NetApp Video Surveillance Storage Solution for Education

BACKGROUND

Over the past decade, a string of school tragedies has turned the spotlight on campus security. To keep students safe, schools everywhere—from K–12 districts to colleges and universities—are strengthening their video surveillance systems by adding and by upgrading cameras across their campuses.

There's no question that video surveillance systems can help protect students, deter crime, and prevent vandalism. To be most effective, cameras must be everywhere students are—in buildings, throughout parking lots, along walking paths, and on "blue light" emergency phones.

CHALLENGE

As campuses grow and evolve their video surveillance deployments by adding high-definition digital cameras, they can face hidden challenges. Campus safety officers now find themselves the stewards of massive amounts of rapidly growing data. Having the right data storage solution can make or break a campus video surveillance deployment.

THE SOLUTION

The NetApp® video surveillance solution features a complete line of external storage systems that are designed to meet today's security challenges. Based on NetApp E-Series storage, the solution's modular architecture offers a true pay-as-you-grow way to address schools' new big data video storage requirements. The solution is integrated with leading intelligent video security applications to handle the heavy computational workloads and bandwidth-sensitive streaming environments of next-generation video surveillance infrastructures.

AROUND-THE-CLOCK RELIABILITY

A college campus never sleeps. When it comes to campus security, downtime can come at a high cost. Interruptions in the flow of data can put lives and property at risk. Data loss can also be a liability in court, where video surveillance footage is often relied upon as evidence.

The NetApp video surveillance solution provides nonstop reliability for campus deployments 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, NetApp's video surveillance solution provides outstanding resiliency, proven by more than 1 million systems in the field.

NetApp®

THE SPEED THAT YOU NEED

Today's high-resolution cameras can capture incredible detail, even in low-light situations across a variety of campus environments. That level of detail can be critical when the video is used in criminal investigations or as evidence in court. To capture the full resolution, you need storage that can ingest data at the same speed and at the same throughput that the camera is putting out.

The NetApp video surveillance solution gives you consistent, high-performance access to video content, including HD and multi-megapixel resolutions. Performance is optimized to support any number of video streams simultaneously and is capable of up to 1 million IOPS of sustained reads and 13 GBps of sustained (and maximum burst) write bandwidth.

EASY DEPLOYMENT AND SUPPORT

Many campus video surveillance solutions today are run out of the campus security office—not the IT department. What started as smaller, analog systems have quickly grown into large-scale digital deployments that demand the reliability, speed, and flexibility of enterprise storage. As a result, your campus security staff can face a steep learning curve as your IT requirements become more complex.

The NetApp video surveillance solution makes it easy. Unlike file systems that require multiple platforms and models to scale, the NetApp video surveillance solution features a modular design. Your campus security staff can nondisruptively add performance and capacity without complex deployments or migrations. NetApp's enterprise architecture also leverages artificial intelligence and machine learning to automate issue resolution and to reduce management overhead.

LOWER TCO

Data storage can account for about 30% of the total cost of a typical video surveillance solution—more than the cameras, servers, networking, or software alone. Schools that aren't smart about storage can quickly see their costs spin out of control.

With NetApp, you can support your growing video surveillance deployments with enterprise storage while saving your budget for new cameras and capabilities. Thanks to their ultra-high-density architecture and low management costs, NetApp systems for video surveillance are 18% to 22% more cost-effective over a 3-year lifecycle than competitive systems are.[1] The solution's modular scalability makes it truly pay-as-you-grow, eliminating the need to overprovision storage.

1. Based on internal NetApp calculations

CASE IN POINT: TUFTS UNIVERSITY

Tufts University is growing its video surveillance deployment across three metropolitan campuses using NetApp's E-Series solution for video surveillance.

"This storage is perfect for video. It is economical, it is easy to deploy, it is easy to manage, it is easy to grow, and it works well. It simply does everything that we need it to do."
—Cope Frazier
Storage Specialist, Tufts University

SEAMLESS SCALABILITY

Today's campus surveillance deployments generate more data than ever before. With high-resolution cameras that generate anywhere from 1TB to 2TB per month, a typical 500-camera campus deployment could require up to 1PB of storage in a single month. That trend is likely to continue as campuses step up their video surveillance deployments by upgrading and by adding cameras to new locations.

The modular design of the NetApp video surveillance solution offers a granular, building-block approach to growth. The solution enables you to scale seamlessly from 200 to 200,000 cameras by adding capacity in any increment—one or multiple drives at a time.

MORE INFORMATION

For more information, visit: https://www.netapp.com/vss

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