ATMIC NETWORKS
YOUR GUIDE TO GLOBAL CERTIFIATION

"Please note that these files may not be up to date. However, the questions will help you understand the exam format and typical question patterns."

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Topic 1, Main Questions

Question: 1

Refer to the exhibit.

Capacity

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Efficiency

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You are configuring a new HPE array and verifying properties of a set of volumes. Which RAID level is used on the VMwareDatastores-GF volume?

A. RAID 0

B. RAID 6

C. Triple Parity+

D. RAID 5

Answer: D

Explanation:

The exhibit refers to a configuration scenario where properties of a volume set, specifically VMwareDatastores-GF, are being verified. The question focuses on identifying the RAID level used on this volume.

RAID 5 is a common configuration in many storage arrays because it provides a balance of performance, capacity, and data protection. In RAID 5, data is striped across multiple disks with parity information distributed among the disks. This parity

allows for the recovery of data in the event of a single disk failure, making it a preferred choice for environments that require efficient storage utilization with a degree of fault tolerance.

HPE storage solutions, such as HPE Nimble Storage and HPE 3PAR, often employ RAID 5 for use cases involving virtualized environments like VMware datastores. These solutions are optimized for high performance and data protection, ensuring that even with a single drive failure, the data remains accessible and the system can continue to operate without significant performance degradation.

Reference:

HPE Storage Products

HPE Flash and Hybrid Storage

HPE Nimble Storage

These resources provide comprehensive information on HPE's RAID configurations, data protection mechanisms, and how they integrate with enterprise storage environments.

Question: 2

You have proposed that a customer replace their legacy SAN switches with new ?-Series switches. They are concerned about the management of all the devices, so you have included SANnav in the proposal.

What are the benefits of SANnav that you should emphasize to this customer? (Choose two.)

A. It runs in a dedicated JVM
B. It offers automated SPOCK validation
C. It runs in a browser
D. It provides a global View
E. It provides fine-grain visibility into Storage Fabrics (FC + Ethernet)

Answer: D, E

Explanation:

Question: 3

A customer has completely virtualized their datacenter with VMware. You propose a SimpliVity solution to replace their aging hardware.

Which SimpliVity features should you emphasize in your presentation? (Choose two.)

A. It uses native hypervisor management tools for management
B. It utilizes the Storage Management Utility for management and monitoring
C. It utilizes a unified ASIC for performance
D. It includes deduplication and backup capabilities
E. It provides S3 file access

Answer: A,D

Explanation:

When proposing a SimpliVity solution for a customer who has fully virtualized their datacenter with VMware, it is essential to highlight the features that will offer the most value in a virtualized environment.

Native Hypervisor Management Tools: SimpliVity integrates seamlessly with existing hypervisor management tools, such as VMware vCenter, allowing customers to manage their virtualized infrastructure using familiar interfaces. This integration simplifies operations and reduces the learning curve for IT staff.

Deduplication and Backup Capabilities: SimpliVity's built-in data efficiency features, including inline deduplication, compression, and optimization, significantly reduce the amount of data stored and transferred. This results in cost savings and improved backup performance, which are critical in a virtualized environment where storage efficiency is paramount.

These features directly address the needs of a virtualized datacenter, providing enhanced data protection, simplified management, and improved performance.

Reference:

HPE SimpliVity Overview

HPE SimpliVity for Virtualized Environments

Question: 4

You want to deploy Recovery Manager Central to a customer environment.

How can you accomplish this? (Choose two.)

A. Install RMC on top of the virtual or physical RHEL system using the GUI wizard
B. Deploy an RMC virtual appliance to Microsoft Hyper-V hypervisor
C. Deploy RMC on top of the virtual CentOS system using the CLI
D. Deploy RMC on top of the virtual CentOS system using the GUI wizard
E. Install RMC on the top of the virtual or physical RHEL system using the CLI
F. Deploy an RMC virtual appliance to VMware ESXi hypervisor

Answer: A,F

Explanation:

Recovery Manager Central (RMC) is a powerful tool that integrates with HPE storage solutions to provide efficient and effective data protection. When deploying RMC in a customer environment, there are multiple options available depending on the infrastructure:

Installing RMC on RHEL Systems: RMC can be installed on top of a virtual or physical Red Hat Enterprise Linux (RHEL) system using the GUI wizard. This method is user-friendly and offers flexibility in deployment across different types of RHEL environments.

Deploying RMC on VMware ESXi: Another common deployment method is to deploy the RMC as a virtual appliance on a VMware ESXi hypervisor. This allows for seamless integration with virtualized environments, providing comprehensive data protection capabilities.

These deployment options provide flexibility for various customer environments, ensuring that RMC can be effectively integrated into their existing infrastructure. Reference:

HPE Recovery Manager Central (RMC)

HPE RMC Deployment Guide

Question: 5

A customer uses Veeam to backup their entire datacenter.

Which Veeam feature allows them to recover a single email from their Exchange server?

A. Changed block tracking
B. Explorer for Storage Snapshots
C. Data Mover Service
D. SureBackup

Answer: B

Explanation:

Veeam's integration with HPE storage solutions, particularly in backup and recovery scenarios, includes features that allow granular recovery of data, such as individual emails.

Explorer for Storage Snapshots is a feature within Veeam that enables customers to perform granular recovery from storage snapshots, including individual items such as emails from an Exchange server. This feature is crucial for minimizing downtime and ensuring quick recovery of specific data without the need to restore entire databases or systems.

This capability provides an efficient and user-friendly way to handle data recovery tasks, which is particularly valuable in

environments where data availability and quick recovery are critical.

Reference:

Veeam and HPE Integration

Veeam Explorer for Storage Snapshots

Question: 6

Refer to the exhibit.

You are designing a new Primera solution and demonstrating performance numbers to the customer. The customer reviews the configuration and requests a change to the configuration that will increase Random Write IOPS.

Which action will satisfy the customer request?

A. Add more disks of smaller capacity

B. Upgrade the HPE Primera base model

C. Change to larger SSDs

D. Add more FC Ports

Answer: A

Explanation:

In the scenario presented, the customer requests an increase in Random Write IOPS for their HPE Primera solution. To achieve this, adding more disks of smaller capacity is the most effective approach (Option A). By increasing the number of disks, the storage system can distribute the write operations across more disks, thereby reducing the write latency and improving the overall Random Write IOPS performance. Smaller capacity disks typically allow for better IOPS performance per GB due to their higher spindle speed and lower data density, which reduces seek times.

This strategy also aligns with best practices in storage design, where increasing the number of spindles (disks) generally enhances the performance of random workloads, particularly in writeintensive environments.

Reference:

HPE Primera Overview

HPE Storage Products Overview

Question: 7

Which of the following are part of the SimpliVity Data Virtualization Platform architecture? (Choose two.)

A. Presentation Layer
B. User Management Layer
C. Security Layer
D. Data Management Layer

Answer: A,D

Explanation:

The HPE SimpliVity Data Virtualization Platform is designed with a modular architecture that includes several key layers. Among these, the Presentation Layer and the Data Management Layer are fundamental components (Options A and D).

The Presentation Layer is responsible for the user interface and the interaction between the user and the system. It provides the tools necessary for administrators to manage and monitor the storage environment efficiently.

The Data Management Layer handles the core functions of the SimpliVity platform, including data deduplication, compression, and optimization. This layer ensures that data is stored and managed efficiently, reducing storage costs and improving performance.

These layers work together to deliver the full capabilities of the SimpliVity platform, enabling simplified management and robust data services in a hyper-converged infrastructure environment. Reference:

HPE SimpliVity Overview

HPE SimpliVity Data Virtualization

Question: 8

A customer is implementing a new high performance database environment.

What type of storage should you recommend?

A. scale-out storage
B. object store
C. system-defined storage
D. network-attached storage

Answer: A

Explanation:

For a high-performance database environment, scale-out storage (Option A) is the recommended solution. Scale-out storage architectures allow for the expansion of storage capacity and performance by adding more nodes to the storage cluster. This approach provides linear scalability, enabling the environment to grow as the database's demands increase. It is particularly effective for high-performance workloads because it balances the load across multiple nodes, reducing bottlenecks and ensuring consistent performance.

Scale-out storage also supports high availability and resilience, which are critical for maintaining uptime and reliability in database environments that require rapid data access and processing. Reference:

HPE Scale-Out Storage Solutions

HPE Storage Overview

Question: 9

You are designing a new enterprise array solution. The customer is interested in a caching tier that provides extremely low-

latency and persistent storage at the same time. They also need to support more than 500GB.

Which technology should you recommend?

A. DRAM
B. SRAM
C. NVMe SCM
D. NAND SSD

Answer: C

Explanation:

For the customer requiring a caching tier that offers extremely low-latency and persistent storage, NVMe Storage Class Memory (SCM) (Option C) is the ideal technology. NVMe SCM provides the performance characteristics of DRAM with the persistence of traditional storage, making it suitable for caching applications where ultra-low latency is crucial. NVMe SCM also supports capacities exceeding 500GB, which aligns with the customer's requirement.

This technology is particularly advantageous in environments where quick access to data is critical, such as in financial services or real-time analytics applications. It bridges the gap between volatile DRAM and slower NAND SSDs, providing a highly responsive and durable storage solution.

Reference:

HPE NVMe Storage Solutions

HPE Storage Class Memory

Question: 10

A customer is implementing an SAP HANA environment and is looking for an alternative to an entirely in-memory database.

Which storage technology should you recommend?

A. SAS SSD
B. NVMe SSD
C. NVMe SCM
D. Intel Optane

Answer: C

Explanation:

In an SAP HANA environment, the speed and latency of storage are critical for performance, especially when dealing with large datasets. While SAP HANA is designed to run entirely in memory, some customers may seek alternatives that offer a balance between performance and cost.

NVMe SCM (Storage Class Memory) is a cutting-edge storage technology that offers extremely low latency and high performance, making it an ideal alternative for environments like SAP HANA. NVMe SCM provides faster data access speeds than traditional SSDs and even NVMe SSDs, making it a

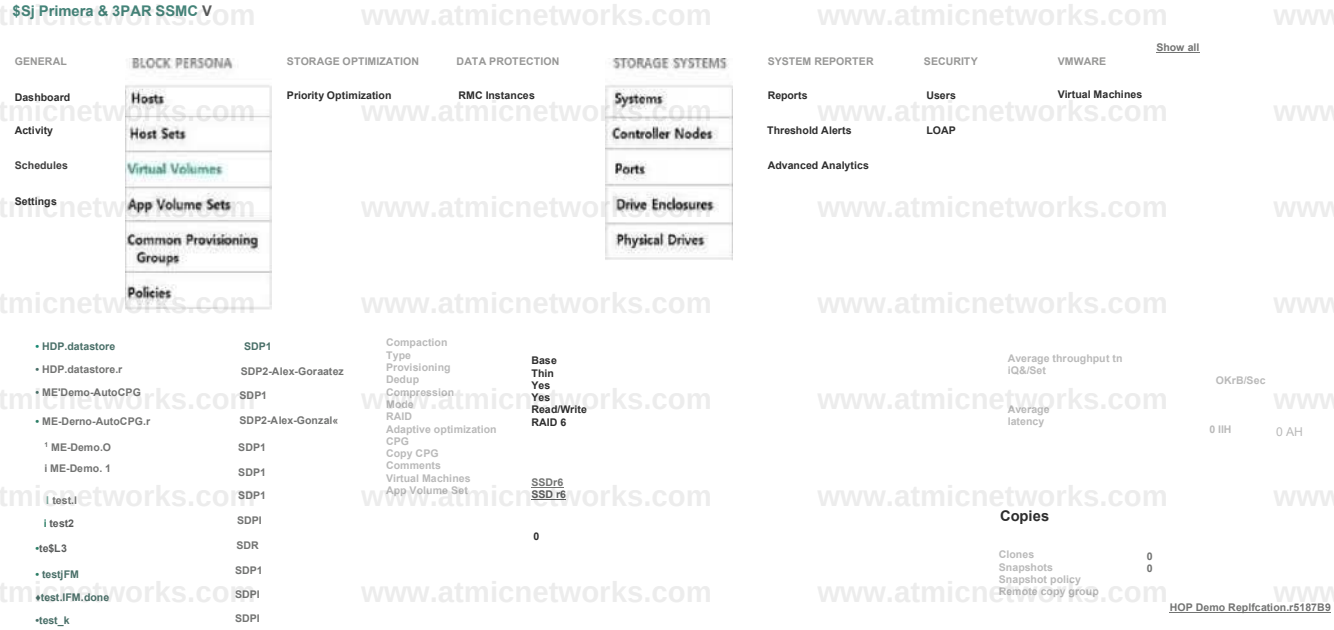
perfect fit for workloads that demand high-speed data processing, such as SAP HANA. Reference:
HPE Storage for SAP HANA
HPE NVMe Storage Solutions

Question: 11

HOTSPOT

You need to create an N:M relationship between VMware hypervisors and virtual volumes with the least amount of administrative overhead.

Click the option where you can create a group of VMware hypervisors for volumes provisioning.



Answer

Explanation:

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Question: 12

Which tool is used to determine current compaction ratios on Primera arrays?

A. WebUI
B. Storage Management Utility (SMU)
C. NinjaStars
D. SSMC System Reporter

Answer: C

Explanation:

When managing HPE Primera arrays, it's important to assess the current compaction ratios to understand how effectively data is being stored.
NinjaStars is an HPE tool specifically designed to analyze and report on data reduction technologies, including deduplication and compression, on HPE storage arrays like Primera. It helps in determining the compaction ratios, providing insights into how efficiently the storage capacity is being utilized. Reference:
HPE Primera Storage
HPE NinjaTools Suite

Question: 13

A customer wants to make a full copy replica of a database to use for performance testing.
Which technology should they use to create the copy?

A. deduplication
B. snapshot
C. clone
D. synthetic full

Answer: C

Explanation:

When a customer needs to create a full copy replica of a database for performance testing, the best technology to use is a clone. A clone creates an exact, independent copy of a volume, which can be used separately from the original. This is particularly useful for scenarios such as testing, development, or backup, where an exact copy of the data is required without affecting the production environment.
Reference:
HPE 3PAR and Primera Clone Technology
HPE Data Protection and Replication

Question: 14

A customer implemented the HPE StoreEver MSL6480 Tape Library.
Which HPE Software can the system administrator use to check the health of the library and monitor its utilization?

A. OneView
B. StoreServe TapeAssure Advanced
C. StoreEver Data Verification
D. InfoSight

Answer: B

Explanation:

For monitoring the health and utilization of the HPE StoreEver MSL6480 Tape Library, StoreServ TapeAssure Advanced is the recommended software. TapeAssure Advanced provides detailed insights into the operational status of tape libraries, including health checks, utilization metrics, and predictive analytics. This tool is essential for ensuring the reliability and efficiency of tape storage environments.

Reference:

HPE StoreEver Tape Libraries

HPE TapeAssure Advanced

Question: 15

A customer environment includes:

10 DL380 Gen8 servers in a VMware Cluster

2 MSA storage arrays

2 8GB b-series fibre channel switches

The customer needs to replace their environment because it is end of life. They have limited budget. The customer is primarily concerned with management because they have limited IT staff, and they want to move away from fibre channel.

Which HPE Storage should you recommend?

A. HPE Primera
B. HPE XP8
C. HPE Nimble dHCI
D. HPE StoreOnce

Answer: C

Explanation:

In this scenario, the customer is looking to replace their existing environment, which includes servers, MSA storage arrays, and Fibre Channel switches. They are budget-conscious, have limited IT staff, and prefer to move away from Fibre Channel technology. The HPE Nimble dHCI (Option C) is the ideal solution to recommend.

HPE Nimble dHCI offers a converged infrastructure that simplifies management, making it easier for organizations with limited IT resources to maintain their environment. It is designed to be easy to deploy and manage, providing the benefits of both hyper-converged infrastructure (HCI) and traditional converged solutions. This solution integrates compute, storage, and networking with advanced data services, and it moves away from Fibre Channel by leveraging iSCSI or Ethernet-based connectivity. The Nimble dHCI also provides excellent performance and reliability at a lower cost, which aligns with the customer's budget constraints.

Reference:

HPE Nimble Storage dHCI Overview

HPE Storage Solutions

Question: 16

You are designing an HPE MSA iSCSI for a customer.

Which components are typically part of the solution? (Choose two.)

A. Drives
B. SFPs

C. Service Processor
D. All-inclusive Multi-system software
E. Switch zones

Answer: A,B

Explanation:

When designing an HPE MSA iSCSI storage solution, two critical components that are typically part of the solution are Drives (Option A) and SFPs (Small Form-factor Pluggables) (Option B).

Drives: These are the storage devices (e.g., SSDs or HDDs) that provide the necessary capacity and performance for the MSA array. The choice of drives can be tailored based on the performance and capacity needs of the customer.

SFPs: These are essential for establishing iSCSI or Fibre Channel connectivity between the storage array and the network switches. They play a crucial role in ensuring that the storage solution can be integrated into the customer's existing network infrastructure.

The inclusion of these components ensures that the HPE MSA solution is fully functional and can meet the performance and connectivity requirements of the customer's environment.

Reference:

HPE MSA Storage Overview
HPE Storage Components

Question: 17

A customer is planning to upgrade their HF40 controllers to support additional I/O requirements.
To which model can they upgrade to meet their new requirements?

A. AF60
B. AF40
C. HF60
D. HF40C

Answer: C

Explanation:

For a customer planning to upgrade their HF40 controllers to support additional I/O requirements, upgrading to the HF60 (Option C) is the recommended path. The HPE Nimble HF60 offers enhanced performance, greater scalability, and improved I/O capabilities compared to the HF40. This upgrade ensures that the storage array can handle more demanding workloads and support future growth. The HF60 model is designed to meet the needs of environments requiring higher performance and capacity, making it suitable for customers looking to expand their infrastructure without a complete overhaul.

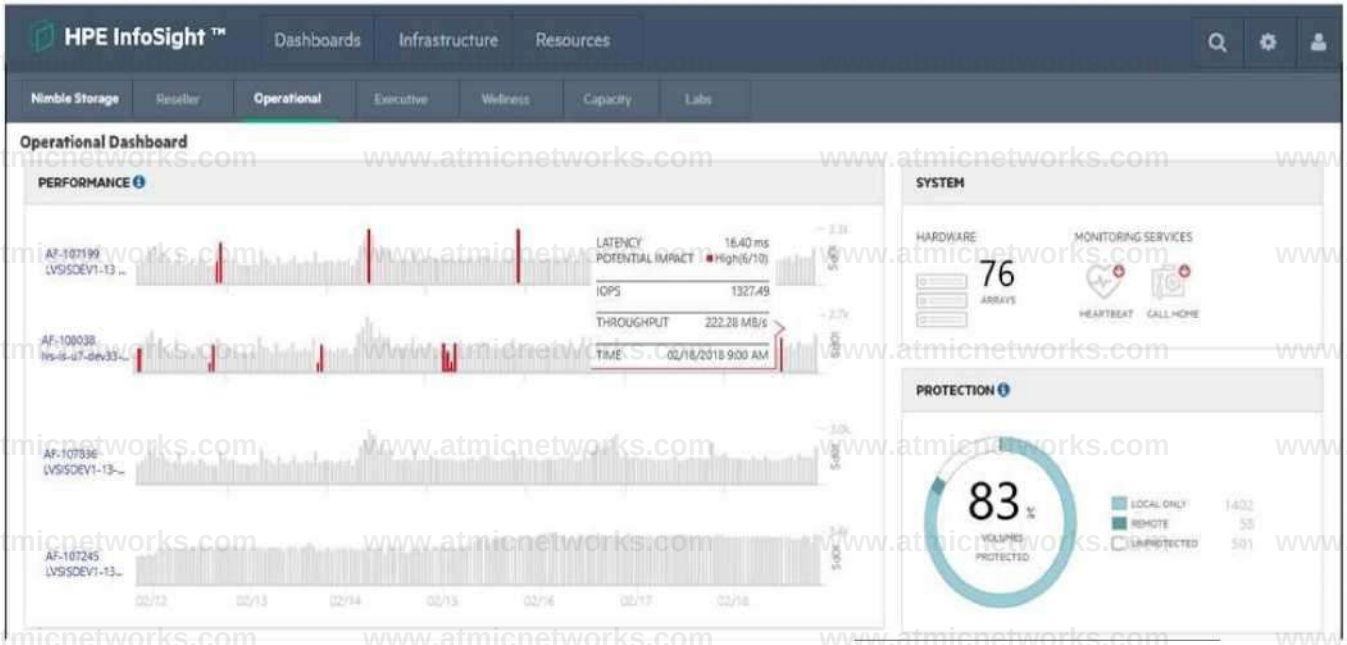
Reference:

HPE Nimble Storage Solutions

Question: 18

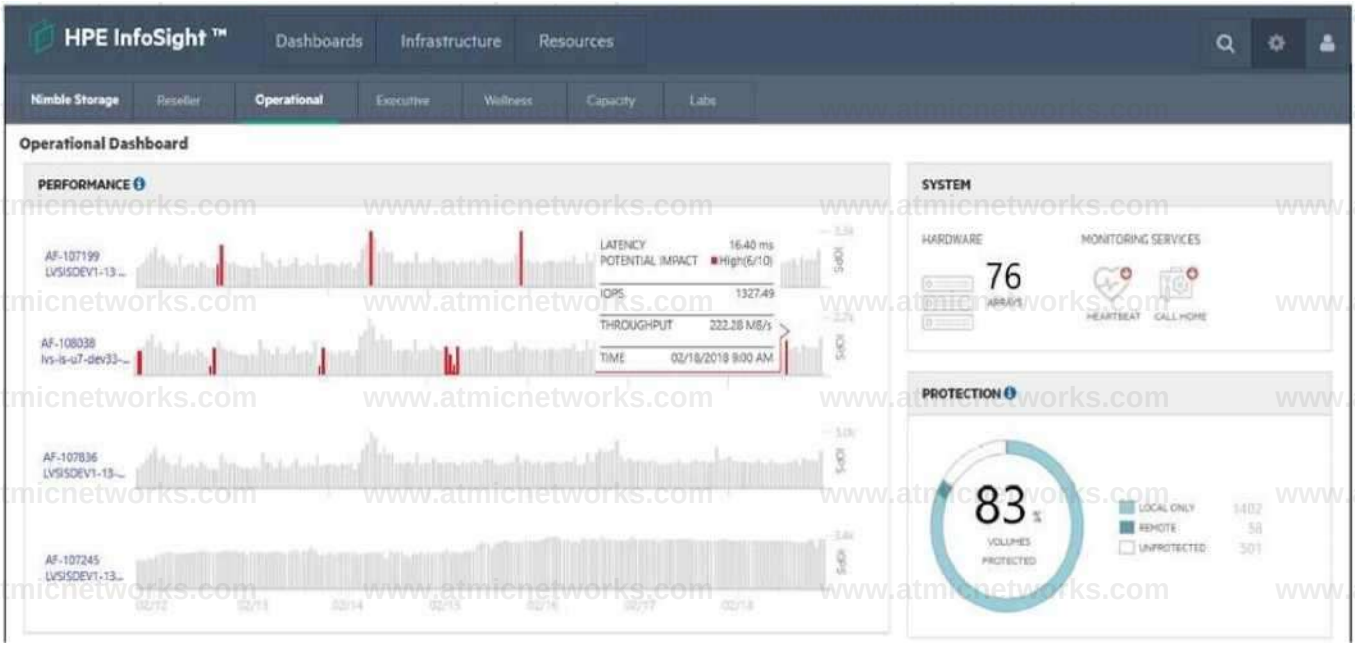
HOTSPOT

A customer has a Nimble HF40 and needs to create a support ticket.
Click the option in the InfoSight portal where the customer can perform this task.



Answer:

Explanation:



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Question: 19

A customer is planning to replace their existing LTO-6 tape library with a new HPE StoreEver MSL2024 tape library. They want to reuse their existing LTO-6 tape cartridges for reads and writes.
What is the latest tape drive technology that will provide backward compatibility?

A. LTO8
B. LTO5

C. LTO6
D. LTO7

Answer: D

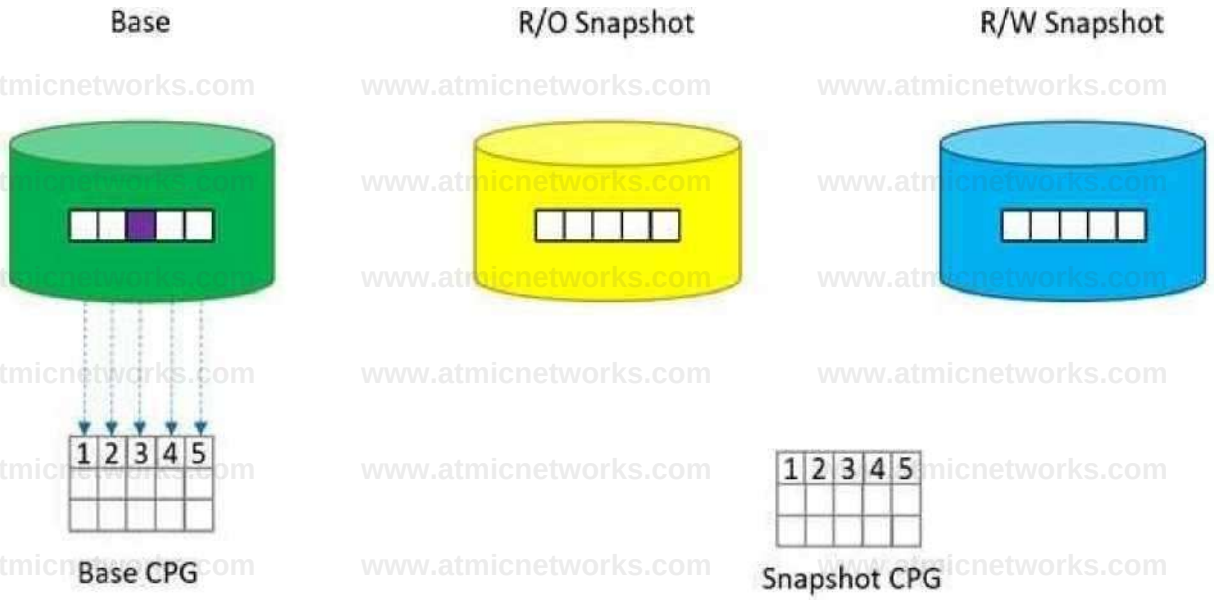
Explanation:

When replacing an existing LTO-6 tape library with a new HPE StoreEver MSL2024 tape library, and the customer wants to reuse their LTO-6 tape cartridges, LTO7 (Option D) is the latest tape drive technology that provides backward compatibility with LTO-6 tapes.
LTO7 drives can read and write to LTO-6 cartridges, making them the optimal choice for ensuring the customer's existing media can be utilized effectively while also providing the benefits of newer tape technology, such as higher capacity and faster data transfer rates.

Reference:
HPE StoreEver Tape Solutions
HPE LTO Tape Technology

Question: 20

DRAG DROP
Refer to the exhibit.



You create two snapshots of a thin provisioned base volume in an HPE Primera. One snapshot is read only and the other is read-write. A write occurs at the location shown in in the diagram.
Place the actions on the left into the order they are taken on the right.

Action **Order**

Copy block to snapshot CPG

Redirect the snapshots

Update the block with new data

Answer:

Explanation:

Action **Order**

Redirect the snapshots

Copy block to snapshot CPG

Update the block with new data

A picture containing diagram Description automatically generated

Question: 21

A customer asks you for a recommendation on setting up their new StoreOnce appliance. They plan to use NetBackup and need the highest performance setup they can get. Their local hosts are connected via FC and the rest are connected via a WAN. Which backup target type should you recommend? A. VTL

B. S3

C. CIFS

D. Catalyst

Answer: A

Explanation:

When setting up a new HPE StoreOnce appliance for a customer who is using NetBackup and requires the highest performance setup, the best backup target type to recommend is VTL (Virtual Tape Library). VTLs are optimized for high-performance environments, particularly when connected via Fibre Channel (FC), which the customer has in their local setup. VTLs provide the speed and

reliability of disk-based storage while emulating the tape systems that many backup solutions, like NetBackup, are designed to work with. This setup will ensure the highest throughput and performance for backup operations over FC.

Reference:

HPE StoreOnce Overview

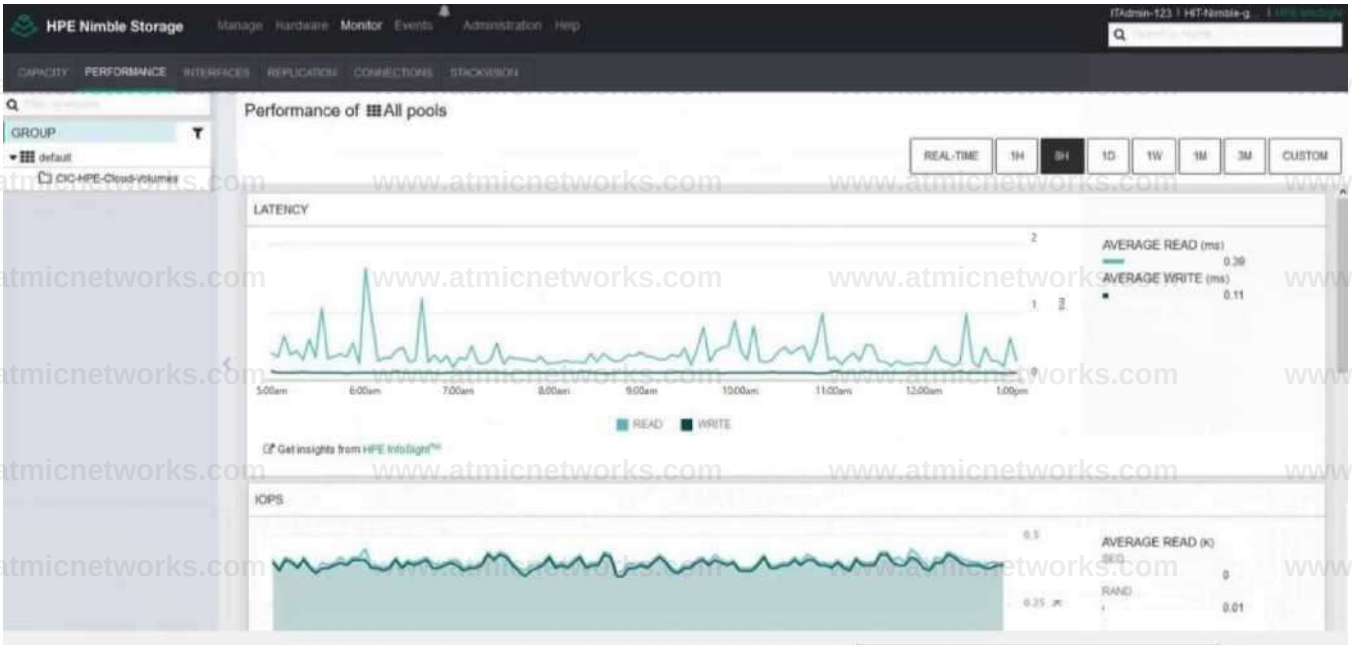
HPE VTL Solutions

Question: 22

HOTSPOT

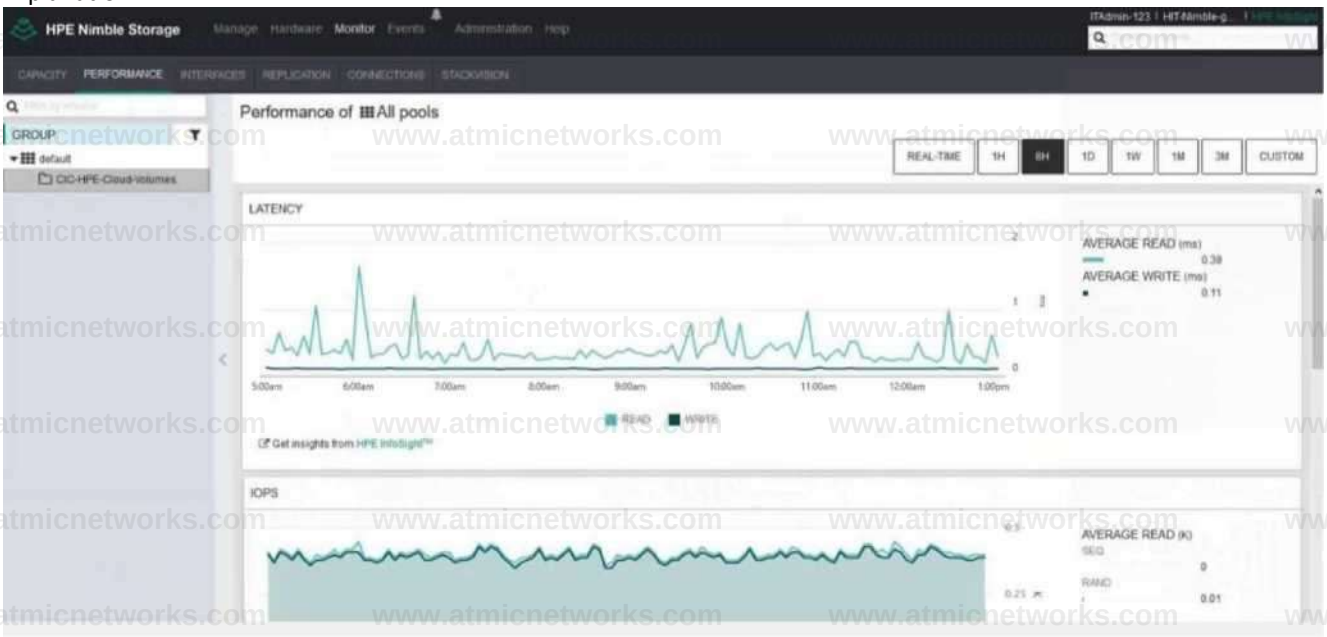
You are handing over the installed array to customer. The customer wants to review the amount of HDDs and SSDs in the system.

Click the relevant menu option where the front panel of the head shelf can be visualized.



Answer:

Explanation:



Question: 23

A customer successfully implemented an HPE Primera solution.

Which tool can be used to verify performance counters, such as IOPS, match customer requirements?

A. NinjaCrawler
B. OneView
C. Recovery Manager Central
D. Primera on-node management GUI

Answer: D

Explanation:

After implementing an HPE Primera solution, the most appropriate tool to verify performance counters such as IOPS (Input/Output Operations Per Second) is the Primera on-node management GUI. This GUI provides real-time monitoring and detailed performance analytics directly from the Primera storage system itself. It allows users to track various performance metrics and ensure they align with the customer's requirements.

Reference:

HPE Primera Management

HPE Primera Performance Tools

Question: 24

A customer successfully implemented an HPE Primera solution.

Which tool can be used to verify achieved savings from deduplication and compression in the customer solution?

A. NinjaSTARS
B. 3PAR Service Processor
C. NinjaCrawler
D. StoreServ System Management Console

Answer: C

Explanation:

Question: 25

A customer has the following requirements for a storage solution:

VMware environment
20 TB of standard business data
400 TB of video archive files
10 GB iSCSI connectivity
They are most concerned with the cost of the solution.
Which HPE storage solution offers the lowest cost while meeting the customer requirements?

A. HPE Nimble
B. HPE SimpliVity
C. HPE Primera
D. HPE MSA

Answer: D

Explanation:

Given the customer's requirements for a storage solution in a VMware environment, with 20 TB of standard business data, 400 TB of video archive files, and a concern for cost, HPE MSA is the most cost-effective solution that meets these needs. HPE MSA offers affordable storage with enterprise features such as snapshots and

replication. It supports iSCSI connectivity, which aligns with the customer's 10 GB iSCSI requirements. Additionally, MSA provides a balance of performance and capacity, making it a suitable choice for environments where budget is a primary concern.

Question: 26

You are proposing a StoreOnce solution to a customer that has always used tape for a backup target. What should you suggest to ensure that the StoreOnce deduplication is correctly sized?

A. StoreOnce timeless storage
B. DDAnalyzer
C. proof of concept with StoreOnce VSA
D. OCA

Answer: D

Explanation:

When proposing a StoreOnce solution to a customer transitioning from tape backups, it's crucial to correctly size the deduplication requirements. OCA (Outcome-based Capacity Analyzer) is the recommended tool for this purpose. OCA helps to predict and size the deduplication storage needs by analyzing the data types and patterns, ensuring that the StoreOnce system is correctly configured to handle the customer's backup workloads efficiently.

Question: 27

A customer is purchasing an HPE MSA 2050 for a branch office. They will use it for critical data services. The customer is concerned that 64 snapshots will not be adequate as they grow.

What can be added to the array to address the customer's concerns?

A. Advanced Data Services Suite license
B. All-inclusive Multi-system license
C. Virtual Copy license
D. Adaptive Optimization license

Answer: A

Explanation:

The HPE MSA 2050 comes with a base set of features, including the ability to create up to 64 snapshots. However, for customers who require more extensive snapshot capabilities as their data services grow, the Advanced Data Services Suite license is the appropriate solution. This license extends the functionality of the MSA, including an increase in the number of snapshots that can be created and managed, thus addressing the customer's concerns about future growth.

Reference:

HPE MSA 2050 Storage

HPE MSA Advanced Data Services

Question: 28

You have proposed a Primera array to a customer for new primary storage. The customer currently has an older 3PAR array that they will continue to use moving forward. The customer would like high

availability configured.

Which RMC Peer Copy pre-requisites do you need to point out to the customer? (Choose two.)

A. No license is required

B. 2-port 10 Gb Ethernet Adapter (NIC) is required
C. 4-port 1 Gb Ethernet Adapter (NIC) is required in each array
D. RMC 6.2 is required
E. Target drive type must match source drive type

Answer: B,D

Explanation:

When configuring high availability with HPE Primera and 3PAR arrays using RMC (Recovery Manager Central) Peer Copy, there are specific prerequisites that must be met:
2-port 10 Gb Ethernet Adapter (NIC): Each array must be equipped with a 2-port 10 Gb Ethernet Adapter to support the high-speed data transfer required for Peer Copy operations.
RMC 6.2: The customer must have RMC version 6.2 or later installed, as this version includes the necessary features and enhancements to support Peer Copy between Primera and 3PAR arrays. These prerequisites are crucial to ensure seamless integration and optimal performance when setting up high availability between the two storage arrays.

Reference:
HPE Primera and 3PAR Integration
HPE RMC Overview

Question: 29

Which protocol can be used for accessing StoreOnce VTL target from Veeam?

A. FC
B. NFSv4
C. iSCSI
D. SMBv3

Answer: A

Explanation:

For accessing StoreOnce VTL (Virtual Tape Library) targets from Veeam, the recommended protocol is FC (Fibre Channel). FC provides the high throughput and low latency necessary for backup operations, making it ideal for environments where speed and reliability are critical. StoreOnce VTL supports FC as a primary protocol for integrating with backup applications like Veeam.

Reference:
HPE StoreOnce VTL
Veeam and HPE StoreOnce Integration

Question: 30

Which StoreOnce Gen4 features are included with the system software without additional licenses? (Choose two.)

A. Encryption
B. Cloud Bank
C. Catalyst
D. VTL/NAS replication
E. Flexible I/O HBAs

Answer: C,D

Explanation:

In StoreOnce Gen4 systems, certain features are included with the system software without requiring additional licenses:

Catalyst: HPE StoreOnce Catalyst is included and provides advanced data reduction and deduplication capabilities, as well as integration with backup software.

VTL/NAS replication: This feature allows replication of Virtual Tape Libraries (VTL) and NAS shares between StoreOnce systems, ensuring data protection and disaster recovery, and it comes standard with the system software.

These features enhance the StoreOnce system's functionality, providing value without additional costs.

Reference:

HPE StoreOnce Features

StoreOnce Gen4 Technical Specifications

Question: 31

You are proposing a new Nimble solution to a customer that recently experienced data loss in their existing storage array.

Which features of the Nimble array should you emphasize to your customer to address their concerns? (Choose two.)

A. quick RAID rebuild
B. deduplication
C. compression
D. encryption
E. triple party

Answer: A,E

Explanation:

When addressing a customer's concerns about data loss, the features of the HPE Nimble array that should be emphasized are the quick RAID rebuild (Option A) and triple parity (Option E).

Quick RAID Rebuild: This feature is crucial in reducing downtime and data loss risk after a disk failure. Nimble's RAID technology ensures that if a drive fails, the rebuild process is swift, minimizing the exposure time during which data is vulnerable.

Triple Parity: This feature provides an additional layer of protection against multiple simultaneous drive failures. Triple parity RAID allows the array to withstand up to three drive failures without data loss, which significantly enhances the reliability and durability of the storage system.

These features work together to provide a robust, resilient storage solution that mitigates the risk of data loss and ensures high availability, making them particularly important for customers who have experienced data loss in the past.

Reference:

HPE Nimble Storage Data Protection

HPE Storage Reliability and Resilience

Question: 32

Which tool is used to configure an HPE MSA 2052?

A. InfoSight

B. SMU

C. CMC

D. SSMC

Answer: B

Explanation:

The HPE MSA 2052 storage array is typically configured using the Storage Management Utility (SMU) (Option B). SMU is a web-based interface that allows administrators to manage and configure their MSA storage arrays. It provides an intuitive platform for setting up volumes, managing RAID levels, and configuring network settings.

This tool is essential for efficiently managing the storage environment and ensuring that the system is optimized for the specific needs of the customer.

Reference:

HPE MSA 2052 Configuration

HPE Storage Management Tools

Question: 33

Match the feature to the appropriate C-Series DCNM license type.

Answer Area

SAN Essentials Edition		Bundled at no charge with the C-series switches
Advanced Edition		Provides configuration, real-time monitoring, and troubleshooting capabilities
		Switch/server-based license
		Historical performance monitoring for network traffic hotspot analysis

Explanation:

DRAG DROP

Answer:

Answer Area

SAN Essentials Edition	SAN Essentials Edition	Bundled at no charge with the C-series switches
Advanced Edition	SAN Essentials Edition	Provides configuration, real-time monitoring, and troubleshooting capabilities
	Advanced Edition	Switch/server-based license
	Advanced Edition	Historical performance monitoring for network traffic hotspot analysis

Graphical user interface, application Description automatically generated

Question: 34

A customer has a VMware environment running vSphere 6.5. They are running DL380 Gen10 servers with HPE 82Q adapters connected through a HPE SN3000B switch to a Nimble HF40. They plan to

upgrade the hypervisor.

What should they use to identify the latest firmware and compatibility information?

A. SAN Health Diagnostics
B. SPOCK
C. OneView
D. SAN Design Reference Guide

Answer: B

Explanation:

For identifying the latest firmware and compatibility information, especially in a VMware environment with HPE hardware, the SPOCK (Single Point of Connectivity Knowledge) tool (Option B) is the recommended resource. SPOCK provides detailed compatibility matrices, firmware recommendations, and interoperability guidelines, ensuring that all components in the storage and server environment are compatible and supported by HPE.

Using SPOCK ensures that the customer's upgrade process is smooth and that all hardware and software components are correctly aligned.

Reference:

HPE SPOCK Compatibility Tool

HPE Firmware and Compatibility Resources

Question: 35

DRAG DROP

Match the MSA architecture components with their descriptions.

Component	Description
Tier	aggregation of disks of the same type using a specific RAID level
Virtual disk group	automatically assigned performance characteristic

Volume group	collection of virtual volumes allowing group management functions
Virtual pool	collection of virtual disk groups
Virtual volume	logical subdivision of a virtual pool that can be mapped to a host

Answer:

Explanation:

Virtual Disk group
Tier
Volume Group
Virtual pool
Virtual Volume

Question: 36

A customer needs a centralized solution for storing departmental data to be accessed by Windows-based laptops and other personal devices.
Which solution should you recommend?

A. Block storage, directly accessed over FC
B. Block storage, directly accessed over SAS
C. Object storage, accessed over S3 connector
D. File-oriented storage, accessed over SMB

Answer: D

Explanation:

For a customer needing a centralized storage solution accessible by Windows-based laptops and other personal devices, file-oriented storage accessed over SMB (Option D) is the most appropriate recommendation. SMB (Server Message Block) is a network file sharing protocol that allows files to be shared among devices running on a Windows network. File-oriented storage solutions, like HPE's StoreEasy or Nimble with file services, are designed to serve files over the network using SMB, providing easy and secure access to departmental data. Reference:
HPE File Storage Solutions
HPE SMB File Sharing

Question: 37

You deployed and configured an all-flash Nimble array. The customer wants to attach their Windows-based server to the array.
Which HPE tool can you use on the host server to make the integration easier?

A. StorServe Management Console
B. Channel bonding
C. Connection Manager
D. Centralized Management Console

Answer: C

Explanation:

To make the integration of a Windows-based server with an all-flash Nimble array easier, HPE's Connection Manager (Option C) is the recommended tool. Connection Manager simplifies the configuration of iSCSI or Fibre Channel connections between the server and the Nimble storage array. It helps automate the setup process, ensuring that the best practices for connectivity are followed, which results in optimized performance and reliability.

This tool is particularly useful for administrators who may not be storage experts, as it streamlines the complex tasks associated with connecting servers to enterprise-grade storage systems. Reference:

HPE Nimble Connection Manager

HPE Storage Integration Tools

Question: 38

A small company has recently purchased an MSA and two B-series SN3000B switches. In an effort save money, they installed the solution themselves. They call you complaining they can now see the multiple volumes on the MSA after creating just a single volume.

What should you advise them to do?

A. Enable Smart SAN on the MSA 2052
B. Set volume's tier affinity to Performance
C. Enable zoning on the SN3000B switches
D. Enable MPIO on their host

Answer: C

Explanation:

The issue of seeing multiple volumes after creating just a single volume on the MSA is likely due to a lack of zoning on the Fibre Channel switches. Zoning is a method used in Fibre Channel networks to segment a fabric into smaller, manageable zones, which helps in controlling access between devices. By enabling zoning on the SN3000B switches, the customer can isolate the connections and ensure that only the desired host can see specific volumes. This prevents the scenario where multiple volumes are visible to a host that should only have access to one.

Reference:

HPE MSA Storage Overview

HPE B-series SN3000B Switches

Question: 39

A customer is deploying a new StoreOnce VSA solution.

How can the necessary storage capacity be added to the VSA? (Choose two.)

A. Verify sufficient capacity LTUs are available

B. Add a new virtual hard disk to the virtual machine
C. The Cloud bank container needs to be configured once the VSA boots
D. The Cloud bank container needs to be configured from the vCenter client

Answer: A,B

Explanation:

When deploying a new StoreOnce VSA (Virtual Storage Appliance), expanding storage capacity can be done by the following methods:

Verify sufficient capacity LTUs are available: License to Use (LTU) is required to allocate more storage to the VSA. Ensuring that there are sufficient LTUs available is essential before increasing capacity. Add a new virtual hard disk to the virtual machine: This is the process of physically increasing the storage allocated to the VSA. By adding a new virtual hard disk to the virtual machine, you expand the storage capacity that the VSA can utilize.

These steps are critical for correctly scaling the storage capacity of a StoreOnce VSA solution. Reference:

HPE StoreOnce VSA Deployment

HPE StoreOnce Capacity Licensing

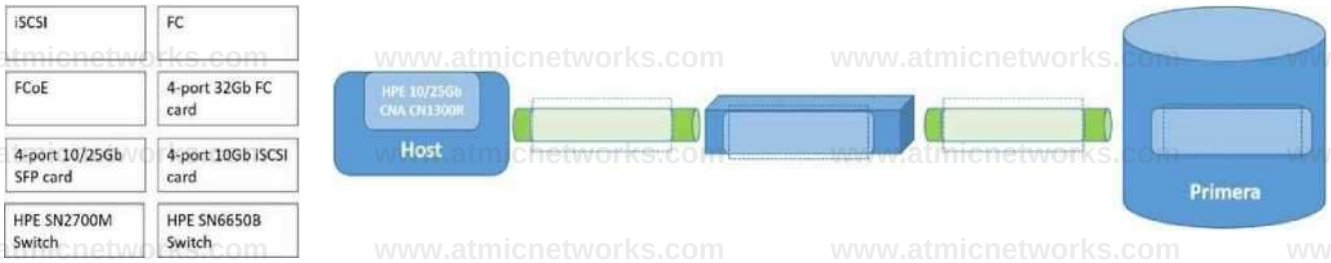
Question: 40

DRAG DROP

A customer wants to implement a new storage network, but wants to retain the ability to connect with legacy fiber channel-based components.

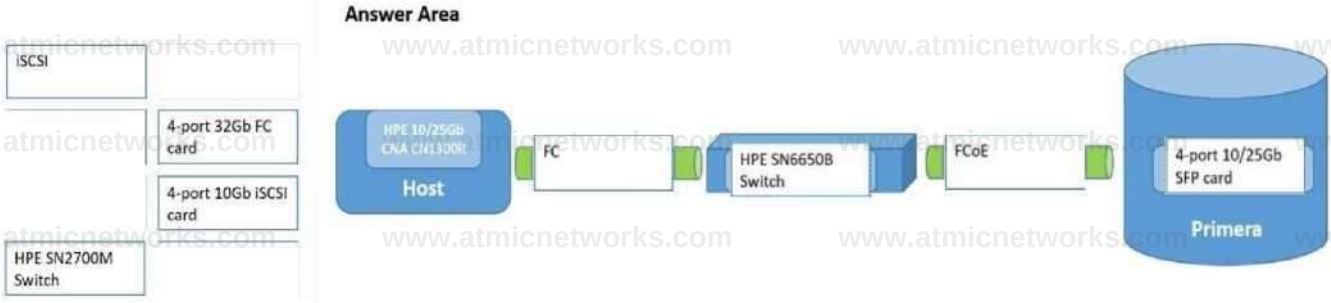
Drag the appropriate component to each box on the diagram to design a new storage network.

Answer Area



Answer:

Explanation:



Question: 41

A customer currently runs MSA 2040 SAS storage system with SFF drives. They are planning a hardware refresh. The customer is using virtual pools only, and is concerned about problematic data

migration

to the new platform.
How can the update to MSA2050 be performed?
A. Peer migration license must be purchased for the online migration
B. Peer migration license must be purchased for the offline migration
C. Existing drives can be moved to the new system; both systems need to be online
D. Existing drives can be moved to the new system; both systems need to be offline

Answer: D

Explanation:

When upgrading from an MSA 2040 to an MSA 2050, the customer can physically move the existing SFF drives to the new MSA 2050 system. However, both systems need to be offline during the process to ensure data integrity and a smooth migration. This approach is efficient for customers using virtual pools, as it allows them to transition to the new hardware without complex data migration processes.

Reference:
HPE MSA 2050 Overview
HPE MSA Data Migration Guide

Question: 42

You are installing an HPE 3PAR StoreServ solution and need to integrate the array with the 3rd party monitoring application customer is using.
Which technology can be configured at 3PAR to support forwarding events from the array to the customer's monitoring application?
A. IPMI
B. NTP
C. SNMPv3
D. DMI

Answer: C

Explanation:

To integrate an HPE 3PAR StoreServ array with a third-party monitoring application, SNMPv3 (Simple Network Management Protocol version 3) can be configured. SNMPv3 is a protocol that supports the forwarding of events from the array to external monitoring tools. It is a secure and standardized method for managing and monitoring network devices, including storage arrays like HPE 3PAR StoreServ.

Reference:
HPE 3PAR StoreServ Management
HPE 3PAR SNMP Configuration

Question: 43

Which actions can be done within InfoSight Cross-Stack Analytics for VMware and Hyper-V? (Choose two.)
A. View replication policies

B. Find noisy neighbors
C. Locate inactive VMs
D. Modify administrative privileges
E. Review backup schedules

Answer: B,C

Explanation:

HPE InfoSight Cross-Stack Analytics for VMware and Hyper-V provides a comprehensive view of the virtual environment, allowing users to monitor and analyze various aspects of their infrastructure. Two key actions that can be performed within this tool are finding noisy neighbors (Option B) and locating inactive VMs (Option C).

Find noisy neighbors: This feature helps identify virtual machines (VMs) that are consuming excessive resources and negatively impacting the performance of other VMs within the environment. By identifying these "noisy neighbors," administrators can take corrective action to optimize resource allocation and improve overall system performance.

Locate inactive VMs: This functionality allows administrators to detect VMs that are consuming resources but are not actively in use. Identifying and addressing these inactive VMs can help free up resources and improve the efficiency of the virtual environment.

These capabilities make InfoSight Cross-Stack Analytics a powerful tool for maintaining optimal performance in VMware and Hyper-V environments.

Reference:

HPE InfoSight for Servers

HPE Cross-Stack Analytics Overview

Question: 44

DRAG DROP

Match each address with the associated address type.

Type	Address Format
FC	20:32:00:60:69:e2:19:82
IPv6	00:lB:44:ll:3A:B7
iSCSI	iqn.2000-05.com.3pardata:20210002ac00851c: 15.372.28.0
MAC	fe80::85b0:5df6:ldfb:6793

Answer:

Explanation:

Type	Address Format
MAC	20:32:00:60:69:e2:19:82

FC	OO:1B:44:11:3A:B7
iSCSI	iqn.2000-05.com.3pardata:20210002ac00851c: 15.372.28.0
IPv6	fe80::85b0:5df6:ldfb:6793

Graphical user interface, text, application Description automatically generated

Question: 45

A customer purchased a StoreOnce 3620 earlier in the year and has decided to add a 10GBase-T adapter to it, which the customer sourced elsewhere and installed themselves. They complain that the new

adapter is not configurable.

What is the most likely reason for this issue?

A. The StoreOnce software requires updating
B. Secure boot must be enabled in the BIOS to securely enable HBAs
C. The customer failed to install a License to Use (LTU) for it
D. The StoreOnce needs to connect to InfoSight to validate the adapter authenticity

Answer: C

Explanation:

The most likely reason the 10GBase-T adapter installed in the StoreOnce 3620 is not configurable is that the customer failed to install a License to Use (LTU) for it (Option C). HPE StoreOnce systems require an LTU for certain hardware components and features. Without the appropriate license, the system will not recognize or allow configuration of the newly installed hardware.

Ensuring that the LTU is correctly installed would likely resolve the issue and allow the adapter to be fully operational.

Reference:

HPE StoreOnce Overview

HPE Licensing and Support

Question: 46

You are designing a new storage environment for a customer. They need good performance, but need to keep costs to a minimum.

They have a very limited staff, and staff is concerned about learning new technologies. You plan to recommend a Nimble HF20 solution.

Which storage connectivity components should you recommend?

A. FlexFabric switches, Nimble iSCSI card. FC adapters for servers
B. FC switches, Nimble FC card, FC adapters for servers
C. Ethernet switches, Nimble iSCSI card, dedicated NICs for servers
D. Ethernet switches, Nimble FC card, dedicated FC for servers

Answer: C

Explanation:

For a customer looking for a cost-effective storage solution with good performance, while also having a limited IT staff concerned about learning new technologies, recommending Ethernet switches, a Nimble iSCSI card, and dedicated NICs for

servers (Option C) is the most appropriate choice.
This configuration is cost-effective and simplifies management by using familiar Ethernet networking technology, which most IT staff are already familiar with. The Nimble iSCSI card provides the necessary storage connectivity while leveraging Ethernet infrastructure, making it easier to deploy and manage compared to Fibre Channel solutions.
Reference:
HPE Nimble Storage Connectivity Options
HPE Networking Solutions

Question: 47

A customer runs their core application on an aging HPE 3PAR StoreServ 20000 Storage array. The application requires 100% availability.
Which HPE storage solution should you recommend?

A. Nimble
B. Nimble dHCI
C. Primera
D. MSA

Answer: C

Explanation:

Given that the customer's core application requires 100% availability, the HPE Primera (Option C) is the best storage solution to recommend. HPE Primera is designed for mission-critical applications that demand the highest levels of availability, performance, and resilience. It offers advanced data services, AI-driven predictive analytics, and a 100% availability guarantee, making it the ideal choice for environments where downtime is not an option.
Primera's architecture is built to ensure continuous availability, even in the face of hardware failures or other unexpected issues, which makes it superior to other options like Nimble or MSA for this specific requirement.
Reference:
HPE Primera Overview
HPE Mission-Critical Storage Solutions

Question: 48

You are asked to review an installation plan for a new Primera storage array. The array will go into an existing environment that has been in production for over 4 years. It includes:
C7000s with Gen8 blades
8Gb Brocade switches
a 3PAR 7400
an MSA that is used as a backup target
What should you use to find appropriate installation and planning guides?

A. SAF Analyze and Collector
B. Information Library
C. NinjaSTARS
D. SPOCK

Answer: D

Explanation:

When reviewing an installation plan for a new Primera storage array in an existing environment, the best resource to find appropriate installation and planning guides is SPOCK (Option D). SPOCK (Single Point of Connectivity Knowledge) provides

detailed interoperability and configuration guides, ensuring that all components in the existing infrastructure (such as C7000s, Brocade switches, and 3PAR 7400) are compatible with the new Primera array.
SPOCK is an essential tool for ensuring that the installation process is seamless and that the environment will support the new storage solution without any compatibility issues.

Reference:
HPE SPOCK Compatibility Tool
HPE Installation and Planning Guides

Question: 49

You are designing a new HPE 3PAR StoreServ solution.
Which HPE tool allows editing the Customer Intent Document and adding specific instructions for packing?

A. One Config Advanced
B. SAF Collect
C. NinjaSTARS
D. Storage Sizing Tool

Answer: A

Explanation:

Question: 50

Refer to the exhibit.

A customer purchased a Primera C6S0 array to replace several older 3PAR arrays. They plan to upgrade the system as each 3PAP reaches the end of its lease. The initial sizing included 100TB effective capacity for an Oracle database environment.

The first 3PAR to come off lease has 100TB of VDI boot images that support thousands of users. Which addition to the Primera should you recommend?

B)

C)

D)

A)

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

Answer: A

Explanation:

The exhibit shows various configurations for expanding an HPE Primera C6S0 array. The customer is planning to upgrade the system as older 3PAR arrays come off lease. Since the next 3PAR system to be replaced holds 100TB of VDI boot images for thousands of users, the recommended addition to the Primera array should focus on providing the necessary performance and capacity for VDI workloads.

Option A in the exhibit appears to include a configuration that balances SSD storage with high performance, making it suitable for VDI environments. This option would allow the customer to maintain a high level of performance while migrating and consolidating their VDI workloads onto the new Primera system.

Reference:

HPE Primera Storage Overview

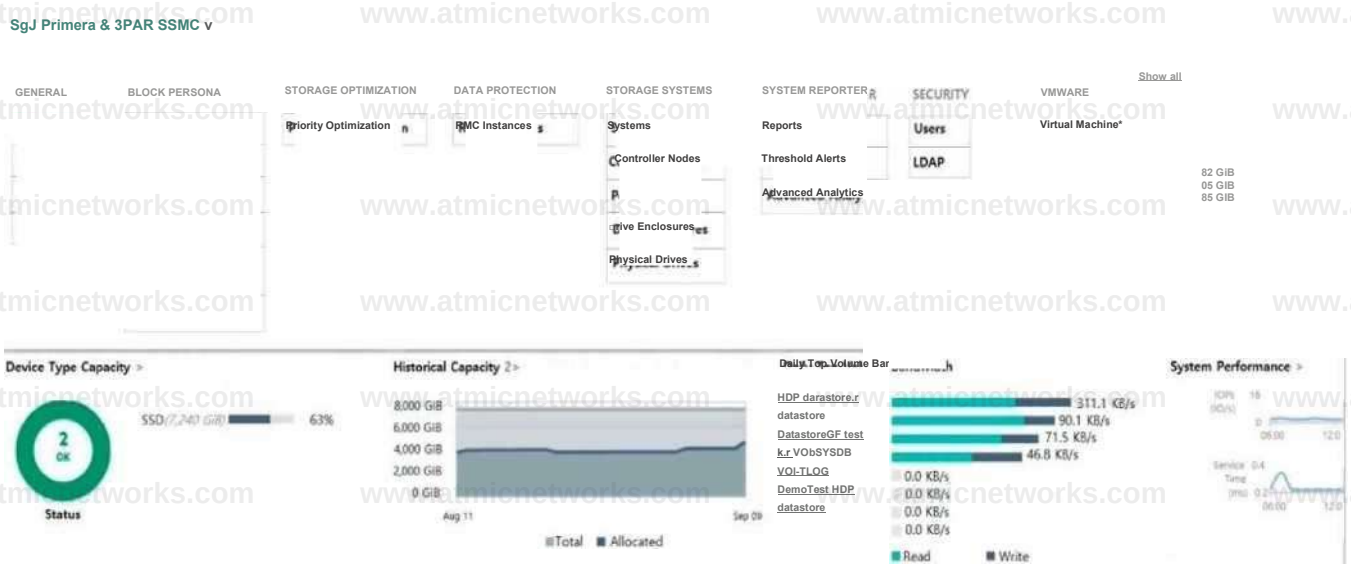
HPE Storage for VDI

Question: 51

HOTSPOT

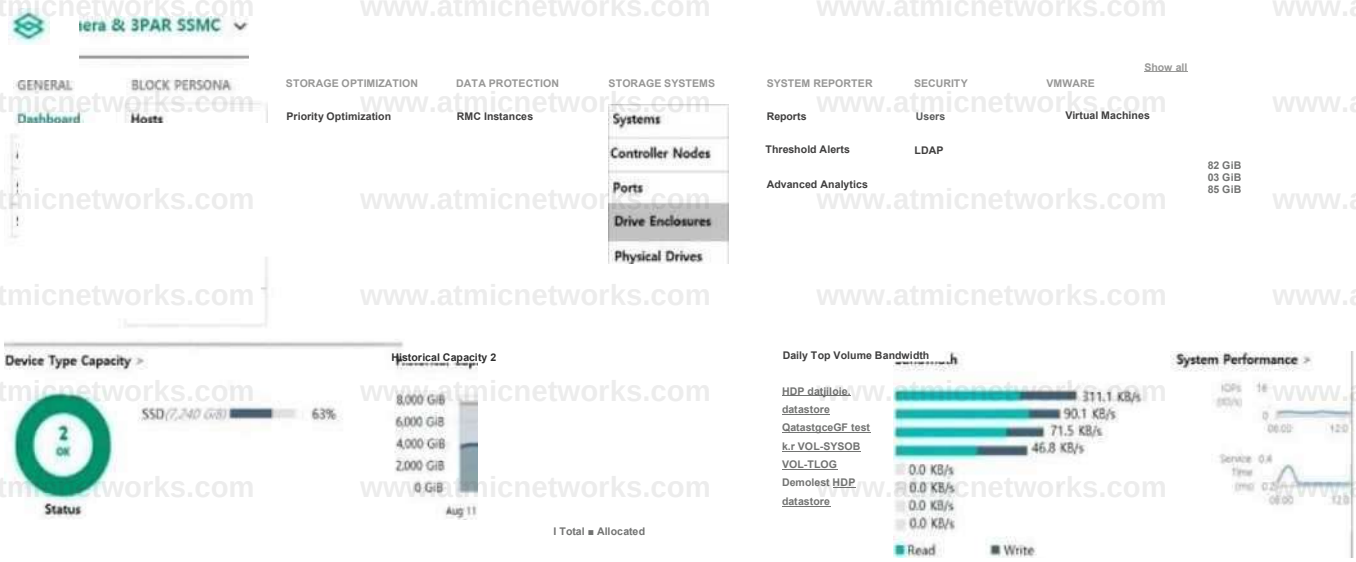
You are configuring a new HPE 3PAR solution and need to create a new disk group with a defined RAID level.

Click the appropriate option where the RAID can be selected.



Answer:

Explanation:



Question: 52

Which feature allows HPE Primera, HPE Nimble, and HPE XP arrays to work with third-party management tools?

A. REST API
B. Data Protection Manager (DPM)
C. StoreServe Management Console (SSMC)
D. Service Processor

Answer: A

Explanation:

The REST API (Option A) is a critical feature that allows HPE Primera, HPE Nimble, and HPE XP arrays to work with third-party management tools. REST APIs provide a standardized interface for programmatically accessing and controlling the storage arrays. This enables integration with various management platforms, automation scripts, and orchestration tools, allowing for greater flexibility

and streamlined management in diverse IT environments.

By using REST API, organizations can integrate their HPE storage systems with existing management frameworks, ensuring a cohesive and efficient infrastructure management approach.

Reference:

HPE REST API for Storage

HPE Storage Management

Question: 53

DRAG DROP

Select the correct initiation option for each HPE Primera function.

Answer Area

User Initiated	Stripe data across drives
Autonomic	Create Virtual Volumes
	Create Common Provisioning Groups
	Create RAID-6 Virtual Volumes
	Optional Performance Management
	Export LUNs

Answer:

Explanation:

Answer Area

User Initiated	Autonomic	Stripe data across drives
Autonomic	User Initiated	Create Virtual Volumes
	User Initiated	Create Common Provisioning Groups
	User Initiated	Create RAID-6 Virtual Volumes
	Autonomic	Optional Performance Management
	User Initiated	Export LUNs

Graphical user interface, application Description automatically generated

Question: 54

What is the purpose of WWN in FC SAN? (Choose two.)

A. Identification of zone members
B. Identification of entities denied access to a volume
C. Identification of entities via Storage Name Server (SNS)
D. Load balanced frame delivery
E. Forward translation of DNS entries

Answer: A,C

Explanation:

In a Fibre Channel (FC) SAN, the World Wide Name (WWN) serves as a unique identifier for devices within the network. The WWN is used in several critical functions:

Identification of zone members (Option A): WWNs are used to define and manage zones within a SAN. Zoning is a method of grouping devices, such as servers and storage arrays, to control access and ensure data security. By identifying zone members via their WWNs, administrators can control which devices can communicate within the SAN.

Identification of entities via Storage Name Server (SNS) (Option C): The WWN is registered with the Storage Name Server (SNS) in the SAN fabric. The SNS maintains a database of all devices within the SAN and their associated WWNs, enabling efficient routing of data frames to the correct destination. These features make the WWN a fundamental element in the operation and management of a Fibre Channel SAN.

Reference:

HPE SAN and Zoning Overview
HPE Fibre Channel Networking Solutions

Question: 55

You have proposed a Primera array to a customer for primary storage. The customer currently has an older HPE 3PAR array and will continue to use it moving forward. The customer would like high availability configured.

Which RMC Peer Copy pre-requisites do you need to point out to the customer? (Choose two.)

A. 4-port 1 Gb Ethernet Adapter (NIC) is required in each array
B. Target drive type must match source drive type
C. 2-port 10 Gb Ethernet Adapter (NIC) is required in each array
D. Check that the 3PAR OS version is supported
E. Required license must be provided
F. RMC 6.2

Answer: D,F

Explanation:

When proposing a Primera array and ensuring high availability with an existing HPE 3PAR array, there are specific RMC (Recovery Manager Central) Peer Copy prerequisites that need to be addressed: Check that the 3PAR OS version is supported (Option D): It is crucial to verify that the HPE 3PAR OS version is compatible with the RMC version being used. Incompatibility between the OS versions can lead to failures in replication or other high availability features.

RMC 6.2 (Option F): RMC 6.2 is the required version for ensuring compatibility with the features necessary for Peer Copy between Primera and 3PAR arrays. Ensuring that this version is installed and correctly configured is essential for successful implementation.

These prerequisites help ensure that the high availability setup between the Primera and 3PAR arrays functions correctly and that the data protection mechanisms are reliable.

Reference:

HPE RMC Overview

HPE 3PAR and Primera Compatibility

Question: 56

Which tool is used to provide centralized management of 3PAR and Primera arrays?

A. SMU
B. Primera UI
C. WebUI
D. SSMC

Answer: D

Explanation:

The StoreServ Management Console (SSMC) (Option D) is the tool used for centralized management of both HPE 3PAR and Primera arrays. SSMC provides a unified interface for managing storage arrays, enabling administrators to monitor, configure, and maintain their storage infrastructure from a single console. It offers advanced features for performance tuning, capacity planning, and data protection, making it an essential tool for organizations using these storage systems.

SSMC simplifies the management process and enhances the efficiency of storage operations, which is particularly beneficial in environments with complex storage requirements.

Reference:

HPE StoreServ Management Console

HPE SSMC Overview

Question: 57

You need to deploy a Recovery Manager Central appliance and integrate it with a customer's 3PAR system. Which information must be collected from the customer in order to proceed with the installer? (Choose two.)

A. StoreOnce store name
B. vCenter IP address or hostname
C. HPE 3PAR used capacity
D. IP address of the RMC
E. NFS path

Answer: B,D

Explanation:

When deploying a Recovery Manager Central (RMC) appliance and integrating it with a customer's HPE 3PAR system, the following information is critical:

vCenter IP address or hostname (Option B): The RMC appliance needs to communicate with the VMware vCenter server for managing virtual machines and performing data protection tasks. The IP address or hostname of the vCenter server is necessary for this integration.

IP address of the RMC (Option D): The IP address of the RMC appliance itself is required during the installation process to ensure proper network configuration and communication between the RMC appliance, the 3PAR storage system, and other network components.

Collecting this information beforehand ensures that the installation process proceeds smoothly and that the RMC appliance can be correctly configured to protect the customer's data environment. Reference:

HPE RMC Installation Guide

HPE 3PAR Integration with RMC

Question: 58

DRAG DROP

Match each HPE storage solution to its use case.

Solution		Use Case
Primera		Smaller site traditional deployments
MSA		Complete solution for virtualized environments
Nimble		Enterprise class storage for SMB
Nimble dHCI		Enterprise class storage with Tier-0 features
SimpliVity		hyperconverged control with independent compute and storage scalability

Answer:

Explanation:

Solution	Use Case
Nimble	Smaller site traditional deployments
Nimble dHCI	Complete solution for virtualized environments
MSA	Enterprise class storage for SMB
Primera	Enterprise class storage with Tier-0 features
SimpliVity	hyperconverged control with independent compute and storage scalability

Graphical user interface, text, application Description automatically generated

Question: 59

What is the typical protocol used to access data from object storage?

A. FC
B. NVMe
C. HTTP
D. iSCSI

Answer: C

Explanation:

The typical protocol used to access data from object storage is HTTP (Option C). Object storage systems, such as those used in cloud environments, typically expose their data through RESTful APIs over HTTP. This allows for easy access and manipulation of data objects over the web. Unlike traditional block or file storage, object storage is designed for scalability and is commonly used for storing large amounts of unstructured data, such as media files, backups, and archives.

HTTP is the standard protocol for web communications, making it the ideal choice for accessing data in object storage environments, which are often cloud-based or designed for remote access.

Reference:

HPE Object Storage Overview

HPE Cloud and Object Storage Solutions

Topic 2, More Questions

Question: 60

Which functionality available in an HPE 3 Par StoreServ 8400 system that is not available in an HPE 3par Storesrve 7200

A. Data at Rest Encryption
B. Persistent Checksum end-to-end data integrity (correct)
C. Adaptive optimization and dynamic Optimization
D. Online import license

Answer: B

Explanation:

The HPE 3PAR StoreServ 8400 system includes the Persistent Checksum feature, which provides end- to-end data integrity. This functionality ensures that data remains consistent and uncorrupted as it travels through the system, from the host to the storage array and back. This feature is particularly important for environments where data integrity is critical, such as financial services or healthcare. The HPE 3PAR StoreServ 7200 does not offer this feature, making it a significant differentiator between the two systems.

Reference:
HPE 3PAR StoreServ 8000 Series
HPE Persistent Checksum

Question: 61

Which storage principle would benefits of customer who has several departments in their organization with different storage needs?

A. Autonomic Management
B. Federated storage
C. Scale out storage
D. Multi-tenancy

Answer: D

Explanation:

Multi-tenancy is a storage principle that allows multiple departments or tenants within an organization to share the same storage infrastructure while maintaining logical separation of data. This approach benefits organizations with different departments that have varying storage needs by providing isolated storage environments within a single physical system. It optimizes storage resource utilization and enhances data security, making it ideal for environments where multiple workloads coexist.

Reference:
HPE 3PAR Multi-tenancy
HPE Storage Virtualization

Question: 62

A customer with restricted budget has an existing HPE 3PAR storeserver 8200 using 10kfast class and near line drives because of the implementation of new application .the workload has shifted to be read intensive therefore ,they want to increase the read I/O performance What should they add to their environment ?

A. A tier with 15k fast class 600 GB drive for new CPG, configure AO policy to advantage of new resources
B. Two 400 GB SSD drives and enable adaptive flash cache (page 173) eed to check

C. A tier with 15k fast class drive and implement thin provisioned deduplicated virtual volumes
D. A tier of SSD and implement thin provisioned virtual volume

Answer: D

Explanation:

Given the shift to a read-intensive workload, adding a tier of SSD (Solid State Drives) will significantly improve the read I/O performance of the environment. Implementing thin provisioned virtual volumes allows the storage to be allocated more efficiently, optimizing the use of available SSD resources. This combination ensures that the customer can meet the new performance demands without overspending, making it the best option for a budget-restricted scenario.

Reference:
HPE 3PAR StoreServ 8000 Series
HPE Thin Provisioning

Question: 63

Which management interface uses four basic commands (Create ,read, update ad delete)to enable administrators to define ad radically simply management processes?

A. Rest API
B. WMI
C. SMI-S
D. WEBEM

Answer: A

Explanation:

The REST API (Representational State Transfer Application Programming Interface) uses four basic commands: Create, Read, Update, and Delete (often abbreviated as CRUD). These commands enable administrators to define and simplify management processes in a programmatic way. REST APIs are widely used in modern IT environments for their simplicity and efficiency in managing and interacting with systems, including storage and networking solutions.

Reference:
HPE REST API Documentation
Introduction to REST API

Question: 64

What can move data directly from a snapshot to backup storage independent of backup server software?

A. SSMC
B. Virtual Lock
C. CLI
D. Express Protect

Answer: D

Explanation:

Express Protect is a feature that allows data to be moved directly from a snapshot to backup storage independently of the backup server software. This feature is available in HPE's backup and recovery solutions, and it is designed to streamline the backup process, reduce load on the backup server, and improve overall backup efficiency.

Reference:
HPE Backup Solutions

HPE StoreOnce Express Protect

Question: 65

What is the benefits of HPE synergy(Select 2)

A. It can present block storage services from HPE 3par as part of the resource pool
B. It support up to 3 HPE store Virtual VSA nodes for storage RAID
C. It can use HPE 3PAR file persona for objet storage
D. It can compose and reclaim DAS storage
E. It support HPE blade system C-Class Flex Fabrics Interconnect module (need to check)

Answer: A,D

Explanation:

HPE Synergy is a composable infrastructure solution that provides flexibility and scalability for data centers. The benefits include:

Block Storage Services from HPE 3PAR: HPE Synergy can integrate with HPE 3PAR storage to present block storage services as part of its resource pool. This allows for a more unified and efficient management of storage resources across the infrastructure.

Composing and Reclaiming DAS Storage: HPE Synergy allows administrators to compose and reclaim direct-attached storage (DAS) as needed, optimizing the use of available storage resources and improving overall efficiency.

These features make HPE Synergy a powerful solution for modern data centers that require flexible, scalable, and efficient infrastructure management.

Reference:

HPE Synergy Overview

HPE 3PAR and Synergy Integration

Question: 66

A large organization is experiencing exponential data growth of object storage due to recent mergers and acquisition .They need an on-premise solution to optimize cost at petabyte scale Which components should you recommend for a software-defined solution ?(select two) A. HPE Appolo 4510 server

B. HPE Complete –Scalability RING
C. HPE Synergy 660 Gen10 compute modules
D. HPE complete –CTERA
E. HPE 3PAR Storeserv 9450c

Answer: A,B

Explanation:

For a large organization experiencing exponential data growth in object storage, particularly at a petabyte scale, a software-defined solution is recommended. The components to consider are: HPE Apollo 4510 Server: The Apollo 4510 is designed for massive storage capacities, making it ideal for handling large-scale data storage needs in an efficient manner. HPE Complete – Scalability RING: The Scalability RING is a software-defined storage solution that provides scalable object storage capabilities. It is well-suited for environments that require onpremise solutions to optimize costs at petabyte scales.

These components provide the necessary infrastructure to manage large volumes of object storage efficiently and cost-effectively.

Reference:

HPE Apollo 4000 Systems

HPE Complete – Scalability RING

Question: 67

A customer migrate their infrastructure from a 3rd party storage to a Nimble environment. During an architecture workshop, you discuss VMvision with the customer and the system engineer. Which statement is correct when implementing performance monitoring using VMVision?

A. Nibmle service processor collects relevant per VM performance data and send them using SSL port 443 to VMvision
B. VMvision is an agentless integration into infosight and needs only the Vcenter server appliance credentials to connect. (page 112)
C. VMware vSphere storage API's array integration (VAAI)has to be configured to combine storage and VM performance metrics
D. SNMP trap service has to be configured to send traps to infosight and integrate performance data using VMvision.

Answer: B

Explanation:

VMvision is a feature within HPE InfoSight that provides deep visibility into the performance and resource utilization of virtual machines (VMs) running on HPE Nimble Storage arrays. It offers an agentless approach, meaning it does not require any additional software or agents to be installed on the VMs or hosts. Instead, VMvision leverages the vCenter server appliance credentials to directly gather data from the VMware environment.

Once integrated with vCenter, VMvision can collect and analyze VM-level performance data, such as latency, IOPS, and throughput, in real-time. This data is then correlated with storage performance metrics, allowing administrators to easily identify bottlenecks and optimize VM performance. The agentless nature of VMvision simplifies the deployment process and reduces the management overhead associated with performance monitoring.

Unlike traditional performance monitoring tools that may require configuring SNMP traps or deploying agents on each VM, VMvision's integration with InfoSight streamlines the process by using existing vCenter APIs to gather the necessary data. This approach not only ensures a seamless integration but also enhances the accuracy of the performance insights provided by InfoSight.

For more details, refer to the following HPE Storage references:

HPE Nimble Storage
HPE InfoSight for Storage
HPE Flash and Hybrid Storage

Question: 68

Which SAN topology offers the highest centralized data access performance?

A. Meshed
B. Cascaded
C. Core-Edge
D. Ring

Answer: C

Explanation:

The Core-Edge SAN topology offers the highest centralized data access performance. In this topology, the core switch provides centralized connectivity, and the edge switches connect to the hosts and storage devices. This architecture is highly scalable and supports high-performance data access while maintaining low latency. It is ideal for large SAN environments where centralized data management and high throughput are crucial.

Reference:
HPE SAN Solutions

SAN Topology Guide

Question: 69

A customer need to implement a new SAN fabric for their growing environment .The new SAN should provide a high performance and port–efficient network with many-to-many connectivity .Because of changing requirement and the possible acquisition of another company in the near future. The customer cannot predit the I/O traffic pattern within the SAN .The customer also concerned about availability. Which type of SAN topology should you recommend?

A. Core-edge fabric
B. Single switch fabric
C. Cascaded fabric
D. Meshed fabric

Answer: D

Explanation:

A Meshed fabric SAN topology is recommended when the customer requires a high-performance, port-efficient network with many-to-many connectivity and cannot predict I/O traffic patterns. This topology provides multiple paths between devices, ensuring high availability and redundancy. It is
flexible and can easily accommodate changes in the network, such as the acquisition of another company, making it ideal for environments with dynamic requirements.

Reference:
HPE SAN Fabric Design
SAN Fabric Planning Guide

Question: 70

Which storage tool in the storage assessment foundry provide data protection analysis?

A. Ninja protected+ (318)
B. NinjaCrawler
C. Ninja Thin
D. Ninja Stars

Answer: A

Explanation:

NinjaProtected+ is a storage assessment tool from HPE that provides data protection analysis. It helps customers understand their data protection landscape, assess backup and recovery needs, and optimize data protection strategies. This tool is particularly useful for ensuring that the data is adequately protected across different storage environments.

Reference:
HPE Ninja Tools Overview
NinjaProtected+ Tool

Question: 71

A customer is a cloud service provider with infrastructure powered by HPE 3PAR Storeserv 9000.The customer is concern about their ability to ensure the quality of service and protect their tenants from unpredictable bursts of I/O from other tenants. What should you recommended to your customer ?

A. Use priority optimization to enable service level for workloads
B. Use virtual domain to automatically set multi-tenant policies
C. Use dynamic optimization to automatically manage quality of service
D. Use adaptive optimization to optimize service level automatically

Answer: A

Explanation:

For a cloud service provider using HPE 3PAR StoreServ 9000, Priority Optimization is the recommended solution to ensure the quality of service (QoS) and protect tenants from unpredictable bursts of I/O from other tenants. Priority Optimization allows administrators to set service levels for different workloads, ensuring that critical workloads receive the necessary resources while maintaining overall system performance. This feature helps manage and enforce QoS in a multitenant environment, providing predictable performance and preventing noisy neighbors from impacting other tenants.

Reference:

HPE 3PAR Priority Optimization

HPE 3PAR StoreServ 9000 Overview

Question: 72

A customer has an existing configuration consisting of first class and nearline SAS drive in an 8000 SFF enclosure. They add two SFF 8000enclosure that are fully populated with nearline

drives to an existing HPE 3Par storeserv 8400 array. What should the customer do to optimize their storage configuration?

A. Defrag the CPG and run align drive on their system
B. Run tunesys and on the array (275)
C. Enable space reclamation
D. Create new CPG for the newly installed drivers

Answer: B

Explanation:

The correct action to optimize the storage configuration when adding new enclosures and drives to an existing HPE 3PAR StoreServ 8400 array is to run the tunesys command. This utility performs a system-wide optimization that includes rebalancing the data across all physical disks to ensure optimal performance and space utilization. tunesys is especially useful when new drives are added because it ensures that the workload is evenly distributed across both the new and existing drives, preventing potential hotspots and improving overall system efficiency. Defragmenting the Common Provisioning Groups (CPGs) and aligning the drives would be beneficial in certain scenarios, but the first and most comprehensive step is to use tunesys.

For more details, refer to the following HPE Storage references:

HPE 3PAR StoreServ Storage

Question: 73

Which storage protocol is supported by virtual connect Flex-10?

A. FCoE
B. FC
C. ISCSI
D. FCIP

Answer: A

Explanation:

Virtual Connect Flex-10 modules support Fibre Channel over Ethernet (FCoE). FCoE is a storage protocol that encapsulates Fibre Channel frames within Ethernet packets, allowing for the consolidation of LAN and SAN traffic over a single Ethernet infrastructure. This protocol is especially useful in converged network environments where space and cabling efficiency are critical. Flex-10 technology allows for the dynamic allocation of bandwidth between different network protocols, and FCoE

is fully supported within this architecture.
For more details, refer to the following HPE Storage references:
HPE Virtual Connect Technology

Question: 74

A customer need a new storage system for visual desktop infrastructure environment to reduce the time required to provision new desktop. Which HPE solution should you recommended to fulfill this customers requirements?

A. Snapclones on HPE MSA 2040
B. SmartClone on HPE store virtual VSA(54)
C. Storage pool on HPE store Easy
D. Virtual Copy on HPE 3Par storeServ

Answer: B

Explanation:

For a Virtual Desktop Infrastructure (VDI) environment where rapid provisioning of new desktops is a key requirement, HPE StoreVirtual VSA's SmartClone technology is an ideal solution. SmartClone allows for the creation of space-efficient clones of existing volumes, which can significantly reduce the time and storage space needed to provision new desktops. This technology creates clones that only use additional space for changes made to the cloned data, making it highly efficient in environments with many similar or identical data sets, like VDI.
For more details, refer to the following HPE Storage references:
HPE StoreVirtual VSA

Question: 75

A customer needs to be manually map out preferred paths within a multi-switch fabric, based on application ,priority ,and topology, while allowing failover to a non-preferred path if the preferred path fails, Which B-series FC switch functionality should be used to provide this?

A. Quality of services
B. Enhanced group management
C. Frame filtering
D. Traffic isolation Zones

Answer: D

Explanation:

In a multi-switch fabric where it is necessary to manually map out preferred paths based on application priority and topology, while still allowing failover to non-preferred paths if needed, Traffic Isolation Zones (TIZs) are the recommended functionality. TIZs provide a mechanism to segregate and control traffic within a Fibre Channel (FC) fabric, ensuring that specific application traffic follows the preferred paths while providing the necessary failover capabilities. This enhances the performance and reliability of critical applications by keeping their traffic on dedicated paths, reducing the risk of congestion and ensuring that failover paths are used only when necessary.
For more details, refer to the following HPE Storage references:
HPE B-series FC Switches

Question: 76

What allows volume level data to be copied between an HPE 3PAR and an HPE store Virtual VSA?

A. Store virtual Peer motion
B. HPE 3PAR Remote Copy
C. Recovery Manager central

D. StoreServ Peer Motion

Answer: A

Explanation:

StoreVirtual Peer Motion allows for seamless data migration and load balancing at the volume level between different storage systems, such as an HPE 3PAR and an HPE StoreVirtual VSA. This feature is critical for environments where maintaining continuous data availability and optimizing storage performance are key priorities. StoreVirtual Peer Motion operates by enabling the non-disruptive movement of data between storage systems, allowing organizations to balance workloads, improve resource utilization, and manage data across hybrid cloud environments.

HPE StoreVirtual Peer Motion supports federated storage, allowing customers to migrate data between HPE storage systems without impacting applications. This process is particularly useful in environments leveraging both HPE 3PAR and StoreVirtual VSA systems, providing flexibility and scalability across heterogeneous storage platforms.

Reference:

HPE Data Storage Products

HPE Storage Solutions

Question: 77

A customer has an excisting environment with 3PAR,Nimble and MSA. They are providing file servicing from all arrays with multiple virtual machine but preference is not adequate.

What should you add to the environment to increase performance ,increase availability, and reduce management overhead?

A. StoreEasy 3850 Gateway

B. StoreEasy 5000

C. 3PAR File Persona

D. Simplvity 380

Answer: C

Explanation:

The customer's current environment consists of HPE 3PAR, Nimble, and MSA arrays, all providing file services through multiple virtual machines. The key issues presented are the need to increase performance, enhance availability, and reduce management overhead.

HPE 3PAR File Persona is the best solution among the given options because it integrates file and block services natively within the 3PAR system. This solution offers several advantages: Performance: 3PAR File Persona is designed to handle high-performance workloads by utilizing the 3PAR architecture, which is known for its efficiency and speed. This will significantly increase the overall performance of file services compared to traditional virtual machine-based file services.

Availability: HPE 3PAR File Persona benefits from the robust, high-availability architecture of the 3PAR system, which includes features like advanced data protection, automated failover, and seamless data mobility. These features enhance the availability of the file services provided by the system.

Reduced Management Overhead: By integrating file services directly into the 3PAR array, File Persona reduces the complexity associated with managing multiple virtual machines for file serving. It simplifies management through a unified interface that handles both block and file services, reducing the need for separate management tools or additional hardware like gateways.

In contrast:

StoreEasy 3850 Gateway and StoreEasy 5000 are dedicated NAS appliances designed for file storage. However, they would add additional hardware and management complexity to the environment.

Simplivity 380 is a hyper-converged solution focused on virtualized environments but would not directly address the file

serving needs in the way 3PAR File Persona does.

HPE Storage Reference:

HPE 3PAR File Persona Overview

HPE 3PAR Storage Systems

HPE 3PAR Architecture

Question: 78

Which statement describes HPE StoreVirtual Network RAID functionality?

A. Redundancy is managed on a per-volume basis.
B. With Network RAID 10+2 data is striped and mirrored across two or more storage systems.
C. Network RAID 10 requires an even number of storage nodes.
D. Volumes remain available if an odd number of nodes are available.

Answer: A

Explanation:

HPE StoreVirtual Network RAID provides redundancy by managing it on a per-volume basis. This means that the level of RAID protection (e.g., Network RAID 0, 10, 10+1, etc.) is set individually for each volume, allowing flexibility in how data protection is applied depending on the importance and performance requirements of the data stored. Unlike traditional RAID, which is managed at the disk level, Network RAID in StoreVirtual VSA allows for more granular control and can be tailored to the specific needs of different workloads.

Question: 79

During a proof-of-concept you need to implement an inter-switch-link (ISL)between two HPE SN6000B switches. Which port mode must be set enable communication between the switches?

A. N_PORT
B. FL_PORT (WRONG)
C. F_PORT
D. E_PORT (Correct)

Answer: D

Explanation:

When implementing an Inter-Switch Link (ISL) between two HPE SN6000B switches, the correct port mode that must be set to enable communication between the switches is E_PORT. E_PORT stands for Expansion Port and is used to connect switches in a fabric. It facilitates the creation of an ISL that allows traffic to be routed between the switches in the fabric, enabling the switches to share the connected devices' routing tables and maintain a unified fabric.

Question: 80

In an ISCSI based storage system Proof-Of-Concept project ,the customer is not satisfied with the performance of their video streaming application .What would you recommended to the customer to optimize the excisting environment?

A. Enable hardware ISCSI initiator
B. Increase the switch buffer to buffer credits
C. Enable jumbo frames on required components
D. Consolidate the heterogeneous switches in the network

Answer: C

Explanation:

For optimizing an iSCSI-based storage system, especially in environments handling large data volumes such as video streaming, enabling jumbo frames is recommended. Jumbo frames allow the transmission of larger data packets over the network, reducing the overhead caused by smaller packets and improving overall network efficiency. This is particularly important in video streaming, where continuous, high-bandwidth data transfer is required. Enabling jumbo frames across all components, including switches, network interface cards (NICs), and storage devices, can significantly improve performance.

Question: 81

You are designing a new HPE 3PAR StoreServ all-flash array for the customer.. Which ratio should you expect to have the highest efficiency?

A. Read/write ratio
B. Reclamation ratio
C. Compaction Ratio
D. Thin provisioning ratio

Answer: C

Explanation:

In an all-flash array like the HPE 3PAR StoreServ, the compaction ratio typically offers the highest efficiency. Compaction includes both deduplication and compression, which reduces the amount of physical storage needed by eliminating redundant data and compressing the data that is stored. The compaction ratio directly impacts storage efficiency, allowing for more effective utilization of the available flash storage, thereby reducing the total cost of ownership and improving performance. Reference:

HPE 3PAR StoreServ All-Flash Arrays

HPE Storage Efficiency

Question: 82

A customer need to update the local sever at each of their branches keep up with the increasing demand for High-performance storage. The customer cannot afford to move to SAN at each state. Which HPE storage technology can increase performance for this customer?

A. Smart Path
B. SmartCache
C. Adaptive Flash Cache
D. Persistent Cache

Answer: B

Explanation:

HPE SmartCache is a feature available on HPE servers that accelerates storage performance by caching frequently accessed data on faster, lower-latency media such as SSDs. For customers who cannot afford to move to SANs at each branch but require high-performance storage, SmartCache provides a cost-effective solution. By leveraging SSDs as a caching layer for frequently accessed data, it can significantly improve the performance of local servers without requiring a full SAN deployment.

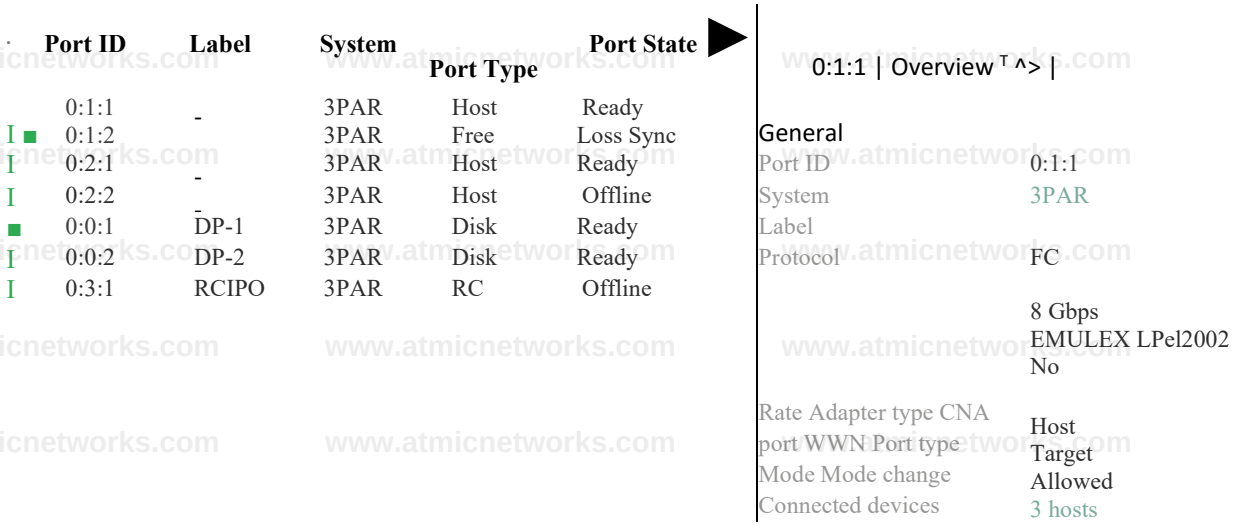
HPE Storage Reference:

HPE SmartCache Overview

HPE Server Technologies

Question: 83

Refer to the exhibit:



	Port ID	Label	System	Port Type	Port State
	0:1:1	-	3PAR	Host	Ready
I ■	0:1:2		3PAR	Free	Loss Sync
I	0:2:1	-	3PAR	Host	Ready
I	0:2:2	-	3PAR	Host	Offline
■	0:0:1	DP-1	3PAR	Disk	Ready
I	0:0:2	DP-2	3PAR	Disk	Ready
I	0:3:1	RCIPO	3PAR	RC	Offline

Which type of data format do you expect in the red rectangle?

A. 172.16.31.11/24

B. 94:b4:0f:cd:34:8a

C. iqn.2015-02.com.hpe:oneview-vcgeDav000

D. 20110002AC00736E235.524

Answer: C

Explanation:

The red rectangle in the exhibit is likely asking for an iSCSI Qualified Name (IQN), which is a unique identifier used in iSCSI environments to address devices on a storage network. The format "iqn.2015- 02.com.hpe " follows the standard IQN naming convention, which is used to identify the iSCSI initiators and targets in an HPE storage environment.

HPE Storage Reference:

HPE Storage Networking

HPE iSCSI and SAN Solutions

Question: 84

Which 3PAR storeServ feature allow to host to continue I/O uninterrupted during a firmware update?

A. Persistent Memory

B. Persistent port (96)

C. Peer persistenceD Persistent Cache

Answer: B

Explanation:

The HPE 3PAR StoreServ Persistent Port feature allows a host to continue I/O operations uninterrupted during a firmware update. It achieves this by automatically failing over the ports of the storage system to a peer port on another node, ensuring continuous data availability and service delivery. This feature is crucial during firmware upgrades or any

maintenance activity where minimal disruption is desired.

HPE Storage Reference:

HPE 3PAR StoreServ Architecture

HPE 3PAR StoreServ Features

Question: 85

A customer has deployed an HPE 3PAR StoreServ 8400 with two nodes and three additional disk enclosure .They want to expand the solution with two additional nodes and three additional disk enclosure ..What must you do to expand the customers solution?

A. The new disks must be imported before the new nodes can be added
B. The existing nodes need to be take Offline
C. The system should be updated to the latest supported OS before the hardware expansion
D. The new nodes and enclosure must be placed in an adjacent racks

Answer: C

Explanation:

Before expanding an HPE 3PAR StoreServ 8400 system with additional nodes and disk enclosures, it is essential to update the system to the latest supported OS. This ensures compatibility with the new hardware and access to the latest features and improvements. Running the latest OS version also mitigates potential issues during the hardware expansion process, providing a stable and supported environment for the new nodes and enclosures.

HPE Storage Reference:

HPE 3PAR StoreServ 8000 Series

HPE 3PAR OS and Firmware Updates

Question: 86

During which event will HPE 3par Storeserv persistent port feature provide transparent and uninterrupted failover (Select two)

A. Loss of persistent cache
B. B-series SAN switch upgrades
C. Firmware upgrade
D. Node maintenance or failure
E. Loss of full-mesh cluster interconnect

Answer: C,D

Explanation:

The HPE 3PAR StoreServ Persistent Port feature ensures transparent and uninterrupted failover during specific events such as firmware upgrades and node maintenance or failure. During a firmware upgrade, the persistent port feature allows data paths to automatically fail over to an alternate path, maintaining uninterrupted host connectivity. Similarly, in the event of node maintenance or failure, the persistent port feature seamlessly redirects I/O to another available node without disrupting the service, ensuring high availability and reliability.

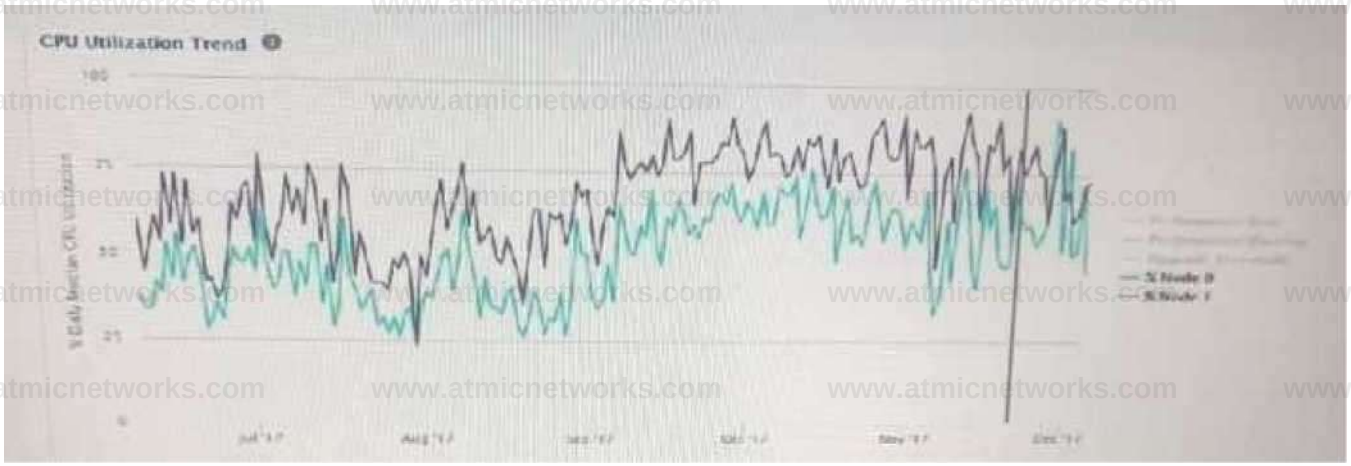
Reference:

HPE 3PAR StoreServ All-Flash Arrays

HPE Storage Solutions

Question: 87

Exhibit:



The customer has upgraded the first of their two HPE StoreServ 8200to the latest inform OS version to take the advantage of the compression feature .You have been asked to design the storage configuration to support oracle database volume to utilize HPE 3PAR compression . Based on the analysis of the array .what would be your suggestion to implement the requested change?

A. Install the catalyst agent on the oracle server to enable inline compression on the selected VV B. Configure the source-side the compression to offload compression to the Host C. Balance the workloads between the arrays to have enough headroom for compression D. Consider adding another node pair for compression to work efficiently

Answer: C

Explanation:

When implementing HPE 3PAR compression for Oracle database volumes, it's crucial to ensure that there is sufficient processing capacity on the array. This can be achieved by balancing the workloads between the arrays to create the necessary headroom for compression tasks. Properly distributing the workloads will allow the system to efficiently manage the compression operations without negatively impacting performance.

Reference:
HPE 3PAR StoreServ and Compression

Question: 88

Due to industry regulation a customer is required to store backup at a separate data center from the company's main data center. The customer application require fast backup and quick restore increase of data lose. Which solution allow the customer to meet both industry and application requirement?

A. HPE storeServe 3par in main and secondary data center with RCIP replication between arrays B. Nimble AF series in main data center and Nimble SF series in secondary data center

C. HPE Storeserve 3Par in main data center HPE StoreOnce in secondary data center with RMC D. HPR StoreServ 3PAR in main data center and HPE StoreOnce in both main and secondary data center.

Answer: C

Explanation:

For a customer who needs to store backups at a separate data center while requiring fast backups and quick restores, the best solution is to use HPE StoreServ 3PAR in the main data center and HPE StoreOnce in the secondary data center with Recovery Manager Central (RMC) integration. This setup provides efficient, fast backups and restores, leveraging HPE StoreOnce's advanced deduplication capabilities, while RMC ensures that backups are performed quickly with minimal impact on production workloads. This solution meets both industry regulations and application performance

requirements.

Reference:

HPE StoreOnce Systems

HPE 3PAR and RMC

Question: 89

Which type of networking switch handles both Ethernet and fibre channel traffic?

A. Director

B. Virtual

C. Edge

D. Converged

Answer: D

Explanation:

Converged switches are designed to handle both Ethernet and Fibre Channel traffic, enabling them to support converged networks where both storage and regular data traffic are managed through a single infrastructure. This approach simplifies network management and can reduce costs by consolidating the networking hardware required for both types of traffic.

Reference:

HPE Networking Solutions

HPE Converged Infrastructure

Question: 90

What has to taken into account when performing capacity planning for HPE Nimble storage using deduplication?

A. Deduplication is performed on a per volume basic

B. Deduplication is performed on a per array basic

C. Deduplication is performed on a per application category basic

D. Deduplication is performed on a per pool and block size basic

Answer: D

Explanation:

When performing capacity planning for HPE Nimble Storage using deduplication, it's important to understand that deduplication is applied at the pool level and operates on a block size basis. This means that all volumes within a pool benefit from deduplication, and the efficiency of the process depends on the block size and the type of data stored within the pool. Proper capacity planning requires taking into account the pool configuration, block size, and expected deduplication ratios to accurately predict storage savings and performance.

HPE Storage Reference:

HPE Nimble Storage Deduplication

HPE Nimble Storage Architecture

Question: 91

Which statement is true when defining object storage ?

A. It is most suited for sharing files and characterized by volumes

B. It is most suited for unstructured data and characterized by file share protocols like NFS

C. It is most suited for unstructured data and characterized by containers or buckets

D. suited for database It is most and characterized by containers or buckets

Answer: C

Explanation:

Object storage is best suited for unstructured data, such as images, videos, and backups, and it is characterized by the use of containers or buckets. Unlike traditional file storage systems, which use hierarchical structures like file systems, object storage uses a flat namespace and stores data as objects within these containers or buckets. This approach allows for scalability and easy management of large amounts of unstructured data, making it ideal for cloud storage and big data applications.

HPE Storage Reference:

HPE Object Storage Solutions

HPE Scalable Object Storage

Question: 92

A customer uses Recovery manager central for Vmware (RMC-V).They need to ability to perform granular recovery of application item directly from backups...Which solution integrates with RMC-V to provide the desired requirements?

A. Veeam Backup & Replication

B. Netbackup

C. StoreOnce cloudbank

D. CommVault

Answer: A

Explanation:

Veeam Backup & Replication integrates with HPE Recovery Manager Central for VMware (RMC-V) to provide granular recovery of application items directly from backups. This integration allows users to perform item-level recovery for applications like Microsoft Exchange, SQL Server, Active Directory, and others, directly from RMC-V backups, providing a seamless and efficient recovery process. HPE Storage Reference: HPE and Veeam Integration

HPE Recovery Manager Central (RMC) Solutions

Question: 93

What performance benefit is provided by using the HPE StoreVirtual DSM for Microsoft MPIO instead of the standard MPIO?

A. The HPE DSM increases availability and reduces latency and throughput.

B. The storage system, which holds a copy of the requested data, services the read I/Os.

C. The iSCSI connections are blocked to non-critical nodes in the cluster by default.

D. The storage system, which receives a copy of the data, does not service the write I/O.

Answer: B

Explanation:

HPE StoreVirtual DSM for Microsoft MPIO (Multi-Path Input Output) enhances performance by ensuring that the storage system holding a copy of the requested data services the read I/Os. This capability allows the DSM to optimize I/O paths by directing read requests to the most appropriate node, reducing latency and improving throughput, as it ensures that the data is accessed from the nearest or least busy copy.

HPE Storage Reference:

HPE StoreVirtual Storage Solutions

HPE DSM for Microsoft MPIO Overview

Question: 94

After a performance analysis, a customer plan to reorganize his adaptive Flash cache (AFC) configuration and want to raise it from 256 to 768GB. Which action is needed to take advantage of the new AFC configuration?

A. Remove flash cache for all VVS then run create Flash cache
B. Increase current AFC configuration to reflect the additional space
C. Remove the old AO configuration and recreate a new one
D. Run tunesys after raising the AFC to take advantage of the additional space

Answer: A

Explanation:

When adjusting the Adaptive Flash Cache (AFC) configuration in HPE 3PAR StoreServ, particularly when increasing the cache size, the correct procedure involves first removing the existing flash cache for all Virtual Volumes (VVs). After this step, you should recreate the flash cache to reflect the new increased capacity. This ensures that the system properly recognizes and utilizes the additional cache space, optimizing performance according to the new configuration.

Reference:
HPE 3PAR StoreServ
HPE Adaptive Flash Cache

Question: 95

How does HPE StoreVirtual DSM for windows enhanced Microsoft windows native MPIO?

A. It automatically create an I/O path to each storage system in the cluster
B. It automatically adjusts transfer block
C. It automatically combines HPE thin provisioning and volume migration technology
D. It automatically adjusts the availability bandwidth between the switch and the array

Answer: A

Explanation:

HPE StoreVirtual DSM (Device Specific Module) for Windows enhances Microsoft's native Multipath I/O (MPIO) by automatically creating an I/O path to each storage system within the cluster. This feature ensures that data can be accessed through multiple paths, increasing redundancy and improving performance. By managing paths effectively, DSM helps optimize the storage network, reducing latency and enhancing overall throughput.

Reference:
HPE StoreVirtual
HPE Storage Networking ==========

Question: 96

A customer run several HPE 3PAR storeserv system in their environment using data rest encryption .The customer needs to add an HPE 3PAR Storeserv 8000system to the storage pool and an external key manager for all systems.. What is the requirement for this solution?

A. Boot server for the existing 3PAR storeserv array must be replaced with self-encrypting drive
B. All drives of the new HPE 3PAR storeserv array must be self-encrypting
C. HPE ESKM FIPS mode must be disabled by the administrator
D. Data on the existing HPE 3PAR storeserv array must be decrypted and re-encrypted with new keys

Answer: B

Explanation:

When adding a new HPE 3PAR StoreServ 8000 system to a storage pool that uses data-at-rest encryption and an external key manager, it is mandatory that all drives in the new system are selfencrypting drives (SEDs). This ensures consistent encryption across all systems within the storage pool and compliance with the security policies managed by the external key manager. The SEDs in the new array will use encryption keys provided by the external key manager, maintaining data security across the environment.

Reference:

HPE 3PAR StoreServ Encryption

HPE External Key Manager

Question: 97

A customer has a SAN based on HPE B-series switches with Gen6 fibre channel technology. Their workload is continually growing and they are experiencing performance issues. They need a solution to enable real-time monitoring and to speed up troubleshooting in his SAN backend.

Which unique feature of the HPE B-series Gen6 switches should you recommend? (Choose two.)

A. Fabric Watch
B. MAPS
C. Advanced Trunking
D. Fabric Vision
E. Extended Fabrics

Answer: B,D

Explanation:

In HPE B-series Gen6 Fibre Channel switches, two key features that address the need for real-time monitoring and accelerated troubleshooting are MAPS (Monitoring and Alerting Policy Suite) and Fabric Vision.

MAPS provides proactive monitoring and alerting, allowing administrators to establish policies that automatically trigger alerts when performance thresholds are crossed, helping prevent issues before they impact the environment.

Fabric Vision is a comprehensive monitoring and diagnostics tool that enables administrators to visualize the health and performance of the SAN fabric, allowing for rapid identification and resolution of issues. Together, these features help maintain high performance and reliability in SAN environments.

Reference:

HPE B-series Gen6 Fibre Channel Switches

HPE Fabric Vision Technology

Question: 98

A customer need to server 40TB via file protocols including SMB and FTP to a board range of client operating system in one location .security protocol dictate that data must be encrypted with FIPS 140-2 compliance. Which HPE storage solution you recommend?

A. HPE MSA 2052 storage with HPE StoreEasy 3850 Gateway
B. HPE 3PAR 8200 using self-encrypting drive with 3PAR file persona
C. HPE StoreOnce 5500with data in fight encryption .
D. HPE XP7 storage with encryption ready disk adapters

Answer: B

Explanation:

For a customer needing to serve 40TB of data via file protocols such as SMB and FTP while ensuring FIPS 140-2 compliance,

the best solution is HPE 3PAR 8200 with self-encrypting drives (SEDs) combined with 3PAR File Persona. The self-encrypting drives ensure that data at rest is encrypted to meet FIPS 140-2 compliance, while the 3PAR File Persona enables file services directly from the 3PAR
storage system, supporting SMB, FTP, and other protocols natively. This combination provides secure, high-performance file storage that meets regulatory requirements.

Reference:

HPE 3PAR StoreServ File Persona

HPE 3PAR Self-Encrypting Drives

Question: 99

A Company using an existing 1GB ISCSI storage array is experiencing storage access
performance issue. They are interested in deploying HPE 3PAR Storeserv with 16GB /S FC end to-end to improve the performance to the minimal changes to the environment. The existing environment consists of these HPE products

* HPE C7000 Blade system platinum blade enclosure with HP virtual connect Flex 10 interconnect modules.
* Configuration of HPE Proliant Gen8 and Gen9 blade servers
* HPE 2920 Switches

Which HPE products must be included to support new HPE 3PAR Storeserv?(Select two)

A. HPE B-Series 16GB SAN switch for HPE Blade system C-class series
B. HPE 16GB/s Fibre channel HBA for Blade servers
C. HP 5900CP switch series with 16GB/S SFP+ Modules
D. HPE Flex fabric 20GB,2-Port 630 FLB adapter
E. HPE Virtual connect Flex fabric 20/40 f8 modules

Answer: A,B

Explanation:

To support the deployment of HPE 3PAR StoreServ with 16GB/s Fibre Channel (FC) in an existing environment that includes HPE BladeSystem with Virtual Connect Flex-10 and ProLiant Gen8/Gen9 servers, the appropriate products to include are:

HPE B-Series 16GB SAN switch: This switch is necessary to provide the high-speed 16GB/s FC connectivity between the BladeSystem and the 3PAR StoreServ array, ensuring that the performance issues are addressed with minimal changes to the environment.

HPE 16GB/s Fibre Channel HBA for Blade servers: The FC HBAs (Host Bus Adapters) are required for the blade servers to connect to the 16GB/s FC SAN, enabling end-to-end high-speed connectivity from the servers to the storage array.

Reference:

HPE B-Series SAN Switches

HPE 3PAR StoreServ Integration with BladeSystem

Question: 100

A customer has a new Nimble CS3000 21T storage systems and is facing latency issues for his 2TB ERP database. What would be a design approach to solve this issue ?

A. Perform controller upgrade to a Nimbel CS3000 storage systems
B. Add additional SSd drives as cache to the system and PIN the volume
C. Enable storage tiering on the system and map the volume to the new tier
D. Change RAID of the drives to RAID -1and setup quality of services for the volume

Answer: B

Explanation:

For resolving latency issues on a Nimble CS3000 storage system, particularly for a high-demand application like a 2TB ERP database, the best approach is to add additional SSD drives to the system as cache and PIN the volume. This ensures that the entire database or frequently accessed parts of it are always stored in the fastest storage tier (SSD), significantly reducing latency and improving overall performance for the ERP database.

Reference:

HPE Nimble Storage

HPE Storage Performance Optimization

Question: 101

A customer want to implement a virtualized environment and want to provide independent storage access to individual virtual servers. Which feature need to enabled on the B-series FC switches to support this solution?

A. FCIP
B. NPIV
C. ALPA
D. RSCN

Answer: B

Explanation:

For resolving latency issues on a Nimble CS3000 storage system, particularly for a high-demand application like a 2TB ERP database, the best approach is to add additional SSD drives to the system as cache and PIN the volume. This ensures that the entire database or frequently accessed parts of it are always stored in the fastest storage tier (SSD), significantly reducing latency and improving overall performance for the ERP database.

Reference:

HPE Nimble Storage

HPE Storage Performance Optimization

Question: 102

When using a HPE 3 PAR Storeserv array to enable a user to apply array–based data services to specific application and VM's. What is the benefit of implementing VM-level gradually of Volts? A. Data sprawls eliminated by performing the migration functions at the array level using 3PAR HPE Dynamic Optimization

B. Efficiency is maintained by reclaiming space from deleted or migrated VMs using capabilities built into the storage ASIC
C. Performing is accelerated by detecting and moving the most frequently –accessed VMs into the fast class tier
D. Performance is accelerated by leveraging the deduplication capabilities built into the storage ASIC

Answer: B

Explanation:

NPIV (N_Port ID Virtualization) is the feature that needs to be enabled on B-series FC switches to allow individual virtual servers to have independent storage access. NPIV allows multiple virtual machines to share a single physical Fibre Channel port while maintaining separate identities (N_Port IDs), enabling each virtual machine to be seen as a separate entity on the SAN. This is crucial in a virtualized environment where individual virtual servers need direct storage access.

Reference:

HPE B-Series SAN Switches

HPE Virtualization Solutions

Question: 103

You are presenting a Nimble solution based on CS3000 hardware to a customer. Which support advantage will be provided with this solution(select two)

A. Customers always interact with a 3rd level support engineer ,when needed

B. Customers only have to deploy a service processor for automating support tasks.

C. Infosight handles the work of 1st and 2nd level support specialist Infosight offers predictive analytics and integration into HPE support center using insight Online.

D. Infosight performs firmware and software updates without additional administrative support.

Answer: A,C

Explanation:

When presenting a Nimble solution based on CS3000 hardware, two key support advantages are provided:
Customers always interact with a 3rd level support engineer, when needed: HPE Nimble Storage has a unique support model where customers directly interact with higher-level support engineers when necessary, bypassing the traditional tiered support model. This ensures faster resolution of complex issues.
Infosight handles the work of 1st and 2nd level support specialists: HPE Infosight, a powerful AIdriven predictive analytics platform, automatically resolves many issues that would typically require intervention from 1st or 2nd level support. It also integrates with the HPE support center via Insight Online, providing proactive issue resolution and reducing the administrative burden on the customer. HPE Storage Reference: HPE Infosight Overview
HPE Nimble Storage Support Model

Question: 104

You are demonstrating adding a new virtual volume for an HPE 3PAR Storeserv array for your customer.in addition to the volume name ,What is the minimum information required to create a virtual volume(select two)

A. Persona type

B. Domain

C. Host

D. Size

E. CPG

Answer: D,E

Explanation:
When adding a new virtual volume on an HPE 3PAR StoreServ array, the minimum required information includes:
Size: The size of the volume must be specified to define how much storage will be allocated.
CPG (Common Provisioning Group): The CPG defines the storage pool from which the space for the new volume will be allocated. It is essential to specify this to ensure the volume is created with the correct provisioning settings.
Other options like Persona type, Domain, and Host are additional configurations but not mandatory for the initial creation of the volume.
HPE Storage Reference:
HPE 3PAR StoreServ Volume Creation
HPE 3PAR Common Provisioning Group (CPG)

Question: 105

Which technology is used in a B-series SAN switch to prevent communicate between unauthorized device?

A. Port isolation

B. IVR

C. Zoning

D. VSAN

Answer: C

Explanation:

Zoning is a technology used in B-series SAN switches to control and prevent communication between unauthorized devices within a SAN fabric. By creating zones, administrators can define which devices (like servers and storage arrays) can communicate with each other, enhancing security and reducing the risk of unauthorized access. This approach is fundamental in maintaining secure and organized SAN environments.

HPE Storage Reference:

HPE B-Series SAN Switches

HPE SAN Solutions and Zoning

Question: 106

You are adding a new host for an HPE 3PAR StoreServ proof-of-concept .In addition to the host name ,What is the minimum information that is required to create a host profile?

A. Host Persona

B. Host MAC

C. Host set

D. Host WWN

Answer: D

Explanation:

Comprehensive Detailed Explanation with All HPE Storage ReferenceWhen adding a new host to an HPE 3PAR StoreServ system for a proof-of-concept, in addition to the host name, the minimum required information is the Host WWN (World Wide Name). The WWN is a unique identifier used in storage networks to address the host within the SAN. It is critical for ensuring the correct host is

recognized by the storage system and is necessary for establishing the connection between the host and the storage volumes.

HPE Storage Reference:

HPE 3PAR StoreServ Host Configuration

HPE 3PAR StoreServ SAN Connectivity

Question: 107

An HPE 3PAR StoreServ 9000 All-Flash Array customer plans to deploy a secondary array 20 km away from their primary array to enable storage replication over a dark fibre. Their existing environment consists of one HPE Synergy Frame 12000, HPE SN6000B Fibre Channel Switches, HPE FlexFabric 5700 Switch Series, and HPE StoreOnce Systems.

Which HPE license is required to meet the customer's technical requirements?

A. Intelligent Resilient Framework licenses

B. HPE StoreOnce Replication

C. Extended Fabric

D. HPE 3PAR Remote Copy

Answer: D

Explanation:

To enable storage replication over a 20 km distance between two HPE 3PAR StoreServ 9000 All-Flash Arrays, the appropriate license required is HPE 3PAR Remote Copy. Remote Copy is HPE's replication technology that allows data to be replicated between 3PAR arrays, providing disaster recovery capabilities. This feature supports both synchronous and asynchronous replication modes, ensuring data integrity and availability in case of a failure at the primary site. The license is essential for setting up and managing the replication process over the dark fiber link.

Reference:

HPE 3PAR StoreServ Remote Copy

HPE Storage Replication Solutions

Question: 108

Match the type of storage found in today's market to the HPE storage solution optimized for that capacity?

A. HPE 3PAR StoreServ - Block

B. MSA - Block

C. Nimble - Block

D. Scalability - Object

E. StoreEasy - File

F. StoreVirtual - Block

Answer: A

Explanation:

Question: 109

A customer need a backup solution to their virtualized environment .The backup solution must be agentless ,hypervise independent and integrated with HPE storage solutions. The solution must support Nimble snapshot and replication management. What products meets the customer requirement?

A. HPE storeOnce Recovery manager central

B. Commvault Simpana Intellisnap

C. Micro Focus Data Protector

D. Veem Backup and Replication

Answer: B

Explanation:

Commvault Simpana IntelliSnap is the ideal solution for a customer requiring an agentless, hypervisor-independent backup solution that integrates seamlessly with HPE storage solutions, including Nimble snapshots and replication management. IntelliSnap provides robust snapshot management, offering instant recovery capabilities and deep integration with HPE's storage offerings. This makes it a powerful tool for protecting virtualized environments without the need for specific agents on individual virtual machines.

Reference:

Commvault IntelliSnap and HPE Integration

HPE Nimble and Backup Solutions

Question: 110

A customer has a SAN infrastructure with the HPE C-class blade Enclosure ,and a mix of proliant G7,gen8 and Ge9 server .They require a new storage platform ... How can you confirm the storage array will be supported in the existing

environment?

A. Check recommended firmware levels in the HP SAN design reference guide to ensure firmware compatibility
B. Document existing server and SAN information ,and consult SPOCK to ensure firmware compatibility
C. Design and array with the latest firmware ,and recommend that the customer engage HPE point Next to upgrade the existing hardware
D. Design an array with older version of the firmware to ensure compatibility

Answer: B

Explanation:

To confirm that a new storage array will be supported in an existing environment that includes HPE C- class Blade Enclosures and a mix of ProLiant G7, Gen8, and Gen9 servers, the correct approach is to document the existing server and SAN information and consult the HPE SPOCK (Single Point of Connectivity Knowledge) tool. SPOCK is an HPE resource that provides detailed compatibility information for various HPE products, including firmware and software compatibility matrices. This ensures that the new storage array will work seamlessly with the existing infrastructure.

Reference:
HPE SPOCK
HPE Storage Compatibility Guides

Question: 111

During Technology workshop ,the customer asks about different between converged and fibre channel switches. What would be a benefits of using flex fabric switches in a fibre channel storage environment?

A. Support for combining multiple physical switches in to one virtual switch with a single IP address
B. Support for six Ethernet and two fibre channel ,or six Ethernet and two ISCSI or eight Ethernet adapters per server.
C. Zones can be configured for QoS with high ,medium, and low priorities within a fabric on a zone by zone basic
D. In-flight compression and encryption provides efficient link utilization and security

Answer: D

Explanation:

FlexFabric switches in a Fibre Channel storage environment offer the benefit of in-flight compression and encryption, which provides efficient link utilization and enhanced security. These features allow data to be compressed and encrypted as it travels across the network, optimizing bandwidth usage and ensuring data integrity and confidentiality. This is particularly advantageous in environments where secure, high-performance data transmission is critical.

HPE Storage Reference:
HPE FlexFabric Switches Overview
HPE Networking Solutions

Question: 112

A large enterprise is experiencing exponential data growth of their existing Oracle databases. They are concerned about their increasing backup windows and the risk of non-compliance with recovery time objectives increase of data corruption in primary storage. Their primary storage is an 3PAR Storeserv 8400,and their backup target is an HPE StoreOnce System. Which HPE storage solution allow the customer to migrate this risk?

A. RMC Express protect
B. Catalyst in-Flight compression
C. 3 PAR remote copy
D. StoreOnce unified deduplication

Answer: A

Explanation:

RMC (Recovery Manager Central) Express Protect is the most suitable HPE storage solution for addressing the customer's concerns about backup windows, recovery time objectives (RTOs), and data corruption risks in their primary storage environment. RMC Express Protect integrates with HPE 3PAR StoreServ and HPE StoreOnce systems, allowing direct backup of Oracle databases from primary storage to the StoreOnce appliance. This reduces backup windows and ensures fast, efficient, and reliable recovery, mitigating the risks associated with data growth and corruption. HPE Storage Reference:
HPE RMC Express Protect Overview
HPE 3PAR and StoreOnce Integration

Question: 113

A customer recently acquired another company and found that the existing infrastructure was outdated and costly to maintain. They need to put a complete infrastructure solution in place that minimizes the footprint in the data center as quickly and possible. Which solution you recommend?

A. Simplicity 380
B. Bladesystem 7000
C. Converged systems
D. Synergy 12000

Answer: A

Explanation:

The SimpliVity 380 is the recommended solution for a customer who has acquired another company with an outdated and costly infrastructure. This hyper-converged infrastructure solution minimizes the footprint in the data center by combining compute, storage, and networking into a single, integrated system. SimpliVity 380 offers quick deployment, simplified management, and reduced operational costs, making it ideal for modernizing IT environments rapidly and efficiently.
HPE Storage Reference:
HPE SimpliVity 380 Overview
HPE Converged and Hyper-Converged Solutions

Question: 114

Match the HPE converged Strategy principle with its function

A. Federated Storage:- Move data between storage systems in peer-to-peer relationship simply, dynamically and nondestructively
B. Deduplication:-Reduce allocated capacity by eliminating data redundancy
C. Thin provisioning:-Reduce TCO ,Opex and CPEx by using virtualization technology to make storage resources more efficient.
D. Storage tiering:-Use combination of I/O accelerator to place data to meet price, performance, and latency requirements .
E. Storage virtualization:- Deliver simplified management ,higher utilization ,efficient, and agility by separating the logical and physical resource.

Answer: E

Explanation:

These principles represent key components of HPE's converged strategy, each contributing to more efficient, agile, and

cost-effective storage management:

Federated Storage: This principle allows seamless data movement between storage systems, enhancing flexibility and simplifying data management.

Deduplication: Reduces storage space by eliminating duplicate data, resulting in more efficient use of resources.

Thin Provisioning: Allows over-provisioning of storage to optimize costs while ensuring that resources are available when needed.

Storage Tiering: Dynamically places data on the appropriate storage tier based on performance and cost requirements, optimizing storage utilization.

Storage Virtualization: Separates the physical storage hardware from the logical storage services, providing greater flexibility and efficiency in managing storage resources.

HPE Storage Reference:

HPE Storage Solutions

HPE Converged Storage Strategy

Question: 115

Which function is built into the HPE 3par OS and enable users to move data and workloads between array without impacting applications, users, or services?

A. Peer persistence
B. Adaptive optimization
C. Peer motion
D. Remote copy

Answer: C

Explanation:

HPE 3PAR Peer Motion is a feature built into the HPE 3PAR OS that allows users to move data and workloads between arrays without impacting applications, users, or services. This non-disruptive data migration capability is particularly useful during hardware refreshes, technology upgrades, or when balancing workloads across arrays. Peer Motion facilitates seamless, online data migration, ensuring continuity of operations and zero downtime during the process.

Reference:

HPE 3PAR Peer Motion

HPE Storage Migration Solutions

Question: 116

An existing Nimble customer is interested in adding storage to their environment to store his Backups, but has a constrained budget and limited personal .The solution must scale to allow for substantial growth over the next five years?

A. Nimble SF series
B. Nimble AF series
C. Nimble cloud volume
D. Nimble CS series

Answer: D

Explanation:

For a customer with a constrained budget and limited personnel, who requires a storage solution for backups that can scale significantly over the next five years, the HPE Nimble CS series is the most appropriate choice. The Nimble CS series offers hybrid storage capabilities, combining flash and disk storage to balance performance and cost. It is designed to be cost-effective while still providing the ability to scale as the customer's storage needs grow. The Nimble CS series also integrates

easily with existing environments, making it an ideal solution for backup storage with room for future expansion.

Reference:

HPE Nimble Storage CS Series

HPE Storage Solutions for Backup

Question: 117

A customer has a 3PAR storeserv with FC and SSD drives who would like to improve the performance for random reads.

Which 3PAR Storeserve feature would provide better read performance?

A. Adaptive Flash Cache

B. Deduplication

C. Smart Cache

D. Express Layout

Answer: A

Explanation:

Adaptive Flash Cache (AFC) is a feature in HPE 3PAR StoreServ arrays that improves performance for random reads by using flash storage as an extended cache. This feature is especially beneficial for workloads with high random read activity, as it accelerates read operations by storing frequently accessed data in the flash cache, reducing latency and improving overall performance.

Reference:

HPE 3PAR Adaptive Flash Cache

HPE Storage Performance Features

Question: 118

Which statement is correct when comparing functionalities of the AF,CF, and SF series in the nimble storage portfolio?

A. Zero copy clone are unique feature of all flash array within the nimble portfolio

B. SF series supports storage snapshots and replication using veeeam backup & replication CS and AF series support storage snapshot only.

C. Inline deduplication for complete array capacity in combination with compression is offered by the AF and SF series only (67) need to check

D. 99.9999% availability measured and guaranteed for AF and CF series arrays, SF series array offer 99.999% availability.

Answer: C

Explanation:

Inline deduplication and compression are advanced features offered in the HPE Nimble AF (All-Flash) and SF (Secondary Flash) series. These features reduce the amount of physical storage required by eliminating duplicate data and compressing stored data, making it more space-efficient. This capability is available across the entire capacity of the AF and SF series arrays, allowing for substantial savings in storage space and cost. The AF series is designed for primary workloads requiring high performance, while the SF series is optimized for secondary workloads, such as backups and archival, with similar data reduction benefits.

Question: 119

Which software feature should an HPE 3PAR Storeserv 8000 customer use to optimize data protection and recovery, Including rapid online recovery for his VMware environment?(select two)

A. HPE 3PAR Virtual Copy software

B. HPE 3PAR Remote copy software

C. HPE 3PAR Security software suite
D. HPE 3PAR File persona Software suite
E. HPE StoreOnce recovery manager central for VMware

Answer: A,E

Explanation:

HPE 3PAR Virtual Copy software is designed to create snapshots of data, which allows for rapid online recovery by preserving data integrity in VMware environments. These snapshots can be used for various purposes including backups, testing, and recovery, providing a flexible and efficient data protection strategy.
HPE StoreOnce Recovery Manager Central (RMC) for VMware integrates with HPE 3PAR and VMware to provide a seamless data protection and recovery solution. RMC enables application-consistent snapshots and backups directly from the storage array, reducing the backup window and providing quick restore options.
These features are crucial for optimizing data protection and recovery in VMware environments, ensuring both efficiency and reliability. For more detailed information, refer to the following HPE resources:
HPE 3PAR Virtual Copy Software
HPE StoreOnce Recovery Manager Central

Question: 120

You are presenting the HPE StoreEver portfolio to a media agency.
What advantage is offered when using LTFS?
A. file management capabilities will be provided with tape cartridges
B. WORM functionality for file, block and object storage access on tape
C. file encryption with public and private key management
D. file and block data management within an HPE HSM solution

Answer: A

Explanation:

The Linear Tape File System (LTFS) provides an easy and intuitive way to manage files stored on tape cartridges. LTFS allows users to organize, browse, and access files directly from the tape as if they were on a disk. This file system presents tape as a drive letter on Windows or as a mount point on Linux, making it simpler to use tape for data archiving and management. This capability makes LTFS an attractive option for organizations that require long-term data storage with easy access.
For further details, visit:
HPE StoreEver LTFS

Question: 121

A customer asks for an integrated solution for their remote office with All-Flesh storage and ease of management. Application-aware replication to their main office is an important requirement.
Which HPE solution component should you discuss with the customer first?
A. HPE SimpliVity 380
B. HPE MSA 2052 Storage
C. HPE Nimble CS1000 system
D. HPE 3PAR StoreServ 8200

Answer: C

Explanation:

The HPE Nimble CS1000 system is a suitable solution for remote offices that require All-Flash storage with simplified management. Nimble Storage offers predictive analytics with HPE InfoSight, providing ease of management and performance optimization. Additionally, the system supports application-aware replication, which is critical for disaster recovery scenarios by replicating data to a central site, ensuring data integrity and availability.

This solution addresses the need for All-Flash performance, ease of management, and robust replication features in remote office environments.

For more information, refer to:

HPE Nimble Storage

Question: 122

While demonstrating an HPE 3PAR StoreServ 9450 array, the customer asks you to demonstrate the File

Persona features.

Which objects do you need to create to demonstrate these features? (Choose two.)

A. File share
B. Storage container
C. Host
D. Remote copy group
E. Virtual file server

Answer: A,E

Explanation:

When demonstrating HPE 3PAR StoreServ 9450 array's File Persona features, creating a File Share and a Virtual File Server is essential. The File Persona feature extends the functionality of 3PAR storage arrays to include file-level storage, enabling the creation and management of file shares directly on the array. A Virtual File Server acts as a logical entity within the 3PAR system to manage these file shares and provide access to users.

This functionality allows organizations to consolidate their block and file storage needs into a single platform, simplifying storage management and reducing costs.

For additional details, visit:

HPE 3PAR File Persona

Question: 123

A customer wants to expand his cascaded B-series based SAN but is concerned about latencies within the SAN backend. You recommend changing the topology to a full mesh.

Which switch feature will ensure that the latencies in the backend are at the lowest possible level?

A. LACP
B. NPIV
C. FSPF
D. VSF

Answer: C

Explanation:

Fabric Shortest Path First (FSPF) is a routing protocol used in SANs to ensure the shortest and most efficient path for data within the network. By using FSPF, the latency in a SAN can be minimized by automatically selecting the best path for data traffic. This is particularly important in a full mesh topology, where multiple paths are available between switches, as it

optimizes traffic flow and reduces the chances of bottlenecks.
For more information on SAN best practices, visit:
HPE SAN Solutions

Question: 124

A customer is planning to connect a new HPE 3PAR StoreServ system to its existing Synergy based composable infrastructure via direct-attach.
Which tool would be used to manage the storage?

A. HPE SAN Network Advisor
B. HPE Synergy Image Streamer
C. HPE Synergy Composer
D. HPE InfoSight for 3PAR

Answer: C

Explanation:

HPE Synergy Composer is the tool used to manage the HPE 3PAR StoreServ system when it is connected to a Synergy-based composable infrastructure via direct-attach. Synergy Composer is powered by HPE OneView and provides a unified interface for managing compute, storage, and networking resources within the Synergy environment. It allows administrators to manage the storage configurations, provisioning, and lifecycle management of the connected HPE 3PAR StoreServ system, ensuring seamless integration with the composable infrastructure.

Reference:
HPE Synergy Composer
HPE 3PAR and Synergy Integration

Question: 125

DRAG DROP
Match the data access type in a SAN fabric to the correct description.

Data Access Type		Description
Centralized		Data access between a local server and a storage system connected to the same switch
Distributed		Data access between multiple, dispersed servers and one storage system
Local		Data access between multiple, dispersed servers and multiple storage systems

Answer:

Explanation:

Description

Local	Data access between a local server and a storage system connected to the same switch
Centralized	Data access between multiple, dispersed servers and one storage system
Distributed	Data access between multiple, dispersed servers and multiple storage systems

Question: 126

Which resource provides configurations for HPE tested and referenced configurations in a software- defined storage environment?

A. HPE Storage Sizer
B. One Config Advanced
C. NinjaStars
D. StoreVirtual VSA Ready Nodes

Answer: D

Explanation:

StoreVirtual VSA Ready Nodes provide configurations for HPE-tested and referenced configurations in a software-defined storage environment. These configurations are pre-validated and optimized for specific workloads, ensuring that they meet performance and reliability requirements. StoreVirtual VSA (Virtual Storage Appliance) enables the deployment of HPE's software-defined storage solutions on industry-standard servers, making it a flexible and cost-effective option for various storage needs.

Reference:

HPE StoreVirtual VSA
HPE Ready Nodes

Question: 127

A customer has mission-critical applications that intermittently experience heavy disk I/O. The storage speed has the most impact on the application's performance. The customer does not want to dedicate SSD disks to these applications because additional performance is only needed periodically, and moving the volumes between tiers takes too long.
Which HPE StoreVirtual VSA feature can address this customer's challenge?

A. Storage virtualization
B. Space Reclamation
C. Thin Provisioning
D. Adaptive Optimization

Answer: D

Explanation:

HPE StoreVirtual VSA's Adaptive Optimization feature is ideal for addressing the challenge of intermittent heavy disk I/O in mission-critical applications. Adaptive Optimization dynamically adjusts the storage tiering based on real-time workloads, ensuring that the most frequently accessed data is moved to faster storage tiers like SSDs, without the need for manual intervention. This feature allows the customer to benefit from SSD performance when needed, without permanently dedicating SSD resources, thus optimizing both performance and cost.

Reference:
HPE StoreVirtual VSA Adaptive Optimization
HPE Storage Performance Features

Question: 128

A customer with several HPE 3PAR StoreServ arrays has reported latencies with newly updated applications.
You have proposed changes to the AO configuration and need to provide high-resolution reports on how the change has affected the latencies.
What should you propose on delivering the service time and I/O workload information daily for you and the customer?

A. Use IMC to schedule performance data gathering and email delivery.
B. Schedule SSMC System Reporter to send the defined email reports.
C. Enable the Service Processor to gather Performance data and schedule data transfer.
D. Login to InfoSight and analyze Advanced Performance history.

Answer: B

Explanation:

The HPE 3PAR SSMC (StoreServ Management Console) System Reporter is the tool that should be used to generate and schedule high-resolution performance reports, including service time and I/O workload information. By configuring System Reporter to send daily email reports, both you and the customer can monitor the impact of changes made to the Adaptive Optimization (AO) configuration.

This ensures that any latency issues or performance improvements are documented and can be analyzed regularly.

Reference:
HPE 3PAR SSMC System Reporter
HPE Performance Monitoring Tools

Question: 129

You are advising a customer on a new backup strategy to deploy HPE StoreOnce.

What should you recommend to ensure the best storage utilization and performance?

A. consolidate activity windows for housekeeping tasks
B. size solution for a single backup device
C. combine management and backup Ethernet traffic
D. use separate backup targets for different data types

Answer: D

Explanation:

When deploying HPE StoreOnce, it is essential to use separate backup targets for different data types to ensure optimal storage utilization and performance. Different data types may have varying deduplication ratios, backup windows, and recovery requirements. By segregating these data types into separate backup targets, the system can more efficiently manage deduplication, compression, and storage allocation, leading to better performance and reduced storage costs.

Reference:

HPE StoreOnce Best Practices

HPE Backup Solutions

Question: 130

You are planning a single-site Nimble solution with iSCSI connectivity. Two 10GbE SFP+ dual port NICS are included in the configuration. You designed an intelligent Resilient Framework (IRF) stack with HPE FlexFabric 5900CP switches.

Which statements is correct when discussing the IRF limits for this configuration?

A. When connecting an iSCSI storage to an IRF stack, a minimum of four 10GbE ports must be used perswitch.
B. A maximum of two switches can be used in an IRF stack when connecting storage.
C. In an IRF stack with storage connectivity, the 40GbE ports cannot be used.
D. The used IRF ports for iSCSI traffic have to be configured as 10GbE converged ports.

Answer: B

Explanation:

In a Nimble solution with iSCSI connectivity using an Intelligent Resilient Framework (IRF) stack with HPE FlexFabric 5900CP switches, there is a limitation on the number of switches that can be used in the IRF stack when connecting storage. Specifically, a maximum of two switches can be included in the IRF stack to ensure optimal performance and reliability when managing iSCSI traffic. This configuration ensures that the storage network maintains high availability and efficient data handling

without overcomplicating the stack.

Reference:

HPE FlexFabric Switches and IRF

HPE Nimble Storage and Networking Best Practices

Question: 131

A customer is concerned about media and transmission errors caused by any component in the I/O stack from the server host bus adapter (HBA) into the HPE 3PAR StoreServ ports.

Which feature will address the customer's concern?

A. Persistent Checksum
B. Persistent Cache

C. Peer Persistence
D. Persistent Ports

Answer: A

Explanation:

Persistent Checksum is a feature in HPE 3PAR StoreServ that helps detect and correct media and transmission errors that may occur anywhere in the I/O stack, from the server's Host Bus Adapter (HBA) to the HPE 3PAR StoreServ ports. This feature ensures data integrity by verifying that data read from or written to the storage array matches the original data, providing an extra layer of protection against data corruption caused by hardware issues or transmission errors.

Reference:
HPE 3PAR StoreServ Data Integrity
HPE Persistent Checksum Overview

Question: 132

How does the HPE StoreVirtual VSA storage platform scale performance and capacity?
A. eliminates the need for storage controllers
B. enables access through multiple protocols
C. aggregates all resources into a single storage pool
D. recreates storage pools on multiple devices

Answer: C

Explanation:

The HPE StoreVirtual VSA platform scales performance and capacity by aggregating all resources (storage, compute, and networking) into a single, unified storage pool. This approach allows for seamless scalability as additional resources can be added to the storage pool without disrupting operations. The unified pool of resources ensures that the storage platform can efficiently handle growing workloads and increasing data storage demands.

Reference:
HPE StoreVirtual VSA
HPE Software-Defined Storage Solutions

Question: 133

Which statement is correct when discussing the RAID layout of an HPE Nimble HF-series storage system?

A. RAID 6 triple parity is set up -21 data drives are used for RAID stripes.
B. RAID 6 triple parity is set up -18 data drives are used for RAID stripes.
C. RAID 6 or RAID 1 can be set up -24 data drives are used for RAID stripes.
D. RAID 6 or RAID 1 can be set up -18 data drives are used for RAID stripes.

Answer: D

Explanation:

In the HPE Nimble HF-series storage system, RAID 6 with triple parity is the default RAID setup, which uses 18 data drives for RAID stripes. RAID 6 provides high redundancy by allowing for the failure of up to two drives without data loss, making it an ideal configuration for environments that require a balance between performance, capacity, and fault tolerance.

Reference:
HPE Nimble Storage RAID Configurations
HPE Storage Best Practices

Question: 134

A customer's growing environment has a mix of HPE 3PAR StoreServ 8200 with 10K HDD, HPE 3PAR StoreServ 9450, and HPE 3PAR StoreServ 2080D with 3 tiers of storage deployed in the same data center.

The customer needs to optimize performance by being able to move workloads to the most appropriate array as needed.

Which solution enables the customer to achieve this goal?

A. HPE OneView to automate cpg migration based on user defined policies.
B. HPE 3PAR Remote Copy in a Synchronous Long Distance topology.
C. HPE Smart SAN to provide autonomic federated management.
D. HPE 3PAR Peer Motion with SSMC to manage storage federation.

Answer: D

Explanation:

HPE 3PAR Peer Motion, combined with the SSMC (StoreServ Management Console), is the optimal solution for a customer who needs to move workloads between different HPE 3PAR StoreServ arrays within the same data center. Peer Motion allows for seamless and non-disruptive data migration across different arrays, enabling the customer to optimize performance by moving workloads to the most appropriate storage tier or array as needed. This capability ensures that the storage environment remains flexible and responsive to changing performance demands.

Reference:

HPE 3PAR Peer Motion

HPE SSMC Overview

Question: 135

A customer with an HPE 3PAR StoreServ needs to upgrade their aging backup solution to a more advanced solution using snapshots and deduplication.

Which HPE products would meet the customer's needs? (Choose two.)

A. HPE 3PAR File Persona
B. HPE StoreEver
C. HPE 3PAR Remote Copy
D. HPE StoreOnce
E. HPE Recovery Manager Central

Answer: D,E

Explanation:

To upgrade the backup solution for an HPE 3PAR StoreServ system, HPE StoreOnce and HPE Recovery Manager Central (RMC) are the optimal products. HPE StoreOnce offers advanced deduplication technology, significantly reducing the storage footprint required for backups, making it more efficient and cost-effective. It integrates seamlessly with various environments, including 3PAR, to provide high-speed data protection and recovery.

HPE Recovery Manager Central (RMC) complements StoreOnce by enabling application-consistent snapshots and direct backup to StoreOnce appliances. This combination allows for fast, efficient, and reliable backups while leveraging the deduplication capabilities of StoreOnce.

For more information, refer to:

HPE StoreOnce

HPE Recovery Manager Central

Question: 136

Where does HPE 3PAR StoreServ Data-at-Rest Encryption occur?

A. ASIC
B. physical disk
C. processor
D. host

Answer: A

Explanation:

HPE 3PAR StoreServ systems perform Data-at-Rest Encryption at the ASIC (Application-Specific Integrated Circuit) level. This approach ensures that encryption is handled efficiently with minimal impact on performance. The ASIC is responsible for encrypting all data as it is written to the physical disks, providing a secure layer of protection for stored data without compromising the high performance that 3PAR systems are known for.
For more details, refer to:
HPE 3PAR StoreServ Encryption

Question: 137

A customer is evaluating an HPE 3PAR StoreServ system in a proof-of-concept project. The customer wants to receive emails about important storage system events and alerts.
What feature do you need to configure?

A. HPE OneView integration
B. Secure Service Agent
C. Real-time Alert Processing
D. Local Notification Service

Answer: D

Explanation:

To receive emails about important storage system events and alerts in an HPE 3PAR StoreServ system, the Local Notification Service (LNS) needs to be configured. LNS allows administrators to set up email notifications for various events and alerts, ensuring that they are promptly informed of any critical issues that may arise. This feature is essential for maintaining the health and performance of the storage system by enabling proactive management.
For more information, refer to:
HPE 3PAR StoreServ Management

Question: 138

A customer wants to implement a management and monitoring tool for an HPE B-series SAN switch environment. You plan to recommend the HPE SAN Network Advisor.
Which information about the customer's environment will help you to decide which edition to recommend?

A. FCIP support
B. Amount of used fabrics
C. FCoE support
D. Fabric OS version

Answer: B

Explanation:

When recommending the HPE SAN Network Advisor for managing and monitoring an HPE B-series SAN switch environment, the amount of used fabrics is a crucial factor in determining the appropriate edition. The HPE SAN Network Advisor comes in different editions, with each edition supporting a different number of fabrics. By assessing the number of fabrics in the customer's environment, you can choose the edition that best fits their needs, ensuring effective management and monitoring capabilities.
For more details, refer to:
HPE SAN Network Advisor

Question: 139

Which storage sizing tool, designed specifically for the HPE 3PAR StoreServ environment, shows the expected deduplication ratio based on actual data analysis of the customer's current environment? A. NinjaCrawler
B. StoreVista
C. NinjaThin
D. NinjaStars

Answer: A

Explanation:
NinjaCrawler is a storage sizing tool specifically designed for the HPE 3PAR StoreServ environment. It analyzes the customer's current data and provides insights into the expected deduplication ratio based on actual data patterns. This tool is crucial for accurately sizing storage solutions and optimizing capacity planning in environments that utilize deduplication features.
Reference:
HPE Storage Sizing Tools
NinjaCrawler for HPE 3PAR

Question: 140

A customer has an HPE 3PAR StoreServ 8200 with eight 3.84 TB SSD's configured with RAID5 7+1.
They plan to add four more 3.84 TB SSD's.
What needs to be changed on the configuration once the new SSD's are installed?
A. Reconfigure the cpg setsize as RAID6 6+2 and wait for tunesys to complete.
B. Change the availability level from cage to magazine.
C. Adjust the cpg growth value to match amount of SSD's.
D. Change the cpg setsize to RAID5 5+1 and run tunesys.

Answer: D

Explanation:

When adding additional SSDs to the HPE 3PAR StoreServ 8200 with an existing RAID5 7+1 configuration, it is advisable to reconfigure the CPG (Common Provisioning Group) setsize to RAID5 5+1. This reconfiguration will allow the array to better balance the additional drives and optimize the use of available storage. After changing the setsize, running tunesys will ensure that the data is redistributed across the new set of drives, optimizing performance and availability.
Reference:
HPE 3PAR StoreServ Configuration Guidelines
HPE 3PAR StoreServ RAID Levels

Question: 141

An HPE 3PAR StoreServ customer with FC, SSD and NL, drives is facing extreme latency during peak business hours with an OLTP application. They have enabled tiering using all drive types.
What could be used to resolve the issue?

A. Dynamic Optimization using tier 2
B. Adaptive Optimization using tier 1
C. Dynamic Optimization between tier 0 and tier 1
D. Dynamic Optimization using tier 1

Answer: C

Explanation:

To address extreme latency during peak business hours for an OLTP application, using Dynamic Optimization between tier 0 (typically the fastest storage tier, such as SSDs) and tier 1 (slightly slower but still high-performance drives) can significantly improve performance. Dynamic Optimization allows for the non-disruptive movement of volumes between different tiers of storage, ensuring that the most performance-critical data resides on the fastest available storage during peak times. This strategy optimizes storage performance and ensures that OLTP workloads meet required performance levels.

Reference:
HPE 3PAR StoreServ Dynamic Optimization
HPE Adaptive Optimization and Tiering

Question: 142

You are planning an upgrade to a customer's existing HPE 3PAR StoreServ 8200 to include 4-port 16Gb FC adapters. The servers are zoned to see the storage via four paths. The customer is concerned about storage availability during the upgrade.

Which statement is correct about performing this upgrade?

A. When NPIV is enabled, the HPE 3PAR Port persistence will show all four paths to the servers.
B. The MPIO service will do a failover, and the servers will continue to have access via two paths.
C. Windows servers require host explorer is installed to ensure MPIO is unaffected.
D. As long as MEM driver is installed on VMware vSphere, no path failures are seen.

Answer: B

Explanation:

During the upgrade of the HPE 3PAR StoreServ 8200 to include 4-port 16Gb FC adapters, the Multipath I/O (MPIO) service will handle failover automatically. This ensures that if any of the paths are temporarily unavailable during the upgrade, the servers will still have continuous access to the storage via the remaining paths. MPIO is designed to manage multiple paths and will reroute traffic through available paths, minimizing the impact of the upgrade on storage availability.

Reference:
HPE 3PAR StoreServ MPIO and Availability
HPE 3PAR StoreServ Port Persistence

Question: 143

A customer asks for a 50 TB disk-based backup solution with deduplication. They also need additional storage for test/dev purposes.

Which single HPE storage platform can you present to the customer that will meet both of their needs?

A. HPE Nimble SF series
B. HPE StoreEasy Gateway

C. HPE StoreOnce
D. HPE Nimble CS series

Answer: D

Explanation:

The HPE Nimble CS series is an ideal solution that can meet the customer's needs for both a 50 TB disk-based backup solution with deduplication and additional storage for test/dev purposes. The Nimble CS series provides efficient storage with advanced deduplication features, making it suitable
for backup purposes. Additionally, it offers high performance and flexible storage that can be effectively used for test/dev environments. The system's ability to handle multiple workloads makes it a versatile option for customers requiring a single platform for both backup and development needs.
For more information, refer to:
HPE Nimble Storage

Question: 144

Which HPE 3Par feature improves CPU utilization ,reduces latency and improve IOPS
A. Zero Detect
B. Persistent Cache
C. Express Indexing
D. Express Writes

Answer: D

Explanation:

The Express Writes feature in HPE 3PAR improves CPU utilization, reduces latency, and enhances IOPS by optimizing the write path in the array. This feature accelerates write operations by reducing the overhead associated with processing and managing writes, leading to higher performance, especially in environments with intensive transactional workloads.
Express Writes is a key technology in HPE 3PAR that contributes to the overall efficiency and performance of the storage system.
For more details, refer to:
HPE 3PAR StoreServ Express Writes

Question: 145

A customer is concerned about the business risks of non-compliance for long-term data protection, retention, immutability, and encryption on petabytes of data consisting of millions of objects in a global namespace across multiple geographic locations.

Which products should you recommend to the customer to address their concern? (Choose two.)

A. HPE StoreOnce Systems
B. HPE Complete Veeam
C. HPE Complete iTernity iCAS
D. HPE Scality RING on HPE Apollo Servers
E. HPE 3PAR StoreServ 9000

Answer: C,D

Explanation:

For long-term data protection, retention, immutability, and encryption across multiple geographic locations, HPE Complete iTernity iCAS and HPE Scality RING on HPE Apollo Servers are the appropriate solutions.

HPE Complete iTernity iCAS provides compliance storage solutions that ensure data integrity, immutability, and long-term retention, which are critical for meeting regulatory requirements and reducing the business risks of non-compliance.

HPE Scality RING on HPE Apollo Servers offers a highly scalable object storage solution designed to manage petabytes of data across multiple locations. It provides robust data protection, global namespace management, and encryption, making it suitable for large-scale environments requiring high levels of data integrity and security.

These solutions address the customer's needs for compliance, data protection, and scalability in a global environment.

For further details, refer to:

HPE Complete iTernity iCAS

HPE Scality RING

Question: 146

A customer needs to expand an HPE StoreVirtual VSA based cluster with two additional VSA instances.

What do you need to consider when designing the new VSA instances?

A. They will require downtime to re-balance the resources within the cluster.
B. They must be configured into a new management group.
C. They must be of equal or greater capacity than the existing instances in a cluster.
D. They can only have equal to or smaller capacity compared to the existing instances.

Answer: C

Explanation:

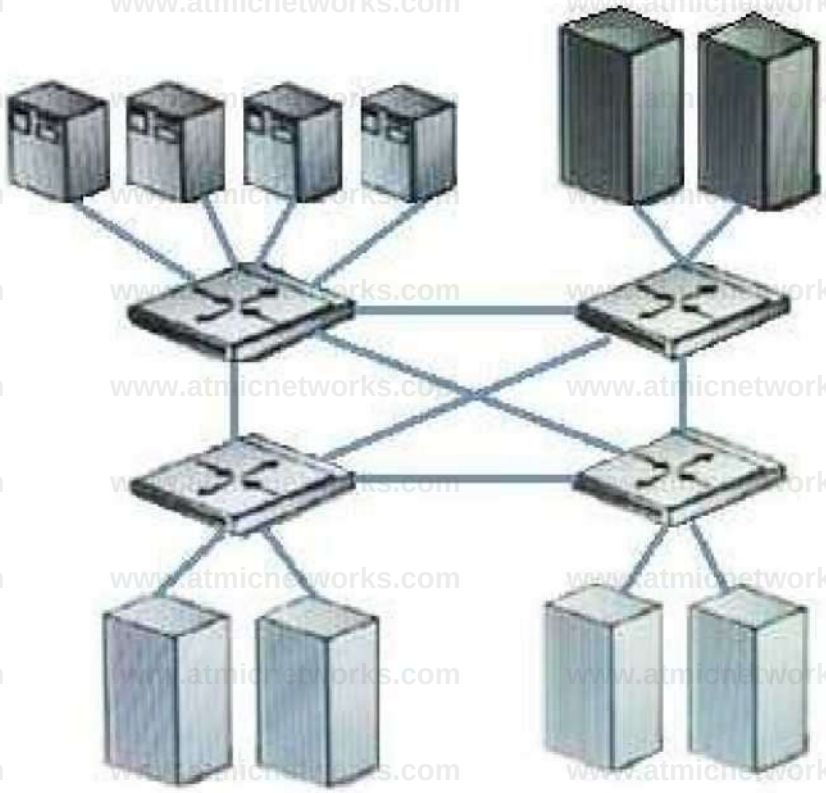
When expanding an HPE StoreVirtual VSA-based cluster with two additional VSA instances, it is crucial that the new instances have equal or greater capacity compared to the existing instances. This requirement ensures that the cluster maintains balanced performance and storage capacity, preventing any potential bottlenecks or imbalances that could affect the overall performance of the cluster.

HPE StoreVirtual VSA is designed to scale out by adding more instances with equal or greater capacity, allowing for seamless expansion while maintaining performance and reliability.

For more information, refer to: HPE StoreVirtual VSA

Question: 147

Exhibit:



Which fabric design is shown?

A. meshed
B. single fabric
C. cascaded
D. core-edge

Answer: D

Explanation:

The fabric design shown in the exhibit is a core-edge architecture. This design consists of core switches that are centrally located and connect to edge switches, which are distributed across the network. The core switches provide high-speed backbone connectivity, while the edge switches connect directly to storage devices or servers. This architecture is commonly used in SAN environments to provide scalability, manageability, and high availability.

Reference:

HPE SAN Design Principles

Core-edge Fabric Design

Question: 148

You have just completed a performance analysis of an HPE 3PAR StoreServ 8400 disk array with different tiers at a customer's site. After reviewing the performance metrics, you determine that they should install a new tier of SSD drives.

Which actions should you recommend they take to fully optimize the array? (Choose two.)

A. Configure Adaptive Flash Cache.
B. Configure scheduled tunesys tasks.

C. Rebalance all flash drives between nodes 0 and 2.
D. Configure Adaptive Optimization.
E. Configure dedicated drives to enable Adaptive Flash Cache.

Answer: B,D

Explanation:

After determining that a new tier of SSD drives should be installed in the HPE 3PAR StoreServ 8400, the following actions should be recommended:
Configure Adaptive Optimization (AO): AO automatically moves data between storage tiers based on real-time I/O patterns. By configuring AO, the most frequently accessed data will be moved to the new SSD tier, optimizing performance and improving efficiency.
Configure scheduled tunesys tasks: Tunesys is a command used to optimize the storage layout on the HPE 3PAR array. By scheduling regular tunesys tasks, the data is redistributed across the available drives, ensuring that the array maintains optimal performance as the storage environment evolves. Reference:
HPE 3PAR StoreServ Adaptive Optimization
HPE 3PAR Tunesys Command

Question: 149

Which feature enables a non-disruptive environment where host-based multi-pathing software is not affected in the event of a firmware upgrade?
A. HPE 3PAR Access Guard
B. HPE 3PAR Persistent Ports
C. HPE 3PAR Persistent Cache
D. HPE 3PAR MPIO

Answer: B

Explanation:

HPE 3PAR Persistent Ports is a feature that enables a non-disruptive environment by allowing hostbased multi-pathing software to remain unaffected during events such as firmware upgrades. With Persistent Ports, the active I/O paths are automatically moved to alternate ports if the primary ports are undergoing maintenance or upgrades, ensuring continuous data access and eliminating disruptions.
Reference:
HPE 3PAR Persistent Ports
HPE 3PAR StoreServ Features

Question: 150

What advantage does the Unified API that is part of HPE's composable strategy provide?
A. infrastructure lifecycle managed with standard programming code
B. single portal for managing servers, networking, and storage
C. write-back capability and instant cable warmth
D. dedicated object storage platform

Answer: A

Explanation:

The Unified API that is part of HPE's composable strategy provides the advantage of managing the entire infrastructure lifecycle using standard programming code. This approach allows IT administrators to automate and streamline operations, enabling them to define infrastructure as code, which can be easily integrated into DevOps workflows. This API-driven

approach is central to HPE's composable infrastructure strategy, providing flexibility, efficiency, and ease of management.

Reference:

HPE Composable Infrastructure

HPE Unified API

Question: 151

Which storage sizing tool, designed for HPE 3PAR StoreServ, can be used to determine whether customers quality for the Get Thin Guarantee Program?

A. NinjaProtected
B. NinjaStars
C. NinjaCrawler
D. StoreVista

Answer: C

Explanation:

NinjaCrawler is the storage sizing tool designed for HPE 3PAR StoreServ that can be used to determine whether customers qualify for the Get Thin Guarantee Program. This tool analyzes the customer's existing storage environment, including data usage patterns and deduplication opportunities, to provide insights into potential savings and help qualify for the Get Thin Guarantee. Reference:

HPE Get Thin Guarantee

NinjaCrawler for Storage Sizing

Question: 152

What owns the physical drives in an HPE 3PAR StoreServ Express Layout?

A. a logical disk
B. a chunklet
C. a single node
D. a node pair

Answer: D

Explanation:

In an HPE 3PAR StoreServ system, the concept of a "node pair" is crucial to understanding how the system manages and owns physical drives. A node pair, which consists of two controller nodes, is responsible for managing the physical drives. Each node pair works in tandem to provide redundancy and high availability. The node pair owns the physical drives and manages data distribution, I/O operations, and redundancy across the drives within the system.

This architecture ensures that in the event of a failure in one node, the other node in the pair can continue to manage the drives and maintain data access, providing seamless operations and high reliability.

Reference:

HPE 3PAR StoreServ Storage Architecture

HPE Storage Overview

HPE Flash and Hybrid Storage

Question: 153

A customer is interested in integrating their HPE 3PAR StoreServ arrays into their OneView environment to support automated volume provisioning.

What must you install to enable the integration?

A. HPE SAN Network Advisor Enterprise
B. HPE SAN Network Advisor Professional
C. 3PAR Host Explorer
D. OneView Global Dashboard

Answer: C

Explanation:

To integrate HPE 3PAR StoreServ arrays into an HPE OneView environment for automated volume provisioning, the installation of the 3PAR Host Explorer is required. The 3PAR Host Explorer software facilitates the communication between the HPE 3PAR StoreServ storage array and the OneView management platform. This software collects detailed host configuration information, which is then used by HPE OneView to optimize the management and provisioning of storage resources, ensuring that the storage is allocated correctly according to the system requirements.
This integration allows for better automation, management, and monitoring of the storage environment, thereby improving efficiency and reducing the likelihood of manual errors.
For more detailed information on HPE 3PAR StoreServ integration with OneView, please refer to the following HPE Storage references:
HPE Storage Products Overview
HPE Storage Solutions
HPE 3PAR StoreServ Information

Question: 154

What is the benefit of HPE Synergy? (Choose two.)

A. It supports up to three HPE StoreVirtual VSA nodes for storage RAID.
B. It can compose and reclaim DAS storage.
C. It supports HPE BladeSystem c-class FlexFabric interconnect modules.
D. It can use HPE 3PAR File Persona for object storage.
E. It can prevent block storage services from HPE 3PAR as part of the resource pool.

Answer: B,C

Explanation:

HPE Synergy is a composable infrastructure platform that provides fluid resource pools, enabling IT to compose, decompose, and recompose infrastructure for any workload on demand. The key
benefits are:
Composing and Reclaiming DAS Storage: HPE Synergy allows you to compose and reclaim direct- attached storage (DAS). This capability provides flexibility in allocating storage resources to different workloads dynamically and efficiently, helping optimize resource utilization.
Support for HPE BladeSystem c-class FlexFabric Interconnect Modules: HPE Synergy is designed with backward compatibility, allowing it to support existing HPE BladeSystem c-class infrastructure, including FlexFabric interconnect modules. This helps organizations leverage their existing investments while adopting the Synergy platform.
Reference:
HPE Synergy Overview
HPE Composable Infrastructure

Question: 155

A customer has a large deployment of HPE Synergy compute modules, HPE 3PAR StoreServ storage, and HPE StoreOnce systems in a single data center. They are concerned about the risk of data loss due to site disaster.

What is the reason to propose HPE CloudBank?

A. To easily move workloads to AWS or Azure in the event of site disaster.
B. To improve RPO/RTO objectives by automating snapshot-based integrating between 3PAR andStoreOnce.
C. To regularly send backups to the cloud for the purposes of DR protection.
D. To leverage 3PAR snapshots and utilize StoreOnce recovery capabilities to minimize data loss anddowntime.

Answer: C

Explanation:

HPE CloudBank is a feature of the HPE StoreOnce system that enables cloud-based backup and disaster recovery (DR) solutions. It integrates with HPE 3PAR StoreServ and HPE StoreOnce systems to send backups securely to public cloud services like AWS, Azure, or private cloud environments. The primary benefit of CloudBank in the context of disaster recovery is that it ensures off-site storage of backups, protecting against site disasters by storing data in geographically dispersed locations. By sending backups regularly to the cloud, CloudBank ensures that data is protected and can be restored in the event of a disaster, minimizing potential data loss and downtime.

Reference:

HPE StoreOnce with CloudBank
HPE StoreOnce Overview

Question: 156

Which HPE storage solutions offer a two-tier backup solution for hybrid cloud with optimal recovery time? (Choose two.)

A. Simplivity 380
B. Nimble SF series
C. 3PAR 8000 series
D. StoreOnce with Catalyst
E. Nimble CS series

Answer: C,D

Explanation:

HPE offers several storage solutions that provide optimized backup and recovery solutions for hybrid cloud environments:

HPE StoreOnce with Catalyst: This solution provides an efficient, two-tier backup architecture that integrates with cloud storage, offering deduplication and data movement capabilities. It ensures fast recovery times and supports hybrid cloud environments, where backups can be seamlessly moved to the cloud for DR protection and retrieved quickly when needed.

HPE 3PAR 8000 Series: The HPE 3PAR StoreServ 8000 series includes robust data protection features, such as snapshot and replication capabilities, which can be integrated with cloud services through solutions like CloudBank. This integration allows for efficient, cloud-enabled data protection, optimizing recovery time and offering flexibility in a hybrid cloud environment.

These solutions provide a comprehensive approach to data protection, ensuring fast recovery times while leveraging the cloud for long-term storage and disaster recovery.

Reference:

HPE StoreOnce Solutions
HPE 3PAR StoreServ 8000

Question: 157

You are planning a single-site Nimble solution with iSCSI connectivity. Two 10GbE SFP+ dual port NICs are included in the

configuration. You designed an Intelligent Resilient Framework (IRF) stack with HPE FlexFabric 5900CP switches.

Which statement is correct when discussing the IRF limits for this configuration?

A. When connecting an iSCSI storage to an IRF stack, a minimum of four 10GbE ports must be used per switch.
B. A maximum of two switches can be used in an IRF stack when connecting storage.
C. In an IRF stack with storage connectivity, the 40GbE ports cannot be used.
D. The used IRF ports for iSCSI traffic have to be configured as 10GbE converged ports.

Answer: B

Explanation:

When designing an Intelligent Resilient Framework (IRF) stack for a Nimble storage solution using HPE FlexFabric 5900CP switches with iSCSI connectivity, the IRF stack typically supports up to two switches for optimal performance and redundancy. This limitation ensures that the iSCSI traffic is managed effectively without overcomplicating the network topology, which could potentially introduce latency or complexity in managing the stack.
Utilizing more than two switches in an IRF stack when connecting to storage could result in diminished returns in performance or increased management overhead, which is why HPE typically recommends limiting the IRF stack to two switches in such configurations.
For further details, refer to:
HPE Nimble Storage Overview
HPE FlexFabric Switches

Question: 158

You are presenting the HPE StoreEver portfolio to a media agency.
What advantage is offered when using LTFS?

A. file management capabilities will be provided with tape cartridges
B. WORM functionality for file, block and object storage access on tape
C. file encryption with public and private key management
D. file and block data management within an HPE HSM solution

Answer: A

Explanation:

Linear Tape File System (LTFS) is a file system that enables tape to be used in a manner similar to disk storage, providing file management capabilities directly on the tape cartridges. This allows users to access files stored on tape in a more intuitive way, with the ability to drag and drop files, just like on a traditional file system. LTFS makes tape more accessible and easier to use, especially for archival and data retrieval purposes, which is particularly advantageous for media agencies that manage large volumes of data.
LTFS does not inherently provide WORM (Write Once, Read Many) functionality or file encryption; these features require additional software or configurations.
For more information, see:
HPE StoreEver Tape Storage Solutions

Question: 159

Which value does an HPE Nimble solution provide in addition to other HPE storage solutions

A. All inclusive software licensing over 5 years and additional capacity upgrades
B. Upfront option for free controller upgrade after 3 years

C. Flat support pricing for all hardware components
D. Tier 1 and tier 2 phone support

Answer: C

Explanation:

One of the key value propositions of the HPE Nimble storage solution, in addition to its technical capabilities, is the flat support pricing model for all hardware components. This means that customers can expect consistent and predictable support costs over the lifespan of the storage system, which is particularly beneficial for budgeting and financial planning. This flat pricing model contrasts with other storage solutions where support costs can vary significantly as the system ages. Nimble's support model, combined with its predictive analytics and all-inclusive software, ensures that customers have a comprehensive and cost-effective storage solution.
For more insights, refer to:
HPE Nimble Storage
HPE Storage Solutions

Question: 160

A customer needs to upgrade their HPE storage environment, including driver and firmware levels and OS, to the latest version.
Where can you find the needed information about supported versions?

A. HPE Storage Assessment Foundry
B. HPE SAN Design Reference Guide
C. HPE OneView
D. HPE SPOCK

Answer: D

Explanation:

HPE SPOCK (Single Point of Connectivity Knowledge) is the authoritative source for information on supported configurations, firmware levels, drivers, and operating systems for HPE storage products. It provides detailed compatibility matrices and reference documents for ensuring that all components in the HPE storage environment, including storage arrays, SAN switches, servers, and operating systems, are compatible and supported.
SPOCK is regularly updated with the latest information, making it an essential tool for planning upgrades and ensuring a stable, supported configuration in HPE storage environments.
Reference:
HPE SPOCK
HPE Storage Overview

Question: 161

Which protocols are currently used in the front end by HPE 3PAR StoreServ systems? (Choose two.)
A. iSCSI
B. Infiniband
C. SAS
D. NVMe
E. FC

Answer: A,E

Explanation:

HPE 3PAR StoreServ systems support multiple front-end protocols to provide connectivity options suitable for various enterprise environments. The two primary protocols used in the front end by HPE 3PAR StoreServ systems are:
iSCSI (Internet Small Computer System Interface): A popular protocol for connecting storage devices over IP networks, iSCSI allows data to be transferred over long distances using existing network infrastructure. It is widely used in environments where cost-effective IP-based storage solutions are required.
FC (Fibre Channel): A high-speed network technology primarily used for storage networking. It provides a reliable and fast connection for block storage, making it ideal for high-performance environments requiring low latency and high throughput.
These protocols enable HPE 3PAR systems to integrate seamlessly into a wide range of IT infrastructures, providing flexibility and performance for various workloads.
Reference:
HPE 3PAR StoreServ Overview
HPE Storage Protocols

Question: 162

A customer's environment consists of two HPE Synergy frames running VMware vSphere, HPE FlexFabric 5700 switches, and one HPE Nimble HF-series array connected via 10GbE-T ports to the FlexFabric switches. The customer is concerned about performance management of the whole solution stack.

When using infosight with VMvision and analyzing end-to-end latency, which of the components within the stack are displayed? (Choose Three)

A. ISCSI network(SAN)
B. Ethernet network (LAN)
C. storage
D. application
E. operating system
F. host

Answer: A,C,F

Explanation:

When using HPE InfoSight with VMVision to analyze end-to-end latency in a VMware vSphere environment connected to HPE storage solutions, the following components are displayed: iSCSI network (SAN): InfoSight with VMVision provides insights into the performance of the storage area network (SAN) layer, specifically the iSCSI connections that are used for data transfer between the storage array and the compute infrastructure.
Storage: The storage component of the stack, which includes the HPE Nimble HF-series array, is monitored for performance metrics such as latency, throughput, and IOPS. InfoSight analyzes these metrics to identify potential bottlenecks and optimize storage performance.
Host: The host component refers to the VMware vSphere hosts running on the HPE Synergy frames. InfoSight provides detailed visibility into the performance of these hosts, including CPU, memory, and I/O operations, helping administrators to identify and resolve performance issues at the host level.
These components are critical for comprehensive performance management and troubleshooting, ensuring optimal operation of the entire solution stack.
Reference:
HPE InfoSight Overview
HPE Nimble Storage with InfoSight

Question: 163

Which storage feature is supported by both the HPE StoreVirtual and the HPE 3PAR StoreServ storage, and is a key differentiator of HPE storage solutions in the industry?

A. Network RAID
B. Peer Motion
C. virtual Copy
D. Dynamic Optimization

Answer: B

Explanation:

Peer Motion is a storage feature supported by both HPE StoreVirtual and HPE 3PAR StoreServ storage systems. It is a key differentiator of HPE storage solutions because it allows for non-disruptive, federated data mobility across storage systems. Peer Motion enables customers to move volumes between storage arrays seamlessly without downtime, making it ideal for data migration, load balancing, and tiering across heterogeneous environments.
This feature enhances flexibility and simplifies storage management, allowing organizations to optimize their storage resources dynamically and reduce the complexity of managing multiple storage systems.
Reference:
HPE Peer Motion Overview
HPE 3PAR StoreServ and StoreVirtual

Question: 164

Which built-in HPE 3PAR StoreServ technology reduces database transaction logs response time?

A. Express Writes
B. Adaptive Flash Cache
C. Thin provisioning
D. Thin Deduplication

Answer: A

Explanation:

HPE 3PAR StoreServ's Express Writes technology is designed to reduce database transaction log response times. Express Writes optimizes the write path within the array, improving latency and boosting overall I/O performance. This feature is particularly beneficial for workloads that require high transaction rates, such as databases, by reducing the time it takes for each write operation to complete, thereby enhancing the efficiency of the database transaction logs.
This technology is built into the HPE 3PAR StoreServ architecture, ensuring faster response times and better performance in demanding environments.
For more information, refer to:
HPE 3PAR StoreServ

Question: 165

A customer has a large deployment of HPE Synergy compute modules. HPE 3PAR StoreServ arrays, and HPE StoreOnce system in a single data center. They are concerned about the risk of data loss due to site disaster and seeks cost-effective offsite Disaster Recovery protection without the need to deploy a secondary site.

Which HPE solution should you recommend?

A. HPE StoreOnce VSA

B. HPE StoreOnce CloudBank
C. HPE StoreOnce RMC
D. HPE StoreOnce Catalyst

Answer: B

Explanation:

For a customer concerned about offsite disaster recovery without the need to deploy a secondary site, HPE StoreOnce CloudBank is the ideal solution. CloudBank extends HPE StoreOnce to the cloud, providing cost-effective, scalable, and secure offsite storage for long-term data retention and disaster recovery. It allows customers to back up data directly to the cloud (public or private), offering a simple and affordable way to protect against site disasters without the overhead of managing a secondary physical site.
StoreOnce CloudBank supports integration with existing backup and data management solutions, ensuring a seamless disaster recovery process.
For detailed information, refer to:
HPE StoreOnce Overview

Question: 166

Which statement is correct when comparing functionalities of the AF and HF series in the Nimble storage portfolio? (Choose Two)

A. Zero Copy Clones are a unique feature of All-Flash arrays within the Nimble Portfolio.
B. >99.9999% availability is measured and guaranteed for AF and HF series arrays.
C. HF series has a dedicated read cache and AF series does not have a dedicated reach cache.
D. HF series supports storage snapshots and replication using Veeam Backup & Replication, HF and AF series support storage snapshots only

Answer: B,C

Explanation:

B . >99.9999% availability: HPE Nimble Storage AF (All-Flash) and HF (Hybrid Flash) series both offer a guaranteed uptime of greater than 99.9999%. This high availability is achieved through advanced architecture, data protection features, and proactive support mechanisms, making both series reliable choices for enterprises that require near-continuous access to data.
C . HF series has a dedicated read cache: The HF series in the Nimble portfolio includes a dedicated read cache, which is designed to accelerate read operations by caching frequently accessed data. The AF series, being an all-flash array, inherently delivers high-speed read operations due to its flash architecture and does not require a separate read cache.
These features highlight the robustness and high performance of both the AF and HF series, with the HF series being optimized for environments that benefit from a hybrid approach.
For more details, please refer to:
HPE Nimble Storage Overview

Question: 167

Which HPE 3PAR StoreServ feature allows a host to continue I/O uninterrupted during a firmware upgrade?

A. Peer Persistence

B. Persistent Ports
C. Persistent Memory
D. Persistent Cache

Answer: B

Explanation:

When using a federated storage approach with HPE 3PAR StoreServ systems, customers can benefit from:
Load Balancing: Federated storage enables the distribution of workloads across multiple storage systems, optimizing resource utilization and ensuring that no single system becomes a bottleneck. This load balancing improves performance and enhances overall system efficiency.
Easier Migration: Federation simplifies the process of migrating data between storage systems. With features like Peer Motion, data can be moved between systems non-disruptively, allowing for seamless upgrades or expansions without impacting ongoing operations. This capability is particularly beneficial in reducing downtime and maintaining business continuity during migrations. Reference:
HPE 3PAR StoreServ Federation
HPE Peer Motion Technology

Question: 168

A customer needs to add another HPE 3PAR StoreServ system and plans to use the federated storage approach.
Which advantages can the customer expect? (Choose two.)

A. load balancing
B. reduced power, cooling, and environmental impacts
C. allows multiple management tools
D. easier migration
E. federated deduplication

Answer: A,D

Explanation:

When using a federated storage approach with HPE 3PAR StoreServ systems, customers can benefit from:
Load Balancing: Federated storage enables the distribution of workloads across multiple storage systems, optimizing resource utilization and ensuring that no single system becomes a bottleneck. This load balancing improves performance and enhances overall system efficiency.
Easier Migration: Federation simplifies the process of migrating data between storage systems. With features like Peer Motion, data can be moved between systems non-disruptively, allowing for seamless upgrades or expansions without impacting ongoing operations. This capability is particularly beneficial in reducing downtime and maintaining business continuity during migrations.
Reference:
HPE 3PAR StoreServ Federation
HPE Peer Motion Technology

Question: 169

What is used to migrate data between nodes in an HPE StoreVirtual VSA environment?

A. Network RAID
B. Peer Motion
C. SmartClone
D. Remote Copy

Answer: A

Explanation:

In an HPE StoreVirtual VSA environment, Network RAID is used to manage data across multiple nodes. Network RAID mirrors or stripes data across different nodes in the cluster, providing resilience and high availability. During data migration or when rebalancing the load between nodes, Network RAID ensures that the data is protected and that the migration process does not disrupt ongoing operations.

This technology allows for automatic data redistribution across nodes in the event of a failure or during scaling operations, ensuring consistent performance and availability.

Reference:

HPE StoreVirtual VSA Overview

HPE Network RAID

Question: 170

You are designing a solution that will have a new HPE Synergy frame and an HPE 3PAR StoreServ 8200 storage array with only the built-in ports. This new environment must keep the infrastructure within the data center to a minimum.

Which interconnect module will achieve this goal?

A. Synergy 25-50Gb F8 Switch Module
B. 6125G/XG Ethernet Blade Switch
C. Synergy 20Gb Interconnect Link Module
D. Virtual Connect SE 40Gb F8 Module

Answer: D

Explanation:

The Virtual Connect SE 40Gb F8 Module is the appropriate interconnect module for a scenario that involves a new HPE Synergy frame and an HPE 3PAR StoreServ 8200 storage array with minimal infrastructure. This module simplifies the network infrastructure by consolidating multiple network functions into a single device, reducing the number of components needed in the data center.

The Virtual Connect SE 40Gb F8 Module provides high bandwidth, flexibility, and simplified management, allowing the environment to scale efficiently while minimizing the physical footprint and power consumption in the data center.

Reference:

HPE Synergy Interconnects

Virtual Connect SE 40Gb F8 Module

Question: 171

A customer needs to store a large amount of unstructured data that must be queried quickly.

Which type of storage meets the customer's needs?

A. object
B. hash
C. file
D. flash

Answer: A

Explanation:

For storing a large amount of unstructured data that must be queried quickly, object storage is the most suitable option. Object storage is designed to handle massive amounts of unstructured data, such as documents, images, videos, and other media types. It stores data in a flat address space, using unique identifiers (objects), making it highly scalable and efficient for quick querying.

HPE offers solutions like HPE Scality RING, which provides robust object storage capabilities optimized for scalability and performance. Object storage is particularly effective in big data environments and applications that require rapid access to large datasets.

For more information, see:

HPE Object Storage Solutions

Question: 172

Users are complaining about poor performance with their Data Warehouse application.

What is an effective solution to increase their performance at minimal cost?

A. HPE 3PAR Adaptive Flash Cache
B. HPE 3PAR Priority Optimization
C. HPE 3PAR Dynamic Optimization
D. HPE 3PAR Adaptive Optimization

Answer: D

Explanation:

When users experience poor performance with their Data Warehouse applications, HPE 3PAR Adaptive Optimization is an effective solution to enhance performance at minimal cost. Adaptive

Optimization dynamically moves data between different tiers of storage based on usage patterns, ensuring that the most frequently accessed data resides on the fastest storage media (such as SSDs), while less frequently accessed data is stored on slower, more cost-effective media.

This approach optimizes storage resources, delivering improved performance for high-demand applications like Data Warehouses without requiring significant additional investment.

For further details, refer to:

HPE 3PAR StoreServ

Question: 173

A customer currently has a CS1000H and wants to upgrade to a CS3000.

What must be considered before upgrading?

A. This upgrade is disruptive and needs planned downtime.
B. A capacity upgrade to a fully populated array has to be performed first.
C. Timeless storage support is not offered for CS1000H entry-level systems.
D. A controller upgrade to a CS1000F has to be performed first.

Answer: A

Explanation:

Upgrading from a HPE Nimble Storage CS1000H to a CS3000 involves a disruptive upgrade process, meaning that planned downtime will be required. The disruption occurs because such an upgrade involves significant changes to the storage system, including hardware replacements and potentially data migration, which cannot be performed while the system is online.

Proper planning and scheduling of the downtime are essential to minimize the impact on business operations.

For more details, refer to:

HPE Nimble Storage Overview

Question: 174

Which value does a Nimble solution provide in addition to other HPE storage solutions?

A. Flat support pricing for all hardware components
B. Future-proofed for newer technologies
C. All-inclusive software licensing over 5 years and additional capacity upgrades
D. Upfront option for free controller upgrade after 3 years

Answer: A

Explanation:

One of the distinguishing values that HPE Nimble Storage solutions provide, compared to other HPE storage solutions, is flat support pricing for all hardware components. This pricing model ensures that customers face predictable and consistent support costs over time, without unexpected increases as the hardware ages. This is particularly advantageous for organizations with tight budgets

or those seeking long-term cost stability.

HPE Nimble Storage also offers advanced features such as predictive analytics and all-inclusive software licensing, making it a comprehensive and cost-effective storage solution.

For more information, see:

HPE Nimble Storage

Question: 175

A customer has a SAN infrastructure with an HPE C-Class blade enclosure, and a mix of ProLiant G7, Gen8 and Gen9 servers. They require a new storage platform.

How can you confirm the new storage array will be supported in the existing environment?

A. Design an array with an older version of the firmware to ensure compatibility.
B. Document existing server and SAN information, and consult SPOCK to ensure firmware compatibility.

C. Design an array with the latest firmware, and recommend that the customer engage HPE PointNext to upgrade the existing hardware.

D. Check recommended firmware levels in the HP SAN Design Reference Guide to ensure firmware compatibility.

Answer: B

Explanation:

When integrating a new storage array into an existing SAN infrastructure with HPE C-Class blade enclosures and a mix of ProLiant G7, Gen8, and Gen9 servers, it is essential to ensure firmware compatibility across all components. The best approach is to document all relevant details about the existing servers and SAN environment, including firmware versions, hardware configurations, and any specific SAN components. Then, consult the HPE SPOCK (Single Point of Connectivity Knowledge) database, which is the authoritative source for compatibility and support information regarding firmware, drivers, and hardware in HPE environments. This ensures that the new storage array will be fully compatible with the existing infrastructure, preventing potential issues related to firmware mismatches.

Reference:
HPE SPOCK
HPE SAN Compatibility

Question: 176

Which file protocols are commonly used in HPE StoreOnce environments? (Choose two.)

A. CIFS
B. NTFS
C. VFS
D. ZFS
E. NFS

Answer: A,E

Explanation:

In HPE StoreOnce environments, the two most commonly used file protocols are CIFS (Common Internet File System) and NFS (Network File System).
CIFS: This protocol is widely used in Windows environments for file sharing. It enables users and applications to access files on remote servers as if they were local, making it ideal for integration with Windows-based systems.
NFS: This protocol is commonly used in Unix and Linux environments for file sharing. It allows a user on a client computer to access files over a network much like local storage is accessed.
These protocols are integral to HPE StoreOnce's capability to provide flexible and efficient file-based backup and recovery solutions across different operating environments.

Reference:
HPE StoreOnce Overview
HPE File Protocols

Question: 177

A customer is looking for a centralized file-sharing solution that can provide print services in addition to 15TB of storage.
Which solution component should you recommend?

A. FC switch
B. NAS
C. FC-based array
D. Disk enclosure with integrated SAS switch

Answer: B

Explanation:

For a customer seeking a centralized file-sharing solution that also provides print services and 15TB of storage, the ideal recommendation is NAS (Network Attached Storage).
NAS systems are specifically designed for file sharing and often come with integrated print server capabilities. They provide centralized storage that can be accessed by multiple clients over a network, making them suitable for environments requiring both file sharing and print services. NAS devices are scalable, making it easy to add additional storage capacity as needed, and they support a variety of file-sharing protocols, ensuring compatibility with different client operating systems.
Reference:
HPE NAS Solutions
HPE Storage Overview

Question: 178

What are two advantages of HPE Recovery Manager Central? (Select two.)

A. Enables automatic transparent failover
B. Less expensive than traditional backup
C. Includes Peer Copy asynchronous replication
D. Manual data provisioning and policy-based copy protection
E. Integration capabilities utilizing HTML

Answer: B,C

Explanation:

HPE Recovery Manager Central (RMC) provides a modern approach to data protection by integrating snapshots, backup, and replication into a single solution. The two primary advantages of RMC are: Less expensive than traditional backup: RMC reduces the need for separate backup software and infrastructure, lowering overall costs. It leverages storage snapshots for data protection, which reduces the time and storage space needed for backups compared to traditional methods. Includes Peer Copy asynchronous replication: RMC includes Peer Copy, which enables asynchronous replication between HPE 3PAR StoreServ and HPE Nimble Storage systems. This feature facilitates efficient data protection and disaster recovery by replicating data to a secondary site without impacting the performance of the primary storage.
These advantages make RMC a powerful and cost-effective solution for modern data protection needs.
Reference:
HPE Recovery Manager Central
HPE Data Protection Solutions

Question: 179

A customer has a large amount of the data on their Primera that is mission critical. The business needs RPO to be under 5 minutes.
Which protection technology should you recommend?
A. synchronous replication
B. asynchronous replication
C. archiving

D. backup to tape

Answer: A

Explanation:

For mission-critical data where the Recovery Point Objective (RPO) must be under 5 minutes, synchronous replication is the recommended protection technology. Synchronous replication ensures that data is written simultaneously to both the primary and secondary sites. This means that in the event of a failure, there is no data loss, making it ideal for environments where data integrity is crucial and the RPO needs to be minimal.
HPE Primera, with its robust data protection features, supports synchronous replication, which provides real-time mirroring of data between storage arrays to meet stringent RPO requirements. For more information, refer to:
HPE Primera Storage Solutions

Question: 180

When adding a first 2140 4U All-Flash expansion shelf into your customer's HPE Alletra 6000 array, what considerations should be taken?

A. The array model must be at least Alletra 6030 running array 05 6.^2.0 and later
B. HPE Services rebalancing service must be ordered along the expansion shelf
C. Expansion shelf must be populated with same disk capacity as the head shelf
D. 2xl00GbE 2-port OCP Mezzanine adapter kit must be ordered along the expansion shelf

Answer: A

Explanation:

When adding a first 2140 4U All-Flash expansion shelf to an HPE Alletra 6000 array, it is crucial to ensure that the array model is at least Alletra 6030 and is running on Array OS version 6.2.0 or later. This requirement ensures compatibility between the expansion shelf and the existing array infrastructure, allowing for optimal performance and integration.
Failing to meet this requirement could result in incompatibility issues or reduced functionality of the expansion shelf.
For further details, refer to:
HPE Alletra Storage

Question: 181

Select the correct description of RTO.

A. Maximum amount of acceptable data loss in the event a disaster occurs
B. Maximum elapsed time allowed to complete the recovery of application processing
C. A property that enables a system to continue operating properly
D. A set of policies, tools, and procedures to enable the recovery or continuation of vital technology infrastructure

Answer: B

Explanation:

Recovery Time Objective (RTO) refers to the maximum amount of time that is allowed to elapse before the recovery of application processing is completed after a disaster or failure occurs. This metric is crucial for business continuity planning as it defines the acceptable downtime that the business can tolerate before the system is back online and fully functional.
For example, if an RTO is set to 2 hours, the business must ensure that the affected systems are restored and operational within that timeframe.
For more detailed information, see:
HPE Storage Solutions

Question: 182

Your customer currently uses a VMwa re -based Veeam backup proxy. They would like to perform a direct backup from their FC-connected Alletra 9000 array.

What could be the reason for the backup falling back to network mode?

A. Direct backup from a FC-connected array is only available on physical server-based backup proxy
B. Direct backup from an HPE Alletra 9000 array requires an Advanced 8ackup LTU
C. VM-based backup proxy has not enough RAM and more must be assigned in VM properties
D. HPE Alletra 9000 storage array WS API connection timeout value must be increased

Answer: A

Explanation:

If a customer is using a VMware-based Veeam backup proxy and attempts to perform a direct backup from their Fibre Channel (FC)-connected HPE Alletra 9000 array, but the backup falls back to network mode, the likely reason is that direct backup from an FC-connected array is only supported on a physical server-based backup proxy. VMware-based (virtual) proxies do not support direct FC connections, which is why the backup process defaults to network mode.

To achieve direct backup via FC, the customer would need to configure a physical server as the backup proxy.

For further details, refer to:

HPE Alletra 9000 Overview

Veeam Backup & Replication Documentation

Question: 183

A solution architect is sizing the required capacity for an HPE Alletra 9000. Customer requirements include:

- 100TB base volumes
- 168 snapshots a week
- 15% daily change rate

How much capacity is needed for snapshots after one week?

A. 1680TB
B. 15TB
C. 700TB
D. 105TB

Answer: D

Explanation:

To calculate the required capacity for snapshots after one week for an HPE Alletra 9000, we start by understanding the customer's requirements:

Base volume size: 100TB

Snapshots: 168 snapshots per week

Daily change rate: 15%

The snapshot capacity requirement can be calculated by taking 15% of the base volume size per day, and multiplying it by the number of days (7 days in a week) and the number of snapshots per day.

Daily change: 15% of 100TB = 15TBTotal change over a week: 15TB * 7 days = 105TB

Thus, the capacity needed for snapshots after one week is 105TB.

Reference:

HPE Alletra 9000 Overview

HPE Storage Snapshots

Question: 184

What is the maximum set size value that can be manually set for an HPE GreenLake for Block Storage system equipped with two enclosures/cages, considering a high availability (HA) level for a drive/disk?

A. 8+2
B. 6+2
C. 10+2
D. 5+1

Answer: B

Explanation:

For HPE GreenLake for Block Storage systems, particularly when equipped with two enclosures or cages, and considering a high availability (HA) level for drives, the maximum set size value that can be manually set is 6+2. This configuration means there are six data drives and two parity drives, ensuring that the system can withstand the failure of two drives while still protecting the data. Reference:

HPE GreenLake Block Storage

HPE Storage Availability and Performance

Question: 185

A solution architect is explaining RBAC concepts behind the HPE GreenLake Platform. How can the customer manage users in HPE GreenLake Platform after creating new company account?

A. HPE Support must be used to create an administrator account for the organization.
B. The creator of the company account is automatically assigned to the Account Administrator role for the organization.
C. Single company can only have one account.
D. The creator of the company account must create another account with Account Administrator role.

Answer: B

Explanation:

In the HPE GreenLake Platform, when a new company account is created, the individual who creates the account is automatically assigned the Account Administrator role. This role grants them the ability to manage users, assign roles, and control access within the HPE GreenLake environment, ensuring that they have full administrative control over the account from the outset.

Reference:

HPE GreenLake Management

HPE GreenLake Platform Overview

Question: 186

You are required to create a sizing based on an existing Vmware legacy configuration for a customer solution for a new HPE SimpliVity setup. Which HPE tool can you utilize to create the required output?

A. 0CA
B. Ninja Stars
C. Ninja Online
D. CloudPhysics

Answer: D

Explanation:

CloudPhysics is the tool recommended for creating a sizing based on an existing VMware legacy configuration for a new HPE SimpliVity setup. CloudPhysics provides in-depth analytics and
simulation capabilities that can assess the current environment, including resource utilization, and generate an optimized configuration for HPE SimpliVity based on the collected data.
This tool helps solution architects and IT professionals make informed decisions by providing a clear understanding of the resource requirements and ensuring that the new HPE SimpliVity solution is properly sized.

Reference:
HPE SimpliVity Overview
HPE CloudPhysics

Question: 187

Which of the following components will need to be updated manually when performing an Intelligent (One-Click) Update on HPE AUetra dHCI?

A. HPE Storage Connection Manager
B. VMware vCenter
C. Array OS
D. VMware ESXi

Answer: B

Explanation:

During an Intelligent (One-Click) Update on HPE Alletra dHCI, VMware vCenter is one of the components that will need to be updated manually. While the One-Click Update feature automates the updating process for various components like HPE Storage Connection Manager, Array OS, and VMware ESXi, vCenter requires a manual update because it serves as the central management hub for the VMware environment. Ensuring that vCenter is up-to-date is crucial for maintaining compatibility and stability across the entire infrastructure.

For more details, refer to:
HPE Alletra dHCI Overview

Question: 188

How can the capacity of an HPE StoreOnce 3620 be expanded?

A. By adding disk enclosures
B. By increasing internal drive capacity
C. By adding a 3620 in slave mode
D. By adding a 5660 in slave mode

Answer: A

Explanation:

The capacity of an HPE StoreOnce 3620 can be expanded by adding disk enclosures. This method allows the system to scale its storage capacity by adding additional disk shelves to the existing configuration, providing more storage space for backups. The StoreOnce 3620 is designed to support this expansion, enabling businesses to meet growing data protection needs without replacing the entire system.

For more information, refer to:
HPE StoreOnce 3620 Documentation

Question: 189

Which UI should be recommended to identify eleveted latency and the root causes across host, storage, or SANs on an HPE Alletra 9000 storage array?

A. HPE Data Services Cloud Console

B. HPE InfoSight
C. HPE Alletra 9000 Ul
D. HPE Alletra 9000 CLI

Answer: B

Explanation:

V The NAND memory controller is the component responsible for wear leveling in SSDs. Wear leveling is a process used to extend the lifespan of NAND flash memory by ensuring that write and erase cycles are distributed evenly across the memory cells. This prevents any single cell from being overused, which could lead to premature failure. The NAND memory controller plays a crucial role in managing this process, ensuring the reliability and longevity of the SSD.
For more details, refer to:
HPE Storage Solutions

Question: 190

Which 5SD controller component is responsible for wear leveling?
A. SATA interface chip
B. NAND memory controller
C. DRAM
D. Processor

Answer: B

Explanation:

The NAND memory controller is the component responsible for wear leveling in SSDs. Wear leveling is a process used to extend the lifespan of NAND flash memory by ensuring that write and erase cycles are distributed evenly across the memory cells. This prevents any single cell from being overused, which could lead to premature failure. The NAND memory controller plays a crucial role in managing this process, ensuring the reliability and longevity of the SSD.
For more details, refer to:
HPE Storage Solutions

Question: 191

Your customer would like to improve the security of their backups with HPE StoreOnce data-at-rest encryption. Which statement is true for this feature?
A. It must be enabled during creation of the backup device
B. It can be tested for free as a part of a demo license
C. It is a hardware assisted feature
D. It is only supported by Catalyst Store

Answer: A

Explanation:

This feature cannot be retroactively applied to existing backup devices; it must be configured at the time of setup to ensure that all data written to the storage device is encrypted. This hardware- assisted encryption feature is critical for enhancing the security of stored data, protecting it from unauthorized access in the event of physical theft or unauthorized access.
For further details, refer to:
HPE StoreOnce Overview

Question: 192

Which statement is true regarding the connection of extra drive enclosures to the HPE Alletra 9000 storage array with an HPE Alletra 9000 NVMe-oF 100 GbE 2-port host bus adapter?

A. It can only be used if the two 100 GbE built-in ports are already populated
B. It offers a lower speed than built-in expansion ports and should be used with slower disks
C. It must be installed on every node in the second H8A slot (slot 4)
D. Alternatively, it can be used for host connectivity

Answer: D

Explanation:

The HPE Alletra 9000 NVMe-oF 100 GbE 2-port host bus adapter (HBA) is a versatile component that can be used for multiple purposes. While it is primarily designed for high-speed host connectivity, it can also be used for connecting extra drive enclosures to the HPE Alletra 9000 storage array. This flexibility allows it to serve dual roles depending on the specific requirements of the deployment, either expanding storage capacity by connecting additional enclosures or providing high-speed connectivity to hosts.

Reference:
HPE Alletra 9000 Overview
HPE NVMe-oF Solutions

Question: 193

A solution architect is sizing the required capacity for an HPE Alletra 9000. Customer requirements include:

- 200TB base volumes
- Regular snapshots being taken every hour with one-week retention
- 10% daily change rate

How much capacity is needed for snapshots after one week?

A. 480TB
B. 140TB
C. 200TB
D. 20TB

Answer: A

Explanation:

To calculate the required capacity for snapshots after one week for an HPE Alletra 9000 with the given customer requirements:
Base volume size: 200TB
Snapshots frequency: Every hour (24 snapshots per day, 168 per week)
Daily change rate: 10%
The snapshot capacity can be calculated by considering the daily change rate and the number of snapshots over a week.
Daily change: 10% of 200TB = 20TBTotal change over a week: 20TB * 7 days = 140TB
Since there are 168 snapshots (24 per day for 7 days), the total required capacity is 140TB (for the changes) plus the base volume size of 200TB, totaling 480TB.

Reference:
HPE Alletra 9000
HPE Snapshot Management

Question: 194

What is the maximum number of 2140 4U All-Flash Array expansion shelves supported by the HPE Alletra 6030 storage?

A. 4
B. 2
C. 1
D. 3

Answer: B

Explanation:

The HPE Alletra 6030 storage system supports up to two 2140 4U All-Flash Array expansion shelves. These expansion shelves allow the system to scale up its storage capacity while maintaining the high performance and reliability expected of the HPE Alletra 6030 platform. The system is designed to provide flexibility in configuration, ensuring that it can meet the varying capacity requirements of enterprise environments.

Reference:
HPE Alletra 6030
HPE Storage Expansion Options

Question: 195

The customer is performing an initial setup of an HPE Alletra 6000 system. Which user interface can you use to define initiators when configuring an HPE Alletra 6000 system?

A. Web-based AUetra Ul
B. Graphical VNC connection to Alletra system
C. Command "Addlnitiator" in Host OS
D. Command "Addlnitiator" in Nimble/Alletra CLI

Answer: A

Explanation:

During the initial setup of an HPE Alletra 6000 system, the most user-friendly and accessible interface for defining initiators is the Web-based Alletra UI. This web interface provides a comprehensive and intuitive platform for configuring, managing, and monitoring the storage system. It allows administrators to define initiators, set up volumes, and manage other critical storage
functions through an easy-to-use graphical interface, which simplifies the overall setup process. Reference:
HPE Alletra 6000 Setup Guide
HPE Storage Management Tools
During the initial setup of an HPE Alletra 6000 system, the most user-friendly and accessible interface for defining initiators is the Web-based Alletra UI. This web interface provides a comprehensive and intuitive platform for configuring, managing, and monitoring the storage system. It allows administrators to define initiators, set up volumes, and manage other critical storage functions through an easy-to-use graphical interface, which simplifies the overall setup process. Reference:
HPE Alletra 6000 Setup Guide
HPE Storage Management Tools

Question: 196

Which HPE storage family should you recommend for a hybrid array, utilizing both 55D and HDD media, supporting 512TiB of raw storage and centralized cloud-based management?

A. HPE Alletra 5000

B. HPE Alletra 6000
C. HPE GreenLake for Block
D. HPEXP8

Answer: A

Explanation:

The HPE Alletra 5000 is the recommended storage family for a hybrid array that utilizes both SSD and HDD media, supports up to 512TiB of raw storage, and provides centralized cloud-based management. The Alletra 5000 series is designed to deliver a blend of performance and capacity, making it ideal for hybrid storage needs. Additionally, it integrates seamlessly with HPE's cloudbased management tools, offering a simplified and unified management experience across onpremises and cloud environments.

Reference:

HPE Alletra 5000 Overview

HPE Hybrid Storage Solutions

Question: 197

How does HPE GreenLake for Block Storage perform write operations caching?

A. Data is buffered in NVDIMM
B. Data is cached on DFC-hosted SSDs
C. Data goes directly to space based on NVMe
D. Data is stored in supercapacitor-protected RAM

Answer: B

Explanation:

HPE GreenLake for Block Storage performs write operations caching by caching the data on DFC- hosted SSDs. The Data Fabric Controller (DFC) manages the SSDs and is responsible for optimizing the performance of the storage system by caching write operations. This approach ensures that write-intensive workloads are handled efficiently, providing lower latency and higher throughput for applications that demand fast storage performance.

For further details, refer to:

HPE GreenLake for Block Storage Overview

Question: 198

How does HPE GreenLake for Block Storage perform VV and LD ownership?

A. W LDs are adaptively shared based on the array config
B. VV LDs are owned by a single node
C. VV LDs are shared based on system parameter ''enh_ownership"
D. VV LDs are shared across all nodes

Answer: B

Explanation:

In HPE GreenLake for Block Storage, VV (Virtual Volumes) and LD (Logical Devices) are owned by a single node. This ownership model is critical for ensuring data consistency and managing the resources effectively across the storage array. By having a single node own the VV LDs, the system can maintain optimal performance and reliability, especially in clustered environments where multiple nodes are involved.

For more information, refer to:

HPE GreenLake Block Storage

Question: 199

Which of the following actions should be performed if your customer cannot deploy vVols on their HPE GreenLake for Block Storage?

A. Acquire a VMware Suite LTU
B. Run the "setsys vVol 1" command on the array CLI
C. Update the OS to release 3 (10.3) or higher
D. Order a RAM upgrade pack

Answer: C

Explanation:

To create a configuration including the sizing and performance values for a customer solution for Alletra MP, the recommended HPE tool is Ninja STARS. This tool is specifically designed for storage sizing and configuration, providing detailed insights into the performance requirements and helping to tailor the solution to meet the specific needs of the customer. Ninja STARS helps in accurately sizing the storage solution to ensure it meets both current and future demands.
For further details, refer to:
HPE Ninja STARS Tool

Question: 200

Which of the following statements describes the encryption capabilities of the HPE Alletra 5000?

A. It supports data in flight encryption for synchronous replication
B. It supports data in flight encryption for async replication
C. It is hardware based and requires DAR capable disks
D. It only supports data at rest encryption

Answer: D

Explanation:

To create a configuration including the sizing and performance values for a customer solution for Alletra MP, the recommended HPE tool is Ninja STARS. This tool is specifically designed for storage sizing and configuration, providing detailed insights into the performance requirements and helping to tailor the solution to meet the specific needs of the customer. Ninja STARS helps in accurately sizing the storage solution to ensure it meets both current and future demands.
For further details, refer to:
HPE Ninja STARS Tool

Question: 201

You are required to create a configuration including the sizing and performance values for a customer solution for Alletra MP. Which HPE tool can you utilize to create the required output?

A. OCA
B. Ninja 0
C. SAF
D. Ninja Stars

Answer: B

Explanation:

To create a configuration including the sizing and performance values for a customer solution for Alletra MP, the recommended HPE tool is Ninja STARS. This tool is specifically designed for storage sizing and configuration, providing detailed insights into the performance requirements and helping to tailor the solution to meet the specific needs of the customer. Ninja STARS helps in accurately sizing the storage solution to ensure it meets both current and future demands.
For further details, refer to:
HPE Ninja STARS Tool

Question: 202

Which cloud/object-storage provide' can be used to deploy HPE StoreOnce VSA?

A. Scality ARTESCA
B. Microsoft Azure
C. Scality RING
D. Amazon AWS

Answer: D

Explanation:

HPE StoreOnce VSA (Virtual Storage Appliance) can be deployed on various cloud platforms, with Amazon AWS being one of the supported cloud/object-storage providers. AWS offers a robust and scalable infrastructure that integrates well with HPE StoreOnce VSA, enabling users to efficiently manage their backup and data protection needs in the cloud. The combination of HPE StoreOnce VSA and Amazon AWS provides flexibility in deployment and helps organizations leverage the cloud for
their backup and recovery operations.

Reference:
HPE StoreOnce VSA Overview
Amazon AWS Integration with HPE StoreOnce

Question: 203

Which HPE system can benefit from storage class memory card?

A. HPEStoreOnce
B. HPE Altetra 5030
C. HPEAUetra5010H
D. HPE Alletra 6000

Answer: D

Explanation:

The HPE Alletra 6000 system can benefit from storage class memory (SCM) cards. SCM provides faster access times and lower latency compared to traditional flash storage, significantly improving the performance of applications that require high-speed data access. The integration of SCM into the HPE Alletra 6000 allows for better performance in latency-sensitive workloads, making it an ideal choice for demanding enterprise applications.

Reference:
HPE Alletra 6000 Overview
HPE Storage Class Memory

Question: 204

How many alerts can be configured when setting up performance alerts on HPE Alletra 9000?

A. 32
B. 64
C. 171

D. 48

Answer: B

Explanation:

The HPE Alletra 9000 allows the configuration of up to 64 performance alerts. These alerts are crucial for monitoring the performance of the storage system, ensuring that administrators are notified of any performance issues or anomalies. The ability to configure multiple alerts provides flexibility in managing different aspects of the system's performance, enabling proactive management and optimization of the storage environment.

Reference:

HPE Alletra 9000 Management Features

HPE Storage Performance Monitoring

Question: 205

What data access protocol does the HPE Alletra dHCI solution use between storage and compute layers?

A. NVMe-oF

B. iSCSI

C. NFC

D. FC

Answer: B

Explanation:

The HPE Alletra dHCI solution uses the iSCSI protocol for data access between the storage and compute layers. iSCSI is a network protocol that enables the transport of SCSI commands over IP networks, allowing for efficient and scalable storage networking. This protocol is commonly used in hyper-converged and disaggregated hyper-converged infrastructure (dHCI) environments, providing flexibility and ease of integration.

Reference:

HPE Alletra dHCI Overview

HPE iSCSI Solutions

Question: 206

Your customer has asked you to add their new HPE Alletra 9000 array to HPE SSMC. What should be your next step?

A. Ensure WEB API is enabled, then add the system via SSMC Admin Console

B. Run "setysys ssmc 1" command to initialize the feature

C. Order HPE SSMC LTU to unlock the Ul

D. Tell them the HPE Alletra 9000 does not support SSMC

Answer: D

Explanation:

The HPE Alletra 9000 does not support HPE SSMC (StoreServ Management Console). Instead, it is managed through other tools designed for the Alletra series, such as HPE Alletra's web-based UI or HPE Data Services Cloud Console. These tools offer a modern, cloud-native management experience, which is different from the traditional SSMC used for other HPE storage platforms like 3PAR.

Reference:

HPE Alletra 9000 Management

HPE Data Services Cloud Console

Question: 207

You'fe starting to design a ToR network for a customer that will use it for JSCSI or NVMe-oF-TCP storage. The design requires a switch with a maximum of 48 ports and 10/25GB speed. What is the best recommended switch for this scenario?

A. SN2700M
B. SN2410bM
C. SN3700cM
D. SN2410M

Answer: D

Explanation:
The HPE SN2410M switch is the best choice for a Top-of-Rack (ToR) network design that will use iSCSI or NVMe-oF-TCP storage, requiring a switch with a maximum of 48 ports and 10/25GB speed. This switch offers the required port density and supports both 10GbE and 25GbE speeds, making it ideal for high-performance storage networks that rely on fast and reliable connectivity.
For more information, refer to:
HPE SN2410M Switch

Question: 208

The customer is using HPE GteenLake for Backup & Recovery. Which steps are necessary to define a Protection Policy in HPE GreenLake Data Services console?

A. Define Hyper-V or vCenter server and snapshot frequency
B. Define source and destination array
C. Define the name of policy, scheduling and destination
D. Create iSCSI tunnel between array and d2d appliance

Answer: C

Explanation:

When defining a Protection Policy in the HPE GreenLake Data Services console for HPE GreenLake for Backup & Recovery, you must define the name of the policy, scheduling, and destination. This process involves specifying how and when backups should occur and where the backed-up data should be stored. The flexibility in setting these parameters allows for tailored backup solutions that meet specific recovery objectives and compliance requirements.
For more details, refer to:
HPE GreenLake Data Services

Question: 209

Your customer is interested in the HPE GreenLake for Block Storage Mission-critical service. Which storage array hardware does this service use?

A. HPE AUetra 9000
B. HPE AUetra dHCI
C. HPEXP8
D. HPE AUetra 6000

Answer: A

Explanation:

The HPE GreenLake for Block Storage Mission-critical service utilizes the HPE Alletra 9000 storage array hardware. The Alletra 9000 is designed for mission-critical applications that require ultra-low latency, high availability, and robust performance. It is ideal for environments where any downtime or data loss could have severe consequences.
For further details, refer to:
HPE Alletra 9000 Overview

Question: 210

Your customer is running out of space on their HPE StoreOnce while it appears there are barely any backups present. Which of the following options could resolve this?

A. Ensure HPE StoreOnce blackout windows allow housekeeping to run
B. Run defragmentation via HPE StoreOnce CLI
C. Configure backup application to run unmap when backup is expired
D. Trigger space reclamation via HPE StoreOnce local UI

Answer: A

Explanation:

If an HPE StoreOnce system appears to be running out of space despite having few backups, it is crucial to ensure that HPE StoreOnce blackout windows allow housekeeping to run. Housekeeping processes are essential for reclaiming space by cleaning up expired backups and optimizing storage.

If these processes are blocked or not scheduled correctly, the system may show limited available space even when data should be purged.
For more details, refer to:
HPE StoreOnce User Guide

Question: 211

Which SAN topology will result in E Port type at the SAN switch?

A. Meshed fabric
B. Routed fabric
C. Arbitrated loop
D. Point-to-point

Answer: A

Explanation:

In a meshed fabric SAN topology, the E Port (Expansion Port) type is used on SAN switches. E Ports connect to other switches within the fabric, allowing for inter-switch links (ISLs) that enable communication between multiple switches in the SAN. This topology is essential for creating a scalable and resilient storage network, as it allows multiple paths for data to travel between different nodes in the SAN.
For more information, refer to:
HPE SAN Solutions

Question: 212

Which low-cost storage technology is suitable for long-term archiving?

A. Persistent Memory
B. Tape
C. RAM

D. NVMe flash storage

Answer: B

Explanation:

Tape storage is a low-cost technology that is highly suitable for long-term archiving. It provides an economical solution for storing large volumes of data that do not require frequent access. Tape is durable, with a long lifespan, and offers high capacity at a low cost per gigabyte, making it an ideal

choice for archiving and compliance-driven storage needs. Additionally, tape storage is energyefficient since it consumes no power when not in use, further reducing long-term costs. Reference:

HPE StoreEver Tape Solutions

HPE Archiving Solutions

Question: 213

The customer is deploying a new HPE AUetra dHCI Storage. Select a correct statement related to HPE Storage Setup Manager:

A. A new user account must be created

B. vCenter connectivity configuration is a mandatory step in the setup process in SSM

C. The setup process includes setting up an IP addressing

D. HPE SSM requires connectivity to HPE GreenLake platform

Answer: C

Explanation:

When deploying a new HPE Alletra dHCI Storage system, one of the steps in the setup process using HPE Storage Setup Manager (SSM) is configuring IP addressing. Proper IP addressing is crucial for ensuring that all components of the dHCI environment, including storage, compute, and networking, can communicate effectively. This step is part of the initial configuration to ensure seamless operation and integration within the existing IT infrastructure.

Reference:

HPE Alletra dHCI Setup Guide

HPE Storage Setup Manager Overview

Question: 214

Which product can you recommend as a SAN component for refreshing an iSCSI-based SAN that supports wire speed Ethernet, comes in a 1U fabric form with two independent switches, and supports lOOGbE.

A. HPE B-series SN6700B

B. HPE B-series SN6500B

C. HPE M-series SN3700cM

D. HPEM-seriesSN2010M

Answer: C

Explanation:

The HPE M-series SN3700cM is a suitable SAN component for refreshing an iSCSI-based SAN. It supports wire-speed Ethernet, is available in a 1U form factor, and includes two independent switches. Additionally, it supports 100GbE, making it a robust choice for high-performance, scalable SAN environments that require efficient connectivity and high throughput.

Reference:

HPE M-series Switches

HPE SAN Solutions

Question: 215

Your customer would like to implement a data protection technology that will offer the lowest possible RPO and will protect from entire array failure. Which technology should the be used? A. Snapshots

B. Disk-based backup
C. Asynchronous replication
D. Synchronous replication

Answer: D

Explanation:

Synchronous replication is the data protection technology that offers the lowest possible Recovery Point Objective (RPO) and can protect against an entire array failure. Synchronous replication ensures that data is simultaneously written to both the primary and secondary storage sites, providing realtime data protection. This approach minimizes data loss in the event of a disaster, as both sites contain identical data, making it the best choice for environments where data integrity and minimal RPO are critical.

Reference:
HPE Synchronous Replication Solutions
HPE Data Protection Overview

Question: 216

Recommend a software stack for changing a backup platform that includes pay-per-use, supports backup of virtualized workloads provided by HPE GreenLake, offers low RPO in minutes, supports HPE AUetra 9000, and integrates with DSCC.

A. Veeam Backup and Recovery
B. Recovery Manager Central
C. Zerto
D. HPE GreenLake Backup and Recovery

Answer: D

Explanation:

HPE GreenLake Backup and Recovery is the recommended software stack for a backup platform that includes a pay-per-use model, supports virtualized workloads, and integrates with the HPE Data Services Cloud Console (DSCC). This solution offers low Recovery Point Objectives (RPOs) in minutes, supports HPE Alletra 9000, and provides the flexibility and scalability needed for modern backup environments. It is part of the HPE GreenLake ecosystem, which provides cloud-like agility and economics with on-premises control.

Reference:
HPE GreenLake Backup and Recovery
HPE Alletra 9000 Integration

Question: 217

What are the benefits of the Persistent Cache feature?

A. Internal validation of checksum for data kept in cache
B. Ability of cache to retain content without power
C. Ability to relocate a cache module to a new array to keep private keys
D. Automatic write cache mirroring in case of partner-node failure

Answer: D

Explanation:

The Persistent Cache feature provides the benefit of automatic write cache mirroring in the event of a partner-node failure. This means that if one node in a high-availability setup fails, the write cache data is still protected and mirrored on the surviving node, ensuring data integrity and continuity. This feature is crucial for maintaining the high availability and reliability of storage systems in mission- critical environments.

For further details, refer to:

HPE Storage Solutions

Question: 218

Your customer has very low deduplication ratio of their Linux VMs farm which is hosted on a HPE Alletra 9000 Which fllesystem type could cause this?

A. XFS
B. EXT4
C. Btrfs
D. EXT3

Answer: A

Explanation:

A very low deduplication ratio in a Linux VM farm hosted on an HPE Alletra 9000 could be caused by the use of the XFS filesystem. XFS is known for its performance and scalability but is less effective in environments where deduplication is critical because of its data layout and file handling characteristics. This can lead to reduced deduplication efficiency compared to other filesystems like EXT4 or Btrfs.

For more information, refer to:

HPE Alletra 9000 Documentation

Question: 219

For optimizing HPE StoreOnce Catalyst Store settings by enabling fixed-block chunking, which backup solution is this setting applicable to?

A. CommVault
B. HPE SimpliVity backup
C. HPE Data Protector
D. Veeam B and P

Answer: D

Explanation:

For optimizing HPE StoreOnce Catalyst Store settings by enabling fixed-block chunking, this setting is applicable to Veeam Backup & Replication. Fixed-block chunking is a deduplication method that works particularly well with backup applications like Veeam, which can handle fixed-size blocks effectively. This optimization can lead to improved deduplication ratios and more efficient storage

utilization.

For further details, refer to:

HPE StoreOnce and Veeam Integration

Question: 220

You have configured a performance alert with the following command: "createsralertcrit port write»bps> TO00O.sumwrite_iops>5OOOO alert" Which of the following options will trigger the alert?

A. If an array port has received more than 10 000 write IOPS and if the sum of all write I0PS for all ports exceeds 50 000

B. If a host port has transfered more than 10 000 write IOPS or if the sum of all host write IOPS for all ports of that host exceed 50 000

C. If an array port has received more than 10 000 write IOPS or if the sum of all write IOPS for all ports exceeds 50 000

D. If a host port has transfered more than 10 000 write I0P5 and if the sum of all host write IOPS for all ports of that host exceed 50 000

Answer: C

Explanation:

The performance alert command provided would trigger an alert if an array port has received more than 10,000 write IOPS or if the sum of all write IOPS for all ports exceeds 50,000. This alert is designed to monitor and respond to high I/O activity on the storage array, ensuring that administrators are notified if the performance thresholds are breached, which could indicate potential issues or the need for further resource optimization.

For more information, refer to:

HPE Storage Monitoring Tools

Question: 221

Which HPE storage array offers the ability to survive any three disks failing at the same time?

A. HPE Alletra 5000

B. HPE Alletra 9000

C. HPE GreenLake for Block Storage MP

D. HPEXP

Answer: D

Explanation:

The HPE XP storage array offers advanced data protection capabilities, including the ability to survive the failure of any three disks simultaneously. This is possible due to its high availability design and advanced RAID configurations, such as RAID 6, which provides dual-parity protection, and additional data protection schemes that ensure data integrity even in the event of multiple disk failures. The XP series is designed for mission-critical environments where maximum data protection and uptime are essential.

Reference:

HPE XP Storage Overview

HPE High Availability Solutions

Question: 222

Which low-latency protocol should you recommend for a local flash-based drive connected directly to PCIe. eliminating the performance penalty of an array controller?

A. SATA

B. SAS

C. FATA

D. NVMe

Answer: D

Explanation:

NVMe (Non-Volatile Memory Express) is the protocol you should recommend for local flash-based drives connected directly to PCIe. NVMe is designed specifically for high-performance SSDs and offers low-latency access by eliminating the overhead associated with traditional storage protocols like SATA and SAS. By bypassing the array controller and connecting directly to the PCIe bus, NVMe significantly reduces latency, providing much faster data access and improving overall system performance.

Reference:

HPE NVMe Solutions

HPE High-Performance Storage

Question: 223

Your customer would like you to prepare an upgrade plan that includes adding extra disks to their HPE GreenLake for Block Storage array to boost performance optimization. What would be the optimal minimum upgrade?

A. SSD per enclosure

B. 1 SSD per system

C. 2 SSDs per enclosure

D. 2 SSDs per system

Answer: C

Explanation:

For optimal performance optimization in an HPE GreenLake for Block Storage array, the recommended minimum upgrade would be to add 2 SSDs per enclosure. This configuration helps to balance the load across the storage system and enhances performance by improving data distribution and access speeds. By adding SSDs to each enclosure, you ensure that the performance benefits are evenly distributed, which is crucial for maintaining consistent high-speed access across the entire storage environment.

Reference:

HPE GreenLake Storage Solutions

HPE SSD Performance Optimization

Question: 224

Recommend a software stack for a backup platform change that supports on-premise deployment, direct backups from Linux and Windows systems, NAS protocol support for the backup repository,
and integration with HPE StoreOnce.

A. Recovery Manager Central

B. Zerto

C. Veeam Backup and Recovery

D. HPE GreenLake Backup and Recovery

Answer: C

Explanation:

Veeam Backup and Recovery is the recommended software stack for a backup platform change that supports on-premise deployment, direct backups from Linux and Windows systems, NAS protocol support for the backup repository, and integration with HPE StoreOnce. Veeam is widely recognized for its robust and versatile backup capabilities, including full support for NAS, seamless integration with HPE StoreOnce for efficient deduplication and storage, and the ability to directly

back up physical and virtual environments running on both Linux and Windows.

Reference:

Veeam Backup and Recovery Overview HPE StoreOnce Integration

Question: 225

The customer uses an HPE Alletra 6000 system and wants to create snapshots of selected volumes automatically at a specific schedule. Which part of the web-based Ul will you recommend for this operation?

A. Data Access
B. Performance Policy
C. Data Protection
D. Hardware

Answer: C

Explanation:

In the HPE Alletra 6000 system, to create snapshots of selected volumes automatically on a specific schedule, you would use the Data Protection section of the web-based UI. This section allows you to define snapshot policies, schedule regular snapshots, and manage snapshot retention. It's specifically designed for setting up data protection strategies, including the automation of backup and recovery processes through scheduled snapshots, ensuring that critical data is always protected.

Reference:

HPE Alletra 6000 Data Protection Features
HPE Storage Management Interface

Question: 226

Which statement regarding controller nodes on the HPE Alletra 9000 series is true?

A. HPE Alletra 9060 supports up to two controller nodes.
B. All four nodes are required for HPE Alletra 9080 to operate
C. Each controller node can connect to all 48 drives in the enclosure.
D. Nodes 0 +1 are in the low 2U positions and use the bottom 24 drives.

Answer: C

Explanation:

In the HPE Alletra 9000 series, each controller node can connect to all 48 drives in the enclosure. This design allows for flexible and efficient access to storage resources by each controller node, optimizing performance and ensuring that the full capacity of the enclosure is accessible. This architecture is crucial for the high-performance demands of mission-critical workloads typically run on Alletra 9000 systems.

For further details, refer to:

HPE Alletra 9000 Documentation

Question: 227

Which backup target will achieve protection from ransomware attacks by decreasing the opportunity for backups to become encrypted?

A. Catalyst Store backup repository
B. Exported RW storage snapshot
C. NAS backup repository
D. DAS backup repository

Answer: A

Explanation:

The Catalyst Store backup repository is designed to provide strong protection against ransomware attacks by reducing the opportunity for backups to become encrypted by malicious software. HPE StoreOnce Catalyst provides secure, deduplicated, and encrypted storage for backups, which can be further protected by air-gapping techniques and other security measures to prevent ransomware from accessing and encrypting the backup data.

For more information, refer to:

HPE StoreOnce and Catalyst Overview

Question: 228

How can an IT administrator access the HPE Alletra dHCI Stack Manager for managing their HPE Alletra dHCI solution?

A. Via HTML5VMwarevSphere client

B. Via HPE Alletra 5000/6000 CLI

C. From Alletra 9000 on-array Management UI

D. From fabric manager

Answer: A

Explanation:

An IT administrator can access the HPE Alletra dHCI Stack Manager for managing their HPE Alletra dHCI solution via the HTML5 VMware vSphere client. The integration with VMware vSphere allows administrators to manage the dHCI environment directly within a familiar interface, streamlining operations and simplifying the management of compute, storage, and network resources.

For further details, refer to:

HPE Alletra dHCI Overview

Question: 229

In discussion with a customer, you are asked about a solution that would support 100G iSCSI connectivity. To which product is this topic related to?

A. AlletraMP16-core

B. Alletra9060

C. Alletra 6030

D. MSA 2062

Answer: B

Explanation:

The topic of supporting 100G iSCSI connectivity is related to the HPE Alletra 9060. This model in the Alletra series supports high-performance networking options, including 100G iSCSI, which is ideal for environments that require extremely fast data transfer rates and low latency, such as in data- intensive applications or large-scale virtualization deployments.

For more information, refer to:

HPE Alletra 9000 Overview

Question: 230

What is the maximum number of ISLs that can be combined to enhance the performance and availability of switch connections in a B-Series trunk group?

A. 8

B. 12
C. 4
D. 6

Answer: A

Explanation:

In a B-Series trunk group, the maximum number of Inter-Switch Links (ISLs) that can be combined to enhance the performance and availability of switch connections is 8. By aggregating up to 8 ISLs into a single trunk group, the system increases bandwidth and provides redundancy, ensuring that the loss of a single ISL does not impact the overall connectivity or performance.

Reference:
HPE B-Series Switches Overview
HPE Networking Solutions

Question: 231

What information should be collected for creating a proper host entry within Data Ops Manager when using an HPE Alletta MP solution?

A. Port World Wide Name
B. HBA vendor
C. LUN ID
D. Data protection policy

Answer: A

Explanation:

When creating a proper host entry within Data Ops Manager while using an HPE Alletra MP solution, it is crucial to collect the Port World Wide Name (WWN). The WWN is a unique identifier for each port on a host's HBA (Host Bus Adapter) and is essential for configuring storage connectivity, zoning, and mapping between the storage system and the host. Accurate WWN information ensures correct and secure access to the storage resources.

Reference:
HPE Alletra MP Data Ops Manager
HPE Storage Connectivity

Question: 232

What HPE Alletra 9000 CLI command allows you to display teal-time statistics on exported volumes including roundtrip time of an 10 as seen by the system?

A. srstatvv
B. statvlun
C. srstatvlun
D. statvv

Answer: B

Explanation:

The statvlun command in the HPE Alletra 9000 CLI is used to display real-time statistics on exported volumes, including the roundtrip time (RTT) of an I/O as seen by the system. This command provides detailed insights into the performance of the volumes, helping administrators monitor and optimize the storage system's performance in real-time.

Reference:
HPE Alletra 9000 CLI Commands
HPE Storage Performance Monitoring

Question: 233

Which statement regarding the deduplication process on HPE StoreOnce is a true?

A. It requires an extra license
B. It is applied on a per-VTL/NAS/Catalyst Store basis
C. It can be disabled at any time
D. It is only available for Catalyst Store

Answer: B

Explanation:

The deduplication process on HPE StoreOnce is applied on a per-VTL (Virtual Tape Library), NAS, or Catalyst Store basis. This means that deduplication settings can be configured individually for each store type, allowing for flexible data reduction strategies depending on the specific use case.

Deduplication helps to significantly reduce the amount of storage required by eliminating duplicate data, making it a key feature in data protection environments.

Reference:
HPE StoreOnce Deduplication
HPE Data Reduction Technologies

Question: 234

Which Veeam feature allows you to automate validation of the backed up data?

A. On-Demand Sandbox
B. DataLabs
C. Explorer
D. SureBackup

Answer: D

Explanation:

SureBackup is a Veeam feature that allows you to automate the validation of backed-up data. It ensures that backups are not only restorable but also functionally correct. SureBackup automatically starts virtual machines from backups in an isolated environment, runs tests, and verifies the integrity of the backups. This feature is crucial for maintaining confidence in disaster recovery plans by regularly validating the consistency and reliability of backups.

For more details, refer to:
Veeam SureBackup Documentation

Question: 235

Based on the customer requirement for hybrid storage solution with fibre channel connectivity. What would you need to consider when proposing HPE Alletra?

A. Alletra 6030 models and above is required for a hybird with FC connectivity
B. Alletra 6000 flash to tier disk would need to be sufficient for the workload
C. Alletra 5030 models and above is required for a hybrid with FC connectivity
D. Alletra 5000 flash to disk ratio would need to be sufficient for the workload

Answer: A

Explanation:

When proposing an HPE Alletra hybrid storage solution with Fibre Channel (FC) connectivity, it is essential to consider that Alletra 6030 models and above are required to support a hybrid configuration with FC connectivity. The Alletra 6030 and higher models are designed to handle hybrid workloads that require the performance of both flash storage and traditional spinning disks, with the added capability of Fibre Channel connectivity for high-speed data transfer in enterprise environments.

For further details, refer to:

HPE Alletra 6000 Series Overview

Question: 236

Which type of host identification is used in an iSCSI -based SAN?

A. WWNN
B. WWPN
C. IQN
D. DCB

Answer: C

Explanation:

In an iSCSI-based SAN, the IQN (iSCSI Qualified Name) is used for host identification. IQNs uniquely identify iSCSI initiators and targets within a network, enabling proper connection and communication in an iSCSI storage environment. This identification is crucial for establishing and managing iSCSI sessions between hosts and storage arrays.

For more information, refer to:

HPE Storage Networking Solutions

Question: 237

What is the maximum number of host-facing PCIe expansion slots available in a HPE Alletra 6030 system?

A. 2
B. 4
C. 3
D. 6

Answer: B

Explanation:

The HPE Alletra 6030 system has a maximum of 4 host-facing PCIe expansion slots. These slots are used to add additional connectivity options, such as Fibre Channel or iSCSI adapters, to meet the specific requirements of the workload and environment. The flexibility provided by these expansion slots allows the Alletra 6030 to be tailored to a wide range of enterprise storage needs.

For further details, refer to:

HPE Alletra 6030 Overview

Question: 238

You are required to create a configuration for pricing for a customer solution for a primary storage use case. Which HPE tool can you utilize to create the required output?

A. SAF
B. Ninja Stars

C. OCA

D. CloudPhysics

Answer: C

Explanation:

The OCA (One Config Advanced) tool is HPE's primary tool for configuring and pricing solutions for customer use cases, including primary storage. OCA provides detailed configuration options, allowing you to tailor the solution to specific customer requirements and generate pricing and quotes based on the selected components and configurations. It is widely used by HPE partners and sales teams for accurate and efficient solution design and pricing.

Reference:

HPE One Config Advanced (OCA)

HPE Solution Configuration Tools

Question: 239

Which of the following statements is true regarding your customer's support status when moving from an HPE StoreOnce backup appliance to HPE GreenLake Backup and Recovery?

A. The HPE StoreOnce appliance can be only used as a on-Premises Protection Store copy target

B. The HPE StoreOnce appliance can be shared with other backup applications

C. The HPE StoreOnce appliance is currently not supported

D. The HPE StoreOnce appliance connectivity is currently FC-only

Answer: A

Explanation:

When moving from an HPE StoreOnce backup appliance to HPE GreenLake Backup and Recovery, the HPE StoreOnce appliance can still be utilized as an on-premises Protection Store copy target. This means that the existing StoreOnce hardware can be integrated into the new GreenLake Backup and Recovery environment, allowing for on-premises data protection and efficient backup processes while leveraging the cloud capabilities of GreenLake for additional flexibility and scalability. Reference:

HPE GreenLake Backup and Recovery

HPE StoreOnce Integration

Question: 240

Which NVMe transport technology is utilizing RDMA and DCB for the lossless fabric?

A. NVMe/TCP

B. NVMe/RoCE

C. NVMe over SCSI

D. FC-NVMe

Answer: B

Explanation:

Question: 241

Which statement is true regarding backup data immutability on HPE GreenLake for Backup and Recovery?

A. It is supported for HPE Alletra 6000 snapshot backups
B. Once set, the immutability period cannot be changed
C. It is supported for HPE Alletra 9000 snapshot backups
D. It is only available for on-prem backups

Answer: B

Explanation:

Question: 242

Your customer would like a new primary array and requires protection of a volume on a different storage system in another location. Which technology should the array include?

A. Deduplication
B. Replication
C. Tiering
D. Snapshots

Answer: B

Explanation:

Question: 243

What is the maximum number of SSDs supported by a 2-node HPE Alletra 9000 system running Alletra OS 9.5?

A. 120
B. 444
C. 240
D. 256

Answer: C

Explanation:

Question: 244

You are required to provide key sizing values for a customer solution for HCI sizing in CloudPhysics. Which HPE tool can you utilize to create the required output?

A. SAF
B. HPE SimpliVity Sizing Tool
C. OCA
D. Ninja Stars

Answer: B

Explanation:

Question: 245

Which product supports data immutability?

A. HPE MSA

B. HPE StoreOnce

C. HPE Alletra 5000

D. HPE SimpliVity

Answer: B

Explanation:

Question: 246

Which statement is true regarding optimizing HPE StoreOnce backup configuration?

A. Schedule multiple backup/replication/housekeeping activities to run in parallel

B. Configure a large block size (min. 256 KB) in backup application

C. Add optional RAM upgrade kit and enable it in Hardware section of UI

D. Configure a single multiplexed backup stream in the backup application

Answer: B

Explanation:

Question: 247

Which HPE Alletra 9000 management option allows you to set up performance alerts?

A. CLI

B. Local UI

C. Data Services Cloud Console Block Storage

D. Data Services Cloud Console Data Ops Manager

Answer: D

Explanation:

Question: 248

To improve the deduplication ratio of their MS SQL VMs farm hosted on an HPE Alletra 9000, what steps can you take?

A. Ensure the datastore-hosting VV has encryption disabled

B. Enable deduplication on the storage system level

C. Ensure the guest OS is using multiples of 16 kiB allocation units

D. Run a database alignment optimization

Answer: A

Explanation:

Question: 249

Select the correct statement regarding the interoperability of different drive interfaces.

A. SATA drives can be connected to the SAS backplane
B. NVMe drives can be connected to SATA backplane
C. NVMe only supports 15K enterprise-class disks
D. SAS drives can be connected to SATA backplane

Answer: A

Explanation:

Question: 250

Which statement is true when designing an HPE Alletra Storage MP Switchless solution?

A. Drive enclosures are connected to nodes via RoCE
B. HPE Alletra Storage MP Switchless architecture requires a service processor
C. Amount of CPU cores in the controller node affects expandability
D. Single node solution supports iSCSI host connectivity only

Answer: A

Explanation:

Question: 251

You want to enhance the security of backups performed via HPE GreenLake for Backup and Recovery. What is a true statement describing end-to-end backup data encryption on that platform?

A. It does leverage AES-512
B. It does support external key managers
C. It is executed by the Protection Store Gateway
D. It allows encryption keys to be exported and saved

Answer: C

Explanation:

Question: 252

When performing an OS update on an HPE Alletra 6000, which of the following options should you perform if the process fails?

A. Power down, then swap controllers and power up to trigger reimaging
B. Use the included USB drive and boot from the recovery image
C. Connect to console via serial cable and run the "factoryimage" command

D. Wait for the rollback to the previous version to complete and then troubleshoot

Answer: D

Explanation:

Question: 253

You need to learn more about source-side deduplication technology. Which HPE StoreOnce backup target type supports this technology?

A. SMB NAS
B. NFS NAS
C. Virtual Tape Library
D. Catalyst Store

Answer: D

Explanation:

Question: 254

Which of the following options is a benefit of the Persistent Ports feature?

A. Increase tolerance for transmission errors
B. Auto-restart of ports that go out of sync
C. Reconnection of broken replication links
D. Transparent handling of paths or controller loss

Answer: D

Explanation:

Question: 255

Select the correct statement regarding HPE Alletra 5000 controller upgrades.

A. Cross-family controller upgrades are not supported
B. Alletra 5010 can be upgraded to Alletra 5030 without downtime
C. Alletra 5010 can be upgraded to Alletra 5050 only via an Alletra 5030 upgrade
D. Array shutdown is required for Alletra 5030 to Alletra 5050 upgrade

Answer: A

Explanation:

Question: 256

Your customer is interested in HPE GreenLake for Block storage, but questions the capabilities of monitoring when using cloud-based management. Which two types of performance-related information can be displayed in a graph format, within Data Ops Manager, without further configuration? (Select two.)

A. Top host ports by write throughput B. Top volume sets by read IOPS C. Top SAN switches by read IOPS D. Top SAN switches by latency

E. SAP HANA OLTP requests per second

Answer: A,B

Explanation:

Question: 257

Which HPE storage array offers the ability to group up to four storage systems into a single logical array with a common pool of space?

A. HPE Primera

B. HPE GreenLake for Block Storage MP

C. HPE XP

D. HPE Alletra 6000

Answer: C

Explanation:

Question: 258

Which technology provides a low-latency storage tier suitable for caching?

A. SAS SSD

B. Enterprise SAS 15K

C. Persistent Memory

D. NVMe flash storage

Answer: D

Explanation:

Question: 259

Your customer would like to improve the security of their backups with HPE StoreOnce data-in-flight encryption. Which statement is true for this feature?

A. It is only available on hardware StoreOnce models

B. It is only available for StoreOnce Catalyst Store

C. It is only available for IP traffic

D. It is hardware accelerator based

Answer: B

Explanation:

Question: 260

In discussion with a customer, you are asked about a storage solution that would have max 2 x 16Gb FC connectivity per controller node. To which product is this topic related to?

A. Primera A630
B. MSA1060
C. Alletra 5010H
D. MSA 2062

Answer: D

Explanation:

Question: 261

What level of HPE support do HPE GreenLake Flex Solutions include?

A. HPE Complete Care
B. HPE Foundation Care NBD
C. HPE Tech Care Critical
D. HPE Tech Care Essential

Answer: D

Explanation:

Question: 262

Select the correct statement regarding the differences between MSL models.

A. HPE StoreEver MSL2024 requires HPE ProLiant gateway system for host access
B. LTFS is only supported in HPE StoreEver MSL3040
C. LTO-9 is supported only in HPE StoreEver MSL6480
D. HPE StoreEver MSL libraries support multiple LTO standards

Answer: D

Explanation:

Question: 263

The customer is using a user login with a Workspace observer role at the HPE GreenLake Platform level. Select the correct statement regarding roles and permissions.

A. User can add users to the workspace
B. User can display other users assigned the observer role
C. User can generate invitations for new users
D. User can assign access to other users

Answer: B

Explanation:

Question: 264

What source of data should you leverage during the restore to recover data after a ransomware attack when using Veeam backup, HPE Alletra 9000 storage-array snapshots as well as HPE GreenLake solutions?

A. HPE GreenLake for Backup and Recovery backup
B. HPE Alletra 9000 array snapshot
C. HPE GreenLake for Disaster Recovery copy
D. Veeam Backup & Replication backup

Answer: B

Explanation:

Question: 265

What cloud resources are currently supported for hybrid cloud protection on HPE GreenLake Backup and Recovery?

A. Amazon AWS
B. Any S3-compatible
C. Google Cloud Platform
D. Microsoft Azure

Answer: A

Explanation:

Question: 266

What is the maximum number of 2240 2U NVMe expansion shelves supported by the HPE Alletra 9080 4-node storage?

A. 2
B. 6
C. 4
D. 8

Answer: D

Explanation:

Question: 267

What technology allows VMs to appear as individual machines from an FC-SAN and storage array perspective?

A. TDPZ

B. VSAN
C. NPIV
D. Smart SAN

Answer: C

Explanation:

Question: 268

Your customer would like to consolidate the management of all three of their HPE XP8 storage arrays via a "single pane of glass" UI. Which UI should you recommend?

A. RAID Manager
B. Remote Web Console
C. Intelligent Storage Management
D. Smart Storage Administrator

Answer: B

Explanation:

Question: 269

The customer is deploying a new HPE Alletra dHCI solution. Which tool can be used to discover the new HPE Alletra array?

A. HPE Storage Setup Manager
B. HPE GreenLake Data Ops Manager console
C. HPE GreenLake Block Storage console
D. HPE StoreServ Management Console

Answer: A

Explanation:

Question: 270

Which technology allows for non-intrusive gathering of 10 statistics from any device port, applies these statistics to an intuitive, policy-based monitoring system, and includes an alerting suite to configure thresholds and alarms?

A. Fabric Vision
B. Nexus Dashboard Fabric Controller
C. MDSCU
D. Web Tools

Answer: A

Explanation:

Question: 271

Which SSD controller component enhances the performance of NAND flash and acts as a cache?

A. SATA interface chip
B. DRAM
C. NAND memory controller
D. Processor

Answer: B

Explanation:

Question: 272

Which tool or feature should you use for setting up health issue alerts for B-Series SAN Switches?

A. NetEdit NAE
B. Web Tools
C. Nexus Dashboard Fabric Controller
D. SANnav MAPS

Answer: D

Explanation:

Question: 273

Which statement regarding fixed-block chunking options on HPE StoreOnce is true?

A. It can be set on any type of HPE StoreOnce backup target
B. It can be disabled at any time
C. It is a Veeam-specific feature
D. It has been available since HPE StoreOnce software revision 3.x

Answer: D

Explanation:

Question: 274

A second group of 11 same-capacity disks has been added to your customer's HPE Alletra 6000 head shelf. After 1 hour it seems the new drives have not merged with the existing driveset. Which action

should you perform to fix the problem?

A. If you add a second driveset, it will always be configured as a separate RAID set.
B. The merging process may take up to 24h, wait and then verify the next day.
C. Log in to the Alletra 6000 local UI, then from the Hardware section of the UI next to the head shelf icon click "Admit."

D. Log in to the Alletra 6000 CLI via SSH, then run the "tunesys" command to trigger the RAID rebalancing process.

Answer: D

Explanation:

Question: 275

Select a correct statement regarding the expandability of the HPE Alletra 9080 with 4 controllers and maximum capacity requirements.

A. Additional drive enclosure increases the performance of the solution.
B. Eight drive enclosures increase capacity efficiency with 82 RAID 6 set.
C. HPE Alletra 9000 supports drive enclosure daisy chaining
D. Sixteen drive enclosures increase capacity efficiency with 82 RAID 6 set.

Answer: C

Explanation:

Question: 276

What is the maximum number of controller nodes that will fit into an HPE Alletra 9000 storage base?

A. 8
B. 4
C. 6
D. 2

Answer: B

Explanation:

Question: 277

What is the minimum number of drive cages to achieve RAID6:6*2 with HA level of cage on an HPE GreenLake for Block Storage array?

A. 2
B. 6
C. 8
D. 4

Answer: A

Explanation:

Question: 278

How many simultaneous disk failures can an HPE Alletra 6000 tolerate?

A. 1

B. 2
C. 4
D. 3

Answer: B

Explanation:

Question: 279

Which product supports dual authorization and a compliance mode that can prevent internal attacks on the local UIs of their devices?

A. HPE Alletra 9000
B. HPE StoreOnce
C. HPE Primera
D. HPE Alletra 6000

Answer: B

Explanation:

Question: 280

Which protocol is supported for connectivity between the HPE GreenLake for Backup and Recovery Protection Store Gateway and the storage systems?

A. S3
B. NVMe-oF
C. FC
D. iSCSI

Answer: D