

# Hitachi

## Exam HH0-110

**Hitachi Data Systems Storage Foundations – Enterprise**

Version: 7.1

**[ Total Questions: 164 ]**

**Topic 1, Volume A****Question No : 1 - (Topic 1)**

A customer has prepared TrueCopy scripts and now wants to create the first replication pairs in an Open Systems environment. Which two steps must be completed before issuing TrueCopy commands? (Choose two.)

- A. Configure HORCM files.
- B. Install RAID Manager CCI.
- C. Ensure that the S-Vols are visible to a host.
- D. Configure external ports.

**Answer: A,B**

**Question No : 2 - (Topic 1)**

A customer is evaluating Hitachi Dynamic Provisioning (HDP) because they are interested in thin provisioning. What are two other benefits provided by HDP? (Choose two.)

- A. increased performance using wide striping
- B. volume creation without formatting time
- C. enhanced data protection using more RAID Groups
- D. automatic migration between FC and SATA pools

**Answer: A,B**

**Question No : 3 - (Topic 1)**

What is the allocation size and unit used by Hitachi Dynamic Provisioning on a VSP?

- A. 16 MB stripe
- B. 42 MB page
- C. 1024 KB slot
- D. 64 MB chunk

**Answer: B**

**Question No : 4 - (Topic 1)**

What is a primary component of Hitachi Virtual Partition Manager?

- A. Port Logical Partition
- B. Disk Logical Partition
- C. Cache Logical Partition
- D. Cache Physical Partition

**Answer: C**

**Question No : 5 - (Topic 1)**

Which two transport methods can HiTrack use to report SIMs to the Hitachi Data Systems Global Support Center? (Choose two.)

- A. FTP
- B. HTTPS
- C. HTTP
- D. SNMP

**Answer: A,B**

**Question No : 6 - (Topic 1)**

A customer is deploying a new OLTP database on a VSP that will have a high performance requirement. They are considering using SSD flash drives, but would like to avoid putting the entire database on SSD. SAS drives will be sufficient for the majority of the workload. Which Hitachi technology should be used to simplify the management of this dynamic workload across SSD and SAS tiers?

- A. Hitachi Dynamic Tiering
- B. Hitachi Dynamic Provisioning
- C. Hitachi Tiered Storage Manager
- D. Hitachi Universal Volume Manager

**Answer: A**

**Question No : 7 - (Topic 1)**

A customer has a ShadowImage pair that is currently suspended and the P-Vol is corrupted. They perform a quick restore. When can they safely start using the data on the P-Vol?

- A. after the P-Vol and S-Vol swap CU:LDEV numbers
- B. after all of the data is copied from the S-Vol to the P-Vol
- C. after the bitmap is transferred and dirty tracks are marked
- D. after the difference data is copied from the S-Vol to the P-Vol

**Answer: A**

**Question No : 8 - (Topic 1)**

What are two components of a storage cluster in a VSP? (Choose two.)

- A. Front-end Directors (FED)
- B. Fiber Switches (FSW)
- C. Virtual Storage Directors (VSD)
- D. Service Processors (SVP)

**Answer: A,C**

**Question No : 9 - (Topic 1)**

One of your customers used Universal Volume Manager (UVM) to virtualize their heterogeneous storage systems by attaching them to a VSP as external storage. Which two UVM tasks were performed during the virtualization process? (Choose two.)

- A. UVM Discovery of the External target ports.
- B. External volumes on the external storage were mapped as Open-9 emulations.
- C. Initiator ports were set on the VSP to connect to the external storage systems.
- D. External ports were set on the VSP to connect to the external storage systems.

**Answer: A,D**

**Question No : 10 - (Topic 1)**

What is the purpose of Hitachi Universal Replicator?

- A. It migrates data between VSP and AMS storage systems.
- B. It maintains a consistent copy of data.
- C. It creates synchronous copies of data.
- D. It migrates data from competitive arrays.

**Answer: B**

**Question No : 11 - (Topic 1)**

You wish to virtualize three external devices on a VSP using Universal Volume Manager. Which parameter should you consider modifying to avoid high cache write pending?

- A. Path Mode
- B. Cache Mode
- C. Priority Mode
- D. I/O Suppression Mode

**Answer: B**

**Question No : 12 - (Topic 1)**

Which two actions are needed when configuring TrueCopy replication on a VSP? (Choose two.)

- A. Set ports on the MCU to Initiator.
- B. Set ports on the RCU to Initiator.
- C. Add an RCU.
- D. Add an MCU.

**Answer: A,C**

**Question No : 13 - (Topic 1)**

A business that generates large amounts of sensitive data has an IT system combining mainframe and Open-Systems applications. They need a storage solution offering highly

secure data storage with minimal performance impact and costs, and consistent with their green data center policy. Which three VSP storage system features meet these requirements? (Choose three.)

- A. VSP can encrypt data in cache before de-staging to disk.
- B. VSP Virtual Storage Directors have a built in encryption capability.
- C. VSP offers encryption capabilities to Open-Systems and mainframe applications.
- D. VSP reduces capital cost by removing the need for discrete encryption devices.
- E. VSP encryption creates no measurable increase in heat output or energy consumption.

**Answer: C,D,E**

**Question No : 14 - (Topic 1)**

What does the Hitachi Dynamic Link Manager "Path Health Check" feature provide?

- A. It detects link issues before data I/O is affected.
- B. It automatically removes the paths where an intermittent error is occurring.
- C. It monitors load balancing.
- D. It automatically places a recovered path back online.

**Answer: A**

**Question No : 15 - (Topic 1)**

A storage administrator wants to script a TrueCopy operation in an Open Systems environment. Which two components are required? (Choose two.)

- A. Command Device
- B. Storage Navigator 2
- C. RAID Manager CCI
- D. replication.conf file

**Answer: A,C**

**Question No : 16 - (Topic 1)**

What are two results when license keys expire? (Choose two.)

- A. No new configuration settings may be performed.
- B. Configuration changes are permitted for a period of 24 hours after expiration.
- C. Configuration settings that were made before the temporary license key expired remain in effect and cannot be deleted.
- D. Configuration settings that were made before the temporary license key expired will revert back to their original settings.

**Answer: A,C**

**Question No : 17 - (Topic 1)**

Which RAID level would provide optimal performance for sequential I/O while still providing data protection?

- A. RAID0 (8D)
- B. RAID6 (6D+2P)
- C. RAID5 (7D+1P)
- D. RAID1 (2D+2D)

**Answer: C**

**Question No : 18 - (Topic 1)**

You want to use Hitachi Replication Manager in an Open Systems environment. Which two actions must be performed? (Choose two.)

- A. Install Replication Manager Agent.
- B. Install RAID Manager CCI.
- C. Install Configuration File Loader (CFL).
- D. Install Hitachi Device Manager.

**Answer: B,D**

**Question No : 19 - (Topic 1)**

What are two drive types supported by the VSP SAS back-end architecture? (Choose two.)

- A. SSD
- B. FC
- C. iSCSI
- D. SATA

**Answer: A,D**

**Question No : 20 - (Topic 1)**

A customer wants to virtualize a new SATA modular storage array and must ensure that virtualizing the new array will have no affect on internal Tier 1 applications. What should the customer do?

- A. Install additional RAID Groups for the Tier 1 applications.
- B. Create a cache logical partition for the new storage.
- C. Configure additional initiator ports for the new storage.
- D. Create a system logical partition for the Tier 1 application.

**Answer: B**

**Question No : 21 - (Topic 1)**

To secure continuous operations, Hitachi Tiered Storage Manager is designed to meet which fundamental requirement?

- A. multi-tiered backup
- B. non-disruptive data migration outside the storage domain
- C. configuration of external devices
- D. non-disruptive data migration within the storage domain

**Answer: D**

**Question No : 22 - (Topic 1)**

What are three advantages of implementing NAS gateways with SAN-based storage?



(Choose three.)

- A. NAS gateways are optimized for file serving.
- B. NAS gateways are optimized for block-level access.
- C. NAS gateways offer multiple protocols for file serving.
- D. NAS gateways combine file server and storage device into one unit.
- E. NAS gateways separate file server from storage device.

**Answer: A,C,E**

**Question No : 23 - (Topic 1)**

A storage administrator wants to set up Hitachi Universal Replicator to replicate data from site A to site B. Observing redundancy requirements, what is the minimum total number of ports that should be set to the RCU target?

- A. 1
- B. 2
- C. 4
- D. 8

**Answer: C**

**Question No : 24 - (Topic 1)**

A customer wants to connect an existing storage system as external storage to a VSP using Universal Volume Manager. What are two required configuration steps? (Choose two.)

- A. Create a 4 GB cache partition.
- B. Create and map LUNs on the external storage system.
- C. Map external volumes to the External Path Group.
- D. Deselect Cache Mode.

**Answer: B,C**

**Question No : 25 - (Topic 1)**

A company needs to improve their SLAs and simplify management of their storage environment. The company will use their VSP to achieve these requirements. One of the data warehouse applications needs access to the most recent order data at multiple times during the day for billing and data mining. Which product should be used to create the online copy of the OLTP database?

- A. TrueCopy
- B. ShadowImage
- C. Copy-on-Write Snapshot
- D. Universal Replicator

**Answer: B**

**Question No : 26 - (Topic 1)**

You are creating two ShadowImage pairs on a VSP. The volume capacities are 10 GB. Volume 1 has 5 GB of user data and volume 2 has 7 GB of user data. Hitachi Dynamic Provisioning is not installed. When performing the paircreate operation, what is the expected timing?

- A. Pair 1 will take a longer time.
- B. Pair 2 will take a longer time.
- C. Both pairs should take the same time.
- D. Either pair can take longer depending on the compression ratio.

**Answer: C**

**Question No : 27 - (Topic 1)**

A customer has a 100 GB DP-Vol that is 70% consumed and does not expect the amount data to increase. They would like to replicate this volume using ShadowImage to a new DP Pool that can be over subscribed. What is the minimum amount of capacity required for the new HDP Pool?

- A. 35 GB
- B. 80 GB
- C. 100 GB
- D. 160 GB