

# HPE0-J74.exam

Number: HPE0-J74 Passing Score: 800 Time Limit: 120 min



HPE0-J74

**Foundations of HPE Storage Solutions** 



#### Exam A

## **QUESTION 1**

When choosing a SAN fabric topology, which components can have the largest effect on data availability? (Select two.)

- A. SFP speed
- B. number of ISLs between the switches
- C. switch firmware version
- D. number of switches
- E. power supply quantity

Correct Answer: BD Section: (none) Explanation

# **Explanation/Reference:**

To ensure maximum data availability, EMC requires redundant physical and logical paths to prevent any single point of failure.

References: http://www.emc.com/collateral/hardware/technical-documentation/h8074-fibre-channel-san-tb.pdf

## **QUESTION 2**

Which RAID level is no longer used in HPE storage?

- A. 1
- B. 3
- C. 5
- D. 6

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

References: http://www.hp.com/ctg/Manual/c03909334 (HPE Smart Storage Administrator User Guide)

## **QUESTION 3**

Which HPE 3PAR StoreServ capacity-based license should you recommend to a customer who needs converged storage?

- A. File Persona SW Suite
- B. Data Optimization SW Suite



- C. Replication SW Suite
- D. Operating System SW Suite

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

HPE 3PAR File Persona Software Suite is a licensed feature of HPE 3PAR OS that enables a rich set of file protocols and core file data services on an HPE 3PAR StoreServ system. As a feature of HPE 3PAR OS, File Persona Software Suite inherits one of the industry-leading architecture and Block Persona benefits of HPE 3PAR StoreServ. It extends the spectrum of primary storage workloads natively addressed by HPE 3PAR StoreServ from virtualization, databases, and applications via the Block Persona to include client workloads such as home directory consolidation, group and department shares, and corporate shares via the File Persona—all with truly Converged Controllers, truly agile capacity, and truly unified management.

References: http://www8.hp.com/h20195/v2/GetPDF.aspx/4AA5-6078ENW.pdf (Technical overview of HPE 3PAR File Persona Software Suite)

## **QUESTION 4**

A customer wants to use an HPE StoreEasy 3000 to host a SQL Server database. How can MS-SQL be configured to use an SMB share rather than local storage?

- A. Configure the default database locations using UNC paths (\server\share) instead of a local drive (D:).
- B. Combine throughput of all network adapters and cluster nodes together.
- C. Set up a new HPE StoreEasy 3000 to create a Microsoft SQL Cluster.
- D. Configure NPIV in the local network adapters to reach the SMB Share.

Correct Answer: A Section: (none) Explanation

# Explanation/Reference:

Confige SQL server to use an SMB share by configuring the default database locations using UNC paths (\\server\share) instead of a local drive (D:).

References: References: http://www8.hp.com/h20195/v2/GetDocument.aspx?docname=4AA4-7418ENW&cc=us&lc=en (HPE StoreEasy 1000 Performance Best Practice Guidelines for SQL over SMB 3, page 3)

#### **QUESTION 5**

Which tool should you use to prepare a configuration and quotation for an HPE 3PAR StoreServ, based on your customer's sizing details?

- A. HPE Storage Sizing Tool
- B. HPE NinjaStars
- C. HPE SalesBuilder for Windows



D. HPE 3PAR StoreServ Configurator

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

## **QUESTION 6**

Under the HPE Converged Storage strategy, which type of primary storage is provided through NAS solutions?

- A. sequential
- B. object
- C. block
- D. file

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Network-attached storage (NAS) is a file-level computer data storage server connected to a computer network providing data access to a heterogeneous group of clients, while a storage area network (SAN) is a network which provides access to consolidated, block level data storage.

References: https://en.wikipedia.org/wiki/Network-attached\_storage

## **QUESTION 7**

Which RAID level uses double parity Advanced Data Guarding?

- A. 1
- B. 5
- C. 6
- D. 10

Correct Answer: C Section: (none) Explanation

# Explanation/Reference:

Double-parity RAID (redundant array of independent disks), also called diagonal-parity RAID, Advanced Data Guarding (RAID\_ADG), or RAID-6, is a



method of protecting against multiple storage drive failures by creating two sets of parity data on an array of hard disks.

References: http://searchstorage.techtarget.com/definition/double-parity-RAID

#### **QUESTION 8**

What does the HPE StoreVirtual solution provide?

- A. scale-out storage
- B. SAN, NAS and object storage
- C. file level storage
- D. scale-up storage

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

HPE StoreVirtual is a scale-out Storage for Virtualised Environments. It gives you affordable storage for a virtualised infrastructure solution that's easy to manage, supports continuous data growth and includes advanced high-availability features that keep you up and running.

References: https://www.hpe.com/se/en/storage/storevirtual.html

#### **QUESTION 9**

Which HPE storage offering provides enterprise-level, Tier 1, primary storage?

- A. HPE 3PAR StoreServ
- B. HPE StoreOnce
- C. HPE StoreVirtual
- D. HPE StoreEver

Correct Answer: A Section: (none) Explanation

## Explanation/Reference:

3PAR StoreServ scale to support the world's most demanding cloud service providers as well as enterprise and midrange applications. 3PAR StoreServ provides Flash-optimized Tier-1 Storage for Any Service Level.

References: https://www.hpe.com/us/en/storage/tier-1.html

## **QUESTION 10**



Which networking transport protocol is used in a NAS environment?

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B. FCIP

C. Ethernet

D. Token Ring

Correct Answer: B Section: (none) Explanation

## Explanation/Reference:

There are several network protocols used to access data on a Network Attached Storage (NAS) device. They are:

- \* FCIP Fibre Channel over IP (FCIP or FC/IP, also known as Fibre Channel tunneling or storage tunneling) is an Internet Protocol (IP)-based storage networking technology developed by the Internet Engineering Task Force (IETF). FCIP mechanisms enable the transmission of Fibre Channel (FC) information by tunneling data between storage area network (SAN) facilities over IP networks; this capacity facilitates data sharing over a geographically distributed enterprise.
- \* NFS (Network File System):
- \* CIFS (Common Internet File System)
- \* NCP (Netware Communication Protocol)
- \* AppleTalk
- \* FTP (File Transfer Protocol)
- \* HTTP Hyper Text Transport Protocol

Reference: http://searchstorage.techtarget.com/definition/Fibre-Channel-over-IP

## **QUESTION 11**

You are meeting with a small SMB customer to discuss the requirements of a new storage solution. The customer tells you that they require a new consolidated platform to provide file storage with built-in deduplication for no more than 20 Microsoft Windows users. The customer has limited budget and IT skills.

With which HPE product should you start the conversation?

A. HPE StoreOnce

B. HPE StoreVirtual

C. HPE StoreServ

D. HPE StoreEasy

Correct Answer: B Section: (none) Explanation



# Explanation/Reference:

Note: Small & Midsize Business (SMB)

## **QUESTION 12**

Your customer wants to implement an HPE 3PAR StoreServ Array for a 24x7 production environment. They want to enable dynamic load balancing for the Virtual Connect uplinks.

Which feature must be enabled on the Virtual Connect interfaces and the HPE B-series SAN switches to accomplish this?

- A. NPIV
- B. ISL
- C. FCoE
- D. FCIP

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

ISL Trunkinl combines multiple links between switches to form a single, logical ISL with a total bandwidth of 64 Gb/s. This feature enables dynamic load balancing of data across ISLs.

References: http://h10032.www1.hp.com/ctg/Manual/c00403562.pdf

## **QUESTION 13**

A customer wants to replace existing EVA storage. You propose an HPE 3PAR StoreServ and want to ensure that your design meets the customer's current IOPS requirement.

Which resources or tools are required to size a solution based on the existing infrastructure? (Select two.)

- A. HPE Storage Optimizer
- B. HP Command View EVAPerf
- C. HPE 3PAR StoreServ QuickSpecs
- D. HPE NinjaSTARS
- E. HPE Single Point of Connectivity Knowledge

Correct Answer: BD Section: (none) Explanation



## **Explanation/Reference:**

B: EVAPerf is a command line utility used to monitor the performance of an EVA. It can be used in a console mode for real time monitoring or have the output piped to a CSV file for future review.

Note: IOPS (Input/Output Operations per Second)

#### Incorrect Answers:

A: HPE Storage Optimizer software cuts the cost of storing and managing vast volumes of unstructured data—without impacting end users or introducing new sources of risk and complexity. It does storage optimization by combining file analytics with policy-based storage tiering and information optimization.

References: https://3pardude.com/2015/02/24/evaperf/

#### **QUESTION 14**

Which operating systems support space reclamation? (Select two.)

- A. Microsoft Windows Server 2012
- B. Microsoft Windows 2003 SP2
- C. VMware vSphere (ESXi) 5.x
- D. Ubuntu 12.x
- E. SLES 9.x

Correct Answer: AC Section: (none) Explanation

## **Explanation/Reference:**

A: Windows Server 2012 introduced many capabilities to integrate with thin-provisioned devices seamlessly. Thin identification, real-time storage optimization, and Windows Storage Optimizer are all features that allow for the efficient use of thin-provisioned devices. These Windows Server 2012 features coupled with the elastic storage allocation provided by HPE Storage result in better space utilization and efficiency.

References: http://h20195.www2.hp.com/v2/getpdf.aspx/4AA5-4020ENW.pdf https://mcloudinfo.wordpress.com/2015/02/11/how-to-reclaim-storage-on-hp-3par-systems/

## **QUESTION 15**

What are hardware components of a Fibre Channel SAN fabric implementation? (Select two.)

- A. server
- B. enclosure
- C. SFP+ transceivers
- D. host bus adapter



E. array controller

Correct Answer: CD Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 16**

Your customer has the following backup strategy:

Sunday to Thursday -> Daily Incremental Friday -> Weekly Full No backup is run on a Saturday Backup window is 22:00 - 04:00

They suffer a catastrophic failure on Thursday at 05:30. Which backup sets are required to restore the failed system to the most recent state?

- A. last full backup plus all incremental backups
- B. last full backup plus the last incremental backup
- C. last incremental backup only
- D. last full backup only

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

An incremental backup is one that provides a backup of files that have changed or are new since the last incremental backup; it is one that backs up only the data that have changed since the last backup — be it a full or incremental backup.

References: https://en.wikipedia.org/wiki/Incremental\_backup

## **QUESTION 17**

Which device connects SAS initiators, expanders, and targets?

- A. backplane
- B. expander
- C. initiator
- D. target



Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

The components known as Serial Attached SCSI Expanders (SAS Expanders) facilitate communication between large numbers of SAS devices. Expanders contain two or more external expander-ports. Each expander device contains at least one SAS Management Protocol target port for management and may contain SAS devices itself. For example, an expander may include a Serial SCSI Protocol target port for access to a peripheral device. An expander is not necessary to interface a SAS initiator and target but allows a single initiator to communicate with more SAS/SATA targets. A useful analogy: one can regard an expander as akin to a network switch in a network, which connects multiple systems using a single switch port.

References: https://en.wikipedia.org/wiki/Serial\_Attached\_SCSI#SAS\_expanders

#### **QUESTION 18**

Which storage connectivity is commonly used between the Smart Array controller and physical disk drive?

A. FC-AL

B. FCoE

C. iSCSI

D. SAS

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

HP Smart Array controllers include a processor, cache, and device driver that all contribute to providing optimum RAID performance. In addition, HP Smart Array controllers are tuned specifically to the drives being used—SAS or SATA, to reduce error rates and data loss.

References: http://www8.hp.com/h20195/v2/getpdf.aspx/4AA5-4124ENW.pdf

#### **QUESTION 19**

Which HPE tool provides a mix of validated storage configurations, guidelines, and suggestions on a variety of HPE storage solutions?

A. HPE Product Bulletin

B. HPE SalesBuilder for Windows

C. HPE Single Point of Connectivity Knowledge

D. HPE Storage Sizing Tool

Correct Answer: B



Section: (none) Explanation

## **Explanation/Reference:**

## **QUESTION 20**

A customer has an HPE 3PAR StoreServ and requires online application-consistent snapshots. Which applications would benefit from VSS-enabled, HPE 3PAR Application Software Suites? (Select two.)

- A. Oracle
- B. MySQL
- C. Hyper-V
- D. Microsoft SQL
- E. Postgres

Correct Answer: CD Section: (none) Explanation

## Explanation/Reference:

C: The Application Suite for Recovery Manager includes Recovery Manager for Hyper-V and the VSS Provider software.

D: The Application Suite for Microsoft SQL creates snapshots instantaneously, irrespective of database size. It includes support for 3PAR VSS HWP 2.3.

#### References:

http://www8.hp.com/us/en/products/storage-software/product-detail.html?oid=5386539 http://www8.hp.com/us/en/products/storage-software/product-detail.html?oid=5335617

#### **QUESTION 21**

Which benefit does dual-domain offer over dual-path SAS?

- A. Dual-path SAS implementations make it possible to tolerate host bus adapter (HBA) failure.
- B. Dual-domain SAS implementations provide some lower cost solutions that cover cable failure.
- $\hbox{C. Dual-path SAS implementations provide full redundancy of a SAS solution.}\\$
- D. Dual-domain SAS implementations make it possible to tolerate host bus adapter (HBA) failure.

Correct Answer: D Section: (none) Explanation



## Explanation/Reference:

Dual-domain SAS implementations make it possible to tolerate host bus adapter (HBA) failure, external cable failure, expander failure, failure in a spanned disk (JBOD) environment, and failure in Redundant Array of Independent Disks (RAID) environments.

References: http://h20564.www2.hpe.com/hpsc/doc/public/display?docId=c01451157 (Redundancy in enterprise storage networks using dual-domain SAS configurations)

## **QUESTION 22**

Which service is used in a NAS environment, but not a SAN environment?

- A. block access services
- B. direct access services
- C. object access services
- D. file access services

Correct Answer: D Section: (none) Explanation

## Explanation/Reference:

Network-attached storage (NAS) is a file-level computer data storage server connected to a computer network providing data access to a heterogeneous group of clients, while a storage area network (SAN) is a network which provides access to consolidated, block level data storage.

References: https://en.wikipedia.org/wiki/Network-attached\_storage

## **QUESTION 23**

Which RAID level uses double distributed parity?

- A. 1
- B. 3
- C. 5
- D. 6

Correct Answer: D Section: (none) Explanation

## Explanation/Reference:

Double-parity RAID (redundant array of independent disks), also called diagonal-parity RAID, Advanced Data Guarding (RAID\_ADG), or RAID-6, is a method of protecting against multiple storage drive failures by creating two sets of parity data on an array of hard disks.



References: http://searchstorage.techtarget.com/definition/double-parity-RAID

## **QUESTION 24**

What must you configure on a host system to connect to iSCSI storage?

- A. iSCSI initiator
- B. iSCSI expander
- C. iSCSI array
- D. iSCSI target

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

The iSCSI specification refers to a storage resource located on an iSCSI server (more generally, one of potentially many instances of iSCSI storage nodes running on that server) as a target. An iSCSI target is often a dedicated network-connected hard disk storage device, but may also be a general-purpose computer, since as with initiators, software to provide an iSCSI target is available for most mainstream operating systems.

References: https://en.wikipedia.org/wiki/ISCSI#Target

## **QUESTION 25**

Before upgrading your customer's SAN fabric based on HPE B-series switches, you need the firmware and switch-and-port status information for the current switches. Which commands can be run to obtain this information? (Select two.)

- A. showver
- B. switchshow
- C. version
- D. fabricshow
- E. showport

Correct Answer: BC Section: (none) Explanation

## **Explanation/Reference:**

B: switchShow displays switch and port status. It works on, for example, HP StoreFabric B-Series SAN Switches.

C: The version command displays the firmware code revision.

#### Incorrect Answers:

D: The fabricShow command displays fabric membership information. The following fields are displayed:



Switch ID, world wide name, Enet, IP Addr, FC IP

References: http://h20564.www2.hpe.com/hpsc/doc/public/display?docId=mmr\_kc-0126810

#### **QUESTION 26**

What is the term for the maximum allowable period for a business to be without a specific application should a disaster occur?

- A. Service Level Objective
- B. Service Level Agreement
- C. Recovery Point Objective
- D. Recovery Time Objective

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

A service-level agreement (SLA) is a contractual agreement outlining a specific service commitment made between contract parties -- a service provider and its customer. The SLA includes language describing the overall service, financial aspects of service delivery, including fees, penalties, bonuses, contract terms and conditions, and specific performance metrics governing compliant service delivery. These individual performance metrics are called service-level objectives (SLOs).

References: http://searchcio.techtarget.com/answer/Whats-the-difference-between-SLO-and-SLA

#### **QUESTION 27**

A customer is experiencing rapid data growth and requires more backup data to be available online. Which technology could benefit the customer?

- A. deduplication
- B. wide striping
- C. snapshots
- D. tiering

Correct Answer: A Section: (none) Explanation

# Explanation/Reference:

Data deduplication is a technique for reducing the amount of storage space an organization needs to save its data. In most organizations, the storage systems contain duplicate copies of many pieces of data.

Deduplication eliminates these extra copies by saving just one copy of the data and replacing the other copies with pointers that lead back to the original copy. Companies frequently use deduplication in backup and disaster recovery applications, but it can be used to free up space in primary storage as



well.

References: http://www.webopedia.com/TERM/D/data\_deduplication.html

## **QUESTION 28**

Which information is exchanged in the FLOGI sequence between a FlexFabric module and a SAN switch?

- A. WWN
- B. port ID
- C. FCID
- D. MAC

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

The Fibre Channel Logon sequence (FLOGI) is used to obtain a routable FCID for use in FC frame exchange. The switch will provide the FCID during a FLOGI exchange.

References: http://www.definethecloud.net/fcoe-initialization-protocol-fip-deep-dive/

#### **QUESTION 29**

Your customer is deploying a new application that is based on OpenStack. Which HPE storage solution supports this deployment?

- A. HPE StoreAll
- B. HPE StoreVirtual VSA
- C. HPE StoreEasy
- D. HPE StoreEver

Correct Answer: B Section: (none) Explanation

## Explanation/Reference:

References: http://www8.hp.com/h20195/v2/GetPDF.aspx%2F4AA5-1966ENW.pdf (OpenStack HPE StoreVirtual Block Storage Driver Configuration Best Practices)

### **QUESTION 30**

You are designing a small, direct attach storage solution for an existing HPE Proliant Server with HPE Smart Array Controllers. Your customer asks you to provide full redundancy with no single point of failure.



What should you propose?

- A. dual-domain and dual-path SATA drives
- B. dual-domain and active SAS cables
- C. dual-domain and dual-port SAS drives
- D. dual-path and dual-port SCSI drives

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Example: This dual-domain SAS architecture provides redundant pathways for cascaded JBODs. Using two IO modules for each enclosure and SAS dual-port drives, this configuration provides redundancy throughout the storage network and eliminates any single point of failure.

References: http://h20564.www2.hpe.com/hpsc/doc/public/display?docld=c01451157 (Redundancy in enterprise storage networks using dual-domain SAS configurations)

#### **QUESTION 31**

Which HPE management tool provides a single integrated management environment with powerful search capabilities and an open architecture?

- A. HPE Insight Remote Support
- B. HPE Systems Insight Manager
- C. HPE OneView
- D. HPE SUM

Correct Answer: C Section: (none) Explanation

## Explanation/Reference:

HP OneView delivers a unified management platform that supports HP ProLiant Rack servers, HP BladeSystem, HP 3PAR StoreServ Storage, and HP ConvergedSystem 700 platforms.

Included is HP Smart Search, which provides fast, sophisticated search to instantly find the exact information for which you look.

## Incorrect Answers:

D: Smart Update Manager (SUM) is an innovative tool for firmware and driver maintenance on HPE ProLiant and Integrity Servers, BladeSystem enclosures, Moonshot systems, and options.



References: http://www8.hp.com/us/en/products/server-software/product-detail.html?oid=5410258

## **QUESTION 32**

Which HPE Storage product uses deduplication technology designed by HPE Labs?

- A. HPE MSA
- B. HPE StoreOnce
- C. HPE StoreEasy
- D. HPE StoreEver

Correct Answer: B Section: (none) Explanation

## Explanation/Reference:

HP StoreOnce deduplication uses new techniques. Up until now, data movement between systems usually requires processing through different tools. HP StoreOnce software will allow end-to-end deduplication capabilities across the converged infrastructure—from backup to primary scale-out.

References: http://community.hpe.com/t5/Data-Protector-Practitioners/HP-Labs-develop-new-technology-HP-StoreOnce-deduplication/td-p/2402500

## **QUESTION 33**

Which HPE direct attach storage product offers an archiving platform for HPE ProLiant -Class servers?

- A. HPE StoreAll
- B. HPE Ultrium Tape Blades
- C. HPE MSA
- D. HPE StoreOnce Backup

Correct Answer: B Section: (none) Explanation

# Explanation/Reference:

The HP Ultrium Tape Blades are ideal for HP BladeSystem c-Class customers who need an integrated data protection solution. HP Ultrium Tape Blades offer a complete data protection, disaster recovery and archiving solution for BladeSystem c-Class customers.

References: http://www8.hp.com/emea\_africa/en/products/tape-drives-enclosures/product-detail.html?oid=5294286

#### **QUESTION 34**

Which element of HPE's BURA storage portfolio provides deduplicated backup disk storage?



- A. HPE 3PAR StoreServ
- B. HPE StoreEver
- C. HPE StoreOnce
- D. HPE StoreAll

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

HP StoreOnce Backup is a federated deduplication architecture that spans purpose built appliances, software-defined VSAs, and backup software like HP Data Protector.

References: http://www8.hp.com/us/en/products/data-storage/deduplication.html

## **QUESTION 35**

Which HPE primary production storage solution is targeted to the small and mid-sized business market?

- A. HPE StoreVirtual
- B. HPE StoreAll
- C. HPE StoreOnce
- D. HPE StoreEver

Correct Answer: A Section: (none) Explanation

# Explanation/Reference:

Incorrect Answers:

B: HPE StoreAll storage is designed to meet the data challenges of large enterprise organisations and industry-specific Big Data archives, content depots, and cloud object solutions.

D: HPE StoreEver Tape addresses all your long-term retention needs with tape media, standalone tape drives and tape libraries that accommodate more than 180 PB2 in a single system.

References: https://www.hpe.com/se/en/storage/storevirtual.html

## **QUESTION 36**

A customer has a number of server blades in a BladeSystem 7000 Enclosure and an HPE D2220sb Storage Blade, and wants to implement a small test and development iSCSI SAN.

What can provide this functionality?



- A. Windows Storage Server
- B. VMware ESXi
- C. HPE StoreVirtual VSA
- D. HPE StoreOnce VSA

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

With the HP P4000 Virtual Storage Appliance (VSA) Software, you can deploy the D2220sb as an iSCSI SAN for use by the servers in the enclosure and any server on the network.

References: http://h20195.www2.hp.com/v2/getpdf.aspx/4aa4-8125enw.pdf (Architecture and technologies in the HP BladeSystem c7000 Enclosure)

## **QUESTION 37**

Which tool allows you to size and provide general performance metrics for HPE 3PAR StoreServ?

- A. HPE NinjaSTARS for 3PAR
- B. HPE Product Bulletin
- C. HPE SalesBuilder for Windows
- D. HPE Single Point of Configuration Knowledge

Correct Answer: A Section: (none) Explanation

# Explanation/Reference:

#### **QUESTION 38**

Which functionality does an HPE 3PAR StoreServ File Controller provide?

- A. switch
- B. router
- C. bridge
- D. gateway

Correct Answer: D



Section: (none) Explanation

## Explanation/Reference:

HP 3PAR StoreServ File Controllers are clustered file gateway configurations with transparent failover and online rolling maintenance updates that deliver continuous availability of data to users, servers, and applications.

References: http://www8.hp.com/us/en/products/file-object-storage/product-detail.html?oid=6608649

## **QUESTION 39**

What are disadvantages of using Fibre Channel Arbitrated Loop (FC-AL) rather than Fibre Channel switched fabric (FC-SW) topology? (Select two.)

- A. FC-AL topology is usually more expensive than FC-SW.
- B. Only one pair of ports can communicate at the same time.
- C. Multiple pairs of ports communicate at the same time.
- D. The failure of a port is isolated from the other ports.
- E. The bandwidth is shared among all active nodes.

Correct Answer: BE Section: (none) Explanation

# **Explanation/Reference:**

A Fibre Channel Arbitrated Loop (FC-AL) is a high-speed Fibre Channel (FC) topology in which FC ports use arbitration to establish a point-to-point circuit and prevent multiple ports from sending frames at the same time.

In a Fibre Channel topology, devices are connected in a one-way ring. When ports in a loop topology have information to transmit, they must send out an arbitration signal to decide which port can use the channel. The port in control of the channel then sends an "open" signal to the destination port and transmits its data. Since all the ports in a loop are connected, every port will see and pass along the data -- but ignore the data unless it is addressed to that particular port.

## **QUESTION 40**

What are benefits of the HPE StoreServ 3PAR architecture? (Select two.)

- A. provides silicon-based hardware acceleration of thin technologies
- B. supports direct SAS connection for up to four servers
- C. provides iSCSI-based asynchronous remote replication
- D. provides a meshed cluster architecture
- E. scales out to meet small and medium-size business virtualization needs

Correct Answer: AC Section: (none)



# **Explanation**

# **Explanation/Reference:**

- \* Reduce capacity requirements by up to 75% guaranteed when migrating from legacy storage to 3PAR StoreServ Storage with the HPE Get Thinner program.
- \* Achieve near-synchronous RPOs with flexible, transparent, model-agnostic remote replication.

References: http://www8.hp.com/us/en/products/disk-storage/product-detail.html?oid=8737813#!tab=features