

Milestone XProtect helps Brampton Manor Academy protect staff, pupils and expanding facilities

Milestone XProtect® Enterprise IP video management software helps Brampton Manor Academy to manage a combined surveillance estate of 115 IP cameras and 34 legacy analog video cameras

Challenge: To deliver effective surveillance and security throughout this expanding academy to ensure over 1,800 pupils and their teachers feel safe and secure

During the £10 million refurbishment of the 15,000 square meters main school building in 2009, the new headmaster, Dr. Olukoshi, was keen to extend the surveillance coverage at Brampton Manor Academy to help protect the new facilities and instill higher levels of discipline school-wide. Although enclosed by high fencing, surveillance coverage inside the main school building was only partial up to that point. A total of 34 CCTV cameras streamed to digital video recorders which recorded 30 days of video images, primarily focused on doorways and emergency exits. The headmaster, working with the academy's director of finance and administration Graham Glass, took the view that it was important to extend surveillance into all school corridors and throughout the new multi-million pound Music Center and 300-seat theater which could otherwise have become a target for theft or vandalism.

Solution

Milestone XProtect Enterprise 8 IP video management software now provides viewing, recording and analysis of high resolution, high definition (HD)-quality images at up to 25 frames per second from 115 Axis, Sanyo, MOBOTIX and Arecont Vision IP cameras, as well as the existing 34 Panasonic CCTV cameras. Images are transmitted via a dedicated gigabit multi-mode fiber backbone to four control rooms and one central server room. The server room holds three Dell servers (2x Dell Power Edge 1950 Dual Quad Core Xeon 4GB RAM and 2x serial attached SCSI



Dell MD 1000 7.5TB RAID-5 arrays and 1x serial attached SCSI Dell MD100 15TB RAID-5 array) offering full mirrored pair redundancy and a total storage capacity of 30 terabytes. The servers contain Milestone XProtect Enterprise software which records, manages and enables easy viewing of the video images. The combined system provides near total coverage of the site and has virtually eliminated bullying, vandalism, unauthorized entry into the school and theft of school property.

Result: Milestone XProtect Enterprise delivers total security

Milestone XProtect Enterprise provides Brampton Manor Academy's management team with an effective tool for delivering an open and safe environment for more than 1,500 pupils between the ages of 11 and 16 years. Milestone offers a flexible and highly responsive surveillance monitoring capability to some 20 teachers operating in pastoral roles. Relevant cameras are also displayed on quad-view monitors in the school's library and reception office. The building of Brampton Manor Academy Sixth Form Center later in 2012 will also see the integration of XProtect with a Paxton



The Open Platform Company

Access control system so that the three entrances into the Center will only be accessible using an ID card. The Paxton ID card reader will be integrated with cameras covering these entrances to ensure that only the 300 authorized sixth formers and relevant staff can enter the building.

"Milestone [XProtect Enterprise] has proved a very accessible and intuitive system for viewing a wide array of cameras here at Brampton Academy. The interface is easy to manage and recorded images can be quickly found when rare incidents do occur. Milestone partner Security Systems Technology (SST) keeps us up to speed with technical enhancements which Milestone is continually bringing to XProtect to keep our initial security investment future-proof," says Graham Glass, Director of Finance and Administration at Brampton Manor Academy.

Brampton Manor Academy

Brampton Manor Academy in East London is funded directly by central government and benefitted from £10 million funding for major refurbishment of parts of the original 1950s-built school, under the nationwide Building Schools for the Future (BSF) scheme.

Brampton Manor Academy serves 1,500 11-16 year-old pupils from a wide ethnic background reflective of its location. It has the status of a Specialist Arts College and offers a 300-seat theater and state-of-the-art music center combined with high-quality teaching and facilities for music, filmmaking, drama and performing arts. The academy will expand by a further 300 pupils on completion of a new £1.7 million 1,700 square meter Sixth Form Center, due to be opened in September 2012.

Milestone XProtect makes it simple to view and manage a wide range of IP and video cameras

Milestone partner SST was awarded the six-figure contract after a competitive tender process in early 2009. SST conducted extensive audit of requirements and selected different IP camera makes and models based on a combination of technical and site-specific factors such as the amount of backlight available to the camera, deterrent value, field of view needed, cost and likelihood of being tampered with.



SST selected cameras for their ability to deliver to specification for each location – whether monitoring one of Brampton Manor Academy's long corridors, doorways, gym, library, sports hall, parents interview room, the state-of-the-art music center, 300-seat theater and car park. Particular attention was paid to aesthetics. SST not only sited cameras sensitively but also ensured that all trunking work, designed to protect and hide wiring to internal cameras, blended into the surrounding walls up into the cabling trays in the ceiling voids.

Cameras are used to protect staff, pupils, their possessions, as well as the £17 million main school building and equipment within it. For example, cameras are placed sensitively to deter graffiti. A regular cleaning and checking regime is also used to report any fresh graffiti in the toilet cubicles or on walls. If graffiti is spotted, it is reported and a staff member can access the Milestone system to pinpoint the images and identify pupils relevant to the



period during which the graffiti must have happened since the previous timed check of the facilities.

Graham Glass explains: "Through analysis using Milestone XProtect we can see who has entered the toilets during a specific time and then use the evidence to take disciplinary action where appropriate. Needless to say graffiti is rarely a problem these days."

SST has been able to set up the cameras for easy viewing. Cameras are identified by their location and set up by simply dragging and dropping them into viewing groups on-screen. For Brampton Manor Academy these groups include 'corridors', 'media center and theater', 'external', 'sports hall' and 'doorways'.



SST has learnt that Milestone has further extended the user functionality of XProtect Enterprise so that it will be possible shortly for the academy's teachers to drill down to live or recorded video views from specific cameras directly from an overhead map of the building on-screen. Milestone has enabled importing and integration of bitmaps of buildings with system component placements depicting the networked devices that are viewable. This mapping provides users with even easier access to images they need to protect assets and ensure the safety of pupils in their care.

The system is used by some 20 teachers who have responsibility for pastoral care including specific year supervisors, head

teacher and director of finance and administration Graham Glass who is also the facilities manager.

SST fitted two rooms with audio recording capability which were integrated and synchronized with the IP cameras so both audio and video can be used as evidence in case of abusive language being used. The first room is a parent interview room where a pupil's behavior can be discussed with parents. The second is a 'time out' room where pupils are sent to be alone for a period of time following an incident of poor behavior.

SST also extended surveillance to the school gate by mounting an AXIS 233D pan-tilt-zoom (PTZ) camera on a 10-meter pole at the edge of the school's property, connecting it via 10/100 wireless Ethernet link and two Netgear WG602v4 wireless routers in wireless point-to-point bridge mode, supported by two omni-directional, high-gain antennas for transmission of high resolution video transmitting back to the network at a consistent 54 Mbps.



Milestone offers route to integrated access control

The benefits of the Milestone open platform architecture are clear to Graham Glass who oversaw the installation and subsequent upgrading and expansion of the new surveillance system by SST over the last two years:

"Coverage is now excellent. If there is an incident of any kind we can find it quickly in Milestone XProtect and use the video, and in some cases audio, evidence to tackle any wrong-doing, which is now very rare."

Brampton Manor Academy now has a surveillance system which serves all their security needs today but is also capable of integrating with other key building management systems including access control in the new Sixth Form Center which will be completed in late 2012.

The XProtect system, once integrated with Paxton, will help academy staff to hand over access control management to the six formers themselves.

"We want to trust them to use their swipe cards to enter restricted areas themselves rather than having to physically be there to unlock computer rooms and other areas where valuable equipment is located. There is clear mutual benefit in using security technology to help pupils take more responsibility for things," Graham Glass added.

Graham Glass summarizes: "We have fewer problems today partly because we are a better school in which pupils are more motivated to succeed...one of the reasons we are a better school is because of the Milestone-based surveillance system."

www.milestonesys.com



The Open Platform Company