

# HP0-J64<sup>Q&As</sup>

Designing HP Enterprise Storage Solutions

## Pass HP HP0-J64 Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

<https://www.pass2lead.com/hp0-j64.html>

100% Passing Guarantee  
100% Money Back Assurance

Following Questions and Answers are all new published by HP Official Exam Center

-  **Instant Download** After Purchase
-  **100% Money Back** Guarantee
-  **365 Days** Free Update
-  **800,000+** Satisfied Customers



## QUESTION 1

During a customer proposal meeting for a 900 TB HP 3PAR StoreServ 10800, you discover an opportunity to address the lack of disaster recovery for two very critical applications that both require approximately 90 TB of usable storage each. The customer is considering a competitive disaster recovery (DR) solution to meet this requirement in a more cost-efficient manner than a second array.

Which HP 3PAR StoreServ architectural feature should you position to address this customer need?

- A. Specify an HP 3PAR StoreServ Synchronous Long Distance configuration utilizing an HP 3PAR StoreServ 7200 synchronous configuration for the best possible RPO and RTO.
- B. Highlight the benefits of the HP 3PAR unified architecture and propose a minimally- configured HP 3PAR StoreServ 7200 to provide a cost-effective disaster recovery (DR) solution.
- C. Propose an HP 3PAR StoreServ solution that highlights the benefits of duplicated storage.
- D. Propose a second HP 3PAR StoreServ 10400 with a 250 TB replication license to cost- effectively meet the disaster recovery (DR) requirement.

Correct Answer: C

<http://h20195.www2.hp.com/V2/GetPDF.aspx%2F4AA3-8318ENW.pdf> Replication solutions for demanding disaster tolerant environments HP 3PAR Remote Copy software

Long-distance disaster recovery

Disaster recovery requirements that include low RTOs and zero-data loss RPOs pose a significant challenge.

Adding a requirement for a distant disaster recovery site on the opposite side of a continent rather than in an adjacent town greatly compounds these challenges and the complexity of typical solutions.

PDF Replication solutions for demanding disaster tolerant environments, pp 10 e 11 Synchronous long- distance topology

Synchronous long distance combines the ability to make replicas created using synchronous mode over a high-speed low-latency network along with the high-link latency replication capability offered by asynchronous periodic mode to provide

a long distance replication solution. An SLD topology has the potential of delivering a zero data loss RPO to the remote asynchronous periodic replication site. This is accomplished by using two backup storage servers: one located near the

primary InServ using Synchronous mode (the sync array) and a distant storage server using asynchronous periodic mode (the disaster recovery array). In addition to the HP 3PAR Remote Copy connections from the primary array to the two

backup arrays, a passive asynchronous periodic link is configured from the sync array to the disaster recovery array (see figure 8). This is the only HP 3PAR Remote Copy technology that supports replicating the same Remote Copy primary

volumes from a source array to two separate target arrays. Only a single Remote Copy volume group (consistency group) is supported in an synchronous long distance topology.

The primary intent of the SLD topology is to provide users with a way of potentially achieving an RPO of zero at the distant asynchronous periodic disaster recovery array in the event a disaster renders the primary array down. If a

disaster

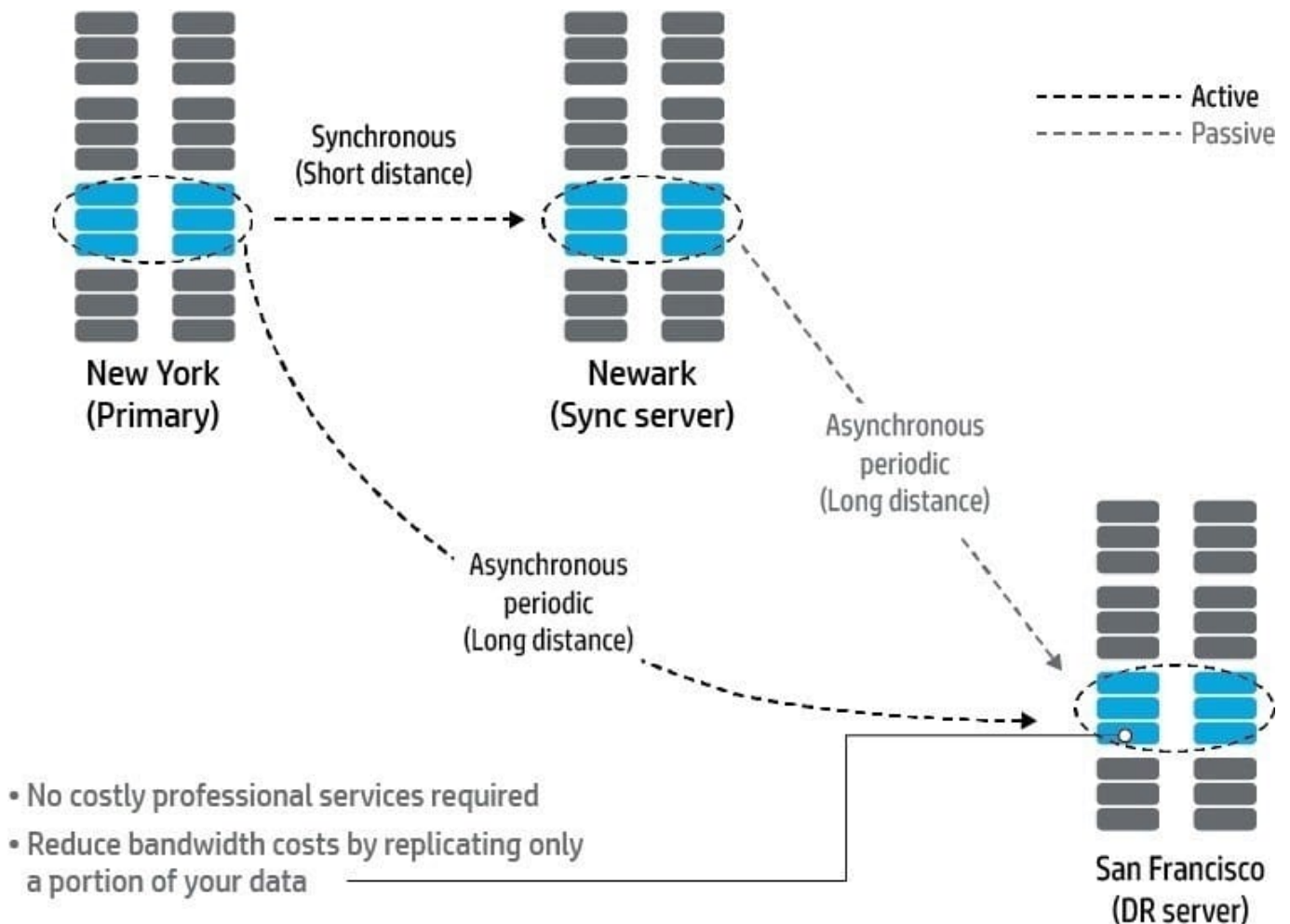
takes the primary storage array down, on failover to the sync array, the passive asynchronous periodic link between the sync array and the disaster recovery array is activated and any data that was written on the sync array but that has not

yet made it to the disaster recovery array is sent from the sync array to the disaster recovery array, bringing the disaster recovery array up to date with the last write that occurred to the primary array. After the disaster recovery array has been

made consistent with the state of the primary storage array at the time of failure, operations may be continued using the disaster recovery site with no loss of data suffered (RPO = 0) (or operations can proceed from the sync array if that is

desired). The normally passive asynchronous periodic link between the sync array and the disaster recovery array is then reversed so updates to the disaster recovery array are replicated back to the sync array albeit in asynchronous periodic

mode. When the original primary array is restored to service, its Remote Copy links are reversed and used to synchronize the primary server's volumes with changes that occurred during the outage before resuming normal service.



**QUESTION 2**

A customer is concerned about backup data growth and maintaining or improving restore service levels. The current

environment consists of an HP StoreVirtual P4500 SAN solution, HP Data Protector, and an HP MSL4048 Tape Library with LTO-3 drives connected via SAS to the backup server.

You have been asked to design an upgrade to the current environment that will provide increased backup storage and improve backup retention and restore times. What should be proposed?

- A. Configure client-side deduplication in the backup software.
- B. Implement HP StoreEasy with block-level deduplication.
- C. Upgrade the MSL Tape Library to LTO-5 tape drives.
- D. Implement an HP StoreOnce Backup System.

Correct Answer: C

The HP StoreEver MSL Tape Libraries meet demanding storage requirement of businesses needing unattended backup, disaster recovery, or archive capability. The MSL Libraries offer a broad choice of storage capacity and interfaces with LTO-6, LTO-5, LTO-4, or LTO-3 Ultrium tape drives.

Attribute	Generation				
	LTO-1	LTO-2	LTO-3	LTO-4	LTO-5
Release date	2000	2003	2005	2007	2010
Native data capacity	100 GB	200 GB	400 GB	800 GB	1.5 TB <sup>[7]</sup>
Max uncompressed speed (MB/s) <sup>[9][Note 1]</sup>	20	40	80	120	140
Compression capable?	ALDC "2:1"				
WORM capable?	No		Yes		
Encryption capable?	No			Yes	
Partition capable?	No (1 allowed)			Yes (2 allowed)	
Tape thickness	8.9 µm		8 µm	6.6 µm	6.4 µm
Tape length	609 m		680 m	820 m	846
Tape tracks	384	512	704	896	1280
Write elements	8		16 <sup>[7][13]</sup>		
Wraps per band	12	15	11	14	20 <sup>[7]</sup>
Linear density (bits/mm)	4880	7338	9638	13,250	15,142 <sup>[14]</sup>
Encoding	RLL 1,7	RLL 0,13/11; PRML		RLL 32/33; PRML	
Cartridge memory	4 KiB			8 KiB	

[http://en.wikipedia.org/wiki/Linear\\_Tape-Open](http://en.wikipedia.org/wiki/Linear_Tape-Open)

**QUESTION 3**

The IT manager of a company wants their NAS storage system that uses deduplication to be more efficient. Which NAS

system meets this requirement?

- A. HP StoreOnce with catalyst
- B. HP 3PAR StoreServ with Thin Provisioning
- C. HP MSA 2040 with snapshot technology
- D. HP StoreEasy with Windows Storage Server

Correct Answer: D

HP X3000 G2 Storage boosts the value of your array or SAN by adding Windows Storage Server-powered, IP-based gateway services to it.

#### QUESTION 4

Your customer has an existing HP StoreVirtual P4500 G2 multi-site SAN, which has become I/O constrained. They want to implement a new higher performance tier into the existing management group. Which Peer Motion method provides the ability to dynamically rebalance data volumes to the higher performance tier?

- A. Dynamic LUN management
- B. Cluster swap
- C. Remote Copy
- D. Volume migration

Correct Answer: D

<http://h20195.www2.hp.com/V2/GetPDF.aspx%2F4AA4-2922ENW.pdf>

Peer Motion on HP StoreVirtual Storage: Volume migration Peer Motion on HP StoreVirtual Storage allows a system administrator to move an HP StoreVirtual volume from one cluster to another, online, without having to reconfigure the host or applications. This is done by simply editing the properties of a volume, selecting the Advanced tab, and choosing a new cluster from the cluster drop-down box. The blocks that make up the volume on the original cluster will begin to migrate to the new cluster, and the LeftHand OS will automatically redirect and proxy requests for blocks to the proper cluster as the data migration is underway. When the migration is complete the iSCSI sessions to the new cluster from the host are automatically restored (assuming the new cluster's virtual IP address has been added to the iSCSI configuration of the host server). A typical use case for Peer Motion could be a volume that contains data for an application that has increasing performance needs. If The volume started out on an MDL SAS cluster, a storage administrator could use Peer Motion to move the volume to a SAS-based cluster. If the volume is on a SAS cluster, the storage administrator could choose to add more nodes to the cluster to provide more performance for the volume, or they could choose to move the volume to an even higher performing tier, such as an SSD-based cluster.

Peer Motion on HP StoreVirtual Storage: Cluster swap The virtualization of storage within an HP StoreVirtual cluster means that the rules about data being tied to physical hardware resources no longer applies. This virtualization allows volumes to be moved dynamically between different physical hardware clusters, and also allows for a feature called cluster swap--the ability to remove existing storage nodes from a cluster and replace them with new storage nodes, online,

with no loss of data or data availability.

In one operation, data from the old storage nodes is moved to the new storage nodes, and all IO is properly directed to

the correct node. Upgrading to newer, faster, or larger storage nodes does not require any downtime, providing a clear, well-defined strategy for future expansion and growth. As an example, a customer might start out with a cluster of 8 drive systems. As the customer adds more applications and workload to the cluster, they could reach the Performance or capacity limit of the nodes. They could easily migrate to nodes with 12 or more drives to increase capacity and performance, without having to bring any applications offline.

#### QUESTION 5

A customer storage infrastructure consists of eight HP StoreVirtual 4000 nodes in a cluster, connected to an HP 2910-24G al network environment. Server virtualization is done using VMware vSphere 5.1 on six hosts across two sites. Which drawbacks must the customer consider when upgrading the solution? (Select two.)

- A. When adding more nodes in the cluster, additional 1Gb network ports have to be added in each node.
- B. When using more than eight nodes in a cluster, a 10 Gb connection is recommended.
- C. When upgrading to VMware version 5.1, the iSCSI multipathing driver has to be configured.
- D. When using a server across the sites, VMware Site Recovery Manager is needed.
- E. When using 10 Gb the customer has to implement new network switches.

Correct Answer: BE

Recommended network switches for HP StoreVirtual 4000 Storage HP Networking has an extensive portfolio of Ethernet switches that are ideally suited for iSCSI deployments. These switches are designed to deliver high-performance, low-latency, and wire-speed Layer 2 to 4 network services. HP Networking top of rack series of switches offer unmatched combination of 1GbE and 10GbE ports density, high availability architecture, Intelligent Resilient Framework (IRF) technology as well as a full range of Layer 2 and or Layer 3 features depending on switch selection. These switches are built to support open and industry-standards networking protocol. These switches can be deployed within the network core or as a highperformance switch in the convergence layer or network edge of SMB and enterprise networks. Listed below is a selection of recommended top of rack models. These are the 3800, 5830, 5920, and 6600 series.

Another recommended switching platform is the HP Networking 2920 series, to learn more visit [hp.com/go/networking](http://hp.com/go/networking).  
<http://h17007.www1.hp.com/docs/products/4aa4-5213enw.pdf>

Networking 2910 <http://www8.hp.com/pt/pt/products/networking-switches/product-detail.html?oid=3901673#!tab=specs>

Recommended switch infrastructure for an HP P4000 SAN HP does not recommend any particular switch for use with HP P4000 SANs. However, there is a set of minimum switch capabilities that make building a high-performance, high-availability storage network a relatively easy and cost effective task. The following are three commonly recommended HP switches, but ultimately you will need to follow the recommended switch capabilities in Table 1 below which provides guidance for general switch selection based on your specific needs. As a rule of thumb, any enterprise-class managed switch typically has the capabilities required for most customer installations.

HP E2910 al Switch Series (10/100/1000Base-T and 4 x optional 10GbE)

HP A5810-48G Switch (10/100/1000Base-T and 2 x 10GbE)

HP E6600 Switch Series (10/100/1000Base-T and 10-GbE SFP+)