## **Hitachi Vantara**

## A Buyer's Guide to Hitachi Vantara Virtual Storage Platform One SDS

Accelerate Development, Simplify Migration, Enhance Performance

## Executive Summary

IT Organizations today continue to struggle with managing large amounts of data across complex, distributed (often siloed) environments. Concerns about infrastructure scalability and manageability leave them vulnerable to outages and inefficiencies.

Hitachi Vantara's Virtual Software Platform One -Software Defined Storage (VSP One SDS) solution offers a unified data platform that seamlessly integrates block, file, and object storage across on-premises and cloud environments including Google Cloud Platform, AWS and Microsoft Azure —enabling unmatched hybrid and multi-cloud flexibility.

VSP One SDS delivers intelligent workload management across hybrid and multi-cloud environments with AI-powered common data and control planes, patented Hitachi Polyphase Erasure Coding (HPEC), and flexible deployment options. Enhanced with asynchronous bidirectional replication, VSP One SDS ensures superior fault tolerance, enhanced performance, and simplified data mobility between on-premises and cloud environments.



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## Table of Contents

(01)

Why VSP One SDS?

02

Use Case:
Application Development and Testing

03

**Use Case:**Distributed Applications

04

**Use Case:**Cloud Migration

05

Key Capabilities

06

Product Page





## Why VSP One SDS?

VSP One SDS delivers a powerful solution for managing data across hybrid cloud environments. It provides software-first storage innovation designed to meet the demands of modern applications and their data.

#### **Key Features**

- **Software-First Innovation:** Replace costly hardware cycles with flexible, enterprise-class solutions for petabyte-scale storage.
- Eliminate Silos: Unify block data across a single platform with Al-powered and API capable administration, reducing storage footprints and freeing staff for strategic initiatives
- Expanded Cloud Support: Seamlessly deploy and manage storage pools across Google Cloud Platform, AWS and Microsoft Azure with unified data and control planes for workload mobility and operational consistency
- Enhanced Serviceability: Use patented Hitachi Polyphase Erasure Coding (HPEC) for improved performance and data protection.

#### VSP One SDS is Ideal For

- Application Development and Testing: Offers agile storage resources for DevOps teams.
- **Distributed Applications:** Ensures data availability across diverse environments.
- Cloud Migration: Ensures seamless data transfer between on-premises and cloud infrastructures.

With VSP One SDS, organizations can achieve greater data scalability and flexibility, streamline management, and support their digital transformation initiatives while optimizing costs and improving ROI.

Streamline storage operations and reduce costs with VSP One SDS. Simplify data management across hybrid cloud environments, enhance performance, and eliminate silos.







## Use Case: Application Development and Testing

Application development and testing teams struggle to quickly provision and manage storage resources for diverse testing environments, leading to delays and increased costs.

Hitachi Vantara VSP One SDS solution addresses these challenges by offering rapid provisioning, using APIs and policy as code, of storage resources and the flexibility to scale capacity and performance independently with separate data and control planes. With support for Google Cloud Platform (GCP), AWS, and MicrosoftAzure, development and testing can occur across multi-cloud environments.

It supports both traditional (legacy database) and modern (AI/ML) block-based workloads, providing AI-powered administration for efficient resource allocation. The solution

seamlessly integrates with containerized platforms like Kubernetes and offers a consistent storage layer across on-premises, AWS, GCP, and Azure hybrid environments. By implementing Hitachi Vantara VSP One SDS solution, organizations can:

- Accelerate development cycles
- Improve resource utilization
- Enable faster, more efficient application testing and deployment
- Accelerating hybrid cloud initiatives without the need for third party replication

This approach not only streamlines the development process but also helps optimize costs and improve overall productivity in application development and testing environments.











# Use Case: Distributed Applications

For most enterprises there some significant challenges when managing distributed applications across storage environments. Existing storage solutions don't always have the adaptability and scalability they need. Existing solutions typically have performance issues and a certain amount of operational complexity. This translates into:

- Slower application responses
- Data inconsistencies
- Lower performance visibility
- Less data mobility across distributed systems

Hitachi Vantara's VSP One Software Defined Storage (SDS) solution removes these challenges by providing a unified platform designed for distributed applications. It ensures smooth data access and management across edge, core, and cloud environments, supported by Al-driven common data and control planes.

With VSP One SDS, you can enhanced modern application performance, simplify management processes, and maintain data consistency across on-premises, AWS, GCP and Azure environments.







## Use Case: Cloud Migration

Enterprises are continuing to move workloads to the cloud, which requires efficient data migration strategies. However, storage solutions and applications often don't have the flexibility and scalability needed for a seamless cloud migration. This can lead to additional data silos, multiple storage locations, and complex non-integrated management infrastructure.

Hitachi's Vantara's VSP One SDS solution addresses these challenges by offering seamless data transfer between on-premises and cloud infrastructures. Ilt provides common data and control planes across hybrid cloud environments. With enhanced asynchronous bidirectional replication, VSP One SDS enables efficient, low-impact data replication between on-premises and any supported cloud—including AWS, GCP, and Azure—in both directions. This ensures data consistency, disaster recovery, and workload flexibility across all environments.

The solution offers flexible deployment options on-premises and in public clouds like AWS, Google Cloud Platform (GCP) and Microsoft Azure, ensuring a single consistent storage layer across hybrid cloud environments. With Al-powered management for optimized operations, Hitachi's Vantara's VSP One SDS:

- Simplifies cloud migration
- Ensures data consistency, and
- Eases hybrid cloud management
- Connect Existing Hitachi Storage to the cloud

Hitachi Vantara's VSP One SDS solution ensures success for enterprises pursuing cloud migration initiatives, offering simple seamless data transfer and management across hybrid environments.









# Key Capabilities: Disaster Recovery and Data Resilience

Hitachi Vantara VSP One SDS includes robust disaster recovery (DR) capabilities to protect critical data and ensure business continuity across distributed hybrid and multicloud environments. Key features include:

- Asynchronous replication across AWS, GCP, and Azure, enabling efficient protection and data mobility between clouds and on-premises data centers.
- Multi-availability zone (Multi-AZ) deployment, supporting advanced fault tolerance and automated failover for minimal service interruption.
- DR automation and testing, let you check your recovery plans without disrupting your live production systems.
- Integrated security with end-to-end encryption and Hitachi Polyphase Erasure Coding for cost-efficient, resilient data protection.









## Embrace the Future of Storage with VSP One SDS

### **Application Development and Testing**

Accelerate development cycles and improve resource utilization with rapid provisioning, flexible scaling, and seamless integration with containerized platforms like Kubernetes.

**Learn More** 



### **Distributed Applications**

Ensure consistent, high-performance storage access and simplified management across edge, core, and cloud infrastructures, improving overall application responsiveness and data consistency.

**Learn More** 



#### **Cloud Migration**

Streamline data transfer between on-premises and cloud environments with seamless replication, flexible deployment options, and a consistent storage layer across hybrid cloud infrastructures.

**Learn More** 



Simplify operations and reduce costs with Hitachi's Software Defined Storage (SDS). Simplify data management across hybrid cloud environments, enhance performance, and eliminate silos. Experience the agility to meet evolving business needs while optimizing your storage infrastructure.

Discover more information about Hitachi Vantara VSP One SDS









## **Hitachi Vantara**

#### About Hitachi Vantara

Hitachi Vantara is transforming the way data fuels innovation. A wholly owned subsidiary of Hitachi Ltd., we're the data foundation the world's leading innovators rely on. Through data storage, infrastructure systems, cloud management and digital expertise, we build the foundation for sustainable business growth.



