



Two becomes one – Sir John Gleed School unifies network infrastructure with D-Link



"We had seen significant improved network performance when we implemented D-Link's switching products in the Girls' School. So when it came to deciding on the technology provider for the new network going with D-Link was a no-brainer"

— Martin Leggott, Network Manager at Sir John Gleed School

About Sir John Gleed School

Sir John Gleed School opened as Sir John Gleed Girls' Secondary Modern School in April 1941. In September 2012, it joined with the Gleed Boys' School to become a co-educational secondary school.

The school has seen immense changes since its opening, the most recent of these being a suite of purpose built technology rooms; a sports hall; air conditioned ICT suites and two state-of-theart food technology rooms.

The challenge – two schools, two different networks

Despite functioning as a single school since February 2012, Sir John Gleed School was still operating two separate networks, one for the Girls' School and one for the Boy's School. The Girls' School had a D-Link 10 Gigabit network which had been implemented in 2006. This gave it a 10Gb fibre optic backbone and 1Gb to each machine. However, the Boys' School only had an HP network with a 1 Gigabit backbone resulting in staff and pupils on that site receiving an inferior network experience. Furthermore, operating two separate networks based on different technologies was becoming a timeconsuming exercise for the Girls' School's IT team who had taken overall responsibility for managing the new school's ICT.

At the same time, users were accessing and sending increasing amounts of multimedia content, so it was imperative that they were provided with a consistent experience no matter where they were located on the school campus. In addition, as a result of merging the two schools, a lot more ICT suites (with 30 machines in each) had been created, all of which needed supporting with a robust and scalable network infrastructure.

With this in mind the school made the decision that it was going to have a single unified network, which would support its teaching and learning ambitions, whilst also being a lot easier for its IT department to manage. Considering these requirements and the positive experience the Girls' School had with its D-Link implementation, Sir John Gleed quickly decided that it should have a D-Link network backbone across its entire campus.

Once the decision was made to go with D-Link, the next challenge for the school was ensuring that the new network for the Boys' School was working from day one, particularly as it needed to be installed over the summer holidays. This meant the school only had a 5-week implementation window and any downtime would have had a detrimental impact on its staff's teaching and pupil's learning.

Our new network needed to be both robust and scalable, said Martin Leggott, Network Manager at Sir John Gleed School. We needed to provide staff and pupils with the capability to stream growing amounts of multimedia content, but at the same time we were also looking for it to support other mission-critical applications such as VoIP telephony. Based on the short timescales for the project we needed to work with a technology partner we could trust."

The solution – D-Link right down to the core

Working with D-Link and its reseller partner CCS Media, Sir John Gleed opted to deploy D-Link's latest DGS-6600 chassis switches and DGS-3420 xStack managed switches. This would provide the Boys' school with a 10GB backbone and 1GB links to each machine just like at the Girls' School.

The DGS-6600 is ideally suited to schools as it provides them with a number of highend features that specifically address their network growth challenges. It offers significant performance from a rack-based, scalable infrastructure, delivering the levels of availability and security normally associated with highend switches designed for large enterprises. The DGS-6600 and DGS-3420 have an intuitive user interface, featuring simple easy-to-use





"Throughout the implementation process I was impressed by the consultancy and handson approach provided by both D-Link and CCS Media. They really took the time to understand our requirements and deliver a solution that would support us both now and in the future. The speed and level of technical support also stood out. For instance, when we had a data transfer issue, one of D-Link's engineers were able to remotely dial in and resolve the problem very quickly. For a time-pressured school IT department such levels of support are essential"

configuration and management, thereby reducing the time and costs to the school to administer the network. Both the DGS-6600 and DGS-3420 are IPv6 compliant, meaning that Sir John Gleed is provided with the performance, high-availability and future-proof architecture it required.

The new network also seamlessly integrated and supported Sir John Gleed's existing wireless solution (also delivered by D-Link). The performance of the wireless network was very important as it was a key element of the school being able to offer 'inclusive' leaning to all of its pupils. For example, all pupils with disabilities are provided with laptops to assist their learning so having fast and reliable wireless provision in every classroom was imperative.

The benefits – A future-proof and reliable network for 21st Century learning

The new network was delivered to schedule providing Sir John Gleed with the bandwidth and throughput it needed throughout the whole school campus. This means that staff and pupils are now able receive the same user experience when downloading or streaming multimedia content no matter which building they are located in. In addition, the new network backbone is now supporting the school's newly installed VoIP telephony system, yet users have not experienced any degradation in performance despite the increased load now being put on the network.

Furthermore, the school's new network infrastructure is much more fail safe than ever before. Particularly in what was the Boys' school, network outages were common as a result of some pupils reconnecting disconnected patch leads wrongly causing a loopback. In addition to the obvious inconvenience to anyone using the network, it also took IT staff considerable time to troubleshoot the problem which was a drain on resources. However, the loop back detection capabilities of the D-Link switches means that problems can be identified and resolved in just a matter of minutes, saving the school's IT department a lot of time and pain.

"With our telephone system now sitting on the network we have now completely moved from the analogue to the digital age. We are now looking at how our new network can support increased staff and pupils' mobility, as they look to bring tablets and other mobile devices into the classroom. D-Link has provided us with the building blocks to deliver a truly 21st Century learning experience to our pupils," concluded Martin Leggott.

> **D-Link** Building Networks for People

— Martin Leggott, Network Manager at Sir John Gleed School