Hitachi Announced High-End TagmaStore™ Storage Platform

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[Hitachi Data Systems](#) Corporation, a wholly-owned subsidiary of Hitachi, Ltd., today announced its new Hitachi TagmaStore™ Universal Storage Platform, a combination of revolutionary advances in hardware and software that radically improves [storage](#) efficiency and significantly reduces the total cost of ownership (TCO) of enterprise storage. The platform, which extends Hitachi's leadership in performance and capacity, powers virtualization breakthroughs, including logical partitioning, management of externally attached heterogeneous storage, and universal storage-agnostic replication. Hitachi Data Systems will provide professional and consulting services through its Global Solution Services organization to help customers obtain the highest benefits from the Universal Storage Platform.

"The Universal Storage Platform represents a new category in the industry as its powerful architecture enables new levels of virtualization and replication not possible in previous generations of enterprise storage. It supports a new operational paradigm capable of delivering a holistic Application Optimized Storage™ approach across an entire enterprise," said Scott Genereux, senior vice president of global marketing and channels, Hitachi Data Systems. "The result is a new economics framework for information infrastructures, providing organizations with millions of dollars in potential cost savings."

Radical Efficiency™
A recent SNIA (Storage Networking Industry Association) survey of customer pain points ranked "Total Cost of Ownership" number one.

According to ITCentrix, an independent software and services firm, customers can expect the Universal Storage Platform to deliver significant TCO benefits.

"It's currently too expensive to provide a common management solution for the fragmented data assets of a corporation," said Dave Vellante, CEO of ITCentrix. "Based on our extensive analysis, nothing else compares to this product, which in some configurations will deliver a 160 plus percent internal rate of return on a $3.4M investment over 3 years. This changes the dynamics of the storage industry."

These savings are achieved through the Universal Storage Platform's ability to aggregate up to 32 Petabytes of internal and external storage into a single virtual storage pool, with common functionality and application Quality of Service (QOS), managed from a single console. This new platform dramatically reduces management overhead and software licensing costs, at the same time extending the latest software advances to older or depreciating storage assets.

By adopting this unified management structure, Hitachi removes the need for, and cost of, multiple and overlapping software products. For example, within a conventional SAN each storage device requires independent replication software. In contrast, Universal Replicator software resides on the Universal Storage Platform only, eliminating the need for multiple software licenses, upgrades and maintenance contracts, further reducing the total cost of ownership.

Breakthrough Innovations
Several breakthrough innovations from Hitachi, Ltd. implemented in the Universal Storage Platform and accompanying software enable these significant economic and information architecture benefits:

1. **Hitachi Universal Star Network™**

The third-generation of Hitachi's unique massively parallel, mega scalable crossbar switch architecture delivers an unsurpassed 68 Gigabytes per second of cached bandwidth, 2 Million IOPs (input output operations per second), 256 concurrent memory operations, and supports 332TB of internal storage capacity—representing advantages over other storage products of 850%, 500%, 800%, and 395%, respectively.

2. **Hitachi Universal Volume Manager software**

Hitachi extends its Virtual Storage Ports/Host Storage Domains technology into the first large-scale embedded virtualization layer, enabling up to 32 Petabytes of internal and external storage to be aggregated into one common pool and managed by a single set of tools and software. Combined with Volume Migration, Universal Volume Manager enables policy-based data lifecycle management across multiple tiers of storage.

3. **Hitachi Virtual Partition Manager software**

The first storage implementation of the logical partitioning feature from Hitachi, Ltd.'s large-scale servers, the Virtual Partition Manager allocates internal and external physical storage resources, including ports, cache and disk, into independently-managed Private Virtual Storage Machines. Partitions can be dynamically modified to meet application Quality of Service requirements based on changing business priorities.

4. **Hitachi Universal Replicator software**

Continuing to advance Hitachi's superior asynchronous remote replication technology, the Universal Replicator features several industry firsts, including heterogeneous replication, disk-based journaling, protection against link failure, "pull" copying, and multi-data center support, greatly simplifying disaster recovery solutions for customers.

"Simplifying storage management is no longer a 'need to have' among customers but a 'must have' in order to reduce the total cost of ownership of their storage networks," said Tony Asaro, senior analyst, Enterprise Strategy Group. "Two major initiatives to achieve lower storage TCO include storage consolidation and implementing intelligence in the

fabric. The Hitachi Universal Storage Platform is an enterprise-class storage system that enables massive consolidation, and at the same time is a virtualization platform used to manage other external storage systems. This an exciting new approach that brings the value of both of these cost saving initiatives from a leading storage vendor that has been providing storage systems and software for mission-critical applications for years."

Commenting on today's announcement, Brian Frank, senior director, architecture and infrastructure, for United Airlines, said, "Enterprise storage environments consist of a body of storage devices that need direction. As we all know, anything with more than one head is a monster; therefore the new Universal Storage Platform will allow for an intelligent storage head that will empower an enterprise to virtualize all other storage as submissive devices under the Universal Storage Platform. Enterprises like ours are dealing with the explosive growth in all areas of information lifecycle management and the staffing required to handle this growth. The Hitachi Universal Storage Platform will enable enterprises to deal with this growth by attaching, virtualizing, and managing all of our diverse storage systems from a single pane of glass. As a result, we believe enterprises will achieve radical performance efficiencies, reduce TCO and increase ROI."

A New Paradigm

"The next big thing in high-end enterprise storage arrays is array virtualization and partitioning, which will enable precise matching of application requirements to storage resources, providing improved security for individual applications and enhanced functionality. These types of innovations will transform the disk control unit into a universal storage server supporting heterogeneous storage systems," said Josh Krischer, vice president and research director, Gartner.

The Universal Storage Platform will empower IT executives to look at

storage deployment and management in a whole different way. By placing the Universal Storage Platform at the apex of their storage infrastructure and attaching existing storage systems directly or through a Storage Area Network (SAN), CIOs can gain significant savings through radical efficiencies of scale. These efficiencies can be achieved through single-pane-of-glass management across all functions, by matching data's value to the appropriate class of storage, and allocating and optimizing resources to meet the application's QoS for any customer workload. Device allocation criteria can include availability, performance, capacity, and cost.

Today, the Universal Storage Platform can move mainframe data to midrange storage systems—an industry first. In the future, the Universal Storage Platform will be able to underpin applications such as Enterprise Content Management (ECM) by aggregating all sources of information and protocols across the organization and optimizing the placement of content across all tiers of storage.