

Hitachi Content Software for File

High-Performance Storage for Al and ML

Now, get the critical competitive edge you need, with access to more data—faster—at a lower cost!

SOLUTIONS BRIEF



The Question

It's a highly complex question with a deceptively simple answer: How do you win with artificial intelligence, machine learning, and high-performance, computing-based analytics? **Speed.** Because **the only way to stay ahead is to run more models with more complex algorithms faster than your competitors.** That requires faster access to more data, ideally at a lower cost. Simple.

The Challenge

Now the hard part: getting there. Your applications need more data, but storage performance has lagged beyond what traditional CPUs can deliver. While GPUs have shrunk compute infrastructure by 40%, the data they process has grown by 50%—but this comes at a high cost: organizations are investing substantial dollars to modify GPUs and get the high-density platform they need. To extract the maximum return from that investment, you need the right infrastructure: a more efficient, higher performing storage platform incorporated into your workflow.

And now, it's possible.

Your Solution

Hitachi Content Software for File. It's the high-performance storage solution you need to stay competitive. It expands the limits of what storage can do for AI, machine learning, analytics, and other GPU accelerated workloads, offering you:

- **Blazing speed:** 3X faster than local flash drives, 10X faster than a traditional all-flash array, saturating compute resources and powering GPUs to go faster with NVIDIA® GPUDirect® Storage.
- Massive capacity: Effortlessly presents PB size data sets, single data lake allows for larger data sampling and training, reduces costs with consolidated management, and removes data silos, lowering the risk of missing relevant data.
- Lower cost: Integrated object storage with seamless movement of data.

Data Lifecycle for AI Modeling

1 INGESTION
Broad application and protocol support

PREPARATION

High performance

MODEL TRAINING
High performance and low latency

INFERENCE Low latency

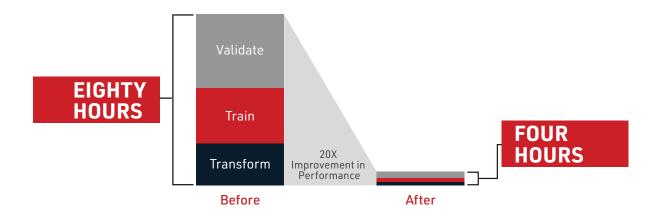
STAGING AND ARCHIVE

Low cost for massive scale

The Power of High Efficiency

Hitachi Content Software for File lets you harness the power of your data to deliver better outcomes faster and surpass your competition. It gives you the speed of a parallel file system with the capacity and cloud capabilities of an object store.

How much speed? Blazing.



That's 20X faster!

Hitachi Content Software for File incorporates NVIDIA® Magnum IO GPUDirect® technology, whose key element, GPUDirect® Storage, delivers up to 20x faster data throughput on multi-server, multi-GPU computing, eliminating the need for CPU involvement in the communication loop and removing many of the bottlenecks that slow down IO between the persistent storage and the GPU processor.

Only Hitachi Vantara delivers this powerful solution—plus integrated cloud storage, a wide range of infrastructure options, and leading-edge digital services to address the overall scope of your projects—through a single vendor with a single point of contact for support.

Product Highlights

- High-Performance Shared File System:
 Validated on SPEC SFS 2014, IO-500
 and STAC M3 benchmarks
- Multi-Protocol: Flexible application storage access: POSIX, NFS, SMB, S3, and NVIDIA® GPUDirect® storage
- Mixed Workloads: Supports small and large files simultaneously, with both mixed random and sequential I/O patterns from the same filesystem
- Linear Performance Scaling: Application-level 4K I/O, sub-250µ second latency, unlimited random OPS
- Automated Tiering: Expand the namespace from fast flash to hard disk storage via on-premises or hybrid cloud object storage
- Distributed Storage: Fully distributed data and metadata to ensure that there are no hotspots in the storage cluster
- Data Protection: Distributed resilience that eliminates the bottlenecks of traditional data protection

Industry Examples

Discover the difference Hitachi Content Software for File makes for these industries.

Financial Services

Humans can only handle about 10 technical indicators across small datasets. With AI/ML supported by Hitachi Content Software for File, you can process hundreds of technical indicators across datasets that are thousands of times larger. Find out why Hitachi Content Software for File is the world's fastest file system for financial services, delivering the highest performance for algorithmic trading, portfolio analysis, and risk management.

LEARN MORE TODAY ③

Life Sciences

With data doubling every 7 months, we're looking at roughly 40 exabytes by 2025, which will put massive strain on research budgets. Learn how Hitachi Content Software for File offers low-cost storage with hybrid cloud capabilities and supports diverse data types to help accelerate drug discovery and improve patient outcomes.

LEARN MORE TODAY ()

Start building your competitive edge now

Find out how **Hitachi Content Software for File** can give you the blistering speed and storage capacity you need to stay competitive now, and in the future, at a price you can afford. <u>Visit our website today</u>.



Hitachi Vantara. We guide our customers from what's now to what's next.

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