

Hitachi Unified Storage VM Storage Virtualization System



Consolidate, reuse and reclaim. Hitachi Unified Storage VM storage virtualization system consolidates external storage into a single managed set to extend asset life and reclaim capacity.

Drive Maximum Utilization and Reduce Storage Costs

Hitachi Unified Storage VM storage virtualization system is designed for organizations that need to manage their storage assets more efficiently. Existing storage from multiple vendors can now be centrally unified in a shared pool of data. A highly efficient architecture allows organizations to satisfy growth requirements and simplify operations to reduce the total cost of storage ownership.

With industry-leading enterprise storage virtualization technology from Hitachi Virtual Storage Platform, Unified Storage VM extends ease of migration, increased utilization, and space reclamation to all storage assets. With a central point of control, this storage virtualization system provides equivalent storage services to all consumers of storage capacity. Payback on investment in storage virtualization is often less than 1 year.

One of the most pressing issues facing organizations today is the need to reduce storage costs. By implementing a virtualized tiered storage architecture, an IT

organization can dramatically improve storage capacities and lower capital and operational expenses. Virtualized tiered storage better aligns data on storage systems by allowing administrators to efficiently match storage attributes with the service level needs of individual business applications. Fragmentation of the storage environment caused by independently managed storage and corresponding interoperability problems creates underutilized capacity and duplicates storage networking equipment, contributing to escalating hardware costs. Eliminating barriers to sharing, storage recovery and improving capacity utilization rates can deliver sustainable long-term savings by allowing future purchase of storage assets to be deferred.

Hitachi Universal Volume Manager software enables the virtualization of a multitiered storage area network composed of heterogeneous storage systems. Multiple storage systems connected to Unified Storage VM act as if they were all in 1 storage

system with common management tools. The shared storage pool in this storage virtualization system comprises external storage volumes. These volumes can be used with storage-system-based software for data migration and replication, as well as any host-based application. Combined with Hitachi Dynamic Tiering software, Unified Storage VM provides an automated data-lifecycle management solution across multiple tiers of storage.

A system administrator only needs to configure the connection from a host to Unified Storage VM. After the configuration is completed, a host can manipulate volumes in the external storage system in the same way as volumes internal to Unified Storage VM. This storage virtualization system provides the external storage with thin provisioning, data replication, logical partitioning and advanced virtual server support. Storage services can then be provided on-demand for critical IT and cloud applications.

Business Benefits

Virtualized Tiered Storage

- Management simplicity through the use of common storage services throughout an entire heterogeneous storage infrastructure.
- A radically more efficient IT environment that goes beyond consolidation into dynamically allocated tiered storage.
- Asset value protection achieved by supporting the virtualization of heterogeneous storage systems from leading vendors.
- Storage reclamation and improved utilization of existing physical assets.
- Transparent data migration between heterogeneous storage resources without affecting access to data by business applications.
- Automate data placement according to workload; maximize storage service levels and minimize storage costs.
- Minimize operational costs through higher levels of usability and workflow across dissimilar storage types.

HITACHI UNIFIED STORAGE VM STORAGE VIRTUALIZATION SYSTEM

Controller	
Maximum (Max.) Raw External Capacity	64PB
External Arrays Supported	100+ from multiple vendors*
Max. External Volume Size	60TB
Max. Number of External Volumes	16,384
Height	5U
Controllers	2
Architecture	Employs a hierarchical star network.
Host Interfaces	48 Fibre Channel: 8Gb/sec
Cache per Controller	256GB
Software Packages	
Hitachi Basic Operating System	Hitachi Device Manager, Hitachi Dynamic Provisioning, Hitachi Dynamic Link Manager Advanced, Hitachi Storage Navigator, cache partition manager feature, storage-system-based utilities, Hitachi Universal Volume Manager
Hitachi Command Suite Mobility	Hitachi Dynamic Tiering, Hitachi Tiered Storage Manager
Hitachi Command Suite Analytics	Hitachi Tuning Manager, Hitachi Command Director
Hitachi Local Replication	Hitachi ShadowImage® Heterogeneous Replication, Hitachi Replication Manager, Hitachi Thin Image
Hitachi Remote Replication	Hitachi TrueCopy®, Hitachi Universal Replicator

*External arrays supported may be viewed at www.hds.com/products/storage-systems/specifications/supported-external-storage.html



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