IT认证电子书

质　量　更　高　　服　务　更　好

半年免费升级服务

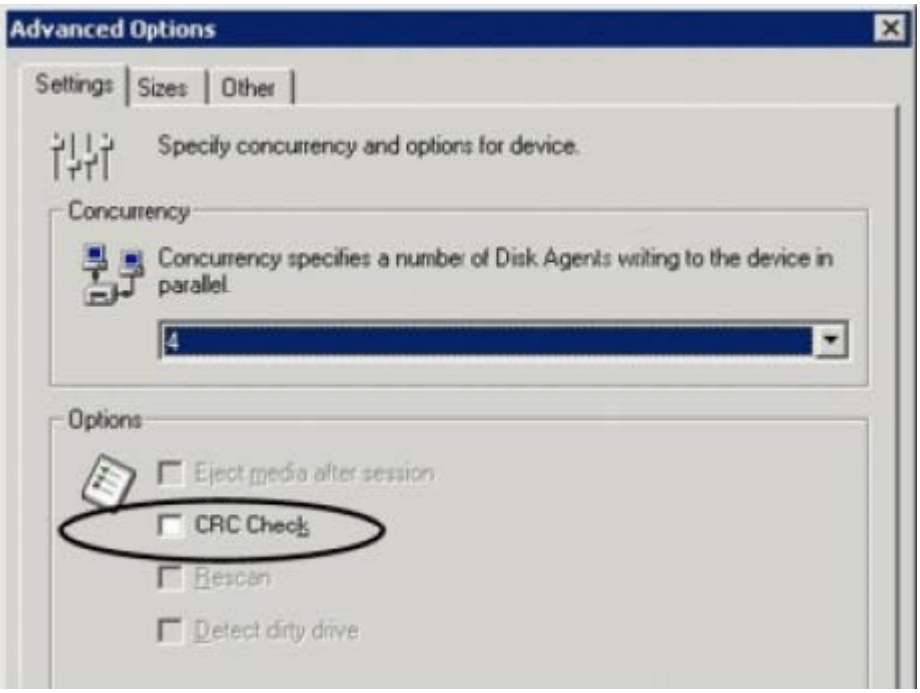
http://www.itrenzheng.com

Exam : **HP0-J64**

Title : Designing HP Enterprise Storage Solutions

Version : Demo

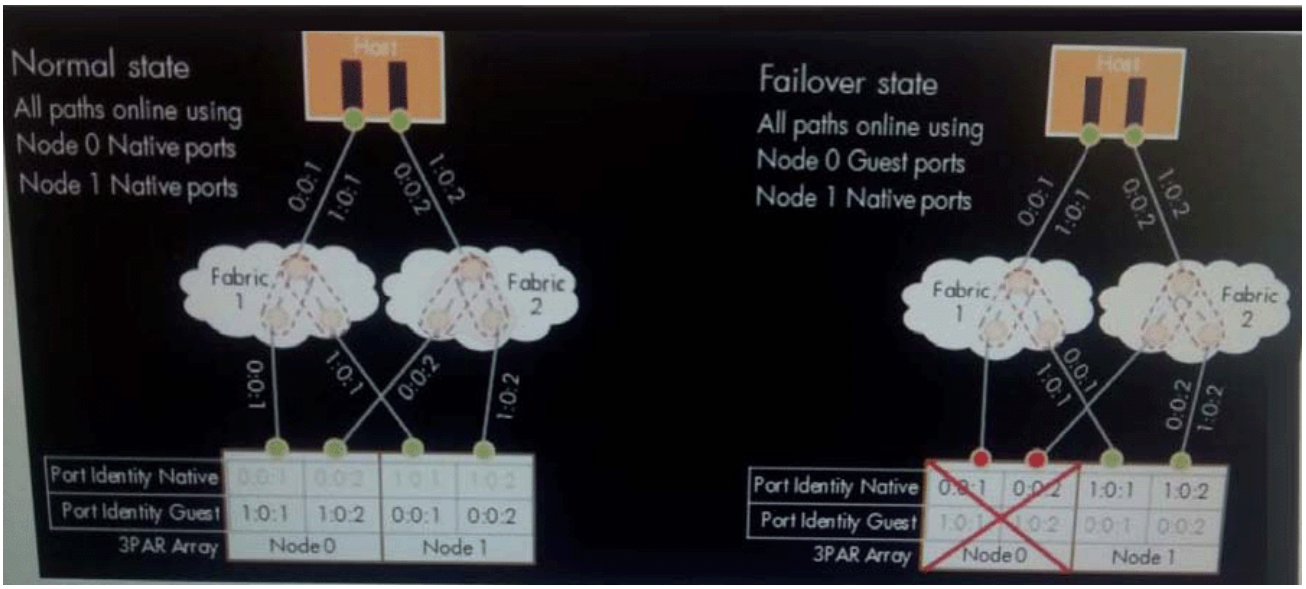
1.On which entity is a Cyclic Redundancy Check (CRC) function repformed when using the HP StoreOnce Backup System?
A. frame
B. transferred file
C. chunk
D. backup job
Answer: D
Explanation:
Page 66
http://h20566.www2.hp.com/portal/site/hpsc/template.BINARYPORTLET/public/kb/docDisplay/resource.process/?spf_p.tpst=kbDocDisplay_ws_BI&spf_p.rid_kbDocDisplay=docDisplayResURL&javax.portlet.begCacheTok=com.vignette.cachetoken&spf_p.rst_kbDocDisplay=wsrp-resourceState%3DdocId%253Demr_na-c01116958-2%257CdocLocale%253D&javax.portlet.endCacheTok=com.vignette.cachetoken
Cyclic redundancy check (CRC)
Cyclic redundancy checking (CRC) is an enhanced checksum function. When this option is selected, CRC checksums are written to the media during backup. CRC checks allow you to verify the media after the backup. Data Protector re-calculates the CRC during a restore and compares it to the CRC on the medium. It is also used while verifying and copying the media. This option can be specified for backup, object copy, and object consolidation operations. The default value is OFF. Figure 49 shows the default configuration parameters for Ultrium tape drives. CRC checking was OFF.
Figure 49. HP SlorageWorks Ultrium 960 advanced opbons - CRC checking OFF



2.A regional market leader in direct financial services runs several call center across the United States and is opening a number of new call center in the near future. The client uses Windows XP on dedicated workstations. The IT infrastructure consists of numerous HP Proliant DL360 G5 and HP Proliant DL360 G6 servers running VMware ESX or SUSE Linux for the database server direct-attached storage and HP

Ultrium tape drives. They want to consolidate the infrastructure. You are meeting with the IT director. Which technical benefits should you emphasize in your presentation of a new solution? (Select two)
A. faster time-to-market f
or new services
B. decreased operational expenditure (OPEX)
C. decreased rack space and power usage
D. greater service margin
E. reduced time-to provision systems
Answer: B,E
Explanation:
http://h20195.www2.hp.com/V2/GetPDF.aspx%2F4AA0-0559ENW.pdf
Simplify your data center; make it more flexible, efficient, and less expensive to operate. Tom Joyce, GM and SVP HP Converged Systems, explains how HP Converged Infrastructure can turn your IT into a business advantage.

3.A company's Leas SAN Architect considers HP 3PAR StoreServ a Tier 2 solution due the requirement for node reboot during Inform Operating System upgrades.
You present the HP 3PAR Persistence Port feature to the customer to address their concerns. (Refer to the exhibit.)



Which crucial characteristics are true about the HP 3PAR Persistence Port feature? (Select two)
A. The host MPIO software must be reset to restarted after a failover scenario to restore the correct path balance
B. HP 3PAR Persistent Port requires additional failover zone for each node's guest World Wide Name (WWN)
C. HP 3PAR Persistent Port will maintain connectivity during 3PAR mode upgrade or 3PAR node failure even with a single path host
D. HP 3PAR Persistent Port requires a minimum to two paths per each World Wide Name (WWN) with additional 1:1 zones
E. One a two node array, the HP 3PAR Persistence Port minimum setup requires each fabric switch to be physically connected equally to each in a node pair

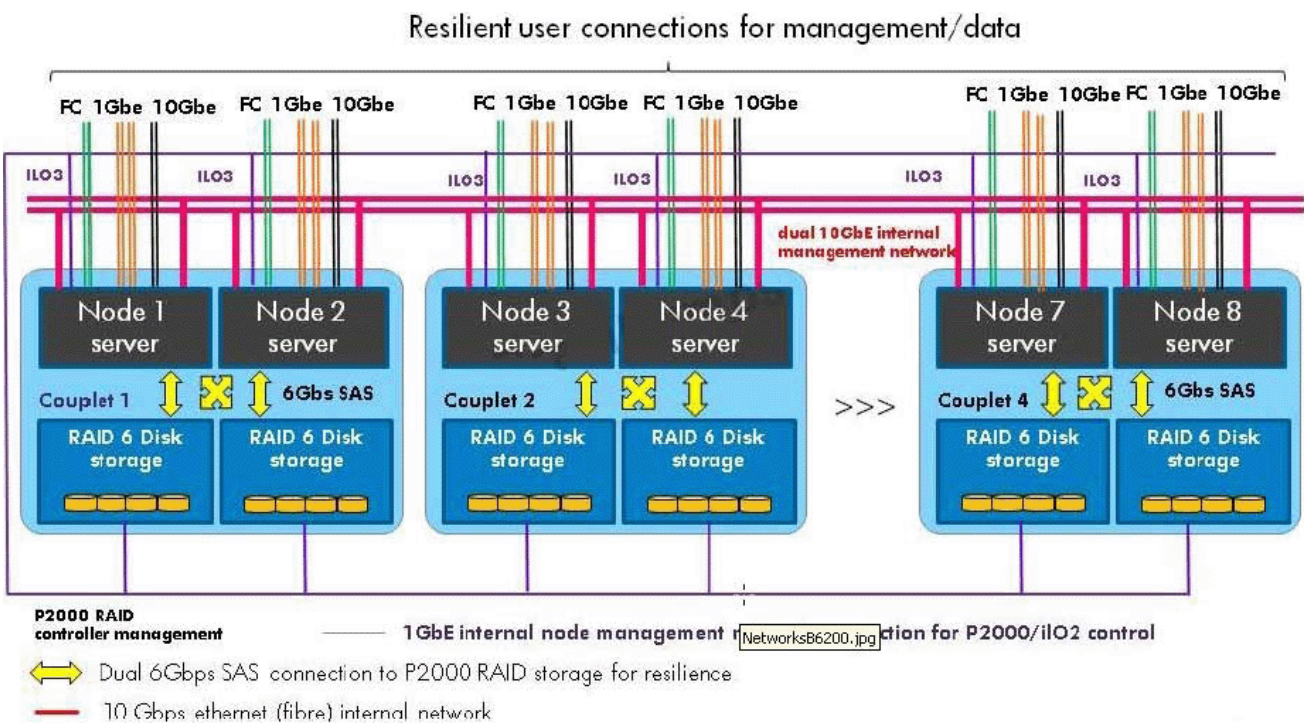
Answer: C,E
Explanation:
http://www8.hp.com/h20195/v2/GetPDF.aspx%2F4AA4-4545ENW.pdf Features and benefits: With the release of HP 3PAR OS version 3.1.2, HP has introduced new functionality called “Persistent Ports” that supports non disruptive online software upgrades and recovery from node failures, in a manner that is transparent to any FC fabric connected host accessing the HP 3PAR StoreServ. The Server HBA ports may be zoned to only a single array Node’s port WWN or it may be zoned to both.

4.A customer wants to implement a new backup solution. The environment is predominantly Fibre Channel with Windows 2008, Linux hosts, and a number of HPUX hosts attached to a 10 GbE network. They have expressed an interest in the HP StoreOnce technology and its integration with HP Data Protector.
When designing an HP StoreOnce solution for this environment, what needs to be considered?
A. Catalyst integration is only supported on Windows and HPUX hosts.
B. Catalyst gateway are used on the HP-UX hosts.
C. Linux hosts requires Catalyst gateway
D. Fibre Channel hosts may only use VTL emulation.
Answer: D
Explanation:
http://h20628.www2.hp.com/km-ext/kmcsdirect/emr_na-c03478346-1.pdf
http://h20195.www2.hp.com/V2/GetPDF.aspx%2F4AA4-1776ENW.pdf
http://www.hp.com/hpinfo/newsroom/press_kits/2012/HPDiscover2012/HPSD_Discover_StoreOnce_Fact_Sheet.pdf

Comparison table of emulations; showing key features and when to use

Emulation	Key Features	Best used in	Comments
Virtual Tape	Uses virtual tape drives and virtual slots to emulate physical tape libraries	Enterprise FC SAN environment (B6200 and 4xxx series). HP StoreOnce also supports iSCSI VTL (4xxx and 2xxx series)	Tried and tested, well understood but lacks sophistication. Uses NetBackup Robot and Drives device type
NAS (CIFS/NFS shares)	NAS shares can be easily configured and viewed by the operating system	Specific environments that do not support tape emulation backup or prefer to backup directly to disk. In some cases the licensing may be lower cost for NAS shares as a backup target.	This is a NAS target for backup - not recommended for random NAS file type access. Uses NetBackup Basic Disk device type
OST with StoreOnce Catalyst	NetBackup has total control over the HP StoreOnce appliance, providing source based deduplication, replication control, improved DR etc.	Environments that require a single management console for all backup and replication activities and the ability to implement federated deduplication*	Requires HP OST 2.0 plugins to be installed on NetBackup Media servers Uses NetBackup OpenStorage device type

Each node has two 8Gb FC connections (used for VTL only), two 10GbE and four 1GbE Ethernet connections (used for NAS shares or Catalyst stores). Figure 4 illustrates these physical connections.



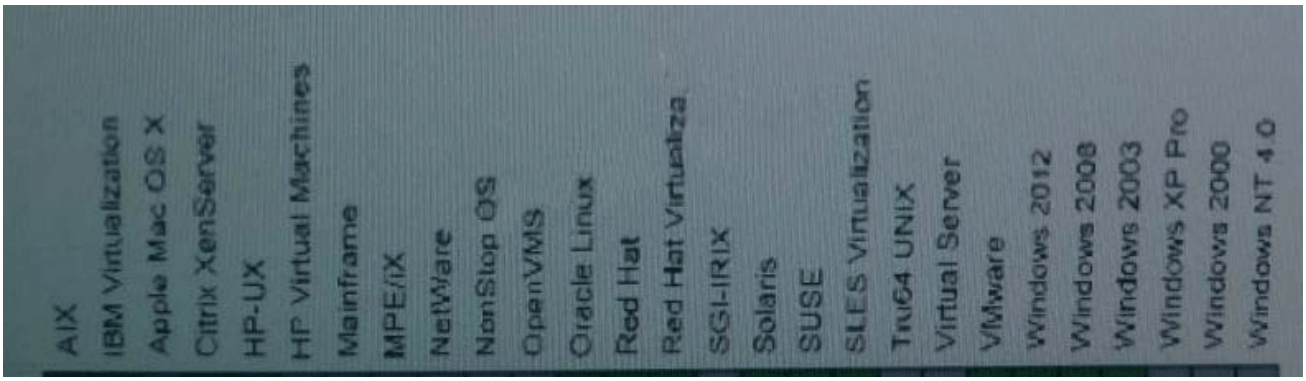
5.A pharmaceutical company is planning to replace their existing SAN environment with new HP 3PAR StoreServ array. They run a multi-vendor data center and need to support applications running under multiple operating systems. They must support AIX, VmWare and Microsoft Windows.
10800FC-duo (exhibit):

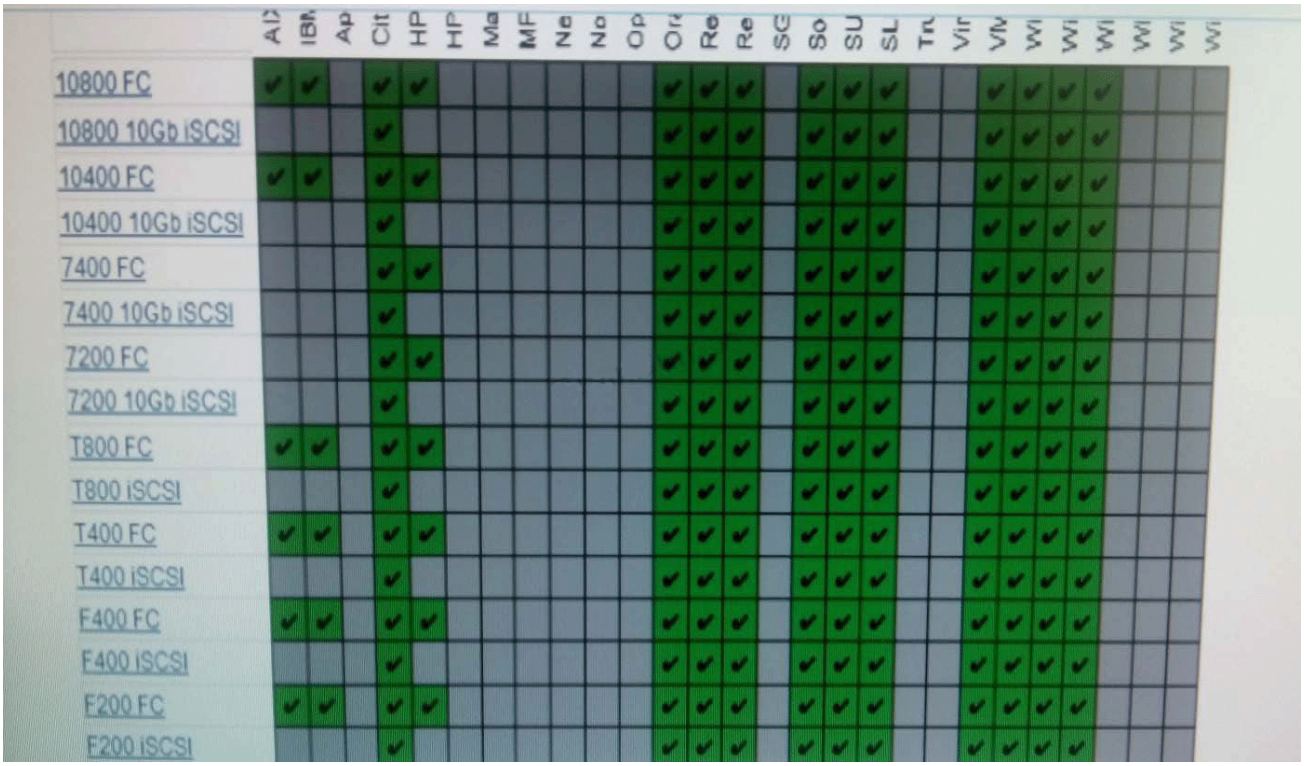
	AIX	IBM Virtualization	Apple Mac OS X	Citrix XenServer	HP-UX	HP Virtual Machines	Mainframe	MPE/iX	NetWare	NonStop OS	OpenVMS	Oracle Linux	Red Hat	Red Hat Virtualization	SGI-IRIX	Solaris	SUSE	SLES Virtualization	Tru64 Unix	Ubuntu	Virtual Server	VMware	Windows 2012	Windows 2008	Windows 2003	Windows XP Pro	Windows 2000	Windows NT 4.0
10800 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
10800 10Gb FCoE													✓									✓						
10800 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
10400 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
10400 10Gb FCoE													✓									✓						
10400 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
7450 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
7450 10Gb FCoE													✓									✓						
7450 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
7400 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
7400 10Gb FCoE													✓									✓						
7400 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
7200 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
7200 10Gb FCoE													✓									✓						
7200 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
T800 FC	✓	✓		✓	✓							✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
T800 iSCSI				✓								✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
T400 FC	✓	✓		✓	✓							✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
T400 iSCSI				✓								✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
F400 FC	✓	✓		✓	✓							✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
F400 iSCSI				✓								✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
F200 FC	✓	✓		✓	✓							✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
F200 iSCSI				✓								✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			

A pharmaceutical company is planning to replace their existing SAN environment with a new HP 3PAR S to and need to support applications running under multiple operating systems.

They must support AIX, VMware versions of Microsoft Windows - Explore HP 3PAR StoreServ Storage HP 3PAR StoreServ Storage interoperability:

- HP 3PAR StoreServ 10000 Storage was previously known as HP P10000 3PAR Storage System
- Storage array models 10400 and 10800 were previously Known as P10000 (V400) and P10000 (V800) respectively
- HP 3PAR OS 3.1.1 was previously known as InForm OS 3.1.1
- For Recovery Manager products (RMV, RME, RMS, RMO) and other host-based product supported configurations, please refer to the 3PAR Array Software page.





Referring to the exhibit, which HP 3PAR StoreServ array would meet their needs?

A. HP StoreServ 7400 FC

B. HP StoreServ 10800 iSCSI

C. HP StoreServ T400 iSCSI

D. HP StoreServ 108000 FC

Answer: A

Explanation:

	AIX	IBM Virtualization	Apple Mac OS X	Citrix XenServer	HP-UX	HP Virtual Machines	Mainframe	MPE/iX	NetWare	NonStop OS	OpenVMS	Oracle Linux	Red Hat	Red Hat Virtualization	SGI-IRIX	Solaris	SUSE	SLES Virtualization	Tru64 Unix	Ubuntu	Virtual Server	VMware	Windows 2012	Windows 2008	Windows 2003	Windows XP Pro	Windows 2000	Windows NT 4.0
10800 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
10800 10Gb FCoE													✓									✓						
10800 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
10400 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
10400 10Gb FCoE													✓									✓						
10400 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
7450 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
7450 10Gb FCoE													✓									✓						
7450 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
7400 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
7400 10Gb FCoE													✓									✓						
7400 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
7200 FC	✓	✓		✓	✓						✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
7200 10Gb FCoE													✓									✓						
7200 10Gb iSCSI				✓								✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓			
T800 FC	✓	✓		✓	✓							✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
T800 iSCSI				✓								✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
T400 FC	✓	✓		✓	✓							✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
T400 iSCSI				✓								✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
F400 FC	✓	✓		✓	✓							✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
F400 iSCSI				✓								✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
F200 FC	✓	✓		✓	✓							✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			
F200 iSCSI				✓								✓	✓	✓		✓	✓	✓				✓	✓	✓	✓			

6.Which HP 3PAR InForm Operating System feature allows you to create point-in-time clones with independent service-level parameters?

A. Virtual Copy

B. Smart Copy

C. Remote Copy

D. Full Copy

Answer: D

Explanation:

http://www8.hp.com/us/en/products/storage-software/productdetail.html?oid=5044394#!tab=features

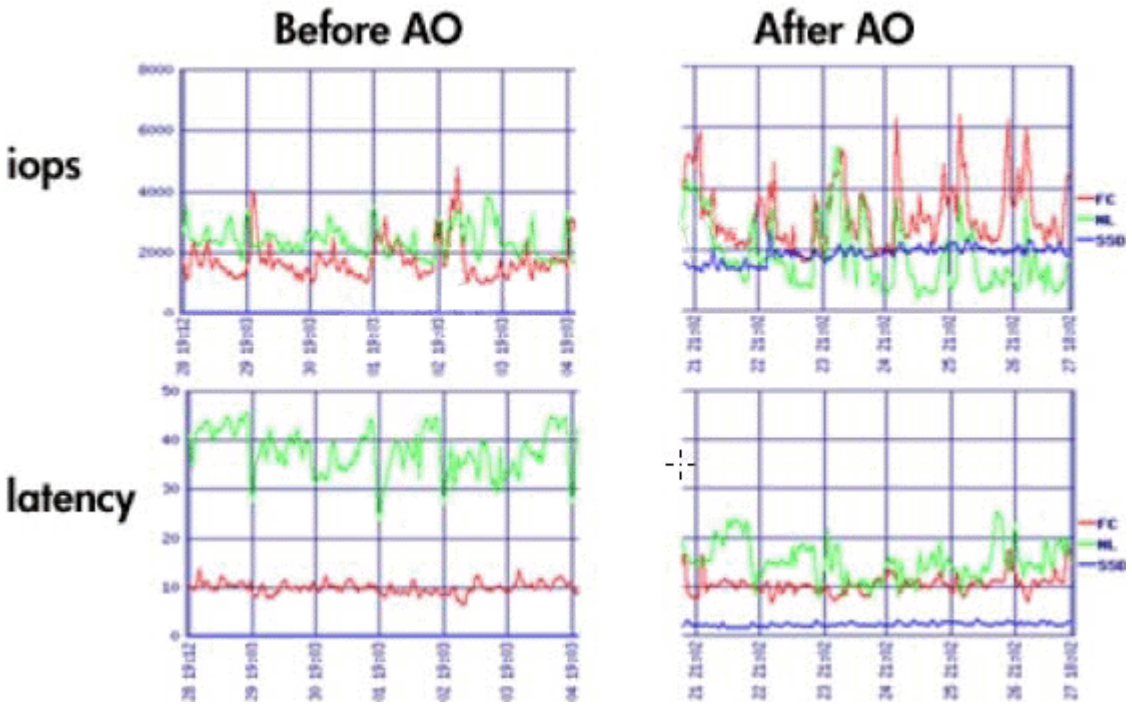
Data Protection and Copy Space Reclamation Features Improve Capacity Utilization HP 3PAR RAID MP (Multi-Parity) uses Fast RAID 6 and the accelerated performance of the HP 3PAR ASIC to prevent data loss as a result of double disk failures. Performance levels are maintained within 15% of RAID 10 and with capacity overheads comparable to popular RAID 5 modes.

HP 3PAR Full Copy is an HP 3PAR Operating System Software feature that allows you to create thin

aware, point-in-time clones with independent service level parameters which can be rapidly resynchronized with base volumes as needed.
The HP 3PAR Thin Copy Reclamation feature keeps your storage lean and efficient by reclaiming unused space resulting from the deletion of virtual copy snapshots associated with virtual copy and remote copy volumes.

7.A company is experiencing performance issues on their four node HP StoreServ 10800 configured with 256x 300 GB Fibre Channel drives. A System Reporter analysis reveals that single tier of Fibre Channel storage is under a lot of I/O pressure from an explosion of VMware servers running high I/O messaging applications used to track package routes daily in an Oracle database. There are 40x 50GB thin provisioned volumes that make up 90% of mostly read I/O activity during regular business hours. The customer is upset and need a solution to quickly increase performance for these critical applications. Which solution should you propose to cost-effectively resolve this issue?
A. Upgrade with 256 addition 300 GB drives and Adaptive Optimization to automatically move high I/O volume regions to a RAID 10 CPG for better I/O performance
B. Utilize Peer Motion to non-disruptively move the offending work load to an SSD optimized HP 3PAR StoreServ array.
C. Upgrade with 32x 100GB SSD drives and Adaptive Optimization configured for performance-based placement in two storage tiers.
D. Upgrade with 2 additional nodes and double host-facing Fibre Cannes ports to archive better I/O caching across all array nodes when accessing small volumes
Answer: C
Explanation:
Customer case study This section describes the real benefits that a customer derived from using HP 3PAR Adaptive Optimization. The customer had a system with 96 300 GB 15k rpm FC drives and 48 1 TB 7.2k rpm NL drives. The customer had 52 physical servers connected and running VMware with more than 250 VMs. The workload was mixed (development and QA, databases, file servers) and they needed more space to accommodate many more VMs that were scheduled to be moved onto the array. However, they faced a performance issue: they had difficultly managing their two tiers (FC and NL) in a way that kept the busier workloads on their FC disks. Even though the NL disks had substantially less performance capability (because there were fewer NL disks and they were much slower), they had larger overall capacity. As a result, more workloads were allocated to them and they tended to be busier while incurring long latencies. The customer considered two options: either they would purchase additional 96 FC drives, or they would purchase additional 48 NL drives and 16 SSD drives and use HP 3PAR Adaptive Optimization to migrate busy regions onto the SSD drives. They chose the latter and were pleased with the results (illustrated in Figure 7).

Figure 7. Improved performance after adaptive optimization



Before HP 3PAR Adaptive Optimization as described in the charts-and even though there are fewer NL drives -they incur greater IOPS load than the FC drives in aggregate and consequently have very poor latency (~40 ms) compared with the FC drives (~10 ms). After HP 3PAR Adaptive Optimization has executed for a little while, as shown in the charts on the right, the IOPS load for the NL drives has dropped substantially and has been transferred mostly to the SSD drives. HP 3PAR Adaptive Optimization moved ~33 percent of the IOPS workload to the SSD drives even though that involved moving only 1 percent of the space. Performance improved in two ways: the 33 percent of the IOPS that were serviced by SSD drives got very good latencies (~2 ms), and the latencies for the NL drives also improved (from ~40 ms to ~15 ms). Moreover, the investment in the 16 SSD drives permitted them to add even more NL drives in the future, because the SSD drives have both space and performance headroom remaining.
http://h20195.www2.hp.com/V2/GetPDF.aspx%2F4AA4-0867ENW.pdf

8.A pharmaceutical company is planning to replace their existing SAN storage platform with new HP 3PAR StoreServ array. They tell you that they have a very mixed environment, but have no inventory or diagram of the existing environment.
Which tool gathers information to determine compatibility of your proposed array?
A. HP Configuration Collector
B. HP SAN Designer
C. HP System Reporter
D. HP SAN Visibility
Answer: D
Explanation:
HP SAN Visibility
SAN Visibility is a complementary software utility for HP customers that helps with SAN Analysis, SAN Diagnostics and SAN Optimization. SAN Visibility saves you considerable time, money, and effort by

automating inventory activities and providing a quick and accurate view of your SAN topology. SAN Visibility has an automated report generation feature that produces recommendations, topology diagrams, and informative SAN element reports for switches, host bus adapters and storage array connectivity. SAN Visibility runs on any Windows desktop or laptop which has network connectivity to a switch within your SANhttp://h18006.www1.hp.com/storage/networking/sansolutions.html

HP SAN Designer

SAN Designer is a powerful application to help you design a customized SAN. Configure and design your SAN based on the following attributes: performance, cost, and future growth requirements. SAN Designer helps you select the fabric characteristics as well as the SAN elements allowing for a complete SAN Design. The reporting feature of SAN Designer generates topology diagrams, required SAN components, and additional recommendations for your SAN Design. SAN Designer is a complementary software utility for HP customers and runs on a Windows desktop or laptop.
http://h18006.www1.hp.com/storage/networking/sandesigner.html

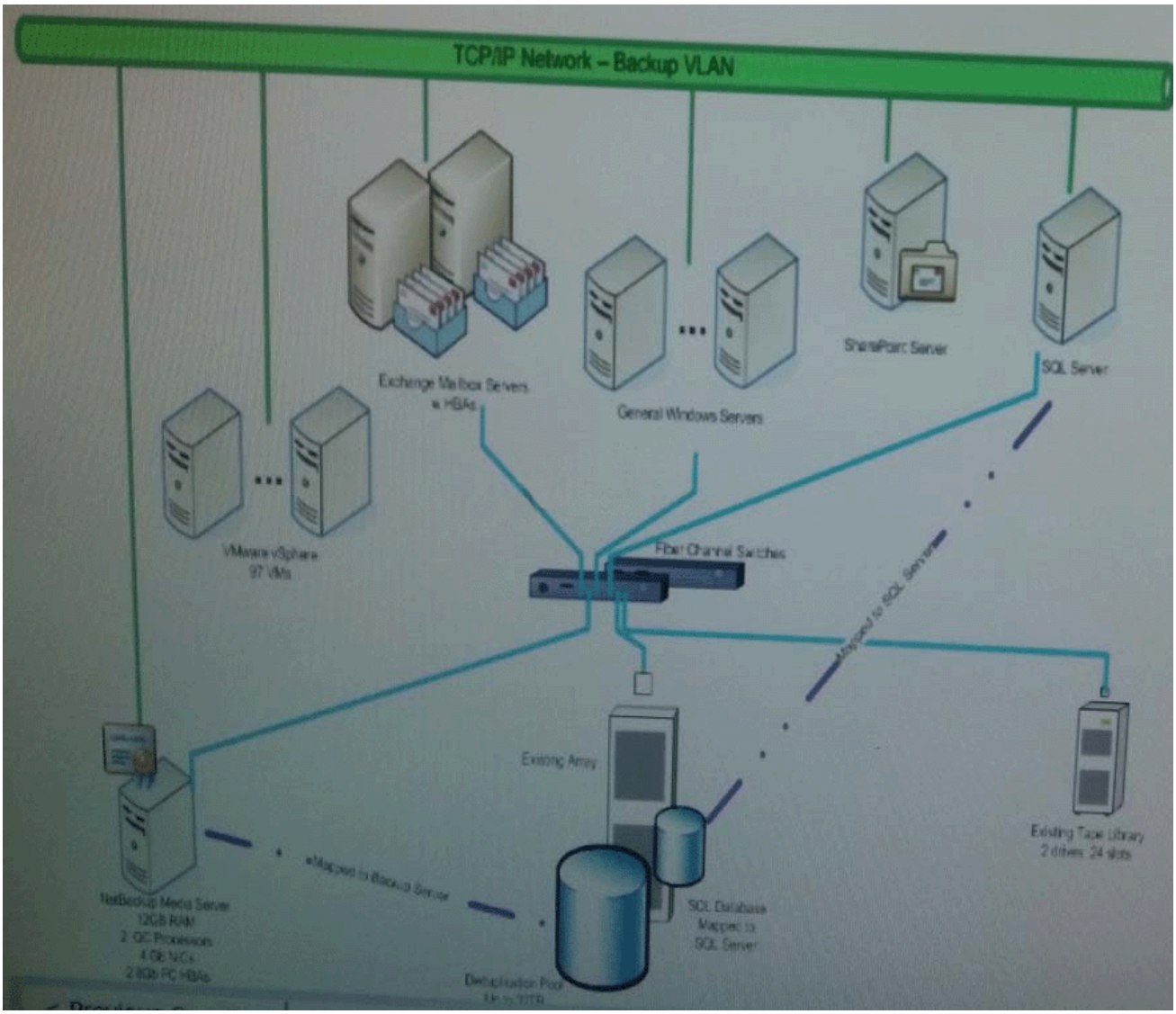
9.Which HP 3PAR InForm Operating System feature provides the ability to analyze how volumes on the array are using physical disk space and makes intelligent adjustments to maintain optimal volume distribution when new hardware is added to the system?
A. HP 3PAR Peer Motion
B. HP 3PAR Autonomic Rebalance
C. HP 3PAR Adaptive Optimization
D. HP 3PAR System Reporter
Answer: B
Explanation:
http://www.hp.com/hpinfo/newsroom/press_kits/2012/HPDiscoverFrankfurt2012/3PAR7000_Op_System_DS.pdf
HP 3PAR Autonomic Rebalance HP 3PAR Autonomic Rebalance optimizes the use of future capacity expansions without requiring administrator intervention. It analyzes how volumes on the HP 3PAR Storage System are using physical disk space and makes intelligent, autonomic adjustments to ensure optimal volume distribution when new hardware is added to the system.
(Thank You - Antonio) HP 3PAR Adaptive Optimization Software is a granular, policy-driven, autonomic storage tiering software solution. It delivers service level optimization for enterprises and cloud data centers and helps reduce cost, while increasing agility and minimizing risk.
HP 3PAR System Reporter Do you need to gather and track historical system information for your HP 3PAR Storage Systems? HP 3PAR System Reporter Software is a flexible, intuitive, web-based performance and capacity management tool that aggregates fine-grained performance and capacity usage data for HP 3PAR Storage Systems, regardless of location. The highly customizable, robust reporting offers straightforward report sharing and report scheduling which simplifies performance monitoring and assists in gathering data for optimization and planning. System Reporter enables quick troubleshooting and isolation of performance issues minimizing business impact. System Reporter proves particularly useful for service providers and enterprises about detailed information for service level administration. The ability to create reports by user group supports charge back and meeting service level agreements. Works with HP 3PAR Adaptive Optimization Software to enable policy management of autonomic storage tiering resources.

10.Your city government customer has been using HP Eva 6400s for the last three years. While the arrays have performed fairly well and the city particularly likes the ease of management, they have found several situations where the arrays were lacking in functionality. To support multiple organizations with in the city government, they have had to utilize multiple arrays to ensure separation of management and data access. The city also had some issues handling their utility billing and VMware environments in a single array and added a separate array to ensure adequate performance.
Which HP Storage solution should you recommend to meet the requirements of city?
A. HP StoreVrtual
B. HP StoreAll
C. HP P9500
D. HP 3PAR StoreServ
Answer: D
Explanation:
StoreServ and HP 3PAR can start small and grow affordably and non-disruptively with multi-tenant and federated, efficient reduce acquisition and operational costs by 50% and autonomic save up to 90% of administrator time. Help for novice storage users in a Windows, VMware or Linux environments for self-installation.

11.A company is replacing their outdated storage environment with an HP 3PAR StoreServ 7000 at the primary site and also in their co-location facility.
These HP 3PAR 7000 Software Suites are included in the proposed package:
- HP 3PAR 7000 Operating System Software Suite
- HP 3PAR 7000 Reporting Software Suite
- HP 3PAR 7000 Application Software Suite for VMware
- HP 3PAR 7000 Replication Software Suite
What can be accomplished with the proposed software solution? (Select two)
A. taking a time-consistent snapshot of their Oracle volumes every 4 hours to protect against corruption
B. reduction in the amount of physical storage needed with the uses of thin technologies
C. autonomic storage tiring as their image files become dated
D. replication of all critical data to the co-location site for disaster recovery
E. frozen, point-in-time copies of employee data for compliance
Answer: A,E
Explanation:
http://www.hp.com/hpinfo/newsroom/press_kits/2012/HPDiscoverFrankfurt2012/3PAR7000_Op_System_DS.pdf
Software suites for HP 3PAR StoreServ 7000 Storage
HP 3PAR Operating System Software Suite: (Option B)
Required for all new HP 3PAR StoreServ 7000 systems, this foundational software suite gives you everything you need to get up and running quickly and efficiently. This suite includes the HP 3PAR Operating System, Management Console, Host Explorer, and SmartStart software designed to get you off to a quick start with your new HP 3PAR StoreServ 7000 system. It also includes all of the platform's thin software offerings Thin Provisioning, Thin Conversion, and Thin Persistence. Other highlights of this suite include Full Copy, autonomic rebalancing capabilities that help you optimize the use of future capacity expansions, and support for standard multi pathing software for high availability in clustered environments.

A 180-day license for online import is included to enable migration from HP EVA storage
This optional suite bundles:
HP 3PAR Replication Software Suite (Proposed package)
This optional suite bundles HP 3PAR Virtual Copy with Remote Copy Software, both also sold separately for all HP 3PAR StoreServ 7000 models. Included in this bundle is Peer Persistence, which enables peer federation for VMware clusters to improve overall availability. Licensed based on system capacity
HP 3PAR Reporting Software Suite (Proposed package)
Enhance system visibility and reporting capabilities with this optional suite, which includes HP 3PAR System Reporter Software and the 3PARInfo application, licensed on a per-system basis
HP 3PAR Application Software Suite for VMware (Proposed package)
Everything you need to make your VMware environment more agile and efficient including HP 3PAR Recovery
Manager for VMware, Host Explorer for VMware, VASA support, and three essential plug-ins: the VMware Site Replication Manager (SRM) Adapter, the HP 3PAR VAAI plug-in, and the 3PAR management plug-in for VMware View. This suite is optional and licensed on a per-system basis
HP 3PAR Data Optimization Software Suite
HP 3PAR Security Software Suite (option E)
HP 3PAR Application Software Suite for Exchange
HP 3PAR Application Software Suite for Oracle (option A)
HP 3PAR Application Software Suite for SQL

12.Refer to the exhibit.



Your customer wants to do a refresh on their storage environment.

They have given you a drawing to show the existing environment and told you the following:

- Their preferred SAN fabric is Fibre Channel-based and the switches are only a year old.
- They want to purchase a single block storage solution that services all applications.
- The NetBackup deduplication pool has provide to be an expensive option, and a new backup target is required
- Budget is limited

Which Hp storage product should you prepare to discuss in your initial meeting with this customer? (Select two.)

A. HP StoreEasy 3830 Storage

B. HP StoreVirtual 4330 Storage

C. HP StoreOnce B6200 Backup

D. HP StoreOnce 2620 Backup

E. HP StoreServ 7400 Storage

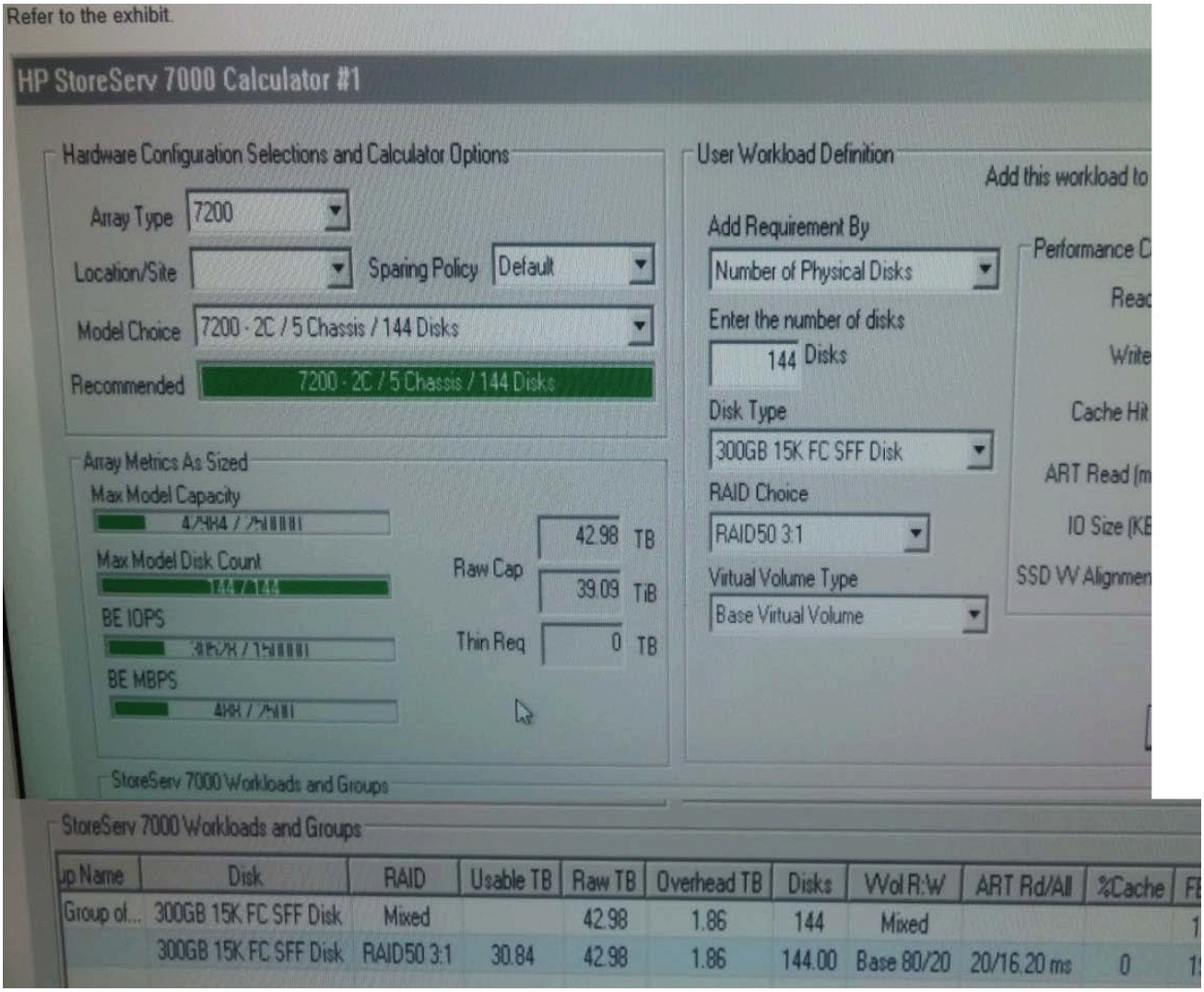
F. HP StoreOnce 4430 Backup

Answer: C,F

Explanation:

HP StoreOncehttp://www8.hp.com/us/en/products/data-storage/data-storage-products.html?compURI=1225909#.UpU3-dK8D6A
Their preferred SAN fabric is Fibre Channel-based and the switches are only a year old
$ HP StoreOnce 2620 Backup ((iSCSI Connectivity)
$$ HP StoreOnce 4000 Backup (FC Connectivity and iSCSI Connectivity)
$$$ HP StoreOnce B6200 Backup ((FC Connectivity)
HP StoreOnce and StoreEver Enterprise Backup Solutions (EBS) Hardware/Software Compatibility Matrix
- They want to purchase a single block storage solution that services all applications. (Question)
- and a new backup target is required (Question)
HP StoreServ is not technology backup but StorageArray
$ HP StoreEasy 3830 Storage (FC Connectivity and iSCSI Connectivity)
http://h18004.www1.hp.com/products/quickspecs/14435_na/14435_na.pdf
$$ HP StorageVirtual 4330 Storage (FC Connectivity and iSCSI Connectivity)
http://www8.hp.com/pt/pt/products/disk-storage/productetail.html?oid=5335854#!tab=specs
$$$HP StoreServ 7400 Storage (FC Connectivity and iSCSI Connectivity)
http://h18000.www1.hp.com/products/quickspecs/14433_div/14433_div.pdf

13.Which field should you change to increase useable capacity and still meet the remaining requirements?



A. Read %
B. RAID choice
C. Number of disk
D. Disk type
Answer: B
Explanation:
https://roianalyst.alinean.com/ent_02/AutoLogin.do?d=11840239389855150 Possible Raid Choice, or Number of disk 95% Raid Choice

14.You have Proposed HP 3PAR StoreServ thin provisioning capability to achieve a 40 % reduction in raw storage requirements. The customer considers all storage vendors thin provisioning equal.
What are the competitive differentiators of HP 3PAR StoreServ thin provisioning? (Select two)
A. fills empty volume space with zeros for space reclaim identification
B. does not require resource pools
C. provides equivalent performance to a normally provisioned volume
D. features dynamic RAID level conversion based on peak write demand statistics to maintain performance
E. automatically converts fully provisioned volumes to thin volumes

Answer: A,C

Explanation:

- **Start Thin:** HP 3PAR Thin Provisioning is the most comprehensive thin provisioning software solution available. Since its introduction in 2002, 3PAR Thin Provisioning has become widely considered the gold standard in thin provisioning. It leverages HP 3PAR's dedicate-on-write capabilities to make organizations more efficient and more green, allowing them to purchase only the disk capacity they actually need and only as they actually need it.
- **Get Thin:** With HP 3PAR Thin Conversion, a technology refresh no longer requires a terabyte-for-terabyte replacement, but instead offers the opportunity to eliminate up to 75% of your legacy capacity, simply and rapidly. This savings alone can save up to 60% on the cost of a technology refresh. HP 3PAR Thin Conversion software makes this possible by leveraging the zero-detection capabilities within the HP 3PAR ASIC and Thin Engine - HP 3PAR's unique virtualization mapping engine for space reclamation - to power the simple and rapid conversion of inefficient, "fat" volumes on legacy arrays to more efficient, higher-utilization "thin" volumes on any HP 3PAR Storage System featuring Thin Built In™.
- **Stay Thin:** With 3PAR Thin Persistence, customers can now leverage next-generation space reclamation technology to minimize storage TCO and maintain environmental responsibility targets they have worked so hard to achieve.

15.The Converged Infrastructure Architect of small aviation firm issued an RFP to three vendors for a new Greenfield virtualization infrastructure.

The RFP has the following design criteria:

- 8 blades x86 virtualization servers, 2x6 core West mere Processors, 128 GB of RAM
- vCenter Server or a physical host, 1x6 core, 16Gb of RAM, MS Windows 2008R2 license
- licenses for vSphere, five for each server
- scale-out-style, iSCSI-based storage, approximately 100 TB usable
- CIFS access required for a third-party application that is on four physical hosts
- 7x24 /4-hour response support - capacity to support host and storage 10 Gb Ethernet connectivity.

Which products satisfy the design requirements?

A. HP StoreSure 2000FC array + HP StoreEasy 3830 Gateway Storage

B. HP StoreVirtual VSA Software + HP StoreEasy 3830 Gateway Storage

C. HP StoreVirtual 4330 array+ HP StoreEasy 3830 Gateway Storage

D. HP StoreSure 2000FC array+ HP StoreAll 9300 Gateway Storage

Answer: A

Explanation:

Request for proposal (RFP)

Capacity to support host and storage 10 Gb Ethernet connectivity:

HP StoreVirtual VSA Software + HP StoreEasy 3830 Gateway Storage

HP StoreVirtual 4330 array 1 GbE iSCSI (4) Ports Optional upgrade to 10GbE iSCSI (2) Ports HP StoreSure 2000FC array: Fibre Channel, Combo FC/iSCSI, 6Gb SAS, and 1Gb or 10GbE iSCSI systems HP StoreAll 9300 Gateway Storage, 4 1GbE ports and choice between 2 10GbE or 2 IB ports for customer data network.

iSCSI-based storage, approximately 100 TB usable:

HP StoreVirtual 4330 array:

Capacity 2.4TB Starting and 1152TB Maximum, Drive description (720) SFF SAS or (256) SFF MDL SAS or (1152) LFF MDL SAS.

HP StoreVirtual VSA Software: HP StoreVirtual VSA now featuring adaptive optimization with sub-volume

tiering automation to optimize performance and cost for dynamic workloads plus flexible product offerings ranging from 4-to-50 TB capacity
StoreAll 9300 Gateway Storage:
(Not support StoreSure 2000FC) Storage expansion options: Attach to HP 3PAR StoreServ, EVA or XP arrays
Storage Capacity:
7.2TB raw capacity (5.7TB after RAID) with 24 300GB Enterprise SAS 10K SFF drives, 21.6TB raw capacity (17.1TB after RAID) with 24 900GB Enterprise SAS 10K SFF drives, 48TB raw capacity (32TB after RAID) with 24 2TB Midline SAS 7.2K LFF drives, 72TB raw capacity (48TB after RAID) with 24 3TB Midline SAS 7.2K LFF drives and Expansion Capacity Block storage capacity of 7.5TB raw capacity (6TB after RAID) with 25 300GB Enterprise SAS 10K SFF drives, 22.5TB raw capacity (18TB after RAID) with 25 900GB Enterprise SAS 10K SFF drives, 48TB raw capacity (32TB after RAID) with 24 2TB Midline SAS 7.2K LFF drives ,72TB raw capacity (48TB after RAID) with 24 3TB Midline SAS 7.2K LFF drives
HP StoreEasy 3830 Gateway Storage:
Storage expansion options: Attach to 3PAR StorServ, EVA P6000, P9000 or P2000 arrays. Compatible operating systems: Microsoft Windows (CIFS), Linux, UNIX, VMware.
HP StoreSure 2000FC array:
Modular Smart Array (MSA) solutions 2312fc, 2324, and P2000 and focuses on implementing and managing an MSA SAN solution. iSCSI-based storage, Capacidade 384TB Maximum Including expansion, depending on model