

Ransomware Protection with Veeam and Cloudian on Lenovo

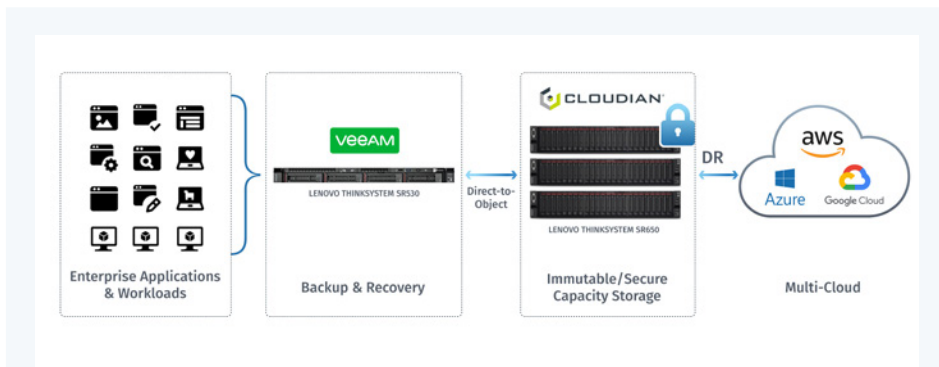
Veeam V12 Direct-To-Cloudian provides end-end immutable backups for protection against ransomware

Challenge: More Data and New Threats

IT managers must manage data growth, meet stringent RPO/RTO objectives, and protect data from loss or malicious attacks. Your infrastructure choices for a backup and storage target are critical to meeting these data protection objectives. Traditional storage appliances as backup targets are expensive and lack scalability. Public cloud targets can limit bandwidth, resulting in lengthy restore times. Wherever your backup data resides, a ransomware attack could render that data useless, potentially shutting down operations. The need for a new approach to data protection has never been greater.

Solution

Cloudian HyperStore and Veeam Backup & Replication simplifies and accelerates your data backup and recovery processes providing enterprise-grade data protection. Veeam v12 enables direct-to-object storage backup workflows, allowing customers to secure their most important assets directly onto Cloudian HyperStore – a fast, on-premises disk-based storage with built-in ransomware protection. Customers can meet their backup window and RTO/RPO objectives while enabling an offsite data recovery strategy that dovetails seamlessly into their daily backup workflow. At 70% less cost than public cloud or traditional enterprise storage, Cloudian offers an innovative solution for better backup storage.



Cloudian provides a fast, on-prem, capacity-tier storage target for Veeam Backup & Replication deployed on Lenovo ThinkSystem. The Object Lock feature ensures protection from ransomware.

High Speed Backup and Recovery for the Largest Environments

Cloudian HyperStore and Veeam Availability Suite deployed on Lenovo servers offers enterprise customers a seamlessly integrated solution working on the industry’s leading hardware infrastructure. Veeam Replication & Backup is deployed on Lenovo SR530, while Cloudian HyperStore is deployed on Lenovo SR650 as a scale-out storage cluster comprised of shared nothing storage nodes. Cloudian provides a local, disk-based object storage target for Veeam backups over your local, high-

Solution Benefits

Enterprise-Grade

- Running on industry leading ThinkSystem, the solution of Cloudian and Veeam provide enterprise-grade data protection solution

Simpler Backup and Recovery

- Eliminates primary backup tier to reduce cost by up to 40%
- Superior RPO/RTO for fast restore from on-prem backup target

Data Immutability for Ransomware Protection

- Object Lock feature protects backup copies from encryption by ransomware
- End-to-End data immutability with Direct-To-Object
- Assured restore in event of an attack
- A must-have for cyber insurance

Lowest TCO

- 1/3 the cost of public cloud or traditional enterprise storage
- 30% lower TCO than tape

Trouble-Free Integration

- Veeam Object Ready certified
- Proven in Veeam deployments worldwide

Modular and limitlessly scalable Direct-to-Object

- Start small and expand without downtime

Cloud compatible

- Replication to public cloud for DR
- Compatible with AWS, Azure, GCP

Use cases

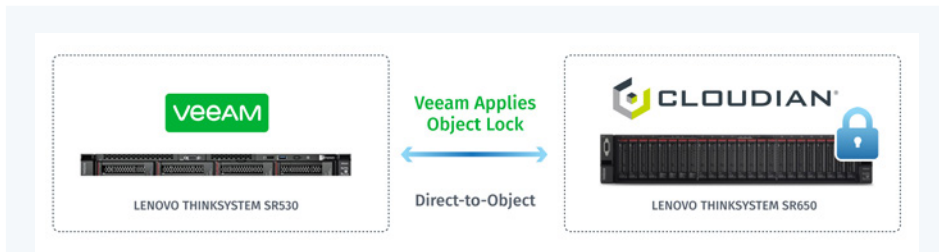
- **Ransomware Protection:** Immutable data for compliance, governance or legal hold
- **Data protection:** Integrated backup and archive solution
- **Disaster recovery:** Policy-based replication to cloud or remote site for DR
- **Regulatory Compliance:** HIPPA, GDPR, SEC Rule 17a-4



speed network and scales to hundreds of petabytes. Data write bandwidth of more than 5,000MB/s (or 18TB per hour) lets you backup and restore large data sets in a fraction of the time required for public cloud storage, leading to enhanced Recovery Point Objectives (RPO) and Recovery Time Objectives (RTO). To further ensure high performance, the solution supports recovery directly from HyperStore without the need to rehydrate an intermediate storage tier.

Comprehensive Ransomware Protection

To protect data from ransomware attacks, Cloudian HyperStore and Veeam Data Platform support Object Lock for end-to-end, air-tight data immutability all the way up to the operating system root level. This permits backup data copies to be made tamperproof for a set period of time, which prevents hacker encryption or deletion and ensures a clean data copy for reliable recovery. The resulting security is comparable to offline storage.



“Object Lock” protects data from ransomware by making it unchangeable for a specified period, thus preventing encryption by malware.

Security

To ensure data security, Cloudian supports AES-256 server-side encryption for data at rest and SSL for data in transit (HTTPS). Fine-grained storage policies -- including encryption at object and bucket-levels -- permit security settings to be individually configured for different users or data types in a shared-storage environment. In addition, Cloudian offers enhanced security features such as secure shell, integrated firewall, and RBAC/IAM access controls to further protect backup copies.

Hybrid Cloud-Ready

For DR purposes, Cloudian’s data management functionality lets you create a remote data copy. Replicate backup data to a second Cloudian site, or to low-cost deep archive storage such as AWS Glacier. With policy-based management, your offsite copy will be automatically kept up to date.

Multi-tenancy

Increase efficiency by allowing multiple users to share a single backup and storage infrastructure, without compromising security. Both Veeam and Cloudian support multi-tenancy, ensuring that multiple clients may be supported within a single system while maintain full data security. Integrated billing simplifies management, and QoS controls help you deliver consistent service levels.

Lowest TCO

Cloudian HyperStore is a scale-out object storage system that provides a fast, cost-effective backup and archive storage platform at 70% less cost than public cloud storage or traditional storage options. The scale-out architecture lets you start small and grow, rather than buying capacity long in advance.

About Cloudian

Cloudian® is the leader in data management software for the hybrid cloud. With military-grade security, limitless scalability, and seamless cloud integration, Cloudian’s HyperStore S3-compatible object storage lets users optimize data access, meet data sovereignty requirements, and cut costs by consolidating information to a single, cloud-like platform. Cloudian’s geo-distributed architecture manages and protects object and file data at the edge, core, and in the cloud—for both conventional and modern applications.

[More at Cloudian.com](https://www.cloudian.com)

About Lenovo

Lenovo is the leading provider of x86 systems for the data center. The portfolio includes rack, tower, blade, dense and converged systems, and supports enterprise class performance, reliability and security. Lenovo also offers a full range of networking, storage, software and solutions, and comprehensive services supporting business needs throughout the IT lifecycle. To learn more about Lenovo ThinkSystem servers and storage, contact your Lenovo representative or Business Partner or visit <https://www.lenovo.com/us/en/servers-storage/>