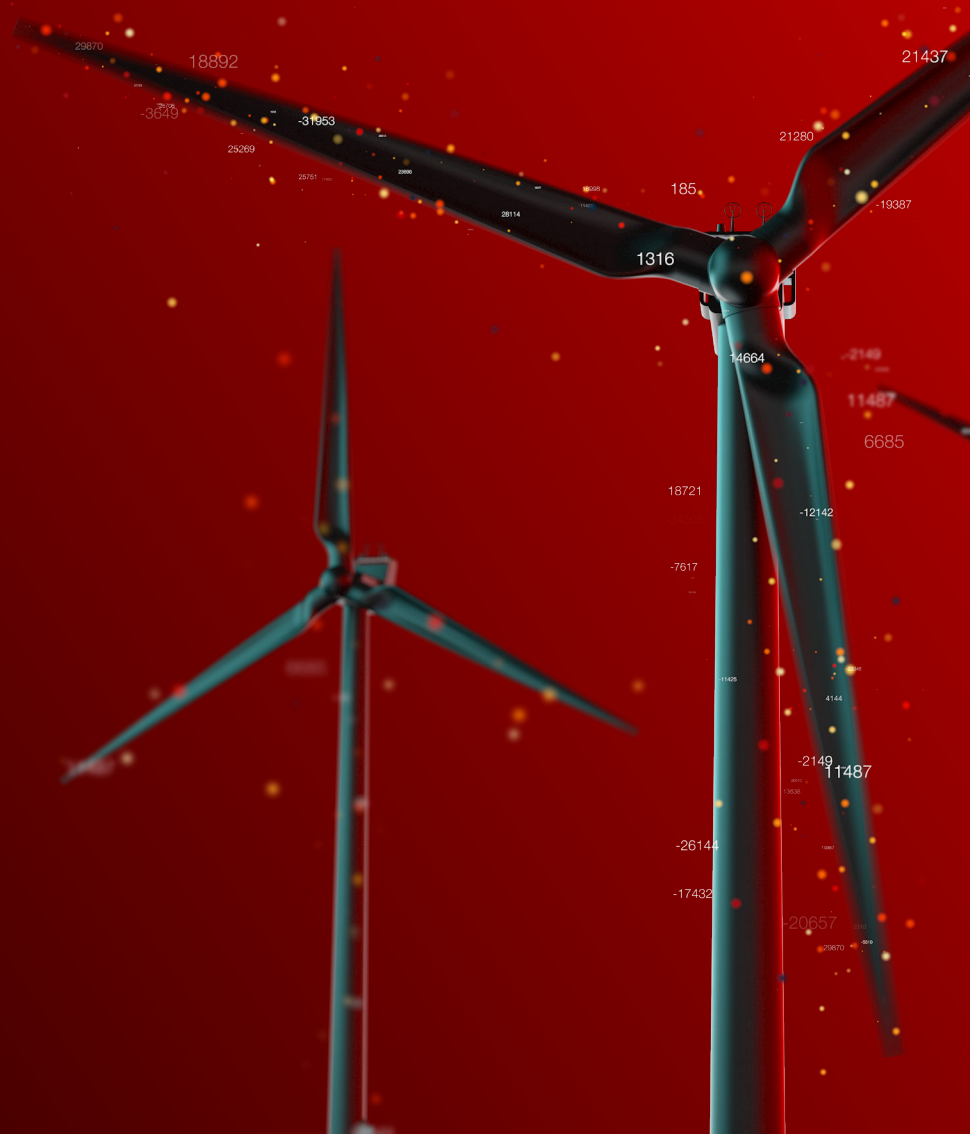
HITACHI
Inspire the Next

Five Data Storage Management Challenges

(and How To Solve Them)

e-book



Introduction

Can your growing federal agency keep up with the demands of real-time, data hungry applications? If your IT staff is overwhelmed by maintenance tasks and struggling to drive innovation, but can't seem to find those elusive operational efficiencies to "do more with less," it's time to rethink how you manage data storage.

Maximize Your Data Infrastructure Advantage

To get performance and agility that scales, there are five data storage management challenges you will need to solve – and this e-book will show you how.

Read on for the solutions ⟶

The Five Data Storage Management Challenges

1. Bridge the skills gap
2. Do more with less
3. Get more value from your data center
4. The need for budget efficiencies
5. The need to protect data (and your company's reputation)

Challenge 1

Bridge the Skills Gap

There are only so many hours in a workday. If you're not careful, your team will spend more and more of those hours maintaining enterprise storage systems, with less time for strategic projects. You either need to keep hiring, or help your team find new efficiencies.

> I can't bridge the skills gap nor deliver with this reduced headcount.

Solution

Make automation work for you. Automation and analytic tools with integrated AI artificial intelligence (AI) and machine learning (ML) help manage ever-growing storage with fewer personnel, resources and human interaction.

How To Implement It

Hitachi Ops Center uses AI-enabled IT analysis and automation to improve operational efficiency and speed of new resource delivery.

The Hitachi Vantara Advantage

- Reduce manual administrative tasks by up to 70% to give your team a break.
- Automate storage provisioning workflows to simplify and error-proof your infrastructure resource management. Optimize performance and improve the speed of delivery with insights from machine-learning resources analysis.
- Gain IT operational insights to help optimize end-to-end resource performance and improve utilization.

> I am continually challenged to do more with less and I am struggling to meet internal and external SLAs.

Challenge 2

Do More With Less

You can't afford to let increasing storage demands slow your federal agency down. But you also can't afford the time and cost of setting up new enterprise storage infrastructure.

Solution

World-class storage infrastructure (speed, capacity, low latency, high availability) is now accessible for companies of all sizes and budgets. New storage virtualization capabilities even allow you to get additional value from older infrastructure without having to completely rip and replace.

How To Implement It

The Hitachi Virtual Storage Platform (VSP) family delivers the performance your growing mission-critical applications need, and consolidate to more efficiently manage and increase the utilization of your storage footprint.

The Hitachi Vantara Advantage

- Eliminate bottlenecks for data-hungry applications with NVMe.
- Maintain the pace of digital business with a 100% data availability GUARANTEED and 24/7 responsive infrastructure.
- Ensure low latency service levels are met and rapidly troubleshoot problems with telemetry metrics analysis across the full data path, from virtual machine to shared storage resources.
- Suffer fewer headaches with predictable and repeatable experiences for all your applications.

Challenge 3

Get Your Value From Your Data Center

Once routine tasks are under control, you need to keep them under control. But can your infrastructure keep up with accelerating demands and still support new digital transformation initiatives?

Solution

Future-proof your storage decisions with scalable, reliable infrastructure. Agility forms a foundation for confident business innovation.

How To Implement It

Hitachi VSP E990 gives you economical access to the latest technology to increase agility and drive innovation. In addition, Hitachi Ops Center provides AI-enabled operations to improve IT operational efficiencies, optimize performance and ensure your data is protected.

The Hitachi Vantara Advantage

- Get best in class performance with latency as low as 64µs and 5.8M IOPs for supercharged application response times
- Quickly and easily upgrade to Storage Class Memory (SCM) and NVMe over Fabrics (NVMe-oF) in the future.
- Simplify storage management tasks with unified system administration.
- Advanced AIOps accelerate speed of execution and innovation by letting your staff concentrate on areas that add value to the business.

> Longer term, I want to deliver more value from the datacenter and support business innovation.

> To keep up, I need to find ways to get more out of my budget.

Challenge 4

Create Budget Efficiencies

Your staff and infrastructure are stretched, but so is your budget. It's time to get creative about resource use to maximize ROI.

Solution

Adopt technologies that create budget efficiencies. For example, automation reduces operational personnel cost, virtualization improves the ROI of existing infrastructure, and data compression reduces infrastructure requirements.

How To Implement It

Hitachi's VSP family allows you to dynamically scale up or down as needed by applying technology solutions to improve performance efficiency.

The Hitachi Vantara Advantage

- Accelerate new resource delivery by up to 90% by using automated provisioning workflows.
- Reduce IT operating budget waste by up to 20% by paying as you consume.
- Reduce storage costs with AI-driven data reduction that is guaranteed by Hitachi.
- 4:1 sight-unseen effective capacity guarantee to extract the highest value per GB and IOP.
- Extract the highest value per GB for performance with Data Efficiency (ADR).
- Lower TCO on existing assets by up to 20% and extend the life of older systems with using third-party storage virtualization.

Challenge 5

Protect Data

Not all news is good news. You don't want your federal agency to be on the front page due to long-term outage or a data breach.

Solution

Predictable performance, encryption of stored data and guaranteed availability helps protect your uptime, data and reputation.

How To Implement It

The Hitachi Virtual Storage Platform family safeguards continuous operations for key applications and provides nonstop, uninterrupted data access and zero RTO and RPO goals.

The Hitachi Vantara Advantage

- Reduce risks with new infrastructure resource deployment with automated provisioning tasks.
- Eliminate risk of theft and data leaks with FIPS 140-2 encryption and industry-leading data erasure.
- Prevent illegal access and destruction of data with hardened system access
- Simplify ongoing security compliance with KMIP agility
- 100% data availability guarantee across the entire Hitachi VSP portfolio.

> "I need to protect our data and our company reputation."

Introducing the Hitachi Midsize Enterprise Portfolio

The Hitachi Virtual Storage Platform (VSP) all-flash portfolio grows with your needs with a family of storage solutions powered by a common storage operating system, user experience and AI-enabled management suite.

PROVEN

Trusted capabilities that won't break the bank

- Legendary 100% data-availability guarantee.
- Time-tested performance, availability and scalability.
- Guaranteed to reduce storage costs.

POWERFUL

AI Ops that work harder so you can work smarter

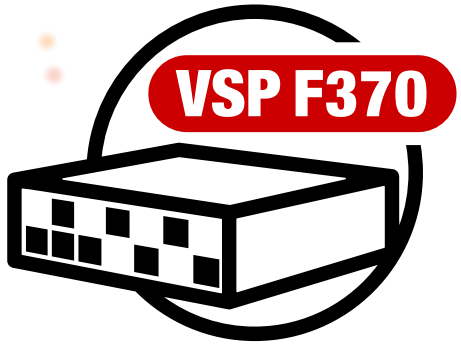
- Accelerate storage resource delivery by up to 90%
- Troubleshoot and get to root-cause analysis 4x faster.
- Reduce manual tasks by up to 70%

PREDICTABLE

Pricing that's predictable for usage that's flexible

- Predictable pricing with cloud-like consumption.
- Reduce IT operating budget waste by up to 20%
- Align purchase to business use to reduce waste, disruption and overspending.

The Hitachi Virtual Storage Platform (VSP) Midsized Enterprise Portfolio



VSP F370

- VSP F370 is a storage solution with bundled software that delivers both performance and value with 1.2M IOPS and 8.6PB raw flash capacity.

VSP F900

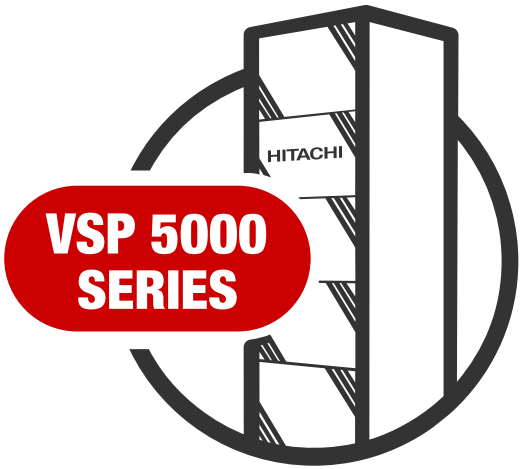
- Step up to VSP F900 for a high-performance, scalable, enterprise-class storage solution with bundled software that offers 2.4M IOPS and 34.6PB raw flash capacity.

VSP E990 – NEW

- The newest member of the VSP family is VSP E990, delivering best-in-class performance and 2x the max performance of a fully scaled-out Dell PowerMax 2000, and 5x the max effective capacity of the Pure Storage //X90.

VSP 5000 Series

- For the most demanding enterprise storage applications, the VSP 5000 series provides the foundation for a modern, enterprise-class infrastructure. As the world's fastest NVMe flash array, the VSP 5000 series provides 21M IOPS and 70µs best-in-class latency, an all-new, scale-out architectural design that is optimized for NVMe, and delivers best-in-class performance and resiliency.



SVOS RF

Common across all systems above

- All VSP systems ship with Hitachi Storage Virtualization Operation System (SVOS) RF, which provides a common software platform that delivers 24/7 application availability.

Hitachi Ops Center

Common across all systems above

- Hitachi Ops Center is an integrated AI Operations software suite to simplify management operations for Hitachi storage infrastructures. Leverage operational insights to make informed decisions to improve administrative best practices, improve performance utilization and lower costs.
    - Simplify systems management.
    - Gain new insights across the full data path to improve service levels, resource planning and troubleshooting (insert Ops Center Analyzer animated icon).
    - Automate IT resource provisioning to speed delivery and reduce risks.
    - Streamline enterprise copy data management to ensure your data is protected.

Ops Center Administrator

Ops Center Analyzer

Ops Center Automator

Ops Center Protector

Let Hitachi Vantara Federal and our partners help you accelerate transformation with the storage portfolio made for digital business. No matter what type of data, application or business, you can trust our comprehensive flash storage solutions.

LEARN MORE >

We Are Hitachi Vantara Federal

We at Hitachi Vantara Federal implement end-to-end data solutions that meet the federal government's needs. Hitachi Vantara Federal provides pathways to the cloud and converged IT systems through virtualization, storage, XaaS and DCC to reduce IT complexity and increase the efficiency of the U.S. Government. Hitachi Vantara Federal is able to offer the best information and operation technology from across Hitachi to provide exceptional value to government agencies. Hitachi Vantara Federal is headquartered in Reston, Virginia.

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