











### **COVERING THE WHITE HATS: -**

# TECHNOLOGY UNIVERSITY SHIELDS NETWORK AND ETHICAL HACKING LAB WITH WATCHGUARD FIREWALLS

As a technologically focused institution, there's no doubt that Dundee-based Abertay University delivers a perfect example of secure, leading edge and commercially smart technology use.

Among Abertay's unique challenges is the fact that its 5,000 tech-savvy students bring in a constantly changing array of devices. Laptops, mobiles, televisions and games consoles are all expected to work as soon as they connect to its network.

Added to this, the university had also scheduled a massive infrastructure upgrade to transform its network from a 1 gigabyte to an 80 gigabyte backbone, calling for a security solution with serious throughput capacity.

#### A CONTROLLED ENVIRONMENT

Given that Abertay teaches courses like 'ethical hacking' and computer games design, its firewall solutions have to be strong enough to seal off its Ethical Hacking Lab from the rest of the network, and to safeguard users who are trying out technologies like the Tor network and other services specifically designed to bypass firewalls.

To offer this kind of advanced network protection, Abertay turned to WatchGuard. Abertay's Senior Network Infrastructure Analyst, Matt Pollard, explained: "When we tested all the firewalls side by side, we ran various programs against them like Azureas, BitTorrent, Ultrasurf and various proxy avoidance tools – systems designed to bypass firewalls – and WatchGuard rated highly on these tests."

"We also needed something that could do all of these things without having any impact on our traffic speed, and the new WatchGuard systems do that," added Pollard.

### ONE-STOP SOLUTION TO A COMPLEX NETWORK

When it came to the network upgrade, Pollard said the systems from WatchGuard successfully delivered on Abertay's wide range of requirements.

"We had a very, very large spec sheet. The main benefits for us have been moving from a basic stateful firewall to a full layer 7 scanning platform. We managed to add IPS/IDS, application filtering, malware detection, Gateway AV, web filtering and all the other security features WatchGuard offers. In this one unit we have managed to combine a lot of security features which as separate units would not make financial sense." ~ Matt Pollard, Senior Network Infrastructure Analyst

The university now relies on two powerful WatchGuard 2520 firewalls supported by a smaller WatchGuard XTM 330 device that isolates the Ethical Hacking Lab.



"WatchGuard has also allowed us to have a much greater visibility on our network. WatchGuard's data logging system, Dimension, has changed things a lot. It is easier to find faults, to do reports on what user demands on the network are and what traffic is going through our network. That is a massive improvement for us."

~ Matt Pollard, Senior Network Infrastructure Analyst, Abertay University

## REAL-WORLD ADAPTABILITY

Crucially, WatchGuard have helped Matt deal with the most demanding aspects of Abertay's network management.

"We support a very diverse range of devices, not only because we have a lot of students, but are also a technologically-based university. Every new intake arrives with new gadgets and they're all expected to work," he explained. "Because our students learn game design and programming, they also expect access to games and a lot of games have unique requirements. We're constantly having to adapt the firewall to enable certain games to work.

"There are also issues with stopping illegal things happening on our network, like copyright infringement," said Pollard, pointing out one of the key reasons Abertay first chose WatchGuard technology. "BitTorrent is very popular and very difficult to block, also Tor and Ultrasurf are used to try and bypass our security."

Pollard concluded: "From a support perspective, WatchGuard, have been great! The firewall has become a much more mature product over the years we have been using it and it provides good value."

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### **ABOUT WATCHGUARD**

WatchGuard® Technologies, Inc. is a global leader of integrated, multi-function business security solutions that intelligently combine industry standard hardware, best-of-breed security features, and policy-based management tools. WatchGuard provides easy-to-use, but enterprise-powerful protection to hundreds of thousands of businesses worldwide. WatchGuard is headquartered in Seattle, Wash. with offices throughout North America, Europe, Asia Pacific, and Latin America. To learn more, visit <a href="https://www.watchguard.com">www.watchguard.com</a>

