Future Proof Education Network for Major Institute of Technology

The Eastern Institute of Technology (EIT) in New Zealand, stays with Allied Telesis for non-stop high-capacity connectivity.

Customer: Eastern Institute of Technology (EIT)

Industry: Education
Location: Hawke's Bay, Gisborne and Auckland, New Zealand

EIT

Challenge

The Eastern Institute of Technology (EIT) is a New Zealand tertiary education provider, with campuses in Hawke's Bay, Gisborne and Auckland, as well as numerous Regional Learning Centres. One of the top polytechnics/institutes of technology in New Zealand, EIT also boasts some of the country's most attractive campuses, with superb architecture and beautiful outdoor spaces shaded for study in warm weather.

EIT offers an extensive range of postgraduate, degree, diploma and certificate level programmes, with more than 130 qualifications on offer across a wide range of subject areas. The Institute networks closely with the community and provides qualifications in the region's key industry groups, such as Viticulture, Wine and Food Science and Nursing, as well as the wider employment market.

> **When the time came for a network upgrade, it was an easy decision for EIT to stay with Allied Telesis.**

EIT is a long-time satisfied customer of Allied Telesis, having used AT equipment since the network's inception. Prior to the upgrade, the network was centered around Allied Telesis switches that were still going strong after 18 years—a true testament to the robustness and longevity of Allied Telesis technology. Although the network wasn't 'broken', it had grown and changed over time. EIT wanted to keep up with the ever-growing demands of voice, video, and data from the many digital resources used in modern education.

EIT decided to redesign its network infrastructure across the main campus in Taradale, Napier, upon which the entire Institute depends. High availability was a key requirement, as well as increased performance to handle increasing traffic volumes, and the explosion of Bring Your Own Device (BYOD)—where today's students expect to easily access online applications using their own laptops, tablets, and other mobile devices.

The new network had to be deployed with minimal downtime – a challenge for this large-scale upgrade, involving numerous locations and many different end-users.

Solution

EIT chose the SwitchBlade x908 Generation 2 (SBx908 GEN2) high-capacity switch for the core of its new network solution.

Two SBx908 GEN2 high-capacity Layer 3+ modular switches now deliver a future-proof network with superior flexibility. The SBx908 GEN2 is ready to support the rollout of any new digital services EIT choose to deploy, as hot-swappable expansion modules (XEMs) provide additional 10 Gigabit, 40 Gigabit, and 100 Gigabit connectivity that can be easily added any time.

The SBx908 GEN2 switches use Virtual Chassis Stacking (VCStack™) so the two physical units operate as a single virtual device, even though located in two different buildings at the Taradale campus. This simplifies management and provides a network core with no single point of failure. As the backup servers are in the second building, EIT can rest assured they are ready for any challenge, as the distributed network core enables data-mirroring with automated disaster recovery.

Allied Telesis Ethernet Protection Switched Ring (EPSRing™) provides high-speed ring-based connectivity right across the campus, with ultra-fast failover.

The combination of VCStack and ESPRing enables a high performing and resilient distributed network, which is also easy to manage. It comfortably handles EIT's ever-increasing data, voice and video traffic volumes, and ensures easy access to online information for all users.

The new network also features x510 Series stackable Gigabit switches providing edge connectivity. With more than 100 switches across the network, EIT have a comprehensive solution with advanced features to manage access by both users and devices, and the ability to control network traffic.

> 66
>
> "It was all over, and up and running like clockwork, within a single day."
>
> **Steve Bluck**
>
> *Senior Systems Administrator, Eastern Institute of Technology*

Success

The installation went seamlessly. Working alongside partners Fusion Networks, the Allied Telesis team began the install at 9PM and by 2AM the next morning it was complete, with no downtime for students or staff.

EIT now enjoys a high-capacity, non-stop network, with resiliency enabled by powerful features that work together seamlessly. IT staff have excellent visibility of network operation, and can apply consistent traffic management and Quality of Service (QoS) policies across the entire solution—ensuring access to digital information for anyone, at any time.

In-house services, like EIT Anywhere, enable students on campus to benefit from both Internet access, and online learning tools and resources for their course of study using their own devices—all supporting a modern learning environment.

Future plans

Future plans include adding the Allied Telesis Autonomous Management Framework (AMF™). AMF centralizes administration, so many or all network devices can be managed at once. Features like auto-backup, auto-upgrade, auto-provisioning, and auto-recovery enable plug-and-play networking and zero-touch recovery. When partnered with Vista Manager EX, proactive graphical monitoring and management of the entire network is realised.

Allied Telesis looks forward to continuing to work with EIT as they provide top-notch education and qualifications to students, both now and well into the future.

Partner profile: Fusion Networks
Wholly New Zealand-owned, Fusion Networks design and deliver secure managed networks, cloud and integration services. Specializing in customer-driven, cost-effective solutions, Fusion Networks has been delivering winning results to clients in government agencies, businesses and the education market for over a decade.