

Dell.D-PVM-OE-01.by.AnNguyen.21q

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Exam Code: D-PVM-OE-01

Exam Name: Dell PowerMax Operate v.2



Exam A

QUESTION 1

DRAG DROP

Place the steps to set Host Flags using the Create Host wizard in the correct order

Select and Place:

Steps	Correct Order
Click the Create button.	
Select the Hosts > Hosts menu option.	
Navigate to the storage array to be configured.	
Click the Set Host Flags button to override or enable any port flag settings.	

Correct Answer:

Steps	Correct Order
	Select the Hosts > Hosts menu option.
	Navigate to the storage array to be configured.
	Click the Create button.
	Click the Set Host Flags button to override or enable any port flag settings.

Section:

Explanation:

Select the Hosts > Hosts menu option.

Navigate to the storage array to be configured.

Click the Create button.

Click the Set Host Flags button to override or enable any port flag settings.

QUESTION 2

What function can a storage administrator enable on the Port Attributes page?

- A. Manage Protocol
- B. Select Mgt Option
- C. Volume Set Addressing
- D. ORS Ceiling

Correct Answer: B

Section:

Explanation:

Step by Step Comprehensive Detailed

The Port Attributes page in Unisphere for PowerMax allows storage administrators to configure various settings related to the front-end ports on the storage array. One of the functions available on this page is Select Mgt Option.

This option allows you to specify how the port is used for management purposes:

Dedicated Management Port: You can designate a port as a dedicated management port, which is used exclusively for communication with management tools like Unisphere and Solutions Enabler.

Shared Management Port: You can configure a port to be shared for both management traffic and host I/O traffic.

This flexibility allows you to optimize port usage and segregate management traffic if needed.

Why other options are incorrect:

A . Manage Protocol: Protocol settings (like FC or iSCSI) are typically configured elsewhere in Unisphere, not on the Port Attributes page.

C . Volume Set Addressing: Volume Set Addressing is a feature related to mainframe connectivity and is not directly managed through the Port Attributes page.

D . ORS Ceiling: ORS (Open Replicator Solutions) settings are managed separately and not through the Port Attributes page.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Unisphere for PowerMax 10.0.0 Online Help: The online help for Unisphere provides detailed information about the Port Attributes page and the available configuration options, including the 'Select Mgt Option' function. You can access this help within Unisphere itself or on the Dell Support website.

Dell PowerMax Family: Essentials and Best Practices Guide: This guide may offer general information about port management and configuration in PowerMax.

QUESTION 3

What information would you expect to see under the System > Hardware view on a newly installed Unisphere for PowerMax deployment on 2000 and 8000 series arrays?

- A. Capacity, performance, and protection
- B. Provision, protect and set host I/O limits
- C. Front-end director, back-end director, and RDF
- D. 10 Profile, performance thresholds, and anomaly detection

Correct Answer: C

Section:

Explanation:

Step by Step Comprehensive Detailed

Unisphere for PowerMax provides a 'System > Hardware' view that offers insights into the physical components of your PowerMax storage array. On newly installed 2000 and 8000 series arrays, this view would typically show information about:

Front-end directors: These directors handle host connectivity and data transfer to and from the array. The view would likely display details about the number of front-end directors, their types, and their status.

Back-end directors: These directors manage the connection to the physical disks (storage media) within the array. The view may show the number of back-end directors, their types, and their status.

RDF (Remote Data Facility): If the array is configured for SRDF replication, the hardware view might display information about the RDF directors or components responsible for managing remote replication.

Why other options are incorrect:

A . Capacity, performance, and protection: While these are important aspects of a PowerMax system, they are typically found in other sections of Unisphere, such as the 'Dashboard' or 'Storage' views.

B . Provision, protect and set host I/O limits: These are management functions accessible through Unisphere, but not typically displayed directly under the 'System > Hardware' view.

D . I/O Profile, performance thresholds, and anomaly detection: These are related to performance monitoring and analysis, which are usually found in the 'Performance' section of Unisphere.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Unisphere for PowerMax 10.0.0 Online Help: The online help for Unisphere provides detailed information about the different views and functionalities available within the tool. You can access this help within Unisphere itself or on the Dell Support website.

Dell PowerMax Family: Essentials and Best Practices Guide: This guide offers a general overview of PowerMax systems and their management using Unisphere. It may provide context for understanding the information displayed in the 'System > Hardware' view.

QUESTION 4

Which services are active after a Unisphere for PowerMax installation on a Microsoft Windows host?

- A. SYMAPI and symrdfg
- B. SMASandGNS
- C. SMASandSTP
- D. SMAS and smasdb

Correct Answer: D

Section:

Explanation:

Step by Step Comprehensive Detailed

When you install Unisphere for PowerMax on a Microsoft Windows host, it installs several services necessary for its operation. The two primary services that are active after installation are:

SMAS (Storage Management Agent Service): This service is responsible for communication between the Unisphere server and the PowerMax storage array. It handles tasks like collecting data, sending commands, and receiving alerts from the array.

smasdb: This service manages the local database used by Unisphere for storing configuration information, performance data, and other relevant information.

Why other options are incorrect:

A . SYMAPI and symrdfg: SYMAPI is a command-line interface tool, not a service. symrdfg is a service related to SRDF (Symmetrix Remote Data Facility) replication, which may not be active if SRDF is not configured.

B . SMASandGNS: GNS is not a standard service associated with Unisphere for PowerMax.

C . SMASandSTP: STP is not a standard service associated with Unisphere for PowerMax.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Unisphere for PowerMax 10.0.0 Installation Guide: This guide provides detailed instructions for installing Unisphere for PowerMax on different operating systems, including Windows. It also lists the services that are installed and their functions. You can find this document on the Dell Support website by searching for 'Unisphere for PowerMax Installation Guide.'

Dell Unisphere for PowerMax 10.0.0 Online Help: The online help documentation for Unisphere may also provide information about the services it uses and their roles.

QUESTION 5

When setting Host I/O Limits on a Storage Group, what are the available dynamic I/O distribution modes?

- A. Never, OnFailure. and Always
- B. Balanced Always, and OnFailure
- C. Never, Balanced, and Always
- D. Balanced, OnFailure. and Never

Correct Answer: C

Section:

Explanation:

Step by Step Comprehensive Detailed

Host I/O Limits in PowerMax allow you to control the maximum IOPS (Input/Output Operations Per Second) or bandwidth that a storage group can consume. This helps prevent performance issues caused by one application or workload monopolizing resources. When setting Host I/O Limits, you can choose from different dynamic I/O distribution modes:

Never: This is the default mode. It means that the I/O limits are statically distributed across the directors in the associated masking view. If a director fails, its allocated portion of the I/O limit is lost.

Balanced: In this mode, the I/O limits are dynamically adjusted based on the number of online directors. If a director fails, its I/O limit is redistributed among the remaining online directors. This helps maintain performance even in the event of a director failure.

Always: This mode provides full dynamic distribution of I/O limits. The limits are continuously adjusted across all online directors based on the current workload and demand. This ensures optimal resource utilization and performance.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell PowerMax and VMware vSphere Configuration Guide: This guide provides detailed information about Host I/O Limits, including the different distribution modes and their benefits. You can find this document on the Dell

Support website by searching for 'PowerMax and VMware vSphere Configuration Guide.'

Dell Solutions Enabler 10.0.0 CLI User Guide: This guide provides information on how to set Host I/O Limits using SYMCLI commands, including the -dynamic option for specifying the distribution mode.

QUESTION 6

What are the two configuration rules that apply to SRDF groups and connections during Non-Disruptive Migrations'?

- A. The source and target arrays are at most one hop away from the control host
- B. Two DM RDF groups are created per SG migration session
- C. RF and RE ports are supported, with RF ports being selected if both types are available
- D. A single array cannot have multiple DM RDF groups
- E. DM RDF groups are configured with a minimum of one path

Correct Answer: A, E

Section:

Explanation:

Step by Step Comprehensive Detailed

Non-Disruptive Migration (NDM) is a feature in PowerMax that allows you to migrate data between storage arrays without any downtime or disruption to host applications. During NDM, SRDF (Symmetrix Remote Data Facility) is used to replicate data between the source and target arrays. Here are the configuration rules that apply to SRDF groups and connections during NDM:

A . The source and target arrays are at most one hop away from the control host: The control host, which manages the NDM process, must have direct connectivity to both the source and target arrays. This ensures efficient communication and control during the migration.

E . DM RDF groups are configured with a minimum of one path: SRDF groups used for NDM (DM RDF groups) must have at least one active path between the source and target arrays. This ensures that data can be replicated continuously during the migration.

Why other options are incorrect:

B . Two DM RDF groups are created per SG migration session: This is not a strict requirement. The number of DM RDF groups may vary depending on the configuration and the specific NDM operation.

C . RF and RE ports are supported, with RF ports being selected if both types are available: While RF and RE ports are supported for SRDF, there's no specific preference for RF ports during NDM. The choice of ports depends on the overall network configuration and availability.

D . A single array cannot have multiple DM RDF groups: An array can have multiple DM RDF groups if needed for different NDM operations or configurations.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell PowerMax Family: Essentials and Best Practices Guide: This guide provides an overview of NDM and its requirements, including information about SRDF configuration.

Dell Solutions Enabler 10.0.0 CLI User Guide: This guide provides detailed information about SRDF commands and configuration options, which are relevant for NDM operations.

QUESTION 7

What function does the storsrvd daemon support?

- A. Manages Composite Groups and Device Groups
- B. Provides centralized gatekeeper device management
- C. Provides replication consistency protection
- D. Listens for SYMAPI sessions and management requests

Correct Answer: D

Section:

Explanation:

The storsrvd daemon is a critical component of the Solutions Enabler (SYMCLI) software suite used to manage Dell PowerMax and VMAX storage arrays. Its primary function is to:

Listen for SYMAPI Sessions: It acts as a communication endpoint, listening for incoming SYMAPI sessions from clients or management tools like Unisphere.

Handle Management Requests: When a client connects, storsrvd receives and processes SYMAPI commands and requests, forwarding them to the appropriate components within Solutions Enabler for execution.

Essentially, storsrvd acts as an intermediary between SYMCLI clients and the storage array, facilitating communication and management operations.

Why other options are incorrect:

A . Manages Composite Groups and Device Groups: This is handled by other components within Solutions Enabler.

B . Provides centralized gatekeeper device management: While storsrvd plays a role in device management, it's not the sole component responsible for it.

C . Provides replication consistency protection: This is a function of SRDF (Symmetrix Remote Data Facility) and related components.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 CLI User Guide: This guide provides information about the architecture and components of Solutions Enabler, including the role of the storsrvd daemon in handling SYMAPI communication. You can find this document on the Dell Support website by searching for 'Solutions Enabler CLI User Guide.'

QUESTION 8

An administrator is using the Workload Planner feature in Unisphere for PowerMax

How does the Planner calculate if the Storage Group workload is stable?

- A. One of the calculated values is within 10-20% of the SL-defined response time
- B. Both calculated values are within a 10-15% threshold of the SL-defined response time
- C. One of the calculated values remains within the SL-defined response time
- D. Both calculated values are within the SL-defined response time.

Correct Answer: D

Section:

Explanation:

Step by Step Comprehensive Detailed

The Workload Planner in Unisphere for PowerMax helps you analyze and predict the performance impact of adding new workloads to your storage array. It uses sophisticated algorithms to calculate how the addition of a new workload will affect the existing workloads and whether it will violate any service level objectives (SLOs).

To determine if a Storage Group workload is stable, the Planner considers two key calculated values:

Read Response Time: The predicted read response time of the Storage Group after the new workload is added.

Write Response Time: The predicted write response time of the Storage Group after the new workload is added.

The Planner compares these calculated values against the service level (SL) defined for the Storage Group. If both the calculated read and write response times fall within the defined SL response time, the Planner considers the workload to be stable. This means that the new workload can be added without negatively impacting the performance of the existing workloads or violating the SLOs.

Why other options are incorrect:

A . One of the calculated values is within 10-20% of the SL-defined response time: Both read and write response times must be within the defined SL, not just one.

B . Both calculated values are within a 10-15% threshold of the SL-defined response time: The threshold is not fixed at 10-15%. The calculated values must be within the actual SL-defined response time.

C . One of the calculated values remains within the SL-defined response time: Again, both read and write response times need to be within the defined SL.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Unisphere for PowerMax 10.0.0 Online Help: The online help for Unisphere provides detailed information about the Workload Planner feature, including how it calculates and analyzes workload stability. You can access this help within Unisphere itself or on the Dell Support website.

Dell PowerMax Family: Essentials and Best Practices Guide: This guide may offer general information about performance management and workload planning in PowerMax, providing context for understanding the Workload Planner's functionality.

QUESTION 9

When using TimeFinder SnapVX technology, what is the maximum number of target volumes that can be linked to a snapshot on a single source volume?

- A. 255
- B. 256
- C. 512
- D. 1024

Correct Answer: A

Section:

Explanation:

Step by Step Comprehensive Detailed

TimeFinder SnapVX is a snapshot technology in PowerMax that allows you to create point-in-time copies of data. When using SnapVX, you can link target volumes to a snapshot to create writable copies of the data at that

specific point in time.

The maximum number of target volumes that can be linked to a single snapshot on a source volume is 255. This limitation ensures efficient management and performance of the SnapVX snapshots and linked targets.

Why other options are incorrect:

B . 256, C. 512, D. 1024: These numbers exceed the maximum limit of linked targets per snapshot.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 TimeFinder SnapVX CLI User Guide: This guide provides detailed information about SnapVX features and limitations, including the maximum number of linked targets per snapshot. You can find this document on the Dell Support website by searching for 'Solutions Enabler TimeFinder SnapVX CLI User Guide.'

Dell PowerMax Family: Essentials and Best Practices Guide: This guide offers a comprehensive overview of PowerMax technologies, including SnapVX. It may provide context for understanding the limitations and best practices for using SnapVX snapshots and linked targets.

QUESTION 10

Which tasks can a storage administrator manage from the Data Protection menu in the Unisphere for PowerMax?

- A. Convert front-end ports to SRDF ports
- B. Configure and manage SRDF groups
- C. Configure Data Protection for z systems
- D. Review the audit log for unwanted logins

Correct Answer: B

Section:

Explanation:

Step by Step Comprehensive Detailed

The 'Data Protection' menu in Unisphere for PowerMax provides a centralized location for managing various data protection features and functionalities. Specifically, it allows storage administrators to:

Configure and manage SRDF groups: SRDF (Symmetrix Remote Data Facility) is a key technology for disaster recovery and data replication in PowerMax. The Data Protection menu enables administrators to create, modify, and monitor SRDF groups, establish replication relationships between devices, and control replication settings.

Why other options are incorrect:

A . Convert front-end ports to SRDF ports: This is typically done through the 'System > Hardware' or 'Connectivity' sections of Unisphere, where port configurations are managed.

C . Configure Data Protection for z Systems: While PowerMax supports mainframe environments, the specific configuration for z Systems might involve specialized tools or interfaces.

D . Review the audit log for unwanted logins: Audit logs and security-related events are usually found in the 'Monitoring' or 'Security' sections of Unisphere.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Unisphere for PowerMax 10.0.0 Online Help: The online help for Unisphere provides a detailed explanation of the functionalities available in each menu, including the Data Protection menu. You can access this help within Unisphere itself or on the Dell Support website.

Dell PowerMax Family: Essentials and Best Practices Guide: This guide offers a general overview of data protection features in PowerMax and how they are managed through Unisphere.

QUESTION 11

A TimeFinder SnapVX snapshot of a Storage Group was created with a time-to-live setting of seven days. Fourteen days after snapshot creation, a query shows that the snapshot still exists.

What is a possible reason for this issue?

- A. Snapshot has one or more linked targets
- B. Snapshot was not manually terminated
- C. Snapshot was created in NoCopy mode
- D. D. Reserved Capacity limit was exceeded

Correct Answer: A

Section:

Explanation:

Step by Step Comprehensive Detailed

TimeFinder SnapVX snapshots in PowerMax can be configured with a time-to-live (TTL) setting. This setting automatically deletes the snapshot after the specified time period has elapsed. However, there are certain situations where a snapshot might persist beyond its TTL:

Linked Targets: If a snapshot has one or more linked targets associated with it, the snapshot will not be automatically deleted even if the TTL expires. This is because the linked targets depend on the snapshot for their data. The snapshot will remain available until all linked targets are deleted or unlinked.

Why other options are incorrect:

B . Snapshot was not manually terminated: The TTL setting is designed to automatically delete the snapshot; manual termination is not required.

C . Snapshot was created in NoCopy mode: The NoCopy mode affects how the snapshot is initially created, not its TTL behavior.

D . Reserved Capacity limit was exceeded: The Reserved Capacity limit applies to the overall storage space used by snapshots, not the TTL of individual snapshots.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 TimeFinder SnapVX CLI User Guide: This guide provides detailed information about SnapVX features and functionalities, including the time-to-live setting and how it interacts with linked targets.

You can find this document on the Dell Support website by searching for 'Solutions Enabler TimeFinder SnapVX CLI User Guide.'

QUESTION 12

A Storage Group is serving host read/write I/O. The Storage Administrator started an MDM migration and ran a `symdm sync -stop` command, putting the migration in a CutoverNoSync migration state. Where does the customer data in the Storage Group reside?

- A. Only the target array
- B. Only on the source array
- C. On both the source and the target array

Correct Answer: C

Section:

Explanation:

Step by Step Comprehensive Detailed

In an MDM (Migration for Dell EMC) migration, data is moved from a source array to a target array. When the `symdm sync -stop` command is issued, it puts the migration into the CutoverNoSync state. This state signifies that: Synchronization Stopped: Active data synchronization between the source and target arrays has been stopped.

Data on Both Arrays: However, the customer data still resides on both the source and target arrays. This is because the CutoverNoSync state is a transitional state that allows for a controlled cutover to the target array.

The next step would typically involve a cutover operation, where host access is switched to the target array, and the source array is removed from the migration configuration.

Why other options are incorrect:

A . Only the target array: While the goal is to eventually have the data only on the target, in the CutoverNoSync state, data still exists on both arrays.

B . Only on the source array: Data has already been partially or fully copied to the target array during the migration process.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 CLI User Guide: This guide provides detailed information about the `symdm` command and its various options, including the `sync -stop` command and the CutoverNoSync state. You can find this document on the Dell Support website by searching for 'Solutions Enabler CLI User Guide.'

Dell PowerMax Family: Essentials and Best Practices Guide: This guide may offer general information about data migration and the different states involved in the process.

QUESTION 13

A storage administrator is using SE 10 to query a PowerMax 2000 using `symcfg list -dir` and wants to see the number of Cores that are assigned to the front-end emulations. What does the storage administrator need to do?

- A. Use the `-mode v9x` argument for backwards compatibility as some output has been deprecated
- B. Look for CPU instead of Cores as these have been rebranded to allow differentiating between virtual and physical hardware.
- C. Specify the full 12-digit serial number with `-sidso` SE 10 understands the output relates to an older system model.
- D. Use `syraconf igure -version -dir` as in SE 10 support for outputs specific to older systems moved to a different command.

Correct Answer: A

Section:

Explanation:

Step by Step Comprehensive Detailed

Solutions Enabler (SE) 10 introduces some changes to the output format of certain commands for better clarity and consistency. When querying a PowerMax 2000 (which is based on older VMAX architecture) using `symcfg list -dir`, you might encounter differences in the output compared to previous SE versions.

To ensure backward compatibility and see the output in the familiar format, you need to use the -mode v9x argument. This tells SE 10 to display the output in the style of SE 9.x, which is compatible with the PowerMax 2000.

Why other options are incorrect:

B . Look for CPU instead of Cores as these have been rebranded...: While there might be terminology changes, this is not the primary reason for the output difference.

C . Specify the full 12-digit serial number with -sid so SE 10 understands...: The serial number is not directly related to the output format.

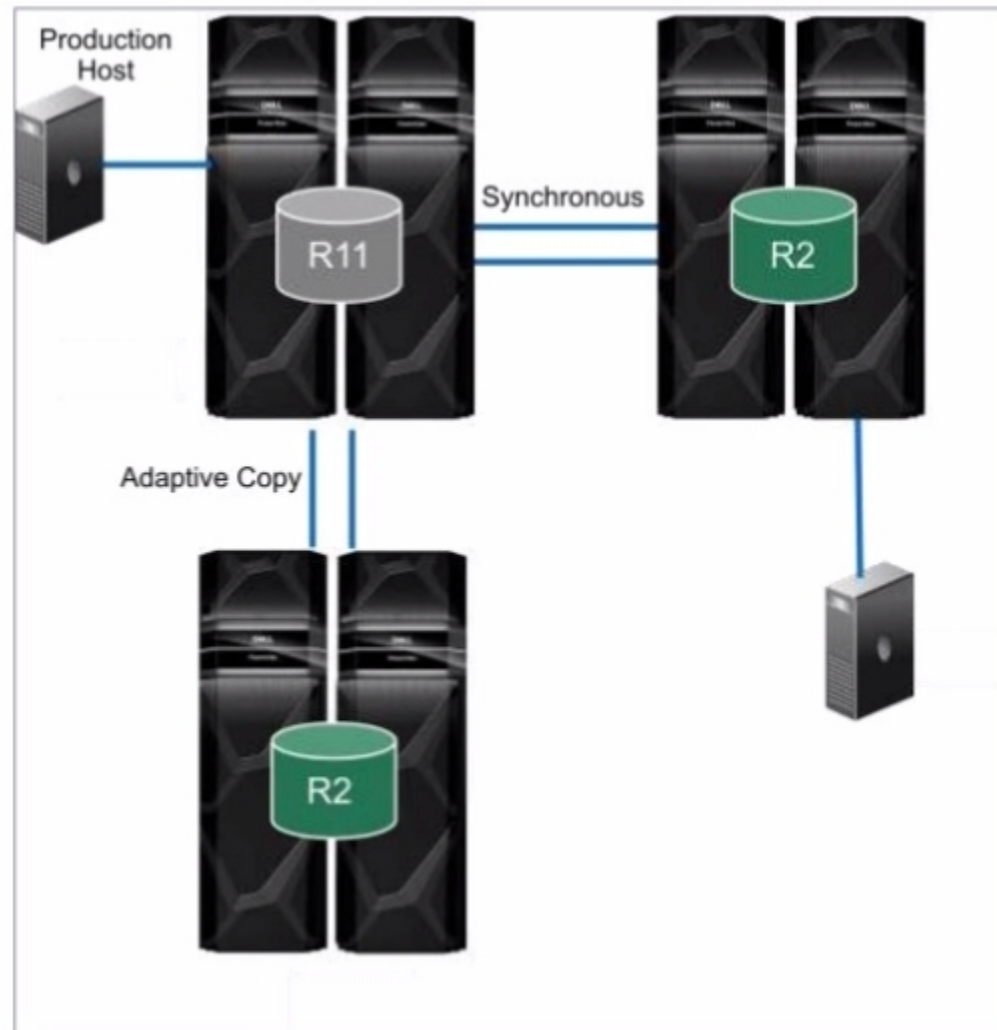
D . Use syraconfigure -version -dir as in SE 10 support for outputs...: The syraconfigure command is not the correct command for this purpose.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 CLI User Guide: This guide provides detailed information about the symcfg command and its options, including the -mode argument for backward compatibility. You can find this document on the Dell Support website by searching for 'Solutions Enabler CLI User Guide.'

QUESTION 14

Refer to the exhibit.



What is the topology shown1?

- A. Cascaded SRDF
- B. SRDF/Star
- C. SRDF/Metro
- D. Concurrent SRDF

Correct Answer: A

Section:

Explanation:

Step by Step Comprehensive Detailed

 **vdumps**

The topology shown in the exhibit depicts Cascaded SRDF. This SRDF configuration involves three storage arrays (or sites) connected in a chained or cascaded manner.

Here's how it works:

Primary Site (R1): The production host is connected to the primary storage array (R1).

Intermediate Site (R2): The primary array (R1) synchronously replicates data to an intermediate array (R2).

Remote Site (R2): The intermediate array (R2) then asynchronously replicates data to a remote array (also labeled R2 in the diagram).

This cascading setup provides a multi-hop disaster recovery solution, where data is first replicated synchronously to a nearby site for high availability and then asynchronously replicated to a further remote site for disaster recovery.

Why other options are incorrect:

B . SRDF/Star: SRDF/Star involves a central array replicating to multiple remote arrays in a star-like pattern.

C . SRDF/Metro: SRDF/Metro is designed for synchronous replication over short distances, typically within a metropolitan area.

D . Concurrent SRDF: Concurrent SRDF allows multiple SRDF relationships to exist simultaneously for the same device.

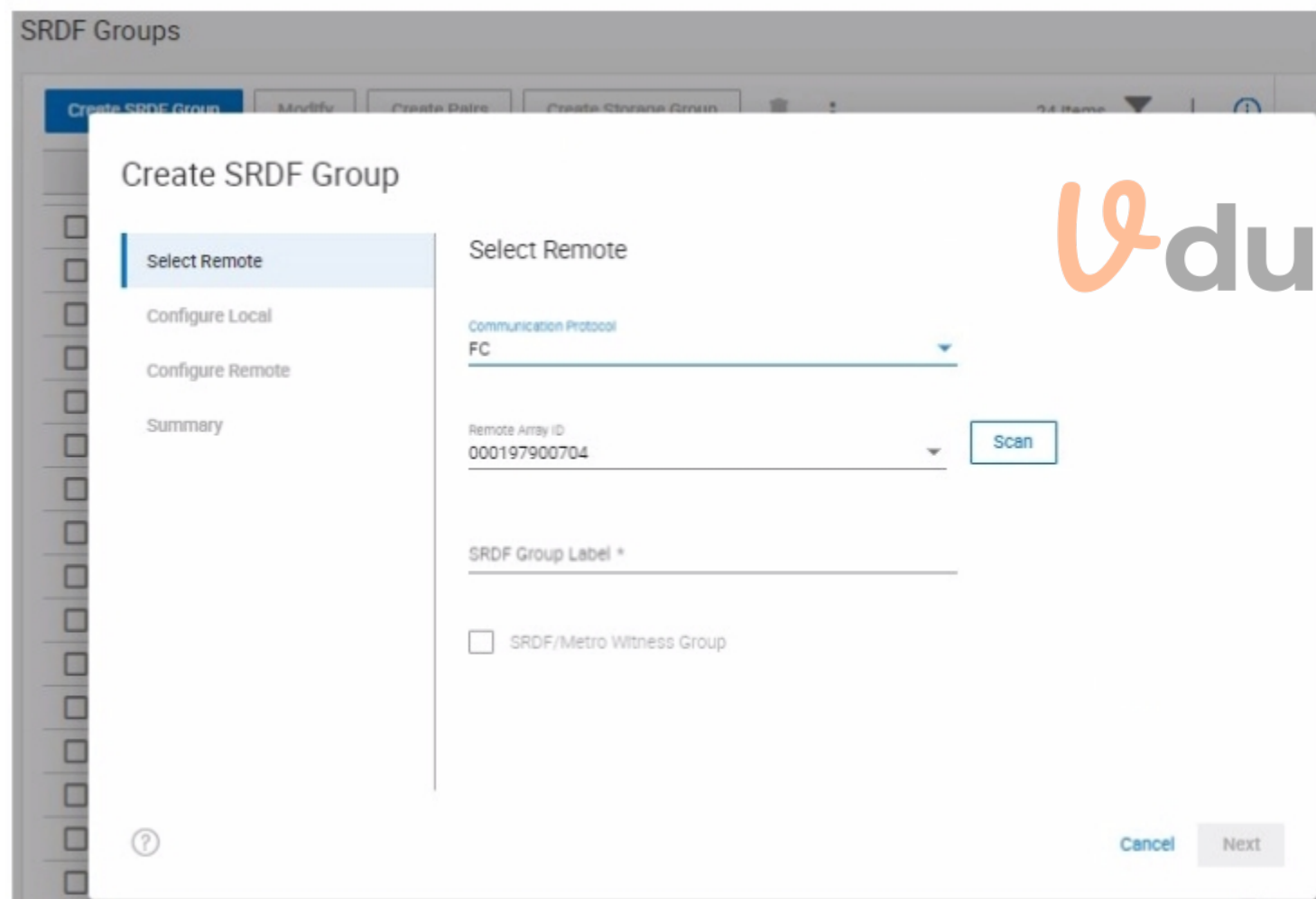
Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 SRDF Family CLI User Guide: This guide provides detailed information about different SRDF configurations, including Cascaded SRDF. You can find this document on the Dell Support website by searching for 'Solutions Enabler SRDF Family CLI User Guide.'

Dell PowerMax Family: Essentials and Best Practices Guide: This guide offers a comprehensive overview of SRDF and its functionalities, including various topologies and use cases.

QUESTION 15

Refer to the exhibit.



SRDF/Metro has been configured between two arrays using a physical witness.

When creating a new SRDF group for the configuration, why is the option to create an SRDF/Metro Witness Group greyed out?

- A. There can only be one SRDF/Metro Witness Group between two arrays
- B. SRDF/Metro Witness Groups can only be created with CLI.

C. The SRDF Group Label needs to be left blank when creating an SRDF/Metro Witness Group

Correct Answer: A

Section:

Explanation:

Step by Step Comprehensive Detailed

SRDF/Metro is a high-availability solution that provides synchronous replication between two storage arrays located within a metropolitan distance. It utilizes a witness to prevent data loss in the event of a split-brain scenario (where communication between the arrays is lost).

In SRDF/Metro, there can be only one Witness Group defined between two specific arrays. This Witness Group manages the witness device that acts as a tie-breaker in case of a communication failure between the arrays.

Since the exhibit shows that SRDF/Metro has already been configured between the two arrays using a physical witness, the option to create another SRDF/Metro Witness Group is grayed out because a Witness Group already exists for that pair of arrays.

Why other options are incorrect:

B . SRDF/Metro Witness Groups can only be created with CLI: While CLI can be used, Witness Groups can also be created through Unisphere for PowerMax.

C . The SRDF Group Label needs to be left blank when creating an SRDF/Metro Witness Group: This is not a requirement. Witness Groups can have labels.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 SRDF Family CLI User Guide: This guide provides detailed information about SRDF/Metro configuration, including the role of the witness and the Witness Group. You can find this document on the Dell Support website by searching for 'Solutions Enabler SRDF Family CLI User Guide.'

Dell PowerMax Family: Essentials and Best Practices Guide: This guide offers a comprehensive overview of SRDF/Metro and its functionalities, including witness configuration and best practices.

QUESTION 16

What is the maximum capacity per array in a PowerMax 8500?

- A. 8 PBe
- B. 18 PBe
- C. 20 PBe
- D. 24 PBe



Correct Answer: D

Section:

Explanation:

Step by Step Comprehensive Detailed

The PowerMax 8500 is a high-end storage array designed for enterprise environments with demanding capacity requirements. The maximum capacity per array in a PowerMax 8500 is 24 petabytes effective (PBe).

This means that after considering data reduction technologies like deduplication and compression, the array can store up to 24 petabytes of usable data.

Why other options are incorrect:

A . 8 PBe, B. 18 PBe, C. 20 PBe: These values are lower than the actual maximum capacity of the PowerMax 8500.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell PowerMax 8500 Hardware Information Guide: This guide provides detailed technical specifications for the PowerMax 8500, including its maximum capacity. You can find this document on the Dell Support website by searching for 'PowerMax 8500 Hardware Information Guide.'

Dell PowerMax Family: Essentials and Best Practices Guide: This guide offers a general overview of the PowerMax family, including the 8500 model and its key features and capabilities.

QUESTION 17

What is the default size of a Gatekeeper on a PowerMax array1?

- A. 3 KB
- B. 3 cylinder
- C. 6 KB
- D. 6 cylinder

Correct Answer: B

Section:**Explanation:**

Step by Step Comprehensive Detailed

A Gatekeeper in PowerMax is a small, dedicated device used for communication between the storage array and Solutions Enabler (SYMCLI), the command-line management interface. The default size of a Gatekeeper on a PowerMax array is 3 cylinders.

While the size can technically be specified in kilobytes (KB), the traditional and preferred unit for Gatekeeper size is cylinders. This is because cylinders represent a specific number of blocks on the physical disks, and using cylinders helps ensure consistent sizing across different disk types and configurations.

Why other options are incorrect:

A . 3 KB, C. 6 KB: These sizes are too small to be practical for a Gatekeeper.

E. 6 cylinder: While older VMAX models might have used 6 cylinders, the current default for PowerMax is 3 cylinders. Reference and documents of Dell's public documentation for PowerMax Operate v.2: Dell Solutions Enabler 10.0.0 CLI User Guide: This guide provides information about Gatekeepers and their role in Solutions Enabler. While it might not explicitly state the default size, it mentions that Gatekeepers are typically small devices. You can find this document on the Dell Support website by searching for 'Solutions Enabler CLI User Guide.' Dell PowerMax Family: Essentials and Best Practices Guide: This guide might offer general information about Solutions Enabler and its configuration, which can provide context for understanding the purpose and sizing of Gatekeepers.

QUESTION 18

From an application perspective, what should be done before performing an SRDF/S Restore operation?

- A. Continue accessing the R1 devices Stop accessing the R2 devices.
- B. Stop accessing the R1 devices Continue accessing the R2 devices
- C. Stop accessing the R1 and R2 devices.
- D. Continue accessing the R1 and R2 devices

Correct Answer: C**Section:****Explanation:**

Step by Step Comprehensive Detailed

Before performing an SRDF/S (synchronous) Restore operation, it is crucial to stop all host I/O activity to both the R1 (source) and R2 (target) devices. This ensures data consistency and prevents potential data loss or corruption during the restore process.

Here's why:

Data Integrity: An SRDF/S Restore operation involves copying data from the R1 device to the R2 device, overwriting any existing data on R2. If hosts are actively accessing and modifying data on either device during this process, it can lead to inconsistencies and data integrity issues.

Synchronization: SRDF/S maintains real-time synchronization between the R1 and R2 devices. 1 Performing a Restore operation while hosts are writing data can disrupt this synchronization and lead to unpredictable results.

Why other options are incorrect:

- A . Continue accessing the R1 devices. Stop accessing the R2 devices: This would leave R1 vulnerable to data inconsistencies.
- B . Stop accessing the R1 devices. Continue accessing the R2 devices: This would make R2 susceptible to data loss or corruption.
- D . Continue accessing the R1 and R2 devices: This is the most dangerous option, as it would likely lead to data integrity issues.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 SRDF Family CLI User Guide: This guide provides detailed information about SRDF operations, including Restore. It emphasizes the importance of halting host I/O before performing such operations to ensure data consistency. You can find this document on the Dell Support website by searching for 'Solutions Enabler SRDF Family CLI User Guide.'

Dell PowerMax Family: Essentials and Best Practices Guide: This guide may offer general information about SRDF management and best practices, which would include recommendations for performing operations like Restore safely.

QUESTION 19

What takes place during an SRDF Restore operation?

- A. Changes made to the R1 are propagated to the R2. Changes made to the R2 are discarded
- B. Resumes normal SRDF mirroring and host access
- C. Changes made to the R2 are propagated to the R1 Changes made to the R1 are discarded
- D. Enables access to both the R1 and R2 devices for their hosts



Correct Answer: A

Section:

Explanation:

Step by Step Comprehensive Detailed

In SRDF (Symmetrix Remote Data Facility), a 'Restore' operation is used to resynchronize the source (R1) and target (R2) devices after a situation where the target device might have been modified independently. This typically occurs after a failover scenario where the target device becomes the primary and undergoes changes.

During an SRDF Restore operation:

R2 Changes Discarded: Any changes made to the target (R2) device since the last synchronization are discarded.

R1 Changes Propagated: The current data on the source (R1) device is copied over to the target (R2), overwriting any existing data on the target.

This effectively restores the target device to a state consistent with the source device, ensuring data integrity and consistency.

Why other options are incorrect:

B . Resumes normal SRDF mirroring and host access: While a Restore operation can be part of the failback process, it's not the only step involved. Failback might involve additional actions like reversing replication direction and restoring host access.

C . Changes made to the R2 are propagated to the R1. Changes made to the R1 are discarded: This describes an 'Update' operation, not a 'Restore.'

D . Enables access to both the R1 and R2 devices for their hosts: This describes a 'Split' operation, where both devices are made accessible independently.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 SRDF Family CLI User Guide: This guide provides detailed information about SRDF commands and operations, including the symrdf restore command. You can find this document on the Dell Support website by searching for 'Solutions Enabler SRDF Family CLI User Guide.'

Dell PowerMax Family: Essentials and Best Practices Guide: This guide offers a comprehensive overview of SRDF and its functionalities, including disaster recovery scenarios and the use of the 'Restore' operation.

QUESTION 20

What does the symsan command do when scanning the SAN environment for devices to use in an O-MDM session?

- A. Temporarily stops the remote application to verify the SAN configuration
- B. Verifies the SAN configuration and creates an ORS session on the remote host
- C. Verifies the SAN configuration without disruption to the remote host
- D. Temporarily stops the remote application and creates an ORS session



Correct Answer: C

Section:

Explanation:

Step by Step Comprehensive Detailed

The symsan command in Solutions Enabler is used for various SAN (Storage Area Network) management tasks. One of its functions is to scan the SAN environment to discover and verify the configuration of devices and paths.

When used in the context of an Open Replicator Migrator for Dell EMC (O-MDM) session, the symsan command specifically:

Verifies SAN Configuration: It checks the connectivity and configuration of the SAN fabric to ensure that the source and target devices are accessible and properly configured for the migration.

Non-Disruptive: It performs this verification without disrupting any applications or host I/O operations on the remote host. This is crucial for maintaining business continuity during the migration planning phase.

Why other options are incorrect:

A . Temporarily stops the remote application to verify the SAN configuration: symsan does not stop applications; it performs a non-disruptive scan.

B . Verifies the SAN configuration and creates an ORS session on the remote host: symsan only verifies the SAN; it doesn't create ORS (Open Replicator Solutions) sessions.

D . Temporarily stops the remote application and creates an ORS session: Again, symsan doesn't stop applications or create ORS sessions.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 CLI User Guide: This guide provides detailed information about the symsan command and its various options, including its use for SAN discovery and verification. You can find this document on the Dell Support website by searching for 'Solutions Enabler CLI User Guide.'

Dell PowerMax Family: Essentials and Best Practices Guide: This guide may offer general information about SAN management and migration tools, providing context for understanding the role of the symsan command.

QUESTION 21

Two PowerMax arrays have been configured for replication using SRDF. During a disaster recovery operation, production has been transferred to the R2 devices at the target site.

Which operation allows the primary hosts to access the R1 devices without waiting for a data transfer to complete from the R2 devices'?

- A. Update
- B. Fallback
- C. Failover
- D. Resume

Correct Answer: D

Section:

Explanation:

Step by Step Comprehensive Detailed

In an SRDF (Symmetrix Remote Data Facility) disaster recovery scenario where production has been switched to the R2 devices at the target site, the Resume operation allows the primary hosts to regain access to the R1 devices without waiting for a full data transfer from the R2 devices.

Here's how it works:

R1 Access: The Resume operation makes the R1 devices (at the primary site) accessible to the primary hosts.

Background Synchronization: While the hosts access and modify data on the R1 devices, SRDF continues to synchronize the changes from the R2 devices (at the target site) in the background. This ensures that the R1 devices are gradually updated with any changes that occurred on the R2 devices during the failover.

This approach minimizes downtime and allows for a quicker return to the primary site without waiting for a lengthy synchronization process to complete before granting host access.

Why other options are incorrect:

A . Update: This operation copies changes from R2 to R1, but it doesn't necessarily grant immediate host access to R1.

B . Fallback: This is a more comprehensive process that involves reversing replication direction and fully restoring the primary site as the production environment.

C . Failover: This operation switches production to the R2 devices, not the R1 devices.

Reference and documents of Dell's public documentation for PowerMax Operate v.2:

Dell Solutions Enabler 10.0.0 SRDF Family CLI User Guide: This guide provides detailed information about SRDF commands and operations, including the symrdf resume command. You can find this document on the Dell Support website by searching for 'Solutions Enabler SRDF Family CLI User Guide.'

Dell PowerMax Family: Essentials and Best Practices Guide: This guide offers a comprehensive overview of SRDF and its functionalities, including disaster recovery scenarios and the use of the 'Resume' operation.

