Located in Grand Island, Nebraska, Grand Island Public Schools’ 1,500 staff members work with over 10,000 students, from pre-kindergarten through grade 12. The district has been a longtime proponent of the importance of technology in the classroom to enhance teaching and learning. Chromebooks are provided to each pupil in grades two to 12.

To support the dramatic growth in network bandwidth commensurate with its increasing use of web-based resources in the classroom, the district embarked on a reevaluation of its infrastructure. Cory Gearhart, Executive Director of IT at Grand Island Public Schools, commented, “A lot of things happened simultaneously. Our legacy firewall was clearly struggling with the volume of network traffic, multiple maintenance contracts were coming up for renewal, and we were growing tired of having to use a variety of point solutions from different vendors just to see what was occurring on the network.”

**STARTING ANEW**

Gearhart and his team took the opportunity to go back to first principles and to architect an infrastructure that could provide the necessary protection, scalability, and visibility the district needed. He recalled, “One of our partners recommended that we look at Fortinet and the more research we did, the more we saw how everything fit together so well: the vision around the Fortinet Security Fabric, the broad set of integrated capabilities, the endpoint management roadmap, even down to the custom Fortinet ASICs being used.”

He continued, “We engaged with the local Fortinet account team and they did a really great job of understanding our needs and demonstrating how the Fortinet solutions addressed each requirement.”

After conducting its due diligence and going through a formal bid process, the Grand Island Public Schools team decided on the proposal from Fortinet. Purchases were made through the district’s long-time IT partner, Yellow Dog Networks, headquartered in Kansas City, Missouri.

**NOT A SECOND TO WASTE**

The district’s initial investment in Fortinet solutions was launched with the deployment of two FortiGate 3000Ds, configured as a high-availability pair. “Some people don’t understand the need for redundancy in schools but we rely on technology so heavily that downtime is extremely disruptive,” explained Gearhart. “We calculated that a single day offline would cost us up to...

“One of the things that impresses me most about Fortinet is the company’s long-term vision, especially in the education space. Fortinet has a very comprehensive strategy that really aligns with our own thinking and gives us the confidence that we absolutely made the right choice of partner.”

– Cory Gearhart, Executive Director of IT, Grand Island Public Schools
CASE STUDY: SECURING THE TECHNOLOGY THAT SHAPES YOUNG MINDS AT GRAND ISLAND PUBLIC SCHOOLS

$350,000 in lost productivity, staff salaries, energy bills, etc. However, having said that, dollars are just dollars. What it really comes down to is that we need to make sure we’re able to use every possible moment to educate our children. That’s what we’re here for, and this is what we get from Fortinet.

DEEP VISIBILITY

Another attraction of the FortiGate is the ability to perform SSL lab tests. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.

Gearhart supplemented his FortiGate pair with a Fortinet FortiAnalyzer. He commented, “The FortiAnalyzer gives us many SIEM-like capabilities and enables us to perform more granular forensic analysis when we see something unusual happening on our network.”

The extensive analytics, logging, and archiving capabilities of the FortiAnalyzer facilitate simplified auditing but also deliver valuable insights into network traffic. “We’re able to see how the district’s students and staff are using the available network-based resources. We are now able to use data to make informed decisions about which applications are being utilized the most and which ones are not worthy of continued investment, reflected Gearhart. “By collecting and applying the data that we have available, we can supplement the unique needs and deliver the individualized attention that each student requires. We’re helping drive the curriculum in the right direction and are able to concentrate our resources in the right places.”

EXTENDED PROTECTION

With many students across North America now taking their computers home, providing protection outside of the school’s physical boundaries can be a major challenge. To overcome the issue, the district implemented FortiClient for Chromebooks to provide extended CIPA compliance and unified endpoint protection, irrespective of the device’s location. “We are helping students develop as digital citizens. Our goal is to create an environment that provides protection but also equips them with the understanding of how to make the right decisions and know what’s real and what is not.”

With a very modestly-sized IT team, managing the district’s extensive environment has the potential to be an insurmountable task if not approached correctly. Gearhart explained, “To handle the almost 13,000 endpoint and 20-plus locations, a comparable corporate IT team would be at least an order of magnitude larger than we are. To accomplish our goals, we implemented FortiClient Enterprise Management Server (EMS) to give us the ability to centrally deploy, register, manage, and monitor security across the entire infrastructure. It also enables us to remotely trigger AV scans and quarantine infected endpoints. Without it, we just couldn’t consistently provide the levels of protection that are needed.”

FortiAP access points are used to provide plug and play deployment in multiple facilities. The district has subsequently deployed multiple smaller FortiGates at some of its lower headcount locations. “The wide range of Fortinet devices is perfect for us. As an example, we have a workforce preparatory academy that took over a vacant coffee shop to give our students hands-on retail experience. The smaller, SOHO-type FortiGate was a perfect fit and meant that we didn’t have to run new fiber just for the few people who would be there,” Gearhart described. “This type of flexibility enables us to accurately size everything without wasting money by over- or under-configuring each device.”

Account support continues to be a major positive for Gearhart: “Our Fortinet team is phenomenally responsive and never hesitates to give me access to product specialists if the need arises. We found a glitch in a Chrome extension and collaborated directly with the internal subject-matter experts to get a fix in an amazingly short period of time. That’s exactly what makes me love partnering with Fortinet.”

LOOKING AHEAD

Grand Island Public Schools is a model example of the power of the Fortinet Security Fabric. The Security Fabric provides the district with a unified view and protection across each network segment, endpoint and appliance. A single console is utilized to manage the diverse range of security solutions owned by the district, irrespective of vendor or supplier.

“One of the things that impresses me most about Fortinet is the company’s long-term vision, especially in the education space,” commented Gearhart. “Fortinet has a very comprehensive strategy that really aligns with our own thinking and gives us the confidence that we absolutely made the right choice of partner.”

Copyright © 2017 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, FortiCare® and FortiGuard®, and certain other marks are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet’s General Counsel, with a purchaser that expressly warrants that the identified product will perform according to certain expressly-identified performance metrics and, in such event, only the specific performance metrics expressly identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet’s internal lab tests. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.

The FortiGate also gives us additional functionality-like web-filtering, website blacklisting, data-loss prevention and safe search enforcement – that also make big contributions to our ongoing CIPA compliance.”