



**Vendor:** EMC

**Exam Code:** E20-322

**Exam Name:** Technology Architect Solutions Design

**Version:** DEMO

### QUESTION 1

You need to perform an assessment of your customer's backup infrastructure that is using EMC NetWorker. You will be collecting information such as:

Backup clients  
Backup servers  
Storage nodes  
Amount of data backed up over time  
Configured devices  
Clients that are not part of the backup network

Which tool should you use to gather this information?

- A. EMCNetWorker
- B. EMC Backup Advisor
- C. Advanced Reporting
- D. VisualSRM

**Answer: D**

### QUESTION 2

A prospective customer has four applications (A, B, C, and D) with various LUNs they wish to snapshot. The LUN sizes are as follows:

Application A:  
10 GB  
20 GB  
10 GB

Application B:  
25 GB  
50 GB

Application C:  
150 GB  
5 GB  
5 GB

Application D:  
100 GB  
25 GB

According to SnapView best practices, how large will the total Reserved LUN Pool be, assuming only SnapView is used on only these LUNs?

- A. 40 GB
- B. 80 GB
- C. 20 GB
- D. 150 GB

**Answer: B**

### QUESTION 3

A prospective customer has presented you with multiple applications. All applications have high write activity levels and unpredictable growth patterns. The applications are currently hosted on direct-attached storage in a RAID 1 configuration. They are concerned with making too many changes at one time in their environment.

The prospect has asked you to justify your recommendation of RAID 1/0 on the CLARiiON configuration you are proposing. How do you respond to the request?

- A. RAID 1 is less flexible for growing LUNs than RAID 1/0
- B. RAID 1 is unavailable in current CLARiiON configurations
- C. RAID 1 LUNs are unable to utilize write cache
- D. RAID 1 has a higher write penalty than RAID 1/0

**Answer: A**

#### **QUESTION 4**

ABC.com would like to create a large pool of "scratch space" disk for their development environment. They are considering using high-capacity SATA drives in a RAID 5 configuration on their CLARiiON array. General performance is not an issue. However, the customer does not want to experience long periods of degraded performance in the case of RAID rebuilds.

Which CLARiiON feature will help the customer prevent this problem?

- A. Proactive Hot Sparring
- B. Quality of Service Manager
- C. Asymmetric Logical Unit Access
- D. Vault Load from Peer

**Answer: A**

#### **QUESTION 5**

ABC.com plans to roll out several experimental large-scale host clusters with low-cost blades for computationally intensive workloads. All IS operations are in a single data center (50 m x 40 m). They use direct-attached storage on all hosts. For better manageability of storage, they are considering a SAN infrastructure with CLARiiON storage (CX3-40s). Preliminary design calls for 200 server blades. Cost and performance are both critical considerations, but high availability is not. Your initial design has single-pathed FC connectivity to each host. Under sustained load, each server blade can sustain up to 4,000 IOPS at 16 KB per I/O. Which additional information do you need before you can attempt a preliminary, high-level SAN design for this environment?

- A. Server model/make, OS type and revision, clustering software
- B. Breakdown of I/O traffic by customer application
- C. Customer's current disaster recovery strategy
- D. Expected cache hit rates on the storage arrays

**Answer: A**

#### **QUESTION 6**

Click the calculator icon in the upper left-hand corner.

A customer is deploying a Microsoft Exchange 2003 environment and has requested assistance with the associated disk design. They are deploying Exchange for 850 users with an average of 3 I/Os per user. They expect a 60% read and 40% write distribution.

The customer would like to know the number of disks required for both RAID 5 and RAID 1/0 DMX configurations with 10k rpm drives.  
How many disks are required for each configuration type?

- A. For RAID 5, 38 disks; for RAID 1/0, 24 disks
- B. For RAID 5, 31 disks; for RAID 1/0, 20 disks
- C. For RAID 5, 28 disks; for RAID 1/0, 18 disks
- D. For RAID 5, 43 disks; for RAID 1/0, 28 disks

**Answer: A**

#### **QUESTION 7**

During a proof of concept, ABC.com who is using a CLARiiON array with four Windows servers notices I/O performance problems on a specific server. Looking at Navisphere Analyzer data for the LUNs in question and comparing the statistics with the System Monitor (PerfMon) I/O counters for the same Windows physical disks, the I/O statistics in Navisphere Analyzer are significantly higher than the System Monitor shows. What is the likely reason for this performance issue?

- A. Windows file systems were not aligned on LUNs with diskpart or diskpart
- B. CLARiiON Write Cache has been disabled on the affected LUNs
- C. Windows file system caching is interfering with CLARiiON caching
- D. CLARiiON cache watermark has been reached and is destaging

**Answer: A**

#### **QUESTION 8**

ABC.com's storage environment is organized into four single-director fabrics. The directors are MDS-9509s with 64 switch ports in each. No more than 70% of available ports are in use. The customer needs hosts in each fabric to access storage in the other three fabrics. It is acceptable for host-to-storage traffic to traverse up to one hop. What is the least disruptive SAN solution that you should consider?

- A. ISLs between adjacent directors to create a partial mesh
- B. Convert to core/edge single fabric, isolating all storage to the core director
- C. ISLs between adjacent directors to create a partial mesh and enable trunking
- D. ISLs between all directors to create a full mesh

**Answer: D**

#### **QUESTION 9**

ABC.com currently has a large storage install base with many hosts. A large number of the hosts allocated their storage several years ago and have poor utilization rates. The customer has engaged EMC to design a new storage solution to replace their current storage. Which feature can be incorporated into the new design to help increase utilization?

- A. Compatible Flash
- B. SATA II drives
- C. Virtual Provisioning
- D. Virtual LUN technology

**Answer: C**

**QUESTION 10**

A new Rainfinity customer has just implemented a VLAN configuration. The customer is concerned about how the servers in a private VLAN can see clients in a public VLAN. Which technology makes this possible?

- A. Rainfinity Bridging
- B. Rainfinity STP
- C. Rainfinity SID Translator
- D. Rainfinity Proxy

**Answer: A**

**QUESTION 11**

ABC.com recently deployed a NSX into their production Oracle environment using NFS for access. They are now concerned that their availability is compromised. Which configuration would you recommend for the highest availability?

- A. 1:1 Data Mover active-to-standby ratio; FSN comprised of single network ports
- B. 3:1 Data Mover active-to-standby ratio with trunked network ports
- C. 3:1 Data Mover active-to-standby ratio with single network ports
- D. 1:1 Data Mover active-to-standby ratio; FSN comprised of network trunked ports

**Answer: D**

**QUESTION 12**

ABC.com would like to use Replication Manager along with a Celerra solution. They have asked if there are any limitations when accessing the replica. The replica of the destination LUN is designed to be used for content distribution, data mining, testing, or other applications that offload activity from the production LUN.

Which consideration should be identified to the customer?

- A. A replicaCelerra LUN is read/write
- B. A replicaCelerra LUN is for backup only
- C. A replicaCelerra LUN is read-only
- D. A replicaCelerra LUN is not accessible for this purpose

**Answer: C**

**QUESTION 13**

ABC.com has implemented a second Brocade director into their environment. They have moved several hosts and one of their two storage arrays onto the new director. When a large batch cycle was run, the customer experienced queuing on the directors when previously there was none. The customer discovered the following during their analysis of the issue. The hosts running the batch cycle used storage from both arrays.

The only LUNs having problems came from the array attached to the new director. When the batch process was re-run with all LUNs made available through the original director, no problems were encountered.

What would you recommend to solve the performance problem?

- A. Utilize Brocade ISLTrunking to optimize the ISL traffic
- B. Add departmental switches to the fabric, creating a core/edge design
- C. Implement additional Brocade ISLs
- D. Change FSPF costs

**Answer: A**

#### **QUESTION 14**

Using SAN Copy, a source Windows LUN of 100 GB has been copied to a 200 GB target LUN. After assigning the target LUN to the new host and running Disk Administrator to recognize the drive, what must be done to the Windows partition on the new host to see the LUN as 200 GB?

- A. Rundiskpart and set the partition size to 200 GB
- B. Nothing; partition will be seen as 200 GB immediately
- C. Run thefdisk command and set the partition size to 200 GB
- D. Run the format command and set the partition size to 200 GB

**Answer: A**

#### **QUESTION 15**

ABC.com is planning to migrate their data and Windows hosts from an existing CLARiiON array to the DMX in their enterprise SAN. The customer would like to perform the migration with the least amount of downtime and no host involvement. What is the best migration method to achieve the desired objectives and design considerations?

- A. Use OpenMigrator/LM for Windows to migrate the host file system to the DMX
- B. Use SAN Copy Live Migration to live pull data from theCLARiiON to the DMX
- C. Use SAN Copy Live Migration to push the data from theCLARiiON to the DMX
- D. Use Open Replicator Live Migration to do a live pull from theCLARiiON to the DMX

**Answer: D**

#### **QUESTION 16**

ABC.com has a mix of Windows, Solaris, and HP-UX servers connected to a CX3-80. They want to move the data for the Solaris hosts that is currently on RAID 1/0 groups to RAID 5 groups. Which tools should be used to determine the appropriate RAID 5 disk configuration?

- A. Workload Analyzer,iostat, and sar
- B. Navisphere Analyzer, System Monitor, and sar
- C. Navisphere Analyzer, iostat, and sar
- D. Navisphere CLI, Smarts, and sar

**Answer: C**

#### **QUESTION 17**

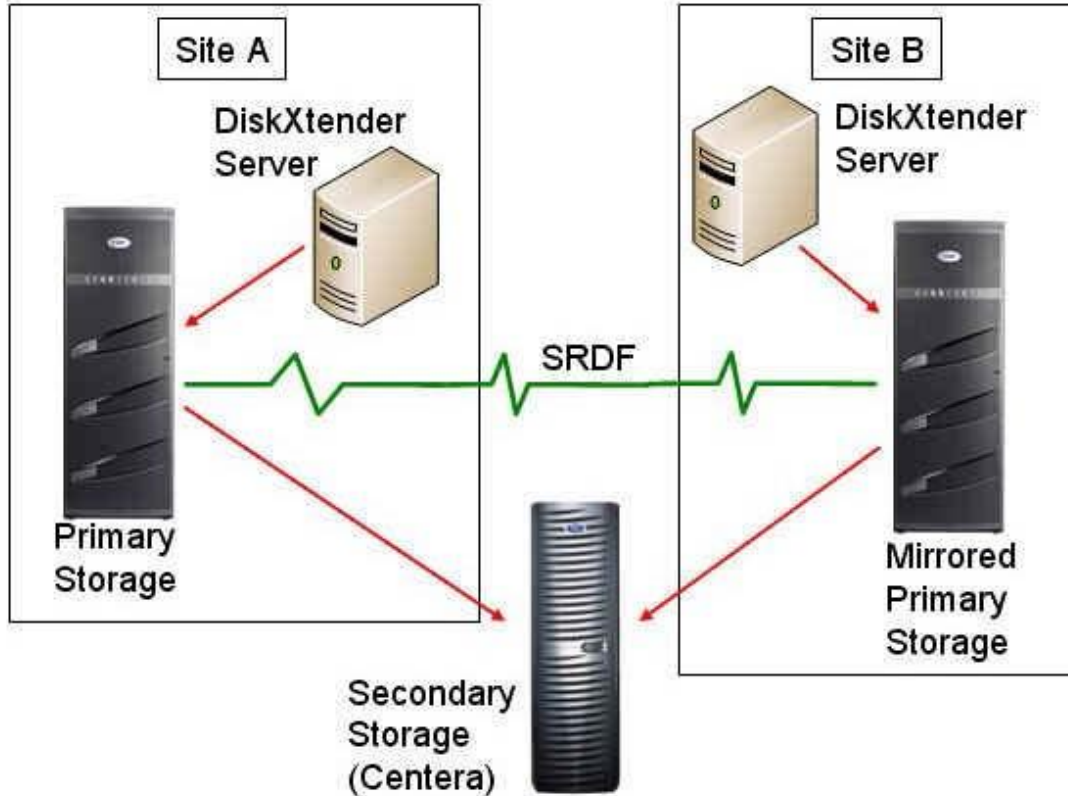
ABC.com will be implementing retention periods on an EMC Centera using the Governance Edition. What happens to the data when a retention period has expired?

- A. It may be deleted but may not be shredded
- B. It will be deleted automatically
- C. It will be deleted automatically and shredded automatically
- D. It may be deleted and may optionally be shredded

**Answer: D**

**QUESTION 18**

You work as an administrator at ABC.com. You study the exhibit carefully.



ABC.com is using EMC DiskXtender for Windows at Site A to archive data to an EMC Centra. They are mirroring the primary storage using SRDF. EMC DiskXtender is also installed on Site B to archive the mirrored primary storage. They are archiving the data from both sites to the same virtual pool on the EMC Centra.

Due to new organizational policy, they need to have two copies of the archived data. Which configuration changes should you suggest to the customer to ensure they are meeting the requirements?

- A. Use multi-target migration to migrate data from both sites
- B. Archive the data to two different EMC Centeras
- C. Enable collision avoidance on the EMC Centera
- D. Archive the data to different pools on the EMC Centera

**Answer: B**

**QUESTION 19**

ABC.com has acquired a company that did not use any form of mailbox management. They now

have several hundred users with large mailboxes of 2,000 or more messages. I/O performance has been negatively impacted since the move of the users. The customer has asked how to quickly address the performance issue without re-architecting the environment.

Which suggestion should you make to the customer?

- A. Implement 12 new disks and use metavolume striping to increase the disk count
- B. Turn on Outlook Cached Mode to reduce I/O requirements
- C. Move the large mailboxes to a new Exchange organization
- D. Implement a new SMTP queue and dedicate it to the new users

**Answer: B**

#### **QUESTION 20**

You have suggested a solution to ABC.com that requires SRDF/A to a remote disaster recovery (DR) facility. The customer asks you if there are any security implications to this solution. Which security concern should you discuss with the customer?

- A. Both sites must have an equivalent level of protection
- B. Storage administrators will now have access to remote replication
- C. Encryption will be required on the WAN links
- D. Encrypted data may impact performance

**Answer: A**