XCubeSAN Series Solution Brief

QSAN, AxxonSoft, and Seagate Deliver Superior VMS and PSIM Solutions

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Solution Brief

The Challenge

Video surveillance shows a sign that is growing more and more popular in the world. It has become a strategic source of intelligence, information, and insights, from the personal surveillance camera to the all-weather monitoring of major transportation hubs. Video surveillance cameras are being installed in major cities around the world to monitor public transportation, subways, streets, parks, etc. These new smart cameras and analytic applications are capturing more evidences than ever before. As a result, the vast amount of data generated through video surveillance has spiked in the past few years. Furthermore, due to the use of high-definition cameras, they collect richer data and cause an increase in bandwidth requirements, write speeds, and storage capacities.

All of this data must be stored somewhere; it faces serious challenges in media storage. Traditional storage architectures are not suitable for large volumes of large video contents. For example, capacity expansion is not easy; backup is difficult, and so on. In addition, a large amount of videos are stored on the drives through the storages; drives are an important part of the overall solution. Lots of drives are used, so the challenge would be the drive retires, disposes, or repurposes.

The Evolution of VMS and PSIM

In the past decade, video surveillance systems have become an integral part of major existing systems for the security measures used by governments, military and police units, large corporations and financial institutions. All video surveillance data is as useful as your ability to manage it. These big data must be analyzed effectively; otherwise it is just a bunch of information garbage.

Current world conditions require increased demand for more stringent security measures. This means new requirements, such as full integration between different security systems, including video surveillance, access control, fire alarms, etc.

Axxon Next is a video management software (VMS) that combines AI-powered video analytics, near-instant forensic search for recorded video, and comprehensive support for 10,000+ IP devices. Full functionality is available even for smaller systems. Axxon Next is a

well-balanced product that can meet the needs of any project, whatever the scale or complexity.

Similarly, Axxon Intellect Enterprise is an open platform for PSIM (Physical Security Information Management) that supports integrated security systems of any level of complexity. The Intellect PSIM integrates with over 90 access control, perimeter protection, and fire/security alarm systems from numerous manufacturers.

The Solution

The QSAN XCubeSAN series storage system, combined with AxxonSoft, leading VMS and PSIM developer, delivers superior benefits for new security, surveillance challenges of data analysis, retrieval, and retention.

Both QSAN and AxxonSoft offer a complete line of products designed to meet today's security challenges. QSAN XCubeSAN series storage delivers proud performance, flexible capacity, and reliability. It features a fully modularized, cable-less architecture. In addition to Dual-Active controllers, all critical components inside the unit such as power supply modules, fan modules, and hot pluggable to provide fault tolerance capabilities. This architecture designs provide an availability solution for new small, medium or large surveillance implementations.
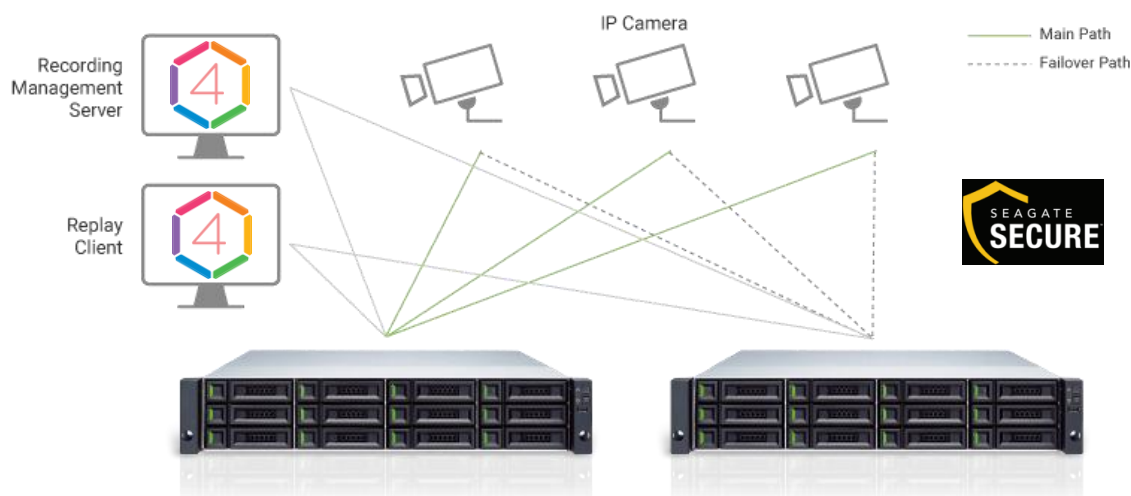

Figure 1   QSAN, AxxonSoft, and Seagate joint solution provides superior performance

SANOS, QSAN's proprietary SAN storage management operating system, is equipped with a refreshingly simple to use web GUI, and can be easily deployed into any infrastructure. SANOS delivers comprehensive storage functionality and brings the enterprise-level features to the SMB and enterprise businesses with high performance, high availability, and unparalleled scalability.

From a performance perspective, AxxonSoft Axxon Next VMS and Intellect Enterprise PSIM which combined with XCubeSAN series storage are capable of operating the heavy computing workloads of video surveillance infrastructure, including HD camera environments and AI applications.

With the data stored by AxxonSoft software, SANOS provides enterprise backup and disaster recovery solutions for protecting data. The XCubeSAN Series includes built-in data backup services for protecting the data from most unpredictable accidents. Like time machine, QSnap (Snapshot) is the easiest and most effective measurement to protect against ransomware attacks, virus attacks, or accidental file deletions, etc. QClone (Local Volume Clone) is used to make copies of volumes in the same storage system. And QReplica (Remote Replication) prevents primary site failure by replicating data to the remote sites.

SANOS (QSAN XCubeSAN series operating system) uses Seagate's SED (Self-Encrypting Drive) to reduce the risk of unauthorized access to sensitive data. As the industry leading technology in data-at-rest protection, including SED and SED-FIPS drives, Seagate Secure™ helps ensure that customers have the highest level of encryption possible. All QSAN products support Seagate SED and Seagate ISE (Instant Secure Erase) to improve data security without affecting storage system performance. For companies, government, military units, hospitals, etc. with sensitive surveillance video, the simple QSAN product line plus Seagate SED provides the best economics, performance, management and data security.

Seagate SED simplifies drive repurposing and disposal, protect data-at-rest and help comply with corporate and federal data security mandates. Prevent unauthorized access and safeguard stored data with three levels of security, including Secure Downloads & Diagnostics (SD&D), TCG compliant Self-Encrypting Drive and government-grade FIPS/Common Criteria tamper-resistant hard drive. These features work perfectly with QSAN XCubeSAN and will assure the performance and security.

The QSAN, AxxonSoft, and Seagate joint solutions deliver superior storage and software to meet the benefits of video, analytics, and security. It also allows consistent high-performance bandwidth for media-intensive video-streaming environments.

Why Choose QSAN, AxxonSoft, and Seagate?

- AxxonSoft's forensic search tools greatly reduce the time you spend searching for recorded incidents.
- To meet the needs of a particular facility, AxxonSoft's AI analytics learn to perform customer-specific tasks from video material obtained onsite.
- Seagate's long history with data storage has given us deep understanding and insight into data security. Seagate Secure™ SEDs protect your data at rest and make device retirement a breeze. For those with more stringent requirements, we also offer advanced government-grade security.
- QSAN has more than 10 years of software experience to ensure data high stability and reliability. SANOS provides full enterprise storage features, let the saving data has no worries.
- QSAN XCubeSAN series with Seagate SED is a perfect fit for the high-performance needs of the surveillance market solutions since hardware-level security features in SEDs are independent of the operating system and there is no performance impact.
- QSAN, AxxonSoft, and Seagate are video surveillance partners. We have the same goal to jointly consolidate the surveillance market.
- QSAN, AxxonSoft, and Seagate technical teams provide collaborated on performance testing and joint customer deployments.
- QSAN, AxxonSoft, and Seagate provide free technical support to company's partners and software end-users.

About AxxonSoft

Founded in 2003, AxxonSoft is a leading developer of smart integrated security and video surveillance systems (VMS and PSIM). The company's portfolio for the Safety & Security market boasts over 150,000 projects with 2.5 million cameras installed. AxxonSoft has more than 5,800 certified partners in 100+ countries, which perform over 1,500 installations every month. With 50 offices around the world, the company provides its partners with fast response times and exceptional support in every corner of the globe. For more information, please visit www.AxxonSoft.com.

About Seagate

Seagate is the world leader in storage solutions, providing hard drives and products that connect people with their content. For 40 years, Seagate has enabled exponential data

growth with breakthrough hard drives, solid state drives, systems, and recovery services. We provide end-to-end data management solutions across surveillance, NAS, data centers, consumer data storage, and more. For more information, please visit www.Seagate.com.

About QSAN

QSAN Technology, a leading storage technology designer and manufacturer, was founded in July 2004. Building on our vast experience in the industry, QSAN strives to build enterprise-class storage systems that pride ourselves with outstanding performance, secure data protection, and comprehensive data management. QSAN endeavors to provide the industry with high-quality data storage systems that are simple, secure, scalable and reliable. For more information, please visit www.QSAN.com.

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