



Solution Brief

Dell Storage for Video Surveillance and Genetec

- Dependable, high-performance storage with bandwidth for HD and multi-megapixel environments
- Dell Storage solutions for Fibre Channel, iSCSI, and NAS
- High efficiency, world-class density and scalability to handle extended retention time requirements
- Scalable building blocks for high video stream concurrency
- Flexible, modular architecture for scaling
- Validated with Genetec VMS systems
- Full integration with Dell servers, workstations and networking

Performance, Scale and Value — Video IT solution

The rapid evolution of CCTV technologies is creating new challenges for security staff and systems. Demand for high-definition and multi-megapixel cameras, extended retention requirements, event capture and big data integration creates a capacity, performance and budget conundrum for customers.

Video surveillance solutions using Dell storage, server and networking products provide physical security experts with the flexibility, performance and scale needed to support high camera counts, megapixel resolutions, high frame rates and long retention times demanded by the industry. Dell's enterprise-class storage architecture is designed to provide the high availability required to meet the demands of today's IP-based video surveillance deployments.

Video surveillance solutions at scale in the enterprise require a storage system that can provide deterministic performance, reliability and ease of use, all at a value point that makes sense. Dell Storage can be deployed as either block or file solutions, enabling direct integration with Genetec Security Center to match the size and scale of the solution requirement.

Surveillance solutions are not one size fits all. The Dell Storage portfolio offers scale up and scale out models with data progression and automatic tiering options to meet project requirements. Moreover, in combination with Dell servers, workstations and networking, complete solutions can be deployed that are optimized for interoperability and all supported through a single vendor.

Dell, in partnership with your security consultant, can recommend appropriate elements of the Dell Storage portfolio including Fibre Channel, iSCSI and NAS capabilities along with a broad offering of form factors and media types that can be tuned to specific workload requirements.



Surveillance solutions are based on high-density storage platforms of up to 84 high capacity drives in a 5U space. These platforms provide the bandwidth, economics, and scalability for video to be maintained for months or years, using high-capacity near-line drives.

The Dell Storage portfolio meets performance expectations with a more compact footprint and value-oriented price-point that combine the benefits of proven, flexible architecture with resilient Dell hardware design to provide efficiency, quality and durability. Additionally, the Fluid File System provides a NAS solution that can scale capacity and performance independently.

Whether you are upgrading and expanding an existing system or deploying a new IP camera system with extended retentions times, Dell can provide a deployment solution designed and validated for high availability and fault tolerance at the application, network and storage system levels.

Sizing your solution

IP camera-based surveillance solutions now often deploy multi-megapixel cameras at frame rates up to 30 fps for HDTV 720p and 1080p resolutions or higher. The storage system sizing is driven by the aggregate data rate of the configured cameras and the total retention time. However, lower frame rate requirements and features, such as server-side motion detection, might substantially decrease the effective data rate delivered to the storage system. Dell will work to size and configure the system based on your VMS choices and physical architecture.

Dell has developed technology and marketing partnerships with Genetec to assure interoperability and provide recommended configuration optimizations for best performance

High-density designs

Storage density and performance make Dell Storage solutions ideally suited for the increased storage demands of HD and megapixel camera deployments. Moreover, some I/O performance capabilities may need to be designed in or planned as future expansion for emerging analytics applications. Dell has been delivering video surveillance storage solutions at leading companies and institutions in law enforcement, public transportation, retail, hotels, casinos, universities and more.

Engage with your Dell Sales team to find the right balance of performance, scalability and value for your surveillance deployment.



The volume of data in a single surveillance solution is moving from terabytes to petabytes, challenging storage scalability

To Learn More about Dell Video Surveillance Solutions go to Dell.com/videosolutions

