Nondisruptive, high-speed data replication within any Hitachi storage system or virtualized storage pool is a reality with Hitachi ShadowImage Replication software. Its cloning capability, independent of operating system, application or device, enables immediate use of data in decision support, software testing and development, and data protection operations.

Hitachi ShadowImage Replication Software for Hitachi Enterprise Storage

Data Replication for Enterprise Storage

Hitachi Data Systems provides innovative, storage-based technology solutions that enable continuous business operations for companies of all sizes. Enabling business continuity means partnering with you to understand your key business challenges and requirements and providing robust, application-focused storage solutions that enhance operational efficiency and resilience.

Today’s prudent business-continuity and risk-mitigation strategies and optimized IT operations must support essential capabilities. Requirements include the ability to quickly replicate data for critical application processing, testing and development of new applications, zero downtime recovery, data migration and necessary backup operations.

High-speed, nondisruptive local mirroring technology of Hitachi ShadowImage Replication software rapidly creates multiple copies of mission-critical information within all Hitachi storage systems in mainframe and open systems environments. ShadowImage software keeps data RAID-protected and fully recoverable, without affecting service or performance levels. Replicated data volumes can then be split from the host applications and used for system backups, application testing and data mining applications, while business continues to run at full capacity.

ShadowImage software is part of the Hitachi Local Replication bundle, which also includes Hitachi Thin Image snapshot software.

ShadowImage software provides replication between any storage systems within a virtualized storage pool managed by Hitachi Virtual Storage Platform, Hitachi Unified Storage VM, or the Virtual Storage Platform G1000 family. Leveraging the storage-virtualization capabilities of these systems, administrators can move data that resides on an externally attached storage system from the source to a target data volume anywhere in the storage pool. This capability includes moving the data to another externally attached system. With ShadowImage software, IT can migrate data volumes from one platform to another to maximize the use of the storage infrastructure.

ShadowImage software can create virtual volumes of thin provisioned volumes created with Hitachi Dynamic Provisioning software. The ShadowImage virtual volumes only consume the actually mapped physical storage. These volumes are defined for the desired capacity of the volume, regardless of the physical disk capacity.

Business Benefits

Ensure Business Continuity

- Shortens restart and recovery times with the consistency group function, which provides multivolume, point-in-time copies for applications and databases that share or span multiple volumes.
- Reduces recovery from data corruption time dramatically through the ShadowImage QuickRestore feature, which allows an immediate restore from a disk resident, point-in-time data copy.
- Replicates large data volumes without having an impact on service levels, timing out or affecting performance levels.
- Enables disaster recovery plan testing: In conjunction with distance replication solutions like Hitachi Universal Replicator software, replicas of the data volume can be created through the ShadowImage At-Time Split capability; this action does not interrupt the distance replication process.
- Allows virtual volume to virtual volume replication via Dynamic Provisioning software, which requires the disk space actually used, not the virtual volume size.

Improve Productivity and Processes

- Reduces testing and deployment time and increases the accuracy of application development by providing always-available copies of current production data.
- Increases competitive advantage through the ShadowImage QuickSplit function by facilitating the sharing of and immediate access to time-critical information; this information can be used for decision support, populating data warehouses, performing analysis or other data mining operations.
- Enables normal backup operations on a copy of up-to-date production data while critical applications continue to run unaffected.
- Simplifies data migration between storage systems.

Reduce Operational and Capital Costs
- Allows business to remain online during data center activities, eliminating the need for 24/7 resources to perform these tasks.
- Maximizes the storage infrastructure by leveraging the virtualization capabilities of the Hitachi Virtual Storage Platform, Hitachi Universal Storage Platform V, Hitachi Universal Storage Platform VM or Hitachi Virtual Storage Platform G1000 family.
- Allows the use of cost-effective storage for enhanced data protection purposes.
- Dynamic Provisioning thin-provisioned volumes with ShadowImage software provide operational flexibility and savings in the physical storage required for replication and ongoing operations.

ShadowImage Advantages
- The ShadowImage software consistency group function allows a user-defined group of ShadowImage volume pairs to be split simultaneously, at a precise moment in time, with a single command. This copy method creates a consistent point-in-time copy of an entire system, database or any related sets of volumes. It is a technique that can replicate data between a primary system and secondary systems anywhere in the world, with full data integrity.

Services
Hitachi Data Systems Global Solution Services provides the Hitachi In-System Replication Bundle Implementation Service. This service helps organizations improve testing and application deployment operations with high-speed, problem-free data duplication. Consultants tailor the configuration and integration of ShadowImage software to serve an organization’s backup and recovery application requirements, whether in open systems or mainframe environments.

Complementary and Optional Software
- Hitachi Thin Image snapshot software.
- Hitachi TrueCopy replication software.
- Hitachi Universal Replicator software.
- Hitachi Replication Manager software.

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