for ISO images to eliminate too much storage being consumed by unnecessary images.

Which setting should be used to accomplish this goal?

A. From Container Advanced Settings, configure 100GB for advertised capacity.

B. From Container Advanced Settings, enable erasure coding.

C. From Container Advanced Settings, turn on compression and deduplication.

D. From Container Advanced Settings, configure 100GB for reserved capacity.

Answer: A

Explanation:

To limit a datastore to a specific capacity within a Nutanix cluster, the best approach is to configure the advertised capacity in the Container Advanced Settings. Setting the advertised capacity to 100GB ensures that this amount of storage is reported to external entities (like hypervisors or operating systems) as the total usable capacity of the datastore, effectively preventing the storage of additional data beyond this limit. This method is preferred over reserving capacity, which guarantees space for specific uses but doesn't limit the total size visible to the system.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically the section on storage container configuration.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), covering datastore management.

Question: 179

A consultant finishes creating a new ESXi cluster. The consultant connects to the nodes via laptop and a personal flat switch. The host/CVM network is on VLAN 23. The customer has the native VLAN on the ToR switches set to 23.

The customer wants to use LACP. Before placing the nodes on the customer network, the consultant tags VLAN 23 for each host and CVM. The consultant connects the nodes to the customer network and finds that they are unreachable.

What is causing this issue?

A. The customer has LACP fallback enabled on switch ports.

B. The hosts have not been migrated to a vSphere Distributed Switch.

C. Under the vSwitch0 settings, the consultant did not select Route based on IP hash.

D. The host and CVM are incorrectly configured.

Answer: C

Explanation:

In this scenario, the connectivity issue arises because the VLAN settings require a specific configuration on the vSwitch settings when using LACP. When using LACP for load balancing network traffic, the vSwitch or Distributed Switch must be configured with the "Route based on IP hash" load balancing algorithm. This setting is necessary to properly distribute the traffic across the LACP bonded links. Not selecting this setting in vSwitch0 settings would result in improper handling of network packets over the LACP bonded links, thereby causing the hosts and CVMs to be unreachable. Adjusting the vSwitch settings to "Route based on IP hash" should resolve the connectivity issue. Reference: VMware vSphere Networking documentation, Nutanix Bible LACP configuration

guidelines.

Question: 180

After deploying an AHV cluster connected to Cisco Nexus 9k switches, unexpected network behavior is observed. The consultant needs to rule out physical network mis-cabling without returning to the datacenter.

Which command from the host should the consultant run?

A. show lldp neighbors

B. show cdp neighbors

C. show interfaces

D. lldpctl

Answer: D

Explanation:

To troubleshoot physical network mis-cabling without physical access to the data center and connected to Cisco Nexus 9k switches, the appropriate command to run from the Nutanix AHV host is lldpctl. This command allows the consultant to view the Link Layer Discovery Protocol (LLDP) information about directly connected devices. LLDP is supported on Nexus switches and provides detailed network topology information, which is crucial for identifying how the AHV nodes are connected to the switches, and to verify correct physical connections.
Reference: Nutanix Command Reference Guide, Cisco Nexus 9000 Series documentation.

Question: 181

What is the minimum number of nodes required for a Nutanix Cluster to support Replication Factor 3 (RF3) on a storage container?

A. 3

B. 4

C. 5

D. 6

Answer: C

Explanation:

For a Nutanix cluster to support Replication Factor 3 (RF3), a minimum of 5 nodes is required. RF3 means that three copies of the data are maintained across the cluster for fault tolerance and high availability. Having at least five nodes ensures that there are sufficient nodes to distribute these copies across different fault domains, minimizing the risk of data loss and providing improved resilience against node failures.
Reference: Nutanix Bible, Nutanix Technical Documentation on Data Resiliency.

Question: 182

A consultant is onsite and needs to start their Foundation Virtual Machine (FVM) to image Nutanix hardware. The FVM fails to boot. The consultant decides to use a different Foundation method.

Assuming the nodes will discover, which Foundation type or configuration option should the consultant select?

A. Foundation VM

B. Use IPMI IPs

C. Use IPMI MACs

D. Foundation Applet

Answer: D

Explanation:

If the Foundation VM fails to boot and other methods need to be considered, the best alternative is the Foundation Applet. This lightweight tool runs on a laptop or other device and doesn't require booting a VM, providing a straightforward method to image Nutanix hardware, particularly useful in situations where hardware constraints or other issues prevent the use of a full Foundation VM.

Reference:

Nutanix Foundation Installation Guide: Nutanix Documentation

Nutanix Field Installation Guide and Tools Overview

Question: 183

A consultant notices while assigning VLAN tags to hosts and CVMs in a running cluster, that Prism Element displays alerts indicating a node is down.

What should the consultant do to prevent these alerts?

A. Restart the Nutanix cluster.

B. Only change the Controller Virtual Machine VLANs.

C. Only change the hypervisor VLANs.

D. Stop the Nutanix cluster before changing VLANs.

Answer: D

Explanation:

When changing VLAN configurations for hosts and Controller Virtual Machines (CVMs) in a Nutanix cluster, doing so while the cluster is running can result in temporary communication losses, leading to alerts such as a node appearing down. To avoid these disruptions and ensure a smooth reconfiguration process, it is advisable to stop the cluster services before making VLAN changes. This prevents the cluster from detecting intermittent connectivity as node failures, thereby avoiding false alerts in Prism Element.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections discussing cluster operations

and network reconfiguration.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which includes best practices for network configuration.

Question: 184

A consultant is using a customer's switch for installation. Although the 10GbE ports for each of the hosts are connected to the switch, the nodes fail to be discovered.

What is causing the issue?

A. IPv6 is not enabled on the switch.

B. IPMI port is not plugged in.

C. Foundation VM is running on a Windows host.

D. 10GbE ports are configured with the incorrect duplex setting.

Answer: A

Explanation:

The failure to discover nodes during installation can often be attributed to the lack of IPv6 support on the network, especially if the Foundation process relies on IPv6 for node discovery. If IPv6 is not enabled on the customer's switch, the discovery packets may not be properly routed, resulting in the nodes not being discovered. Enabling IPv6 on the switch could resolve this discovery issue.

Reference:

Nutanix Foundation Troubleshooting Guide: Nutanix Support Portal

Network Configuration and Troubleshooting Documentation

Question: 185

During the Foundation imaging process, nodes are successfully imaged, but the cluster creation fails.

Which log should the consultant review to determine the cause?

A. service.log

B. foundation.out

C. first_boot.log

D. genesis.out

Answer: B

Explanation:

During the Nutanix Foundation process, if imaging succeeds but cluster creation fails, the foundation.out log is the primary resource for investigating issues related to cluster creation. This log file contains detailed information about the steps undertaken by the Foundation process, including any errors or issues encountered during the cluster creation phase, making it invaluable for diagnosing problems that prevent successful cluster configuration.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections on troubleshooting with logs.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), where log file analysis is discussed in the context of deployment troubleshooting.

Question: 186

A consultant has deployed a new Nutanix AHV cluster with Foundation. The customer requests separating the management and production traffic in the CVM.

Which feature should the consultant configure?

A. Micro-segmentation

B. Multi-homing

C. Network Segmentation

D. VLAN Tagging

| Answer: D |

Explanation:

To separate management and production traffic within a Nutanix AHV cluster, VLAN Tagging is the appropriate feature to configure. VLAN Tagging allows different types of traffic to be segregated onto different network segments over the same physical infrastructure, effectively isolating management traffic from production traffic at the network level. This setup enhances security and performance by reducing the possibility of network congestion affecting critical management operations.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically the sections on networking and VLANs.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which covers advanced network configurations including VLAN Tagging.

Question: 187

A consultant is preparing to foundation over a customer network that has the following criteria:

* VLAN segmented network

* VLAN tags on the nodes must be imaged prior to starting the foundation process.

For each node, the consultant has done the following:

* Connected to the Network Crash Cart of the Node

* Logged in using "root" credentials

What should the consultant do next?

A.

1. CD to /root/nutanix-network-crashcart/

2. Start Network Utility tool by running: ./network_configuration

3. Change Values

B.

1. CD to /home/data/nutanix/nutanix-network-crashcart/

2. Start Network Utility tool by running: ./network_configuration

3. Change Values

C.

1. Log into CVM using nutanix@192.168.5.254

2. CD to /root/Nutanix-network-crashcart/

3. Start Network Utility tool by running: ./network_configuration

4. Change Values

D.

1. Log into CVM using nutanix@192.168.5.254

2. CD to /home/data/nutanix/nutanix-network-crashcart/

3. Start Network Utility tool by running: ./network_configuration

4. Change Values

Answer: A

Explanation:

Question: 188

A customer is running out of storage in an ESXi cluster. The customer wants to add storage without paying for an additional hypervisor license.

Which option should the consultant recommend to meet the requirement?

A. Convert the cluster to AHV to support storage-only node requirements.

B. Select the storage-only checkbox during Foundation and then expand the cluster in Prism.

C. Buy a new node to meet the requirements of the storage-only node specifications.

D. Edit the factory_config.json file to configure the node as storage-only and then expand the cluster in Prism

Answer: A

Explanation:

When a customer needs to add storage to an ESXi cluster without incurring additional hypervisor licensing costs, converting the cluster to Nutanix AHV presents a viable solution. AHV allows the incorporation of storage-only nodes, which can extend the cluster's storage capacity without necessitating additional licenses for hypervisor usage.

Reference:

Nutanix Solutions for ESXi to AHV Migration: Nutanix Documentation

Nutanix AHV Licensing and Features Guide: Nutanix Licensing Information

Question: 189

A consultant creates a Nutanix cluster using the 10.10.10.0/24 network and VLAN 10. The customer creates a VM network inside the Prism using VLAN 20. The customer starts to create VMs but is unable to ping the default gateway from these new systems.

What is causing the issue?

A. The CVM/hypervisor must be on an untagged VLAN.

B. The switch port is not set up as a trunk.

C. Only one VLAN is supported on AHV.

D. The CVM/hypervisor cannot use the same VLAN as guest VMs.

Answer: B

Explanation:

The issue of VMs not being able to ping the default gateway from a newly created VM network on VLAN 20, while the Nutanix cluster uses VLAN 10, most likely stems from the switch port configuration. For the VMs on VLAN 20 to communicate outside their local network, the switch port to which the Nutanix nodes are connected must be configured as a trunk. This configuration allows multiple VLANs to coexist on the same physical port and enables routing between them. Without the trunk setup, the VLAN 20 traffic is restricted and cannot reach the network beyond the switch, including the default gateway.
Reference: Nutanix Network Configuration Guide, Best Practices for VLAN Configurations.SZXCDESX

Question: 190

An existing Nutanix customer has several clusters in production and is adding a new cluster. The customer wants to create an AHV cluster that has already been racked and powered on remotely, with the factory image, using Prism Central.

Which step should the consultant take next?

A. Build the cluster with the Foundation Applet

B. Build the cluster with the Foundation VM.

C. Bare metal image the nodes with the Foundation VM.

D. Build the cluster with Foundation Central.

Answer: D

Explanation:

For adding a new cluster to an existing set of production clusters using AHV and wanting to manage the setup remotely via Prism Central, the most appropriate and efficient method is to use Foundation Central. Foundation Central allows for the remote deployment and configuration of Nutanix clusters through Prism Central, facilitating the foundation process without needing physical access or separate foundational utilities like the Foundation VM or Applet. It uses the factory image on the nodes and is designed to streamline cluster expansions and deployments in enterprise environments.
Reference: Nutanix Foundation Central User Guide, Nutanix Prism Central documentation.

Top of Form

Question: 191

A customer buys ultimate licensing and wants to use the built-in Nutanix software encryption on their new AHV cluster. The customer needs to create three storage containers and asks the consultant to complete the process as fast as possible.

In which order should the cluster be deployed?

A. Create Cluster -> Install License Key -> Encrypt Cluster -> Create Storage Containers

B. Create Cluster -> Install License Key -> Create Storage Containers -> Encrypt Cluster

C. Create Cluster -> Encrypt Cluster -> Install License Key -> Create Storage Containers

D. Create Cluster -> Create Storage Containers -> Encrypt Cluster -> Install License Key

Answer: A

Explanation:

The optimal sequence for deploying a Nutanix AHV cluster with built-in software encryption involves the following steps:

Create Cluster: Establish the cluster foundation, which sets up the basic network and cluster configurations.

Install License Key: The ultimate licensing must be applied before enabling encryption because the feature depends on this license.

Encrypt Cluster: Once the cluster is created and licensed, enable encryption to secure the data at rest. This step should be done before creating storage containers to ensure that all data written to the containers is encrypted from the outset.

Create Storage Containers: Finally, create the storage containers. With encryption already enabled, any data written to these containers will be automatically encrypted.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically the sections on licensing and data encryption.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), covering deployment and configuration best practices.

Question: 192

A consultant is running Foundation. The cluster creation fails during the process. The host logs confirm that the nodes have been successfully imaged. The consultant decides to create the cluster manually.

Which command should the consultant use?

A. cluster -c IP_CVM_A, IP_CVM_B, IP_CVM_n

B. cluster create -s IP_CVM_A, IP_CVM_B, IP_CVM_n

C. cluster -s IP_CVM_A, IP_CVM_B, IP_CVM_n create_manual

D. cluster -s IP_CVM_M, IP_CVM_B, IP_CVM_n create

Answer: B

Explanation:

To manually create a cluster after the nodes have been successfully imaged but the automated cluster creation fails, the correct command to use is:

cluster create -s IP_CVM_A, IP_CVM_B, IP_CVM_n

This command specifies the -s option to include the IP addresses of the Controller Virtual Machines (CVMs) on the nodes, initiating the manual cluster creation process.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections on manual cluster operations.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), with detailed instructions on manual cluster commands.

Question: 193

A consultant is reimaging a Nutanix cluster with a supported ISO, but Foundation returns an error that the media is not a supported ISO.

Which two actions should the consultant take to resolve this issue? (Choose two.)

A. Restart the imaging process in Foundation.

B. Obtain the MD5 checksum of the ISO and confirm the MD5 checksum of ISO is listed.

C. Edit the whitelist file in Foundation.

D. Download and replace with the latest iso whitelist. json from the Support Portal.

Answer: B, D

Explanation:

When Foundation reports an error indicating the ISO is not supported:

Option B: Checking the MD5 checksum of the ISO file ensures that it matches the expected value listed by Nutanix, confirming the file's integrity and compatibility.

Option D: Downloading and updating the iso whitelist.json from the Nutanix Support Portal ensures that Foundation has the latest information on supported ISO files, potentially resolving compatibility issues.

Reference:

Nutanix Bible (https://www.nutanixbible.com), especially sections on Foundation and ISO troubleshooting.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which covers the setup and troubleshooting of Foundation.

Question: 194

According to Nutanix best practices, which interface configuration should be used when setting up the default bond?

A. One 10G uplink only

B. 10G uplinks only or 25G uplinks only

C. One 10G uplink paired with one 25G uplink

D. One 1G uplink paired with one 10G uplink

Answer: B

Explanation:

According to Nutanix best practices for network configuration, it is recommended to use either:

10G uplinks only: This provides sufficient bandwidth for typical data center operations.

25G uplinks only: This option is suitable for higher bandwidth requirements. Mixing uplinks with different speeds, such as 10G and 25G, is not recommended as it can lead to non-optimal performance and complexity in handling traffic.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically sections discussing network interface configurations.

Nutanix Network Administration Guide, which details best practices for network setup.

Question: 195

A customer is considering increasing the Redundancy Factor from 2 to 3 for a Nutanix cluster in their existing environment.

Which option would provide the company with the optimal solution?

A. Four Compute Nodes with 25% available disk space

B. Six Compute Nodes with 25% available disk space

C. Three Compute Nodes with 40% available disk space

D. Five Compute Nodes with 40% available disk space

Answer: B

Explanation:

To increase the Redundancy Factor (RF) from 2 to 3, at least five nodes are required for the cluster to function correctly with RF3, as each data block needs to be replicated to three different nodes. However, the optimal solution that offers both the necessary node count and sufficient storage overhead is:

Six Compute Nodes with 25% available disk space: This configuration ensures that there are enough nodes to support RF3 while maintaining adequate storage capacity for redundancy without overutilization.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections on redundancy factors and node requirements.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), focusing on cluster scaling and redundancy considerations.

Question: 196

A consultant is working on an expansion project for a customer that has an existing 7-node RF2 cluster. The customer has purchased four more nodes to add to the cluster. All of the hardware is identical between the existing hardware and newly purchased hardware.

Currently, the 7-node cluster has the following utilization:

•   CPU: 48%

•   Memory: 66%

•   Storage: 91%

During the kick-off call, the customer mentioned they'd like to reserve storage capacity on the cluster if a node were to fail in the future.

What's the safest and best way to implement this on the cluster?

A. Expand the cluster with the additional nodes and enable Reserve Rebuild Capacity.

B. Enable Reserve Rebuild Capacity and expand the cluster with the additional nodes.

C. Expand the cluster with the additional nodes and enable HA reservation.

D. Enable HA reservation and expand the cluster with the additional nodes.

Answer: A

Explanation:

The most efficient and safest way to implement the customer's desire to reserve storage capacity for future node failures after expanding their existing 7-node RF2 cluster with four additional nodes is to first expand the cluster with the additional nodes, and then enable the Reserve Rebuild Capacity setting. This approach allows the cluster to immediately benefit from increased storage and other resources provided by the additional nodes, which can then be partially reserved to handle potential future failures. This method ensures both an increase in total capacity and the preservation of operational integrity during node failures.
Reference: Nutanix Prism User Guide, Nutanix Best Practices for Cluster Expansion.

Question: 197

How should a consultant verify that a Nutanix cluster can tolerate a single-node failure?

A. [root@cvm~]# ncli cluster get-domain-fault-tolerance-status

type=node

B. nutanix@cvm~$ ncli cluster get-domain-fault-tolerance-status

type=node

C. [root@avh~]# ncli cluster fault-tolerance-status type=node

D. nutanix@cvm~$ ncli cluster status type=node

Answer: B

Explanation:

To verify that a Nutanix cluster can tolerate a single-node failure, the consultant should use the

command nutanix@cvm~$ ncli cluster get-domain-fault-tolerance-status type=node. This command is executed from the Controller Virtual Machine (CVM) and checks the cluster's fault tolerance status specifically for node failures, providing insights into how the cluster's data resiliency and redundancy configurations are holding up against potential single-node failures.
Reference: Nutanix CLI Guide, Nutanix Fault Tolerance Documentation.

Question: 198

A customer design calls for link aggregation. Despite the consultant verifying all hosts are correctly configured for fallback per Nutanix best practices, initial testing reveals the aggregate bond fails to pass traffic and shows a status of configured.

What is the most likely cause for the bond disabling and reporting a "configured" status?

A. The uplinks in the bond need to be turned on.

B. The ports need to be flushed.

C. Failed negotiation due to misconfiguration on ToR switches.

D. The bond needs to be reconfigured for balance s_b mode.

Answer: C

Explanation:

If link aggregation is failing to pass traffic and is only showing a status of "configured," the most likely cause is a failed negotiation due to a misconfiguration on the Top-of-Rack (ToR) switches. This typically occurs when the aggregation protocols (like LACP) or the settings on the ToR switches do not match the configuration on the hosts. Ensuring that both ends of the aggregated links are configured identically and properly for the expected protocols is critical for successful link aggregation.
Reference: Nutanix Network Configuration Guide, Best Practices for Network Aggregation.

Question: 199

A consultant asks a customer to verify the ToR Switch data port configuration was done according to Nutanix best practices. The switch configuration must simplify future deployments and expansions.

Which two configuration actions will satisfy this requirement? (Choose two.)

A. Disable multicast and broadcast flood optimizations.

B. Configure the CVM and hypervisor host VLAN as the native.

C. Use a tagged VLAN for the CVM and hypervisor hosts.

D. Configure the connected switch ports as access.

Answer: AC

Explanation:

For a Nutanix cluster configuration that simplifies future deployments and expansions, disabling multicast and broadcast flood optimizations (A) and using a tagged VLAN for the CVM and hypervisor hosts (C) are the best practices. Disabling these optimizations helps in reducing unnecessary network traffic and potential broadcast storms in a growing environment. Using tagged VLANs for CVM and hypervisor hosts ensures proper network segmentation and scalability, allowing for easier management and expansion without reconfiguring the native network setup for each expansion or deployment.
Reference: Nutanix Network Configuration Best Practices, Nutanix Deployment Guide.

Question: 200

To ensure VM availability when a service outage has occurred, a customer has requested that automatic VM failovers must occur as part of the DR strategy for their environment.

Which failover operation is within an Unplanned Failover option?

A. AHV Metro - with Witness Operation

B. Protection Domain Migrate

C. Cross-Cluster Live Migration

D. Test Failover

Answer: A

Explanation:

For scenarios requiring VM availability during unplanned outages, AHV Metro with Witness Operation is designed to handle such situations. AHV Metro Availability enables synchronous replication between two sites with a witness that arbitrates site availability in case of a split-brain scenario. This setup is intended for automatic failover during service disruptions, ensuring continuous availability of VMs without manual intervention.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections on disaster recovery and AHV Metro Availability.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), covering disaster recovery strategies and configurations.

Question: 201

Where can the Foundation version included with an AOS bundle be found?

A. AOS Release Notes

B. Upgrade Paths menu

C. Compatibility and Interoperability Matrix

D. Field Installation Guide

Answer: A

Explanation:

The Foundation version included with an AOS bundle can be found in the AOS Release Notes. These release notes typically provide detailed information about all components and versions included in the bundle, ensuring that users are aware of compatibility and new features.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where reference to locating AOS bundle details is mentioned.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), providing instructions on how to access and interpret AOS release notes.

Question: 202

A customer wants to validate the Microsoft SQL workload performance for a CRM application before migration to the new Nutanix cluster.

Which activity must the consultant add as part of the test plan to fulfill this requirement?

A. X-Ray with OLAP Workload.

B. Run perfmon on guest VM.

C. X-Ray with OLTP Workload.

D. Run perfmon on all CVMs.

Answer: C

Explanation:

To validate the performance of a Microsoft SQL workload for a CRM application, using X-Ray with an OLTP (Online Transaction Processing) Workload is most suitable. OLTP workloads simulate typical transactional database operations which are representative of CRM application usage, providing accurate insights into expected performance on the Nutanix platform.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically the sections on performance testing tools and methodologies.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), detailing how to use X-Ray for specific application testing.

Question: 203

How should a consultant validate the installed version of an NVIDIA driver in a Nutanix VDI deployment?

A. [root@ahv   rpm qa I grep i nvidia

B. nutanix@cvm~$ rpm -qa I grep -i nvidia

C. adminGcvm^S rpm -qa I grep i nvidia

D. [rootQesxi -)# rpm -qa I grep -i nvidia

Answer: B

Explanation:

To validate the installed version of an NVIDIA driver in a Nutanix environment with AHV or within the CVM, use the command:

This command checks for all RPM packages related to NVIDIA installed on the Controller Virtual Machine, providing details about the driver version.

Reference:

Nutanix Bible (https://www.nutanixbible.com), especially sections on AHV and CVM maintenance commands.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which covers command-line tools and driver management.

Question: 204

What should a consultant consider when completing a bare-metal imaging process?

A. Avoid connecting any device to the node USB port that presents virtual media such as a CD-ROM.

B. Connect to a managed switch with routing tables to protect the production environment against configuration errors.

C. Ensure that the CD ROM appears last in the BIOS boot order to avoid Foundation timeout.

D. Enable STP by using PortFast or an equivalent feature on the ports that are connected to the Nutanix host.

Answer: A

Explanation:

When completing a bare-metal imaging process, it is crucial to avoid connecting any device to the node's USB port that presents virtual media such as a CD-ROM. This is important because such devices can interfere with the imaging process, potentially leading to errors or misconfigurations by

presenting alternative boot options or media.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where hardware setup and imaging process precautions are discussed.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which covers the best practices for physical setup and foundation imaging.

Question: 205

A consultant is setting up a new install of Nutanix Files for a customer, but receives this error when attempting to join the customer's Active Directory domain:

File Server <FileServerName> could not join the Domain because User credentials failed with error Unable to connect to WORKGROUP ads_connect: No logon servers

The consultant has already verified the domain credentials provided by the customer are valid and have the correct permissions.

What is the most likely cause in this scenario for a domain-join failure when setting up Nutanix Files?

A. The FSVMs storage network must be in the same network as the logon servers.

B. The client network is failing to communicate with the customer's domain controllers due to mismatched MTU sizes.

C. The client network is failing to communicate with the customer's domain controllers due to a missing network firewall port requirement.

D. The FSVMs must first be manually added to a site mapping in Active Directory before they can be authorized to communicate with the logon servers.

Answer: C

Explanation:

The most likely cause for the failure in joining the Active Directory domain when setting up Nutanix Files, given the error message about the inability to connect to logon servers and valid credentials, points to network communication issues. The specific mention of "ads_connect: No logon servers" suggests that the File Server VMs (FSVMs) are unable to reach the domain controllers. This issue is

often due to necessary network firewall ports not being open. Ensuring that all required ports for Active Directory communications are open between the FSVMs and the domain controllers would resolve this issue.
Reference: Nutanix Files Administration Guide, Active Directory Services Network Configuration requirements.

Question: 206

A consultant is not able to run the As-Built Tool for a technical reason.

What action should the consultant take to gather information and provide customer documentation?

A. Manually create documentation using As-Built document template.

B. Use RVTools for vSphere and Hyper-V deployments.

C. Create a support case on behalf of a customer.

D. Access portal.nutanix.com, search Software Documentation.

Answer: A

Explanation:

If the As-Built Tool cannot be run due to technical reasons, the next best action for the consultant is to manually create documentation using an As-Built document template. This approach ensures that documentation is still provided to the customer detailing the setup, configuration, and operational state of their environment, which is crucial for ongoing management and future audits. This method is proactive and ensures customer needs are met despite technical setbacks.
Reference: Nutanix Technical Documentation Guidelines, Best Practices in Nutanix System Documentation.

Question: 207

A customer has requested that a consultant create a Disaster Recovery Test for their new Nutanix environments.

What should the consultant include in a custom plan to validate VM availability across the network?

A. Assign backup policies to source VMs.

B. Verify VMs received correct IP address after failover.

C. Ensure NTP configuration active.

D. Sign into VM console using local credentials.

Answer: B

Explanation:

For creating a Disaster Recovery Test plan for Nutanix environments, verifying that VMs receive the correct IP address after a failover is critical to validate VM availability across the network. This check is essential to ensure that network configurations and DHCP/Static IP settings are correctly applied post-failover, enabling proper network communications and access to services hosted on the VMs. Ensuring correct IP addressing is fundamental to the successful operation of DR strategies in virtualized environments.
Reference: Nutanix Disaster Recovery Best Practices, Nutanix Network Configuration for DR environments.

Question: 208

During an AHV upgrade, a database VM automatically migrated to another host. A customer is concerned about potential storage performance impact.

Which statement addresses the customer's concern?

A. Shadow clones mitigate the need for data locality.

B. Data locality is not required on all flash nodes.

C. Mirroring the database on two VMs eliminates the need for data locality.

D. AHV's built in scheduler automatically restores data locality.

Answer: D

Explanation:

 Addressing the customer's concern regarding the potential storage performance impact after a VM migration, it's important to note that Nutanix AHV includes intelligent scheduling mechanisms. AHV's built-in scheduler automatically works to restore data locality after VM migrations. Data

locality refers to the placement of data close to the VM consuming it, which optimizes read and write operations by reducing latency. After migration, the scheduler actively moves data to ensure it is close to its consuming VM, thereby minimizing any adverse impacts on storage performance.

Reference:

Nutanix AHV Administration Guide: Nutanix Documentation

Nutanix Data Locality Explanation and Benefits: Nutanix Portal

Question: 209

Which two components are required to validate and Foundation a cluster with ESXi as the hypervisor? (Choose two.)

A. ISO image for ESXi

B. iso_whitelist.json

C. Phoenix Installation Tool

D. Latest NCC LCM Bundle

Answer: A, B

Explanation:

To foundation a cluster using ESXi as the hypervisor, the necessary components include:

ISO image for ESXi: This is required to install ESXi on the nodes within the cluster.

iso_whitelist.json: This file is crucial for the Foundation process as it lists the supported ISO images and their checksums to ensure the integrity and compatibility of the hypervisor ISO being used.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically sections discussing hypervisor installation and compatibility.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), covering Foundation processes and required files.

Question: 210

A consultant is completing final network failover testing on a recently deployed AHV cluster.

The cluster consists of the following:

•   Three nodes

•   Two uplinks connected to two switches

•   Supported SFPs

The consultant removed one SFP+ out of each node. Two of the nodes (Hostl I Host2) failed over to the backup NIC correctly without any interruption but have lost communication with the third node (Host 3) hypervisor/CVM. Inserting the original SFP+ back into the problematic node allowed the network to be connected and the two healthy nodes could communicate successfully again.

manage_ovs showjnterfaces output

manage_ovs showjinterfaces output:

name mode link speed

cthO 10000 True 10000

ethl 10000 False None

eth2 10000 True 10000

eth3 10000 False None

manage_ovs show.uplinks output:

Bridge: brO

Bond: brO-up

bond_mode: active-backup

interfaces: ethl ethO

lacp: off

lacp-fa I 1 back: false

lacp_speed: slow

What should the consultant validate first?

A. Validate NIC card on node is seated properly.

B. Validate that the correct interfaces are included in the bridge.

C. Validate the customer has configured all their switch ports identically.

D. Validate the SFP+ is fully plugged into the node and switch.

Answer: D

Explanation:

Given the symptoms where two nodes correctly failover but lose communication with the third node after an SFP+ is removed, the first action should be to:

Validate the SFP+ is fully plugged into the node and switch: This is critical because a loose or partially connected SFP+ can cause intermittent network issues, which seems to be the problem based on the scenario described.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the network troubleshooting sections.

Nutanix Field Installation Guide, which provides detailed steps on how to ensure hardware components like SFPs are correctly installed.

Question: 211

After finishing customer education during a new cluster deployment, the consultant wants to make sure all in-scope tasks have been completed.

Which document can the consultant use to verify all tasks have been closed out?

A. As-Built Guide

B. Deployment Questionnaire

C. Deployment Guide

D. Deployment Checklist

Answer: D

Explanation:

To verify that all in-scope tasks for a new cluster deployment have been completed, the consultant should refer to the:

Deployment Checklist: This document typically lists all tasks required for a successful deployment, making it a suitable tool for ensuring that nothing has been overlooked.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where the importance of deployment documentation is discussed.

Nutanix Deployment Guide, which includes detailed checklists for ensuring thorough project completion.

Question: 212

A consultant deployed a Nutanix Files cluster using separate networks for client and storage.

For testing a SMB standard share, a VM has been deployed on storage network. However, the consultant cannot access the share.

What is the cause of the issue?

A. The CVM network segmentation is configured.

B. Clients on the same subnet as the storage network cannot access the shares.

C. An iSCSI Data Services IP is not configured for the cluster.

D. Clients on the same subnet as the storage network can only access the distributed shares.

Answer: B

Explanation:

If a VM deployed on the storage network cannot access a SMB standard share, the likely issue is that:

Clients on the same subnet as the storage network cannot access the shares: This scenario typically occurs due to network segmentation policies or firewall rules that restrict access to the storage network from clients within the same subnet, intended to segregate traffic types for security and performance reasons.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically sections on network segmentation and Nutanix Files configurations.

Nutanix Technical Documentation on Nutanix Files, which covers network configuration and troubleshooting issues related to file access.

Question: 213

When utilizing the Nutanix cluster As Built Document generator, which two configuration elements should a consultant provide when running the run_as_built.exe command? (Choose two.)

A. Data Services IP

B. Cluster IP

C. Remote Site IP

D. Customer Name

Answer: B, D

Explanation:

When using the Nutanix cluster As Built Document generator, the necessary configuration elements to provide when running the run_as_built.exe command include the Cluster IP (B) and the Customer Name (D). The Cluster IP is required to properly identify and communicate with the cluster to gather configuration and operational dat

a. The Customer Name is typically used to personalize the documentation, making it specific to the client's deployment, which is useful for record-keeping and future reference purposes.
Reference: Nutanix As Built Documentation generator usage guidelines, Nutanix Best Practices for Documentation.

Question: 214

As a consultant concludes the project for deploying a new cluster, the customer expresses plans to repeat the process in-house for one of the company's dark site locations.

What three items can the consultant deliver in closing to help ensure customer's success in deploying

and supporting Nutanix clusters?

A. . Creating an account for access to Nutanix Support Portal

· External USB drive

. Offline NCC bundle

B. · A trial license activation code for Prism Starter

. Creating an account for access to Nutanix Support Portal

. Guide for dark site deployments using Nutanix standards

C. . Generating cluster licenses

. What are binaries and where can they be downloaded

. Creating an account for accessing the Nutanix Support Portal

D. · External USB drive

. Access to Nutanix FTP

. Encrypted key required for accessing clusters

Answer: B

Explanation:

As the consultant concludes the project, to assist the customer with repeating the deployment process at a dark site, the best items to deliver would be:

A trial license activation code for Prism Starter, which will allow the customer to begin using the Nutanix cluster immediately without initial extra costs.

Creating an account for access to the Nutanix Support Portal, ensuring the customer can access support and documentation as needed for troubleshooting and learning.

A guide for dark site deployments using Nutanix standards, which will provide step-by-step instructions tailored to the specific challenges of deploying in a location with no direct internet connectivity.
These resources are critical for enabling the customer to independently deploy and manage Nutanix clusters under the unique constraints of a dark site.
Reference: Nutanix Deployment Guide, Nutanix Support Portal Documentation.

Question: 215

During a pre-engagement call, a customer explains that network cables are missing from the boxes. The consultant examines the bill of materials more closely to verify the quantity and type required by the hardware. The rack is already equipped with one OOBM Ethernet switch and two 10GbE SFP+ ToR switches.

Product	Product Code	Quantity
10GbE, 2-port, SFP+ Network Adapter (Intel 82599ES)	C-NIC-10GSFP2-A-CM	3.00
3.84TB 3.5" SSD	C-SSD-3840GB-3.5-A-CM	6.00
64GB Memory Module (2933MHz DDR4 RDIMM)	C-MEM-64GB-2933-A-CM	12.00
Intel Xeon Processor 6210U (2.5 GHz, 20 cores)	C-CPU-6210U-CM	3.00
L-CORES-PRO-PRD-5YR	L-CORES-PRO-PRD-5YR	60.00
L-FLASHTIB-PRO-PRD-5YR	L-FLASHTIB-PRO-PRD-5YR	21.00
No Cables	C-CBL-NONE-CM	3.00
No HDD	C-HDD-NONE-CM	3.00
NX-1175S-G7, 1 Node configuration	NX-1175S-G7-CM	3.00
PRD HW SUP	S-HW-PRD	3.00

Which cables should the consultant recommend to the customer for implementing in this scenario?

A. Six Ethernet Cat7 cables

B. Six DAC 10GbE cables and 3 Ethernet cables

C. Six lOGbE cables

D. Three DAC 10GbE cables and 3 Ethernet cables

	Answer: B

Explanation:

Considering the equipment setup with one Out-of-Band Management (OOBM) Ethernet switch and two 10GbE SFP+ Top of Rack (ToR) switches, the consultant should recommend six DAC (Direct Attach Cable) 10GbE cables and three Ethernet cables. The DAC 10GbE cables are suitable for connecting the nodes to the ToR switches to handle high-speed data transfers, while the Ethernet cables are necessary for connections related to management purposes, such as connecting to the OOBM switch for remote management tasks. This recommendation ensures adequate connectivity for both data and management networks.
Reference: Nutanix Hardware and Installation Guide, Best Practices for Network Cable Management.

Question: 216

A consultant will be doing an install for an enterprise customer. The consultant has racked up, powered on, and connected their Foundation software to the new nodes. The Foundation VM is not discovering the hardware.

What should the consultant do to resolve this issue?

A. Console to each node, reboot the node, go through BIOS to set an IPMI IP address, then run Foundation bare metal installation using IPMI IP addresses.

B. Connect a crash cart to each node, log in to the pre-installed AHV hypervisor, run the IPMITool commands to set IPMI IP Address, subnet, and gateway for each node. Run a Foundation using the configured IPMI addresses that were just set.

C. Collect the IPMI MAC addresses on the back of each node, run a bare metal Foundation using each MAC addresses.

D. Connect a crash cart to each node, reboot the node, go through BIOS and set an IPMI IP address for each node. Using your Foundation VM, create a Phoenix boot ISO, then mount the ISO via Virtual Media connector from IPMI.

	Answer: B

Explanation:

 In a Nutanix environment, if the Foundation VM is not discovering the hardware, it could be due to

issues with the IPMI (Intelligent Platform Management Interface) settings. IPMI is a set of computer interface specifications for an autonomous computer subsystem that provides management and monitoring capabilities independently of the host system's CPU, firmware (BIOS or UEFI), and operating system.

In this scenario, the consultant should connect a crash cart to each node, log in to the pre-installed AHV hypervisor, and run the IPMITool commands to set the IPMI IP Address, subnet, and gateway for each node. After setting the IPMI settings, the consultant should run Foundation using the configured IPMI addresses that were just set.

This will ensure that the Foundation VM can communicate with the nodes via IPMI and discover the hardware, allowing the installation to proceed.

Reference:

[Nutanix Support & Insights]

[Nutanix Community]

[Nutanix Documentation]

[Nutanix Certified services - core (NCS-Core) 6.8 - Nutanix University]

[Nutanix Bible]

[Nutanix Certified services - core (NCS-Core) 6.8 Playlist - YouTube]

Question: 217

During the knowledge transfer on Prism GUI, a customer asked about AHV best practices for VM High Availability on a five-node cluster and the safest configuration. The consultant informed the customer that best practices dictate that all storage containers are configured with a replication factor of 3.

What will be the behavior if the non-default Guarantee mode is selected on Prism with two AHV host failures?

A. Keeping the default mode will ensure that all VMs can restart in case of two AHV host failures.

B. Keeping the default mode will ensure that all VMs can restart in case of an AHV host failure.

C. Will ensure that all VMs can restart if two AHV nodes remains online.

D. Will ensure that all VMs can restart in case of two simultaneous AHV host failures.

Answer: D

Explanation:

In a five-node cluster with storage containers configured with a replication factor of 3, the behavior of VM High Availability when two AHV host failures occur with the non-default "Guarantee mode" enabled is as follows:

Will ensure that all VMs can restart in case of two simultaneous AHV host failures: This mode prioritizes maintaining VM availability by reserving enough resources to restart VMs even with multiple host failures, as long as at least three hosts (matching the replication factor) remain functional.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically sections on VM High Availability and replication factors.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), where best practices for VM High Availability are detailed.

Question: 218

A consultant is running operational verifications to validate cluster behaviors

What will happen if one power supply is disconnected from a NX-3235-G9 chassis?

A. The hardware status is updated to reflect the change in Prism Element, the hosts continues to run, but VMHA has started securing workloads by moving them to other nodes.

B. The hardware status updates to reflect the change in Prism Element, the hosts continues to run, and the Host hardware power status alert is sent There is no impact on workloads.

C. The hosts appears disconnected in Prism Element and VMs are restarting on the other hosts.

D. The hosts appears disconnected in vCenter and VMs are restarting on the other hosts.

Answer: B

Explanation:

If one power supply is disconnected from a NX-3235-G9 chassis, the behavior observed will be:

The hardware status updates to reflect the change in Prism Element, the hosts continues to run, and the Host hardware power status alert is sent: Modern Nutanix hardware like the NX-3235-G9 is designed with redundant power supplies to ensure that the loss of one does not impact the overall operation of the cluster. Prism Element updates the hardware status to notify administrators of the power supply issue, but there is no impact on running workloads.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections on hardware management and monitoring.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which includes information on responding to hardware alerts and maintaining cluster health.

Question: 219

In which two ways can the IPMI address be set on a Nutanix hardware installation? (Choose two.)

A. Nutanix Network Crashcart

B. iLO configuration utility

C. BIOS configuration

D. ipmitool

Answer: C, D

Explanation:

The IPMI address on a Nutanix hardware installation can be set in two ways:

BIOS configuration: Access the BIOS settings during boot-up to manually configure the IPMI address directly on the hardware.

ipmitool: Use the ipmitool command-line utility to configure the IPMI address from a remote session or script, which provides a way to automate or manage IP settings without needing physical access to the BIOS.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections on hardware installation and IPMI settings.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), detailing tools and techniques for IPMI configuration.

Question: 220

During a Site Readiness Check, a customer informed the consultant that there is no NTP server currently configured in the environment.

Which two statements should the consultant consider for continuing the cluster deployment? (Choose two.)

A. An NTP server is not required for cluster Foundation and can be added later.

B. If an NTP server is provided using FQDN, a DNS server is required.

C. At least 3 NTP servers must be provided in a comma-separated list.

D. At least one external NTP server must be used to complete Foundation process.

Answer: A B

Explanation:

For continuing the cluster deployment without an NTP server immediately available:

A. An NTP server is not required for the initial foundation process of the cluster and can indeed be added later. This allows the deployment to proceed without delays, although it's critical to add NTP synchronization as soon as possible post-deployment to ensure proper cluster time management. B. If an NTP server is to be provided using an FQDN, then a DNS server must indeed be available. This is because the FQDN needs to be resolved to an IP address, which requires DNS resolution services. Options C and D are not strictly required as per Nutanix deployment standards; a single NTP server can suffice initially, and there's no requirement for it to be external or in a comma-separated list unless specifically dictated by network or organizational policies.
Reference: Nutanix Installation and Configuration Guide, Nutanix Foundation Tool documentation.

Question: 221
Refer to Exhibit:

NX-3460-G9

A Foundation install must be done on four NX nodes for a new customer. A consultant need to set up the network onsite before imaging the nodes through the Foundation tool.

The nodes are equipped with two SFP28 25GbE NICs with dual ports, and a 10GBase-T NIC with dual ports as well The customer's ToR switches are 25GbE datacenter switches, already in production.

What is the appropriate hardware to perform the most reliable imaging of these NX nodes?

A. A flat Ethernet switch, 4 compatible IGBase-T GBiCs, five Ethernet cables and a laptop.

B. The 25GbE production switches. 4 DAC cables and 5 Ethernet cables with a flat Ethernet switch, and a laptop.

C. A flat Ethernet switch. 9 Ethernet cables, and a laptop.

D. The 25GbE production switches. 4 DAC cables, only one Ethernet cable with a 10GBase-T GBIC, and a laptop.

Answer: B

Explanation:

Given that the customer's ToR switches are 25GbE and are already operational, the most reliable and straightforward method for imaging these NX nodes with dual 25GbE and 10GbE ports is to use the 25GbE production switches. The appropriate hardware setup includes:

4 DAC (Direct Attach Cable) cables for connecting the 25GbE NICs on the nodes to the ToR switches.

5 Ethernet cables to manage connectivity between nodes and potentially to a flat Ethernet switch and a laptop for Foundation process control. This setup ensures the fastest and most reliable network performance during imaging, leveraging the existing high-speed infrastructure.
Reference: Nutanix Hardware and Installation Guide, Best Practices for Network Configuration during

Foundation.

Question: 222

A customer has requested help deploying a small single-VM instance of Prism Central in their environment that will be used for managing less than 100 guest VMs and registered to a single 5-node cluster. Due to business needs, the customer also plans to consume additional service features within the PC platform.

The consultant discusses with the customer and ultimately decides to deploy a small 3-VM instance to better account for possible resource overhead required once the additional services are enabled on the cluster.

The additional services the consultant must enable to meet the customer's requests are as follows:

•   Nutanix Disaster Recovery

•   MS-SQL Server Monitonng

•   Flow Microsegmentation

Why won't the plan to deploy a small PC instance work for this customer?

A. The consultant must specify during the small PC deployment that all 3 PCVMs are configured to have 32GB of memory in order to ensure adequate overhead.

B. The additional services the customer needs cannot be supported on a small sized PC. Consultant must deploy at a minimum a large size PC.

C. Flow Microsegmentation requires an X-Large 5-VM scale-out instance of Prism Central be deployed in order to avoid constraints.

D. MS-SQL Server Monitoring requires additional licensing and a separate appliance to be deployed when using a small sized PC.

Answer: B

Explanation:

The plan to deploy a small Prism Central (PC) instance will not work for the customer because the

additional services required, especially Flow Microsegmentation and MS-SQL Server Monitoring, demand more substantial resources than a small PC instance can support. The correct approach: B. The additional services the customer needs, including Nutanix Disaster Recovery, MS-SQL Server Monitoring, and Flow Microsegmentation, require a larger resource pool for adequate performance and functionality, making a minimum of a large size PC deployment necessary. Options C and D point to specific requirements but are incorrect in stating the exact size or additional licensing for MS-SQL alone; rather, the overall resource demand across services necessitates a larger PC deployment. Reference: Nutanix Prism Central Deployment Guide, Nutanix Services Specifications.

Question: 223

A consultant is conducting a vSphere cluster deployment. As a part of operational tests, a vMotion operation is performed on a test VM, but fails with following error message:

The VMotion failed because the ESX hosts were not able to connect over the VMotion network. Please check your VMotion network settings and physical network configuration.

VMotion [184329483:1276605211167987] failed to create connection with remote host <10.10.16.14>: The ESX hosts failed to connect over the VMotion network Migration [184329483:1276605211167987] failed to connect to remote host <10.10.16.14>: Timeout

What issue could prevent the vMotion operation from completing successfully?

A. The vmknic is configured with a conflicting IP address.

B. NIOC is enabled and vMotion traffic is configured with Share value SO.

C. Foundation service prevents connectivity between the source and the destination TCP port 8000.

D. The vSS is configured with Route based on originating virtual port.

Answer: A

Explanation:

The failure of the vMotion operation indicated by the error message could most plausibly be caused by:

A . The vmknic (VMkernel network interface card) configured with a conflicting IP address. This conflict can prevent the ESXi hosts from establishing a connection over the VMotion network, as each host must have a unique IP address on the VMotion network to facilitate proper migration

communications. Option B, involving NIOC settings, and option D, involving vSS configuration, could influence performance but are less likely to cause a complete failure to connect. Option C, related to the Foundation service, is not relevant to vMotion networking issues directly. Reference: VMware vSphere Networking Documentation, Nutanix Integration with VMware Environments.

Question: 224

A customer has provided the following network requirements to their consultant during a discovery session for AHV cluster deployments:

•   Maximum Uptime Guest Traffic is a Hard Requirement

•   Maximum Throughput for Guest is a Hard Requirement

•   Link Aggregation is established at the TORs

Cluster nodes have the following network card configurations:

•   2 x 40GbE Adapters

•   2 x IGbE Adapters

How should the consultant satisfy these requirements?

A. Bonded 2 x 40GbE Adapters with LACP Disabled for Storage Traffic and Guest Traffic using balance-sib

B. Bonded 2 x 1 GbE Adapters with LACP Enabled for Storage Traffic and Bonded 2 x 40 GbE Adapters for Guest VM Traffic using balance-tcp

C. Bonded 2 x 40GbE Adapters with LACP Enabled for Storage Traffic and Guest Traffic using balance-tcp

D. Bonded 2 x 40GbE Adapters with LACP Disabled for Storage Traffic and bonded 2x1 GbE Adapters for Guest VM Traffic using active-backup

Answer: C

Explanation:

To satisfy the customer's requirements for maximum uptime and throughput in an AHV cluster deployment with link aggregation at the Top-of-Rack (TOR) switches, the consultant should:

Bonded 2 x 40GbE Adapters with LACP Enabled for Storage Traffic and Guest Traffic using balance-tcp: This configuration leverages Link Aggregation Control Protocol (LACP) to combine the bandwidth of the two 40GbE adapters, enhancing both redundancy and throughput. The balance-tcp mode ensures effective load balancing of traffic based on TCP session ensuring optimal use of available bandwidth and improved fault tolerance.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections discussing network configurations and LACP.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which covers advanced network settings for performance optimization.

Question: 225

A consultant has finished imaging all assigned clusters and is ready to close out the engagement

Which action is part of the Closeout Checklist?

A. Provide an overview of Nutanix NDB.

B. Provide an overview of Nutanix NC2.

C. Provide an overview of Nutanix Prism Central.

D. Provide an overview of Nutanix Self-Service.

Answer: C

Explanation:

During the closeout of a cluster imaging engagement, a key action to include in the Closeout Checklist is:

Provide an overview of Nutanix Prism Central: This is crucial as Prism Central is the management and operations platform for Nutanix environments, providing visibility and control over clusters and workloads. Giving an overview of this tool is essential for the customer to manage their newly imaged clusters effectively.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where management tools like Prism Central are discussed.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which includes training on using Prism Central for cluster management.

Question: 226

A consultant is working to setup the network before starting the Foundation process.

How should the consultant complete this task?

A. Using the shared IPMI port, ensure that the connected switch can auto-negotiate to 1 Gbps.

B. Disable IPv6 on the network to which the nodes are connected to ensure that IPv6 unicast is blocked.

C. Ensure the IPMI of the nodes are reachable using pre-configured IPMI IPv6 addresses.

D. On Nutanix NX Series, connect the IPMI port and any one of the data ports to the switch.

Answer: D

Explanation:

Before starting the Foundation process, the consultant should prepare the network by:

On Nutanix NX Series, connect the IPMI port and any one of the data ports to the switch: This ensures that the IPMI (for management and remote access) and at least one data port (for cluster communication and data traffic) are connected and operational, facilitating a smooth foundation process.

Reference:

Nutanix Bible (https://www.nutanixbible.com), especially sections on initial hardware setup and network preparations.

Nutanix Hardware Setup Guide from Nutanix University (https://university.nutanix.com), detailing the specific steps for networking configurations during initial setup.

Question: 227

Before deploying a new 3-node cluster, a consultant wants to know which VLAN ID to use during Foundation.

Where can the consultant find this information?

A. Nutanix Portal

B. As-Built Guide

C. Deployment Questionnaire

D. Test Plan

Answer: C

Explanation:

To find the correct VLAN ID to use during the Foundation of a new 3-node cluster, the consultant should refer to the:

Deployment Questionnaire: This document typically contains detailed pre-engagement information gathered from the customer, including network specifications such as VLAN IDs. It provides the necessary context and configurations needed for a successful deployment.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where the importance of pre-deployment planning and documentation is highlighted.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which covers the process of gathering and using deployment information.

Question: 228

After an onsite cluster deployment, a consultant prepares the deliverables for a project closeout.

Which two data in the As-Built Guide require adjustment or might be missing completely? (Choose two.)

A. Nutanix Node Port Layout

B. AHV Host information

C. Physical Rack Layout

D. Cluster information

Answer: AC

Explanation:

After an onsite cluster deployment, the As-Built Guide is a crucial document that provides detailed information about the final configuration of the system. However, certain data in the As-Built Guide might require adjustment or might be missing completely.

In this case, the Nutanix Node Port Layout (Option A) and the Physical Rack Layout (Option C) are two data that might require adjustment or might be missing completely. The Nutanix Node Port Layout provides a visual representation of the network connections for each node in the cluster, while the Physical Rack Layout provides a visual representation of the physical arrangement of the nodes in the rack. Both of these data are crucial for understanding the physical and network configuration of the cluster, and any inaccuracies or omissions in these data could lead to confusion or issues in the future.

Therefore, the consultant should ensure that the Nutanix Node Port Layout and the Physical Rack Layout in the As-Built Guide are accurate and complete.

Reference:

[Nutanix Support & Insights]

[Nutanix Community]

[Nutanix Documentation]

[Nutanix Certified services - core (NCS-Core) 6.8 - Nutanix University]

[Nutanix Bible]

[Nutanix Certified services - core (NCS-Core) 6.8 Playlist - YouTube]

Question: 229

A consultant is reviewing a customers Pre-delivery Questionnaire.

The customer wants to deploy their cluster with ESXi as the hypervisor with vSphere Distributed Switch. The customer will be using Cisco Nexus 9k as their switch choice In the kick-off call, it is confirmed that the customer has a business requirement to use LACP in their environment.

What should the consultant ensure that the customer configures on the port-channel interface before deployment?

A. show pore-channel

B. no lacp graceful-convergence

C. service unsupported-transceiver

D. no lacp suspend-individual

Answer: D

Explanation:

Given that the customer is using a Cisco Nexus 9k switch and wants to deploy ESXi with a vSphere Distributed Switch while using LACP, the consultant should ensure that the customer configures:

D . no lacp suspend-individual: This command ensures that LACP doesn't suspend the individual port if it does not receive LACP PDUs from the other side, which is crucial in environments where continuous connectivity is required for all member links of the port-channel to maintain uninterrupted network services.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where it discusses ESXi configurations and switch settings.

Cisco Nexus configuration guides, referred through Nutanix's training materials, which recommend settings for optimal integration with Nutanix environments.

Question: 230

A consultant is preparing for a cluster deployment and evaluates portable Foundation.

Laptop configuration is as follows:

- CPU: 2.8 GHz Quad-Core Intel Core i7

- Memory: 4GB RAM

During the installation, the consultant encounters some errors and tries to troubleshoot.

What could prevent successful installation and Foundation usage?

A. Gatekeeper must be enabled

B. Oracle VirtualBox is installed on the laptop

C. Laptop configuration does not meet installation requirements

D. Firewall Stealth Mode is disabled

Answer: C

Explanation:

The likely reason for encountering errors during the installation and use of the portable Foundation tool on the laptop described is:

C . Laptop configuration does not meet installation requirements: The Foundation tool, being a resource-intensive application, typically requires more than 4GB RAM to function efficiently, especially when deploying larger or more complex environments.

Reference:

Nutanix Bible (https://www.nutanixbible.com), especially sections on Foundation requirements.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which includes specifications for hardware requirements for deployment tools.

Question: 231

After deployment of a Nutanix cluster, a customer has requested to validate the peak performance of the cluster.

Which tool can a consultant use to satisfy this request?

A. Nutanix X-Ray

B. Nutanix HCiBench

C. diagnostics.py

D. Nutanix perfmon

Answer: A

Explanation:

To validate the peak performance of a deployed Nutanix cluster, the consultant can use:

A . Nutanix X-Ray: X-Ray is a performance testing tool specifically designed for Nutanix environments, capable of simulating a variety of workloads and scenarios to measure and report on the cluster's performance capabilities.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where X-Ray and its capabilities are detailed.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which covers performance testing and validation using X-Ray.

Question: 232

A consultant attempts to perform an LCM inventory after successfully creating the cluster, but is met with the following error:

LCM Exception [LcmExceptionHandler]: Could not find a module for entity with reference name nutanix.ncc.update

What is the most likely reason LCM inventory/update is failing?

A. Nameservers are not reachable.

B. IPMI network is unable to reach the internet.

C. Clusters must be licensed before LCM inventory.

D. Nutanix CVMs are blocking TCP port 54.

<div align="right">**Answer: C**</div>

Explanation:

The error encountered during the LCM inventory process, which mentions "Could not find a module for entity with reference name nutanix.ncc.update," typically indicates that the cluster has not yet been licensed. The Life Cycle Management (LCM) functionality in Nutanix systems requires a valid license to perform operations such as inventory checks and updates. Without this license, LCM cannot retrieve or update the necessary software modules, leading to the stated error. Licensing the cluster would resolve this issue and allow the LCM processes to proceed normally.
Reference: Nutanix LCM Documentation, Nutanix Licensing Guidelines.

Question: 233

During the knowledge transfer session, a consultant conducts a storage management demo. In the Creating a Storage Container workflow, the customer notices the Advertised Capacity parameter and asks for an explanation.

How should the consultant respond?

A. It is a capacity computed by dividing physical storage usage of a container by the replication factor (RF).

B. It assists in reserving space for a storage container to ensure a maximum storage capacity is available.

C. It enables the ability to cap usage of storage containers to be smaller than the limit of a storage pool capacity.

D. It assists in reserving space for a storage container to ensure a minimum storage capacity is available.

<div align="right">**Answer: C**</div>

Explanation:

The "Advertised Capacity" parameter in the context of creating a storage container in Nutanix systems is used to cap the usage of storage containers to be smaller than the limit of a storage pool's capacity. This feature allows administrators to set a maximum storage limit for a container, preventing it from using the entire storage pool's capacity and ensuring that resources are allocated based on planned capacity requirements. This helps in maintaining predictable storage management and allocation within a Nutanix environment.
Reference: Nutanix Storage Container Management Documentation, Nutanix Best Practices for Storage Configuration.

Question: 234

A customer's security team has a policy prohibiting a consultant's laptop from connecting within the corporate datacenter.

In which two ways should the consultant complete the customer deployment on the factory-prepared nodes? (Choose two.)

A. Use the Controller VM-based Foundation process.

B. Configure IPs on hosts and create the cluster.

C. Run the Network Crashcart Script, provide IPs, and create the cluster manually.

D. Manually edit ifcfg-etho file on CVM, restart networking, and create the cluster.

Answer: A, C

Explanation:

Given that the customer's security policy prohibits connecting a consultant's laptop within the corporate datacenter, the consultant can complete the deployment using:

A . The Controller VM-based Foundation process, which allows the consultant to configure and deploy the cluster using the software tools provided within the Controller VM itself. This method does not require direct laptop connection to the network. C. Run the Network Crashcart Script to manually configure IP addresses on the hosts and then proceed to create the cluster manually. This approach involves using available scripts and utilities that can be executed from within the data center's management interfaces without needing direct laptop access. Options B and D would typically require direct network connection capabilities not permissible under the security constraints.
Reference: Nutanix Foundation Documentation, Nutanix Deployment Best Practices.

Question: 235

Refer to Exhibit:

30	SN20231312732I8	ESXI-NUTA-01	ESXI-NUTA-03
29		ESXI-NUTA-02	ESXI-NUTA-04
28	SN502413104920	ESXI-NUTA-05	ESXI-NUTA-06
27			
26	SN47280948053	ESXI-NUTA-07	ESXI-NUTA-08
25			
24	NEW BLOCK	ESXI-NUTA-09	ESXI-NUTA-10
23			

A customer is preparing to expand a cluster with a consultant. The production cluster is comprised of one NX-3460-G7 and two NX-8235 G8 blocks. The running AOS version is 5.20.4.6 and Hypervisor version is ESXi 6.7 U3b. vCenter is also running a 6.7 version.

One NX-3235-G9 block will be added to that cluster (ESXI-NUTA-09 and ESXI-NUTA-10).

The consultant has verified Nutanix documentation and customer's As-Built guide:

•   NX-3060-G7 and NX-8035-G8 are hybrid HCI nodes

•   ESXi 6.7 U3b is unsupported for the new G9 hardware model

•   AOS 5.20.X and ESXi 6 X are end of support

•   NX-3060-G7 and NX-8035-G8 hypervisors can be upgraded to the latest ESXi supported version

What actions should be taken before beginning the cluster expansion?

A. Upgrade vCenter, AOS and ESXi to supported and recommended versions.

B. Upgrade only AOS and ESXi to supported and recommended versions.

C. Replace all HDDs with SSDs on the Production cluster.

D. Prepare Foundation and the whitelist. json file to deploy ESXi 6.7 U3b on the new nodes.

Answer: A

Explanation:

Before expanding the cluster with the new NX-3235-G9 block, it is critical to ensure that all components are running supported and recommended versions due to compatibility and support issues. Therefore, the necessary actions include: A. Upgrade vCenter, AOS, and ESXi to supported and recommended versions. This step ensures compatibility across all components, particularly important as the new G9 hardware does not support the currently installed version of ESXi. Upgrading these components will also ensure continued vendor support and the stability of the environment. Options B, C, and D do not adequately address the need for vCenter upgrades or the fact that ESXi 6.7 U3b is unsupported for G9, highlighting the necessity for a comprehensive upgrade. Reference: Nutanix Hardware Compatibility List, Nutanix Support Portal.

Question: 236

A consultant notes that a customer environment requires Nutanix storage containers to be mounted on non-Nutanix hosts for manual data migration workflows.

What configuration should the consultant validate to ensure setup was performed properly?

A. Prism Element • Settings - Filesystem Whitelist

B. Prism Element - Settings - Cluster Details

C. Prism Central - Settings - Cluster Details

D. Prism Central - Settings - Filesystem Whitelist

Answer: A

Explanation:

For ensuring that Nutanix storage containers can be mounted on non-Nutanix hosts for data migration workflows, the consultant should validate the configuration under:

A . Prism Element - Settings - Filesystem Whitelist. This setting allows specific non-Nutanix hosts to access the Nutanix storage containers, which is essential for environments where data must be accessible to systems outside the Nutanix cluster. By whitelisting the IP addresses or hostnames of

these external systems, they are granted the necessary permissions to mount and interact with the Nutanix file systems.

Reference: Nutanix Prism Element User Guide, Nutanix Storage and Filesystem Configuration Best Practices.

Question: 237

What is the default password shipped on new NX hardware from the factory for the ADMIN user on IPMI?

A. node-serial-number

B. nutanix/4u

C. block-serial-number

D. ADMIN

Answer: A

Explanation:

Nutanix Security: As part of security improvements (complying with California statute SB-327), Nutanix changed the default IPMI password policy.

Node-Specific Password: Each Nutanix NX hardware node now ships with a unique default IPMI password for the ADMIN user.expand_more This password is the node's serial number (using capital letters).expand_more

Finding the Serial Number: You can locate the node's serial number either on a physical sticker or by running the ipmitool fru print command on the node.

Reference:

Nutanix Support Portal - Knowledge Base Article 1091: https://portal.nutanix.com/kb/1091

Question: 238

After reviewing the questionnaire provided by a customer, the consultant is completing the

Foundation Configuration on the Nutanix website. According to the customer requirements, the cluster should be prepared off site in a safe room, and moved afterwards to the datacenter.

Which configuration should the consultant implement on the Foundation VM?

4. Do you want RDMA passthrough to the CVMs?   ● No   ○ Yes

5. What type of LAGs will your production switch have?   ● None   ○ Static   ○ Dynamic (LACP)

6. To assign a VLAN to host/CVMs, enter the tag:
   [   ]
   Optional. 1 - 4094. Enter 0 (zero) to remove any existing tag.

7. Nutanix requires all hosts and CVMs of a cluster to have static IPs in the same subnet. Pick a subnet:

   Netmask of Every Host and CVM   Gateway of Every Host and CVM
   [255.255.255.0]   [10.136.166.254]

   ○ If you plan to deploy Nutanix Objects, click here to learn about important network requirements.

8. Pick a same or different subnet for the IPMIs as well, unless you want them to have no IPs.

   Netmask of Every IPMI   Gateway of Every IPMI
   [255.255.254.0]   [172.17.213.254]

9. Double-check this installer's networking setup.

   • There must be one interface in the host-CVM subnet you entered above.
   • There must be one interface in the IPMI subnet you entered above.
   ☐ Skip this validation (e.g. this installer is on a routed network)

   List of existing interfaces   Refresh   Add a new interface   Add

A. Add « virtual switch dedicated to the IPMI network.

B. Prepare multi-homing with two IP addresses.

C. another physical laptop port to the Foundation VM.

D. Create a firewall rule blocking customer subnets.

_____

                                                        Answer: A

Explanation:

When preparing the cluster offsite in a safe room, the consultant should ensure that the Foundation VM is correctly configured to handle IPMI networking. Implementing a virtual switch dedicated to the IPMI network within the Foundation VM environment ensures that there is a segregated and controlled network path for IPMI traffic, which is crucial for initial hardware configuration and management. This setup facilitates the secure and efficient foundation process before the cluster is moved to the data center.
Reference: Nutanix Foundation Tool Guide, Nutanix Network Configuration Best Practices.

Question: 239

After the successful creation of clusters, the customer wants to ensure that alerts are sent automatically to Nutanix support.

Which Nutanix feature should the consultant ensure is enabled?

A. Support Portal

B. Pulse

C. insights

D. Support Tunnel

Answer: B

Explanation:

To ensure that alerts are automatically sent to Nutanix support, the Nutanix feature called Pulse must be enabled. Nutanix Pulse is an automated system intelligence service that collects health information and system alerts from Nutanix clusters and sends them to Nutanix support for proactive monitoring and troubleshooting. Enabling this feature is crucial for maintaining high availability and performance of the Nutanix environment, as it allows Nutanix support to quickly respond to and manage potential issues.
Reference: Nutanix Pulse Documentation, Nutanix Support Services Information.

Question: 240

Which subnet should a consultant be aware is reserved for internal connectivity within a Nutanix

cluster?

A. 192.168.5.0/24

B. 192.168.5.0/23

C. 192.168.254.0/24

D. 192.168.5.0/26

Answer: A

Explanation:

The consultant should be aware that the subnet 192.168.5.0/24 is reserved for internal connectivity within a Nutanix cluster. This subnet is typically used for the internal operations of the Nutanix cluster, including CVM backplane communications. It is critical to ensure that this subnet does not overlap with any external network configurations to avoid networking conflicts that can affect cluster operations and communications.
Reference: Nutanix Networking Best Practices, Nutanix Cluster Configuration Guide.

Question: 241

During Foundation using a customer-provided network switch, a consultant is facing time-out issues.

What action should the consultant take to resolve this issue?

A. Check jumbo frames support of the network switch.

B. Ensure the firmware of network switch is updated.

C. Enable queue depth on ports connected to nodes.

D. Disable STP on ports connected to Nutanix nodes.

Answer: A

Explanation:

When encountering timeout issues during Foundation using a customer-provided network switch, one common cause can be mismatched or unsupported network configurations, particularly concerning MTU sizes:

A . Check jumbo frames support of the network switch: Ensuring that the switch supports jumbo frames (MTU of 9000) and is properly configured for it can prevent timeout issues that might arise due to packet fragmentation or dropped packets.

Reference:

Nutanix Bible (https://www.nutanixbible.com), which discusses network prerequisites for successful Foundation.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), covering the technical setup and network requirements for cluster deployments.

Question: 242

During the knowledge transfer session, a consultant conducts a storage management demo. In the Creating a Storage Container workflow, the customer notices the Reserved Capacity parameter and asks for best practices related to it.

How should the consultant respond?

A. Nutanix recommends to configure at least 2 storage pools with at least one storage container each.

B. Do not reserve less than 90% of the total space in the storage pool.

C. Reserve capacity for a storage container only if the storage pool consists of single storage container.

D. Reserve capacity for a storage container only if the storage pool consists of multiple storage containers.

Answer: C

Explanation:

Regarding the Reserved Capacity parameter in a storage container:

C . Reserve capacity for a storage container only if the storage pool consists of a single storage container: This best practice ensures that dedicated space is guaranteed for the container, which is particularly important if the storage pool is not shared among multiple containers. This prevents space from being over-provisioned or unavailable when needed by critical applications.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically sections on storage management and best practices for capacity planning.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which includes detailed discussions on storage container configuration and management.

Question: 243

Based on customer requirements, a consultant conducted an AHV cluster deployment. Each node is configured with four NICs.

Which two components should the consultant manually update in the As-Built Guide? (Choose two.)

A. Node Port Layout Diagram

B. Network Cabling Diagram

C. Logical Design Diagram

D. Site installation Diagram

Answer: A, B

Explanation:

In the As-Built Guide for an AHV cluster deployment with each node configured with four NICs, the consultant should manually update:

A . Node Port Layout Diagram: To reflect the physical connectivity and usage of each NIC on the nodes.

B . Network Cabling Diagram: To accurately document how each node is connected to the network

infrastructure, ensuring clarity on physical network setup.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where documentation standards and diagrams are emphasized.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), covering the importance of accurate network and port documentation in deployment guides.

Question: 244

A consultant is showing the Prism Element Web Console to a customer and wants to check that cluster health is OK. During validation, the Health menu raises critical alerts about components using default passwords.

The cluster is based on ESXi as hypervisor, where Prism Central and Nutanix Files are deployed. Passwords have already been changed for a few components, but some of them have been left by default.

How can the consultant check and handle that situation?

A. Activate Cluster lockdown in Prism Element.

B. Check accounts and passwords in Local User Management in the vCenter.

C. Check NCC results and review the associated KB.

D. Deploy and connect the cluster to Prism Security Central.

Answer: C

Explanation:

To address critical alerts about components using default passwords in the Prism Element Web Console:

C . Check NCC results and review the associated KB: The Nutanix Cluster Check (NCC) tool can identify security vulnerabilities, including default password usage. Reviewing the results and associated knowledge base articles provides specific guidance on changing these passwords to secure the environment.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically sections on cluster health checks and security practices.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which includes instruction on using NCC for cluster validation and security enhancements.

Question: 245

A consultant is working with a customer on a new cluster deployment.

While reviewing the customer questionnaire, the consultant notices that the customer has documented their DNS servers as follows:

•   CompanyDNSI 192.168.5.10

•   CompanyDNS2 192.1685.20

What should the consultant consider regarding this deployment?

A. Everything has been accounted for to ensure a successful deployment.

B. Internal Nutanix networking will interfere with the installation's ability to complete.

C. During deployment, the CVMs should be configured to use a separate network.

D. New IP's provided should be verified to not conflict with the customers network.

Answer: D

Explanation:

Noticing a potential typo or error in the DNS server IP address notation:

D . New IPs provided should be verified to not conflict with the customer's network: It's crucial to verify the accuracy and validity of the IP addresses provided, ensuring there are no typos and that the IPs do not conflict with existing network configurations. The noted IP '192.1685.20' appears to be incorrectly formatted and should be corrected and validated.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where network preparation and IP address configuration are covered.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which discusses network planning and verification in cluster deployments.

Question: 246

What must be set to enable node discovery when using Foundation VM?

A. Host-only Adapter

B. Bridged Adapter

C. Network Address Translation

D. Internet Access

Answer: B

Explanation:

For enabling node discovery when using the Foundation VM, the network adapter of the Foundation VM must be set to a Bridged Adapter. This configuration allows the VM to appear as a separate device on the same physical network as the host machine, making it possible for the Foundation VM to communicate directly with the nodes that are also connected to the same network. This is essential for node discovery and subsequent imaging operations performed by the Foundation tool. Reference: Nutanix Foundation Guide, Nutanix Networking Best Practices.

Question: 247

Refer to Exhibit:
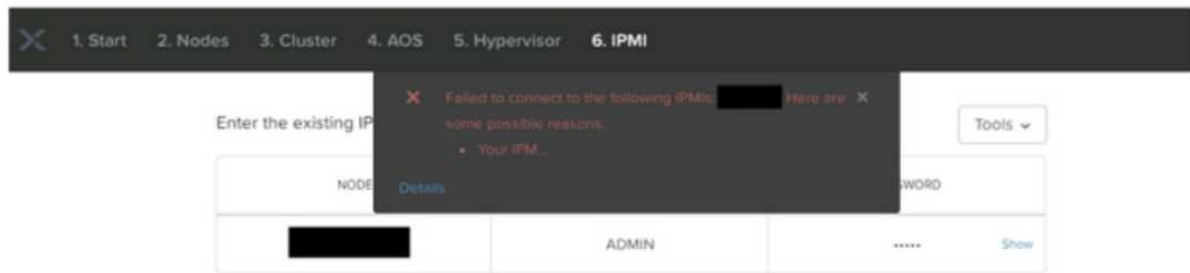
A consultant is conducting cluster deployment using Foundation VM on a laptop.

What troubleshooting step is required?

A. Disable local machine firewall to ensure its not blocking traffic.

B. Verify Foundation VM is configured with at least 4GB of memory.

C. Confirm that TCP port 5123 is open.

D. Ensure that adaptive endpoint security agents are enabled.

Answer: A

Explanation:

In the scenario where the Foundation VM on a laptop is used for a cluster deployment, and an error indicating a failure to connect to the IPMIs is shown, the first troubleshooting step should be to disable the local machine's firewall to ensure it is not blocking traffic necessary for the Foundation VM to communicate with the IPMIs. Firewalls can often block essential ports or IP addresses needed for deployment operations, hindering the Foundation process.
Reference: Nutanix Foundation Tool Troubleshooting Guide, Nutanix Deployment Common Issues.

Question: 248
Imaging fails for one or more nodes in the cluster

Imaging fails for one or more nodes in the cluster.

A log file displays this output:

```
Interface eth0 has an uplink.
Downloading livefs files...
Connecting to 10.249.230.171:8000 (10.249.230.171:8000)
[   80.852033] random: nonblocking pool is initialized
...
tar: short read livecd files not found.
```

What is the possible root cause?

A log file displays this output:

Interface ethO has an uplink.

Downloading livefs files... Connecting to 10.249.230.171:8000 (10.249.230.171:8000) [80.852033] random: nonblocking pool is initialized

tar: short read livecd files not found.

What is the possible root cause?

A. IPMI credentials are invalid.

B. There is a problem connecting to the Foundation VM.

C. Hypervisor version is not on the whitelist (iso_whitelist. j son).

D. AOS version is incompatible.

Answer: B

Explanation:

The log file output indicating a failure in downloading livefs files and problems finding the livecd files

during node imaging suggests there is a problem connecting to the Foundation VM. The specific error "tar: short read livecd files not found" typically points to an interrupted or failed download process, which can be caused by connectivity issues between the nodes and the Foundation VM. Ensuring robust network connectivity or verifying network settings in the Foundation VM could resolve this issue.
Reference: Nutanix Foundation Tool Error Messages, Nutanix Troubleshooting Documentation.

Question: 249

In preparing to install a new cluster for a company, a consultant needs to complete an installation worksheet.

Which values must be documented prior to initial base system setup?

A. Block Serial Numbers

B. Hypervisor, CVM, and IPMI IP Addresses

C. DNS and NTP IP Addresses

D. Prism Central IP Address

Answer: C

Explanation:

Prior to the initial base system setup for a new cluster installation, the consultant needs to document several critical infrastructure details. Among the most important are the DNS and NTP IP addresses (C). These addresses are crucial because they ensure that all nodes within the cluster can resolve domain names properly and synchronize their clocks accurately, which is vital for cluster operations and management. Proper DNS and NTP configurations help prevent many common issues related to name resolution and time synchronization that could affect the performance and stability of the cluster.
Reference: Nutanix Installation Prep Guide, Nutanix Network Configuration Requirements.

Question: 250

A customer already has a Prism Central (PC) instance deployed in their environment and expects the consultant to unregister the old cluster before registering the new cluster

What steps should the consultant take to safely and successfully unregister the customer's former cluster from PC?

A. Login to any CVM using SSH and use the multicluster command found within NCLi, followed by the unregistration_cleanup.py script on PE and PC.

B. Login to the PC Web UI, locate the PE cluster and click Unregister from the Actions dropdown menu.

C. Login to any PCVM using SSH and run the PE_unreglster.py script located in the Nutanix scripts directory, followed by the unregistratlon_cleanup.py script

D. Login to the PC Web Ul, navigate to Cluster Registrations found under settings in the Admin Center, check the box next to the desired PE. and click Remove

---

Answer: D

Explanation:

To safely and successfully unregister the customer's former cluster from Prism Central (PC), the consultant should take the following steps as outlined in option D:

Login to the Prism Central Web UI, which provides a user-friendly interface for managing multiple clusters.

Navigate to the "Cluster Registrations" section found under the "Settings" in the "Admin Center" of the Prism Central interface.

Check the box next to the desired Prism Element (PE) cluster that needs to be unregistered.

Click the "Remove" button to unregister the cluster.

This method allows the consultant to cleanly and directly manage the cluster registration without needing to interact with command-line tools or scripts, making it a straightforward process that minimizes the risk of errors and ensures that the operation can be tracked and audited through the UI.

Reference: Nutanix Prism Central Guide, Nutanix Administration Documentation.

Question: 251

A consultant has been tasked with increasing security on a 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 consultant to meet these requirements?

A. Enable STlGs via command line on SSH to a CVM.

B. Configure LDAP authentication through a secure server.

C. Enable Cluster Lockdown and provide an RSA key.

D. Restrict access with User Management in Prism.

Answer: C

Explanation:

The most straightforward approach for increasing security by disabling password authentication and moving to key-based SSH on a Nutanix cluster involves:

C . Enable Cluster Lockdown and provide an RSA key: Cluster Lockdown mode restricts management access to the cluster, ensuring that only key-based SSH authentication is used to access the CVM and AHV hosts, enhancing security by eliminating the use of passwords.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly sections discussing secure access and authentication methods.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), where security features like Cluster Lockdown are covered.

Question: 252

At which prompt should a consultant execute the command nanage_ovs —bridge_nawe brO show_uplinks in a Nutanix cluster?

A. nutanix@CVM-$

B. rootOcvM-t

C. esxiOcvM'S

D. rootQAHV-J#

Answer: A

Explanation:

To execute the command manage_ovs --bridge_name br0 show_uplinks in a Nutanix cluster, the appropriate prompt is:

A . nutanix@CVM-$: This command is intended for execution within the Controller Virtual Machine (CVM) environment, and "nutanix@CVM-$" is the standard user prompt in the CVM where such network commands are run.

Reference:

Nutanix Bible (https://www.nutanixbible.com), especially sections on managing virtual bridges and networking commands.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), which includes details on command-line operations within the CVM.

Question: 253

The installation process stops before imaging any of the nodes and an error message is displayed notifying the IPMI IP address is unreachable.

What should consultant do to fix the issue?

A. Ensure the Foundation VM is not in the same broadcast domain as the Controller VMs.

B. Re-try Foundation using a non-flat switch.

C. Check the service. log and the individual node log files for more detailed information.

D. if the nodes are in the same subnet go to the Cluster page and configure multi-homing.

Answer: C

Explanation:

When facing an error during the installation process that the IPMI IP address is unreachable:

C . Check the service.log and the individual node log files for more detailed information: Reviewing

these log files will provide insights into what might be causing the IPMI connectivity issue, offering specific error messages or network configuration problems that need resolution.

Reference:

Nutanix Bible (https://www.nutanixbible.com), where troubleshooting and log analysis are discussed.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), focusing on Foundation troubleshooting and the use of log files to diagnose installation issues.

Question: 254

A customer wants to ensure that the Data Protection configuration using Protection Domains is fully functional.

The consultant has configured a protection domain for newly-created VMs with static IP addresses on multiple VLANs. The network administrator confirmed that the correct subnets exist at both physical sites.

After performing a failover operation, the virtual machines are turned back on but have no network access.

Which statement describes this issue?

A. Network mappings are not configured for the Remote Site.

B. Nutanix Guest Tools (NGT) are mandatory to use Data Protection.

C. VirtIO drivers need to be reinstalled after a failover.

D. Remote Virtual IP addresses are missing for the Remote Site.

Answer: A

Explanation:

If after performing a failover operation the virtual machines have no network access despite the network administrator confirming the correct subnets at both sites, the likely issue is:

A . Network mappings are not configured for the Remote Site: This configuration oversight means that although the VMs are online, they do not have appropriate network settings that correspond to the network environment at the failover site, resulting in connectivity issues.

Reference:

Nutanix Bible (https://www.nutanixbible.com), specifically the sections on disaster recovery and network configurations in failover scenarios.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), covering Data Protection and failover operations.

Question: 255

A consultant has completed a cluster build according to the following requirements:

• Syslog Setup with ERROR level Logging

• Proxy Setup

• SNMP v3 Trap setup

When adding the cluster to an existing Prism Central with a proxy setup, the following error is triggered in the Prism Gateway logs:

Caused by: corn.nutanix.util .base.ValidationException: Prism Central is unreachable

What configuration is likely missing?

A. Whitelist of Prism Central OSIP inside of Prism Element and all Prism Element CVMs inside of Prism Central

B. Whitelist of Prism Central VIP inside of Prism Element and Prism Element VIP inside of Prism Central

C. Whitelist of AHV Host IP addresses in Prism Central

D. Whitelist of Prism Central DSIP inside of Prism Element

Answer: B

Explanation:

The error stating "Prism Central is unreachable" when trying to add a cluster to an existing Prism Central with a proxy setup is likely due to incorrect or missing network routing configurations or firewall rules that do not allow communication between Prism Element and Prism Central. The most likely configuration that is missing and needed to resolve this issue is the whitelist of Prism Central VIP inside of Prism Element and Prism Element VIP inside of Prism Central. Whitelisting these Virtual IP addresses ensures that network traffic between these crucial components of the Nutanix architecture is permitted, thus enabling successful communication and registration of the cluster with Prism Central.
Reference: Nutanix Network Configuration Guide, Nutanix Prism Central Administration.

Question: 256

As a part of a cluster deployment test plan, a customer asks the consultant for some additional performance and resiliency tests.

How should the consultant best satisfy this request?

A. Deploy X-Ray and conduct any relevant tests.

B. use Apache Jmeter.

C. Run diagnostics.py directly from CVM.

D. Leverage lometer.

Answer: A

Explanation:

To satisfy the customer's request for additional performance and resiliency tests on a cluster, deploying Nutanix X-Ray is the best option. X-Ray is a performance testing and benchmarking tool specifically designed for hyper-converged infrastructures and provides a range of tests that simulate real-world scenarios, stress tests, and resiliency tests. This tool allows the consultant to comprehensively assess the performance, fault tolerance, and operational resilience of the Nutanix cluster, meeting the customer's testing requirements effectively.
Reference: Nutanix X-Ray Documentation, Nutanix Performance Testing Best Practices.

Question: 257

During the cluster deployment, a consultant conducts operational tests on a vCenter-managed ESXi hypervisor.

As a part of tests, vCenter must place the host into maintenance mode, however, the task is stuck and the CVM is not shutting down automatically.

What should the consultant do to resolve the issue?

A. Shutdown the CVM using cvn_shutdown -P now.

B. Put the node into maintenance mode using

C. acli host.enter_maintenance_mode Hypervisor address.

D. Put the node into maintenance mode using '-/serviceability/bin/esx-shutdown

-s cwn_.£p_addr

E. Shutdown the CVM using shutdown -h now.

Answer: E

Explanation:

When a task to place an ESXi host into maintenance mode is stuck and the CVM (Controller Virtual Machine) is not shutting down automatically, the consultant should manually shut down the CVM. The command shutdown -h now is used to halt the system safely. Before executing this command, it is important to ensure that all virtual machines hosted on the CVM have been properly shut down or migrated to avoid any data loss or corruption.

Reference:

Nutanix Community: CVM maintenance and Host maintenance1

Nutanix Support & Insights documentation on Cluster Management Commands2

Nutanix Support & Insights on AHV Host Maintenance Mode3

Question: 258

Refer to Exhibit:

Basic Cluster Inventory					
Rack Unit	Node ID	Hypervisor Host Name	BMC IP Address	Hypervisor IP Address	CVM IP Address
	A	AHV-CLUSTER-01	172.25.16.10/24	172.25.17.10/24	172.25.17.20/24
S4-B13-U36-37	B	AHV-CLUSTER-02	172.25.16.11/24	172.25.17.11/24	172.25.17.21/24
	C	AHV-CLUSTER-03	172.25.16.12/24	172.25.17.12/24	172.25.17.22/24
	D	AHV-CLUSTER-04	172.25.16.13/24	172.25.17.13/24	172.25.17.23/24

A customer has completed and given the pre-delivery questionnaire to the consultant. The customer has indicated that they are using HPE/OEM hardware.

Which action should the consultant take to prepare the laptop and Foundation networking for the installation?

A. Configure Backplane Traffic Isolation.

B. Set IP Addresses in CVM/Host subnet only.

C. Set IP Addresses in both CVM/Host and IPMI subnets.

D. Enable network segmentation.

Answer: C

Explanation:

When preparing the laptop and Foundation networking for the installation on customer-indicated HPE/OEM hardware, the consultant should set IP addresses in both the CVM/Host and IPMI subnets (Option C) This ensures that all necessary network interfaces are appropriately configured for management and operational traffic, facilitating seamless communication during the foundation process. Properly setting up IP addresses in both subnets is crucial for ensuring that the Foundation process can access both the CVMs/Hosts and the IPMI for management tasks.
Reference: Nutanix Foundation Guide, Network Preparation for Nutanix Installations.

Question: 259

A consultant wants to expand a Nutanix cluster based on Dell PowerEdge servers and notices the nodes have arrived software-less.

Which two actions should the consultant take to expand the cluster? (Choose two.)

A. Image nodes using Foundation VM/App.

B. Use Expand cluster to expand duster.

C. Return nodes to factory for imaging.

D. Use Expand cluster to image the nodes.

Answer: A B

Explanation:

For expanding a Nutanix cluster with software-less Dell PowerEdge servers, the consultant should:

A. Image nodes using Foundation VM/App. This tool is designed for initial imaging and configuration of Nutanix nodes, including software installation, which is necessary since the nodes arrived without any software. B. Use the Expand cluster functionality within the existing Nutanix environment once the nodes are imaged. This feature will integrate the newly imaged nodes into the existing cluster, enhancing the cluster's capacity and performance. Options C and D are not applicable as returning nodes to the factory for imaging is unnecessary with the availability of the Foundation tool, and "Expand cluster to image the nodes" is not a correct procedure as imaging must be completed before expansion.
Reference: Nutanix Foundation Tool Documentation, Nutanix Cluster Expansion Guide.

Question: 260

While reviewing the BOM during the kickoff call, a consultant notices that there are six NX nodes and 12 SFP+ modules, but no fiber cables are listed.

Which statement is correct regarding this scenario?

A. Only copper cables, not fiber cables, are required for SFP* modules.

B. The customer can use any fiber cable from existing network devices.

C. Nutanix provides fiber cables based on the fiber channel ports on the server.

D. The consultant should remind the customer that it is their responsibility to procure compatible fiber cables.

Answer: D

Explanation:

When deploying Nutanix hardware, it is essential to ensure that all necessary components are included in the Bill of Materials (BOM). In this case, the BOM includes SFP+ modules but lacks the fiber cables needed for connectivity. The SFP+ modules indicate a requirement for fiber optic cables, and it's crucial for the consultant to ensure the client understands their responsibility to procure compatible cables. Nutanix typically does not provide fiber cables as these are considered network infrastructure components, which vary based on specific network requirements and setups.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible (https://www.nutanixbible.com/)

Nutanix TechTalks and Learning Videos
(https://www.youtube.com/playlist?list=PLAHgaS9IrJecs_AcQT3Y7vSsKT2mjz3Iu)

Question: 261

What are the two most important prerequisites to be validated before the consultant goes onsite? (Choose two.)

A. Complete the kickoff call and validate the BOM (Bill of Materials).

B. Verify whether the servers have been racked by the customer.

C. Validate whether the cluster questionnaire is complete and if the physical switch configurations are complete.

D. Identify the point of contact who can provide networking details and switch port information after arriving onsite.

Answer: A, C

Explanation:

Before going on-site to deploy a Nutanix cluster, the following prerequisites are crucial:

A . Complete the kickoff call and validate the BOM (Bill of Materials): This ensures that all necessary components are accounted for and any discrepancies or missing items are addressed prior to installation.

C . Validate whether the cluster questionnaire is complete and if the physical switch configurations are complete: Ensuring that all relevant customer and network information is obtained and validated is critical to avoid delays or issues during the physical installation and configuration of the cluster.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly sections on pre-deployment planning and validation.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), covering the importance of thorough preparation and documentation before on-site engagements.

Question: 262

The consultant is deploying a 20-node AHV cluster, as part of a Nutanix Files deployment.

How many FSVMs can the consultant deploy in this environment?

A. 16

B. 18

C. 20

D. 22

Answer: A

Explanation:

In a Nutanix Files deployment within a 20-node AHV cluster, the consultant can deploy a maximum

of 16 FSVMs (File Server Virtual Machines). This limitation is based on Nutanix's best practices and design considerations for scalability and performance. The number of FSVMs that can be effectively managed and maintained without degrading the performance of the file-serving operations or the underlying storage infrastructure dictates this maximum.

Reference:

Nutanix Certified Services - Core (NCS-Core) Learning Documents

Nutanix Bible: https://www.nutanixbible.com

Nutanix University Videos:
https://www.youtube.com/playlist?list=PLAHgaS9IrJecs_AcQT3Y7vSsKT2mjz3Iu

Question: 263

A customer recently bought services from their consultant to re-configure an existing Cluster for a new use case. The data on the cluster is not important. The customer does not know the CVM usernames and passwords.

Which Foundation tool should the consultant use to resolve this issue?

A. Foundation VM - Auto Discovery

B. Foundation Applet(CVM) - Auto Discovery

C. Foundation VM - Bare Metal

D. Foundation Applet(CVM) - Bare Metal

Answer: C

Explanation:

For re-configuring an existing cluster for a new use case where data preservation is not a concern, and there is a lack of CVM credentials:

C . Foundation VM - Bare Metal: This tool allows for a complete re-installation of the Nutanix software from scratch, which is ideal in scenarios where existing configurations and data are no longer needed, and access credentials are unknown or lost.

Reference:

Nutanix Bible (https://www.nutanixbible.com), especially sections on cluster reconfiguration and Foundation tools.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), where cluster deployment and reconfiguration scenarios are extensively covered.

Question: 264

A consultant is onsite with a customer to expand an existing eight-node cluster with four new GPU nodes. The consultant plugs the nodes into the network switch and follows the procedure to expand the cluster in Prism Element, but the new nodes cannot be found.

Which issue is preventing the new nodes from being discovered?

A. IPMI is not plugged into the network.

B. IPv6 is disabled on the ToR switch.

C. Node discovery is disabled in the BIOS.

D. Active Directory is not configured appropriately.

Answer: A

Explanation:

If new GPU nodes cannot be found during an attempt to expand an existing cluster:

A . IPMI is not plugged into the network: IPMI must be connected and functional for node discovery and management during expansion processes. If IPMI ports are not connected to the network, the nodes will not be discoverable in Prism Element.

Reference:

Nutanix Bible (https://www.nutanixbible.com), particularly the sections discussing network requirements for cluster expansion.

Nutanix University: NCS-Core 6.8 Training (https://university.nutanix.com), focusing on troubleshooting and resolving issues during hardware expansions.

Question: 265

Which container advanced setting should be configured to prevent ISO container images from exceeding a 100GB limit.

A. Reserved capacity

B. Advertised capacity

C. Erasure coding

D. Compression

Answer: B

Explanation:

The correct container advanced setting to configure in order to prevent ISO container images from exceeding a 100GB limit is "Advertised Capacity." This setting allows administrators to set a maximum storage capacity that is visible and available to the user, irrespective of the actual physical capacity available, thereby preventing over-allocation and management issues in environments where strict capacity limits are required.

Reference:

Nutanix Certified Services - Core (NCS-Core) Learning Documents

Nutanix Bible: https://www.nutanixbible.com

Question: 266

A customer needs a 20-node cluster built. The consultant only has a 16-port flat network switch, and the customer is using VLAN tagging for the hosts and CVMs.

How should the consultant create the cluster?

A. Set VLAN tags on all hosts and CVMs.

B. Create the Nutanix cluster manually.

C. Connect the cluster to the production network.

D. Create a separate four-node cluster.

Answer: B

Explanation:

Given the constraint of a 16-port switch for a 20-node cluster, the consultant cannot physically connect all nodes to the network simultaneously. VLAN tagging allows multiple virtual networks to be carried over the same physical network. However, the challenge here is not about VLANs but the physical limitation of ports. The practical approach would be to manually create the cluster, potentially in stages, as the full network capacity required for all nodes is not available.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Networking chapter (https://www.nutanixbible.com/)

Question: 267

A consultant completes a new cluster installation and tries to update the firmware using LCM. The update fails with the following.

operation failed, Reason: Failed to run LCM operation, error: ReadError('not a grip file',).

Which log should the consultant view to get more info?

A. genesis.out

B. zookeeper.out

C. janus.out

D. athena.out

Answer: A

Explanation:

The error encountered during the LCM operation suggests a failure in reading a file, which might be linked to the foundational services of the cluster. The genesis.out log file is essential for troubleshooting issues related to cluster initialization and fundamental operations. This file logs the activities of the Genesis service, which is responsible for managing and monitoring the lifecycle of cluster services, including LCM tasks. In case of errors during LCM operations, the genesis.out log provides detailed insight into what might have gone wrong during the process, making it the appropriate log to check in this scenario.

Reference:

Nutanix Bible: https://www.nutanixbible.com/

Nutanix University Videos on LCM and Genesis service: Nutanix Official YouTube Playlist

Question: 268

A consultant is planning to use a flat switch for installation.

What is the network requirement for Foundation VM, CVM, Hypervisor, and IPMI

A. Foundation VM, CVM, and Hypervisor must be on the same subnet. IPMI can be on a different subnet.

B. CVM, Hypervisor, and IPMI must be on the same subnet. Foundation VM can be on a different subnet.

C. Foundation VM and CVM must be on the same subnet. Hypervisor and IPMI can be on a different subnet.

D. Foundation VM, CVM, and IPMI must be on the same subnet. Hypervisor can be on a different subnet.

Answer: A

Explanation:

In a typical Nutanix deployment using a flat switch, the Foundation VM, the CVM, and the Hypervisor should all be on the same subnet to facilitate seamless communication and management operations during the initial setup and operation. The IPMI, being a management interface, can be on a different subnet as it serves a different purpose primarily for remote management at the hardware level and does not need to be on the same subnet as the other components for cluster functionality.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Network Configuration chapter (https://www.nutanixbible.com/)

Question: 269

From a hypervisor, which IP address should the consultant use to connect to the locally tossed on?

A. 192.168.5.254

B. 172.16.19.2

C. 10.100.5.5

D. 192.168.1.254

Answer: A

Explanation:

When configuring network settings for a hypervisor or accessing local services hosted on it, the IP address must be reachable from the network configuration you are currently using. Given the generic nature of the options, the correct choice typically depends on the subnet used for management purposes, which often uses a standard private address. "192.168.5.254" is a common choice for local network configurations and is likely set up as the gateway or a primary network interface on the hypervisor.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Network Configuration chapter (https://www.nutanixbible.com/)

Question: 270

The customer notices storage latency issues with their new Nutanix AHW cluster. The deployment includes the following components:

◦ 2 ToR switches

◦ 7 nodes

Which command should the consultant run to identify issues?

A. manage_ovs show bridges

B. manage_ovs show_interfaces

C. manage_ovs show_11dp

D. manage_ovs show_uplinks

Answer: B

Explanation:

To troubleshoot storage latency issues in a Nutanix cluster, it is vital to examine the state and performance of the network interfaces. The command manage_ovs show_interfaces provides comprehensive details about each interface's status, including any errors or drops that could contribute to network-related latency. This information is crucial for identifying problematic nodes or interfaces that may be causing storage access delays. This command effectively presents the operational status of network interfaces, which can help pinpoint issues directly affecting storage performance.
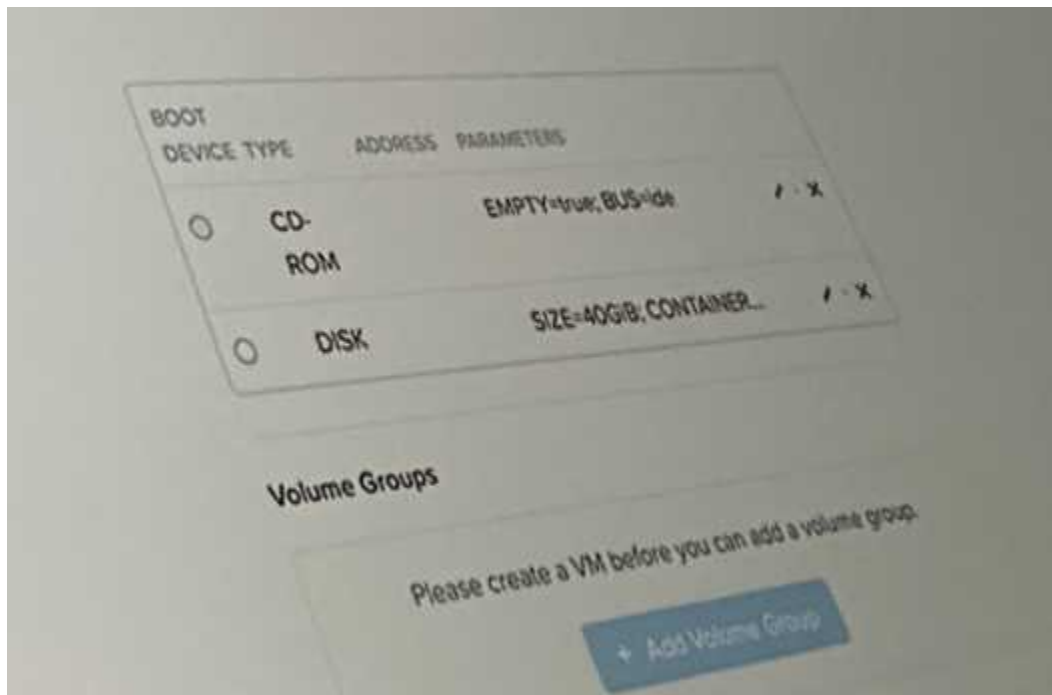
Reference:

Nutanix Command Reference Guide: https://portal.nutanix.com

Nutanix University Troubleshooting Network Issues: https://www.nutanix.com/support-services/training-certification

Question: 271

Refer to the exhibit.

A consultant migrated multiple VMs to a new cluster. VMs were previously in VLAN 10.

Why can the VMs no longer communicate on their network?

A. The VNIC type should be set to VMXNET2.

B. The GuestOS firewall is blocking traffic in the new cluster.

C. The VLAN ID is incorrect.

D. Static IP addresses have not been assigned to the new VMs.

Answer: C

Explanation:

In scenarios where VMs have been migrated to a new cluster and they were previously on VLAN 10 but can no longer communicate, the most likely cause is that the VLAN ID setting on the virtual network interface cards (VNICs) of the VMs does not match the VLAN configuration of the new network. Ensuring that the VLAN IDs are correctly set to match the network configuration of the new cluster is essential for proper network communication.

Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Networking chapter (https://www.nutanixbible.com/)

Question: 272

During Foundation, all nodes are imaged successfully. The cluster creation step fails. The consultant troubleshoots the issue and verifies that all Hosts and CVMs are up and running and responding to network pings.

Which method should the consultant select to create the cluster?

A. Log into one of the hosts and run the cluster create command.

B. Image the Bare Metal nodes.

C. Log into one of the CVMs and run the cluster create command.

D. Factory reset the nodes and re-start the Foundation process.

Answer: C

Explanation:

After confirming that all nodes (Hosts and CVMs) are operational and network accessible, the next step in troubleshooting a failed cluster creation process is to use one of the CVMs to manually initiate the cluster creation. This is done using the command cluster create from a CVM, which allows you to establish the cluster management and data services provided by Nutanix. This approach is recommended when the Foundation process has successfully imaged the nodes but the automatic cluster creation has failed.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Cluster Initialization chapter (https://www.nutanixbible.com/)

Question: 273

Where in the Support Portal can it be determined if a version of AOS is supported on a particular hardware platform.

A. Solution Documentation

B. Upgrade Paths

C. Hardware Compatibility Lists

D. Compatibility and Interoperability Matrix

Answer: D

Explanation:

To determine if a version of Acropolis Operating System (AOS) is supported on a specific hardware platform, the "Compatibility and Interoperability Matrix" section of the Nutanix Support Portal should be consulted. This resource provides detailed information on supported hardware for different AOS versions, ensuring that all components are compatible and supported for optimal operation.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 274

A consultant deploys a new ESXi-based Nutanix cluster and migrates a sphere deployment to the cluster, After completing the deployment, the customer states they are experiencing VM performance issues.

Upon observing logs and performance data, the consultant identified the following symptoms.

◦ Excessive read/write 1/Os on CVMs

◦ Excessive Motion of VMs

What is causing this issue?

A. Sphere cluster DRS migration threshold is set to Conservative.

B. DRS is in use and the cluster is configured to use Erasure Coding.

C. DRS is in use and the cluster is configured to use Deduplication.

D. Sphere cluster DRS migration threshold is set to Aggressive

Answer: D

Explanation:

The customer is experiencing VM performance issues characterized by excessive read/write I/Os on CVMs and excessive motion of VMs due to the Distributed Resource Scheduler (DRS) in an ESXi-based Nutanix cluster. This is likely caused by the DRS migration threshold being set to Aggressive, which leads to frequent rebalancing of workloads across the cluster, causing high I/O and VM motion. Adjusting this setting to a less aggressive level can help reduce unnecessary VM motions and stabilize performance.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 275

Refer to the exhibit.

Hypervisor Host Name (FQDN)	Hypervisor Mgmt IP	SUBNET	CVM IP	SUBNET	IPMI IP	SUBNET
NTNXAHV1	10.170.1.5	255.255.240.0	10.170.1.8	255.255.240.0	10.170.25.5	255.255.255.0
NTNXAHV2	10.170.1.6	255.255.240.0	10.170.1.9	255.255.240.0	10.170.25.6	255.255.255.0
NTNXAHV3	10.170.1.7	255.255.240.0	10.170.1.10	255.255.240.0	10.170.25.7	255.255.255.0

Which IP addresses can be configured for the Foundation VM and Consultant Laptop?

A. FVM: 10.170.25.15/24, Laptop: 10.170.25.16/24

B. FVM: 10.170.1.2/20, Laptop: 10.170.1.12/20

C. FVM: 10.170.16.15/20,: 10.170.16.16/20

D. FVM: 10.170.25.2/24, Laptop: 10.170.25.12/24

Answer: D

Explanation:

Based on the subnet assignments from the exhibit provided, the Hypervisor Management IP addresses fall within the 10.170.0.5, 10.170.0.6, 10.170.0.7 range with a subnet mask of 255.255.240.0, indicating a /20 subnet. However, the Foundation VM (FVM) and the Consultant Laptop should ideally be on the same subnet as the Controller Virtual Machine (CVM) to facilitate easy access and management. The CVM IP addresses indicated are 10.170.0.4, 10.170.0.9, and 10.170.0.10 with subnet 255.255.240.0 (/20). Thus, the appropriate choice for the FVM and Laptop that matches the subnet without overlapping with existing IPs and allows network configuration without conflicts would be in the same /24 range as suggested in option D, i.e., FVM: 10.170.25.2/24, Laptop: 10.170.25.12/24.

Reference:

Nutanix Networking and Foundation Setup Guidelines

Question: 276

A new Nutanix customer suspects that network traffic is going over the 1G interfaces instead of the 10G interfaces.

How should a consultant confirm that the traffic is only traversing the 10G interfaces?

A. Look in Prism Element under Network.

B. Run the allssh manage_ovs show interfaces command.

C. Run the iconfig command on the CLI of each CVM.

D. Run the allssh manage ovs show uplinks command.

Answer: B

Explanation:

To confirm that network traffic is traversing the 10G interfaces and not the 1G interfaces in a Nutanix environment, the consultant should run the allssh manage_ovs show interfaces command. This command allows for the inspection of all interface configurations and their current operational status across the cluster, effectively confirming which interfaces are actively managing traffic.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 277

Which Nutanix tool does the Field Installation Guide provide instructions for?

A. Prism Central

B. Foundation

C. As-Built Generator

D. Nutanix Move

Answer: B

Explanation:

The Nutanix Field Installation Guide primarily provides instructions for using Foundation. Foundation is the tool used for deploying, imaging, and configuring Nutanix nodes in a new installation or when expanding existing clusters. This tool is essential for setting up the Nutanix environment correctly and efficiently.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Foundation chapter (https://www.nutanixbible.com/)

Question: 278

For a new AHV cluster installation, a customer has 20 NX-8155 nodes with quad port NICs. The

customer wants to meet the following guidelines:

◦   Take advantage of all available 10G links

◦   Achieve maximum throughput per VM

◦   Use of redundant ToR switches

◦   Fastest reconvergence during link failure

How should the load balancing be configured on the host?

A. In Prism Element, update the virtual switch uplink configuration to Active-Active with MAC pinning.

B. In Prism Element, update the virtual switch uplink configuration to Active-Active.

C. Use CLI to add the interfaces to bridge bro on all hosts.

D. Use CLI to configure Balance-TCP on bridge bro.

Answer: D

Explanation:

For a configuration that aims to utilize all available 10G links, achieve maximum throughput per VM, and ensure redundancy with fast reconvergence during link failure, the optimal setting would be to configure Balance-TCP on bridge br0. This setting distributes the load across all available network paths based on the TCP session, maximizing the utilization of network interfaces and ensuring redundancy. This approach is particularly effective in environments with multiple network paths and ensures efficient network traffic management.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Network Configuration chapter (https://www.nutanixbible.com/)

Question: 279

A consultant successfully creates a Nutanix cluster. The consultant needs to configure containers for the customers business critical applications and general server workloads. The customer

requirements are to achieve maximum storage space savings and optimize

I/O performance.

What setting(s) should the consultant enable on the storage container(s)?

A. Compression and deduplication

B. Deduplication only

C. Compression and erasure coding

D. Compression only

Answer: C

Explanation:

To meet the requirements of maximizing storage space savings while optimizing I/O performance for business-critical applications and general server workloads, enabling both compression and erasure coding on the storage containers is recommended. Compression reduces the data footprint on storage disks, while erasure coding provides data redundancy in an efficient manner, which not only saves space but also enhances data durability and I/O performance for read-intensive applications. Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Storage Efficiency chapter (https://www.nutanixbible.com/)

Question: 280

A customer has HE servers with DiscoverOS and wants to install a Nutanix cluster.

Which method should a consultant use to meet the requirements?

A. Manually create the cluster.

B. Create the cluster using CVM Foundation.

C. Image the bare metal nodes.

D. Create the cluster using Crash cart.

Answer: C

Explanation:

When installing a Nutanix cluster on hardware servers pre-loaded with an existing operating system such as DiscoverOS, the best approach is to re-image the bare metal nodes. This process involves using the Nutanix Foundation tool to install the required Nutanix software (such as AOS and Hypervisor) onto the nodes, replacing any pre-existing software. This ensures that the hardware is properly configured and optimized for the Nutanix environment.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Foundation chapter (https://www.nutanixbible.com/)

Question: 281

A consultant is running Foundation discovery with Foundation VM and is unable to dynamically discover the nodes. The consumer needs another method to image the nodes.

What information does the consultant need to do bare metal Foundation?

A. Serial # of Block

B. IPMI MAC Address

C. LAN MAC Address

D. Serial # of Node

Answer: B

Explanation:

When using the Foundation tool for bare metal imaging of Nutanix nodes and dynamic discovery is not possible, the consultant needs the IPMI MAC Address of the nodes. This address is used to identify each node uniquely through its IPMI for remote management purposes, allowing the Foundation VM to interact directly with each node's base management controller (BMC) for the imaging process.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 282

A consultant needs to upgrade the ESXi hosts on a Nutanix cluster from version 6.7 to 7.0. vSphere DRS and wMoton are working properly. The consultant needs to use One-Click Upgrade.

Which setting should be verified by the consultant?

A. vSphere HA is enabled.

B. Nutanix Prism HA is enabled.

C. vSphere DRS Automation level is set to Conservative.

D. DRS automation level on all CVMs is disabled.

Answer: A

Explanation:

When upgrading ESXi hosts on a Nutanix cluster using One-Click Upgrade, it is crucial to verify that vSphere HA (High Availability) is enabled. This setting ensures that in the event of host failure during the upgrade process, VMs will be automatically restarted on other hosts in the cluster, maintaining availability and minimizing disruption. Verifying this setting is essential to ensure the resilience of the environment during the upgrade.

Reference:

VMware vSphere Upgrade Documentation

Nutanix Upgrade Guide

Question: 283

During which part of the Knowledge Transfer does the customer learn about Nutanix basics and their environment at a high level?

A. Technical Checklist

B. Technical Handoff Slides

C. Support portal

D. As-Built Guide

Answer: B

Explanation:

During the Knowledge Transfer phase, customers typically learn about Nutanix basics and their specific environment at a high level through "Technical Handoff Slides." This part of the training and handover process provides a broad overview of the installed solution, how it operates, and how it interacts with the existing infrastructure, making it essential for foundational understanding. Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 284

A consultant installs a new AHV cluster and moves the cluster into the customer's environment. Alter the move, the consultants notice that traffic is not being balanced across the physical NICs. The ToR switches have been configured with LACP.

Within Prism Element, which AHV network option should be set to resolve the issue?

A. Active-Backup

B. Active-Active

C. No Uplink Bond

D. Active-Active with MAC Pinning

	Answer: B

Explanation:

In a situation where traffic is not being balanced across the physical NICs and the Top-of-Rack (ToR) switches have been configured with LACP (Link Aggregation Control Protocol), the appropriate AHV network configuration to resolve this issue within Prism Element is "Active-Active." This setting enables both NICs to actively handle traffic, which, combined with LACP, allows for load balancing and redundancy, effectively utilizing all available network paths. This setup ensures that traffic is spread evenly across the physical NICs, maximizing network throughput and resilience.

Reference:

Nutanix Prism User Guide

Nutanix AHV Administration Guide

In a scenario where a new AHV cluster is installed and the traffic is not being balanced across the physical NICs despite the ToR switches being configured with LACP, the appropriate network option to set within Prism Element is Active-Active. This configuration allows for a traffic-hashing algorithm, such as balance-TCP, to split traffic between multiple links in an active-active fashion. Since the uplinks appear as a single L2 link, the algorithm can balance the traffic among bond members without any regard for switch MAC address tables1.

Reference:

Nutanix Community: AHV Networking | Enable, Disable and Verify LACP1

Nutanix Support & Insights: Layer 2 Network Management2

Nutanix Support & Insights: Enabling LAG and LACP on the ToR Switch (AHV Only)

Question: 285

A customer has an ESXi cluster with two 10GbE NICs on each node and the following requirements.

◦   Solution must follow Nutanix Best Practices

◦   Network configuration should be redundant

◦   A vSphere Distributed Switch will be utilized

Which load balancing configuration should be used?

A. Route based on IP hash

B. Route based on source MAC hash

C. Route based on originating port ID

D. Route based on physical NIC load

Answer: A

Explanation:

For a customer using an ESXi cluster with two 10GbE NICs on each node and a vSphere Distributed Switch, the recommended load balancing configuration, following Nutanix Best Practices for redundancy and efficiency, is "Route based on IP hash." This setting allows for optimal utilization of network bandwidth and redundancy by distributing the traffic based on the IP address pairings, ensuring a balanced load across the physical NICs.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 286

Which subnet is reserved for CVM internal switch traffic?

A. 192.168.5.0/24

B. 192.168.254.0/24

C. 10.100.5.0/30

D. 172.16.19.0/16

Answer: B

Explanation:

The subnet 192.168.254.0/24 is commonly reserved for CVM (Controller Virtual Machine) internal switch traffic within Nutanix environments. This subnet is used internally by the CVMs for management and storage operations that are integral to the Nutanix infrastructure. Using a separate, reserved subnet helps to isolate management traffic from general network traffic, enhancing security and performance.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Network Configuration chapter (https://www.nutanixbible.com/)

Question: 287

Which configuration item is a hard requirement to deploy a Nutanix cluster?

A. Nutanix cluster name

B. Cluster Virtual IP

C. Motion IP address

D. CVM IP address

Answer: D

Explanation:

The CVM IP address is a hard requirement for deploying a Nutanix cluster. Each CVM must have a unique IP address assigned to it as this IP address is critical for cluster operations, including data replication, management activities, and communication between CVMs and hypervisors. The other options, while important for various functionalities, do not represent a hard requirement for initial deployment.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Cluster Configuration chapter (https://www.nutanixbible.com/)

Question: 288

After a consultant runs a bare metal Foundation, the imaging process fails.

In which two locations can the consultant find the logs? (Choose two.)

A. On the CVM - /home /nutanix/foundation/logs

B. On the Hypervisor - /home/nutanix/foundation/logs

C. On the Foundation VM - /home/nutanix/foundation/logs

D. View Logs link on the Foundation Imaging progress screen

Answer: C, D

Explanation:

After a failed bare metal Foundation imaging process, the consultant can find relevant logs in two primary locations: on the Foundation VM at "/home/nutanix/foundation/logs" and via the "View Logs" link available on the Foundation Imaging progress screen. These logs are crucial for diagnosing issues during the imaging process as they provide detailed error messages and operational data. Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Foundation chapter (https://www.nutanixbible.com/)

Question: 289

A consultant is discussing VLAN tagging for a newly deployed Nutanix system. The customer requests that the the vlan dor the CVMs

and AHV hosts be placed in the customer's management VLAN 10. The customer also has VLAN 20 for production VM traffic and

VLAN 30 for backup/replication traffic.

Which VLAN should the consultant recommend for CVM and host traffic?

A. VLAN 10

B. VLAN 0

C. VLAN 20

D. VLAN 20

E. VLAN 30

Answer: A

Explanation:

For a newly deployed Nutanix system where the customer has specified VLAN 10 for management traffic, the consultant should recommend using VLAN 10 for both CVM and AHV host traffic. This VLAN designation ensures that all management, monitoring, and internal cluster communication are on a dedicated network, separate from production VM traffic (VLAN 20) and backup/replication traffic (VLAN 30), thereby enhancing network security and performance.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Network Configuration chapter (https://www.nutanixbible.com/)

Question: 290

A customer has a mail server and needs Nutanix to send email notifications about errors that might occur in Prism. The following information is included under SMTP Server Settings

○   IP Address of mail server

○   Port Security Mode

○   From email address

What should the consultant set up before arriving onsite?

A. SMTP server to allow emails from all IPs in customer network

B. SMTP server to allow emails from Cluster VIP and CVM IP addresses

C. SMTP to allow emails from Cluster VIP

D. SMTP server to allow emails from Host IP addresses

Answer: B

Explanation:

Before arriving onsite, the consultant should set up the SMTP server to allow emails from both the Cluster Virtual IP Address (VIP) and the Controller Virtual Machine (CVM) IP addresses. This setup ensures that Prism can successfully send email notifications through the customer's mail server about any errors or notifications generated by the Nutanix environment, as both the Cluster VIP and CVM IPs are sources from which Prism sends alerts.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 291

A consultant completes a manual cluster creation of AHV. When the consultant logs into Prism Element, critical error messages appear regarding the hypervisor and NTP.

What component or setting, if misconfigured, would cause these errors?

A. Cluster name

B. Name Server

C. Cluster Virtual IP

D. Data Services IP

Answer: B

Explanation:

If the consultant logs into Prism Element and sees critical error messages related to the hypervisor and NTP, this could likely be caused by misconfigured Name Server settings. The Name Server (DNS) is essential for resolving domain names into IP addresses, which are required for NTP operations and overall cluster health checks and communications within the Nutanix environment.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 292

Refer to the exhibit.
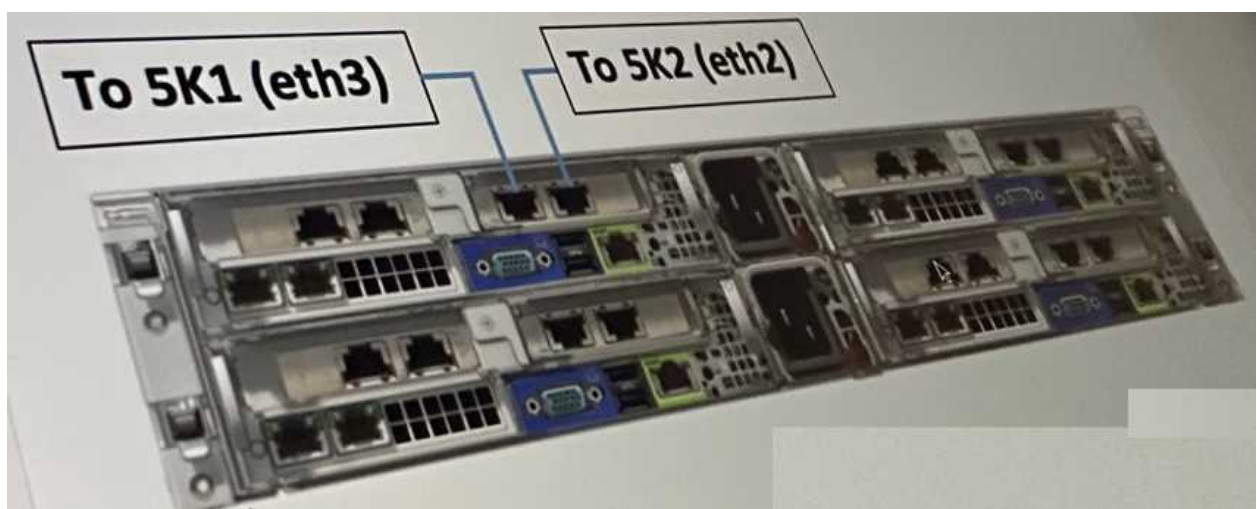
On a four-node NX-3460 cluster, two 10G NiCs are connected to redundant Cisco ToR 5K switches as shown in the first exhibit Port On a four-node NX-3460 cluster, two 10G NICs are connected to redundant Cisco TOR Sk switches as shown in the fist exthibt. Port failover must be tested.

The network configuration output from the CVM is shown in the second exhibit. To test fallover, a shut command is executed on the switchport that connects the node to the 5k1 switch.

Refer to the exhibit.
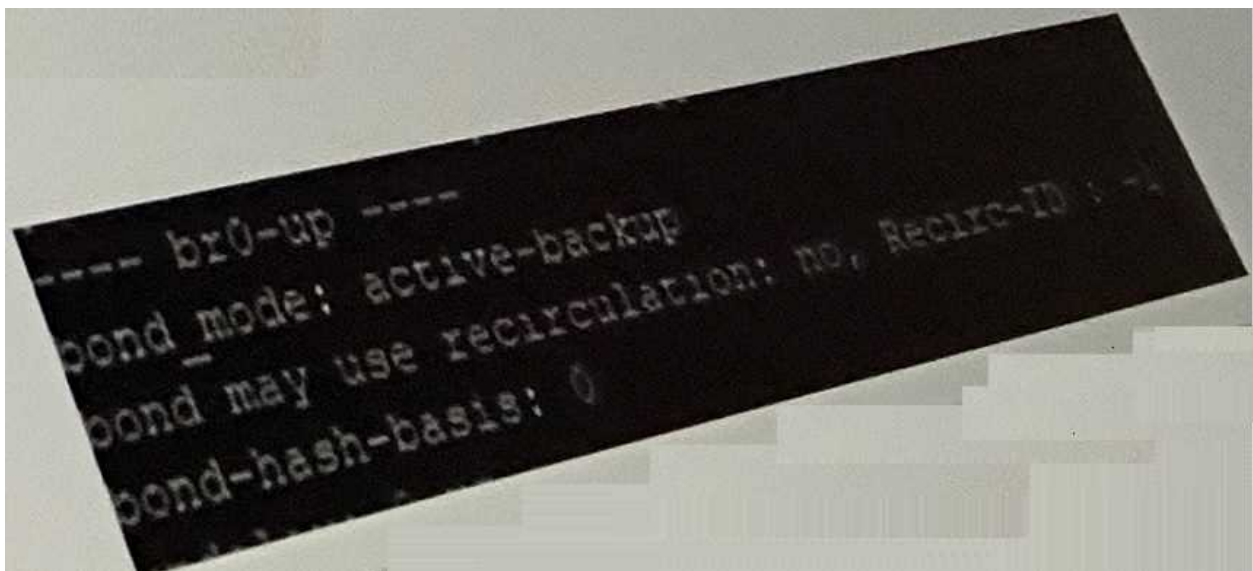
A. Active link is disconnected. Passive link takes over.

B. Passive link is disconnected. Active link takes over.

C. Active link takes over. HA Failover takes place.

D. Passive link takes over. HA Failover takes place.

Answer: A

Explanation:

In the scenario described, the configuration shown in the exhibit indicates that there is an "active-backup" bond mode. If a shut command is executed on the switchport that connects the node to the 5k1 switch (assuming it's the active link), the passive link should take over. This response ensures no loss of connectivity as the passive link becomes active in the absence of the primary (active) link.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 293

A consultant needs to image nodes that cannot be discovered with the Foundation VM

The nodes are connected to a flat stitch and

are already part of a Nutanix cluster.

What course of action would result in Foundation success?

A. Use the customer's top of rack switch.

B. Buy a new flat switch.

C. Bare metal image the nodes.

D. Change the physical connections.

Answer: C

Explanation:

If nodes cannot be discovered using the Foundation VM and they are already part of a Nutanix cluster, the best course of action is to bare metal image the nodes. This process involves re-imaging the nodes from scratch, which can resolve discovery and communication issues that may be caused by existing configurations or errors within the cluster's networking setup.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 294

Which two files should be downloaded to deploy Foundation VM on VMware ESXI or AHV Hypervisors? (Choose two.)

A. foundation_VM-version-disk-0.geow2

B. foundation_VM-version. tar

C. foundation_VM-version. vmdk

D. foundation-version.tar.gz

Answer: B C

Explanation:

To deploy the Foundation VM on VMware ESXi or AHV Hypervisors, the two necessary files are:

foundation_VM-version.tar which contains the complete Foundation VM package.

foundation_VM-version.vmdk, which is the virtual disk file for VMware environments.

These files are required to create and boot the Foundation VM in these hypervisor environments, facilitating the deployment and configuration of the Nutanix nodes within the cluster.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 295

In which part of the Knowledge Transfer can the customer learn how to create, escalate, comment, and close cases?

A. Operations Guide

B. Demonstration of the Support Portal

C. Demonstration of features

D. Handover Slides and Checklist

Answer: B

Explanation:

The best way for the customer to learn how to create, escalate, comment, and close cases is through a demonstration of the Support Portal. This portion of the Knowledge Transfer focuses on showing customers how to effectively use the Support Portal, which is an essential tool for managing support tickets and communicating with Nutanix support. This hands-on demonstration helps ensure that customers are familiar with the functionalities and can navigate the portal effectively.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Support and Maintenance chapter (https://www.nutanixbible.com/)

Question: 296

A consultant is deploying a new Nutanix cluster. The nodes have the following network interfaces.

◦ 2x 10G NICS

◦ 2x 25G NICS

The consultant is using the default virtual switch configurations for AHV. After creating 10 VMs, the consultant observes inconsistent network speeds from the VMs on the AHV host.

What should the consultant do to resolve this issue?

A. Configure load balancing on the virtual switch for both 106 and 25G interfaces.

B. Configure a separate virtual switch with 10G NICs on vs o and 256 NICs on vs.

C. Configure Active/Backup for both the 10G and 25G interfaces.

D. Configure all network interfaces with LACP on the same virtual switch.

Answer: D

Explanation:

To resolve inconsistent network speeds from the VMs on an AHV host equipped with both 10G and 25G NICs, the consultant should configure all network interfaces with Link Aggregation Control Protocol (LACP) on the same virtual switch. This configuration will allow for better load balancing and bandwidth aggregation across multiple network interfaces, improving overall network throughput and reducing bottlenecks.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Networking chapter (https://www.nutanixbible.com/)

Question: 297

A consultant discovers that while the Foundation VM and the consultant's laptop are able to ping each other nodes are rea discovered while trying to run Foundation on the customer's network.

What should the consultant do to resolve the issue?

A. Connect to same switch as the cluster and ping.

B. Install Java on the Foundation VM.

C. Enable IPv6 and multicast on the switch.

D. Enable IPv6 and multicast on the laptop.

Answer: C

Explanation:

When Foundation VM and a laptop can ping each other but nodes are not being discovered, it suggests a network protocol issue. The consultant should enable IPv6 and multicast on the switch. Multicast is required for node discovery in many environments, especially when using Nutanix Foundation, as it helps in the detection and communication between nodes and the Foundation VM. Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Foundation chapter (https://www.nutanixbible.com/)

Question: 298

A consultant is unable to ping the CVM from the hypervisor using the external interface. The customer's network is configured with the 10.3.12.0/24 subnet without VLAN tagging. The CVM and hypervisor are using the same address space.

What is causing this issue?

A. The 1GbE and 10GbE NICs have not been separated.

B. The default gateway is incorrect.

C. The switch is trunked without a native VLAN.

D. The CVM/hypervisor only communicates over 192.168.5.0/24.

Answer: B

Explanation:

If a consultant is unable to ping the CVM from the hypervisor using the external interface in a network without VLAN tagging, and both are using the same subnet, the issue might be related to an incorrect default gateway configuration. The default gateway must be correctly set to ensure proper routing of packets between the CVM and the hypervisor. An incorrect gateway can prevent successful communication even if both devices are on the same subnet.
Reference:

Nutanix University - NCS-Core 6.8 Learning Path

The Nutanix Bible, Networking chapter (https://www.nutanixbible.com/)

Question: 299

A consultant is setting up Prism Central to manage multiple Nutanix clusters. The customer requires til redundancy and tre aby to manage up to 12,500 VMs.

Which deployment option should the consultant use to meet the requirements?

A. Maximum CPU and memory allowed for the server hosting the Prism Central VM

B. Prism Central cluster mode

C. Prism Central Scale-out deployment

D. Large Prism Central VM with the maximum CPU and memory allowed

Answer: C

Explanation:

To meet the customer's requirements for high availability and the ability to manage up to 12,500 VMs, the consultant should use Prism Central Scale-out deployment. This deployment mode allows Prism Central to be scaled out across multiple instances, significantly enhancing both performance

and resilience, ensuring that the management and operations of a large number of VMs can be handled efficiently and without a single point of failure.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 300

Refer to the exhibit.

The customer has an existing NX-3160 block and is adding a second node into it.

Where should the node be installed?"

A. 1

B. 2

C. 3

D. 4

Answer: B

Explanation:

Based on the exhibit which shows an NX-3160 block with marked slots, the correct slot for installing a new node in the existing NX-3160 block is slot 2. This configuration is typically aligned with the chassis' design for orderly expansion and maintaining balanced power and cooling distribution among the nodes.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 301

A consultant and customer agree on a scope of services regarding the deployment of a new Nutanix cluster.

Which two products does this scope apply to? (Choose two.)

A. Foundation

B. Flow

C. X-Ray

D. Prism Central

Answer: A, D

Explanation:

The scope of services for the deployment of a new Nutanix cluster would apply to both Foundation and Prism Central. Foundation is the initial software used for deploying Nutanix nodes and creating clusters, essential for setting up the environment. Prism Central is used for managing multiple clusters and is integral to the operational scope of the service, providing centralized management capabilities.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Question: 302

A consultant deploys a Nutanix cluster with AOS and ESXi. The cluster is managed by a vCenter server.

After installation, what should the consultant do to ensure the cluster will support network segmentation?

A. Connect both CVM eth0 and eth2 interfaces to vSwitchNutanix.

B. Manually assign an IP address to the CVM eth2 interface.

C. Connect both CVM eth0 and eth2 interfaces to the assigned portgroups.

D. Add another vSwitch to the cluster.

Answer: C

Explanation:

After deploying a Nutanix cluster with AOS and ESXi managed by a vCenter server, the consultant should ensure that both CVM eth0 and eth2 interfaces are connected to the assigned portgroups on the standard or distributed switch. This setup allows for network segmentation and proper traffic isolation, which is crucial for maintaining network security and efficiency in a virtualized environment.
Reference: Nutanix Bible, Nutanix University NCS-Core 6.8 learning materials

Thank You for Purchasing NCS-CORE PDF

[Offer] Improve Your Exam Preparation with our Practice Exam Software

Use Coupon "20OFF" for special 20% discount on the purchase of Practice Test Software. Practice Exam Software helps you validate your preparation in a simulated exam environment.

Download Free Practice Test Demo from our site:

http://www.justcerts.com/nutanix/NCS-CORE.html