Bolton College (previously known as Bolton Community College) is a further education college located in Bolton, Greater Manchester, England. The College provides a range of courses that include vocational education, work-based learning, ESOL courses, diplomas, apprenticeships and access courses. The College is the most successful provider in the country for its Entry to Employment programme (a first step into employment based training), in addition to being one of the leading providers in Greater Manchester for apprenticeships.

The College has over 400 members of staff, and over 15000 enrolled students, spread over six campuses. While based primarily in Bolton, the College operates a number of Community Learning Centres in the surrounding area. The College opens its new £70 million state-of-the-art facility in September 2010.

“We have roughly 1600 devices on the network including roughly 40 servers, of which 95% are within a virtual infrastructure,” said Steven Fitzsimmons, Senior IT Technician at Bolton College. “With the move to the new facility, we started looking for a long-term network security solution to accommodate the College's growing needs.”

**The challenge: A long-term solution to meet the College's needs**

“We needed a long-term security solution to replace our current Cisco® PIX firewall, which, due to it being at end-of-life, meant no further firmware updates, leaving the College vulnerable,” said Fitzsimmons. “Also, the PIX was only protecting the College externally, with no internal protection present.”

A primary challenge for Fitzsimmons was to recreate the firewall rules from the existing rules that resided on the PIX. Additionally, to satisfy the College's administrative and security requirements, selection criteria included a user-friendly Web interface and the ability to perform comprehensive security tasks, such as gateway anti-virus, application control, gateway malware detection, bandwidth control and content filtering.

After narrowing down leading vendors, Fitzsimmons conducted an in-depth analysis of solutions from SonicWALL® and Juniper Networks®.

“I was interested in the full suite of services the SonicWALL E-Class had to offer,” said Fitzsimmons, “including deep packet Inspection, gateway anti-virus detection and content filtering.”

SonicWALL E-Class Network Security Appliance (NSA) Next-Generation Firewall appliances provide institutions with high-performance full deep packet inspection for a secure network free from viruses and other malware. Unauthorized access to the College's network could jeopardize day-to-day operations. SonicWALL E-Class NSA solutions provide a first line of defense against Internet security attacks of all types.

Additionally, the College could utilise advanced SonicWALL Application Intelligence and Control features to ensure proper utilisation of bandwidth by throttling down peer-to-peer and video traffic while prioritising access to education related applications. SonicWALL
E-Class NSA solutions do this automatically at the application layer, removing the burden of hunting for ports and protocols, thus freeing up IT administrative resources.

The solution: SonicWALL E-Class Network Security Appliance E8500

After careful consideration, Fitzsimmons selected the SonicWALL E-Class Network Security Appliance (NSA) E8500.

“I decided on SonicWALL NSA E8500 due to extremely positive reviews from other colleges around the country,” said Fitzsimmons. “I spoke to colleges using other vendors and did not hear the same enthusiasm about the other products. When we first plugged in the NSA E8500, we could see for the first time that 80% of non-Web browsing traffic was attributed to Bit Torrent sites. More worryingly, we could also see that many machines were infected with the Conficker virus. When compared to a competitive device we tried from another vendor, this data was simply not detected at all.”

The SonicWALL E-Class Network Security Appliance E8500 is a premier enterprise Next-Generation Firewall delivering robust Application Intelligence and Control, and real-time situational visualization and awareness. Combining SonicWALL Reassembly-Free Deep Packet Inspection™ (RFDPI) with a powerful multi-core platform, it can analyse and control thousands of unique encrypted or unencrypted applications.

An in-house team of eight technicians will share administration of the solution.

“Due to the friendliness of the user interface, and compared to doing the same job with the PIX, our users will feel immediate benefit with this technology,” said Fitzsimmons.

The result: Greater administrative savings, ease-of-use and flexibility

“Technologies such as Application Control and Deep Packet Inspection will let our technicians administer the network in so many new ways that have not been possible before,” said Fitzsimmons.

The NSA E8500 is engineered to reduce administrative complexity, while defending against the entire spectrum of network attacks, both externally and internally, with unprecedented speed. The NSA E8500 provides centralised management, network segmentation, multiple deployment options and advanced networking features for ultimate control and flexibility.

As an in-line solution, the NSA E8500 leverages existing infrastructure and add an extra layer of network security and visibility. As a security gateway, it adds secure remote access, high availability and other enterprise features.

“Success will depend on how seamless the installation and rollout is,” said Fitzsimmons. “Another important issue in determining success will be the ability to show management the threats detected. We will also be looking for a reduction in running costs on the product in the long-term.”

The future: Long-term protection and savings

“I see the product being able to replace the use of existing products such as our Web filter and external SSL VPN access,” said Fitzsimmons. “There is an obvious saving once the licenses for these products have expired.”

Combining multi-core technology unrestricted deep packet inspection, and Application Intelligence and Control, NSA E8500 solutions are the most scalable, reliable and highest performing multi-function full deep packet inspection network security appliances in their class.