Scalable Video Analytics Solutions in the Cloud

Deploy a hybrid or hosted video-surveillance-as-a-service platform for enterprise data management with VXG and Seagate Lyve Cloud.

Challenge Summary
Today’s customers are seeking reliable data management solutions for video storage. They are realizing the value of video analytics and the benefits it can have for their business and the functionality of their operations. Newer technologies and business developments require changes in regulations for security throughout areas such as buildings, retail stores, homes, or parking lots. To track movement or activity at sites through cameras and video recordings, users must be able to view their recordings from anywhere at any time, as well as store them for long-term retention.

Benefits Summary
- Critical Video Data Protection
- Scalable Video Analytics
- Simple and Predictable Pricing
- Infrastructure Cost Savings
- Long-Term Data Retention

Seagate® Lyve™ Cloud with VXG provides a simple and trusted surveillance solution for businesses to record and store their videos and data for backup and long-term retention. This joint solution offers a simplified flow of data transfer from IP cameras directly into the cloud to enable easy access for customers—all while maintaining stringent security standards.

The combined effort supports both a hosted or hybrid video-surveillance-as-a-service (VSaaS) model that adheres to the business’s needs. Whether this solution is deployed on a hybrid or hosted VSaaS, robust storage systems must support simple storage and guaranteed retrieval of critical video data and enable analytics to drive business value.

With VXG’s video management software and Lyve Cloud’s storage as a service, users are supported with complete storage needs for hybrid and hosted VSaaS surveillance. This hybrid or hosted VSaaS platform works seamlessly with video management systems (VMS) to enable real-time backup and scalable long-term data retention while also connecting to other artificial intelligence (AI) systems of the customer’s choosing for data analytics purposes.
Today’s surveillance solution providers are beginning to realize the benefits of a hybrid VSaaS model, in which on-premises networks utilize the cloud for backup and long-term retention. This also enables the cloud to be used for remote access to important files from anywhere, and to scale out on-premises data centers or VMS infrastructures to the cloud. With the growth of video surveillance data—as well as rising demand for secure monitoring solutions for businesses, households, and other large-scale organizations—video surveillance organizations are seeking the most convenient storage solution to support large data sets gathered from complex surveillance environments.

**Challenge/Problem**

As the demand for video surveillance video data continues to grow, customers are searching for durable and cost-effective storage options that guarantee safe look retrieval and transfer of video data. Additionally, they want an efficient system that is easy to maintain, upgrade, and use.

VMS providers are adopting cloud-based solutions to provide customers with innovative techniques for their business position. Depending on their business needs, however, they are still utilizing physical infrastructure in tandem with the cloud. Therefore, they need solutions that can be easily integrated into their business workflow instead of having to revamp entire systems. There’s a need for a new solution to accommodate more cameras, higher resolutions, and existing infrastructures.

**Solution Approach**

Video surveillance systems integrators require manageable and cost-effective storage solutions that support recording and storing video from a multitude of cameras. Solutions should include a simplified workflow with secure data transfer, as well as a large amount of storage available to hold the video recording files. They should also be able to assist with solving infrastructure problems, budget, and service and maintenance issues.

This solution should be able to work with any IP cameras and video management system to ensure easy capabilities and smooth transitions. Additionally, cost effectiveness plays a significant part of a customer’s needs, and any solution should be flexible and predictable when it comes to pricing for storage.
Seagate Solution

Seagate Lyve Cloud provides robust, scalable, secure, and cost-effective storage delivered as a service for all your camera streams, supporting different uses such as temporary, long-term, or archival video data recordings.

Lyve Cloud’s flexible, monthly pay-for-use model enables customers to select the best solution for their business. With no extra API or egress charges, customers can guarantee that their cloud bill will not include additional costs for retrieving or transferring large amounts of data from the platform.

With over 40 years of industry-leading data storage experience, Seagate prioritizes security first. Lyve Cloud is committed to the most stringent globally recognized security standards, as demonstrated by its ISO 27001 and SOC 2 certifications. With multi-level login authentication and encryption in flight and at rest, data privacy is protected at all times. Object immutability options on Lyve Cloud’s S3 object storage protect data from alteration or deletion.

Lyve Cloud maintains data integrity as a priority through utilization of Seagate’s own hard drives. It’s designed with 29 nines of durability and crafted for 99.99% availability to configure and protect against potential corruption.

Partner Solution

VXG provides video management software as a reselling opportunity or directly to businesses, enabling customers to connect their cameras to a storage platform so they can retrieve recordings and move their video data to a variety of compatible AI-enabled applications, storage destinations, and more.

VXG provides plug-in integration with major IP cameras and cloud network video recorders, which allows customers to choose to send video surveillance collected onsite to any destination. Its compatibility empowers a wide range of customers to utilize VXG for their video surveillance needs.

Pricing models with VXG are dependent on customer needs—flexible and predictable. It offers a pay-as-you-go model for businesses to use based on their operations.

VXG connects with many third-party AI solutions depending on customer needs to store and manage video recordings for multiple uses. For example, videos can be used to track motion, face recognition, or certain objects for business purposes.

The platform that customers use for VXG is easy to use. Customers can add or manage users who have access to the recordings, open and retrieve certain recordings organized by date and time, and even use connected AI programs to conduct business.

Total Solution

Customers that choose Lyve Cloud and VXG as their video surveillance storage providers can guarantee their data is safe and securely stored. Together, VXG and Lyve Cloud work hand in hand to produce the most cost-effective and agile video storage solution for video recordings and surveillance. Using the cloud for video backup allows for less costs in infrastructure maintenance, operational burdens, and overall simplicity in storage.

The solution allows customers to connect their own IP cameras to VXG, whether systems are tied to physical infrastructure or all in the cloud. By connecting VXG to Lyve Cloud, all recordings, photos, and other captured data can be stored for functions such as backup, archive, data ingestion, and long-term retention immediately. This solution is compatible with both a hybrid and hosted VSaaS model, allowing for full flexibility in any business structure.
**Hybrid VSaaS Model**

IP cameras send their recordings to VMS systems in micro data centers, where all videos are aggregated to one location. The files are then directly transferred into Lyve Cloud for long-term storage where they can be accessed any time from anywhere.

**Hosted VSaaS Model**

IP cameras directly connect to Lyve Cloud, where VXG works to aggregate all video recordings and directly transfer them into storage for long-term retention.

VSaaS providers can easily establish an entire cloud-based solution or integrate with any existing infrastructure by utilizing VXG’s white-label approach. Video footage is stored directly to and accessed from Lyve Cloud while data processing and camera deployment are administered directly from the VXG interface. Customers such as small retail stores with modest deployments and limited IT staffing can take advantage of this simple deployment model.

Whether deploying a hybrid storage or hosted VSaaS solution through Lyve Cloud and VXG, customers can safely guard their data with this joint solution’s world-class security. Additionally, data-center proximity and high-speed bandwidth allow for scalable, consistent performance while S3 compatibility facilitates quick and easy transfers for important data.
In Conclusion

With demand for new surveillance storage solutions increasing, Lyve Cloud with VXG is here to provide the most optimal and efficient video storage options for recordings. The joint effort works specifically to the demands of video surveillance and complies with its capabilities to retain and manage high-resolution video for business needs and data processing. It also connects to third-party AI solutions for the customer to utilize for their own business needs.

Lyve Cloud with VXG is the simple, robust, and cost-effective video storage solution for video data retention.

Features & Benefits Summary

• Full S3 Compatibility
• Predictable Pricing
• No Cloud Lock-in or Egress Fees
• Open Standard API
• Fast Data Ingest
• Encryption in Transit and at Rest

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