

SOFTCAT TOP OF THE CLASS AT MYTON SCHOOL AFTER DEPLOYING SUCCESSFUL NETWORK PROJECT

Professional services Networking & security 

Located in Warwick, Myton School is a secondary school and Specialist Science College with 1,700 students. The first school in this part of the country to convert to Academy status, Myton School is an ambitious forward thinking school that actively partners with local Universities. Through its role as a training school and relentless focus on excellence in teaching, it is in the top ten percent of comprehensive schools nationally for getting students into work, training and university.

The Challenge

In order to realise the aspirations of the teaching staff and governors for modernising the learning environment, Myton School needed a revamp of its existing IT infrastructure. In particular, the desire to share video and rich content across the network, deploy IP Telephony, and enable staff and students to use mobile devices would all be inhibited by the current environment. Refreshing the entire estate was cost prohibitive, but with a new building about to be brought into service some new network capacity would be required so it made sense to look at the wider network in tandem as this would be the critical enabler for the school's plans.

With important decisions ahead, Myton School needed an IT partner with experience working in education and able to offer unbiased advice. "I'd worked with Softcat in a previous role and they'd always delivered for me. They were my first port of call for help," explains Tom Brocklehurst, IT Manager.

Steve Burnley, Network Business Manager at Softcat, takes up the story, "When Myton engaged us, the first thing we did was take a thorough look at the estate, in particular, performance of the systems the school needed whilst getting a handle on the school's vision for the future. Latency experienced across the school site and ageing technology all suggested that some massive improvements could be achieved through upgrading the network and the server infrastructure. The network in particular would provide the solid foundations necessary to enable the subsequent projects the school wanted to roll out and mindful of budget this was where we started."

Specifically, the school was using legacy networking technology that would shortly go out of support. Similarly, dated network cabling meant that the latest speeds, in particular 10Gig Ethernet, could not be supported using the existing fibre. Finally, the cabinets used to house the network switches around the school were not large enough to accommodate current technology and had resulted in overheating and noise disruption due to location in teachers' offices and even school hallways. Whilst reliability of the network had not been a major problem, performance was proving to be an issue, especially at the start of lessons when the network would be flooded with users trying to access the network resulting in substantial bottlenecks. "We identified that some of the classrooms furthest away from the core were suffering the worst performance - specifically one switch was taking about 70% of the network traffic creating a big single point of failure and a necessity to spread the traffic more evenly," explains Steve Burnley.

The Solution

Following a review of technologies and network designs, Softcat recommended that Myton replace the entire network infrastructure with new HP equipment. Steve Burnley continues, "There were a couple of reasons we felt HP would be best. Firstly, on price and performance, the technology delivers great value.

Secondly, all HP equipment comes with a lifetime warranty, which for a school is very attractive. Finally, HP technology is built on open standards so it effortlessly integrates with other technologies which would be important for future plans. On top of this, we proposed that we redesign the network so every edge switch connect directly into the network core on 10gig fibre. This would overcome most of the performance issues seen in the past caused by 'daisy chaining' switches together. This also makes for an extremely simple configuration for future maintenance and admin." Likewise, future switches would be housed in new cabinets with built in cooling and sound dampening features.

The whole project needed to be as non-disruptive as possible, although perhaps the biggest hurdle was the timescale. The project had to be delivered during what was to be a busy summer holiday period, giving Softcat only three weeks between term ending and the first set of exam results, by which time the new network would need to be up and running available to students and staff.

This posed a significant challenge. The cabling element of the solution was projected to take two weeks as was the switch deployment. Softcat needed to lose a week's deployment time in order to hit the deadline so came up with a creative solution. Tom Brocklehurst elaborates, "It was pretty impressive. Softcat proposed to run each element of the project concurrently. So whilst the new cabling and racks were being installed, they built and commissioned the switches in a proof of concept environment, transitioning switches to racks and wiring them into the network as they went. This wasn't standard practice but I trusted Softcat and in the end it was an ingenious approach as it was installed with time to spare!"

The Benefits

Tom Brocklehurst explains, "We now have a firm foundation for our whole environment – the network is an enabler for all of the things we have to come. We know we're not going to saturate 10gig fibre on day one but in preparing for the future we believe the new fabric will last us another 10 years."

The new network is capable of much larger throughput which eases some of the performance bottlenecks experienced previously, especially at locations furthest from the core. Likewise, management time is a fraction of what it was. Practical improvements like simplified IP addressing mean a device can be easily located within the school whereas before an IP address could have been anywhere on the network making for complex troubleshooting.

Similarly, the new network means that Myton now has Power over Ethernet (PoE) capability, something essential to delivering wifi access. Combined with the topology of the new network considerably better Wi-Fi coverage will now be possible across the campus.

Why Softcat?

"It was the meticulous planning from Softcat that made this project possible underpinned by genuine experience of working with schools like ours. Equally they never forgot our desire to get the best possible value from the budget we had whilst making sure we did not compromise on the quality of the final solution," says Tom Brocklehurst.

Ten out of ten

Concluding, Tom Brocklehurst comments, "Softcat's customer service in particular is outstanding. Even when I had a change of Account Manager early on in the planning process this took place seamlessly. They've been outstanding – professional, friendly just first class in every department. Ten out of ten all round."

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Tom Brocklehurst, IT Manager
MYTON SCHOOL

Key Facts

- Warwick based Secondary School
- Specialist Science College
- 1700 students
- One of the first local Academies

Critical Success Factors

- Provide a solid foundation for the school's IT infrastructure
- Enable future IT plans
- Be delivered in short 3 weeks

Solutions Highlights

- Meticulous planning and innovative approach to delivery
- HP industry standard networking technology
- 10gig fibre from core to edge
- Cooled and sound proofed cabinets sympathetic to school environment

At a Glance

- Network foundation to last next 10 years
- Dramatically improved performance – no more bottlenecks
- Simplified network administration
- Power over Ethernet to enable enhanced Wi-Fi coverage