HITACHI
Inspire the Next

Five Challenges To Solve
When Modernizing
Your Infrastructure

Introduction

As your organization moves along the path to digital transformation, your infrastructure needs to keep pace with the new rules of the emerging data economy. The AI-based applications and real-time data needs of the future will require an integrated, intelligent architecture that is capable of storing, managing and processing all sources and types of data while scaling to manage the ever-growing assimilation of data.
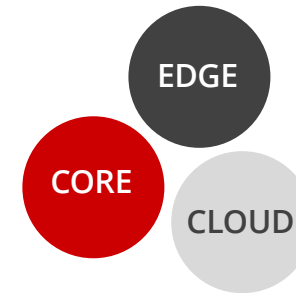
Is your infrastructure ready to support the new workloads, architecture and expectations of the future?

The New Rules of the Data Economy

EDGE

CORE
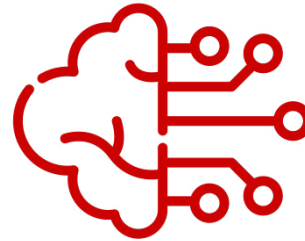
CLOUD

New Workloads

Enterprise AI / ML / AR

New Architecture

Edge To Multicloud

New Expectations

Business @ Speed of Now

This e-book will show you how to fast track digital transformation by solving five key infrastructure modernization challenges.

Challenge No. 1: How To Rapidly Process Data

With an aim to gain competitive advantage, 40% of your rivals will be investing in predictive analytics. This data-driven capability, along with the collection of IoT data streams, generates huge volumes of data that must be processed rapidly to yield relevant insights.

How To Solve the Challenge

To enhance the performance of existing workloads and prepare for modern workloads like IoT data and streaming analytics, you will need a storage architecture that can scale up and out — and fast. Application performance drives the need for all-flash performance that is enhanced by nonvolatile memory express (NVMe) technology.

Accelerate Workload Performance With VSP 5000 Series

Hitachi Virtual Storage Platform 5000 series offers the world's fastest NVMe equipped storage system, delivering 21M IOPS and as low as 70 microseconds latency. In a league of its own, VSP 5000 series delivers speeds 1.4 times faster than Dell and IBM.

21M
IOPS

70μs
Best in Class
Latency

Challenge No. 2: How To Manage Diverse Workloads

To support the business needs of today and tomorrow, you need a digital infrastructure that can be upgraded and scaled to support any data-driven workload.

How To Solve the Challenge

Eliminate inefficient storage silos by implementing one system that can accelerate and consolidate multiple workloads of any type — from traditional (Oracle, SAP, Microsoft), to modern (containerized) and even mainframe.

Deliver Workload Diversity With VSP 5000 Series

With the VSP 5000 series, up to 69PB of capacity enables a single footprint most big-data analytics workloads. Designed to get data insights and business outcomes faster, Hitachi's Pentaho data integration and analytics platform can make full use of the VSP 5000 series' 21 million IOPS.

UP TO 69PB CAPACITY

SUPPORT FOR ANY AND ALL BIG-DATA WORKLOADS

Challenge No. 3: How To Future-Proof Your Architecture

To future-proof your architecture, you need to be able to take advantage of "future" technologies without worrying about obsoletion, time-consuming data migrations or service-stopping disruptions.

How To Solve the Challenge

Implement infrastructure that's flexible and expandable so that you can buy exactly what you need, when you need it. This way, you won't outgrow the system, it won't slow you down as you scale, and as technology changes, you do not need to rip and replace the array.

Expand and Update With VSP 5000

VSP 5000 is the first storage platform in the industry to offer a mixed nonvolatile memory express (NVMe) solid-state disk (SSD), serial-attached SCSI (SAS) SSD, and HDD in one environment that can scale up in capacity but also scale out for performance. This approach provides a composable data platform for all your workloads.

Mix NVMe and SAS

Optimize workload cost and performance

NVMe

SAS

SCM
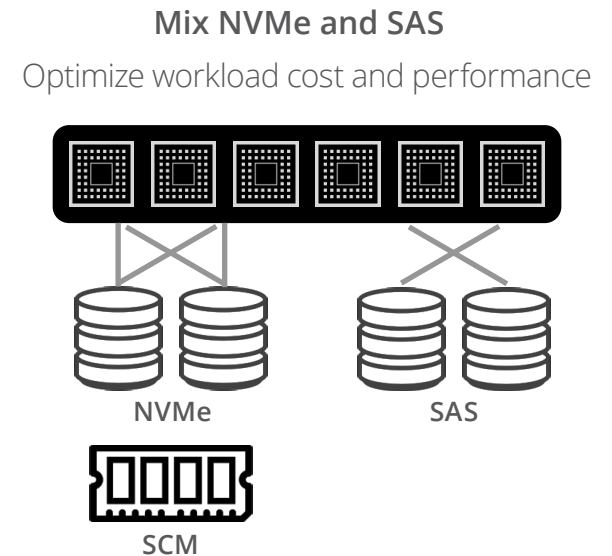
Challenge No. 4: How To Extend the Value of Existing Storage Assets

To improve the total cost of ownership of your infrastructure, you need to enhance the value and extend the life cycle of your existing data services, such as data reduction, automation and metro clustering.

How To Solve the Challenge

Storage virtualization provides a single management control point for multiple storage systems, which increases administrative efficiencies and enables you to extend new capabilities to aging arrays, including deduplication, AI-driven tiering, and automated provisioning.

Introduce Powerful Array Virtualization With VSP 5000

Modernizing your data center with VSP 5000 series accelerates return on investment (ROI) by enabling the redeployment of existing storage assets by virtualizing them as a Hitachi VSP solution. This way you can run an NVMe caching layer on the VSP 5000 series to reduce application latency on aging arrays and tier down to your existing arrays for less performant workloads.

Average **40%** reduction in storage TCO	Up to **60%** more efficient data storage	**38%** more dedupe performance

# Challenge No. 5: How To Simplify Management and Accelerate Automation

Management operations, storage provisioning and performance optimization of data platforms create a demanding, never-ending cycle of lengthy, repetitive tasks for IT staff, pulling them away from innovative business efforts.

How To Solve the Challenge

Create AI-enabled management operations that can rapidly improve IT operational efficiencies. Ongoing data center operations can leverage machine learning for data-driven recommendations that can improve automation efforts. With integrated IT analytics and automaton, gain end-to-end data path monitoring, smart provisioning and orchestrated problem remediation. Streamline online migration efforts to maximize return on investments of your infrastructure.

Enable AI Operations With Hitachi Ops Center

Hitachi Ops Center enables the foundation for Hitachi's AI-driven infrastructures. Drive new IT operational efficiencies with Hitachi Ops Center to manage, optimize, automate, plan, troubleshoot and protect Hitachi storage infrastructures.

Analyzer

Automator

Ops Center

Protect

Administrator
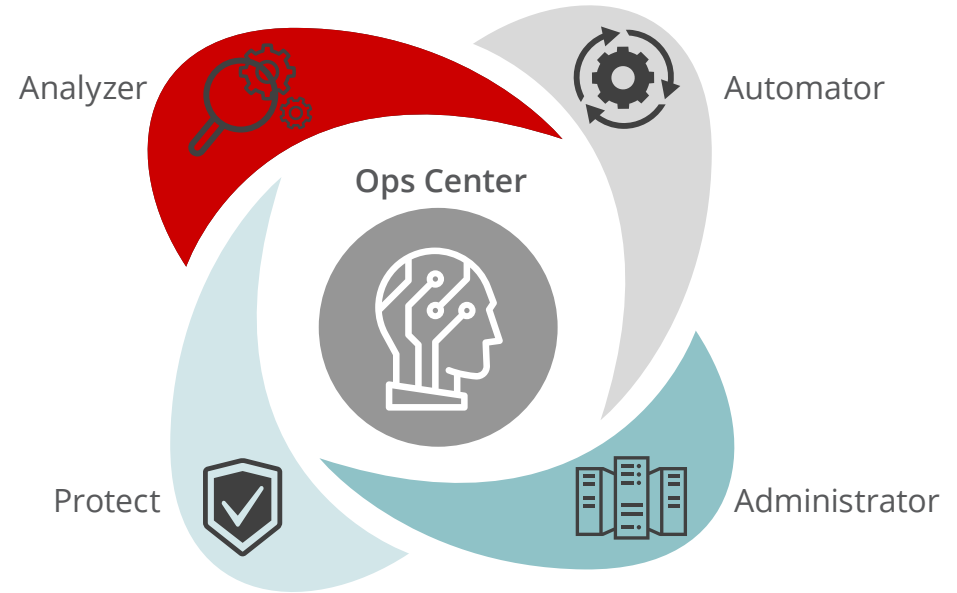
Up to
70%
reduction in storage management tasks

Can save
2000+
hours per month

30 To 8
reduction in manual steps (of managing storage)

7

Meet the Hitachi Virtual Storage Platform (VSP) 5000 —the Game Changer in the Data Center

Hitachi Virtual Storage Platform 5000 series is the fastest storage array in the world. It allows you to focus on your DataOps advantage by having the right data in the right place at the right time.

The VSP 5000 series scales up to 69PB of raw capacity and 21 million IOPS of performance, which allows for massive consolidation of workloads for cost savings. And with response times as low as 70 microseconds, your team will be delighted by how fast their applications run. Meanwhile, you won't outgrow the system, and it won't slow down as you scale.
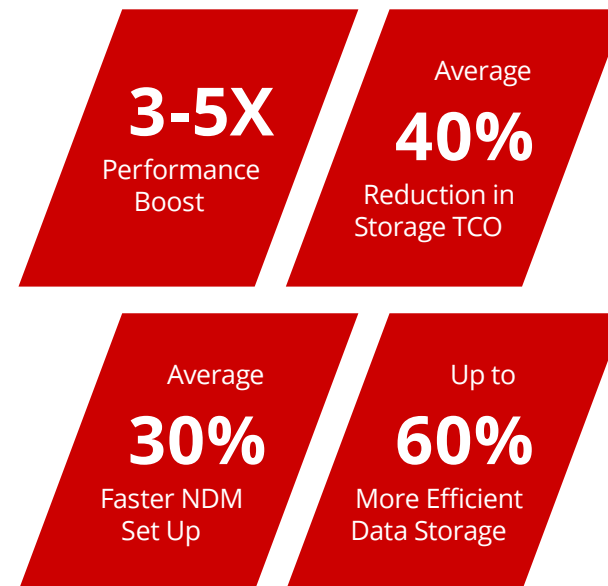
Choose From Four Models in the VSP 5000 Series

VSP 5100	The all-flash VSP 5100 is a scale-up enterprise storage platform with a dual-controller block supporting open and mainframe workloads.
VSP 5500	The all-flash VSP 5500 starts with a single quad controller block and scales out to three blocks as you grow. The VPS 5100 provides a nondisruptive upgrade path to this model.
VSP 5100H	Hybrid array model of the VSP 5100.
VSP 5500H	Hybrid array model of the VSP 5500.

Rely on Hitachi Engineering Experience

The VSP 5000 series builds on 57 years of Hitachi engineering experience, with over 350 unique flash patents. Hitachi offers a superior range of continuity options, all backed up with the industry's first and most comprehensive 100% data availability guarantee.

Get on the Fast Track to Digital Transformation With VSP 5000

3-5X Performance Boost

Average **40%** Reduction in Storage TCO

Average **30%** Faster NDM Set Up

Up to **60%** More Efficient Data Storage

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Learn more about VSP 5000 >

We Are Hitachi Vantara
Get Your DataOps Advantage, connecting data consumers with data creators. Accelerate your collaboration and digital innovation with one great solution partner.