

A man with glasses and a beard is sitting at a desk in a server room, looking at a laptop. The background is filled with server racks and glowing lights.

Hitachi Modern Data Protection and Copy Data Management Solutions

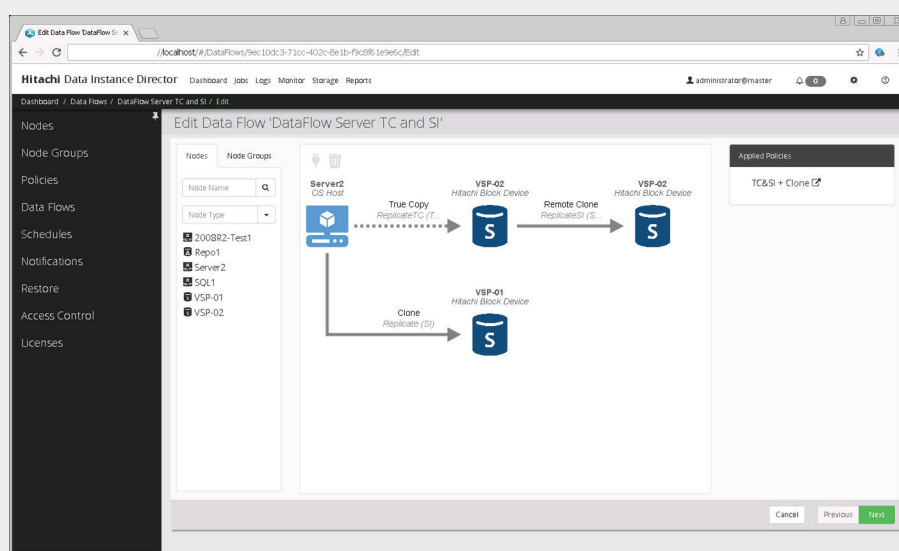
Transform Critical Application Availability
and Resiliency

OVERVIEW

Traditional backup and recovery solutions cannot keep up with today's business-critical requirements. Modern data protection and copy data management software from Hitachi Vantara can radically improve data availability, recoverability, resiliency and costs. This is accomplished through a range of tightly integrated technologies that are automated and orchestrated to support high expectations for operational and disaster recovery, business continuity and data repurposing.

Eliminate the Downtime Caused by Backup and Recovery

Business-critical applications cannot tolerate downtime in today's hypercompetitive, always-on marketplace. Backup windows often inflict hours of downtime on these applications. Recovery after a failure using traditional methods can also result in many hours or even days of downtime. Performing backup once per day can result in the need to recreate, or lose, up to 24 hours of new data, causing further disruption. Making copies of production data for secondary purposes, such as test and development operations, also impacts application availability. All this downtime can be eliminated with Hitachi Vantara's modern data protection solution family.



The drag-and-drop user interface of Hitachi Data Instance Director (HDID) makes it easy to create business-defined, policy-based data protection and copy data management workflows, just like using a whiteboard.

Reduce Administrative Complexity to Increase Staff Productivity

Hitachi Data Instance Director is built on a powerful policy-based workflow engine, with a unique whiteboard-like user interface that makes it fast and easy to meet business-defined application availability and resiliency requirements. HDID automates all replication management, eliminating the complexity of managing configuration files and custom scripts. It orchestrates the interactions between applications and storage copy services to ensure application consistency on recovery, and can combine operations across local and remote systems to deliver end-to-end protection against the full range of data loss threats, while also supporting data repurposing.



The unique capabilities of Hitachi Data Instance Director allowed us to efficiently and reliably protect data while enabling us to save money through reduction in energy, floor space and maintenance requirements.

Michael Harbman
Calpine Corporation
IT Plant Support Services, Manager



Nondisruptive, Application-Consistent Protection With Full Automation and Orchestration

Modern approaches to data protection and copy data management, including high-performance storage-assisted snapshots, clones and remote replication, are tightly integrated. They are combined to perform end-to-end, policy-based workflows that meet the highest levels of data availability required of critical application environments.

Local Backup and Operational Recovery With Near-Zero Downtime

Hitachi Data Instance Director (HDID) harnesses a wide range of technologies and capabilities to effect operational recovery. Host-based capabilities include continuous data protection (CDP) and live backup. Storage-based protection orchestrates application-consistent Hitachi Thin Image (HTI) snapshots and Hitachi ShadowImage clones.

Protection is achieved without impacting application availability and can be run far more frequently to reduce recovery point objectives (RPO) by more than 95%.

Ensure Business Continuity With Zero Data Loss

The remote replication technologies built into the Hitachi Virtual Storage Platform (VSP) family include global-active device active-active storage clustering, Hitachi TrueCopy synchronous and Hitachi Universal Replicator (HUR) asynchronous replication, and support flexible 2- and 3-data-center topologies.

Zero data loss can be assured, and with HDID automation, business continuity and disaster recovery becomes part of an end-to-end, integrated modern data protection solution.

Offer Backup and Disaster Recovery as a Service

HDID has all the features necessary to use it as the basis for advanced backup and disaster recovery as-a-service offerings (BaaS and DRaaS), including multitenancy, granular role-based access controls and a complete RESTful API.

Easily integrate HDID into your cloud services portal to augment account management, reporting, billing and self-service restore with radically improved RPO, recovery time objectives (RTO) and backup windows.

Gain Control of Copy Data Governance

A large majority of enterprise storage capacity is dedicated to copies of data, including massive amounts of “dark data.” These copies include multiple redundant full backups, as well as copies for test and development, finance and more.

HDID automatically creates, refreshes and expires physical and virtual copies, with no disruption to applications, reducing the bad behaviors that lead to uncontrolled copy generation.

Unique Whiteboard-Like Interface Makes It Easy

The HDID user interface is web-based and includes a drag-and-drop functionality that makes it easy to design policies and workflows for local and remote protection as well as data repurposing. It also includes full reporting.

Processes that would take days to script in traditional solutions take only a few minutes with HDID. Updating policies and workflows is equally easy.

A Tightly Integrated Solution Set for Modern Data Protection

Traditional backup and recovery solutions cannot keep pace with the demands of critical applications. The Hitachi solution set for modern data protection and copy data management meets these challenges, offering dramatic improvements in application availability, recoverability, resiliency, risk avoidance and cost reductions.

Hitachi Data Instance Director

HDID is the automation and orchestration software that simplifies the ability to achieve demanding service levels for operational recovery, business continuity, disaster recovery and data repurposing. Its powerful policy engine and drag-and-drop interface bring together a suite of host-based and automated storage-based copy technologies to achieve end-to-end protection in a single workflow.

Hitachi Local Replication for Fast Protection and Restore

Hitachi Thin Image creates space-efficient, point-in-time copies of protected volumes, with no impact on production applications. Hitachi ShadowImage creates full copy clones of the protected volumes, also with no impact on production performance. Both local replication technologies are part of the Hitachi Storage Virtualization Operating System (SVOS) available in all Hitachi VSP systems, with HDID providing automated pair management and application awareness.

Hitachi Remote Replication for Continuity and Disaster Recovery

The global-active device feature in SVOS provides active-active storage clustering across systems in different locations, with no need for failover or failback. Hitachi TrueCopy provides synchronous replication across two systems within 300km with zero data loss, and Hitachi Universal Replicator provides asynchronous replication across any distance with near zero data loss through a unique journaling capability. HDID automates the setup and management of these technologies.



30%

By 2020, 30% of large enterprises will leverage snapshots and backups for more than just recovery, up from less than 10% in 2015.

Source: Gartner, "Predicts 2017: Business Continuity Management and IT Service Continuity Management." Published: 15 November 2016. ID: G00315512

Modernize Data Protection and Recovery To Support Digital Transformation

As market disruption is increasing across industries, digital transformation is on the agendas of most organizations to keep them relevant. But as you transform your information infrastructure, it is essential to also modernize your data protection infrastructure:

- Modernize data protection to radically improve data availability and resiliency.
- Dramatically reduce setup and management time, while improving RPO and RTO, and reducing costs.
- Enable automated copy data management as part of an end-to-end, policy-based workflow.
- Offer self-service data protection and recovery services using comprehensive integration capabilities and granular role-based access support.

Data protection and copy data management are complicated. Use the right tools for each requirement, but manage them all in one place. HDID automates local and remote replication for modern data protection, as well as host-based protection where appropriate.

To learn more about modernizing your data protection infrastructure, please visit our [website](#).



Hitachi Vantara at a Glance

Your data is the key to new revenue, better customer experiences and lower costs. With technology and expertise, Hitachi Vantara drives data to meaningful outcomes.

Hitachi Vantara

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