

Safety and Security in an Ever-Changing Educational Establishment



For educational establishments like Bedford Modern School, digital security is paramount. But at a time when so much learning is done online – with teachers and students often using their own devices – achieving this has never been harder. To tackle this challenge, the School turned to Switchshop, who advised on a suite of Fortinet solutions.

Introduction

A changing educational landscape

Bedford Modern School is an HMC Independent Day School for boys and girls aged 7-18. Combining a 250-year old tradition with a modern outlook, it has built a community where all students can flourish as individuals. As an outstanding school aiming to ensure that education remains relevant, it recognises the era of rapid change that it faces.

Safeguarding confidential educational material and information has always been crucial for schools like Bedford Modern, but as students and teachers adjust to remote learning in a post-pandemic landscape it has become even more important.

Students are now encouraged to bring their own devices to the school premises, or log in remotely from home. Sensitive information and personal data is being shared at a rate never before seen, and entirely incomprehensible even a few years ago. Educational institutions are entrusted to safeguard their students' information, and a weak cybersecurity infrastructure can easily put this at risk.

“The deployment of the FortiGate Next-generation firewall (NGFW) from Switchshop has transformed our school’s IT security and is enabling us to work towards having a fully 1:1 operating system and IT infrastructure for the future.”

“Switchshop provided a great solution that works well and is suited to education. They recognised our needs and wants, delivered a fantastic cost-effective solution on time for the rollout, and were professional and supportive at all times. The Fortinet solutions they provided offers a very secure environment for the school’s users with a full feature set of integrated and required security features and controls.”

Angelo Felice, ICT Services and Innovations Manager at Bedford Modern School

The challenge - a need for a secure and safe system for an evolving educational landscape

Security is paramount to the school, and it knows the importance of protecting the information of students, teachers and partners.

To meet the needs of remote and hybrid working—triggered by the pandemic—laptops were rolled out to all teaching staff. Microsoft Teams and SharePoint are used, and the school created a portal where students log in and access information. In an ideal world they would have 1:1 student devices and audio/visual set up for all classrooms, but they needed to have enough access points to enable this deployment whilst maintaining a secure, reliable and safe environment for the students and staff.

The solution - a partner the school could trust

A school's IT infrastructure is vital to operations. Everything from entry to canteen cards, smartboards to hybrid delivery lessons are now online, so the school needed a solid and trusted security platform to build its IT infrastructure upon.

The solution had to be cost-effective and offer a fully feature-rich set of security tools using just one appliance. It also needed to satisfy safeguarding requirements, with the ability for user web reporting. And, it needed to support a number of virtual firewalls to cater for their Head Office function and a separate IT programming network.



The school wanted a firewall solution that worked as one system, offering multiple security features and easy control, that would also integrate with other security products. It was key that a variety of virtual firewalls were included, and that they be compliant with Keeping Children Safe in Education (KCSIE) and Prevent legislation and part of the Internet Watch Foundation.

So, the school began extensive research for providers. Finding a partner that could look after all of the moving parts and who had the right skillsets to deliver was essential.

Vendor choice: Switchshop and Fortinet

Switchshop worked closely with Bedford Modern School to develop a system that provided security, and empowered the education of their students. Its goal was to have a best-in-class holistic security system that gave it confidence in its ability to safeguard sensitive information, use cloud platforms to best advantage, upgrade data storage practices, and have the highest quality IT infrastructure.

With ample experience in the public sector (70% of business is focused in the education space) Switchshop was able to understand the nuances and detail of what was required from the school. Switchshop always invests time and effort, and so got to know the establishment to make sure they could design the right solution, at the right budget. The school was already employing Fortinet solutions to reliably meet other needs and thanks to the success of their existing relationship, Fortinet was the obvious choice.

Switchshop recommended Fortinet solutions to deliver broad protection and visibility to every network segment, device, and appliance within the school, with ongoing support via a single platform. Providing seamless security, this approach allows the school's IT team to monitor, detect and remediate different attack vendors and entry points, ensuring all bases are covered. This freed up the school's IT team to focus on their everyday tasks, without having to worry about ever changing threats and the security landscape.

By providing a secure, resilient and fast performing environment from which the IT team can deliver a number of other security components, FortiGate 500E has transformed the security network. It was essential that all the systems were robustly protected against ransomware, and using FortiClient with malware sandboxing and FortiWeb enabled this to happen.

Teachers at Bedford were adjusting from using wired technology to wireless and remote, an added complexity. Switchshop recommended the rollout of FortiAuthenticator to enable a seamless experience. The complete effective security solution offered a number of features: a secure VPN access with ability to offer two-factor authentication (2FA) and web filtering that was compliant with Prevent/KCSIE legislation; Application Control; SSL Deep packet Inspection; Comprehensive and flexible Safeguarding and web usage User Reports; and wireless user authentication using Microsoft Office 365 Login credentials. Plus, Switchshop was able to deliver several virtual Fortinet FortiGate 500Es, a specific requirement for the school.





The result: security that excels for a future proofed school

Bedford Modern School now has excellent firewalling with client end point protection for all devices, laptops, Chromebooks and tablets. This is thanks to FortiClient, an advanced endpoint protection solution with a built-in VPN client. It delivers integrated endpoint and network security. The school now benefits from reports on the status of a device, flagging of any suspicious files, and malware protection. The system is simple to use, safe, and secure.

The future: upgrading systems for all students

Switchshop enabled Bedford Modern School to develop a site wide IT security architecture that is comprehensive and easy to manage. The solution is now an integral part of the school's infrastructure as they look into the provision of 1:1 devices for the students. The Fortinet approach provided with Switchshop will help them to deliver and achieve this - safely and securely.

Angelo Felice ICT Services and Innovations Manager at Bedford Modern says "We know that cyber security goes far beyond just having strong passwords and regular security awareness training. We are delighted with the systems and structure that Switchshop has put in place through Fortinet solutions, and are now confident in keeping our staff, students and parents as digitally safe as possible as we navigate new challenges in the educational landscape. It's a secure, easy to implement all-in-one solution that is cost effective - perfect for us."

Further Resources:

Bedford Modern School

www.bedmod.co.uk

Switchshop

www.switchshop.co.uk

Fortinet

www.fortinet.com