

# **NetApp**

## **NS0-516 Exam**

**NetApp Certified Implementation Engineer - SAN Specialist - E-Series**

**Questions & Answers  
Demo**

# Version: 4.1

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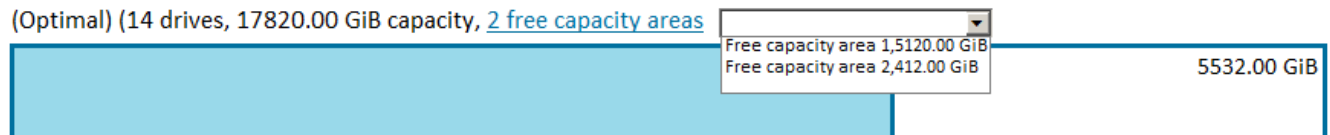
## Question: 1

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Click the Exhibit button.

### Rock\_Group

(Optimal) (14 drives, 17820.00 GiB capacity, [2 free capacity areas](#))



Secure-capable Yes (🔒 not enabled) ? | DA No ?

An administrator is asked to create a 5532 GiB volume from the volume group.

Referring to the exhibit, how would the administrator complete this request?

- A. Create the volume after performing space reclamation
- B. Create the volume after consolidating the capacity
- C. Create the volume from the available capacity
- D. Create the volume after adjusting the preservation capacity

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**Answer: B**

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Explanation:

**Review the Available Capacity:** According to the exhibit, the volume group has a total of 17820.00 GiB capacity, out of which 5532.00 GiB is the current free capacity. However, it is split into two free capacity areas of 15120.00 GiB and 2412.00 GiB.

**Identify the Challenge:** The requested volume of 5532 GiB cannot be created directly from the current free capacity because it is not contiguous; it's split into two separate areas.

**Consolidate the Capacity:** To create the volume, the administrator needs to consolidate the free capacity. This involves merging the non-contiguous free spaces to form a contiguous space large enough for the 5532 GiB volume.

**Procedure for Consolidation:**

Access the volume group management settings.

Select the option to consolidate free capacity areas.

Follow the prompts to merge the two free capacity areas into a single contiguous space.

**Create the Volume:** Once the free capacity is consolidated, proceed to create the 5532 GiB volume from the newly formed contiguous free space.

Reference: NetApp E-Series documentation on volume management and space consolidation.

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**Question: 2**

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A customer intends to use an E2812 system without expansion shelves. The specification for their Windows host requires that six E-Series data volumes be used.

In this scenario, how should the system be configured?

- A. one DDP with all the volumes
- B. three DDPs with the volumes divided equally
- C. one DDP for each volume
- D. two DDPs with the volumes divided equally

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**Answer: A**

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Explanation:

Understand the Requirements: The E2812 system is to be used without expansion shelves, and the customer requires six data volumes.

Consider DDP (Dynamic Disk Pooling): DDP is a recommended configuration for simplifying management and enhancing data protection.

Single DDP Configuration: Using one DDP for all volumes is efficient for the following reasons:

Simplifies the storage configuration.

Ensures balanced use of all drives.

Provides efficient data protection and rebuild performance.

Creation of Volumes: Within the single DDP, create six volumes as required by the customer.

Advantages of One DDP:

Easier management compared to multiple DDPs.

Better performance and protection due to the distributed nature of DDP.

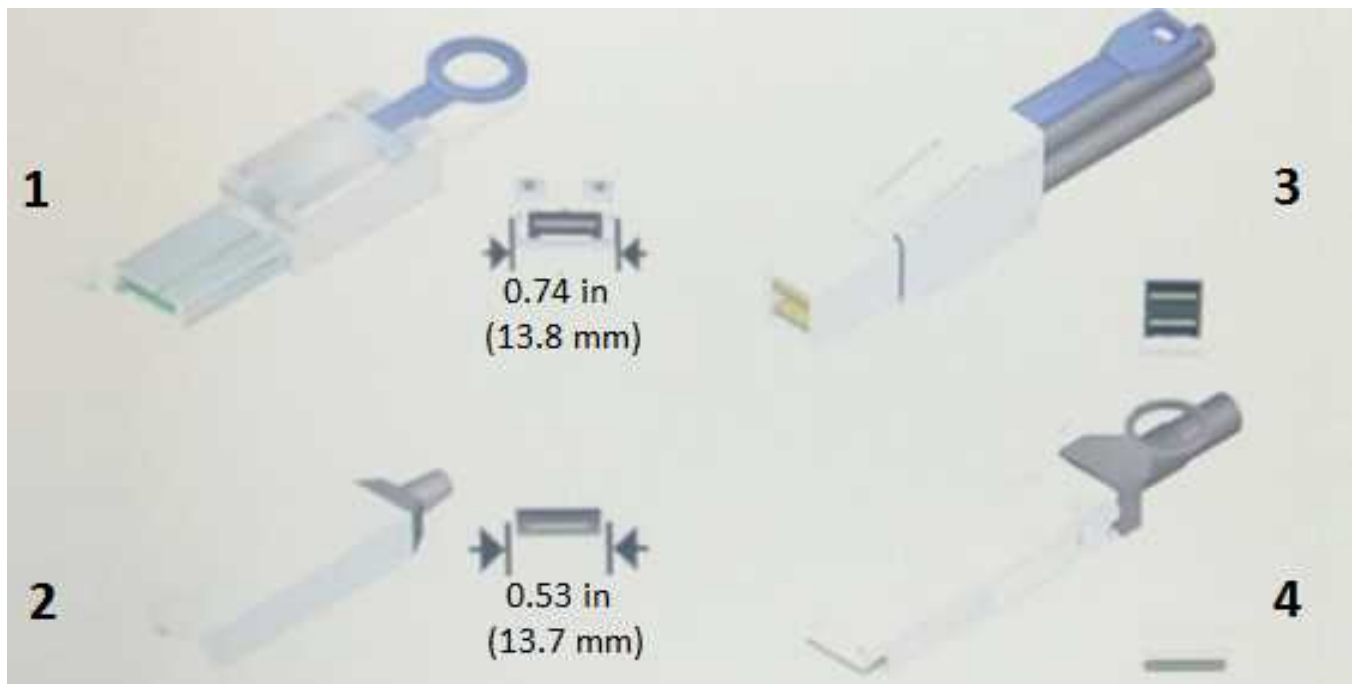
Reference: NetApp E-Series documentation on configuring DDP and best practices for volume creation.

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**Question: 3**

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Click the Exhibit button.



Referring to the exhibit, which SAS connector is supported on the NetApp E2800 E-Series family?

- A. 1
- B. 4
- C. 2
- D. 3

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**Answer: A**

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Explanation:

Identify SAS Connector Types: The exhibit shows different types of SAS connectors labeled 1 through 4.

Review E2800 Documentation: According to NetApp E2800 E-Series documentation, the supported SAS connector for expansion and host connectivity is type 1, which is the mini-SAS HD (High Density) connector.

Match the Connector: Verify the appearance and dimensions of the connector in the exhibit. Type 1 matches the mini-SAS HD connector used in the E2800 series.

Confirm Selection: Type 1 (0.74 in / 13.8 mm) is the correct choice for the E2800 family based on the physical characteristics and NetApp specifications.

Reference: NetApp E2800 E-Series hardware installation guide and connectivity specifications.

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#### Question: 4

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A company implemented Automatic Load Balancing (ALB). When the controller workloads are monitored, it becomes obvious that there is an imbalance and that ALB is not working correctly.

In this scenario, what are two causes of the problem? (Choose two.)

- A. The company implemented a load balancing min-min algorithm that does not support ALB
- B. The company implemented an adaptive load balancing agent that does not support ALB
- C. The company implemented a host multipath driver that does not support ALB
- D. The company implemented a host type that does not support ALB

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**Answer: C,D**

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Explanation:

Understand ALB Requirements: Automatic Load Balancing (ALB) in NetApp E-Series systems requires compatible host multipath drivers and host types.

Check Host Multipath Driver:

Verify if the host multipath driver installed supports ALB.

Incompatibility with the multipath driver can prevent ALB from functioning correctly, causing imbalance.

Review Host Type Compatibility:

Ensure the host types used in the configuration support ALB.

Certain host types might not be compatible, resulting in ALB malfunction.

Potential Causes:

Host Multipath Driver (C): If the multipath driver does not support ALB, it won't distribute I/O efficiently across controllers.

Host Type (D): Incompatible host types can lead to issues with ALB implementation, causing imbalances.

Steps for Resolution:

Update or replace the host multipath driver with a version that supports ALB.

Reconfigure or update the host types to ensure compatibility with ALB.

Reference: NetApp E-Series documentation on Automatic Load Balancing (ALB) requirements and compatibility.

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### Question: 5

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A company wants the most scalable host-side connection topology for E-Series systems.

In this scenario, which FC topology would satisfy the requirement?

- A. direct connect
- B. fabric attach
- C. private loop
- D. arbitrated loop

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**Answer: B**

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Explanation:

Fabric attach FC topology is the most scalable host-side connection topology for E-Series systems. This topology involves connecting the E-Series storage system to a Fibre Channel switch, which then connects to the hosts.

Scalability: The fabric attach topology supports a large number of devices by allowing multiple switches to be interconnected, forming a fabric.

Redundancy: It offers higher redundancy and failover capabilities because multiple paths can be created between the hosts and the storage.

Reference: NetApp Documentation (NetApp E-Series SANtricity Software, Implementation and Planning Guide).