CLOUDIAN®

NTT Communications Delivers Object Storage To Enterprise Cloud Service with Cloudian Hyperstore

NTT Communications is one of the world's top three telecom companies and sits in the Fortune Global 500. NTT Communications enterprise cloud, dubbed Biz Hosting Cloud^n Object Storage, is NTT's cloud hosting service. NTT relies on Cloudian HyperStore® software to bring robust Amazon S3-like services and limitless scalability to its cloud as the company combines flexibility features, straightforward data management, and full customization with expanded global reach.

Background

The IT team at NTT Communications knew its legacy storage systems could not provide the required scalability an ironclad data security at the aggressive price points that its customers demanded. If the company was to compete with the world's other significant service providers, the team needed to switch from its outdated distributed file storage scheme to the much more agile object storage model in order to optimally manage its many petabytes of user data. These technical requirements lead the Biz Hosting Cloud^n Object Storage team to consider Cloudian HyperStore.

The Project

The Biz Hosting Cloud^n Object Storage team wanted to replace its outdated distributed file storage service with the more robust object storage platform via Cloudian HyperStore. The team needed to move fast; speed-to-launch was of primary concern. They evaluated open source products and quickly learned that those solutions carried a host of hidden costs, including separate development of critical storage-as-a-service (STaaS) management functions like statistics analysis and flexible billing. NTT Communications saved time and money with Cloudian HyperStore's pre-packaged STaaS features.

One hundred percent Amazon S3 API compatibility was a requirement. Access to the entire S3 application ecosystem was critical in order to expand its user base and satisfy customer demand for flexibility. Cloudian HyperStore was the only solution that provided that.

It was especially important that the storage solution was field-proven and used by other top cloud service providers. With hundreds of HyperStore deployments to enterprises and cloud service providers worldwide, Cloudian HyperStore fit the bill as one of the only hybrid cloud solutions to meet the company's rigorous product standards.

Cloudian HyperStore

Cloudian HyperStore is an ideal software solution for companies who offer public cloud storage. Unlike legacy solutions, HyperStore is designed specifically for hybrid cloud scenarios and includes necessary management features such as multi-tenancy, multi-currency rating plans, billing, quality of service (QoS), and an S3 API that allows service providers like NTT Communications to deliver Amazon S3-like services to customers.

Cloudian fundamentally changes the way storage is managed. Object storage

Industry
Cloud Service Provider

Challenge
- To provide unlimited scalability and ironclad data security at the aggressive price points that customers demanded
- To find a solution with 100% Amazon S3 API support
- To migrate from distributed file storage to object storage to better manage multiple petabytes of user data
- Quick solution implementation

Solution
Cloudian HyperStore software

Results
- Field-proven hybrid cloud solution
- Unlimited scalability
- 100% Amazon S3 API fidelity
- Pre-packaged STaaS features
- Usability features, including: multitenancy, multi-currency rating plans, billing, quality of service (QoS)

Service Provider Use Cases
- Storage-as-a-Service
- Infrastructure-as-a-Service
- Backup-as-a-Service
- Disaster Recovery-as-a-Service
- Archive-as-a-Service
- File Sync & Share

HYPERSTORE SERVICE PROVIDER BENEFITS

▸ Reduced acquisition cost with high-density commodity servers and storage

▸ Reduced complexity with the elimination of backups, volume/LUN management, and costly data migrations

▸ Value-added services, including: Storage-as-a-Service, Backup-as-a-Service, Archive-as-a-Service, and File Sync & Share, as well as 100% support for all S3 applications

▸ Future-proofing with the ability to start small (terabytes) and easily expand to petabytes as requirements grow

jumpstarts adoption of STaaS by enabling service providers like NTT Communications to deliver StaaS via its own commodity servers. In fact, the HyperStore object storage platform is based on the same technology as that of Web 2.0 pioneers, including Facebook and Amazon.

The combination of HyperStore software and commodity hardware ideally suits the cloud service provider business model. In fact, Cloudian object storage software addresses all the operational requirements of cloud storage. It is self-managing and seamlessly mitigates hardware and site failures by replicating content across physical resources. Cloudian is fully multitenant and simplifies storage provisioning by allowing end-users to self-provision their storage. Service providers can create an elastic storage infrastructure that easily expands or shrinks based on application demand or end-user requirements. Service providers can operate a very cost-effective cloud storage business and focus on providing exceptional services to their customers and no longer be involved in LUN or volume management, time-consuming data migration, backups, and similar time-sinkers.

The Future with Cloudian

Unmatched scalability and data protection features keep NTT Communications coming back for more. The ability to create highly scalable storage systems that broadly deliver comprehensive S3 features with 100% API fidelity, perfectly resonates with NTT Communication's mission to provide customers with unlimited scale-out storage capacity. Robust data durability across multiple data centers enables NTT Communications to always keep customer data secure. All of this helps position Biz Hosting Cloud[n] Object Storage as an attractive alternative to other global service providers.

Cloudian made the difference at NTT Communications with:

- Complete S3 API
- Infinite scalability
- Excellent performance for all data types
- Configurable replication
- CloudStack integration
- Field-proven reliability

"Our aim is to provide innovative, highly reliable ICT service seamlessly across the globe under our 'Global Cloud Vision.' With this aim, we were also studying an object storage service that is highly scalable, with unlimited data capacity. Cloudian has a proven track record in global markets to provide highly resilient and robust object storage with an Amazon S3-compatible API, which we believe is an optimal fit with our idea of object storage service."

Susumu Okuhira
NTT Communications Director of Hosting and Platform Service, Cloud Services