“Consolidating multiple security technologies onto a single Fortinet platform conserves district funding for other services in support of student learning.”

– Steve Bratt
Technology Operations Manager
Vancouver Public Schools

Vancouver Public Schools district enhances IT security with TierPoint and Fortinet

Situation
Vancouver Public Schools (VPS) is Washington State’s seventh largest school district, serving over 22,000 students with 3,200 teachers and staff. The growing district needed an IT solutions provider with extensive managed security experience to help update and enhance their IT security policy and procedure. They turned to TierPoint for assistance.

The IT department was tasked with updating the district’s IT Security posture that covered both school district managed devices, including a growing one-to-one initiative, and those that connected via a BYOD (Bring Your Own Device) environment. The enhanced services needed to integrate multiple layers of security as well as ease of use both on the back end and user end.

Details
Customer Name: Vancouver Public Schools
Industry: Education
Location: Vancouver, Washington

Challenges
- Adhere to federal CIPA compliance
- Provide secure access in a vast BYOD environment

Objectives
- Update security infrastructure
- Provide best in class service

Deployment
- FortiAnalyzer VM
- FortiGate-100D
- FortiGate-1000C
- FortiManager 100D
Solution
Fortinet, a leading global provider of Network Security Appliances for Carriers, Data Centers, Enterprises (Next Generation Firewall), and Distributed Enterprises (Unified Threat Management) was the foundation for these services. VPS selected the FortiGate security platform, which offers a powerful blend of ASIC accelerated performance, integrated multithreat response, and constantly updated in-depth threat intelligence.

TierPoint, Fortinet’s North America VIP Partner of the Year in 2012, was elected to service the consolidation project because of their extensive experience with providing managed services (MSSP) for over 1,100 Fortinet powered devices across North America as well as providing 24x7 support and engineering services for Fortinet customers. TierPoint’s vision and expertise provided VPS exactly what they needed as they rolled out this new system.

VPS purchased from TierPoint several FortiGate devices to update and improve their security infrastructure. The purchase included FortiGate 1000C and FortiGate 100D firewall appliances, a FortiManager 100D, a FortiAnalyzer virtual appliance, and several hundred FortiAnalyzer software licenses. These devices provide a variety of functions including user based web filtering, application control, advanced firewalling, VPN termination, and traffic shaping.

Remote filtering was provided by the FortiGate’s explicit web proxy capabilities to ensure the several thousand district-issued Apple iPads protected the students when using a non-district provided internet connection and met CIPA (Children’s Internet Protection Act) law requirements. Remote filtering of Window’s laptops was controlled by FortiClient Endpoint Protection.

VPS provides students and faculty BYOD WiFi access with Fortinet’s intelligent captive portal that ties into their existing network directory schema, providing the correct level of access and reporting for each user.

Fortinet also provides VPS the capability to use TCP fingerprinting to perform device identification so that a faculty member can access shared district resources from a protected PC, but not necessarily from an unsupported device such as a personal smart phone.

TierPoint worked closely with the VPS IT staff to design and engineer a solution that met each requirement. “We take pride in understanding our customers’ needs and then crafting a secure solution that meets and exceeds those business requirements” stated John Stoker, Senior Sales Engineer. “VPS’ needs lined up nicely with the feature set in the Fortinet product line. We were able to implement new hardware that provided more features and better security. It was a huge win for VPS and we’re glad they allowed us to show them the benefits of Fortinet and TierPoint.”

TierPoint remotely provided configuration and migration services to consolidate all routing, firewalling, and security services that were previously on four separate appliances. TierPoint certified engineers engaged with VPS IT staff to discuss security policies and practices to confirm all concerns were met. “Consolidating multiple security technologies onto a single Fortinet platform will allow us to discontinue maintenance on several other devices, conserving district funding for other services in support of student learning” said Steve Bratt, VPS Technology Operations Manager.

Once TierPoint concluded the thorough preparation work of merging multiple products and services they completed an onsite implementation of the new environment. VPS was able to eliminate aging hardware and now have a single pane of glass to implement Next Generation Firewalling. Previously, web filtering was provided by URL databases, however, VPS now has application control, user authentication, botnet protection, sandbox support for APTs, and more at their fingertips with Fortinet’s powerful FortiOS 5 operating system. Fortinet’s custom built hardware with FortiASIC technology enables VPS to be able to support their growing user base with up to 20Gbs of firewall protection.
Success
TierPoint not only achieved consolidation of all technologies, but they also engineered a fully redundant HA cluster environment to provide ultimate uptime and availability to VPS with the use of redundant and aggregated interfaces as well as FGCP, Fortinet’s high availability FortiGate clustering protocol.

VPS can now continue their expansions to support the phased expansion of one-to-one technology deployments with the peace of mind that with TierPoint and Fortinet they will be successful in their education endeavors. Support and services costs are now significantly reduced due to the integration of multiple products on a single platform. “TierPoint Engineers were able to work within our timetable to quickly and smoothly integrate the new services during our winter break” continues Steve Bratt. “Their hard work allowed us to reach our goal of having a fully tested and available service for our students when they returned, without any interruption to learning.”

VPS Superintendent Steve Webb was honored with eSchool News’ national 2014 Tech-Savvy Superintendent award for “outstanding educational technology leadership and vision.”