

Project Information

End User: Newcastle International Airport

Region: UK - Northeast

Customer Vertical: Airport – Transport Hub **System Integrator:** Advantex Network Solutions Ltd

Distributor: Oprema

Video Management Solution: Milestone

Camera Manufacturer: AXIS

Products: Management Servers, Storage Servers, Advanced

Failover Solution

CASE STUDY 2024

CASE STUDY 2024

BACKGROUND

Newcastle International Airport is a critical transport hub. Situated about 7.7 miles from Newcastle City Centre, it holds the distinction of being the primary and busiest airport in North East England, and the second busiest in Northern England. As a bustling gateway for millions of passengers traveling domestically and internationally each year, Newcastle International Airport faces multifaceted security challenges. With the constant influx of passengers, aircraft movements and cargo shipments, the airport becomes a potential target for various security threats, including terrorism, smuggling and unauthorised access. Ensuring the safety and security of passengers, airport staff and infrastructure is paramount to maintaining operational continuity and safeguarding public trust.

The Challenge

The need to accommodate an additional 200 HD cameras into the existing CCTV system at Newcastle International Airport highlighted the challenge of seamlessly expanding the storage requirements while utilising the existing Dell infrastructure. This required a solution that not only integrated with the current setup but also allowed for the incorporation of ultra-high storage density servers to meet the increased demand.



As Milestone xProtect evolves to allow for GPU offloading to decrease overall processing requirements, a challenge arose of ensuring compatibility and integration with the latest technological advancements. Retrospectively adding GPU capability to the servers and upgrading CPU processors in situ are measures taken to enhance smooth operability, but this requires careful planning and execution to ensure seamless integration with the evolving technology landscape.



Improving the operator experience by optimising client positions around decoding parameters of Milestone xProtect posed a significant challenge. This involves installing new client machines to display more cameras per position at enhanced frame rates without compromising resolution. Enhancing real-time situational awareness for operators while ensuring smooth system operation requires meticulous planning and implementation.

The Solution

Secure Logiq played a pivotal role in addressing the complex challenges faced by Newcastle International Airport's CCTV system expansion project:

· Utilisation of Ultra-High Storage Density Servers

Secure Logiq was tasked with allowing for the utilisation of ultra-high storage density servers to accommodate the existing camera estate as well as the expansion moving forwards; seamlessly expanding storage requirements by leveraging advanced server technology capable of handling increased storage demands efficiently.

Retrospective Addition of GPU Capability and CPU Upgrades

To ensure compatibility with the evolving technology landscape, Secure Logiq retrospectively added GPU capability to the servers and upgraded CPU processors in situ, ultimately enhancing processing capabilities to meet the requirements of Milestone xProtect's GPU offloading feature.

Installation of New Client Machines

Advantex tasked Secure Logiq with improving the operator experience by installing new client machines optimised around the decoding parameters of Milestone xProtect; allowing for more cameras to be displayed per position at enhanced frame rates without the need to scale resolutions down. This enhanced real-time situational awareness for operators while ensuring smooth system operation.



Redefining Airport Security

Expanding on the successful integration of new client machines optimised around Milestone xProtect's decoding parameters, the enhanced operator experience has significantly bolstered the airport's security operations. With the ability to display more cameras per position at improved frame rates, operators now have unprecedented real-time situational awareness, empowering them to swiftly respond to potential security threats and ensure the safety of airport personnel and millions of passengers. Secure Logiq's expertise in hardware architecture and proactive approach to system optimisation have not only facilitated the smooth implementation of the project, but have also set a new standard for operational success at Newcastle International Airport.

THE RESULTS

"The Advantex solutions team worked closely with Secure Logiq to design a 3 stage (storage servers, processing servers and management servers) upgrade for one of our prestigious clients.

We were really impressed with the outcome of the solution design. Secure Logiq provided us with hardware architecture schematics along with a detailed proposal for their solution. Continued support was also provided during the design process, in addition to the hardware designs, Secure Logiq provided us with an in-depth presentation on their Health Monitoring software. The first phase of this project has been deployed with Logiqal Healthcheck Pro software installed to monitor all recording servers"

Tony Easingwood, Senior Account Manager,
 Advantex Network Solutions Ltd



