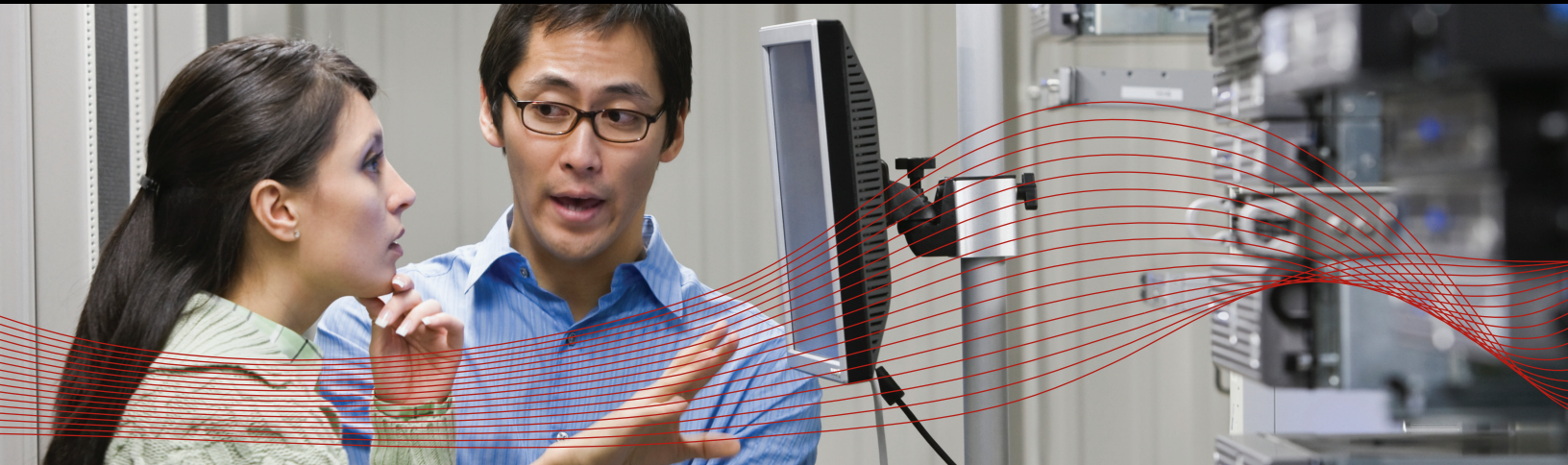


Hitachi Content Platform



Content-aware Storage and Data Management

It's not just about scale. It's about lowering costs, consolidating storage and maximizing its utilization. It's not only about storing the tidal wave of unstructured data flowing into your data center, but also about knowing what it is, where it is and how it got there. It's about knowing your data is secure, managed and controlled on a storage platform that combines industry leading reliability with features critical to modern IT applications.

Why Hitachi Content Platform?

Hitachi Content Platform (HCP) is a complete, end-to-end storage solution that combines massive scalability with a rich feature set complementary to the growing need for regulatory compliance and unstructured data management. HCP is an ideal building block for new and existing applications and services. It enables enterprise architects to:

- Simplify application architectures.
- Accelerate time to production.
- Lower development and support costs.

Hitachi Content Platform simplifies storage administration, providing a single pane of glass for management of resources. Built-in storage virtualization allows co-location of multiple tenants and applications on the same physical hardware. With HCP IT administrators can:

- Consolidate storage resources and increase utilization.
- Lower storage administration costs.
- Grow storage according to demand, on demand.

Hitachi Content Platform

supports quick deployment of new applications and services in enterprise environments with complex requirements. It provides simple, unified access to storage, monitoring and management.

Features

Scalable Architecture

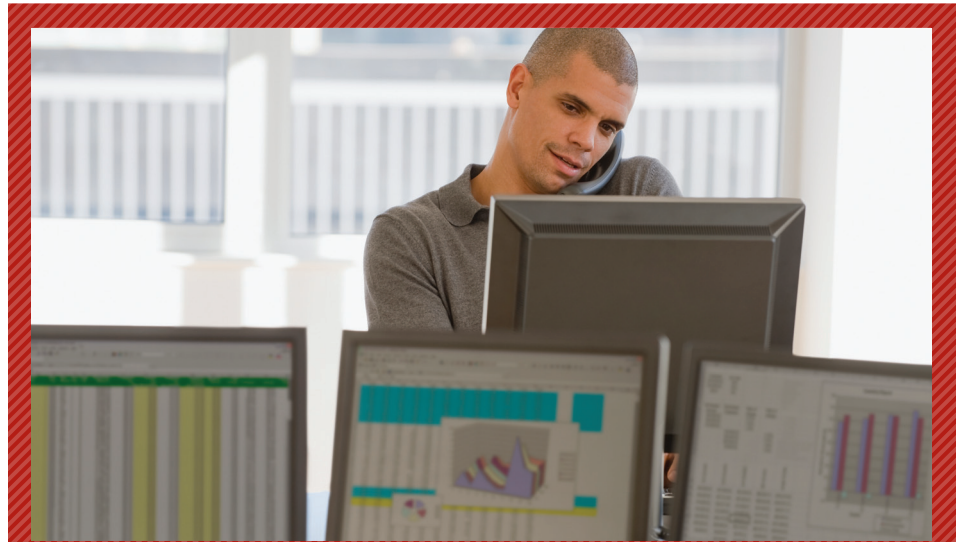
HCP can grow in size and capability. Capacity can be added to the system dynamically without service interruption. Start off small and quickly expand to managing billions of objects and petabytes of data, seamlessly.

- Scale from terabytes to petabytes.
- Add storage capacity on the fly.

Multitenant Platform Virtualization

HCP allows multiple organizations and applications to safely and securely share the same physical storage. Each tenant has complete control over its virtual HCP instance and is capable of managing and monitoring its own storage through web-based user interfaces or simple, easy-to-use APIs. This provides:

- Safe and secure co-location of multiple tenants on a single HCP hardware platform
- Role-based tenant-level management of storage, policies and services
- Role-based tenant-level monitoring of storage utilization and chargeback metrics



HITACHI CONTENT PLATFORM HIGHLIGHTS

Hitachi Content Platform simplifies the management of large scale storage systems, leaving developers and IT administrators free to focus on what matters most: applications.

- **Easy to use:** work with simple APIs for data access, platform management and monitoring.
- **Scalable:** start small and grow seamlessly as demand increases.
- **Multitenant:** virtualize Hitachi Content Platform storage and share physical resources securely.
- **Searchable:** query objects by metadata or content.
- **Efficient:** use data de-duplication and data compression services.
- **Reliable:** reach flexible data protection levels and use local and remote site replication.
- **Evolvable:** incrementally upgrade to latest technologies without service downtime.

Integrated Search

HCP indexes objects as they are ingested. Search based on content, metadata and even custom metadata according to your application needs.

- Index content, system metadata and custom metadata.
- Add search capacity on the fly.

Multiprotocol Access

HCP is built on open standards. There are no custom APIs to integrate to. There is no vendor lock-in.

- Web services: HTTP, REST, WebDAV
- Network attached storage: NFS, CIFS

Data Archiving and Compliance

HCP provides best-of-breed data archiving services to applications with regulatory compliance needs.

- Automate information lifecycle management at the policy and system level.
- Archive data by applying retention policies.
- Secure data at rest with on-disk encryption and shredding services.
- Ensure data authenticity with content verification services.
- Maintain data with object-level versioning.

HITACHI CONTENT PLATFORM BENEFITS

Benefits to Developers

Feature	Benefit
Easy to Use	<ul style="list-style-type: none"> Web-based APIs for data access and storage management Low learning curve Large body of developers familiar with HTTP-based development
Search	<ul style="list-style-type: none"> Index objects on ingest. Search by content, metadata or custom metadata. Fully integrated, scalable solution eliminates the need to develop or integrate third-party solutions to index and search data.
Archiving and Compliance	<ul style="list-style-type: none"> Assign and enforce data retention properties to objects on ingest. Continuous content verification ensures data fidelity on the wire and on disk. Data encryption and shredding services meet federal standards for data leakage protection. No need to develop or integrate third-party solutions to secure, encrypt or audit data.
Multitenancy	<ul style="list-style-type: none"> Securely support multiple organizations and applications on a single storage platform. Allow independent administration and monitoring of virtual storage. No need to develop or integrate third-party solutions to provide data abstraction or resource isolation.
Capacity Monitoring	<ul style="list-style-type: none"> Fine-grained storage utilization and chargeback metrics Accessible via web-based APIs for monitoring, management and process automation

Benefits to Storage Administrators

Feature	Benefit
Easy to Manage	<ul style="list-style-type: none"> Consumption of storage is abstracted away from storage consumers. No need to map LUNs or attach disk to application servers. No need to worry about zoning new application servers or running new fiber. HCP provides a single point of storage management for multiple applications.
Multitenancy	<ul style="list-style-type: none"> New tenants and applications can be co-located on HCP with a minimum of administrative effort. Role-based management isolates risk and delegates day-to-day administrative burden. Application owners can be empowered to manage their own storage without affecting other residents.
Scalable	<ul style="list-style-type: none"> Capacity can be added without affecting applications, and without complicated service and migration plans.
Available	<ul style="list-style-type: none"> Fully redundant hardware and software components
Replication	<ul style="list-style-type: none"> Advanced replication for disaster recovery Topologies that include many-to-one and chain
Efficient	<ul style="list-style-type: none"> Built-in data compression and de-duplication
Monitoring	<ul style="list-style-type: none"> Industry standard SNMP component monitoring and alerting Accessible via web-based APIs for monitoring, management and process automation

Storage Utilization

HCP maximizes storage utilization, reclaiming wasted space and compacting data wherever possible.

- Eliminate on-disk data redundancy with de-duplication services.
- Condense on-disk data with compression services.
- Reclaim expired objects with disposition services.

Data Protection

HCP provides flexible data protection levels to meet a variety of data reliability and availability needs.

- Adjust the number of copies HCP maintains for each object on an application-by-application basis.
- Deploy advanced replication topologies to meet disaster recovery requirements.

Incremental Equipment Upgrade

HCP is capable of integrating multiple generations of hardware in a single repository. Incrementally refresh HCP to the latest technology without service interruption. Avoid forklift upgrades, downtime and costly migrations.

- Integrate new server, array and disk technologies in a single cluster.

- Migrate data from legacy equipment for decommissioning without service interruption.

Flexible Hardware Deployment

HCP maximizes your current storage investment. Deploy HCP to manage new or existing storage assets.

- Use existing SAN storage systems.
- Independently scale storage, I/O and search capacity.

Conclusion

Hitachi Content Platform is a turnkey storage solution that enables developers and IT administrators to quickly deploy new applications and services in enterprise environments with complex requirements. It provides simple, unified access to storage, monitoring and management.

Unlike competing products, HCP does not shift the burden of managing capacity, throughput or functionality at scale to the customer. Integration with third-party software is not necessary to manage object IDs, provide search and compliance capabilities, provide data compression services or perform I/O load balancing. HCP is a complete storage solution. There are no hidden costs.

HCP is designed to remain relevant, capable of evolving with changes in computing and storage technology without ever compromising the data entrusted to it.

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