Solution Profile

Navigating the Hybrid Cloud Landscape

Addressing the Challenges of Modern Storage Infrastructure



Managing Hybrid Cloud Complexity

Addressing the challenges of orchestrating data movement and security across diverse environments.

Ensuring Consistent Performance

Strategies for maintaining reliable performance across traditional and cloud-native workloads.

Enhancing Data Protection and Compliance

Implementing robust security measures to meet regulatory requirements in distributed systems.

Hitachi Vantara provides integrated storage solutions, including the VSP One platform, to help enterprises manage hybrid cloud environments efficiently and securely.

Storage and IT teams are supporting enterprises through a profound transformation. Changes are driven by the rapid adoption of hybrid cloud environments, exponential data growth, and the increasing demand for AI-powered insights across distributed storage and application systems. As enterprises try to remain competitive in this data driven era, they face the critical challenge of modernizing their storage infrastructure to meet the evolving needs of both traditional and cloud-native applications without service disruption. The most pressing challenges include:

- Managing hybrid cloud complexity
- Ensuring consistent performance
- Addressing data protection concerns
- Overcoming skills gaps, and
- Balancing cost-efficiency with enterprise-class features

Enterprise support teams are looking for a storage infrastructure that seamlessly scales across environments, supports diverse applications with enterprise-class performance, offers unified Al-driven management, ensures high availability with advanced data protection, and reduces complexity through softwaredefined flexibility.

Hitachi Vantara's VSP One platform offers a comprehensive approach to storage that seamlessly bridges the gap between on-premises and cloud environments. VSP One Block, Software-Defined Storage, and Ops Center Clear Sight work in concert to deliver unparalleled scalability, performance, and operational efficiency, empowering businesses to unlock the full potential of their data in today's data transformation cycle.

VSP One Block

VSP One Block addresses modern storage challenges by offering a scalable and high-performance solution for mission-critical workloads. Its ability to scale out to 65-node clusters provides massive capacity and performance, enabling organizations to seamlessly grow their storage infrastructure as needs evolve. By supporting block, file, and S3 access protocols in a single platform, VSP One Block eliminates data silos and simplifies management across diverse workloads. Furthermore, its 4:1 data reduction guarantee and 100% data availability ensure optimal resource utilization and uninterrupted access to critical data, delivering both cost efficiency and enterprise-class reliability

VSP One SDS

Hitachi's Virtual Storage Platform One Software Defined Storage (SDS) Block and Cloud address modern storage challenges through its software-first approach, offering significant flexibility in deployment. This solution can be implemented on-premises, in virtual machines, or in public cloud environments like AWS, enabling organizations to seamlessly extend their storage infrastructure across hybrid and multi-cloud landscapes. By leveraging commodity hardware, SDS Block helps reduce costs while maintaining enterprise-grade capabilities. The integration of patented Hitachi Polyphase Erasure Coding (HPEC) technology provides increased performance and data protection, ensuring that organizations can meet stringent requirements for mission-critical workloads across diverse environments.

Ops Center Clear Sight

Hitachi's Ops Center Clear Sight addresses the complexities of modern storage management through its cloud-based SaaS offering, providing unified management and monitoring across diverse storage environments. Seamlessly integrating with both VSP One Block and VSP One Software-Defined Storage solutions, it delivers centralized health reporting and risk detection for all storage assets, enabling organizations to proactively identify and mitigate potential issues before they impact operations. This thorough visibility, combined with intelligent capacity planning capabilities, empowers storage and IT teams to make informed decisions, optimize resource allocation, and maintain peak performance across their entire storage infrastructure, whether on-premises, virtual, or in cloud environments.

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Complexity of managing hybrid cloud environments

IT and storage teams face significant challenges in managing diverse storage environments as they transition to hybrid cloud solutions. These complexities include orchestrating data movement between on-premises and cloud platforms, ensuring consistent security policies across environments, and optimizing performance for geographically distributed workloads.

Hitachi Vantara's integrated solution, comprising VSP One Block, SDS Block, and Ops Center Clear Sight, addresses this challenge through flexible deployment and unified management. VSP One Block offers scalable, highperformance block storage for mission-critical workloads, while SDS Block and Cloud provides a software-first approach for deployment across on-premises, virtual, and public cloud environments. Ops Center Clear Sight enhances this by offering consistent management and monitoring across all storage assets. This comprehensive solution simplifies operations, reduces overhead, and enables seamless extension of storage resources across hybrid cloud environments, helping IT teams effectively manage complexity.

Consistent performance across diverse workloads:

Maintaining reliable performance for various applications becomes crucial as organizations transition to hybrid environments that support both traditional and cloud-native workloads. IT and storage teams must navigate these complexities to ensure that performance remains consistent across diverse applications. These complexities include managing diverse performance requirements, balancing resource allocation across different application types, and maintaining consistent service levels in dynamic, distributed environments

Hitachi Vantara's integrated solution, comprising VSP One Block, SDS Block and Cloud, and Ops Center Clear Sight, addresses performance challenges across diverse workloads. VSP One Block provides scalable, high-performance storage supporting multiple protocols, while SDS Block and Cloud offers flexible deployment across various environments. Ops Center Clear Sight provides unified management and monitoring. This approach enables organizations to consolidate applications onto a flexible, enterprise-class storage system with improved responsiveness, simplified architecture, and proactive management across traditional and cloud-native services.

Data protection and compliance concerns in distributed systems

With the growing number of data regulations and the increasing need for secure data management, enterprises face significant challenges in addressing compliance and protection requirements across distributed systems. IT and security teams must navigate complex landscapes of regional and industry-specific regulations, ensure data sovereignty, maintain audit trails, and implement robust encryption and access controls. These challenges are further complicated by the distributed nature of hybrid cloud environments, where data may reside across multiple locations and platforms.

Hitachi Vantara's integrated solution, comprising VSP One Block and Cloud, SDS Block, and Ops Center Clear Sight, addresses these data protection and compliance concerns comprehensively. VSP One Block delivers 100% data availability and advanced data protection features, while SDS Block extends these capabilities across diverse deployment scenarios. Ops Center Clear Sight provides centralized health reporting and risk detection, enabling proactive issue mitigation and simplified compliance management. This approach allows organizations to implement consistent data protection policies, maintain compliance across distributed environments, and gain visibility into potential security risks. Benefits include enhanced data security, easier to meet regulatory requirements, and reduced risk of data breaches or unauthorized access in hybrid cloud solutions.



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Benefits

Hitachi Vantara's integrated storage platform, comprising VSP One Block, SDS Block and Cloud, and Ops Center Clear Sight, enables organizations to transform their data infrastructure for hybrid clouds. Using the VSP One platform, enterprises can achieve superior agility through software-first innovation and flexible deployment options across on-premises and cloud environments. The unified platform for block, file, and object storage eliminates data silos, while Al-powered management and automation enhance usability and reduce operational risks. Hitachi Vantara's integrated approach extends enterprise-class storage capabilities seamlessly from on-premises to the cloud, enabling enterprises to meet the demands of modern workloads.

Find out more information on VSP One Hybrid Cloud.



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.



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