# Coping With Video Surveillance Data Explosion

## Quantum StorNext Scale-out Tiered Storage is Perfect for this Demanding Workflow

Video Surveillance is among the most challenging workflows for any storage system. When all the variables are taken into account—number of cameras, type of video format, frame rate, video compression, and length of the recordings—the amount of data can become unwieldy very quickly. Factor in the number of days the content must be retained and you have a massive data management problem on your hands. Finally, add the need to manage and search through thousands, if not hundreds of thousands, of files for retrieval, and you have a use case that can bring most storage systems to their knees.

While each of the following applications will have slightly different requirements, their need for robust and reliable multi-camera ingest, and the management and retrieval of desired content, is consistent.

- **Critical infrastructure protection:** Power plants, refineries, bridges, docks
- **Law enforcement agencies:** Dash-mounted cameras, body-mounted cameras, license plate recognition, prison monitoring
- **Mass transit monitoring and security:** Airports, in-bus cameras, train stations, freight yards
- **Military and intelligence applications:** Aerial surveillance, terrain mapping, urban reconnaissance
- **Municipalities and urban surveillance projects:** Traffic monitoring and metering, universities and higher education, school yards, parks, museums, and stadiums
- **Commercial projects:** Shopping malls, large and multi-site retail, and casinos

### QUANTUM: VIDEO IS IN OUR DNA

Because of the unique attributes of the Quantum StorNext® 5 file system, more video is stored and managed on Quantum than on any other platform. Don't take our word for it. You can speak to thousands of Media & Entertainment companies who rely on Quantum to capture, store, share, and retrieve video content at far higher bit rates and frame sizes than those required by video surveillance. In fact, Quantum recognizes video data as a unique data type and treats incoming video specifically to optimize the workflow for video applications—making the entire workflow faster and more efficient.



**STORNEXT SOLUTION PROFILE**

StorNext Solutions for Video Surveillance provide:

- **Transparent access** for VMS and other workflow applications
- **Policy-based tiering** that automatically moves content to the most cost-effective storage
- **Scale-out storage infrastructure** that allows for virtually unlimited storage capacity
- **Unparalleled reliability & data protection**

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At Quantum, we're all about data management—storage is just a part of it. Video surveillance needs proven data management—fast capture, flexible access, scale, policy-driven tiering, and reliable protection. It's a perfect fit.

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*- Geoff Stedman, SVP, StorNext Solutions, Quantum*

*Figure 1.* **Video Surveillance Shared Storage Environment**

## SUPPORTING THE COMPLETE VIDEO SURVEILLANCE LIFE CYCLE

Quantum believes that you should never spend more money to store content than is necessary. We build systems to automatically migrate data from more costly high-performance primary storage for capture and analysis, to lower-cost disks, cloud, or tape for long-term storage and archive. All while maintaining the ability to locate needed files quickly from anywhere on the network.

For some use cases, content must be kept for many years to support investigations or analysis long after recording. But there are also jurisdictional and regulatory compliance issues that require surveillance content to be removed from storage after a relatively short period of time. The StorNext data management system allows for custom rules for migration and retention that keep data as long as needed and remove content on time to maintain compliance.

## FLOOD OF INFORMATION DEMANDS EASY AND FLEXIBLE SCALABILITY

Growth drivers in video surveillance are more than just the addition of cameras and the retention of content. Cameras are becoming more affordable with higher quality. High-definition recording is now available at a fraction of the cost of just a few years ago. The increased resolution and improved image quality makes the footage more useful as improved analytics now make every frame of video more valuable. The next generation of video management systems and automatic video indexing and search products make it possible to analyze many hours of video in just a few minutes. More often than not, the trend is moving toward "keep everything and sort it out later." This is driving higher demands for storage systems that must be nimble enough to accommodate additional capacity without requiring a redesign or hardware change-out. StorNext is a true scale-out storage infrastructure that allows for multi-petabyte growth without the disruption of hardware replacement or complex data management.

As more and more surveillance content is collected, maintaining access to data is important, but scaling primary storage to keep all video material online would be cost prohibitive. StorNext data management can automatically migrate content from primary disk for ingest, to lower-cost object storage, to tape or cloud archives for the most cost-effective long-term storage—all through rule-based policies, and all while maintaining immediate access to footage for analysis and review.

## ROBUST DATA INTEGRITY AND RELIABILITY

Above all, video surveillance content must be captured and stored with uncompromising reliability. In almost all cases, video surveillance content is only available once, so it's imperative that the material gets to storage and gets protected as soon as possible. The StorNext data management system automatically creates multiple copies to support both on-site protection and off-site long-term storage.

To learn more about how a StorNext solution would work in your environment, please visit us at: www.quantum.com/video-surveillance or email scaleoutstorage@quantum.com.

## STORNEXT 5 SCALE-OUT STORAGE

StorNext 5 Scale-out Storage is found in the most demanding information workflows in Government, Defense & Intelligence, Video Surveillance, and Media & Entertainment—and is designed for applications that operate on large sets of large files, for organizations that need to capture, preserve, share, and process critical data.

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