

Warwickshire College

Gripping and engaging headline about the case study

Case Study

Situation

Providing training, leisure courses and qualifications for individuals and business organisations, Warwickshire College (WWC) is one of the largest further and higher education colleges in the UK, catering for over 30,000 students.



With six main centres as well as the use of more than 60 community centres across the county, WWC prides itself on its excellent facilities, and for today's tech-savvy students, technology capabilities play a major role in the college and its students' success.

There are almost 3500 desktops in use across the college estate and ensuring that staff and student's business information as well as online activity are safeguarded is a complex and costly exercise.

With its incumbent firewall solution requiring consistent and costly upgrades to keep up with the growing demand for increased throughput at the college, Paul Maddock, IT Director at WWC, soon looked to an alternative.

"Whilst the growing expense was the driving factor in looking at alternative security for the college, we knew we couldn't skimp on speed or performance," explains Maddock. "The throughput of our existing firewall had begun to cause a bottleneck, something we cannot afford to have. Students rely on access to the web for vital course information and research purposes."

Solution

Maddock and his team called on trusted IT provider, Vistorm, to propose an effective replacement. Introducing WWC to Fortinet and its family of FortiGate™ integrated multi-threat security platforms, Vistorm invited Maddock and his team to spend a day learning more about the technology's capabilities.

He comments: "Testing the product extensively, I soon realised that my initial impression of UTM as an all in one solution for small businesses was seriously misjudged. It became clear that as well as satisfying our immediate security needs, the extended possibilities and high-performance capabilities provided by Fortinet's technology was a highly attractive proposition for our large campus environment." Following a rigorous testing period, WWC implemented the FortiGate-500A security appliance to provide firewall and anti-virus protection across the college's network.

Impressed with the performance of the FortiGate appliance, Maddock was keen to open up the full capabilities of his investment, he declares: "We found we'd acquired more than just a firewall with Fortinet. Switching on the firewall, anti-virus, IPS, anti-spam and Web-filtering functionalities, it was clear that this was a strategic solution with the ability, and most importantly, the capacity to adopt more functionality without negatively impacting our network performance.

"Single function solutions from alternative vendors would have meant we needed separate pieces of equipment to satisfy each of our security requirements, resulting in more cost, more management and slower data throughput."

Deployment:

FortiGate-500A
FortiGate-100A
FortiAnalyzer-800

Industry:

Education

Success

Now in place, the systems are kept up to date automatically by Fortinet's FortiGuard™ services, providing continuous signature updates to help protect against the latest viruses, worms, Trojans, and other threats - making the user experience simple and easing management complexity for the 30-strong IT team.

Demands on the implemented Fortinet solution are high, with anything between 13,000 – 14,000 concurrent sessions being in operation at any one time. Such capacity requirements need a solution that is able to deal with high demand without degrading performance. In parallel, the flexibility and scalability of the FortiGate platform enabled WWC to build a bespoke security solution across its network, to meet its varying security needs.

Maddock explains: "We have hundreds of different long and short-term courses running at any given time, and the amount of students requiring access to the college network fluctuates in accordance with this. With Fortinet, we now we have the capacity to safeguard the network during even our most busy periods, without affecting the network performance that our staff and students expect."

Running courses for the under 15s up to degree level and business training, controlling the access to Web content based on the management of groups at the college had previously been a complicated task.

"We have to implement varying policies for web-filtering across the network," says Maddock. "For example, younger students need more stringent protection from harmful and inappropriate sites, whereas some of our courses, such as 'Online Gaming', require students to access gambling sites for learning purposes – sites normally blocked by your regular Web filtering policy. The FortiGate-500A is easy to configure and update, so we are able to set-up and manage these groups and policies both quickly and easily."

In addition, WWC has implemented Fortinet's FortiAnalyzer™ network logging, analyzing, and reporting system to carry out detailed reporting of network performance. This provides the team with full visibility of the network in real-time, including activity logging and vulnerability scanning, which has greatly simplified WWC's logging and analysis processes.

In August this year, WWC merged with one of the UK's most acclaimed horticultural institutions, Pershore College. Located approximately 30 miles away, Maddock and his team were faced with the task of securely linking the existing WWC network with this large campus. Already using the Fortinet device for six security functions, WWC looked to the integrated VPN capabilities within their existing Fortinet appliance to provide the secure intersite connectivity required over the UK's high capacity National Research and Education Network, JANET.

Maddock explains: "We wanted to leverage the 100Mb bandwidth opportunities of superJANET, but we also knew that linking our sites over the national education backbone could open the college network to security vulnerabilities. With Fortinet, we knew we had a solution with the capacity and performance already in place to secure this, all we had to do was 'switch on' the VPN functionality, to secure the traffic on the JANET network."

With a FortiGate-100A™ in place at Pershore College, as the new academic year begins, Maddock is confident that the solution has the capacity and performance capabilities to support and secure the increased levels of traffic soon to be travelling over the network.

Maddock concludes: "Using Fortinet we have succeeded in protecting the entire network from all types of Internet threats. Moreover, our decision to deploy Fortinet has enabled us to keep management overheads down, and have the flexibility and scalability required to adapt and expand the solution to meet with our future needs."

About Fortinet

Fortinet is the pioneer and leading provider of ASIC-accelerated unified threat management, or UTM, security systems, which are used by enterprises and service providers to increase their security while reducing total operating costs. Fortinet solutions were built from the ground up to integrate multiple levels of security protection—including firewall, antivirus, intrusion prevention, VPN, spyware prevention and anti-spam -- designed to help customers protect against network and content level threats. Leveraging a custom ASIC and unified interface, Fortinet solutions offer advanced security functionality that scales from remote office to chassis-based solutions with integrated management and reporting. Fortinet solutions have won multiple awards around the world and are the only security products that are certified in six programs by ICSA Labs (Firewall, Antivirus, IPSec, SSL, Network IPS, and Anti-Spyware). Fortinet is privately held and based in Sunnyvale, California.

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