

Paris, IL Independent School District #95

Fortinet protects students from inappropriate Websites

Case Study

Situation

The Paris School District #95 is a special charter unit district as designated by the state of Illinois and consists of pre-kindergarten through high school students. Located in Paris, Illinois, the school district is bordered by many higher learning institutions such as Indiana State University and Eastern Illinois University. The school district consists of Mayo Middle School, Memorial Elementary School, Carolyn Wenz Elementary, Paris High School and the superintendent's office with a total enrollment of 2,300 students and 150 faculty and staff.

According to the "Paris Union School District No. 95 Tech Plan 2004", 34 percent of students declared their technology proficiency as "capable of teaching others" and only 25 percent of administrators did the same. Along with that, 22 percent of the teachers surveyed reported their students are not using technology for class work. These percentages validate the importance for the IT department to install network security to prevent students from accessing sites that violate the school district's appropriate use policy and potentially introduce liability to the district.



Educational leaders have a social, legal, and ethical responsibility to make sure that the technology being used in classrooms is provided in a safe and educational environment for students. Previously using a WatchGuard solution for firewall, antivirus and Web filtering protection, the school district quickly became disgruntled with the units because they kept experiencing outages and rebooting themselves. To help in the search for a new network security vendor, the school district turned to its trusted partner, Computer Wares.

"We have a solid foundation of working with educational institutions and realize the importance of them having top notch security with a low total cost of ownership," said Blaze Lewis, network engineer at Computer Wares. "When the district turned to us for a security solution, we knew that Fortinet was the only choice to meet their current and future needs."

Solution

As part of the technology plan, the school district received approval to replace the aging infrastructure hardware – in particular the unreliable WatchGuard network security solution.

A FortiGate-100A appliance was deployed at the high school and is providing antivirus, Web filtering, firewall and anti-spam protection for the students, faculty and staff. Fortinet's consolidated approach to network security has allowed the school district to add a spam filtering solution without having to buy an additional appliance from a different vendor.

In addition, a FortiGate-200A appliance was installed at the superintendent's office and is providing antivirus, Web filtering, firewall and anti-spam protection for the students, faculty and staff located at schools other than the district's high school. The appliances are also being used for virtual private network (VPN) connectivity so that the faculty and staff can access their email remotely and securely.

Deployment:
FortiGate-200A
FortiGate-100A
FortiGate-50B
FortiAnalyzer

Industry:
Education

To provide additional anti-spam protection, the school district has deployed a FortiGate-50B appliance behind the FortiGate-200A appliance. The extra level of protection is ensuring that no unwanted email is clogging the email inboxes of faculty and staff.

The school district was also in need of a network security reporting and analysis solution so that they could analyze network activity. The natural solution was Fortinet's FortiAnalyzer™-100B appliance. The FortiAnalyzer system is easily aggregating, analyzing and reporting on Internet usage of thousands of students, faculty and staff and monitoring and analyzing attempted network attacks. FortiAnalyzer is allowing the school district to simplify and centralize the collection and analysis of log and event data from the FortiGate appliances. It then delivers highly relevant network reports and valuable intelligence on network usage.



"We have never had so much visibility into our network and the ability to analyze and report on network usage is fantastic," said Nathan Bell, IT administration at Paris, IL independent school district #95. "Using Fortinet's FortiAnalyzer, we can tell exactly which student is trying to view sites such as MySpace and play online games – sites that we prohibit access from our campuses."

Success

Since the implementation of the Fortinet solutions, Paris, IL School District #95 has seen many benefits. At the top of the list is a secure distributed network throughout the school district. Now no matter which school or office the student, faculty or staff is located at; they know they are protected from malicious Internet threats such as malware and vulnerability exploit attempts. In addition, network changes are easy because every Fortinet appliance shares a common graphical user interface (GUI).

Working closely with Microsoft's Active Directory, each network user is granted role-based permissions and has a specific login and password. By basing Web filtering policy from a user's Active Directory permissions, the IT staff can implement Web filtering access profiles based on student, faculty or staff status.

Students are becoming more technologically savvy and are constantly trying to find ways to proxy around the FortiGate appliances to access prohibited sites such as MySpace – while in class. Due to proxy avoidance capabilities built into the solution, the IT team can pinpoint exactly which student is trying to access prohibited Websites either by proxying to home computers or by using free services such as proxify.com. If needed, the IT staff can add sites like proxify.com to the list of non approved sites.

Another benefit is that by using FortiAnalyzer, the IT staff is able to aggregate and analyze log data from FortiGate appliances in order to provide the network administrators with the most comprehensive view of network usage and security information.

"The Fortinet appliances have been great for the school district. With the consolidated approach to network security we can have one appliance with the functionality of multiple vendors and multiple boxes - ultimately lowering our total cost of ownership," said Bell.

One key element of the "Paris Union School District No. 95 Tech Plan 2004" is the "Six Essential Learnings in a Technological Society". The fifth learning is "The student as a responsible citizen in a technological age. The student understands the ethical, cultural, environmental and societal implications of technology and telecommunications, and develops a sense of stewardship and individual responsibility regarding his/her use of technology, media and telecommunications networks." Fortinet is not only protecting network users but is allowing the school district to meet the key initiatives they have set out in their educational plan.

About Fortinet

Fortinet is the pioneer and leading provider of ASIC-accelerated unified threat management, or UTM, security systems, which are used by enterprises and service providers to increase their security while reducing total operating costs. Fortinet solutions were built from the ground up to integrate multiple levels of security protection—including firewall, antivirus, intrusion prevention, VPN, spyware prevention and anti-spam -- designed to help customers protect against network and content level threats. Leveraging a custom ASIC and unified interface, Fortinet solutions offer advanced security functionality that scales from remote office to chassis-based solutions with integrated management and reporting. Fortinet solutions have won multiple awards around the world and are the only security products that are certified in seven programs by ICSA Labs: (Firewall, Antivirus, IPSec, SSL, Network IPS, Anti-Spyware, and Anti-Spam). Fortinet is privately held and based in Sunnyvale, California.

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