

Cloudian HyperStore File Services

Scale-out File Services for Cloudian HyperStore

Cloudian® HyperStore® File Services overcomes the limitations of traditional file systems and supports your cloud initiatives with infinitely scalable file-connected storage and multiple data management options. Maintain storage entirely on-prem, or span your on-premises and cloud storage environments. HyperStore File Services enables innovative solutions to store, share, and leverage information.

Cloudian HyperStore File Services delivers file cache functionality that is accessed and managed from within Cloudian HyperStore object storage system. It supports a full range of enterprise features—such as SMB/ NFS support, VSS support for file versioning, POSIX-compliance, as a fault-tolerant, highly available clustered platform. With next-generation capabilities like unified management, converged bimodal data access support, and cloud integration, HyperStore File Services simplifies data management on-prem and in the cloud.

HyperStore File Capabilities

Multi-Node High-Availability

With high-availability support, three nodes can operate in an active-active mode for non-disruptive failover that ensures uptime. All nodes in the cluster maintain a consistent file cache namespace and access to the same object metadata and namespace, ensuring fast failover.

Converged Data Access

Directly access file data from object storage without traversing the HyperStore File Node. S3-enabled applications can directly read and write file data to object storage – either on-prem or in the cloud. Write file data and read with a file protocol, or use the S3 API to access S3-compatible storage via both file-based apps and S3-compatible apps.

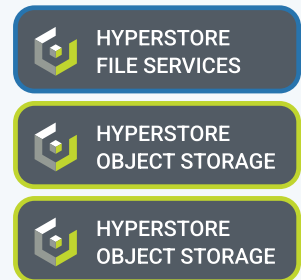
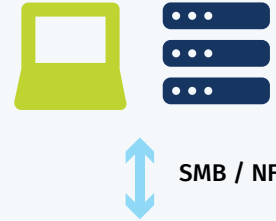
Global Namespace

Employ a single namespace across multiple file nodes in a cluster to enable shared access by multiple workgroups. Users and applications globally can read and write to a common data set.

Multi-Tenancy

When a single file cluster is shared by multiple groups or clients, multi-tenancy lets you authenticate each group with a separate Active Directory domain for isolation and segregated management.

Clients/ Apps



HyperStore File Services delivers unified support for file and object storage. With SMB/ NFS support, POSIX-compliance, and cloud integration, it goes far beyond traditional file services.

KEY BENEFITS

Full Suite of Enterprise File Services

Supports users and applications with SMB/NFS, plus Active Directory and LDAP integration.

Limitlessly Scalable Infrastructure Consolidation

Unified storage for both files and objects with limitless capacity scalability.

New Options for Cloud Integration

Multi-cloud support and converged data access simplify cloud data management.

Maximum Uptime

Multiple levels of redundancy, up to 14 nines data durability, and integrated DR options.

Features

HyperStore File Services Basic

Multi-Protocol Access

- SMB/NFS
- POSIX compliant

User Authentication

- Active Directory and LDAP

Acceleration Caching

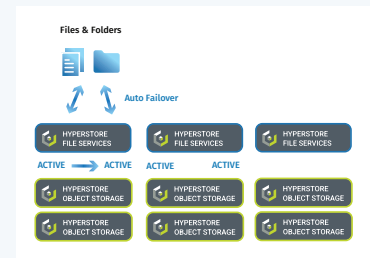
- Write file caching using NVMe
- Read file caching using HDDs or SSD/NVMe

Converged Data Access Support

- VSS Support for File versioning
- Access files directly to/from object storage
- Allows S3-enabled applications to directly read/write file data

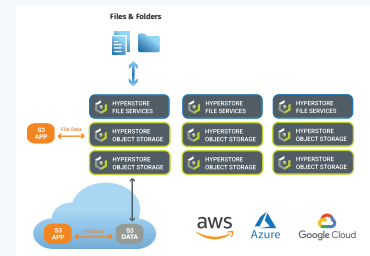
High Availability

Multiple levels of redundancy for continuous uptime. Active-active failover plus multi-file node capability



Converged Data Access & Multi-Cloud Support

Cloud-based and on-premises apps have direct access to file data.



HyperStore File Services Enterprise

Includes all Basic features, plus:

High Availability

- Active/Active HA (with cluster deployment)
- Non-disruptive failover

Snapshots (planned)

- Point-in-time copies of file systems
- For protection of single files or entire file systems

Geo-Distribution (planned)

- Allows file nodes to be located at multiple sites with access to a common file and object namespace
- Global file cache and object namespace

Use Cases

- Media and Entertainment
- CCTV / Video Surveillance
- Healthcare / Medical Imaging
- File Storage-as-a-Service
- File Collaboration
- File Backup & Archival

HyperStore File Appliance 1100 Specifications

Form Factor	1U rack mount chassis
Metadata Drives	2x U.2 7mm NVMe Flash
Metadata Drive Sizes	1.92TB, 3.84TB, 7.68TB options
Write Cache Drives	2x U.2 7mm NVMe Flash
Data Drives	12x 3.5" SAS HDD (7200 RPM)
Data Drive Sizes	10TB, 12TB, 14TB
Storage Capacity Raw	120TB, 144TB, 168TB
Data Protection	Replication across HyperStore File nodes
Redundancy	Hot-swappable disk drives 2x hot-swappable power supplies No single point of failure Non-disruptive, online software upgrades
CPU	2x Intel Xeon Gold 5218R 2.1G 27.5M Cache, 20C/40T
Memory	128GB
Network Interfaces*	10GbBaseT (RJ45), 10/25GbE SFP28, or 40/100GbE QSFP28 options
Power Supply	800W Platinum, 1-1 redundancy 100-127/200-240Vac, 50-60Hz, 7.5A/3.5A
Cooling	2 System fan modules
Thermal Rating	2730 BTU/hour
Dimensions (WxHxD)	17.6" x 1.7" x 37.4" / 448mm x 43.2mm x 950mm
Weight	65 lbs (29.5kg)
IO Ports / Connectivity	1x GbE RJ45 LAN Port (Dedicated IPMI Management port) 2x USB 3.0 ports 1x VGA port 1x Micro-USB (serial header port)

*SFP transceivers and network cabling not included and must be supplied by the customer.



- Single node 1U chassis
- 12x hot-swappable 3.5" disk drives
- Up to 4x hot-swappable 2.5" 7mm NVMe drives
- 10GbBaseT (RJ45), 10/25GbE, and 40/100GbE networking options