

Merton College Oxford switches up to a network of the future

Qolcom preserves reputation for excellence with Aruba CX technology



Steeped in history, Merton College is one of Britain's most iconic centres of learning. As a founding college in the University of Oxford, Merton has delivered high calibre education for over 750 years and counts Emperors, Prime Ministers, and Nobel Prize winners among its alumni.

This is a place of remarkable contrasts, where the world's oldest student library and newest technology coexist, where centuries of tradition are combined with cutting-edge expertise to develop the leaders and innovators of the future.

A network for the next century

Today's world is unrecognisable from the one that existed when Merton College opened its doors, more than seven centuries ago. The dawn of the Internet age disrupted education forever. As a venerable institution that has always led from the front, Merton College acted fast to build a network that would meet the needs of online learners. Manual and complex though it was, this network served its purpose, until 2020 triggered a seismic change in education.

Steve Bowdery, the new Head of IT, had already recognised a need for change. Never a place to rest on its laurels, the College had to evolve again to meet the demands of top-tier students and remain a global standard-bearer for third-level education.



With its medieval architecture and ancient library, a visit to the College transports you to another era in time. Look within the historic facades, however, and you'll discover an ultra-modern IT infrastructure that is transforming the student experience.

“Learning is no longer something you need to be in a lecture hall or library to do. The College is part of a global community that operates 24/7. Staff and students are involved in international collaborations that they need to be able to dive into at short notice, from whatever device is at hand. We needed to upgrade our network so it can connect these people seamlessly and securely whilst handling huge volumes of data without any time delay.”

Steve Bowdery, Head of IT at Merton College

Enter Qolcom

With a pedigree in education and being a longstanding preferred supplier to the University, Qolcom was a natural fit to partner the College and modernise their network to a world-class standard. Being a Platinum Partner of Aruba, a Hewlett-Packard Enterprise company, meant Qolcom could give the College access to market-leading technology and work shoulder to shoulder with them on the design, pre-staging, configuration, and operation.



After consulting with the College IT team and understanding their vision, Aruba's OS-CX switching platform was chosen as the foundation for a future-proof network.

“The College's original infrastructure was struggling to meet the demands of modern education; some components were close to retirement and limiting the speed, capacity and throughput of the LAN. The network needed a refresh so the College could have the bandwidth and confidence to apply new thinking, integrate emerging applications and excel at the highest level.”

Neil Wheeler, Account Director at Qolcom

Laying a new foundation

Remote learning and video conferencing are here to stay, IoT devices are going mainstream and students

need resources on tap. The smooth flow of data in large volumes is critical to the modern university and legacy networks are struggling to keep up.

With one eye on the future, Merton College had anticipated the challenges ahead. They could have thought short-range or mid-term and patched up their Wired LAN after a decade of service. But this institution thrives by matching the ambitions of its students. Rather than plug some gaps, here was a chance to think bigger and prepare for advances that will shape the next generation of learning.

“The network is the foundation for everything. This project was about more than updating hardware – by giving our infrastructure a new lease of life we've moved the College forward and into the future. The Aruba switches are the building blocks that hold the whole system together.”

Steve Bowdery, Head of IT

Why Aruba OS-CX

Built on cloud-native principles, Aruba OS-CX switches give IT teams the flexibility to deploy a single switch operating system from edge to core. Automation, high availability and secure segmentation are designed into the switches to support intuitive management tools, distributed analytics, and enterprise-grade security.

Today's students rely on high-performance video, voice, and cloud applications to better learn, collaborate, and socialise. They need 24/7 network availability, even during software upgrades. By unifying management of all network infrastructure into a single control panel Aruba OS-CX switches reduce network complexity, simplify troubleshooting and speed up response times.



Implementing a LAN for the future

Qolcom supported the College from the outset of the project, working closely with the IT team to design the new LAN and select the best hardware from the Aruba portfolio. Timeframes were tight and a lot of the configuration had to happen out of hours to ensure a seamless migration for the College and its users.

Part of the challenge was to integrate the new LAN with the University of Oxford backbone and its FroDo system and expand the LAN to connect multiple sites.



Merton College's tight-knit community is part of its appeal, and it endeavours to house most of its student population. The college provides 444 rooms for undergraduates and graduates, with 100 graduates based in Holywell Buildings, a modern facility in central Oxford. All these students rely on the LAN to work on group projects, collaborate internationally and study when at home.

"Qolcom's engineers were really accommodating. There was no issue working off hours and at weekends to install the core switches. We were offline for seconds at the most during the whole Aruba upgrade so there was zero service disruption; they kept everything flowing without drawing attention. The big result for us is that we completed a network refresh in what seemed to users like the flick of a switch."

Steve Bowdery, Head of IT

Setting up for success

In tandem with the Aruba OS-CX platform activation, Qolcom's engineers trained the College IT team. The upgraded LAN is a bespoke system, designed specifically to cater for the College's demands and training had to be tailored to reflect this. After a short and intensive program, Steve and his team had gained the knowledge to manage and configure the new switches with confidence. Once familiar with their upgraded LAN they quickly started to think about new ways to harness its superior power and explore new possibilities to enhance the student experience.

Turning the page

The place where Tolkien completed the Lord of the Rings trilogy is ready to write the next chapter in its history. Merton College now has an IT infrastructure that's in a league of its own. Adaptive, high speed, secure and resilient, their new LAN gives them the flexibility to move more functions from on-premise to the cloud, scale and flex to facilitate expansion and deliver insights in a visual way that facilitates instant action.

Backed by industry leading services from Aruba and Qolcom, Merton College have the foundation they wanted to deliver next generation services and experiences to their staff, students and worldwide community.



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To discuss how Qolcom's Managed Network Services can benefit your organisation, your users and your IT team, contact Qolcom on **01635 298021** or at sales@qolcom.co.uk