Ballarat Grammar secures BYOD with HP software-defined network and Sentinel SDN security application

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—Gregory Bell, Head of Technical Services, Ballarat Grammar

Customer Solution at a Glance

Industry
Education

Primary Solutions

- HP Sentinel SDN Application
- HP Virtual Application Networks SDN Controller
- FlexCampus Solution
  - HP 3800 Series Switches
  - HP 5400 Series Switches
  - HP Advanced Services zl Module
  - MSM 422 Access Points
  - MSM 466 Access Points

Objective

To increase student and faculty productivity and educational opportunities by allowing users to bring their own devices and securely connect to the network.

Challenge

Technology has created new diverse opportunities for learning in the classroom through rich media and the internet.

Many schools provide managed devices such as laptops and tablets to students and faculty. Some are also starting to enable users to bring their own device (BYOD) onto the network. However, these schools are realizing the insurmountable security challenges that are associated with allowing unmanaged devices onto the network.

Ballarat Grammar is one such school. Senior students and faculty each have a school-provided laptop, while everyone is allowed to bring their own device onto the network with access in classrooms, boarding houses, and throughout the campus.

The IT department had implemented several security measures including local antivirus software on the school-owned machines and intrusion prevention on the firewall. Nevertheless, they were still bogged down with hours of manual work when it came to identifying and eliminating network threats such as botnets, spyware and malware—issues that were impacting student and faculty productivity.

Ballarat needed a solution that could accurately and reliably prevent and report threats to the network, no matter who the user or what the device. These capabilities would enable the IT team to immediately eliminate threats and minimize user impact.

Customer Profile

Ballarat Grammar is a K-12 independent Anglican school located in Victoria, Australia. An extensive parkland campus hosts a flourishing community of 250 faculty and 1,400 students, with over 200 of the students living on campus in boarding houses.

Every year, through connections with seventy schools internationally, Grammar students have the opportunity to further their education overseas, on exchange, and Grammar itself hosts students from twenty different countries.

Solution

When Ballarat Grammar approached HP with its challenges, HP was able to offer a solution that was not possible with legacy networks. Harnessing the power of an HP software-defined network (SDN), HP delivered the Sentinel SDN security application to identify and block network threats and enable secure BYOD.

HP Sentinel Security, running on the HP Virtual Application Networks SDN Controller, enables automated network posture assessment and real-time security across OpenFlow-enabled network devices such as switches.

One of the concerns with implementing an SDN solution is knowing where to start. Ballarat Grammar was able to implement an SDN solution quickly because of their investment in OpenFlow-enabled hardware. They were able to take advantage of the Sentinel SDN solution by downloading a free software upgrade for their existing switches to enable OpenFlow, eliminating the need for a costly rip-and-replace of their network infrastructure.

Sentinel leverages the Virtual Application Networks SDN Controller and OpenFlow to program the network infra-structure with security intelligence from the TippingPoint RepDV Labs database. This effectively turns the entire network infrastructure into security enforcement devices providing unprecedented threat protection and visibility.

Ballarat Grammar installed the solution during a school break, and saw instant results when students and faculty returned. Immediately, thousands of threats were automatically identified and blocked by Sentinel, and the IT team was able to proactively address the network vulnerabilities.

“Sentinel takes away a lot of the manual labor that we used to do,” stated Gregory Bell, Head of Technical Services, “We now know exactly where the infections are and how many there are—we can detect threats and respond in a proactive manner. That saves us hours of work every week.”

By protecting Ballarat Grammar from threats, Sentinel improves productivity and enables students and faculty to securely bring their own device to fully experience the benefits of rich media in the classroom.

Bell further described another unique feature, “We use Sentinel to help us with challenges around sites like Facebook, which are a distraction during class. With the DNS Blacklist feature, we restrict access to websites like that, which encourages the staff and students to engage more with one another during class.”

At a time when many companies are hesitating to deploy SDN applications—simply because they don’t understand the benefits—Ballarat Grammar is ahead of the pack in embracing the new technology. As a result, they are seeing remarkable results with a more secure and reliable network, and increased productivity among staff and students.

“It’s hard for us to measure the return on investment that we’ve had with Sentinel,” Bell concluded, “but there’s no doubt that it gives us the power to help staff and students be more productive in the classroom, and at the end of the day that’s what we’re all about.”

Key Benefits

- Increases student and faculty productivity
- Enables secure BYOD connectivity
- Provides real-time protection from over one million threats
- Allows proactive IT management of threats
- Decreases time IT spends on security problems—from days or weeks to hours
- Enhances network security—thousands of threats easily detected and blocked

For More Information

To read more about HP Software Defined Networking, go to **hp.com/sdn**

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