Cloudian HyperStore Xtreme

HyperScale® S3-Compatible Storage for Private Clouds

Accommodate your most capacity-intensive workloads with Cloudian® HyperStore® Xtreme. Built on a new ultra-dense Seagate server platform, the HyperStore Xtreme object storage system packs more than 1.5 petabytes of capacity in just 4U of rack height. Get the scalable, S3-compatible storage you need for use cases such as big data, media archives, healthcare records, and video surveillance. Intuitive management tools and built-in data protection make it easy to manage and grow.

S3-Compatible and Hybrid/Multi-Cloud Ready

Cloudian's native S3 API implementation offers the industry's highest level of S3 interoperability, letting you capitalize on the rapidly growing ecosystem of S3-enabled applications. It's also compatible with public cloud platforms including AWS, Google, and Microsoft, HyperStore Xtreme includes data management tools that make it easy to integrate your on-prem and cloud storage environments.

Reduced Data Center Footprint

At 1536TB capacity in a 4U chassis, the HyperStore Xtreme appliance is the industry's most space-efficient enterprise storage system. The chassis incorporates two separate storage nodes per 4U enclosure, each with independent Intel processors and connectivity resources. You scale by simply adding devices, so you can grow from petabytes to an exabyte with no interruption.

Cost Savings Now, and Into the Future

At less than ½ cent per GB per month, HyperStore Xtreme delivers over 70% savings when compared with either traditional enterprise storage or public cloud storage. When it's time to expand, you'll save even more. Cloudian's evergreen architecture and Seagate's accelerated component/system integration process let you benefit from industry-leading technology, both now and into the future.

File and Object Storage Support

Proven in over seven years of deployments, HyperStore's native S3 API implementation eliminates gateways or access layers to give you guaranteed compatibility with your S3-enabled applications. For files, deploy Cloudian HyperFile, the optional SMB/NFS interface. Together with Cloudian HyperStore, HyperFile provides a cost-effective solution for your capacity-intensive, less-frequently used files.

Uncompromising Data Durability

Get up to 14 nines data durability and configurable data protection. Only HyperStore offers granular management that lets you customize data protection for various data types within a cluster. Select from multiple levels of data replication and erasure coding.

Integrated Multi-Site Capability

Extend your storage with the industry's most flexible geo-distribution architecture. Replicate data across regions to provide local access and resilience in the event of a data center failure. Configurable consistency levels let you select either synchronous or asynchronous replication. Or employ distributed erasure coding to stripe data across sites as a highly-efficient disaster recovery option.

Scalable Performance

Process multiple requests in parallel, across all nodes in HyperStore's shared-nothing cluster. This eliminates bottlenecks and allows performance to grow as you add nodes. For large file

FEATURES/BENEFITS

- 1.5PB capacity in 4U of rack height
- Up to 18PB per data center rack
- Limitlessly scalable capacity
- Non-disruptive capacity expansion
- Fully native S3 API for guaranteed application compatibility
- Efficient data protection with replication and erasure coding
- Bucket-level granularity for all storage policies
- Encryption for secure data storage
- Comprehensive multi-tenant services
- Quality of Service (QoS) controls
- Integrated billing, management, and software
- Multi-data center support via replication and erasure coding

Gartner peerinsights™

CLOUDIAN ★★★★★ 4.8 OUT OF 5 STARS

HIGHEST RATED S3-COMPATIBLE STORAGE

transfers, multi-part upload lets you transfer files seamlessly between sites or to the public cloud.

Multi-Tenancy

Establish multiple user spaces with HyperStore's multi-tenancy capabilities. Provide individual management domains and namespaces within a shared cluster. Cloudian offers QoS controls and billing features that let you manage bandwidth and chargebacks.

Intuitive Management

Manage Cloudian via the intuitive GUI or automate tasks using the RESTful API. Cluster management tasks are simple as well. Add or remove nodes and update system software without disruption.

Variable-size Metadata Tags

Record metadata along with user data to facilitate data management and data search. Elastic Search integration provides near real-time search capability. Variable metadata tag sizes give you flexibility not found in other object storage systems.

Security

HyperStore AES-256 Server-Side Encryption enables enterprises and service providers to easily encrypt data stored at rest. SSL encryption ensures data confidentiality for data in transit (HTTPS). And with S3-compatible object-level ACLs, system administrators can better manage access to buckets and objects.

HyperStore Xtreme Appliance

The Cloudian HyperStore Xtreme appliance, Powered by Seagate, delivers the industry's highest enterprise storage density to save you space and cost. Fully integrated with Cloudian HyperStore software, it is available with end-to-end support packages, professional services, and administrator certification programs.

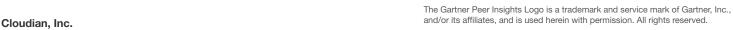POWERED BY

SEAGATE

Platform

- Ultra-dense 4U platform
- 1536TB capacity (raw)
- 2 nodes in 1 chassis
- 96x hot-swappable 3.5" disk drives (48 per node)
- 4x hot-swappable 2.5" SSDs
- 4x 10GbE networking per node
- Native S3-API support

Software

- Fully native S3 API support
- Non-disruptive, modular expansion
- Scalability to an exabyte
- Hybrid, multi-cloud ready
- Policy-based tiering / replication to the cloud
- Native compatibility with AWS, GCP, Azure
- Data protection via erasure coding and/or replication
- Bucket-level configuration settings
- Geo-distribution with replication and/or distributed EC
- WORM support
- Multi-tenancy, QoS, billing support

HyperStore Xtreme Specifications

Form Factor	2 nodes in a 4U rack mount chassis
Metadata Drives	4x 1.92TB SSD (2 per node)
Data Drives	96x SAS HDD (48 per node, 7200RPM)
Drive Sizes	16TB
Storage Capacity Raw	1536TB
Data Protection	Replication and erasure coding via storage policies
Redundancy	Hot-swappable disk drives
	4x hot swappable power supplies
	No single point of failure
	Non-disruptive online software upgrades
CPU	4x Intel Xeon Silver 4110, 8 core (2 per node)
Memory	256GB (128GB per node)
Network Interfaces	8x 10GbE (SFP+, 4 per node); 25GbE (SFP28) option
Monitoring/Management	CLI, GUI, API, IPMI, JMX
Power Supply	2x 3200W PSU, 200-240V AC
Cooling	(4) 8056 + (1) 6056 dual-rotor fans
Thermal Rating	3794 BTU/hr (max)
Dimensions (W x H x D)	17.4" x 6.95" x 44.8" / 441mm x 176.4mm x 1139mm
Weight	330 lbs / 150Kg
IO Ports	Rear per node: (1) USB 3.0 port; (1) HDMI port;
	(1) GbE RJ45 management
Operating Environment	Operating temperature: 5°C to 35°C (41°F to 95°F)
	Non-operating temperature: -40°C to 70°C (-40°F to 158°F)
	Operating relative humidity: 10% to 80%RH
	Non-operating relative humidity: 5% to 90%RH