Universal Data Management Buyer’s Guide

Strategies to simplify data management and analytics.

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Today’s data storage landscape is stretched across an increasing variety of storage arrays, data and application silos that creates the need for an unified data management architecture to efficiently store, manage and make sense of all your data assets. More often than not, your data is disconnected and inaccessible, making decisions and analysis difficult, if not impossible.

What if there was an unified data management framework that helped to organize and unlock access to all data assets, no matter where they reside? Imagine being able to:

- Scale your storage infrastructure cost effectively
- Automate data management practices and policies
- Drive new data insights to accelerate business results

All with added efficiency, cost control, risk mitigation, and ease of management.

This guide will show you how to bring everything together, simplify and take charge of your data using an universal data management approach.
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What is Universal Data Management?

**Universal Data Management** provides a new approach way to improve and unlock access to all data assets – no matter where they reside with an efficient way to manage various data systems, sources and types.

With an end-to-end framework, universal data management is an easier way to handle information from different sources and types. **It works with both structured and unstructured data**, helping combine existing storage systems into a common virtualized environment for centralized storage visibility, control and management.
Why Centralized Data Management?

By centrally managing data with a common data and control plane, you can simplify data management processes across different data silos. In addition, by using a standard set of tools, you can improve scalability and streamline operations by automating management workflows, which can efficiently optimize application data performance and storage capacity.

Benefits of Centralized Data Management:

- Accelerate performance
- Provide easier access
- Reduce costs
Buying Criteria for Universal Data Management

Look for the following criteria when evaluating systems for universal data management.

- **Scalability and Performance**
- **Advanced Automation**
- **Intelligent Optimization**
Scalability and Performance

Today, we will generate nearly three times the volume of data than we did four years ago. But to drive value from all this data, you need to understand it, which means it needs to be available, assessable — and fast. However, with data growing exponentially, storage capacity needs can create scalability, reliability and performance challenges.

With universal data management, you can easily add scalable storage capacity and performance to address these growing data demands. This strategy utilizes a shared storage operating system and virtualization to enable common data management services across various storage assets.

With a shared data management and control plane, you can have increased data visibility, access and control while enabling data to easily move between data assets, tiers and a hybrid cloud environment based on defined data management policies.

Consolidating data silos via storage virtualization provides the flexibility to extend the life of existing storage systems without the need of significant infrastructure upgrades for improved storage ROI.

Did you know?

Hitachi Virtual Storage Platform provides a 100% Data Availability Guarantee.

Checklist:

- Scale-out data storage platforms support multiple data types and any application workload.
- Flexibly extend the life of existing data storage investments without requiring significant hardware upgrades.
- Consolidate data silos with a common data plane through storage virtualization including 3rd party storage assets.
Managing large data repositories can be risky and time-consuming, especially when data is siloed and requires manual backend operations to accomplish daily management tasks. If you can’t properly manage or connect all the data, how will you understand it, learn from it or set rules for its use?

By unifying disparate data silos under a common data management architecture, you can unlock data insights faster with the right data discovery, profiling and automation at scale to reach new business impact potential.

AIOps will simplify common data management tasks with automated practices, enabling faster storage resource delivery by up to 90% and reducing manual processes by up to 70%. By managing data with this approach through its lifecycle, shared cyber resiliency capabilities can be applied for enhanced data security and protection against ransomware.

The cost of recovery, the resulting downtime in the aftermath of a ransomware attack, and the reputational damage can be 10 to 15 times more than the ransom.¹

Did you know?

Hitachi Virtual Storage Platform delivers cost-effective cyber resiliency capabilities to protect all data assets from ransomware.

¹ https://www.gartner.com/en/doc/how-to-prepare-for-ransomware-attacks

Checklist:

- Common storage virtualization architecture and integrated management approach.
- AIOps to automate management tasks.
- Shared data protection and cyber resiliency capabilities.
Intelligent Optimization

It’s easy to keep collecting and storing data, but it might be time to reassess needs if a percentage of that data is racking up storage costs without being used. Do you have the correct data governance rules? Can data be moved to long-term storage for compliance? How can you simplify and automate this process?

First, create an end-to-end view of all enterprise data by integrating distributed data sources and using rapid profiling and classification of all structured and unstructured data. Then, after eliminating data silos, use data intelligence and utilization patterns to provide insights for more effective operations, tiering for cost, performance and application optimizations.

Did you know?

Hitachi Vantara provides rapid out-of-the-box integrations for over 600 distributed data sources.

Checklist:

- Rapid profiling and classification of all structured and unstructured data.
- Data availability and placement optimization.
- Observability of data usage, content assets and storage optimization.
Strategy Recommendations

Build a universal data management platform with the right infrastructure and tools.

**Consolidate Data Silos**
Utilize universal data management architecture to consolidate data silos with a single, shared data plane to enable faster delivery of common data services at lower costs, simplify management tools while facilitating rapid data infrastructure deployments.

**Fast & Accurate Data Processing**
Ensure all your data resource needs are being met across mission critical business applications, online transaction processing and high-performance workloads (AI/ML, data & business analytics) while accelerating accurate data analytics operations.

**AIOps**
Utilize the power of AI operations to better observe, optimize, manage and protect data management operations to adapt to changing application needs, ensure fast data access and improve IT operational efficiencies.

**DataOps**
Accelerate discovery, classification and integration of data and manage the entire data lifecycle to uncover new data insights and opportunities to reduce governance risk, improve performance and lower cost of your data infrastructure and analytics.
Unlock the full potential of your data - bridging the gap between storage, data and applications.

Hitachi Vantara’s Universal Data Management provides a comprehensive framework to manage data across different silos. It works with both structured and unstructured data, integrating various storage systems into a unified virtualized environment. This offers better control, visibility and management of your data. Benefits include faster data-driven results, fewer outages, reduced ransomware risks and support for sustainability goals.
Hitachi Storage Virtualization Operating System (SVOS)

Single storage operating system and virtualization architecture enables consolidation of multiple data silos providing shared management operations and easy data migrations to lower overall data management costs.

Global Services

Professional Services, Managed Services, and Education Services are three service domains designed to cater to customers’ specific needs and desired outcomes, to maximize their investments in Hitachi technology.

High-Performance Storage Infrastructure

VSP 5000 or VSP E Series Storage Platform

Scalable storage platforms with all-flash and hybrid configurations for general purpose business applications to high performance transactional and analytical workloads.

AIOps

Hitachi Ops Center

AIOps-enabled infrastructure management streamlines operations, optimizes performance, improves capacity utilization and ensures data is protected.

Data Ops

Pentaho Platform

Intelligent data platform to deliver excellent customer experiences, create new insights faster and lower costs. Automate data governance, audit and regulatory compliance.

Learn More

Learn how Hitachi Vantara’s Universal Data Management can help you meet your data goals.
ABOUT HITACHI VANTARA

Hitachi Vantara, a wholly owned subsidiary of Hitachi Ltd., delivers intelligent data platforms, infrastructure systems and digital expertise that support more than 80% of the Fortune 100. To learn how Hitachi Vantara turns businesses from data-rich to data-driven through agile digital processes, products and experiences, visit hitachivantara.com.