NetApp Video Surveillance Storage Solution for Government

Video surveillance systems are a necessity for public safety and efficient government oversight. From small city councils to large-scale municipalities and the largest state and federal agencies, governments must now look beyond delivering clean water, well-lit streets, and basic public safety.

Federal funding from the Department of Homeland Security has helped cities such as New York, Baltimore, and Chicago build large-scale surveillance systems. In Oakland, CA, police are now aided by thousands of new surveillance cameras placed throughout the city. Small towns are beneficiaries of this funding as well; bridges, reservoirs, train stations, malls, and school campuses that were once only intermittently patrolled by police are now constantly covered by cameras.

THE CHALLENGE

Effective surveillance enables officials to anticipate, prevent, and investigate safety threats. New multimegapixel cameras capture minute detail, and sophisticated software can add facial recognition and analytics capabilities. However, these new video surveillance technologies create an enormous volume of video data that government organizations must collect, manage, and analyze.

To handle the increasing dependence on video surveillance—and the corresponding growth in video data—today's government organizations require fast, simple, reliable storage solutions that can scale quickly and affordably.

THE SOLUTION

The NetApp® video surveillance storage solution delivers unparalleled capacity, speed, and availability for on-demand access to video data. The modular scalability and simplified management of NetApp E-Series storage makes the solution easy to manage and grow. Agencies can confidently maintain the integrity of their data, meet retention policies, and support rapid growth with an enterprise video surveillance storage solution from NetApp.

NEVER LOSE ACCESS

Government programs depend on the reliability of their video surveillance systems to protect citizens and infrastructure. In addition to assisting personnel with real-time monitoring, video surveillance data can provide evidence for the apprehension and conviction of criminals. Data must be continuously recorded without interruption.

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Across the country, fire departments are increasingly reliant on video footage to do forensic work on the causes of wildfires that destroy communities. Minutes—even seconds—of downtime could mean the difference between catching an arsonist or the spark from a power line and thwarting an effective investigation.[1]

The NetApp video surveillance storage solution provides nonstop reliability with a fault-tolerant design that is proven to deliver greater than 99.999% availability. With best-in-class redundancy and no single point of failure, the NetApp video surveillance storage solution offers tested resiliency, proven by more than 1 million systems deployed.

GET THE SPEED THAT YOU NEED

Today's high-resolution cameras capture incredible detail in a wide range of conditions. However, to record and store video at full resolution, you need storage that can ingest data at the same throughput that hundreds of high-resolution cameras are capturing.

If your storage can't keep up, you could lose valuable video frames. If you drop frames, you're not getting the full value of your video data. With the NetApp video surveillance storage solution, performance is optimized to support any number of video streams simultaneously. E-Series storage is capable of up to 1 million IOPS of sustained reads and 9GBps of sustained (and maximum burst) write bandwidth.

EASY DEPLOYMENT AND SUPPORT

As your agency upgrades its video surveillance systems to take advantage of today's smart, high-definition cameras, your security staff can face a steep learning curve. When Kentucky's Department of Juvenile Justice needed to provide surveillance for 26 group homes and juvenile detention centers, NetApp E-Series storage with Verint video management software provided the high performance the department needed in a simple-to-deploy configuration.

Unlike other storage systems that require multiple platforms and models to scale, the NetApp video surveillance storage solution features a modular design that enables you to nondisruptively increase performance and capacity without downtime or complex migrations. The deep resiliency at the foundation of the solution means that you can spend less time managing storage and more time on strategic tasks. If an issue does arise, NetApp's proactive, call-home support accelerates time to resolution.

SEAMLESS SCALABILITY

Regardless of where you are in your video surveillance deployment, you need a future-proof infrastructure that can handle today's data requirements and easily scale for tomorrow's. Today's high-resolution cameras can generate anywhere from 1TB to 2TB of data per month. That data can accumulate quickly as the sheer number of cameras deployed by many agencies quickly rises.

California's Department of Forestry and Fire Protection (CAL FIRE) plans to increase the number of cameras it uses for fire detection by a factor of six by 2022, causing their storage needs to expand exponentially.[2] As storage requirements increase, government agencies need a solution that offers seamless scalability. NetApp E-Series storage enables a granular, building-block approach to growth. Quickly scale from 100 to 500,000 cameras by adding capacity in any increment—one or multiple drives at a time—without downtime.

LOWER TOTAL COST OF OWNERSHIP

Not every security department has the budget for sophisticated IT. And, as publicly funded institutions, government agencies have the additional responsibility to use taxpayer dollars wisely. Data storage can account for 30% or more of the total cost of a typical video surveillance solution—more than the cameras, servers, networking, or software. With NetApp, you don't have to cut corners when it comes your data, and you can justify expenditures of public funds with confidence and transparency.

With ultra-high-density architecture and low management costs, the NetApp video surveillance storage solution is 18% to 22% more cost effective over a 3-year lifecycle than competitive solutions. The solution's modular scalability makes it truly pay-as-you grow, eliminating the need to overprovision storage.

1. Cetin, A. Enis et al., Using Surveillance Systems for Wildfire Detection, FireFighterNation, June 5, 2013.
2. Daniels, Jeff, California's Next Governor Hopes to Get the Jump on Fires by Expanding the State's High-Tech Early Warning Camera System, CNBC, Nov. 16, 2018.

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