



Smarter communications ensures the continued climb of further education standards

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Mark Chester
Head of IT and Telecommunication Systems
Bilborough College

Bilborough College optimises teaching and administration with a BT Nortel solution providing IP Telephony, Unified Messaging and Call Centre facilities

Executive summary

Further education is facing a variety of new challenges. Bilborough College knows this only too well. Explosive growth in student intake had started to expose its campus network, which became unstable and unreliable due to increased traffic loads and the constant need to extend service to temporary accommodation. More importantly, teaching and learning was fast becoming impeded.

Teaming with BT, Bilborough has overcome these challenges in its move to a new state-of-the-art building. Reaping the benefits of a converged IP environment – based on the latest Nortel technology – the college has optimised communication and improved the flow of information between teachers, students and administration and other key support functions.

Nortel IP phones can now be easily moved between rooms to ensure that teachers are instantly contactable. Wireless integration has extended learning beyond the classroom by allowing students to move around and stay connected to teaching modules or research resources. Unified messaging means that administration and finance teams can now listen to messages or view and forward faxes direct from their PCs. With the introduction of Nortel IP call centre functionality to help manage peak traffic loads, Bilborough continues to cement its place as one of the top 6th Form Colleges in the country.

Marketplace

Situated on the North West side of Nottingham, Bilborough College is a progressive 6th Form College dedicated to offering academic excellence in a supportive learning environment. Bilborough’s individual student performance, related to prior GCSE grade achievement, consistently exceeds expectations in comparison with other institutions. These high standards are formally recognised by the Office for Standards in Education (OFSTED).

Business opportunity

At Bilborough College, explosive intake growth had seen the campus population increase from around 950 to 1,500 students in just a few years. The college knew that short-term fixes using Portakabins and temporary accommodation were no longer a viable option. Furthermore, teaching and learning was being impeded by ineffective communications, to the extent that further investment in legacy systems was deemed to be cost prohibitive.

Mark Chester, Head of IT and Telecommunication Systems for Bilborough College, puts this into context: “The continual build out of infrastructure had taken its toll. Increased traffic loads coupled with poor design meant that the network had become unstable and unreliable. Cost of ownership was escalating due to high maintenance costs.”

Case study

Bilborough College

Bilborough decided to accelerate its vision for a state-of-the-art learning environment by taking a more strategic approach to networked IT services. The spur was a move to new purpose-built accommodation located within the existing site.

BT solution

To support this transition, Bilborough selected BT to provide a converged wireless solution based on the Nortel Communication Server 1000 (CS1000) IP-based PBX. Mark Chester explains the selection decision: "BT's proposal represented best value for money. It was not the cheapest, but it offered all the features and functionality we wanted, and a clear future roadmap."

The CS1000 platform delivers feature-rich IP Telephony – via a mixture of Nortel 2002, 2004 and 2007 IP handsets – to 170 teachers, administrators and support staff located in the new building. Integration with the campus wireless LAN provides mobile voice within the main student reception area. This wireless environment will be extended from September 2006 with the widespread deployment of access points within breakout areas, enabling students to securely surf the internet and stay connected to the main college network. Walkie-talkie devices used by IT and facilities management teams will eventually be replaced by wireless IP phones.

Offices worldwide

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There are further plans to leverage the converged network. The rollout of Nortel Call Pilot Unified Messaging will enable administration and finance teams to combine voicemail, fax and e-mail into a single application on their desktop. Users will be able to click on an icon within Outlook and listen to messages and, for example, view and forward faxes direct from their PCs. Simple menus can also be configured to streamline incoming calls, with the capability to forward calls to specified numbers.

Administration of the network is performed using Nortel Telephony Manager, an advanced management application for configuration, control and analysis. This Windows-based management platform also provides call logging, tracking and billing capabilities. A BT CustomCare package provides maintenance and support services.

Results

The new converged network has helped Bilborough College to transform the teaching and learning environment through efficient and cost-effective IP communications.

Teachers no longer have to pick up messages in the staff room. Instead they have their own IP phones in the workroom, which also ensures that all messages can instantly be retrieved using voicemail. The introduction of Nortel Unified Messaging means that the costs of terminals such as fax machines and scanners will become a thing of the past. The BT solution also provides more advanced features, such as email-to-voice or voice-to-email capabilities.

Main BT products and services

- BT-supplied Nortel Communications Server 1000
- BT-supplied Nortel Telephone Manager software
- BT CustomCare support package

Managing peak traffic loads – a common problem for many learning institutions – is now no longer an issue. New CS1000-based call centre functionality enables the college to respond to seasonal trends, such as new admissions and enquiries for the forthcoming year or when student exam results are published. IT itself is also a major beneficiary. Mark Chester concludes: "Whereas before we would end up having to call out different suppliers, simplified processes now allow us to effect moves and changes by ourselves in minutes. This agility means that we are able to deliver more flexible educational services to teachers and students."

This forward-looking approach is already paying off. In January 2006, Bilborough received an OFSTED award as a "Particularly Successful" college, confirming its position as one of the top 6th Form Colleges in the country.

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