

D A M O V O

UNDERSTAND. DELIVER. IMPROVE.

DUBLIN INSTITUTE OF TECHNOLOGY

Damovo has implemented a modern network infrastructure in the brand new €500M+ Dublin Institute of Technology campus to the benefit of its 20,000 students and 2,000 staff.



DUBLIN INSTITUTE OF TECHNOLOGY



Industry:
Education

Region:
Ireland

www.dit.ie

About DIT

Dublin Institute of Technology (DIT) has been an integral part of the Irish Higher Education system for more than a century.

Nearly 20% of the student body comes from outside Ireland, creating a culturally diverse and stimulating teaching and research environment. A community of over 800 student and staff researchers are engaged in addressing 21st century challenges, ensuring DIT plays a vital role in Ireland's transition to a smart society.

Damovo has worked with Dublin Institute of Technology for more than 25 years, providing consistent best-in-class technology to the leading institution throughout that time. Prior to this project, Damovo implemented a high-speed core network that has enhanced collaboration, research and e-learning opportunities for its 20,000 students and 2,000 staff.

As DIT has grown to the position of top 4% universities worldwide, Damovo has been a consistent and integral part of that growth by implementing best-in-class ICT solutions and managed services.

UNDERSTAND

Since 1887 Dublin Institute of Technology (DIT) has played a central role in Ireland's higher education system. Academically it comprises four core colleges: Engineering and Built Environment / Business, Science and Health / Arts and Tourism / and a Graduate Research School.

Currently occupying six main campus sites across Dublin, DIT is preparing to consolidate its twenty-four academic schools, major research institutes and research centres, and a range of other activities on a single campus in Grangegorman, a new urban quarter in the heart of Dublin's north inner city.

The move commenced in 2014 with the relocation of 1000 students of Creative Arts, Photography and Social Sciences. By 2018 that number will have grown to over 10,000. On completion, the campus will host some 22,000 students and staff. From a communications perspective, the institution needed a seamless transfer of services to the new college. It was restricted by a wide variety of legacy systems in place across its many buildings and needed a new and updated infrastructure in Grangegorman.

DIT issued a competitive tender for a complete network solution including telephony, VoIP, wired LAN and Wi-Fi, which would include the migration and integration of existing voice systems from DIT campuses around the city.

Two separate tenders were issued for wired and wireless technology respectively. Damovo was chosen to implement both due to its ability to meet all of Dublin Institute of Technology's exacting criteria.

DELIVER

"Damovo has delivered all elements of the project to date on time and within budget," said Shane Moss, CTO, DIT. "We meet with Damovo's team on a regular basis and they ensure we are receiving a high level of service and that all KPIs are being met."

Following the relocation of the first 1000 students in 2014, Damovo began implementing an integrated network solution. This included a private LAN fibre infrastructure from Extreme Networks, and a leased 10 gigabit WAN connection from HEAnet, Ireland's National Education and Research Network, which provides access for the campus systems in Grangegorman to the services located in the DIT data centre in Aungier Street. A new data centre in Grangegorman is also being provisioned and will enjoy similar connectivity speeds.

The refurbished listed buildings at Grangegorman are Victorian style with dense architecture, so establishing reliable and high speed connectivity was potentially difficult but Damovo designed a powerful and scalable architecture.

From a wired perspective Damovo installed two core Summit X670V-48x. These are linked together with 2 x 10Gb/s links over SM fibre creating a resilient ring between the cores. Each building's individual stack is dual-homed with 10Gb/s SM fibre links to both core routers using M-LAG configuration creating a resilient ring configuration and giving maximum bandwidth.

From a wireless perspective, Damovo installed a high-speed wireless network from Extreme which allows up to a gigabit per second to each individual device. The network is fully resilient and fault tolerant with a no single point of failure (NSPF) guarantee. In total, Damovo is installing 178 high density wireless access points (WAPs), all at AC standard.

In addition, Damovo has upgraded the existing Mitel MX-One telephony solution and rolled-out new VoIP phones across the Grangegorman campus.

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"All students and lecturers are able to connect their devices with the on campus network and maintain the connection to applications walking from building to building. Damovo is providing sufficient and scalable bandwidth to handle multiple devices; so students and staff can get a high speed connection with their smartphone, laptop, tablet, etc."

High speed connectivity is also being installed in the new DIT Hothouse Incubation Centre at Grangegorman. This programme helps technology entrepreneurs to establish and run their companies and collaborate with other industries and education institutes around the world.

IMPROVE

"DIT now has one of the fastest and most reliable network infrastructures of any third level institution in the country," continued Shane Moss. "This has bolstered our reputation as an innovation-driven and world class college. The modern infrastructure is enabling improved levels of productivity and collaboration, as well as enhancing learning, research and development across a wide range of areas.

"Students, lecturers and staff are benefitting greatly from the new infrastructure. The high speed connectivity and reliability is enabling better ways of working and studying throughout the academic year. With increasing use of mobile devices and more powerful applications, the high capacity network remains fast and fully operational even at peak times such as during exams."



Damovo has played an important and positive role in Dublin Institute of Technology's move to Grangegorman and has improved connectivity, speed, availability and user experience across our entire network of campuses."

Shane Moss, CTO, DIT.

Damovo delivers technology-enabled business efficiencies to enterprises around the world, enabling them to stay ahead in today's digitally transforming world.

Our customers benefit from our 40 years of experience, expertise and ecosystem of industry partners. Through our consultative approach (understand, deliver and improve) we work with our customers to explore how technology can support their business objectives now and into the future. Our portfolio includes solutions around Unified Communications and Collaboration, Enterprise Networks, Contact Centres, Cloud Services and Global Services.

Damovo has regional offices across Europe and a global capability spanning over 120 countries. Whatever the sector and wherever the geography, we give our 2,000 customers the tools they need to accomplish continuous business improvement.

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