

SOLUTION BRIEF

Scale-Out Storage for the Petabyte Generation— Built on Western Digital and Powered by Cloudian



Highlights

- Scale-Out Capability: Enables simple expansion of capacity in the future as needed to keep pace with rapid data growth.
- Breakthrough Economics: Offers a costeffective solution that reduces power, cooling, and rack space to cut Opex and Capex costs.
- Increased Performance and Stability: Boosts performance and reliability with an integrated solution to manage your business-wide workloads with high availability.

Challenges

- Skyrocketing Costs: Exploding data rates are pushing infrastructures to store more data for longer periods of time, often within a flat or shrinking IT budget.
- Management Difficulties: Performance and capacity must be able to grow without increasing management workload.
- Integration Demands: Systems must work flawlessly with customer applications to ensure high satisfaction with the lowest possible support costs.

Solution

The combined solution of Cloudian HyperStore object storage with Western Digital Ultrastar Data60 storage platform improves collaboration, sharing, and file access with a flexible, featurerich, enterprise-grade data management solution.

You Need Faster, More Reliable Data Storage

The exponential growth of unstructured data has created new challenges for enterprises and service providers alike. Delivering competitive solutions is a constant concern for IT admins, particularly in the face of low-cost offerings from public cloud providers. At the same time, they are also seeking increased infrastructure agility and cost savings while providing improved security, compliance, and flexibility for managing file storage, access, and sharing.

Breaking Down Data Storage Barriers

To address these issues, Western Digital and Cloudian have created an enterprise-level scale-out storage solution by combining Ultrastar® Data60 and Cloudian HyperStore®. This integrated solution offers the ability to start small and grow limitlessly with simple management, data protection, and the industry's most interoperable S3 API compatibility services. Advanced features offer high density and flexibility with industry standard storage using IsoVibe[™] and ArcticFlow[™] technology, and enabling multitenancy, native QoS, billing support, and S3 API access using Cloudian HyperStore. Cloudian's robust API simplifies integration with management tools. Fine-grained configuration tools give you the ability to set data protection levels based on each customer's specific needs.

Simplify and Scale Your Environment

This best-in-class enterprise solution provides a browser-based view of an organization's unstructured data, including on-premises filers, on-premises object storage, as well as storage in public cloud services. This single pane of data index enables you to securely store, access, and share files from any computer or device, all within a highly secure role-based access control framework that does not sacrifice end-user productivity—and it integrates with your existing authentication system(s). This joint solution provides new levels of economic efficiencies, performance, and service, as well as comprehensive, policy-based control over all file data, independent of location. This solution enables:

- 100% native S3 API for excellent interoperability
- Nearly unlimited scalability
- Multi-tenancy features with QoS
- Low TCO storage solution for most environments



Applications

Ultrastar Data60 + Cloudian HyperStore

Cloud

A Winning Partnership for Enterprise-Grade Unified Data Storage

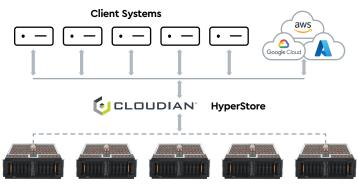
By combining industry-leading Cloudian with Western Digital Ultrastar storage platforms, you can add scalable, high-performance, and reliable capacity to your environment easily and affordably.

Western Digital Ultrastar storage platforms provide the perfect directattached storage (DAS) for Cloudian HyperStore. This family of "just a bunch of disks" (JBOD) platforms combines excellent density, strong performance, and flexible capacity in a simple, affordable solution.

Ultrastar storage platforms connect directly to HyperStore servers. Within seconds, you can store and manage data reliably and with boosted performance—no complicated configurations or complex architectures required.

The Ultrastar platform makes it easy and inexpensive to increase capacity. Start with as few as 24 HDDs and scale all the way up to 1.2 petabytes¹ (raw) as your capacity requirements grow—all in a compact 4U form factor. And, if you find you need even more capacity, attach up to 16 Ultrastar platforms together, to expand to multiple petabytes of storage at a fraction of the cost of other solutions.

Cloudian and Western Digital help you meet your performance needs and keep pace with rapid data growth within the limits of your IT budget.



Ultrastar Data60 Scale out systems

Benefits

- **Big Data Analytics:** Reduce time to insight and save on infrastructure costs by performing analysis directly from storage.
- Web Content Storage: Create a single global content repository that can be accessed from anywhere, anytime, and from any device. Improve user visibility and access.

- **Storage-as-a-Service:** Deliver Storage-as-a-Service (STaaS) to your end users using self-service. Start small and easily expand capacity if needs change.
- Ransomware Protection: Reduce the risk of data loss while improving regulatory compliance and enforcement through granular control, policies, audit, and discovery.

An Industry Leader in JBOD Storage

Direct-attached storage platforms don't have to be complicated, but you wouldn't know it looking at other solutions on the market. Many high-capacity storage enclosures include features and performance that enterprises rarely need, with a price tag to match. Others offer simple JBOD storage—but keep costs down by skimping on components, manufacturing, and warranties.

Western Digital's Ultrastar storage platforms include unique technologies not found in any other storage platform: patented IsoVibe and innovative ArcticFlow. IsoVibe reduces vibration-induced performance degradation, while ArcticFlow overcomes cooling issues by introducing cool air into the middle of the platform. Combining these technologies with HelioSeal* hard drives provides a solution designed for long-term reliability and reduced drive returns, enabling the safekeeping of all the digital content stored on the platform.

Get Started

The amount of data your organization collects will continue to grow. As data volumes reach petabyte scales, the manageability and economics of yesterday's storage solutions simply can't keep up. Fortunately, modern distributed storage solutions can. By combining Ultrastar Data60 storage platform with Cloudian HyperStore software, you can create a powerful, flexible foundation for handling the most demanding workloads at petabyte scale. Service providers can now quickly implement customer-ready services that include:

- Pay-As-You-Consume pricing model
- Self-service administration for customers
- Scale your system based on need

For more information on how Cloudian paired with Western Digital's Ultrastar storage platforms can turbocharge your data storage infrastructure and improve business operations, visit cloudian.com/ products/hyperstore.



IsoVibe Vibration Isolation Technology

Precise cuts in the baseboard provide a suspension for the drives in the chassis, isolating them from transmitted vibration. The result is that consistent performance is maintained, even when all the drives are working hard.



ArcticFlow Thermal Zone Cooling Technology

By introducing cool air into the center of the chassis, drives operate at lower and more consistent temperatures than conventional systems. This results in lower fan speeds, reduced vibration, lower power consumption, quieter operation and ultimately higher reliability.

🐝 Western Digital.

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¹One GB is equal to one billion bytes and one TB equals 1,000GB (one trillion bytes). Actual user capacity may be less due to operating environment.