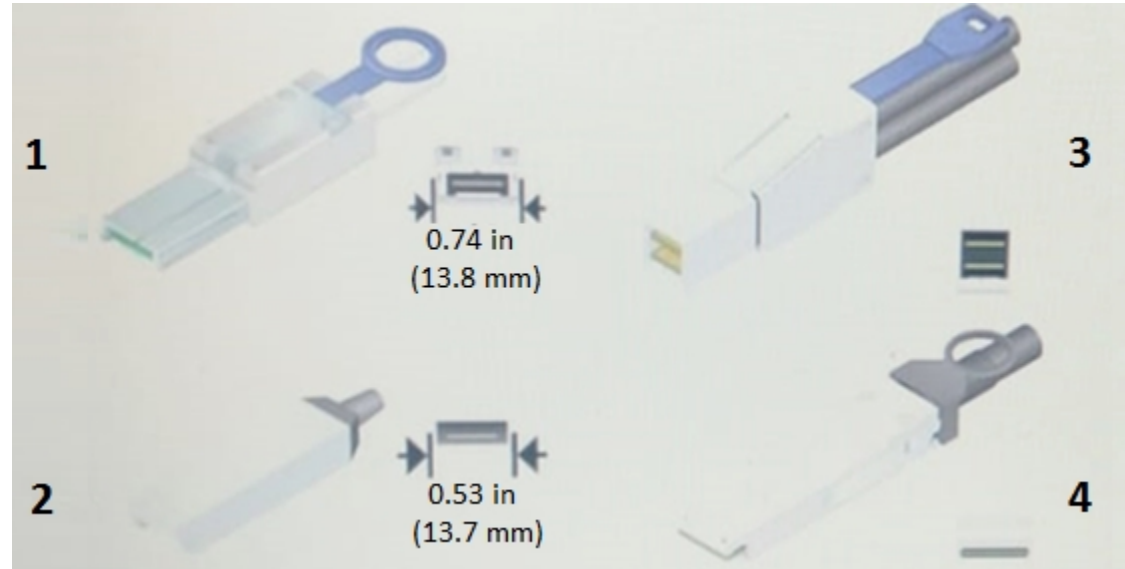**Exam Code: NS0-516**

Exam Name: NetApp Certified Implementation Engineer - SAN Specialist, E-Series

Vdumps

Exam A

QUESTION 1
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

Correct Answer: A
Section:
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.

QUESTION 2
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

Correct Answer: C, D
Section:
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.

QUESTION 3
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

Correct Answer: B
Section:
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).

QUESTION 4
Click the Exhibit button.

E2812 and E2824 controller shelf and EF280 flash array:
Weight

Unit	Weight		
	Maximum*	Empty**	Shipping***
E2812 controller shelf, with twelve 3.5 in. (8.89 cm) SAS-3 drives each with 6 TB capacity	63.9 lb (29.0 kg)	17.08 (7.75 kg)	80 lb (36.2 kg)
E2824 controller shelf and EF280 flash array, with twenty-four 2.5 in. (6.35) SAS-3 drives each with 900 GB capacity	60.5 lb (27.4 kg)	17.4 lb (7.89 kg)	91 lb (41.2 kg)

* Maximum weight indicates a controller shelf, fully-loaded with the heaviest drives and all other components installed. Because drive weights can vary greatly, this value can vary, depending on the drives installed. Refer to the next table for weight ranges by drive type.

** Empty weight indicates a controller shelf with the controller canister, the power fan-canister, and the drives removed.

*** Shipping weight indicates the maximum weight of the controller shelf and all shipping material.

Component	Weight
Controller canister	5.47 lb (2.48 kg)
Power-fan canister	5.2 lb (2.35 kg)
2.5 in. SAS drive	0.6 lb (0.27 kg)
3.5 in. SAS drive	2.09 lb (0.95 kg)
2.5 in. SSD (solid-state disk)	1.33 lb (0.6 kg)

A customer has a raised floor with a weight limit of 700 lb. per floor tile. The customer's data cabinet weights 90 lb. and covers a single floor tile.
Referring to the exhibit, what is the maximum number of E2824 shelves possible to be installed?

A. 22
B. 10
C. 6
D. 14

Correct Answer: C
Section:
Explanation:
Total weight capacity per tile: 700 lb.
Data cabinet weight: 90 lb.
Available weight for shelves: 700 lb. - 90 lb. = 610 lb.
Weight of an E2824 shelf (maximum): 60.5 lb.
Number of shelves: 610 lb. / 60.5 lb. 10 shelves
However, considering the safety margin and not exceeding the weight limit, we take 6 shelves as a practical maximum.

QUESTION 5
Click the Exhibit button.

Referring to the exhibit, which three statements are true? (Choose three.)

A. There are two SAS expansion ports available

B. There are six SAS host ports available

C. There are two Base-T iSCSI ports available

D. There are two FC/iSCSI host ports available

E. There are four SAS host ports available

Correct Answer: A, B, D
Section:
Explanation:
Exhibit Analysis: The exhibit shows the rear view of an E-Series controller with various ports.
SAS expansion ports: 2 ports (EXP1 and EXP2).
SAS host ports: 6 ports.
FC/iSCSI ports: 2 ports (these ports can be configured as either FC or iSCSI).
Reference: NetApp E-Series hardware manual and port configuration guides.

QUESTION 6
You are cabling drive expansion shelves for an E2800 storage system.
In this scenario, which cabling method should you use?

A. You use SAS expansion port EXP1 and reserve SAS expansion port EXP2 for a second drive expansion stack.

B. The controller A and the controller B SAS expansion ports (EXP1 & EXP2) should be divided between the A-side and B-side IOM-12 modules for all the expansion shelves.

C. You use SAS expansion port EXP2 and reserve SAS expansion port EXP1 for a second drive expansion stack.

D. The controller A and the controller B SAS expansion ports (EXP1 & EXP2) should not be divided between the A-side and B-side IOM-12 modules for all of the expansion shelves.

Correct Answer: B
Section:
Explanation:
Cabling method: It is important to distribute the connections for redundancy and balanced performance.
EXP1 and EXP2 ports: By dividing these ports between the A-side and B-side IOM-12 modules, the system ensures balanced load and failover capabilities.
Reference: NetApp E-Series hardware setup and configuration guide.

QUESTION 7
A customer needs to add an EF280 with FC into its existing Brocade fabric but the FC ports in the SANtricity System Manager are showing the FC ports as down and the LED on the FC HIC is amber.
Which three tasks does the installer need to complete to solve this problem? (Choose three.)

A. Verify that the ports are enabled on the switch

B. Verify that the cables are plugged into the switch

C. Verify that the server HBA has the boot BIOS enabled

D. Verify that the EF280s management port is up

E. Verify that the switch zone has the WWPNs for the EF280 and Server HBAs

Correct Answer: A, B, E
Section:
Explanation:
Verify Switch Port Status:
Step: Check the status of the FC ports on the Brocade switch.
Reason: The ports need to be enabled for communication.
Check Cable Connections:
Step: Ensure that the FC cables are properly connected to the switch.
Reason: Loose or disconnected cables can cause the ports to appear down.
Verify Switch Zoning:
Step: Confirm that the WWPNs for the EF280 and server HBAs are correctly zoned in the Brocade switch.
Reason: Incorrect zoning can prevent the devices from communicating, causing the ports to appear down.
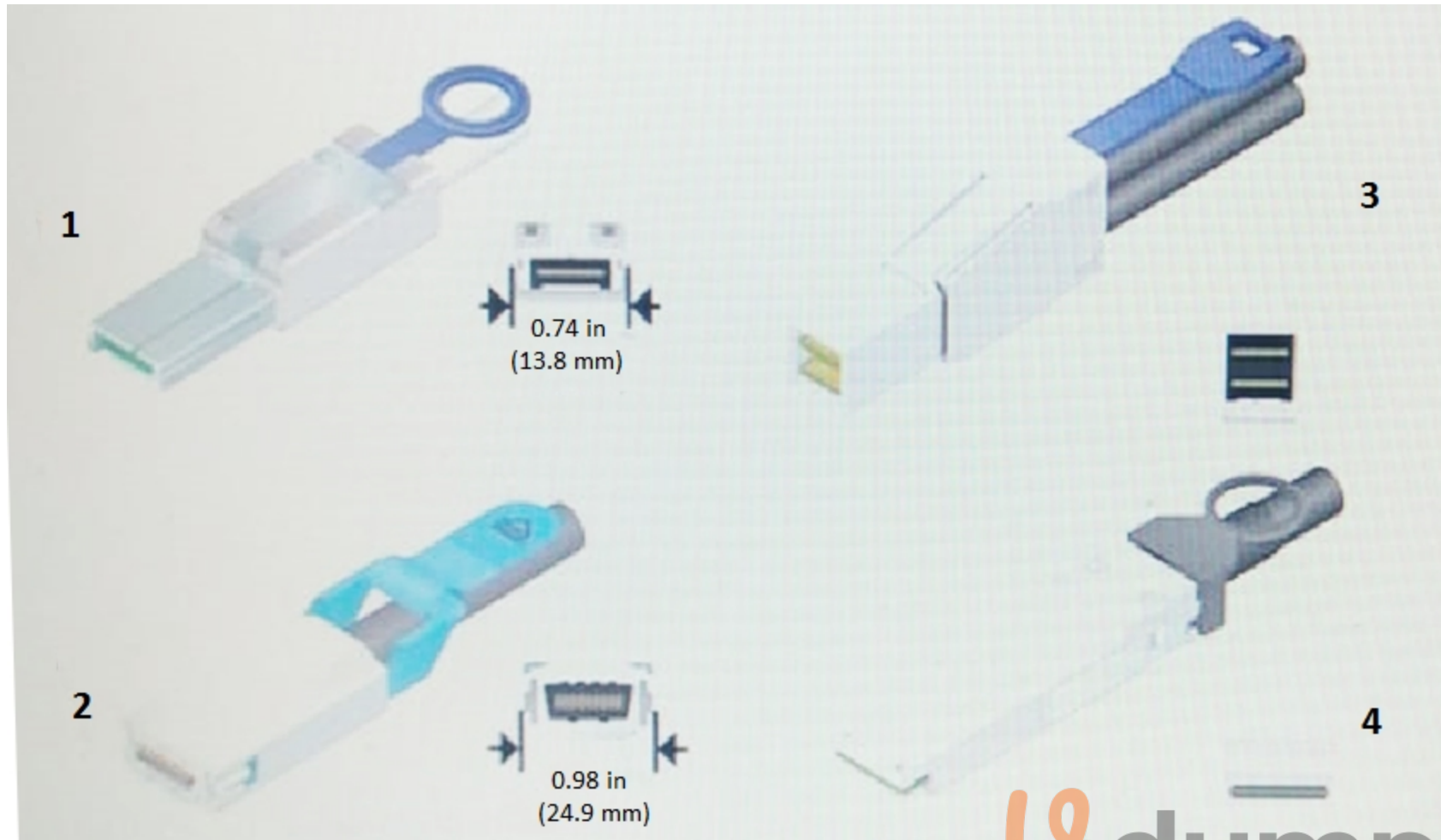NetApp SANtricity System Manager documentation
Brocade switch configuration and zoning guides
NetApp hardware installation and best practices guides

QUESTION 8
Click the Exhibit button.

Referring to the exhibit, which cable is an InfiniBand 4X connector?

A. 3

B. 1

C. 2

D. 4

Correct Answer: B

Section:

Explanation:

Identify Connector Types:

Step: Examine the connectors in the exhibit to identify the InfiniBand 4X connector.

Reason: InfiniBand 4X connectors have a distinct appearance and size.

Connector Characteristics:

Observation: Connector 1 in the exhibit is labeled as 0.74 in (13.8 mm), which matches the size and appearance of an InfiniBand 4X connector.

Verification:

Cross-Reference: Confirm with NetApp and industry standards for InfiniBand connectors.

Result: Connector 1 is the InfiniBand 4X connector based on size and design.

NetApp E-Series hardware documentation

Industry standards for InfiniBand connectors

QUESTION 9

An administrator is asked to create a Dynamic Disk Pools (DDP) pool from eleven 12 TB disks with the requirement that there is adequate space available for a reconstruction if a drive in the pool fails.

In this scenario, what should the administrator do to satisfy this requirement?

A. Create the disk pool, and then edit the pool to reserve 12 TB of space
B. Create the disk pool, and then add another 12 TB drive to the pool
C. Create the disk pool, and then the system automatically reserves 12 TB of space
D. Create the disk pool, and then create a hot spare on another 12 TB disk

Correct Answer: C
Section:
Explanation:
Create the Disk Pool:
Step: Use the SANtricity System Manager to create a DDP with the eleven 12 TB disks.
Reason: The DDP automatically reserves space for reconstruction purposes.
Automatic Space Reservation:
Functionality: The system automatically reserves adequate space for reconstruction when a disk fails.
Confirmation:
Verify: Check the pool's configuration to ensure the space is reserved for reconstruction.
Result: The system will show the reserved space within the DDP configuration.
NetApp SANtricity System Manager User Guide
NetApp E-Series DDP configuration and best practices

QUESTION 10
You are adding drives to an existing Dynamic Disk Pool (DDP).
In this scenario, which two drive characteristics should you consider when selecting the drives? (Choose two.)

A. if the drives are the same capacity or larger
B. if the drives have a compatible security type
C. if the drives are from the same manufacturer
D. if the drives have the same firmware level

Correct Answer: A, B
Section:
Explanation:
Check Drive Capacity:
Step: Ensure that the new drives are of the same capacity or larger than the existing drives in the DDP.
Reason: Consistent drive capacity ensures optimal performance and utilization.
Verify Security Type:
Step: Confirm that the new drives have a compatible security type (e.g., FDE, FIPS) with the existing drives.
Reason: Incompatible security types can lead to configuration issues or reduced security.
NetApp E-Series Hardware and Software Compatibility Guide
NetApp SANtricity System Manager User Guide

QUESTION 11
Click the Exhibit button.
Referring to the exhibit, which three steps would you take to solve the problem shown in the event log? (Choose three.)

A:9/7/15 12:09:22 AM (07:09:22) 55985 1017 Fibre channel link down – Host-side: controller in slot A, port 2
A:9/7/15 12:09:22 AM (07:09:22) 55986 1018 Fibre channel link up – Host-side: controller in slot A, port 2
A:9/7/15 12:09:26 AM (07:09:26) 55990 1017 Fibre channel link down – Host-side: controller in slot A, port 2
A:9/7/15 12:09:26 AM (07:09:26) 55991 1018 Fibre channel link up – Host-side: controller in slot A, port 2
A:9/7/15 12:09:30 AM (07:09:30) 55993 1017 Fibre channel link down – Host-side: controller in slot A, port 2
A:9/7/15 12:09:30 AM (07:09:30) 55994 1018 Fibre channel link up – Host-side: controller in slot A, port 2
A:9/7/15 12:09:33 AM (07:09:33) 55996 1017 Fibre channel link down – Host-side: controller in slot A, port 2
A:9/7/15 12:09:33 AM (07:09:33) 55997 1018 Fibre channel link up – Host-side: controller in slot A, port 2

A. Swap out the SFP in the controller port
B. Swap out the FC cable
C. Reinitialize the FC switch
D. Move the connection to another controller port
E. Swap out the HBA on the FC switch

Correct Answer: A, B, D
Section:
Explanation:
Step: Replace the SFP (Small Form-factor Pluggable) module in the controller port.
Reason: Faulty SFPs can cause link issues and errors.
Swap Out the FC Cable:
Step: Replace the Fibre Channel cable connecting the controller port.
Reason: Damaged or faulty cables can lead to intermittent connectivity issues.
Move the Connection to Another Controller Port:
Step: Connect the Fibre Channel cable to a different port on the controller.
Reason: The current port may be faulty, and using another port can help isolate the issue.
NetApp SANtricity System Manager User Guide
NetApp hardware installation and troubleshooting guides

QUESTION 12
Which file contains the configuration for a multipath driver for FC on Linux systems?

A. /etc/kernel/mp.conf
B. /opt/multipath/multipath.cnf
C. /etc/multipath.conf
D. /etc/dm-multipath.conf

Correct Answer: C
Section:
Explanation:
The multipath configuration file for Fibre Channel (FC) on Linux systems is typically /etc/multipath.conf.
This file is used to define multipath settings and policies, such as path grouping, path selection, and failover behavior.
Reference: NetApp E-Series SANtricity Multipath Drivers Guide for Linux.

QUESTION 13
Which two local users of NetApp SANtricity Unified Manager would be used to edit the Certificate Management section? (Choose two.)

A. storage

B. support

C. security

D. admin

Correct Answer: C, D
Section:
Explanation:
The admin user has comprehensive privileges, including the ability to manage certificates.
The security user is specifically designed for managing security-related tasks, including certificate management.
Reference: NetApp SANtricity Unified Manager User Guide, which details user roles and permissions.

QUESTION 14
What are two base host connectivity selections that are provided by the E2800 controller? (Choose two.)

A. FC

B. SAS

C. IB

D. iSCSI

Correct Answer: A, D
Section:
Explanation:
The E2800 controller supports Fibre Channel (FC) and iSCSI as base host connectivity options.
FC provides high-speed connectivity for SAN environments.
iSCSI allows for IP-based storage networking, facilitating connectivity over existing Ethernet networks.
Reference: NetApp E2800 Series Hardware Guide, which lists supported host interfaces.

QUESTION 15
An orphaned volume occurs during an asynchronous mirror implementation. You must recover the orphaned volume.
In this scenario, which statement is correct?

A. Remove the mirroring relationship on the orphan, then re-create the mirroring relationship

B. Suspend mirroring operations on the orphan, then resume operations

C. Deactivate the mirror consistency group that contains the orphan, then re-enable the group

D. Perform a role change on the orphan, then re-create the mirroring relationship

Correct Answer: A
Section:
Explanation:
Identify the Orphaned Volume:
Step: Use SANtricity System Manager to identify the orphaned volume.
Reason: To determine which volume has lost its mirror relationship.
Remove the Mirroring Relationship:
Step: Access the mirroring settings for the orphaned volume and remove the existing relationship.
Reason: The current relationship is invalid and needs to be removed to reset the configuration.
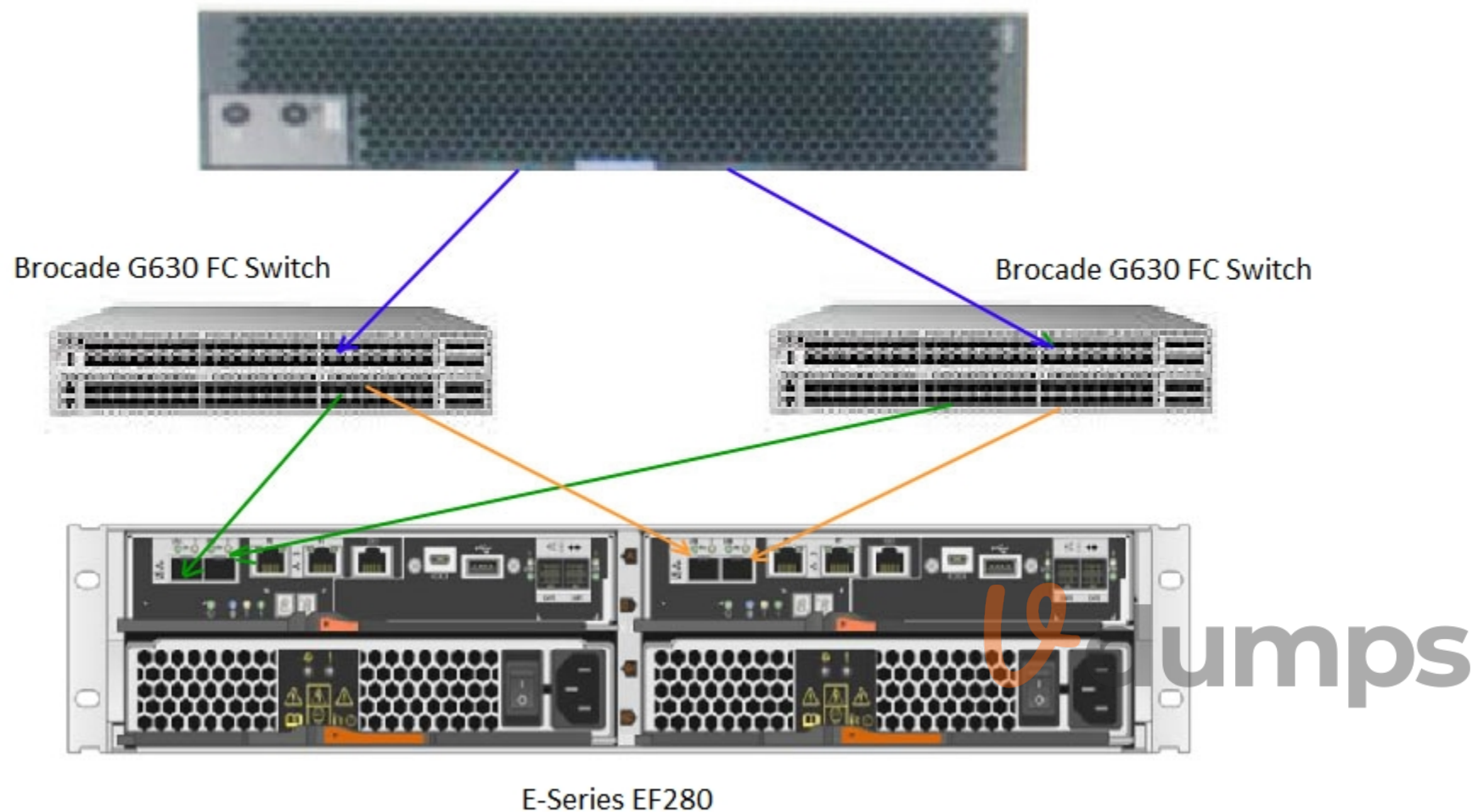Re-create the Mirroring Relationship:
Step: Establish a new mirroring relationship for the previously orphaned volume.
Reason: To restore the asynchronous mirroring setup with a valid configuration.

NetApp SANtricity System Manager User Guide
NetApp Asynchronous Mirroring Best Practices Guide

QUESTION 16
Click the Exhibit button.

Referring to the exhibit, what is the total number of ALUA paths from the host to a volume on the EF280?

A. 8
B. 6
C. 2
D. 4

Correct Answer: D
Section:
Explanation:
Understand ALUA Path Configuration:
Step: Review the exhibit to determine the paths between the host and the EF280.
Reason: ALUA (Asymmetric Logical Unit Access) provides multiple paths for redundancy and load balancing.
Count the Paths:
Observation: Each controller has two ports connected to two separate FC switches, and the host is connected to each switch, providing two paths per controller.
Calculation: 2 controllers x 2 paths per controller = 4 total ALUA paths.
NetApp EF280 System Documentation
NetApp ALUA Configuration Guide

QUESTION 17
Click the Exhibit button.

```
switch:admin> porterrshow
        frames              enc      crc      crc      too
        tx       rx         in       err      g_eof    shrt
    0:  12.1m    24.2m      0        0        0        0
    1:  0        0          0        0        0        0
    2:  12.1m    24.2m      0        0        0        0
    3:  0        0          0        0        0        0
    4:  0        0          0        0        0        0
    5:  24.2m    12.1m      0        7m       0        0
    6:  0        0          0        0        0        0
    7:  0        0          0        0        0        0
```

Referring to the exhibit, what is the reason for the errors that are shown on port 5 on the switch of one of the fabrics?

A. protocol errors, encoding errors, or conversion errors
B. faulty SFPs, cables, or patch panels
C. twisted cables, wrong plugs, or cable material
D. wrong switch configuration

Correct Answer: B
Section:
Explanation:
Analyze the Errors:
Step: Review the porterrshow output, which indicates CRC errors on port 5.
Reason: CRC errors typically point to issues with the physical layer, such as faulty hardware or connections.
Check Physical Connections:
Step: Inspect the SFPs, cables, and patch panels for damage or improper connections.
Reason: Faulty or improperly connected hardware can cause CRC errors.
Troubleshoot by Replacing Components:
Step: Swap out the suspected faulty components (SFPs, cables, patch panels) and observe if the errors persist.
Reason: Replacing faulty hardware usually resolves CRC error issues.
Brocade Switch Troubleshooting Guide
NetApp SANtricity System Manager Hardware Diagnostics Guide

QUESTION 18
A customer is configuring an EF570 system on an internal network. Due to security concerns, the network does not have Internet access. The customer wants to regularly send standard support data to NetApp.
In this scenario, what should the customer do to accomplish this task?

A. Enable AutoSupport with a set interval and with the store locally option selected, manually move the data to a server with Internet access, and then send the data to NetApp.
B. Open a support ticket with NetApp to enable AutoSupport local functionality, manually move the data to a server with Internet access, and then send the data to NetApp.
C. Set up a script to initiate Collect Support Data on a set interval, manually move the data to a server with Internet access, and then send the data to NetApp.
D. Set up a script to initiate Collect Support Data, remove the extra log files, manually move the data to a server with Internet access, and then send the data to NetApp.

Correct Answer: A
Section:
Explanation:

Enable AutoSupport:

Step: Configure AutoSupport on the EF570 system with the option to store data locally.

Reason: This allows the system to generate and save support data without needing immediate Internet access.

Set Interval for Data Collection:

Step: Set AutoSupport to run at regular intervals.

Reason: Regular intervals ensure that up-to-date support data is available for NetApp.

Manual Data Transfer:

Step: Periodically transfer the collected support data from the local storage to a server with Internet access.

Reason: This server can then send the support data to NetApp.

Send Data to NetApp:

Step: Use the server with Internet access to forward the collected support data to NetApp's support systems.

Reason: This ensures NetApp receives the necessary support data for ongoing maintenance and troubleshooting.

NetApp EF-Series AutoSupport Configuration Guide

NetApp Support Site for manual data upload procedures

QUESTION 19

An E2812 system, without expansion shelves, is configured with 12 Gb SAS host interface cards (HICs) and is directly connected to a host. However, the host cannot access the volumes.

In this scenario, which two troubleshooting steps should you take? (Choose two.)

A. Verify that the host can ping the E2812 system over the SAS link

B. Verify that the E2812 host port SAS link up lights are illuminated

C. Verify that the E2812 SAS CHAP secret is set

D. Verify that the correct SAS ports are in use on the E2812 system

Correct Answer: B, D

Section:

Explanation:

Verify that the E2812 host port SAS link up lights are illuminated

The link up lights on the E2812 host port should be checked to confirm that the physical layer connection is established. If the lights are not illuminated, it indicates that there is no physical link between the host and the E2812 system, which would explain why the host cannot access the volumes.

Verify that the correct SAS ports are in use on the E2812 system

Ensuring the correct SAS ports are used is critical. Using incorrect ports might result in connectivity issues. The documentation for the E2812 provides guidance on the appropriate ports to be used for direct connections to a host.

QUESTION 20

An administrator is asked to create an asynchronous mirroring environment that supports multiple mirroring relationships, each with different recovery point objectives (RPOs).

In this scenario, how does the administrator create this environment?

A. The administrator creates a mirror group with the appropriate RPOs

B. The administrator creates multiple mirror pairs, each with their own schedule and RPO

C. The administrator creates a single consistency group with multiple RPOs

D. The administrator creates multiple mirror consistency groups with the appropriate RPOs

Correct Answer: B

Section:

Explanation:

To support multiple mirroring relationships, each with different recovery point objectives (RPOs), the administrator should create multiple mirror pairs. Each pair can be configured with its own schedule and RPO, allowing for tailored data protection strategies that meet specific needs.

Reference: NetApp SANtricity Storage Manager Configuration and Provisioning Guide.

QUESTION 21
You want to find detailed information about the devices that are connected to the Brocade switch.
In this scenario, which command would accomplish this goal?

A. portloginshow

B. zoneshow

C. nsshow

D. switchshow

Correct Answer: C
Section:
Explanation:
nsshow
The nsshow command on a Brocade switch provides detailed information about devices connected to the switch. It displays the name server database, which includes information about all devices (initiators and targets) that are logged into the fabric.

QUESTION 22
Your company has an E-Series system connected to Cisco MDS switches. You are asked to provision a volume on a new Windows host, but the Windows host is unable to connect to the volume on the E-Series system. All other Windows hosts in the fabric are able to connect to their volumes.
In this scenario, which three actions should you perform to accomplish this task? (Choose three.)

A. Create a new virtual SAN (VSAN)

B. Obtain the WWPN for the Windows HBA

C. Restart the switches

D. Create a single-initiator zone with the host and E-Series system

E. Add a zone to the active zoneset

Correct Answer: B, D, E
Section:
Explanation:
To resolve the issue of a new Windows host being unable to connect to a volume on the E-Series system when all other hosts can, follow these steps:
Obtain the WWPN for the Windows HBA (B): The Worldwide Port Name (WWPN) is essential for zoning and establishing communication between the host and the storage system. Ensure you have the correct WWPN for the new Windows host's HBA.
Create a single-initiator zone with the host and E-Series system (D): Zoning is crucial in SAN environments to control and secure the data paths. Create a single-initiator zone that includes the WWPN of the Windows host and the target ports of the E-Series system. This ensures that the host can see the storage.
Add a zone to the active zoneset (E): After creating the necessary zone, it needs to be added to the active zoneset on the Cisco MDS switch. The zoneset must then be activated for the changes to take effect, enabling the new host to communicate with the E-Series system.
These steps ensure that the new Windows host is properly zoned and can access the storage volumes without disrupting the existing configurations.
NetApp E-Series SANtricity Storage Manager Documentation
Cisco MDS Switch Configuration Guide

QUESTION 23
Which iSCSI setting would you change from its default value to increase the throughput of an iSCSI host port on a NetApp E-Series system?

A. maximum transmission unit (MTU)

B. flow control

C. Challenge-Handshake Authentication Protocol (CHAP)

D. Time to Live (TTL)

Correct Answer: A
Section:
Explanation:
To increase the throughput of an iSCSI host port on a NetApp E-Series system, you should change the maximum transmission unit (MTU) setting from its default value.
Maximum Transmission Unit (MTU): The MTU size determines the largest packet that can be sent over the network without needing to be fragmented. By increasing the MTU size, you can reduce the overhead associated with packet processing and improve throughput. For example, setting the MTU to 9000 bytes (Jumbo Frames) can enhance performance for iSCSI traffic.
NetApp E-Series SANtricity Storage Manager User Guide
NetApp Best Practices for Configuring iSCSI with E-Series

QUESTION 24
Which alerting method would be configured using the SANtricity System Manager setup wizard?

A. Syslog
B. SNMP
C. Web Services Proxy
D. Email

Correct Answer: D
Section:
Explanation:
When configuring alerting methods using the SANtricity System Manager setup wizard, the option you configure is Email.
Email: The setup wizard in SANtricity System Manager provides an option to configure email notifications. This involves specifying the email server details, sender address, and recipients to ensure that alerts and notifications about the system's status, errors, and other critical events are sent via email.
SANtricity System Manager Setup Guide
NetApp E-Series Documentation

QUESTION 25
Which two steps are required to enable multifactor authentication on an E-Series system? (Choose two.)

A. Test SSO login
B. Configure In-Band Management
C. Map roles
D. Configure LDAP

Correct Answer: C, D
Section:
Explanation:
To enable multifactor authentication (MFA) on an E-Series system, follow these steps:
Map roles (C): Role mapping is necessary to define the permissions and access levels for different users when MFA is enabled. This ensures that only authorized users can access specific functions and data on the system.
Configure LDAP (D): LDAP configuration is required for integrating with directory services to manage user authentication and access control. LDAP settings need to be correctly configured to support MFA, allowing the system to authenticate users against an external directory service.
NetApp E-Series Security Configuration Guide
SANtricity System Manager User Guide

QUESTION 26
Click the Exhibit button.

Supported Adapter Cards – E2812 Duplex 16Gb 10GbE Base-T 11.50 SANtricity OS							
Adapters							
Priority	Category	Bus Type	Mktg Part No	Images	LED	Mfg Part No	Description
1	Block Access	PCle2	X-56023-00-0E-C		View		HIC.E2800.10Gb Base-T.2-ports, -C
2	Block Access	PCle2	X-56026-00-0E-C		View		HIC.E2800.12Gb SAS.2-ports, -C
3	Block Access	PCle2	X-56027-00-0E-C		View		HIC.E2800.12Gb SAS.4-ports, -C

You ordered a NetApp E2812 Duplex 16GB 10 GbE Base-T system.
Referring to the exhibit, what is the maximum number of 10GbE Base-T ports available to be used?

A. 8

B. 4

C. 6

D. 12

Correct Answer: B
Section:
Explanation:
The exhibit shows the supported adapter cards for the E2812 system with specific marketing part numbers.
The E2812 system ordered is a Duplex 16Gb 10GbE Base-T system with the adapter card part number X-56023-00-0E-C, which is described as 'HIC.E2800.10Gb Base-T.2-ports, -C'.
Each card provides 2 ports.
Given that the system is duplex, it means it has two controllers, each capable of supporting one card.
Therefore, each controller can have one 10GbE Base-T card with 2 ports, resulting in a maximum of 4 ports available in total for the system.
NetApp E-Series SANtricity System Manager and E2800 Series Hardware Installation Guide.

QUESTION 27
A customer has launched a data analytics initiative and has been transferring old data into the new data lake. The customer has discovered some data read errors during the transfer process.
In this scenario, how should the customer have avoided these data integrity issues?

A. by ensuring that data assurance and media scan are always activated

B. by deploying secure-capable drives

C. by turning on cyclic redundancy checks (CRCs)

D. by turning on erasure coding

Correct Answer: A
Section:
Explanation:
Data integrity issues can often be prevented by ensuring that mechanisms for data assurance and media scanning are activated.
Data Assurance (DA) is a feature that verifies the integrity of the data as it is read from or written to the storage system, detecting and correcting errors.
Media scan is a background process that checks the entire disk surface for errors and corrects any found before they cause data integrity issues.
Together, these features ensure ongoing data integrity by preemptively identifying and fixing potential issues.
NetApp E-Series Data Assurance (T10-PI) and Media Scan Documentation.

QUESTION 28
Click the Exhibit button.

Referring to the exhibit, what would you select in the search list to see all of the host selections for NetApp E-Series storage systems?

A. Storage OS
B. SANtricity
C. E-Series SAN Host
D. E-Series Controller Firmware

Correct Answer: C
Section:
Explanation:
To see all the host selections for NetApp E-Series storage systems, you need to choose the appropriate category from the search list in the NetApp Interoperability Matrix Tool.
The exhibit shows a list of categories and solutions. Among these, the 'E-Series SAN Host' category specifically refers to configurations and compatibility for hosts that connect to E-Series storage systems.
Selecting this option will provide a comprehensive list of supported host configurations for E-Series systems.
NetApp Interoperability Matrix Tool (IMT).

QUESTION 29
Your AutoSupport does not automatically send reports to NetApp's ActiveIQ tool.
In this scenario, how do you access the data that would have been sent using the AutoSupport feature?

A. Use SANtricity Unified Manager to collect the support data remotely
B. Access the event log by using SANtricity System Manager
C. Use SANtricity System Manager to manually collect the support data
D. Ask NetApp Support to help you to access the data by using special support tools

Correct Answer: C
Section:
Explanation:
When AutoSupport is not automatically sending reports to NetApp's ActiveIQ tool, you can manually collect the support data using SANtricity System Manager.
The manual collection involves generating a support bundle that includes all necessary logs and system information.
This data can then be reviewed locally or sent to NetApp support for analysis if needed.
NetApp E-Series SANtricity System Manager Documentation.

QUESTION 30
Which NetApp tool provides information on size, weight, acoustic noise, and power of NetApp E-Series systems?

A. Hardware Universe
B. Interoperability Matrix Tool
C. Config Advisor
D. Active IQ

Correct Answer: A
Section:
Explanation:
The Hardware Universe is a NetApp tool that provides comprehensive information on the size, weight, acoustic noise, and power requirements of NetApp systems, including the E-Series.
This tool is essential for planning and managing the physical aspects of deploying NetApp hardware in a data center environment.
NetApp Hardware Universe Documentation.

QUESTION 31
A customer has an E5760 array with a 30-drive Dynamic Disk Pool (DDP) that uses 800 GB SSD drives. The customer needs to expand the pool by one drive but has only a 1.6 TB SSD drive available.
In this scenario, what happens when the customer attempts to add the 1.6 TB drive to the existing pool?

A. The pool is expanded by 1.6 TB
B. The pool is expanded by 1.6 TiB
C. The pool is expanded by 800 GB
D. An error occurs, and the add fails

Correct Answer: C
Section:
Explanation:
The pool is expanded by 800 GB
When a larger drive (1.6 TB) is added to a Dynamic Disk Pool (DDP) that consists of smaller drives (800 GB), the pool expands only by the size of the existing drives in the pool. Hence, in this scenario, the pool would be expanded by 800 GB.

QUESTION 32
Which three documents should be provided to the customer after the E-Series installation is complete? (Choose three.)

A. a document showing how much space is available for system expansion
B. a document showing the cabinet layout with cabling information and IP addresses being used
C. a document showing user IDs and passwords for all deployed devices
D. a document with IMT pages that show the supported host configuration and fabric switches in the solution
E. a document showing available power on the UPS with no equipment connected

Correct Answer: B, C, D
Section:
Explanation:
A document showing the cabinet layout with cabling information and IP addresses being used
This document helps the customer understand the physical and logical layout of the installation, making future troubleshooting and expansion easier.
A document showing user IDs and passwords for all deployed devices
It's essential for the customer to have access credentials for all the devices to manage and maintain the system.
A document with IMT pages that show the supported host configuration and fabric switches in the solution
This document ensures that the customer's environment is compatible with the NetApp solution, detailing the supported configurations.

QUESTION 33
The NetApp E-Series system with a 32 Gb FC Host Interface Card (HIC) requires which type of fiber cable to connect to switches or to connect directly to hosts extending up to 100 meters?

A. OM4
B. OM3
C. OM1
D. OM2

Correct Answer: A
Section:
Explanation:
OM4
OM4 fiber optic cables are recommended for 32 Gb FC connections up to 100 meters due to their high bandwidth capabilities and lower attenuation, ensuring optimal performance for such high-speed connections.
:

QUESTION 34
When a drive fails in a Dynamic Disk Pool (DDP) with no free capacity, what happens to the data?

A. It is rebuilt using the on-board backup database
B. It is rebuilt using preservation capacity within the DDP
C. It is evacuated to the preservation capacity within the DDP
D. It is evacuated to a hot spare drive that is assigned to the DDP

Correct Answer: B
Section:
Explanation:
In a Dynamic Disk Pool (DDP), the system is designed to handle drive failures efficiently without impacting data availability. When a drive fails within a DDP and there is no free capacity, the data from the failed drive is rebuilt using preservation capacity within the DDP.
Dynamic Disk Pools use distributed sparing, which allows the spare capacity to be spread across all the drives in the pool rather than relying on dedicated hot spare drives. This distribution ensures that the rebuild process

starts immediately and can be completed faster than traditional RAID systems because the workload is shared across more drives.

The preservation capacity is essentially reserved space within the DDP that can be utilized in the event of a drive failure to rebuild the data. This approach helps in maintaining redundancy and protecting data integrity even when a drive fails.

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