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Case Study

Wakefield Grammar School Foundation



Location:

Wakefield, England

Systems:

Exacq:

- exacqVision (NVRs) with Kantech OnBoard
- exacqVision VMS software

Kantech:

 EntraPass Corporate Edition software

Illustra:

- 3 MP Illustra Pro mini-domes
- Illustra Pro LT bullet cameras

Wakefield Grammar School Foundation chooses a complete Tyco Security Products surveillance package that includes Illustra IP cameras and exacqVision network video recorders with exacqVision VMS software and Kantech EntraPass Access Control System pre-installed.

Introduction

Queen Elizabeth Grammar School (QEGS) and Wakefield Girls' High School (WGHS) have been enriching the lives of their students from West and South Yorkshire, England for hundreds of years. The private school foundation has a rich history in England. QEGS has the distinction of being founded by Royal Charter of Queen Elizabeth I in 1591 at the request of leading citizens in Wakefield, some of whom formed the school's first governing body.



Wakefield Grammar School Foundation needed a surveillance package that would be easy to use, produce clear images and be scaleable to protect the historic campus.

In 1854, QEGS moved to its current location in Northgate, Wakefield, onto a large campus formerly occupied by the West Riding Proprietary School. A little more than two decades later in 1878, when a movement for the social and educational emancipation of women gathered pace in England, Wakefield Girls' High School opened with 59 pupils.



Today, the schools are a modern educational hub, segregated on one large campus of about 40 buildings of varying sizes – some dating back to the 16th century. The foundation comprises five schools total as both QEGS and WGHS have a junior school and senior school, in addition to the Mulberry House Nursery for ages 3-4. Together, the schools make up the Wakefield Grammar School Foundation (WGSF). A 19-person governing body and 500-person teaching and support staff aim to ensure that all 2,100 pupils can enjoy an distinguished education now and in the future.

Challenges

Years ago, Wakefield Grammar School Foundation took steps to secure the insides of its buildings with localized access control at its doors. More recently, the governing board at the school was concerned that the perimeter of the campus was unsecured and wanted to put a CCTV system in place to add an extra layer of security – particularly since the campus is located near the centre of town, as well as train and bus routes. The boys' school is mostly fenced in, but has a gate that remains largely open during school hours. The girls' school has a low wall around most of its buildings, but could potentially be scaled by a trespasser.

"The inside of the building was taken care of, but we needed a system that would help us see strangers coming onto the site or others that shouldn't be there," said David Butterfield, estates and contracts manager at WGSF.

In searching for a surveillance package that would suit their needs, Butterfield determined that the system would need to be easy to use and produce clear images that could help identify a person and be used to send information to the appropriate authorities, if necessary. In addition, Butterfield's years of experience in this area helped him determine that a security package that would allow WGSF to expand its capabilities and integrate its systems in the coming years was important as well.

The Solution

With their security needs laid out, Butterfield decided that a complete Tyco Security Products' system provided them with the most costeffective, robust solution. After Tyco Security Products completed a site survey, Butterfield was given a list of types of equipment and approved installers. Reflex Systems of South Yorkshire, England, an integrator with close to three decades of experience across security, life safety and fire installations throughout the United Kingdom, was selected for the project.

Together, WGSF and Reflex Systems determined that exacqVision VMS software, along with exacqVision network video recorders (NVRs) with pre-installed Kantech Onboard access control software, and 15 Illustra high-resolution IP cameras would be the best solution to secure the campus' perimeter.

"They had done quite a bit of research on everything. Once they came to us, we decided that going with the Kantech embedded software was the best decision from a future-proofing point of view," explained Steven Ward, technical director, Reflex Systems.

Camera performance and image quality were some of the most important factors for WGSF. Ten of the 3 MP Illustra Pro mini-domes and five Illustra Pro LT bullet IP cameras allowed the campus to cover all entry and exit points on the grounds, see critical details, as well as perform well in areas with little to no sunlight. In addition to camera performance, a selling point for WGSF was the strong integration between exacqVision VMS software and Illustra cameras as one unified product, optimizing performance, simplifying deployment, and saving time and money.

With exacqVision EasyConnect, WGSF could automatically address and configure the cameras for fast installation. If a network outage were to occur, exacqVision will automatically reconnect to the cameras.

"It's really easy to use and the quality of images is great. Zooming in on faces is so easy to do, and the night time images are just really good," Butterfield said.





The Illustra cameras selected by Reflex Systems and WGSF allow school staff to see clear images even in low light conditions and without bandwidth concerns

One of the concerns that WGSF had before embarking on the project was making sure the school's bandwidth would be able to handle distribution of camera signals without disruption. Reflex Systems helped the organization's IT team design a solution that would work perfectly before installation of the security equipment. In addition, the Illustra cameras' bandwidthfriendly performance aided in making sure everything would go smoothly.

"The installation went absolutely seamlessly. We prewired extra IT points where cameras were going to be and when it came time to connect everything to the network, they were snapped in and up and working right away. It was a great experience," Butterfield said.

Not long after the installation, WGSF directly benefited from the image quality and ease of use of its new system when a few of the teachers at the school noticed an unfamiliar person walking around the campus and reported the incident. "They were able to give me a time and I pulled up the incident so easily, with great quality of images. I was really impressed with that," Butterfield shared. While the incident was just a concern and nothing more, the speed, ease and quality at which Butterfield was able to pinpoint the incident cemented in his mind that they had chosen the right security solution.



The exacqVision recorders with Kantech OnBoard enables the school to have quick access to critical access control commands, and can improve response time to alarms and events.

While the school has not yet integrated its access control system, the exacqVision Kantech Onboard combines the power of exacqVision recorders with an access control system within one recorder. exacqVision recorders with Kantech Onboard will enable WGSF to have quick access to the most needed access control commands. The integration of the two platforms on one system greatly improves response time to critical alarms and events.

"The exacqVision VMS with Kantech On-board and Illustra cameras is an ideal solution for educational environments who need easy access to clear, crisp images and an intuitive interface that staff positions can operate with ease," said Stuart Bettle, Video Product Marketing Manager, EMEA, Tyco Security Products. "The addition of the Kantech EntraPass access control system onto the exacqVision recorders will enable WGSF to manage and configure both video and access control from a single hardware platform for a complete and cost-effective solution."

The Future

With the school's current surveillance needs taken care of, WGSF is looking forward to being able to use even more capabilities of the system in the future as its security needs evolve. For example, Butterfield plans to use the Exacq and EntraPass Go mobile apps so that the campus night guard can view video from his or her mobile phone, as well as integrating alarm features that will alert users to an event.

In addition, while WGSF's access control was a standalone system, one of the benefits that the organization saw in installing exacqVision NVRs with Kantech Onboard is that they can integrate video and access control in the future. With the pre-installed and pre-licensed access control software embedded right on the server, WGSF will be able to manage and configure both video and access control from a single interface for a more cost-effective, complete solution. This saves hardware maintenance and power expenses by eliminating the need for a dedicated access control server.



The Customer – Wakefield Grammar School Foundation

Wakefield Grammar School Foundation is one of the country's leading families of independent day schools. Wakefield Girls' High School and Queen Elizabeth Grammar School, junior and senior schools, offer a single-sex education from 4-18 years in England. Mulberry House Nursery offers a co-educational environment for ages 3-4. In total there are around 2,100 pupils across the five schools and 500 employees covering both teaching and support staff. The schools are all highly individual and are tailored to the needs of their pupils. The foundation has a rich history in the Yorkshire area as Queen Elizabeth Grammar School was founded in 1591 by Royal Charter of Queen Elizabeth I at the request of leading citizens in Wakefield.

The Integrator – Reflex Systems

Reflex Systems was founded 28 years ago as a system integrator installing security, life safety and fire equipment for customers throughout the United Kingdom. The integrator, based in South Yorkshire, England, works across multiple sectors from small applications to more complex, sophisticated systems for intelligent building management security. One recent large-scale integration was for Lincoln Castle in England, which houses one of the only original copies in the world of the Magna Carta. Reflex Systems installed a new integrated fire safety and security solution, while respecting the complex nature and architecturally sensitive environment of the 947-yearold castle.

The Solutions Provider – Tyco Security Products

Tyco Security Products is now part of Johnson Controls, a global diversified technology and multi industrial leader serving a wide range of customers in more than 150 countries. With its world-leading premium access control, video, location-based tracking and intrusion solutions, Tyco Security Products employs over 2,800 employees globally, including research and development, marketing, manufacturing, sales, service and logistics teams in the Americas, Europe, the Middle East, Africa, and Asia Pacific. Our products, built by developers from all product disciplines, consistently allow customers to see more, do more, and save more across multiple industries and segments including healthcare, government, transportation, finance, retail, commercial and residential. Worldwide, Tyco Security Products helps protect 42% of Fortune 500 companies, transportation systems on five continents, 37% of the world's top 100 retailers, over two million commercial enterprises, thousands of students in more than 900 educational facilities, and over five million private residences.

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