



PLYMOUTH COLLEGE OF FURTHER EDUCATION INSTALLS ONE OF THE LARGEST, INTEL® PRO/WIRELESS LAN SOLUTIONS IN EUROPE

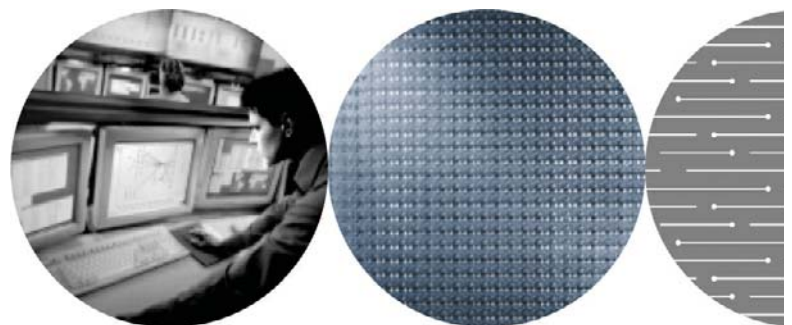
CASE STUDY SUMMARY

Intel® Pro/Wireless technology is starting to play a key role in the development of IT infrastructures in schools, colleges and universities to aid teachers and improve the learning experience of students.

Plymouth College of Further Education wanted to increase the classroom resources available to lecturers in order to help attract new students to the college and improve teaching standards. The college was also particularly keen to be at the forefront of innovation. Based over two campuses, with staff often travelling between sites, teachers needed a laptop with internet access available in each classroom, so they could access information stored locally, present their lessons, close their notebook, move on to the next lecture and repeat the process with ease.

Using Intel® technology, DMT Communications, has revolutionised Plymouth College of Further Education's teaching methods. Through the Virtual Learning Environment accessed via Intel® Pro/Wireless LAN, teachers can easily integrate the different types of resources such as information from the Internet, Microsoft Powerpoint presentations, handouts and graphical displays into their lectures.

This case study explains how the Intel® Pro/Wireless LAN Solution, designed and implemented in collaboration with DMT Communications, works, the technological basis of Plymouth College of Further Education's network and the benefits obtained.



The Challenge

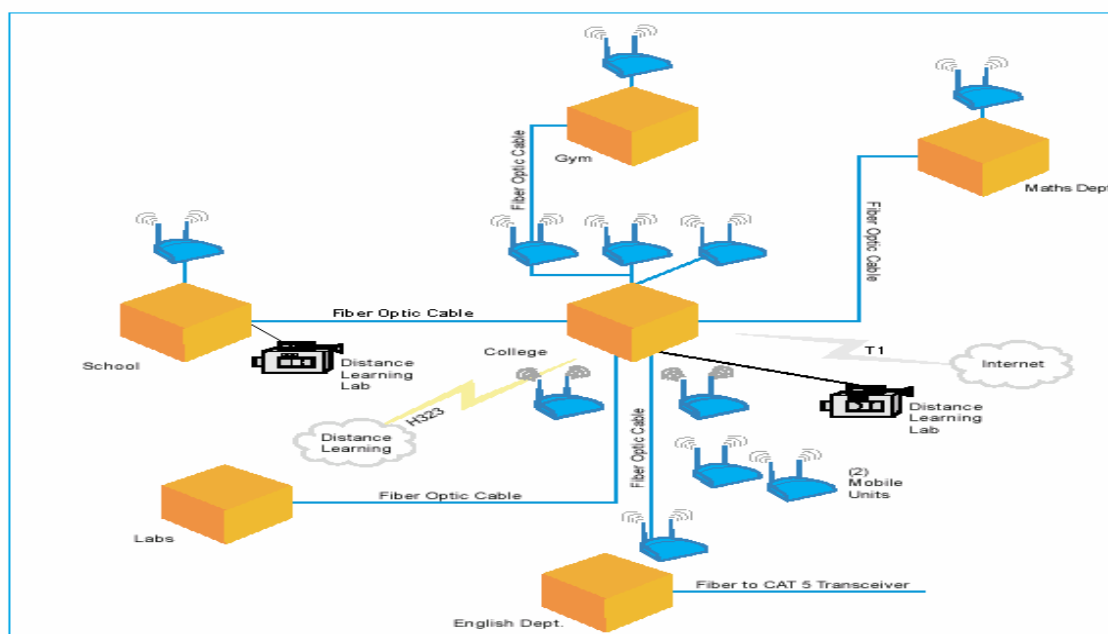
DMT was challenged to design, build and implement a scalable, cost effective, Intel® Pro/Wireless LAN network that would not easily date for up to 600 members of staff over two campuses 1.25 miles apart.

Having recently purchased new laptops for their academic staff, Plymouth College of Further Education required a flexible and portable way of obtaining access to the network across the campus. The technology had to provide staff with the capability to integrate any application in order to accommodate all levels teaching- whether the need was to access a presentation or to stream multimedia data from the internet.

Plymouth College required a flexible system that was quick and easy to integrate into the existing 100mb wired network and would complement the existing technology. It needed to be highly reliable to ensure minimal disruption to teaching and be easily maintained while still being affordable.

The Solution

DMT Communications, the preferred supplier of Plymouth College of Further Education, worked closely with Intel® to develop and deploy one of the largest education Wireless LANs in Europe.



Intel® PRO/Wireless LAN turns every Plymouth College classroom into a virtual lab, and puts world-class educational material in the hands of every student.

As a result of the comprehensive site survey in advance of the installation, the project took just over two weeks to finish. This was a key factor in the decision making process as the project had to be finalised before the start of term.

The proposed network comprised 104 54Mbps [Intel® Pro/Wireless LAN 2011a access points] each with eight non-overlapping channels, providing maximum bandwidth with the capacity to transfer larger data and graphic-bit intensive files while working in a collaborative environment. This ensured that whatever bandwidth the teacher required to access information, it could be delivered quickly and efficiently – saving on time and improving the quality of teaching.

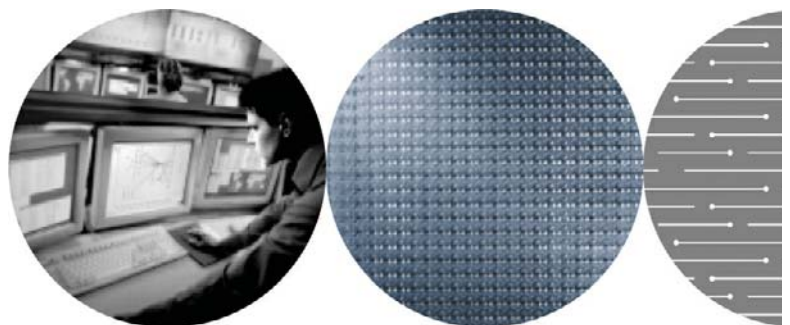
To ensure ease of use when transferring between the college's wired and wireless network, DMT implemented Intel® PROSet software. This enables the laptop to automatically locate the strongest signal and works like a car radio picking up the strongest Radio 1 signal for example, as well as ensuring teachers can easily connect to the network whether at home preparing for lessons or in the classroom.

Benefits

The introduction of the Intel® Pro/Wireless LAN at the Plymouth College of Further Education has led to significant benefits. The speed of installation with minimum disruption to the network meant that the levels of teaching that won Plymouth College of Further Education four Grade Ones (Excellent) and seven Grade Twos (Good) from the Learning and Skills Council could be maintained and improved upon.

Quote

David Turner, Director for ICT at Plymouth College of Further Education said of the Intel® Pro/Wireless LAN: "Staff feedback has been very positive and the teachers using the system have confirmed that it's quick, provides them with access to resources that enhance lessons and makes for a varied learning experience which as a result means our students are more likely to retain information."



Intel® Pro/Wireless LAN has benefited both teachers and students:

Teachers – It provides a much more simple and direct method of accessing a wide variety of information when working with a group of students as they do not need to be tethered to the classrooms which have network points. Lectures can be more interactive through use of different applications, ensuring that all pupils are stimulated and retention levels are improved through the potentially versatile display of information. For example, an A-level psychology teacher can access the Big Brother web site to use the people on the show as a case study.

Students - The Intel® Pro/Wireless LAN has benefited students due to the more interactive and innovative teaching. For example, Plymouth's biology students will soon be using laptops to go on fields trips to collect information which can then be accessed easily and presented back to the class.

The Intel® Pro/Wireless LAN offers the following:

Flexibility – staff can move work anywhere, anytime within the college's network ensuring they are constantly connected with other staff, the college's education resources and the internet

Speed – High performance and bandwidth to keep essential applications and transactions running

Scalability – as the college's requirements change, the wireless network can adapt with the minimum of disruption. It also enables the quick set up of temporary computer facilities should student's require access

Design – there is no need to plan computer positioning and the number of network connections are not limited to access points

Customised – Interoperability with existing wired networks and can be implemented easily

Cost-effective – Networks that can be implemented gradually, depending on budget and your requirements

Easy to use - teachers switch seamlessly from the wired network to wireless network

Capability – The Solution has vastly expanded teachers access to information, teaching tools, other teachers, outside experts, lesson plans, research material and interactive/collaborative technology

For more information, visit the Intel web site at: developer.intel.com



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