LOGICALIS
Architects of Change

UNIVERSITY OF STIRLING

Enabling University of Stirling to operate in a rapidly evolving technology landscape

At a glance

Customer: University of Stirling

Challenge: Over the years, the University network has evolved gradually and benefited from discrete investment tranches but was in need of some technical upgrades.

Solution: Building out a software-defined overlay across a coherent new infrastructure will deliver benefits including, segmentation for security, the ability to re-programme the network in an agile manner and automation to simplify operating this already complex environment. This will underpin a Zero Trust Architecture.

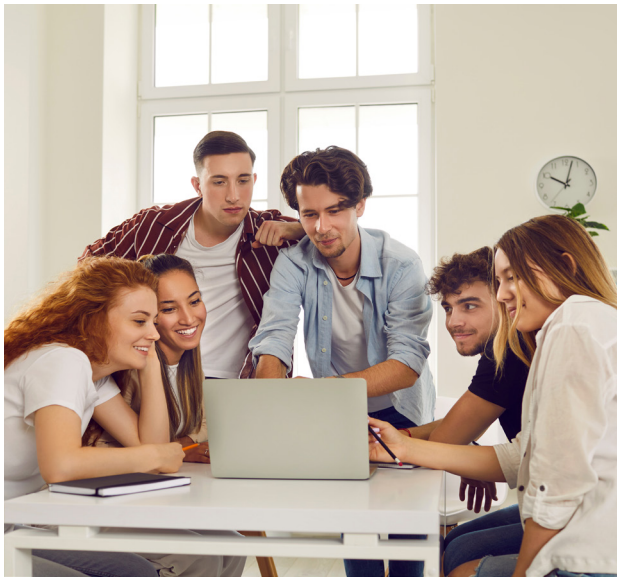
Outcome:

- The benefits of a strategic approach to adopting a new network architecture were positioned and agreed at Board level.
- The University understands where the network poses a significant risk and can prioritise investment.
- The University has focussed significant investment in reducing the risk through adoption of a strategic network architecture.

Background

The University of Stirling is an international university, with a global reputation for high-quality teaching and research. Its focus is to make a positive difference in people's lives. The University is an agent for change, connecting people, innovating, and transforming the lives of its students, staff, and the global communities it serves.

The University of Stirling is in the top 50 new universities in the world; a reputation gained through the quality of its research, its impact on society, and the skills and competencies of its graduates. Its distinctiveness derives from the collaboration of its academics across disciplines to address key world issues. Graduates of the University are well equipped to play a leading role in society thanks to the knowledge, initiative and resilience developed as part of their educational experience, and from the wider cultural and sporting opportunities available.



Challenges

The University has a network which, whilst extensive, had grown iteratively and with a simplistic architecture. Historically, as equipment became obsolescent, it was replaced with a more modern version to sustain the existing architecture.

To meet the challenges of a modern organisation operating in a rapidly evolving technology landscape, it was crucial for the University to pivot to a new strategic network architecture, that will adapt to the changing needs of the organisation and respond to any emerging threats.

An agile network is needed to help the University to achieve this flexibility and responsiveness, enabling it to deliver new services and applications more quickly and effectively. In the constantly evolving cyber threat landscape, the University must have strong security controls in place to protect its' data and infrastructure. To enable this requires centrally collected telemetry which also gives the network team unprecedented observability of the network, its status and usage.

"It was imperative that through this shift in strategy, we were able to comprehensively demonstrate the business benefits, justifying the investment, rather than it just being seen as the cost of staying compliant," **Tim Wadey, Advisory Services, Logicalis UKI**.

Solutions

Working as a collaborative team, Logicalis supported the University in developing a new Network Strategy. Setting out the 3–5-year vision to transform the network from a simple transport mechanism to an agile service delivery platform with inherent security controls to meet the current threat landscape.

Using a 'classic as-is-to-be' approach and a risk assessment methodology, Logicalis was able to identify specific business risks based on technology and operating model components. This is an important step in ensuring that the subsequent investment is prioritised to minimise the risk profile for the University and for the value of any investment to be predicted within the business case.

Logicalis recommended a Network Strategy that aligns with the University's strategic plan, which is based on three key institutional enablers: Connect, Innovate and Transform. The network is a fundamental building block for each of these enablers, and investing in it is necessary to remain relevant in today's technology landscape. Without investment, the network will become a technological drag and hinder the University's ability to achieve its strategic goals.

Connect

- The network provides the basic connectivity – on campus, to remote colleagues and into global collaborations.
- There are increasing numbers of ways to connect, with differing demands on the network.

Innovate

- The Network securely supports innovation but must be developed to continue to be relevant.
- Network technology continues to innovate to support new use cases, meet new security challenges and support increased demand for capacity.

Transform

- As Teaching & Learning and Research undergoes change, the demands on the infrastructure change with it. This change is happening faster than ever.
- To change with the agility required to support the University's strategic plan, the network must transform to be active and agile.

Outcome

Through conducting a thorough analysis of the network infrastructure, including hardware and software components, the project identified potential areas of risk to the network's overall security and performance. Through this analysis, a strategic approach gives insight into the network's architecture, highlighting outdated or unsupported components that require updates or replacement. This allows the University to build the case to mitigate and reduce the risks associated with outdated or obsolete network infrastructure.

The University can also benefit from valuable insights into the network's scalability, flexibility, and overall capacity to adapt to future changes and evolving technology trends. This proactive approach helps ensure the network remains robust and resilient in the face of changing business requirements and technological advancements.

The University will simplify network administration, freeing scarce resource to more important tasks and improving efficiency. Consolidating its procurement allows the University to adopt an Enterprise Agreement which introduces an unprecedented level of technical agility and flexibility. This is essential in today's rapidly evolving technology landscape where the University needs to be able to quickly adapt to changing needs and emerging technologies.

Finally, the partnership will result in a modern, flexible, agile network that's secure and observable to deliver on the business outcomes, but also to delivers for the technical team. Demonstrating these key outcomes, justified the investment needed for this approach and target architecture for the overall investment resulting in a modern software-defined architecture over time.

"We're working closely with the Logicalis team, to enhance and improve our network connectivity and reliability for the University students, staff, and visitors to the campus. The Logicalis team, really operate as an extension of our internal team, and their expertise and willingness to engage with us to find the correct solutions, is second to none and is very much what we desire in a business partner," says **Jim McKee, Head of Infrastructure, University of Stirling**.