

Cloudian HyperStore Streamlines Scientific Collaboration

CASALE SA is a global leader in developing and licensing proprietary technologies in ammonia, methanol, urea, melamine and syngas production processes. Founded as Ammonia Casale in 1921, Casale remains one of the oldest and most innovative synthetic ammonia production companies in the world. Casale is notable for continuous technology innovation driven by its global team of highly specialized scientists and engineers who now rely on Cloudian hybrid cloud storage for streamlined collaboration. The company is headquartered in Lugano Switzerland with branch offices in Czech Republic and mobile employees throughout the world.

Background

Riccardo Donati, Head of IT at Casale, knew he needed to transform Casale's outdated IT capabilities if the company was to continue to innovate. Its legacy storage system did not allow for much of the functionality that is required to run a technology-savvy global business. It did not allow the company to adequately administer its worldwide consulting activities from its headquarters. It was difficult to manage, did not provide access controls, and it did not allow its geographically dispersed scientists to collaborate on projects which was of primary concern to Casale.

Donati began to think about redesigning the way the company stored its data. He sought a storage solution that would be a secure, on-premises data repository that would securely store terabytes of data for up to five years. It needed to be easy to use and manage across the company's multiple data centers, and be easily accessible to remote users. As he researched alternatives, hybrid cloud storage, the combination of on-premises private cloud storage with optional tiering to the public cloud, emerged as the ideal back-end solution. This put Cloudian at the top of his list.

Cloudian HyperStore

Cloudian HyperStore software made it easy for Casale to build the high availability, on-premises, Amazon S3-compliant storage solution that it wanted. It gave

Casale mirrored data protection, unlimited scale, multi-data center storage, the ability to collaborate among its users, fully automated data tiering to the S3 public cloud, and support for all S3 applications—all behind its firewall.

HyperStore combines robust availability with system management control, advanced monitoring capabilities and reporting so that Donati's team could apply clear user access controls to protect company intellectual property. A host of features, including hybrid cloud streaming, virtual nodes, configurable erasure coding, and data compression and encryption helped give Casale highly efficient storage and seamless data management that lets its users store and access their data where they want it, when they want it. That flexibility was a boon to collaboration and project sharing.

Donati and his IT team especially liked the fact that HyperStore seamlessly integrated into their existing IT environment comprised of a fully virtualized data center with VMware as the primary infrastructure software.

The Project

Donati implemented two storage clusters with Cloudian HyperStore software. The first, a private collaboration cluster which is also accessible to remote personnel via the internet (green in Figure 1) for file share applications. The second cluster, also private and not accessible to the outside world (grey in Figure 1), is used by



Industry

Science & Industry

Challenges

- Manage worldwide consulting services from Casale headquarters
- Provide employees, consultants, clients, and suppliers with access to data regardless of their location
- Provide clear and easy to use access controls
- Improve collaboration and project sharing
- Maintain high availability with mirrored data
- Integration with existing IT infrastructure

Solution

Cloudian HyperStore software

Results

- Hybrid cloud storage: the ability to store data on-premises with the option to tier data to the public cloud
- Scale-out storage for unlimited capacity expansion
- Easy file sharing among on-site and remote users
- Automatic data replication across multiple data centers
- Long-term data archiving

“Cloudian HyperStore software is one of the most complete and reliable hybrid cloud storage platforms available.”

Riccardo Donati

Head of IT at Casale

Casale IT for VMware backup and disaster recovery. This second cluster receives virtual machine backup copies from Veeam for Casale's long-term data archiving requirement. Those copies also provide the ability to perform disaster recovery without requiring additional software since one of the cluster nodes (Cloudian node 5 in Figure 1) is deployed in a remote data center hosted by Swisscom.

“Cloudian HyperStore software deployed easily across our multi-data center environment. It is effortless to use, secure, flexible, and cost-effective, thanks to our use of commodity hardware.”

Riccardo Donati

Compelling TCO

HyperStore cost-effectively scales via industry-standard hardware. With HyperStore, initial deployments can be comprised of only a few servers in a single data center. As demand grows, those installations can easily expand to thousands of servers that process hundreds of petabytes of data, distributed across multiple data centers. This just-in-time IT approach perfectly suits Casale's future expansion plans.

Powerful Cloudian Partnerships

The project was facilitated by BCLLOUD, distributor and Technical Competence Center for Cloudian in EMEA, located in Milan, Italy. BCLLOUD supported Casale in all phases of the project, from initial architecture design, to installation, deployment and training.

Cloudian also partners with leading technology companies, including Veeam,

that focus on data archiving and backup, disaster recovery, and virtualization so that companies like Casale can be assured that they are deploying the best possible data center solution.

“BCLLOUD Professional Services was there for us throughout the project.”

— Riccardo Donati

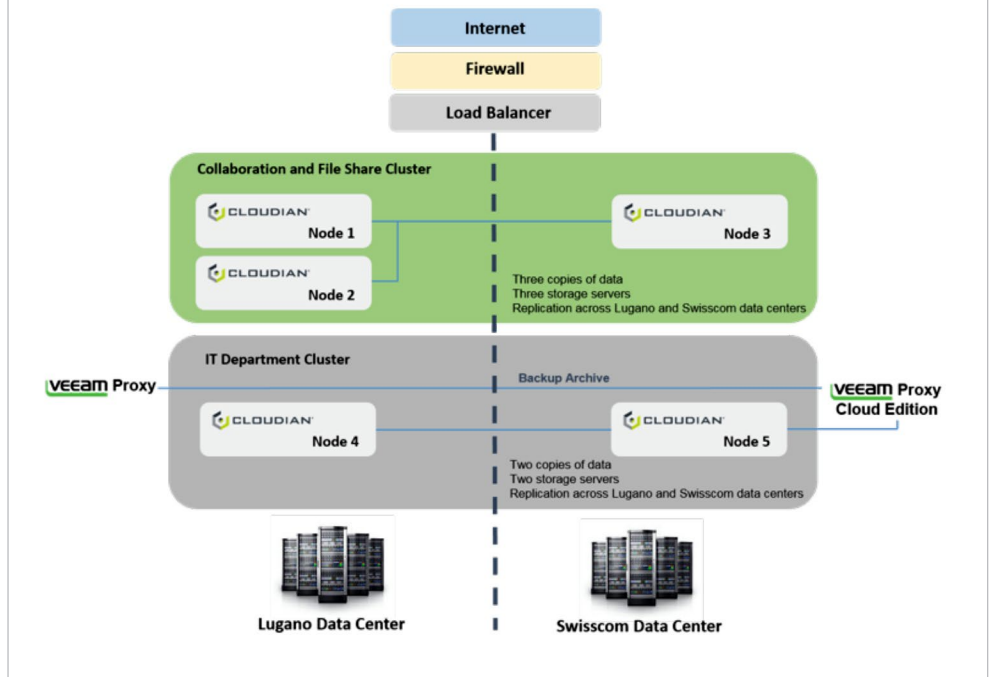
Casale's Future is Bright with Cloudian HyperStore

Animated by its successful hybrid cloud implementation, Casale plans to continue expanding its available capacity with Cloudian HyperStore. The company will further work with Cloudian's partner ecosystem as it applies its innovative touch to accelerating scientific discovery with Cloudian storage solutions.

“Not only did Casale achieve all our business objectives with Cloudian HyperStore, we got a robust hybrid cloud based on an object storage infrastructure that is 100% Amazon S3-compatible. We can access all available S3 applications and choose to store our data on-premises, or in the cloud—all behind our firewall.”

Riccardo Donati

FIGURE 1



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