



Seagate Upgrades Surveillance Network with Unified Video Management System

Implementing an Efficient and Cost-Effective Solution that is Scalable and Future-Proof

Success Summary

Seagate's® Global Trust & Security department successfully updated its global video surveillance network with **Genetec's Security Center Omnicast™** software video management system (VMS) solution together with the Seagate Exos™ X 5U84 SAN storage platform, an intelligent data storage combination that is easy to manage, fast to access, and provides maximum uptime; the solution meets Seagate's needs for centralized storage, multiple concurrent video streams, optimized data protection, and security and is capable of scalability, high performance, and data protection for years to come.

Evidence of Success

The Genetec Security Center software video management solution together with the Seagate Exos X 5U84 SAN storage platform provides Seagate's Global Trust & Security department with a unified security platform that provides a single interface to manage worldwide video surveillance, situational awareness, access control, and information analytics. The solution enables Seagate to benefit from:

- Centralized management with the ability to connect all of Seagate's worldwide video surveillance streams and devices.
- Increased bandwidth to support more cameras with a higher frame rate without compromising quality.
- Streamlined ability to rebuild storage volumes up to 95% faster than conventional RAID solutions.
- Expanded and simplified ability to scale.
- Future-proofed technology that provides savings on installation and upgrades.
- Improved data protection with in-transit and at-rest encryption + appliance security level such as Advanced Distributed Autonomic Protection Technology (ADAPT).



Customer Story

Seagate's Global Trust & Security department is tasked with protecting the company's own networks and devices, which in turn enables Seagate to continue its work to help safeguard and activate the world's data. Sensitive computer networks require that storage products protect user data at all times. Seagate itself is a global company with employees, assets, and intellectual property that need to be protected 24/7, and 365 days a year. Seagate's technology provides a reliable foundation for video surveillance data with affordable, scalable, and flexible storage solutions—from data center to edge to cloud.



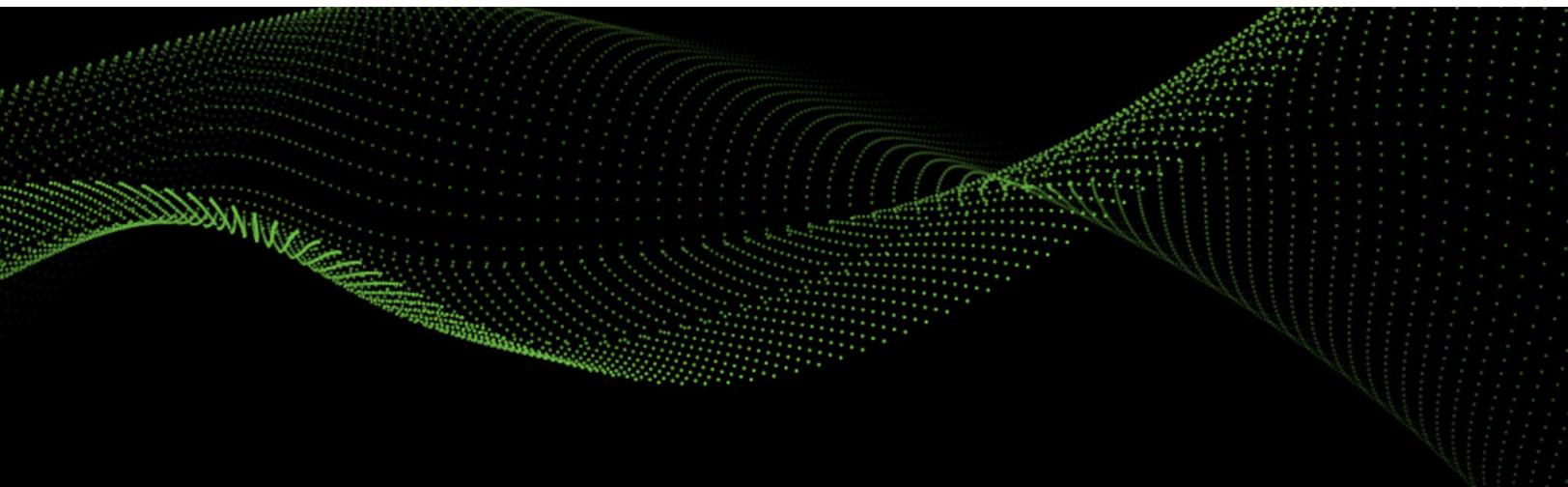
Customer Goal

Seagate's Global Trust & Security facilities team needed a scalable and flexible VMS as part of a unified security platform.

The team's goal was to replace a fragmented system with a single platform that could facilitate management, streamline company-wide video surveillance, and provide metrics for analyzing efficiency. It also needed to provide real-time access to data during emergencies.

The Seagate team relied on a reference architecture that combines the company's own Exos X 5U84 SAN storage platform with a proven VMS platform from Genetec. The solution enables centralized storage, management, and visualization of all video streams. The VMS supports a distributed worldwide implementation to ensure secure storage and retrieval of archived video data. The new platform also delivers performance, security, availability, and scalability.

Seagate wanted to implement a VMS that tightly integrates with Seagate's own best-in-class video surveillance storage solutions that solve data capture challenges by offering petabyte-scalable storage with large capacity and high density drives with a small footprint. Seagate video surveillance storage provides fast access with ease of management, cost-effective options for future upgrades, and proven solutions that have been tested and certified by leading VMS vendors, including Genetec.



Customer Problem

Seagate's challenge was to implement a global security system for a network of more than 5,500 video cameras and other devices. The company needed a scalable solution that would accommodate third-party integration and the capacity to grow as needed.

"Previously, we used a wide range of siloed video components and systems, which were not designed for management of our global security system," said Brandon Gregg, Vice President of Global Trust & Security at Seagate. "We needed business continuity built into our security systems, as well as the ability to track and analyze basic metrics."

Seagate also wanted a VMS that aligned with its commitment to safeguard its products and its infrastructure. The new solution had to be able to protect Seagate's people, products, and intellectual property. The Trust & Security team also wanted a centralized system that was future-proof, simpler to manage, and would improve uptime.



Customer Solution

The VMS solution implemented by Seagate includes on-premises implementation of Genetec VMS over IP SAN or iSCSI SAN. The Genetec Security Center software and the Seagate Exos X5U84 SAN storage platform provide ultra-dense capacity that scales to 1.3PB in a single disk enclosure and delivers up to 5.5GB/s bandwidth for sequential writes and 7.0GB/s for sequential reads. The system's overall efficiency translates into an exceptionally low total cost of ownership (TCO).

A SAN is a dedicated storage area network that connects application servers and storage devices point-to-point. IP SAN works like a centralized single storage network with shared storage resources. VMS edge/recording servers using IP SAN storage can handle massive video streams.

The architecture's combination of the Genetec VMS and Seagate Exos X systems gives Seagate Global Trust & Security a dynamic system for managing and securing its video data assets.

The system's storage provides the highest capacity available for meeting the company's increasing need for storing video surveillance data. The solution also enabled Seagate to optimize streaming by accommodating a high bandwidth, and by enabling higher frame rates for video recordings.



Customer Solution (continued)

Genetec’s software includes the ability to integrate with both Seagate’s storage systems and third-party security products and applications. It also provides extensibility because of its ability to integrate with new programs and technologies.

The platform also implements Seagate’s own Autonomic Distributed Allocation Protection Technology (ADAPT) data protection technology. With ADAPT, the raw disk storage areas on the HDDs are chopped into chunks and zones and the user data and parity information are optimally distributed among all those participating storage chunks. The technology facilitates flexibility of physical storage by optimizing the use of space on each drive. The flexibility provided by ADAPT enables 95% faster rebuild times compared with conventional RAID storage solutions.

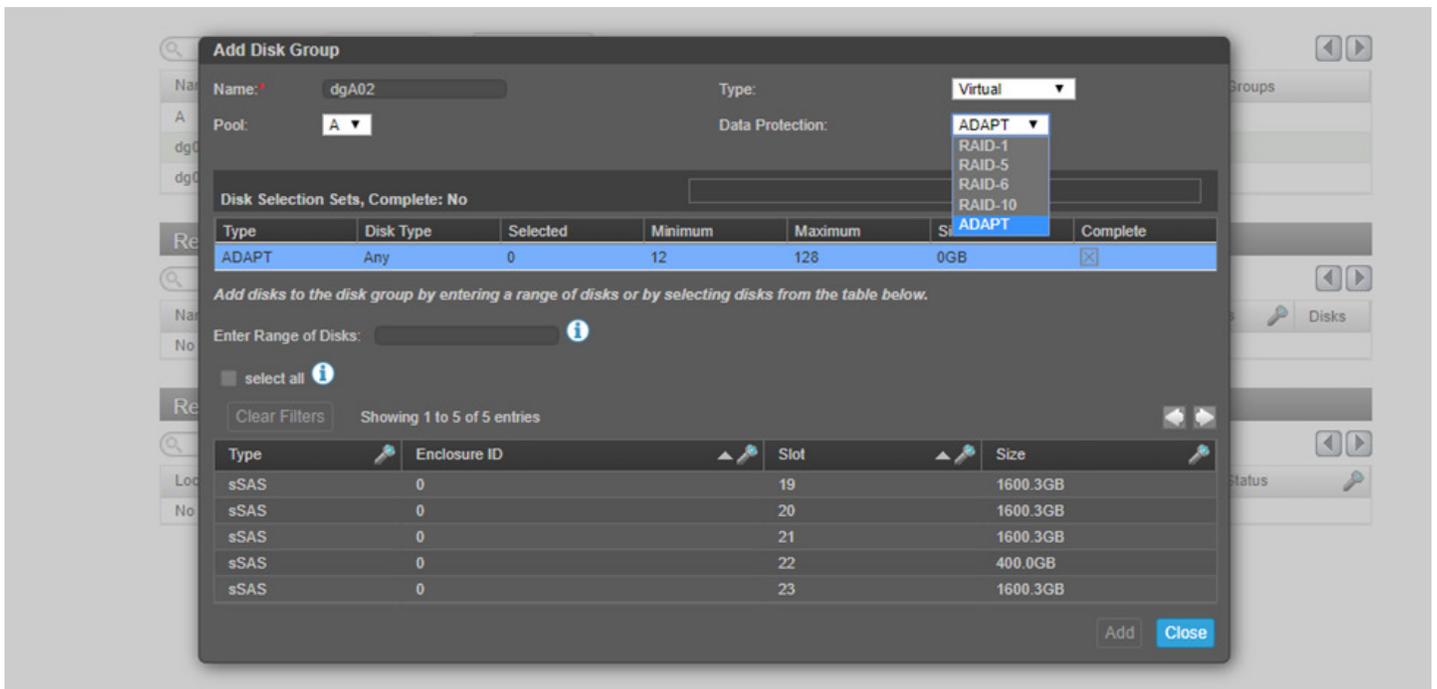
The Genetec VMS also enables Seagate to protect its video streams with encryption. The solution integrates the industry-leading Seagate Secure™ drive encrypting technology for keeping data safe— even if the drives are lost, stolen, or misplaced. Data is also encrypted in

transit, between video archivers and cameras.

In addition to drive-level safeguards, the Genetec Security Center includes unified video management, access control, intrusion protection, and communications in a single user interface.

“Genetec’s Security Center with the Seagate Exos X 5U84 is exactly what we needed,” said Gregg. “The new platform addressed our previously fragmented setup, and enabled us to deploy one unified, centralized system serving all of our global sites.”

The Genetec VMS with Seagate’s Exos X is well-suited for meeting Seagate’s growing demand for surveillance and security. “Our Exos X systems deliver performance by being optimized for video streaming, and can handle a growing environment when the time comes to add additional security devices,” said Ken Claffey, Senior Vice President, Enterprise Data Solutions at Seagate. “The VMS also enables us to benefit from Seagate Secure, which encrypts the hard drive for data safekeeping, and ADAPT technology, our rapid rebuild storage technology.”



Customer Success

Centralizing the management of Seagate's multiple video surveillance systems around the world into a single platform has improved the company's physical security infrastructure and has provided access to a new ecosystem of tools, metrics, and analytics.

Better analytics tools have enabled the company to convert data into actionable intelligence that can, for instance, be used to address risks and respond to problems before, during, or after they occur. The streamlined ecosystem also provided Seagate with cost savings, not only because a unified system is simpler to maintain and operate than the myriad of different applications and networks it replaced, but also because the system's ultra-dense capacity that scales to 1.3PB in a single disk enclosure provides exceptionally low TCO, and its easy scalability brings a cost-effective way to grow and expand the number of cameras and expansion servers in the Genetec environment without fear of running out of storage capacity.

The Genetec's Security Center with the Seagate Exos X 5U84 architecture has been so successful that Seagate now plans to use it as the backbone for its three regional security operations centers, including the one located at the company's headquarters in Fremont, California.

The solution is also enabling Seagate to benefit from a wide range of specialized tools, such as 360-degree cameras, thermal night vision imaging, and visual tracking. "From welcome screens for visitors to contact tracing and space utilization analysis, the product is a future-proof foundation that we can use for years to come," said Gregg. "We are already exploring license plate recognition (LPR), touchless access control, and integration into our network security system."



Customer Success

The new security platform also minimizes downtime and reduces expenses by enabling Seagate's security team to directly monitor the health of its system in ways that were not possible before the new system was deployed. "Being able to proactively monitor our systems," said Gregg, "prevents outages when it really matters, like during a crisis."

Genetec's unified security platform combined with Seagate enterprise storage system's Exos X delivers the performance, security, availability, and scalability the company needs for storage and retrieval of archived video data. It facilitates central management for storing, archiving, and managing recorded video over a distributed infrastructure, and provides a cost-effective way to grow and expand as the company's video surveillance needs increase.



Genetec's expertise in video management capabilities combined with Seagate's best-in-class enterprise storage solutions provide the perfect surveillance management option, giving our Global Trust & Security team a complete package that is easy to access, manage, and control.

**KEN CLAFFEY, SENIOR VICE PRESIDENT,
ENTERPRISE DATA SOLUTIONS AT SEAGATE**



Products Used



Exos® X 5U84

Ultra-dense capacity that scales to 1.3PB in a single disk enclosure and delivers up to 5.5GB/s bandwidth

[Learn more](#) →

Advanced Distributed Autonomic Protection Technology (ADAPT)

ADAPT is based on intelligent parallel architecture that utilizes machine learning to respond to potential or active failures.

[Learn more](#) →

Genetec™

**Security Center
Omnicast**™

Security Center Omnicast™

Security Center Omnicast is an IP-based VMS that lets you work smarter with video.

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