

Telent to revolutionise wireless communications for University of Bristol

More than 30,000 students and staff at the University of Bristol will soon have access to a new and improved Wi-Fi experience thanks to a major new wireless network project that will be delivered by Telent. It will be one of the largest education networks outside of North America, with the capacity to support over 300,000 devices.

Laying the foundations for the wireless network, Telent have upgrade the university's core network and infrastructure that connects buildings across multiple campus locations to a carrier-class 100G capacity. Telent has completed the design and is now testing the new Wi-Fi solution as part of the Modern Network Programme that will be deployed across 229 separate campus locations using over 12,000 wireless access points. The solution will provide ubiquitous and secure connectivity for staff and students across the campus, all while enabling greater collaboration, creative teaching and inclusive learning.

The new campus network will also enable students to take part in comprehensive learning activities due to stable connectivity and improved data security. As part of this project, Telent is designing and implementing a management platform to help the university effectively deliver the new IT services that the network will enable. The design of the network began in 2023 and will be a multi-year programme of work to deploy across campus.

The Modern Network Programme is a wireless-first approach that involves the strategic deployment of Wi-Fi access points across the university's campus.

Client



The University of Bristol is a Russell Group research university that received its royal charter in 1909 and was founded in 1876 as University College, Bristol. With 30,000 students and 8,000 members of staff, the university is ranked 9th in the UK.

Needs

The previous IT network lacked the performance to support the digital transformation of teaching, research and learning at the University.

Solution

A new Wi-Fi network deployed across 229 separate campus locations using over 12,000 wireless access points.



The design of this major network project incorporating many innovative new features, was completed and replicated at Telent's networking engineering centre of excellence based at the organisation's Camberley facility. This allowed the team to fully test the wireless network in a simulated environment before being deployed at the university.

The project is built on Mist AI technology from Juniper Networks, which uses a combination of Artificial Intelligence, Machine Learning, and data science techniques to optimise user experiences and simplify operations across the network. The expertise of Telent's engineering team responsible for the network design and the company's leadership with large and complex network projects has been recognised by technology partner Juniper Networks. The company awarded Telent 2023 Enterprise Network Transformation Partner and 2023 EMEA Partner of the Year.

Benefits:

The new Wi-Fi network will:

- Enable an academic to live stream lectures on campus with fluid, stable connectivity.
- Mean that a student can link multiple devices securely to support their study, social and entertainment platforms.
- Allow a researcher scalable connection to conduct experiments and store data.
- Empower a member of Professional Services to seamlessly join meetings and carry out tasks on the move.

"With an array of devices and technologies now available and necessary to enrich the learning experience of students in the higher education sector, high-performance and world-class connectivity and IT services are essential. The new network will be fundamental to power the university's mission to continue to attract world-class students and research projects and help drive the University of Bristol up the UK and world university rankings."

- Jo Gretton, CEO at Telent

