



George Watson's College

Revolutionising safety in education with a cutting-edge camera solution



20 buildings
on campus

52 acres
of land

3,000
daily passerby

Industry

 Education

Location

 United Kingdom

Products

 Meraki Smart Camera

Highlights

- Meraki MVs are simple to install, use and update
- The dashboard allows for easy monitoring of the college grounds
- The IT team, Facilities Management and Health & Safety Officer all benefit from the deployment

George Watson's College is a co-educational independent day school in Edinburgh, Scotland. It was first established as a hospital school in 1741 and has developed into a prestigious educational institution that is well recognised in Edinburgh and across the country.

Roughly 2,500 pupils from Preschool to Senior 6 are enrolled. The College includes a Preschool, Junior and Senior School and employs around 450 staff including teachers and support staff to provide educational excellence.

Not only is George Watson's College of considerable size in terms of pupils taught and staff employed. The College is made up of around 20 separate buildings on 52 acres (38 football fields) of land. Due to its sheer size, the IT infrastructure of George Watson's College is comparable to a small university rather than a traditional school network.

Chris McMorris, Senior Technical Lead, is supervising and implementing this comprehensive IT network. He is supported by an IT team of 10, including two AV specialists tasked with installing camera gear.

Even though George Watson's College is over 270 years old, it has always been a pioneer when it comes to technology and embraces the full Cisco stack. The new Cisco infrastructure was deployed over a six-year-long period and builds the foundation on which the Meraki smart cameras operate today.

Initial challenge and criteria: 50 CCTVs, 5 servers

Over 20 years ago, Watson's invested in a suite of 50 industrial coaxial cameras for exterior and interior use on campus. In order to digitalise their CCTV system, the team had to add decoders over time and linked the cameras to five large storage servers. To keep the system running, the software had to be renewed and updated nearly 20 times. The complex and

ageing CCTV system was increasingly failing and components were out of support.

In summary, the camera solution was outdated and could not withstand the increasing security demands for a college that sees nearly 3,000 people pass its doors daily.

The team flagged the issues to the Head of IT Services and discussions started on the best way to either bring the current system up-to-date or replace the legacy system completely.

Why Meraki?

Chris evaluated several providers and decided that smart cameras by Cisco Meraki were the way forward for George Watson's College, "We got five Meraki cameras and everyone immediately loved them."

Meraki MVs were the best solution for the College due to a number of reasons. Meraki offers several camera models for interior and exterior use and Chris successfully trialled the cameras on campus.

Additionally, Chris and his team are convinced by the advantages of cloud-managed CCTV cameras. Meraki MVs are simple to install, use and update. The dashboard allows for easy monitoring thanks to the video wall, footfall analytics and motion heat maps. Due to the fact that video storage is directly on the camera, mission-critical network activities in college get the bandwidth they need.

At the same time, investment and operational costs are low in comparison to traditional CCTV solutions that require costly storage servers and complex maintenance.

Deployment and solution

The two AV experts within the IT team were tasked to install the first batch of nine MV cameras. It took them less than two days and thanks to the “plug and play” deployment, the cameras were immediately visible and ready for use in the dashboard once they were connected to the network.

George Watson's College staff are now able to monitor buildings, gates and fences. Chris explains the use cases as follows, “Maybe someone bumps into someone in the car park, or someone starts a fight in the playground”, the MV allows staff to quickly identify the correct footage to review the incident.

The Facilities team, in particular, enjoy the ease-of-use of the new Meraki solution after some initial reservations. With the legacy cameras, staff needed a desktop computer to monitor the campus. Janitors can now use their smartphone with the Meraki app to monitor the college grounds while on foot, or they can log into a desktop computer in the vicinity.

Additionally, the IT team can now use the dashboard to see footfall analytics to identify potential bottlenecks, which is a highly relevant insight for the Health & Safety officer. For instance, a specific corridor in senior school that serves as an overflow area when the bell rings and frequently gets overcrowded was identified.

If there would be a break-in, a theft report or a fight and someone was charged with an assault, the police would ask for CCTV footage to be exported. With Meraki, the data export would be much easier than with the complex legacy

system. Thanks to the search feature and motion detection, exploring the footage would make it possible for facility staff to assist a police officer in delving into the timeframe. This significantly reduces the overhead on the IT team.

Results

The MV smart cameras provide several benefits to the college. The biggest improvement in comparison to the previous CCTV solution is that footage is now stored locally on the cameras rather than a central storage system that needs an additional power source. The team can easily identify footage during a specific time frame via the Meraki dashboard. The recently released option for cloud archiving is also a big win for Chris and his team as it allows for a “happy medium” between local storage and the cloud. Chris says, “I think it is a dream combination.”

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The clever software is streaks ahead of anything I've seen.

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CHRIS MORRIS

Senior Technical Lead

Another advantage is the ease of installation in general. If new cameras are needed in the college, they can be mounted quickly by the two AV experts, “It's not specialised to install and you can use a drill. It's all about the quality and ease.”

The team also appreciates the continuing broadening and improvements Meraki offers for

its MV portfolio, especially the quality and range of the second or third generation of cameras. They have the option to choose between a large variety of smart camera models for different applications. For example, the MV range includes indoor, outdoor and fisheye cameras with various PoE (Power over Ethernet) options.

Last but not least, one crucial benefit of the MV deployment at George Watson's College is the Meraki dashboard, which simplifies powerful technology, "The clever software is streaks ahead of anything I've seen."

Lessons learned

If Chris were asked to advise another IT Manager about lessons learned, he would say, "The wires need to be good. Infrastructure, infrastructure, infrastructure is the foundation and the key to anything." With a strong Cisco infrastructure backbone and a Cisco Meraki MV deployment, which continues to grow, George Watson's College will continue its role as a pioneer when it comes to educational technology.

Contact us at sales@meraki.com for more details.

Additional resources

[Meraki Smart Cameras](#)

[Meraki for Schools](#)

[Ebook: End-to-End Security in Education](#)