‘Exceptional’ penetration testing helps college plan long-term approach to security

How Xaverian College in Manchester used Jisc's penetration testing service to protect public-facing services and make the case for investment in cyber security.

The challenge: protecting web services in FE
As an outstanding-rated sixth-form college in Manchester, with 2,500 students aged 16–18, Xaverian College faces many challenges as it tries to keep its IT estate protected from cyber-attacks. With a young student body that changes every two years, for example, education on good IT practice is a constant process, says the college’s network and IT resources manager, Martyn Bratt.

Yet it is also vital to have a sense of where public-facing vulnerabilities may lie. So, after an external security audit recommended that the college undertake penetration testing, Martyn recognised the need to act.

The solution: flexible testing from the providers of the Janet Network
When Jisc mentioned that it provided a CREST-accredited penetration testing service – offering remote testing against real-world attack scenarios, using trained and certified in-house experts – Martyn was attracted to the idea of using this to test Xaverian College’s public-facing web services.

And after comparing against other providers to check that the price was in the right ballpark, he went ahead.

“What attracted me to Jisc was that they would be ‘attacking’ a network they technically own,” Martyn explains.

The service started with a scoping call to work out what specific work could be included. At this stage, Jisc agreed that testing web services was a reasonable goal and designed testing around this – including three days of testing, daily updates, and a detailed report. “I put myself in Jisc’s hands,” Martyn says.

Short-term and long-term benefits of the service
The penetration testing of web services revealed ‘no bombshells’, as Jisc put it, which was good news for Xaverian College – yet the college still benefited in many ways, from patching short-term vulnerabilities to building a longer-term approach to IT security.

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As an immediate gain, a new service the college was deploying was discovered to have some potential vulnerabilities, which the vendor was then able to patch ahead of going live.

During the process, the IT team was also able to benefit from knowledge transfer from Jisc. "I have an understanding of websites, but there’s a limit to my knowledge. Jisc were very good at helping me understand what the threats were and how they manifest themselves. As far as I can tell, the service is exceptional."

And in the longer term, Martyn was able to use the detailed penetration testing report as a way to help kickstart wider conversations about security – including how the college protects itself from threats such as phishing and ransomware.

The IT team has since been able to secure funding internally for further security tools. "On the back of the penetration testing, and other issues we experienced, I was able to get funding to put an extra layer of security into the network," he says. "It gave me the grounding to improve our security position. I hope it’s the start of a continual process that we can keep building on.”

Benefits for the wider sector: a shared approach to security
Jisc’s penetration testing report also helped create benefits for the FE sector in the north-west. That’s because, after receiving the report, Martyn took the decision to desensitise it and share it with IT managers of a local consortium of colleges – in an effort to raise the awareness of the benefits of penetration testing.

“I have recommended the Jisc service to others in my position,”
Martyn Bratt, IT resources manager, Xaverian College