



Telent provides rapid support for online teaching at Russell Group University

One of the country's leading universities and a member of the prestigious Russell Group is carving a pioneering role in the area of digital transformation. With its number of students expected to grow by 21% in the next five years, the university recently embarked on a journey to transform its IT provision and move to Digital Services.

Within the £11 million technology project, Telent will be responsible for designing and building the university's IT and telecommunications infrastructure. This will include the integration and management of equipment from five different technology partners, while adhering to the university's strict budgetary requirements.

During the design phase of the project in spring 2020, the Coronavirus pandemic occurred. The Telent team delivering the project proactively approached the university to discuss the possibility of implementing a new Virtual Private Network (VPN) solution that would support remote access and online teaching at scale. Immediately the government announced all schools, colleges and universities should close until further notice, the Telent project team working with the university IT team, deployed the new solution so that staff and students could work and study safely at home.

From a formal request being sent to Telent, it took just 11 days to have this solution tested and working which is a great achievement.

Client

A major Russell Group University

Challenge

The Coronavirus pandemic required the university campuses to close. The university's existing remote access solution could only support a small number of users and not the potential demand of around 5,000 staff and 23,000 students that would require remote access to the university's IT systems.

Solution

A new remote access solution, based on a pair of HPE Aruba Mobility Controllers operating in high availability, to provide IPsec/SSL VPN termination. The new controllers integrate into the university's existing IT infrastructure to support role-based authentication and authorisation of remote users.

In recognition of the work by Telent's team, the following message was received from the Registrar and Secretary at the university:

"A quick note to thank you and your teams for the extraordinary work over the past couple of weeks supporting staff to work effectively and students to learn and study off-site. I think what has been achieved has been truly inspirational and the whole institution owes you all a huge debt of gratitude for your hard work, dedication and professionalism. No doubt the weeks ahead will bring further challenges, but I have every confidence that we shall meet them with colleagues at Telent and the university performing so brilliantly. In the space of two weeks you transformed the university and the reputation of our IT and Digital teams for much the better."

Solution overview

The university's original remote access solution could not support the potential demand of around 5,000 staff and 23,000 students. The new remote access solution from Telent deployed a pair of HPE Aruba Mobility Controllers, to provide a high availability solution with capacity for 30Gbps of encrypted traffic and 32,000 remote users.

Staff and students gain access to campus services via their own PC, tablet or smart phone by simply downloading the Aruba Virtual Intranet Access (VIA) application, which is supported on multiple operating systems (Windows, MacOS, Linux, iOS and Android). This self-service approach avoided significant workload for the university IT team and provided a simple, secure, flexible and highly scalable solution. As various travel restrictions are certain to continue the remote access solution will be vital for overseas students, allowing them to continue with their studies.

The Mobility Controllers integrate into the university's existing backend Network Access Control (NAC) system, including Aruba ClearPass and Microsoft Active Directory, to support role-based authentication and authorisation of connecting remote users. This provides either direct campus network access – allowing staff and students access to services usually restricted to the university's public IP addresses – or split tunnelling, allowing client connectivity to bypass the VPN.

Benefits

Deployed in less than two weeks, the new solution provided remote access capability for up to 32,000 users. Allowing every staff member and student to remotely access IT services, using their own PC, tablet or smart phone, enabled through the simple self-service download of an app for their device. This facilitated lectures as normal while the university campuses are closed as a result of the Coronavirus pandemic.