

XtremlO Solutions and Design Specialist Exam for Technology Architects

EMC E20-526

Version Demo

Total Demo Questions: 9

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QUESTION NO: 1

A VMware administrator is preparing ESXi hosts for Fibre Channel connectivity to an XtremIO cluster.

Which practices should be included in the host connectivity design? Select three.

- A. Use independent SAN fabrics
- B. Use single initiator/single target zoning
- C. Configure supported multipathing
- D. Connect every host HBA only to one SAN switch
- E. Disable path failover on the ESXi hosts

ANSWER: A B C

Explanation:

Use independent SAN fabrics, use single initiator/single target zoning, and configure supported multipathing are correct. Independent SAN fabrics provide resiliency against a switch or fabric failure. Single initiator/single target zoning limits each zone to one host initiator and one XtremIO target port, making connectivity predictable and easier to troubleshoot.

Supported multipathing is required so ESXi can use redundant paths and continue I/O following a path failure. For XtremIO volumes presented to ESXi through VMware NMP, Round Robin is commonly used as the path selection policy. Dell host configuration guidance should be validated for the installed XtremIO and ESXi releases through the [XtremIO Host Configuration Guide](#).

QUESTION NO: 2

A customer is preparing an XtremIO proof of concept and wants the performance results to reflect production conditions as closely as possible.

Which practices should be included in the test plan? Select three.

- A. Populate a representative logical data set before testing
- B. Age the environment before collecting measurements
- C. Use a workload that reflects expected production behavior
- D. Measure performance only while the array remains empty
- E. Exclude latency from the recorded results

ANSWER: A B C

Explanation:

Populating the array with a representative logical data set, aging the environment before collecting performance measurements, and running a workload that reflects expected production behavior are correct practices. These steps help avoid measuring a newly initialized array under an artificial workload that does not represent normal application behavior.

The Age phase uses broad overwrite activity to create a more realistic data state before measurement. Performance results should also include latency, IOPS, throughput, and workload characteristics so that they can be evaluated against the customer's requirements. A proof of concept should not be limited to an empty array or a synthetic workload that has no relationship to the intended application environment. Dell XtremIO documentation is available through the [Dell XtremIO documentation portal](#).

QUESTION NO: 3

When creating XtremIO volumes for a host, which operating systems will benefit by changing the default logical block size for applications consisting of 4 KB I/Os?

- A. Microsoft Windows and RHEL
- B. VMware ESX and Microsoft Windows
- C. RHEL and IBM AIX
- D. Sun Solaris and HP-UX

ANSWER: A

Explanation:

Microsoft Windows and RHEL is correct. XtremIO volumes normally use 512-byte logical blocks, a broadly compatible setting. For supported Windows and Red Hat Enterprise Linux hosts running applications whose native I/O size is consistently 4 KB, configuring a 4 KB logical block size aligns the volume's exported logical blocks with the application I/O pattern. This alignment avoids splitting a typical 4 KB application request across multiple smaller logical blocks and can reduce block-level translation overhead. It is therefore a design choice intended for workloads that are known to use 4 KB I/O and whose host operating system supports 4 KB logical-block devices. The decision should be made when the volume is created, based on the host OS and application requirements, because logical block size is a volume characteristic rather than a setting to change casually after deployment. XtremIO host and volume configuration guidance, including host interoperability considerations, is available in Dell's XtremIO product documentation at [Dell Support: XtremIO Documentation](#). Dell also provides current compatibility and support guidance through its [E-Lab Navigator](#), which should be consulted for the specific XtremIO software release and host configuration.

QUESTION NO: 4

An administrator is planning an XtremIO snapshot strategy for development and test environments.

Which statements describe XtremIO snapshots? Select three.

- A. Snapshots are writable volumes
- B. Snapshots use metadata references to shared ancestor data
- C. Snapshots may be deleted in any order
- D. A full physical copy of the source volume is created immediately
- E. Snapshots require reserved capacity equal to the source volume

ANSWER: A B C

Explanation:

XtremIO snapshots are writable, are created using metadata references rather than a full initial physical copy, and can be deleted in any order. At creation time, the snapshot shares the ancestor volume's existing data through metadata. New physical capacity is consumed only when subsequent writes create unique data that differs between the related volumes.

This metadata-based architecture enables snapshots to be created rapidly and used efficiently for test, development, reporting, and protection workflows. XtremIO snapshots do not require physical capacity equal to the full source volume when they are created. Dell XtremIO snapshot documentation is available through the [Dell XtremIO documentation portal](#).

QUESTION NO: 5

A storage administrator creates a new XtremIO volume and needs to present it to a group of hosts that share the same access requirements.

Which XtremIO object is used to associate the host initiators with the volume mapping?

- A. Initiator group
- B. Snapshot set
- C. Consistency group
- D. Volume folder

ANSWER: A

Explanation:

Initiator group is correct because an XtremIO initiator group contains the initiators that require common access to one or more volumes. The administrator maps a volume to the initiator group, allowing all eligible initiators in that group to discover and access the presented volume.

This approach simplifies provisioning for clustered hosts because a shared volume can be mapped once to the applicable group rather than separately configured for every individual initiator. Host-side zoning, LUN discovery, and multipathing must also be configured according to the applicable host connectivity guidance. See the [XtremIO Support Matrix](#) for supported connectivity information.

QUESTION NO: 6

What is a method to establish an XMCLI session?

- A. Use the PuTTY SSH tool configured for the serial port and xmsupload credentials
- B. Use the Telnet SSH tool configured on Port 443 and root credentials
- C. Use the CLI terminal in the Administration tab and root credentials
- D. Use the PuTTY SSH tool configured for Port 22 and xmsadmin credentials

ANSWER: D

Explanation:

Use the PuTTY SSH tool configured for Port 22 and xmsadmin credentials. XMCLI is the XtremIO Management Server command-line interface, and it is accessed remotely through a secure SSH connection to the XMS management address. SSH conventionally listens on TCP port 22, so a workstation SSH client such as PuTTY can establish the required terminal session when it is directed to that port. The built-in `xmsadmin` account is intended for XtremIO management access and can authenticate an administrator to the XMCLI environment. After logging in successfully, the administrator can run supported XtremIO commands to view system status and perform authorized management operations. This connection method also protects credentials and command traffic in transit through SSH encryption, which is appropriate for administrative access. Dell Technologies documentation for XtremIO management identifies XMCLI as an XMS-resident interface and describes SSH-based access. For background on the SSH protocol and its standard assigned port, see the [IANA Service Name and Port Number Registry](#). XtremIO product documentation is available through the [Dell Technologies XtremIO documentation portal](#).

QUESTION NO: 7

You are gathering requirements for an XtremIO solution that will host a business-critical database environment.

Which information should be collected to characterize the storage workload? Select three.

- A. Peak IOPS and throughput
- B. Read/write ratio and I/O size
- C. Application latency objectives

- D. Only the current allocated LUN size
- E. Only the number of database administrators

ANSWER: A B C

Explanation:

Peak IOPS and throughput, read/write ratio and I/O size, and application latency objectives are all required to characterize the performance requirement. IOPS and throughput identify the amount of work that must be processed, while the read/write mix and I/O size describe the nature of that work. The latency objective establishes the response-time requirement that the proposed configuration must meet.

Current and projected logical capacity should also be gathered as part of the overall design; however, capacity by itself does not define the workload performance profile. A storage design based only on allocated LUN size can overlook peak demand, application service-level requirements, and future growth. Dell XtremIO documentation is available through the [Dell XtremIO documentation portal](#).

QUESTION NO: 8

A customer has an existing Oracle environment they are considering moving over to XtremIO from VMAX for improved performance. The customer wants to know the expected deduplication and compression savings they can achieve with XtremIO.

Which tool is appropriate for conducting this assessment?

- A. EMC Backup Tool
- B. EMC Storage Tool
- C. XtremIO Sizing Tool
- D. EMC MiTrend Tool

ANSWER: D

Explanation:

EMC MiTrend Tool is the appropriate assessment tool because it collects and analyzes performance and capacity information from the existing EMC storage environment, including VMAX. For a proposed XtremIO migration, the assessment data provides the workload characteristics needed to evaluate the target platform and estimate the effective-capacity benefit that XtremIO inline data reduction can deliver. This makes the discussion evidence-based: the customer's actual Oracle workload and storage consumption are assessed rather than relying on generic deduplication or compression ratios.

MiTrend was designed to provide accessible reporting and analysis of EMC array environments, helping customers and partners understand utilization, growth, and workload behavior for planning purposes. In this scenario, its value is in gathering the source-environment data that supports an XtremIO sizing and data-reduction assessment. XtremIO's architecture applies inline deduplication and compression globally, so expected savings must be evaluated in the context of the customer's real data profile and workload characteristics. Dell EMC describes XtremIO data services and architecture in its product documentation and technical resources; see [Dell XtremIO family](#) and the [Dell XtremIO documentation portal](#).

QUESTION NO: 9

You need to design an Oracle solution for a customer. Which XtremIO best practices should be used in Oracle environments?

- A. Use a 512 byte LUN sector size for databases. Use Eager Zeroed Thick formatting for ESXi
- B. Use a 4 kB LUN sector size for databases. Use Lazy Zeroed Thick formatting for ESXi

C. Align data on 4 kB boundaries. Use Thin formatting on ESXi

D. Align data on 4 kB boundaries. Use Lazy Zeroed Thick formatting on ESXi

ANSWER: A

Explanation:

Use a 512 byte LUN sector size for databases. Use Eager Zeroed Thick formatting for ESXi is the applicable XtremIO Oracle best-practice combination. XtremIO presents volumes with 512e logical sector formatting by default, and this setting should be retained for Oracle databases. Oracle database software and associated operating-system components have broad compatibility with 512-byte logical sectors, while 512e does not impose a database-performance penalty on XtremIO. The array's architecture handles writes efficiently, so an Oracle deployment does not need a 4 KB logical-sector LUN merely to obtain storage efficiency or performance.

For Oracle workloads hosted on ESXi, Eager Zeroed Thick VMDKs are appropriate because the virtual disk is initialized when it is created rather than during later application writes. This gives the database predictable write behavior from the outset and is particularly suitable where Oracle configurations require consistent storage behavior. Although the VMDK is presented as thick to VMware, XtremIO's inline data reduction and thin-provisioned allocation model prevent this choice from necessarily consuming equivalent physical array capacity. Dell EMC's Oracle guidance specifically identifies 512e volumes and Eager Zeroed Thick VMDKs as the recommended settings for these deployments. See the [Dell EMC XtremIO Oracle Best Practices white paper](#) and [Dell XtremIO documentation](#).