Top of the Class Cabling for Educational Giant

In the world of education, Findel Education is the market leader. The company is Europe's largest supplier of educational resources to schools and other academic institutions, as well as exporting all around the world.

Findel Education Ltd currently employs around 650 staff and operates a portfolio of leading brands including Hope Education, GLS and Davies Sports, all of which represent long standing and respected brands in the education market. The extent of the company's product range is comprehensive by any standard and it supports all curriculum subjects as well as supplying furniture, audio visual equipment and commodities such as stationery, which are in constant demand. This breadth and volume is served via both printed catalogue and a variety of e-procurement systems, not only Europe-wide but via an International Division to more than 150 countries and regions including the Middle East, Far East and Africa.

With such impressive scope it's not surprising that Findel Education recently outgrew its traditional home in a historic cotton mill in Hyde near Manchester. This site, although inspiring, was largely outdated and restrictive, so as the company continued to grow it was clear that a new site would be needed to allow expansion and to harness the benefits of a modern work environment. A brand new three storey head office building was planned and, with it, an IT infrastructure to empower Findel Education's future growth. When it came to selecting the right IT infrastructure to support the business John Duxbury, IT Technical Operations Manager, had to take an extensive list of requirements into account. After all, the new building was going to become the company's central hub for many years to come.

Educated demands

Findel Education's main business application is SAP which covers most of the organisation's business functions including CRM in the Contact Centre, supply and stock control, plus account management. During the project planning stage John already knew that the company would soon have to upgrade to the next release of SAP which is ever more 'bandwidth hungry' and pushed demand towards 10 Gigabit. The company therefore naturally had to consider an infrastructure that could support this. As an organisation that works closely with teaching professionals in both the public and private sector, Findel Education has access to confidential information and takes compliance with the 1998 Data Protection Act very seriously. Security of data was therefore another key requirement for the new infrastructure.
Being an environmentally aware organisation, Findel Education recently acquired ISO:14001 accreditation at its Enfield site for its environmental management system. As part of this commitment to continual environmental improvement, the organisation also wanted their new headquarters equipped by an infrastructure provider with sound environmental credentials. With specific focus on monitoring power usage and the associated cost savings, the company needed a cabling solution that offered better protection against heat dissipation. Lastly, the new structured cabling infrastructure had to support VoIP technology, be stable and reliable in the long term and deliver the best possible return on investment to encompass developing applications and requirements.

**Calling in the experts**

For support and advice in IT related matters, John turned to 4Net Technologies, the company's long standing voice application specialist, who had helped Findel Education manage its integration and migration to a common platform after the acquisition of a number of businesses in the education market. 4Net, in turn, brought IT cabling partner NETcare Europe Limited in to advise on physical layer requirements. "We sat down with NETcare and 4Net Technologies and discussed in detail our requirements as well as future plans and upgrades," explained John.

"From the outset we recognised that VoIP was the preferred solution and with future requirements for a higher bandwidth network we would need to propose a 10Gb/s cabling solution," comments Steve McMurrough, operations director of NETcare Europe.

"Our preferred cabling choice is Siemon. We have a long standing business relationship with Siemon and have installed Siemon systems in a number of projects before. We are especially experienced at installing the company's 10Gb/s solutions, including category 6A and category 7A/TERA." With Siemon's 10G category 6A shielded cabling solution, NETcare knew they could offer a system to meet if not exceed Findel Education's needs.

The proposed solution would support future IT upgrades as the performance headroom built into the system provides additional assurance that the normal wear and tear that a cabling system experiences due to upgrades and moves, adds, and changes (MAC work) during its lifecycle will not degrade channel performance below the levels required to support a particular application.

Moreover, when comparing shielded cables with UTP cabling, experiments have proven that UTP has 100 times more potential to radiate and receive signals (like an antenna) than shielded cables; another important consideration of a system's ability to coexist with other electronic/electrical devices. This point further supported the organisation's need to implement a shielded solution in order to securely deal with sensitive information.

1700 category 6A F/UTP outlets, category 6A F/UTP cable and Siemon's 10G XGLO OM3 24 core multimode fibre optic cable, jumpers and panels were installed in the new building in Hyde. Due to NETcare's experience with Siemon product the project could be realised within a very short time frame of three months.

**A new hi-tech HQ**

The project was completed in May 2009 and the new IT infrastructure now serves 450 staff, with the space and specification already in place to serve as many as 600, including a 100 seat call centre. Flexible working is also accommodated, for example with a hot desk area for field sales representatives.

Network uptime, especially for the call centre, is critical with downtime costs spiralling into the millions of pounds in lost transactional revenue. Findel Education therefore took care to build in extra resilience with a primary server room on the ground floor and further telecommunications rooms on the first and second floors.

"This project was a true collaboration between application, infrastructure and installation specialists and we are proud to deliver a quality IT infrastructure to the approval of Findel Education that will support their current and, more importantly, their future IT applications," concludes Tony Robinson RCDD, global accounts manager at Siemon.