

Datasheet

Hitachi Storage Plug-in for Containers

Efficiently manage persistent storage in containerized environments

Seamlessly Integrate Between Storage and Container Orchestrators

Storage Integration Hurdles

Organizations are increasingly adopting containerized environments for application deployment and management. However, managing persistent storage in these environments can be challenging, especially when using enterprise-grade storage systems.

Containerized applications often require persistent storage for stateful workloads, but traditional storage management methods may not integrate well with container orchestrators like Kubernetes. This disconnect can lead to inefficient storage provisioning, limited data management capabilities and difficulties in leveraging advanced storage features. Without proper integration between container platforms and enterprise storage systems, enterprises may face challenges in data persistence, scalability and advanced storage operations for their containerized applications

Hitachi Solution Overview

Hitachi Storage Plug-in for Containers addresses these challenges by providing seamless integration between [Hitachi Vantara Virtual Storage Platform One](#) (VSP One) and container orchestrators.

Implementing Hitachi Storage Plug-in for Containers can significantly enhance your organization's ability to manage storage in a Kubernetes environment. This plug-in addresses the complexities of persistent storage management, ensuring that stateful applications operate seamlessly. By adopting this solution, you can:

1. Simplify storage management in containerized environments.
2. Ensure data persistence and reliability for stateful applications.
3. Utilize advanced storage features within Kubernetes workflows.
4. Improve scalability and efficiency of storage operations for containerized workloads.

Key Features

This software plug-in provides a solution for managing persistent storage in Kubernetes environments, enabling you to seamlessly create and utilize Hitachi storage volumes for stateful applications. Key features include:

Dynamic Provisioning

Dynamic provisioning of persistent volumes using Hitachi storage volumes for containerized environments ensures that you can efficiently manage storage resources in Kubernetes. You can quickly allocate and deallocate storage on demand.

Results include improved resource utilization, reduced manual intervention and faster application deployment in containerized environments.

Application Resilience

Support for stateful applications in Kubernetes and OpenShift environments with advanced volume management features like snapshots, cloning and expansion enables you to efficiently manage data-intensive workloads in containerized environments. You can perform complex storage operations without disrupting application availability.

Results include improved data protection, faster application development cycles and enhanced overall system reliability for containerized stateful applications.

Operational Efficiency

Advanced volume management capabilities include:

- Volume snapshots
- Cloning
- Expansion
- Raw block volume support

These abilities allow you to perform sophisticated data operations in containerized environments: You can efficiently manage, protect and scale your storage resources without disrupting application availability.

Results include improved data protection, faster recovery times, enhanced storage flexibility and better resource utilization for containerized workloads.

Hitachi Storage Plug-in for Containers

Secure Isolation

Resource partitioning for multi-tenancy support allows you to securely isolate storage resources for different teams or applications within a shared Kubernetes environment. This means you can efficiently manage and allocate storage across multiple users or projects.

Results include improved resource utilization, enhanced security and simplified management of storage resources in multi-tenant containerized deployments.

Storage Versatility

Integration with multiple Hitachi storage solutions, including VSP One (appliances and [VSP One SDS](#)), enables Hitachi Vantara customers to leverage a wide range of enterprise-grade storage solutions in their containerized environments. This means you can choose the most suitable storage platform for your specific workload requirements.

Results include improved flexibility, scalability and performance optimization across diverse containerized applications and use cases.

Supported Environments

Hitachi Storage Plug-in for Containers works seamlessly with leading container orchestration platforms, supporting both OpenShift and Kubernetes environments. This compatibility allows you to leverage advanced Hitachi storage capabilities across a wide range of containerized infrastructures, enabling efficient management of persistent volumes for stateful applications in modern, cloud-native deployments.

The plug-in supports a comprehensive array of Hitachi storage platforms, including VSP appliances and VSP One SDS. This broad support allows you to utilize enterprise-grade storage features across diverse containerized applications and use cases, from entry-level to high-end storage solutions.

Scalability Optimized

Hitachi Storage Plug-in for Containers provides a comprehensive solution for managing persistent storage in containerized environments, particularly within Kubernetes and OpenShift.

By seamlessly integrating Hitachi storage systems with container orchestrators, this plug-in simplifies storage management, enhances data persistence and reliability for stateful applications, and enables the utilization of advanced storage features. With capabilities such as dynamic provisioning, application resilience, operational efficiency, secure isolation for multi-tenancy and versatility across multiple Hitachi storage solutions, you can significantly improve storage operations scalability and management efficiency.

Optimize your cloud-native deployments and ensure reliable and efficient data management with Hitachi Storage Plug-in for Containers.

Learn more →

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.



Corporate Headquarters
2535 Augustine Drive
Santa Clara, CA 95054 USA
hitachivantara.com | community.hitachivantara.com

Contact Information
USA: 1-800-446-0744
Global: 1-858-547-4526
hitachivantara.com/contact

© Hitachi Vantara LLC 2025. All Rights Reserved. HITACHI and Pentaho are trademarks or registered trademarks of Hitachi, Ltd. All other trademarks, service marks and company names are properties of their respective owners.

HV-BTD-DS-Hitachi-Storage-Plug-in-for-Containers-8Jan2025-A