

**Exam : EMC E20-815**

**Title : Symmetrix Business  
Continuity Expert  
Technology Architects**

**Version : Demo**

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1. TXD, LTD wants to have SRDF implemented in its current infrastructure. TXD asked you to validate that it can implement SRDF in a Campus mode without purchasing new equipment. It has two Symmetrix systems; one system has ESCON cards and the other has Free Fiber ports. TXC wants to purchase a new site close by and it needs to know its limitations on the distance. What are three [3] cost effective considerations that you must make in this environment?

- A. Distances that need to be spanned
- B. The need for Fiber Channel to IP conversion equipment
- C. The infrastructure of the site to include ESCON, Fiber Channel, or both
- D. The write I/O profile of the combined applications that will use SRDF for each Symmetrix system

**Answer:** ACD

2. BNF, Inc. currently has a Symmetrix. BNF wants to introduce SRDF through a SAN. What are two [2] Symmetrix RA considerations when implementing SRDF in this environment?

- A. Take in to account any single points of failure
- B. Make sure that the SRDF bit settings are applied
- C. Ensure that the FA processor has both ports available
- D. Ensure that all FA ports on a card are set to switched SRDF

**Answer:** AC

3. What are the three [3] key factors that affect performance when designing a Replication Manager/Local TimeFinder/SNAP implementation?

- A. Application I/O profile
- B. Replication scheduling
- C. Number of Virtual Devices
- D. Number of replicas to keep
- E. Size and placement of storage pool

**Answer:** ACE

4. CKG Corporation will implement an SRDF solution. The SRDF solution will utilize FC-SW from the array and DWDM for replication to a data center 170 kilometers away. Which BB\_Credits allocation is the best practice for this configuration?

- A. Array ports on each end of replication are capable of using high BB\_Credits
- B. Array ports on each end of replication are capable of using limited BB\_Credits
- C. ISL ports on either side of long haul DWDM are capable of using high BB\_Credits
- D. ISL ports on either side of long haul DWDM are capable of using limited BB\_Credits

**Answer:** C

5. You have collected data for an SRDF/A study and presented the results to the customer. They do not understand why the bandwidth requirements are identical for both synchronous and asynchronous. What is

the reason?

- A. The write IO rate is identical; therefore bandwidth is identical
- B. Bandwidth requirement is influenced by remote adapter type
- C. The collection mechanism cannot determine locality of reference
- D. The bandwidth for synchronous and asynchronous are always identical

**Answer: C**

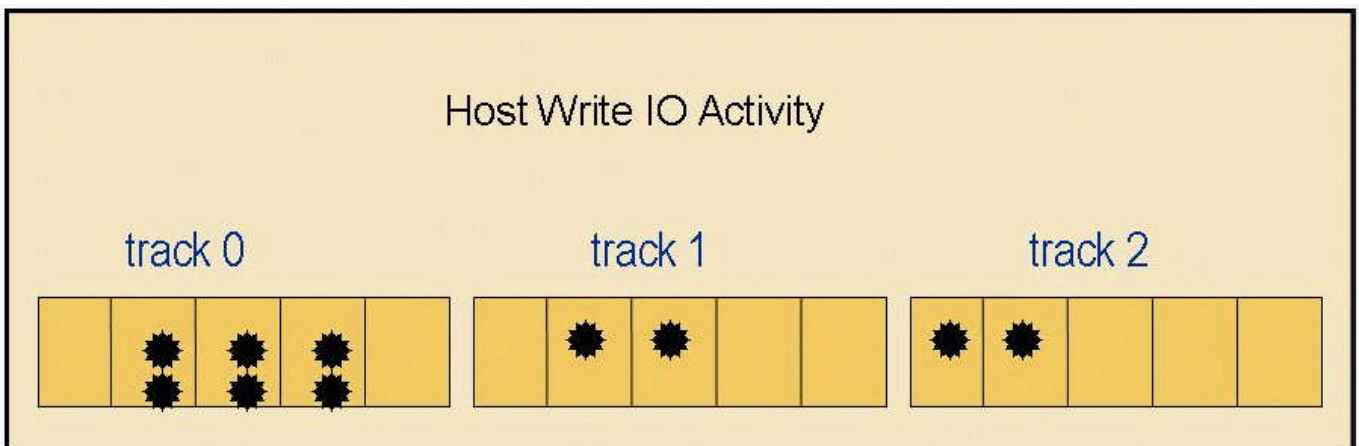
6. In an SRDF/S solution, the host's write response time is longer than that in a non-SRDF/S environment. Which three [3] factors directly affect response time calculations?

- A. Data transfer time
- B. Signal propagation delay
- C. Protocol converter/channel extender delay
- D. Non-SRDF writes to the Source Symmetrix
- E. TimeFinder activity in the Source Symmetrix

**Answer: ABC**

7. Click the Exhibit button.

GRW, Inc. recently converted from SRDF/S to SRDF/A. GRW notices that the SRDF write activity has changed. The diagram shows sample write activity from the host. Using the sample data, how many write I/Os will be sent across the link for both SRDF/S and SRDF/A?



- A. 3 for SRDF/S and 1 for SRDF/A
- B. 7 for SRDF/S and 5 for SRDF/A
- C. 10 for SRDF/S and 3 for SRDF/A
- D. 10 for SRDF/S and 7 for SRDF/A

**Answer: C**

8. Company ABC is considering a DMX2000 as a source for SRDF/AR. The data will be remotely replicated over an OC-12 to a Symmetrix 8830 using a symreplicate cycle. Each array will have two remote adapter ports for SRDF data transfer. The network administrator is trying to determine the network compression factor of the data as it passes through the GIG-E port on the DMX2000. Which factor should be applied to

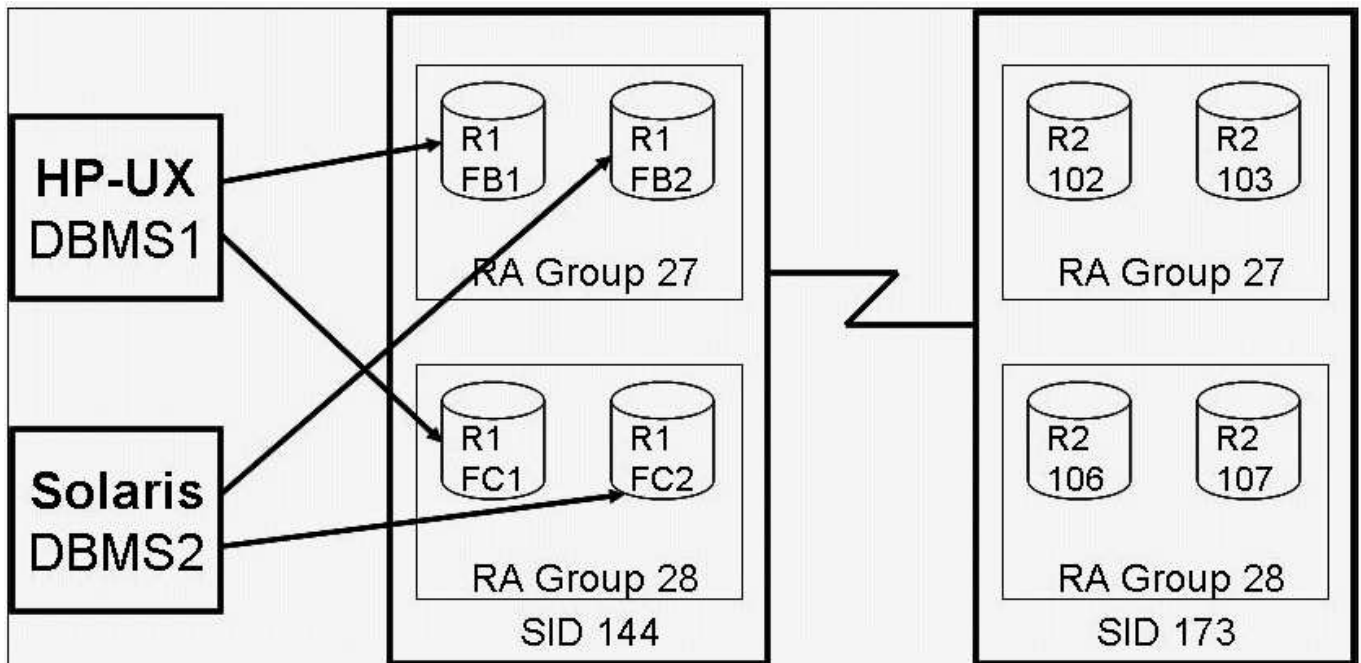
the design?

- A. 0
- B. 1.5:1
- C. 2:1
- D. 3:1

**Answer: A**

9. Click the Exhibit button.

Review the scenario shown in the graphic. BND, Inc. wants to implement SRDF/A with Multi-session Consistency (MSC) for DBMS1. A composite group with FB1, FB2, FC1, and FC2 has been created. This group was enabled for SRDF consistency. What will provide consistency protection for the two DBMS in this scenario?

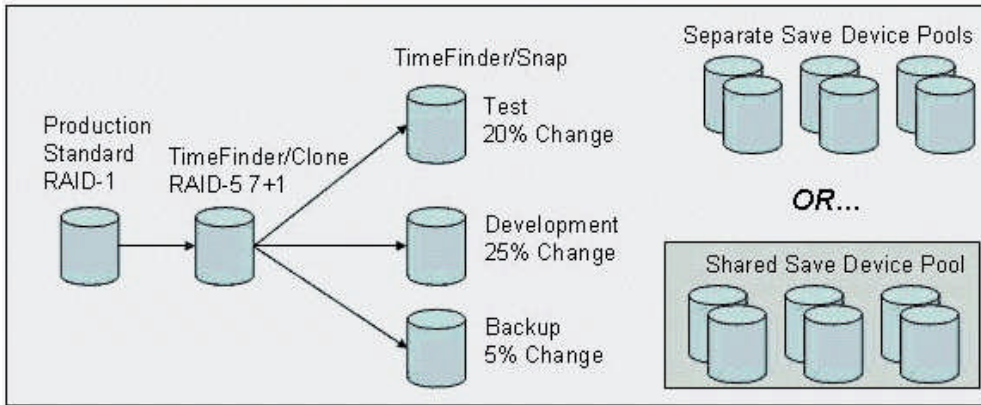


- A. SRDF
- B. Enginuity Consistency Assist
- C. PowerPath on HP-UX or Solaris
- D. RDF Daemon on HP-UX or Solaris

**Answer: D**

10. Click the Exhibit button.

BDC, LTD has a DMX3000 with 5671 Enginuity microcode. You propose the configuration shown in the diagram with either one shared Save Device Pool or separate Save Device Pools for the test, development and backup applications. What are two [2] disadvantages of having separate Save Device Pools instead of one shared Save Device Pool?



- A. Separate pools allows Save Devices of different sizes to be used
- B. The Development team cannot share their data with the Test team
- C. Monitoring and growth management of separate pools is more complex
- D. Easier to charge the Test and Development teams for the amount of space used
- E. If the Development team uses all of their pool space they cannot use the Test team's pool

**Answer:** CE

11. What are three [3] considerations for facilitating the high-speed copy of BCV pairs in a DMX?

- A. Different Disk Adapters
- B. Different Cache Sectors
- C. Different Physical Spindle
- D. Different Front-End Adapter ports
- E. Inner and outer hypens on same physical
- F. Different FC ports on the same Disk Adapter

**Answer:** ACF'

12. XYZ Corporation has a write intensive Oracle 9i 3TB database residing on multiple DMX frames with solutions enabler 5.5 running on an HP server with PVLlinks. Currently redo logs, control files, and datafiles are interspersed in volume groups. XYZ wants to implement local replication to provide hot disk based backups while minimizing or eliminating any disruption to application availability and performance. What is the best practice solution for this environment?

- A. Use PowerPath consistent split; assign TimeFinder Clone volumes, perform split while database is in hot backup mode
- B. Reorganize data layout to separate redo logs and control files from data files, perform PowerPath consistent split with TimeFinder Snap volumes
- C. Reorganize data layout to separate redo logs and control files from data files; assign TimeFinder Clone volumes, perform split while database is in hot backup mode
- D. Reorganize data layout to separate redo logs and control files from data files; perform consistent split with ECA while database is in hot backup mode, Assign TimeFinder snap volumes

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**Answer: C**

13. MTS, Inc. is relocating its systems containing GPS data from a Symmetrix 3830 to a DMX1000. Due to the criticality of the data, minimal host disruption is required. Hosts are running HP-UX and are connected to storage via a SAN infrastructure. SRDF will be used to migrate the data in the background. Which re-configuration option supported by SRDF is the best solution?

- A. Migrate from single hyper volumes to striped meta volumes
- B. Migrate from regular logical volumes to striped logical volumes
- C. Re-distribute hyper volumes across more front-end array ports
- D. Migrate from single hyper volumes to concatenated meta volumes

**Answer: C**

14. HDG, LTD runs an application which resides on multiple Symmetrix frames. HDG wants to use TimeFinder with Solutions Enabler 5.1 to create a consistent restartable image. Which consistency component ensures a successful outcome?

- A. PowerPath
- B. Consistency Groups
- C. Multi-session Consistency
- D. Enginuity Consistency Assist

**Answer: A**

15. RMT Corporation is interested in buying an SRDF over WAN solution. What are two [2] I/O delays that are commonly introduced by WAN solutions?

- A. Distance
- B. Response Time
- C. Protocol conversion
- D. Locality of reference

**Answer: AC**

16. What are the three [3] most important features of the multi-protocol channel director (MPCD) card one needs to consider when designing remote replication solutions using IP?

- A. Tunable Speed Limit
- B. Tunable MTU Setting
- C. Option of selection UDP
- D. TCP Connection Scaling
- E. Direct connectivity to SONET

**Answer: ABD**

17. CHL Corporation has a DMX2000 with 216, 146 GB drives configured with RAID-1 protection. The storage array was recently upgraded to 5671 Enginuity operating system.

The hosts are connected to the storage through FC-SW and run Windows 2000 or Windows 2003 operating system. All of the storage is presented as four-way meta volumes to the hosts.

Due to unexpected growth in storage requirements, CHL is considering changing the protection type from RAID-1 to RAID-5. CHL also plans to upgrade the DMX2000 to fill up all available disk slots.

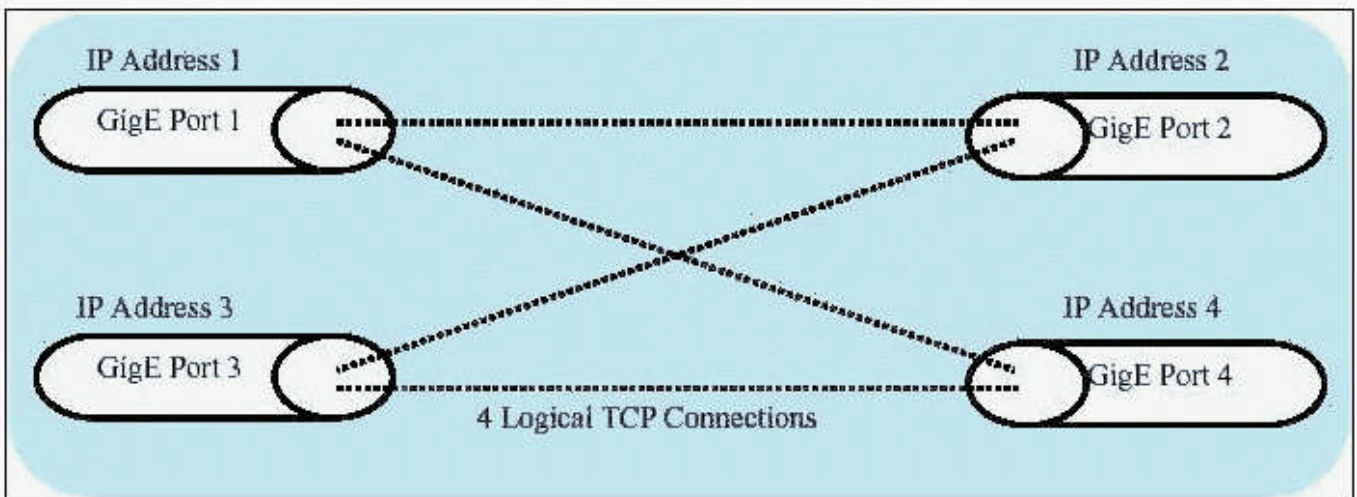
During the conversion and upgrade process CHL wants to migrate to eight-way meta volumes. It would also like to minimize the disruption to production services. Which EMC technology do you recommend?

- A. DRU
- B. SRDF
- C. TimeFinder
- D. Open Replicator

**Answer: A**

18. Click the Exhibit button.

As shown in the diagram, there are four TCP connections between four GigE port pairs. What is the significance of having this configuration while running SRDF in the DMX?



- A. Increased throughput by reducing packet loss
- B. Decreased throughput by increased packet loss
- C. Increased throughput by reducing network latency
- D. Increased throughput by providing Multiple TCP windows

**Answer: D**

19. What is the main benefit of using host based striping?

- A. Multiple disks working in parallel
- B. Span physical drives for availability
- C. Increased performance and availability
- D. Allows concatenated data on a physical device

**Answer: A**

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20. DFB, LTD is deploying new servers in conjunction with a new DMX2000. DFB wants to use RAID-5 and larger volume sizes. Additionally, DFB will redesign their Volume Groups. It would like to keep business disruption to a minimum. What is the best migration strategy?

- A. Tape based restore
- B. Host-Based Offline Copy
- C. Host-Based Online Copy
- D. Symmetrix Migration Services

**Answer: C**