

Security and automation service provider offers high-capacity storage system for video surveillance at suburban executive airports.





Airports are busy places and the operational needs of specialized, executive airports are no less challenging than those that serve everyday travelers. Surveillance systems are needed to secure runways, hangars, terminals and offices, and the video collected from those systems supports billing and operations, as well.

It was natural that when an executive airport in suburban Houston went in search of a partner to integrate its on-site cameras into an overall high-capacity video monitoring system, EOS Digital Services would get the call. Based in Houston with a long track record of quality installations supported by strong customer service, EOS Digital Services was founded on the goal of making audio/visual connectivity easy and affordable to Houston businesses.

The Challenge

The airport was looking for a system to connect its previously installed cameras to a fully integrated solution that would monitor and record everything from security and access to the movements of corporate jets in and around the hangars and runways. Video of movements in the hangars was also necessary, in case of damage to the planes, to determine liability by identifying who was working on and near them.

Just as important as surveilling hangar activity, was gaining a video record of the comings and goings of the jets for billing purposes. By documenting jet traffic, the tail numbers on each plane can be documented, thereby designating ownership so the appropriate charges can be recorded.

“ The client came to us to take over the project, maintain the cameras, and provide the storage solution. They have some pretty expensive jets; security is an issue. It was very important to them to have reliable surveillance.”

Ilan Saadia,
owner of EOS Digital Services

“It was crucial to their operation that they get recordings with the tail numbers,” said Saadia. “The main thing we were looking for was a reliable piece of technology that could store video records. We’d looked at different storage solutions. In the end it was a function of cost-effectiveness, ease of use and reliability.”

Action Taken

EOS turned to Buffalo's pre-sales support for guidance. A Buffalo sales engineer worked closely with EOS to review the airport's needs and specifications and identify a solution to meet the client's requirements.

EOS selected a 24 terabyte TeraStation™ 7120r Enterprise NAS solution. Not only does it possess the capacity, the TeraStation offers the level of fault-tolerance that the airport required. It supports hot-swappable hard drives so that, in the event of a disk failure, the defective drive can be removed and replaced without powering down the entire system. This allows operations to continue uninterrupted. It also employs RAID (Redundant Array of Inexpensive Drives) technology.

EOS installed the airport's new TeraStation 7120r in the default RAID 6 configuration to provide fault tolerance and maximize the amount of available storage, also equipping it with redundant power supplies to provide continuous power and allow operations to continue in the event of a power supply failure. All Buffalo TeraStation NAS solutions ship preconfigured in a default RAID mode to ensure efficient deployment and operation.

The 2U rack-mountable TeraStation also allows the system to scale to future needs if additional storage is needed at a future date. It easily installs into an equipment rack that can accommodate additional rack mountable units and can be secured in a communications or server room. And because the TeraStation is Linux-based, there are no operating system licensing fees; maintenance was also minimized as compared to Windows-based servers as there are relatively few system updates and patches.

“ Basically, the client was looking for a storage solution to store all the video files, and they wanted to keep this video a long time. They needed something that would allow them to go back six months. That's why we went with generous storage.”

Ilan Saadia,
owner of EOS Digital Services

EOS integrated the TeraStation 7120r into the airport's existing network system, including a SAN hosting the surveillance video management system. Eighteen high definition IP surveillance cameras, including two cameras with dual day-and night lenses in each hangar, record on detected motion around the airport. The networked cameras not only capture and process 180 degree high resolution images but also allow viewing clients to do virtual pan and zoom as they access images from either the console or from their mobile devices. All are powered off of a multi-port POE switch and write video to the TeraStation 7120r where the video images are archived.



Results

Houston served as a pilot project for another executive airport outside of Austin. Because the TeraStation is essentially a storage appliance, it can be plugged in, turned on and ready to store data with minimal set-up. Complete installation took only a couple of days.

The Houston installation was so successful that owners of the airports decided to immediately move ahead with the Austin installation. Operators in both locations can now peruse the recorded video at any time from any location to monitor operations and record the tail numbers of planes as they move on and off the runways. A large screen, tied to the system, is also in the pilot's lounge off the main terminal.

And, in terms of storage, the TeraStation has outperformed expectations. The airport owners were looking to store six months of video. "Right now," said Saadia, "it's looking like a single TeraStation will do a lot more than six months."

Key Benefits

- Cost-effective, high-capacity storage
- Fault tolerant architecture for continuous operation
- Scalable for future needs
- Pre-configured RAID 6 and ease of installation and setup offers rapid deployment

Customer

EOS Digital Services
www.eosdigitalservices.com

Industry

Security & Automation Services

Product

TeraStation™ 7120r Enterprise NAS - 24 TB

Goals

- To implement an affordable and scalable surveillance storage solution for up to 6-months of video retention.
- Record runway and hangar activity for security purposes.
- Support billing with visual record of take-offs and landings.

Solution

- TeraStation™ 7120r Enterprise NAS - 24 TB
- 18 HD IP Surveillance Cameras
- Multi-port PoE Switch

Results

EOS Digital Services now provides an effective, comprehensive, state-of-the art video recording and storage solution to monitor airport security and runway operations at multiple airports.

- High capacity for high quality video images
- Reliable, long-term storage and video retention
- Easy "anywhere/any time" access
- Quick and efficient installation
- Minimal maintenance



About Buffalo™ Technology

Buffalo™ is a Japanese manufacturer of wireless network, multimedia and innovative storage solutions for individuals and companies. The company is the market leader in PC devices in Japan. Moreover, it held a dominant position on the international NAS market 6 years in a row (source: In-Stat).

The company's storage products meet the needs of individuals and small firms, by offering innovative NAS solutions, portable and desktop hard drives, media players and wireless LAN routers which, when combined, provide a comprehensive solution which is integrated into the digital environments of the individual or the company.

Buffalo's product offering includes TeraStation™ NAS devices specially designed to offer storage solutions to small and medium-sized companies. The range of NAS LinkStation™ products includes NAS multimedia

solutions for individuals. The LinkStation™ units can create a central location, where files, photos and music can easily be stored. The AirStation™ range includes high-performance wireless network solutions for small and medium-sized companies and individuals. Thanks to the sector-leading AOSS™ technology (AirStation™ One-Touch Secure System), users can very easily create and manage secure wireless networks, from home or at the office, at the touch of a button.

Buffalo™'s powerful international alliances with companies such as Intel, Broadcom™, Nintendo and Microsoft allows the company to be the forerunner in developing cutting-edge technology for practical tools to be used by small companies and individuals.

Buffalo™ Technology, whose head office is in Japan, also has offices in the UK, France, the Netherlands, Russia, the USA and Taiwan. For more information, visit:

www.buffalo-technology.com