



NetApp Video Surveillance Storage Solution for Transportation

BACKGROUND

Threats to the security of public transportation, including terrorism, violence, and vandalism, abound. Around the world, airports as well as train, bus, and subway stations are moving rapidly to upgrade from older, traditional video surveillance systems to high-definition smart systems to monitor transit hubs, routes, and vehicles. These new systems are helping to more effectively deter crime, maintain the safety of passengers, and investigate incidents.

CHALLENGE

Public transit systems pose unique challenges for video surveillance. As agencies expand and upgrade their surveillance deployments, they must store and manage unprecedented amounts of data. Depending on the area covered, they could require thousands of mobile and fixed cameras. The largest public transit systems in the world now have up to 500,000 cameras.

Airports pose their own challenges, requiring extremely dense camera coverage to effectively track and analyze the movement of individuals in real time throughout the airport. Nonstop coverage is critical for early detection of suspicious activities.

New cameras with higher-resolution image capture contribute to the strain on existing storage infrastructure. A train station or airport at rush hour requires faster storage—and lots of it—to capture dynamic scene complexity. With lengthening data retention requirements, an agency's storage footprint could grow by orders of magnitude overnight.

THE SOLUTION

The NetApp® video surveillance solution features a complete line of external and cloud-based storage systems that are designed to meet today's security challenges. Airports and other transportation agencies that require fast, continuous storage and on-demand access to video evidence can feel secure in the knowledge that their solution can help them maintain data integrity, meet retention policies, and support rapid growth.

NEVER LOSE ACCESS

Transit agencies depend on their video surveillance systems to ensure the safety of the public. In addition to assisting personnel with real-time monitoring, video surveillance data can provide evidence for the apprehension and conviction of criminals. Downtime is not an option.

The NetApp video surveillance solution provides nonstop reliability for public transit systems 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 offers outstanding resiliency, proven by more than 1 million systems in the field.

GET THE SPEED THAT YOU NEED

Today's high-resolution cameras can capture incredible detail, even in low light. However, to capture and store the 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 be losing valuable video frames. And if you drop frames, you're not getting the full picture.

The NetApp video surveillance solution gives you consistent, high-performance storage for video content, including high definition and multimegapixel 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 9GBps of sustained (and maximum burst) write bandwidth.

EASY DEPLOYMENT AND SUPPORT

As you upgrade your video surveillance systems to take advantage of today's smart, high-definition cameras, your security staff can face a steep learning curve as your IT requirements become more complex.

Unlike other storage systems that require multiple platforms and models to scale, the NetApp video surveillance 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 the 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. 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 500 to 500,000 cameras by adding capacity in any increment—one or multiple drives at a time, without downtime.

KEY POINTS

- High performance to support any number of video streams
- Transparent, modular scalability from 500 to 500,000 cameras
- Nonstop access with greater than 99.999% availability
- Easy deployment and management with call-home capabilities

LOWER TOTAL COST OF OWNERSHIP

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 alone. With NetApp, you don't have to cut corners when it comes your data.

Grow 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.

MORE INFORMATION

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

1. Based on internal NetApp calculations

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