

# Waterford Institute of Technology attracts new students with high quality learning resources



EXECUTIVE SUMMARY
<b>CUSTOMER NAME</b> · Waterford Institute of Technology
<b>LOCATION</b> · Waterford, south-east Ireland
<b>INDUSTRY</b> · Education
<b>COMPANY SIZE</b> · 10,000 students and 1,000 staff
<b>BUSINESS CHALLENGE</b> · Existing technology unable to support online learning and communication · Difficult to deploy services expected of a modern higher-education institution · Security threat from thousands of student laptops accessing computing resources
<b>NETWORK SOLUTION</b> · Cisco foundation networking technologies · Cisco wireless networking · Cisco Self-Defending Network
<b>BUSINESS VALUE</b> · High quality network infrastructure proves essential to delivering modern learning resources · Helps improve education by supporting and delivering online resources · Increases WIT's standing as a preferred place for study · Reduces the threat to corporate and individual computers and IT resources

Cisco foundation networking and security technologies have enabled one of Ireland's leading higher education institutions to support a raft of modern learning resources and social networking services, making it a preferred place of study.

## Customer Profile

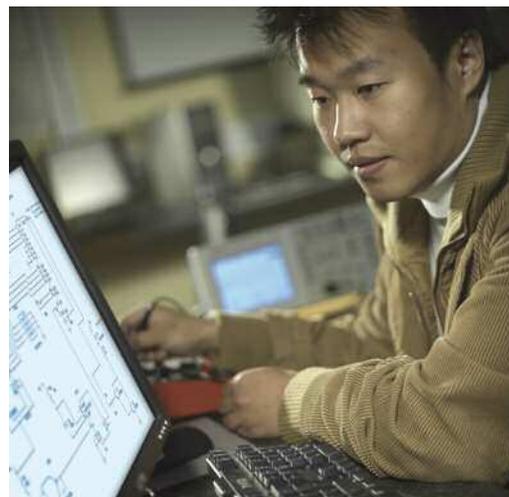
Waterford Institute of Technology (WIT) is one of the top institutes of technology in Ireland and is currently seeking designation as a university. Established in 1970, it now has the largest number of students outside Dublin with around 10,000 full- and part-time students. WIT offers a range of academic programmes covering the Humanities, Health Sciences and Nursing, Science and Informatics, Engineering and Architecture, and Business and Education.

## Business Challenge

- Existing technology was unable to support the demand for online learning and communication.
- Could not roll out the type of services and facilities expected of a modern higher-education institution.
- Difficulty managing and controlling risk from thousands of personal laptops accessing the institute's computing resources.

## Network Solution

- Cisco foundation networking technologies:
  - Cisco Wide Area Network (WAN) linking four campus sites over fibre;
  - Cisco Local Area Networks (LANs) within each location.
- Cisco network supports a portfolio of online learning and teaching applications including a virtual learning environment, lecture notes online, chat rooms, exam registration and results, and video streaming.
- WIT and its Cisco network are home to the Irish National IPv6 Centre used for testing the latest Internet standards and protocols.
- Cisco wireless networking available in selected open campus areas where students can study and access online resources.
- Cisco Self-Defending Network solution including Network Admission Control (NAC) and Cisco adaptive security capabilities.



The Cisco solution at WIT was implemented by Lan Communications, a Gold Certified Partner.

## Business Results

- Aidan McGrath, IT Manager at Waterford Institute of Technology says, “Cisco is fundamental to education at WIT; you can’t operate without a proper network. MIS applications, communication, the way the college works – everything depends on it. Since choosing Cisco technology we haven’t looked back. It’s proven itself to be ultra reliable and very stable.”
- Helps improve education by supporting and delivering online resources.
  - “With Web 2.0 being bandied around and students relying on instant messaging and social networking, everything is done online. The Cisco network means we can provide pretty much everything students expect,” says McGrath. “When we roll out an application, we don’t consider the network. We know it’s there and we know it works.”
- Increases WIT’s standing as a preferred place for study.
  - “The Cisco technology has definitely helped to attract new students to WIT. Today they expect modern, online facilities and you can quickly get a bad name if you don’t have a certain level of computing facilities and the fundamental basis of all that is a good network. It’s like having the electricity in a building; you just take it for granted. But you quickly know about it if it isn’t there,” says McGrath.
- Wireless networking is also becoming more important as a service for students. At WIT, students use wireless networking for telephone calls, which is especially important for international students. McGrath says, “In a couple of years people won’t be asking if you have wireless, they’ll be asking where it is.”
- Reduces the threats to corporate and individual computers and IT resources.
- Integration of several Cisco network security technologies – including firewalls, voice and video security, intrusion prevention, and content security – provides an intelligent and predictive solution to managing and controlling risk.

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**Aidan McGrath, IT Manager, Waterford Institute of Technology**

- The value of Cisco NAC:

- Ensures WIT overcomes the threat of thousands of laptops over which it has little control, while giving students unlimited access to WIT's online learning and communication resources.
- Automatically checks a laptop every time it logs onto the network to ensure it has the required and updated security. In this way Cisco NAC deals with the main security threat of students who are unaware their laptop has been infected.
- Prevents WIT from being a source of viruses to the outside world, thereby safekeeping the institute's reputation.
- Helps educate people to look after their laptops.



### PRODUCT LIST

#### Routing and Switching

- Cisco Catalyst 6500 Series Switches
- Cisco Aironet Access Points
- Wireless LAN Controllers

#### Security and VPN

- Cisco NAC Appliance (Clean Access)
- Cisco ASA 5500 Series Adaptive Security Appliances



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