Burnley College Builds First-Rate Student Experience on First-Class Network

Challenges

- Legacy infrastructure needed to be updated to support uptime and capacity demands while eliminating wireless trouble spots.
- Agile network that could provide secure, resilient connectivity to support new in-classroom technology and lab environments.
- Improved troubleshooting capabilities and a need for deeper insight and analytics into network performance.

Extreme Solutions

- Extreme Wireless Access
- Extreme Wired Access
- ExtremeCloud™ IQ

> "ExtremeCloud IQ gives us that extra troubleshooting capability and extra information about the network that we just didn't have before."

Nick Williams, Infrastructure Lead, Network Services, Burnley College

> "NetProtocol's wireless layout plans helped us eliminate wireless black spots and ExtremeCloud IQ makes it easier to manage the maintenance of the APs in terms of uptime, load and updates."

Nick Williams, Burnley College

> "In the last couple of years we've had record uptime for our switches and wireless. We're at 99.8% at the moment, which for a college of our size is extremely good."

James Stott, Burnley College

Burnley College is a nationally-recognised further education institution in Burnley, Lancashire serving approximately 9,000 students with a staff of more than 600. The college has been consistently ranked as one of the top in the UK for more than a decade due to the strength of its apprenticeship programs and the dedication and commitment of staff to creating first-class learning experiences. In 2022, Burnley College was named the No. 1 College in the country based on achievement rate tables for learners aged 16 to 18.

As the college expanded and embraced new learning initiatives, they faced challenges with network infrastructure, wireless dead zones and campus expansions. Additionally, Burnley College works closely with the local business community to ensure course work involves the technologies that are most relevant for today's careers – which places added strain on the network. On top of supporting critical classroom initiatives, Burnley's IT team also provides support for the college's highly competitive esports program as well as campus life for a large student population.

In partnership with NetProtocol, an Extreme Diamond Partner with expertise in the education sector, and Extreme Networks, Burnley College began a journey to transform its wired and wireless network infrastructure into a dynamic, strategic asset that served as the enabler for key campus initiatives and expansion. Following an edge switch refresh, a new wireless deployment, and the adoption of ExtremeCloud IQ for simplified management of the network, Burnley now has a network infrastructure to match the college's ambitions. With another campus expansion on the horizon, Burnley continues to partner with both Extreme and NetProtocol to embrace the latest technologies to support the college's growth.

Results

Enhanced Network Performance

- Achieved an impressive 99.8% network uptime, highlighting the success of the network infrastructure upgrade and Burnley's improved operational efficiency.
- Significant reduction in trouble tickets driven by an improvement in network stability and reliability.
- ExtremeCloud IQ made it easier to troubleshoot network issues by providing granular insights into network performance, client history, signal strength, and AP workload.
- Extensive site survey work and wireless deployment by NetProtocol's experienced team eliminated dead zones and enhanced the campus wireless experience.

Powering State-of-the-Art Facilities

- Enhanced network supports cutting-edge amenities including esports arenas, new laboratory environments, and an advanced engineering center.
- Modern campus amenities help Burnley tailor the classroom experience through collaboration with local businesses, resulting in better academic outcomes and job placements.
- Extreme's VLAN capabilities make it easy to increase network security by isolating sensitive equipment onto a separate network.

Future Expansion Strategies

- Strong network foundation will help Burnley College's IT team support an upcoming expansion of its campus.
- Continued integration of technological advancements in robotics and automation, leveraging Extreme's capabilities to ensure secure segregation for specialised areas, paving the way for a dynamic and secure learning environment.