



Solution Brief

NetApp Video Surveillance Storage Solution

E-Series offers dense, flexible storage for video surveillance

Key Benefits

Support for High-Bandwidth Surveillance Environments

Dependable high-performance bandwidth supports high-definition and megapixel environments.

High Efficiency Through World-Class Density and Scalability

High-density packaging allows support for large-scale capacity and fast expandability.

Optimization for Increased Productivity

Faster read/write performance enables more concurrent video streams per rack unit.

Extreme Flexibility with Modular Architecture

Standard 4U enclosures allow precise scaling and growth over time.

The Challenge

From on-body police cameras to 24/7 monitoring of major transportation hubs, video has become a strategic source of information, insights, and intelligence. Major cities throughout the world are mounting video surveillance cameras to monitor and control streets, subways, mass transit, parks, and other public places. These new intelligent video surveillance cameras and analytical applications are capturing more evidence than ever, causing an increase in bandwidth requirements, write speeds, and storage capacities. However, this worldwide massive surveillance adoption also generated a demand for enterprise-class, easy-to-use, and highly integrated video management solutions.

As a result, governments, retail enterprises, and other public entities are faced with serious challenges with respect to media storage. Traditional storage architectures are not designed for massive amounts of big video content. Purchasing standalone network video recorder (NVR) solutions has become inefficient and costly.

The Solution

NetApp® E-Series Video Surveillance Storage Solutions, combined with leading video management software, provides superior benefits to meet the new security surveillance challenges of data retrieval, retention, and capture. The NetApp E-Series Video Surveillance Storage Solution provides a complete line of external storage systems designed to meet today's security challenges by delivering unprecedented capacity, speed, and durability. The E-Series storage system uses a modular architecture that offers a true pay-as-you-grow solution to address the new big video data storage requirements. Leading intelligent video security applications combined with E-Series storage handle the heavy computational workloads and bandwidth-sensitive streaming environments of next generation video surveillance infrastructures.

With them you get:

- Consistent high-performance bandwidth for media-intensive video-streaming environments
- Performance-tuned solutions that deliver high-availability access for media content needs
- Superior performance to/from NVR for greater camera support and reduced NVR instances
- The capability to leverage your investment in video cameras and networks and maintain productivity with high-availability storage

Support for High-Bandwidth Surveillance Environments

The NetApp E-Series Video Surveillance Storage Solution offers superior storage to meet the advances in video and analytic surveillance technology and superior performance to handle bandwidth-sensitive streaming environments. E-Series combines high-performance storage with leading video security management companies' solutions, allowing customers to develop optimized video infrastructures. IP video security management leaders have teamed with NetApp to qualify their software with the E-Series storage platform. With NetApp E-Series storage, users get high-performance access to video content, including HD resolutions, and support for digital and analog video surveillance installations:

- **Big bandwidth support.** Performance is optimized to support any number of video streams simultaneously.
- **Read throughput.** Each E5760 system is capable of up to 1 million IOPS sustained reads.
- **Write throughput.** Get up to 13 GBps sustained (and maximum burst) write bandwidth.

High Efficiency Through World-Class Density and Scalability

The NetApp E-Series Video Surveillance Storage Solution delivers the highest density scale-out storage solution to support the unique requirements of large government and commercial video surveillance infrastructures. Using an industry-standard rack configuration, solution-Series can scale up to dozens of nodes with multiple gigabytes per second of throughput and petabytes of storage. The modular architecture allows nondisruptive scaling of performance and capacity so that applications and data are available when and where they are needed:

- **Modular design.** Allows growth with minimal additional components, eliminating the need to overconfigure. Supports 5.7PB in each industry-standard 40U 19" rack.
- **World-class density.** Maximizes space and cooling efficiency in a standard 19" rack. NetApp uses 40% fewer disk drives and 25% less rack space and power.
- **Scalability of external storage system.** Pay-as-you-grow scalability supports from 250 cameras to over 5,000 cameras in a single rack enclosure.

Optimization for Increased Productivity

The NetApp E-Series Video Surveillance Storage Solution is architected to provide the highest reliability and availability. Using advanced controller technology, NetApp delivers field-proven technology in a tested and validated solution, with over 20 years of firmware development behind it for rapid deployment. By teaming with leading video security management software companies, the video surveillance storage solution is optimized for managing tens of petabytes of video data, enabling rapid access to and retrieval of content:

- **Maximum serviceability and reliability.** System hardware delivers 99.999% availability.
- **High availability with best-in-class redundancy.** Dual redundant controllers, multipathing failover, and Dynamic Disk Pools provide high-availability access to video surveillance recordings.

Partner with the Experts

A worldwide team of experts helps you maximize the value of your investment. We work with security organizations to identify critical business drivers and offer extensive training and tools, so your teams can better optimize your surveillance operations. NetApp partners with leading technology providers and surveillance software and solution companies to develop and deliver compelling solutions that meet your specific requirements. We then work with you to architect the right solution to meet the most demanding workloads with unmatched efficiency.

About NetApp

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation and optimize their operations. For more information, visit www.netapp.com. #DataDriven