

# IBM

## Exam C4090-958

### Enterprise Storage Technical Support V3

Version: 9.0

[ Total Questions: 143 ]

**Question No : 1**

A customer with a DS8800 believes that additional host ports need to be connected into the SAN environment. Which resource or application would be used to determine whether the customer's suspicions are correct?

- A. IBM Tivoli NetCool
- B. Tivoli Storage Productivity Center
- C. Storage Manager Performance Monitor
- D. D58999 Performance Monitoring and Tuning Redbook

**Answer: B**

**Question No : 2**

A customer purchased Metro Mirror synchronous replication capabilities between two DS8870 systems. What is the maximum supported distance for Metro Mirror?

- A. 150 km (93 21 miles)
- B. 300 km (186 4 miles)
- C. 200 km (124 27 miles)
- D. 250 km (155 34 miles)

**Answer: B**

**Question No : 3**

A customer wants to implement a 3-site continuous copy solution with three DS8800 systems. A three-site Business Continuity (BC) license and TotalStorage Productivity Center for Replication (TPC-R) are already installed.

Which action should be completed before using the TPC-R GUI to configure the Metro/Global Mirror?

- A. Select the action Start H1-H2->H3
- B. Configure the CIMON agent on the DS8800
- C. Add copy sets to the Metro/Global Mirror session
- D. Ensure paths exist between the 3 DS8800 systems

**Answer: D**

**Question No : 4**

IBM has been called in to enhance an existing EMC environment with an IBM SVC. Data has been collected and needs to be verified that the SVC will handle the projected workload.

Which tool should be used to validate the proposed solution?

- A. STAT tool
- B. TCO now for Disk
- C. Capacity Magic
- D. Disk Magic

**Answer: D**

**Question No : 5**

Which of the following is an attribute of the Real-time Compression Appliance?

- A. can be used to compress block storage
- B. can be used to compress NFS and CIFS files
- C. is good at compressing .mpg and .mp3 files
- D. is good at handling thousands of small files (4k in size)

**Answer: B**

**Explanation:** Appending small changes (up to a few kilobytes) might increase the compressed file size above the original file size. This can occur in files that are smaller than ten megabytes

**Question No : 6**

A customer is installing a new backup solution. An existing tape library based on TS1 120

Tape Drives that was installed on 7 September 2006 is proposed as part of the solution due to lack of customer funds. Additionally, because of local regulations, any tapes transported between locations require encryption.

What advice should the technical specialist give?

- A. Keep the TS1120 drives and implement a chargeable upgrade to enable encryption
- B. Keep the TS1 120 drives and implement a chargeable upgrade to make them TS1 130 drives
- C. Replace the TS1120 drives with TS1 140 drives, as the TS1120 drives will not support encryption
- D. Replace the TSI 120 drives with TS1 140 drives, as the TS1 120 drives support only AES2S6 encryption

**Answer: A**

#### Question No : 7

A customer has recently installed a SONAS system and now wants to set up backups to the virtual tape library (VTL) using their existing Symantec NetBackup data management application. The server running the NetBackup application has 1 GE connectivity, while a different server with 10 GE connectivity is used as the NDMP tape server.

Which options offers the least impact on the customer's current infrastructure?

- A. Set up a remote SONAS NDMP configuration
- B. Configure a three-way SONAS NDMP implementation
- C. Connect the SONAS directly to the VTL's fibre channel ports
- D. Install a dedicated 8 Gbps fiber channel switch for connectivity

**Answer: B**

#### Question No : 8

A customer has just learned that a brand new TS7650G ProtecTIER installation will not run as a virtual tape library with Symantec's NetBackup OST feature concurrently.

When should this implementation situation have been discovered?

- A. The Pre-Sales site survey
- B. The Pre-Install Technical and Delivery Assessment
- C. The Solution Communication Vehicle (PTSCV) spreadsheet
- D. The pre-qualification task performed by the subject matter expert for the disk arrays

**Answer: B**

Reference:[http://arrowecsmidmarket.typepad.com/files/ibm\\_technical\\_and\\_delivery\\_assessment\\_070120091-1.pdf](http://arrowecsmidmarket.typepad.com/files/ibm_technical_and_delivery_assessment_070120091-1.pdf)

**Question No : 9**

A large multi-site company is considering the purchase of a DS8000 system and would like to build a Virtual Desktop Infrastructure for approximately 400 users. Cost is a concern.

What should the technical specialist propose to help avoid performance problems during peak times?

- A. Thin Provisioning
- B. SSD drives with Easy Tier
- C. Adding an IBM FlashSystem 810
- D. FlashCopy

**Answer: B**

**Question No : 10**

Which data type will have the best compression ratio with Real-time Compression?

- A. databases
- B. file and print
- C. encrypted data
- D. JPEG images

**Answer: A**

**Question No : 11**

How can a customer view 30 minutes of performance data from the SVC?

- A. Only through a SVC GUI interface
- B. Only through Tivoli Storage Productivity Center
- C. Both Tivoli Storage Productivity Center and SVC GUI interface
- D. Only through the CIMOM and only with Tivoli Storage Productivity Center

**Answer: B**

**Explanation:** The SAN Volume Controller Performance Monitor does not store performance data for later analysis. Instead, its display shows only what happened in the last five minutes. Although this information can provide valuable input to help you diagnose a performance problem in real time, it does not trigger performance alerts or provide the long-term trends that are required for capacity planning. For those tasks, you need a tool, such as IBM Tivoli Storage Productivity Center, to collect and store performance data for long periods and present you with the corresponding reports. For more information about this tool, see Chapter 13, "Monitoring" on page 349.

**Question No : 12**

An XIV Gen3 was ordered with the wrong power option. What must be done to correct this situation?

- A. The system must be returned to the factory for repair
- B. The IBM Certified Engineer can modify the automatic transfer switch
- C. The correct power configuration must be ordered and changed in the field.
- D. The Systems Support Representative can change the power receptacle in the field

**Answer: A**

**Question No : 13**

A customer needs to know how many Global Mirror sessions are supported within a single DS8870. Which information source would have this information?

- A. DS8870 website

- B. DS8870 Redbook
- C. IBM DS6000 Series website
- D. DS8870 quick reference guide

**Answer: B**

**Question No : 14**

Which statement is true about Capacity Magic outputs?

- A. They are input directly into eConfig.
- B. They are used as an input into Disk Magic.
- C. They are used to provide the number and size of drives.
- D. They are used to determine the overall performance of a solution.

**Answer: C**

**Question No : 15**

A customer wants to better understand how much recovered storage space will be gained by implementing Real-time Compression (RTC) on their SAN Volume Controller (SVC). The customer has requested a test method which shows how much space savings could be realized.

Which method would the technical specialist use to show the customer RTC benefit on SVC?

- A. Compress a mirrored copy and compare to the source.
- B. Back a volume to tape and then use compression during the restore
- C. Insert a RTC compression appliance between the SVC and back-end storage
- D. Examine the managed disk group size after compressing the existing volume.

**Answer: A**

**Question No : 16**

A customer requires consolidated problem reporting capability for multiple TS3500 Tape

Libraries, Which of the following would provide this capability?

- A. Implement a IBM TS3000 System Console (TSSC)
- B. Attach a modem to each TS3500 to a single phone line
- C. Configure connectivity to a Hardware Management Console (HMO)
- D. Modify a Machine Reported Product Data (MRPD) file and distribute to all TS3500 libraries

**Answer: D**

**Question No : 17**

A technical specialist is holding a general discussion with a customer who has a large volume of block and file data. The customer tells the specialist that their company's storage maintenance is coming up for renewal and that they are facing pressure from within the company to adopt a Cloud Strategy. The customer's main technical concern is to avoid downtime with migration.

Which solution provides native support for this strategy?

- A. XIV
- B. DS8000
- C. StorwizeV7000
- D. Storwize V7000 Unified

**Answer: D**

**Question No : 18**

When using an SVC with Native IP Replication which of the following is correct?

- A. Requires an optional additional Ethernet adapter
- B. Does not support encrypted or compressed data
- C. Supports only synchronous mirroring
- D. Supports mirroring from SVC to any other members of the Storwize family

**Answer: D**

**Explanation:** The native Internet Protocol (IP) replication feature enables replication between anySVC/Storwize family member running code version 7.2 or higher, using the



built-in networking ports of the cluster nodes. Following a recent partnership with IBM, it uses SANslide technology developed by Bridgeworks Limited of Christchurch, UK. They specialize in products that can bridge storage protocols and accelerate data transfer over long distances. Adding this technology at each end of a wide area network (WAN) Transmission Control Protocol/Internet Protocol (TCP/IP) link significantly improves the usage of the link. It does this by applying patented Artificial Intelligence (AI) to hide latency normally associated with WANs. Therefore, doing so can greatly improve the performance of mirroring services, in particular Global Mirror with Change Volumes (GM/CV) over long distances. More details are provided in 1.4, "SVC/Storwize IP replication in more detail" on page 7.

**Question No : 19**

A customer tells a technical specialist that EMC stated XIV has a double drive failure problem because XIV has a 180 drive RAID group.

What is the best response to this competitive statement?

- A. EMC has double drive failure issues as well.
- B. EMC deploys different drive tapes and sizes making their reliability issues much more complicated.
- C. EMC uses RAID protection. The high load on drives during RAID rebuilds, that cause dual drive failures, do not exist on XIV.
- D. EMC employs wide striping across many RAID groups, so they have the possibility of high data loss in the event of a dual drive failure too.

**Answer: C**

**Question No : 20**

SVC split cluster uses which SVC software function?

- A. FlashCopy
- B. Volume Mirror
- C. Metro/Global Mirror
- D. SmartCloud Virtual Storage Center

**Answer: B**

**Explanation:** The SAN Volume Controller stretched cluster configuration provides a continuous availability platform, whereby host access is maintained in the event of the loss of any single failure domain. This availability is accomplished through the inherent active/active architecture of SAN Volume Controller along with the use of volume mirroring. During a failure, the SAN Volume Controller nodes and associated mirror copy of the data remain online and available to service all host IO. The existing SAN Volume Controller stretched cluster configuration has two locations, each with one node from each I/O group pair. The quorum disks are usually held in a third location. This solution is very successful in the field for many IBM clients. It allows SAN Volume Controller hardware to be geographically distributed, resembling how IBM Metro Mirror is deployed.

**Question No : 21**

On XIV Gen3 what is the internal interconnect between the modules?

- A. Ethernet
- B. InfiniBand
- C. FICON (zHPF)
- D. Fibre Channel

**Answer: B**

Reference:<http://www-01.ibm.com/support/docview.wss?uid=tss1prs4805&aid=1>

**Question No : 22**

What is one of the most important considerations for the number of LUN5 required for optimum performance in an XIV Gen3 Storage System environment?

- A. XIV QOS settings
- B. Application I/O threads
- C. Host multi path configuration