CASE STUDY

Multilayered Security Solution Protects Students on Their Educational Journey

Delsea Regional School District is a public school system located in Gloucester County, New Jersey. Serving the seventh through twelfth-grade populations of Franklin and Elk townships, the district enrolls about 1,700 students a year.

Committed to helping each student strive to reach his or her full potential, Delsea Regional School District offers a forward-thinking curriculum that reflects the challenges and the fascinations of modern-day life. The district has a stated objective to equip students with the skills and desire to be lifelong learners and become valued members of society.

Cybersecurity in the Classroom

The ever-increasing integration of technology into classrooms has had an undeniably powerful impact on the world of education. However, school districts are facing the dichotomy of making access to information broadly available while simultaneously protecting students from harmful content and malevolent individuals.

Kevin Thibault, chief technology officer for the district, explains, "We really embrace technology in the classroom. We also offer a wide range of STEM classes, desktop publishing, web design, Java and C++ programming, and countless others. However, our number of connected devices was growing dramatically, and our legacy security infrastructure was struggling to keep up. It was restricting throughput and becoming increasingly unreliable. At the same time, maintenance costs were climbing at unacceptable rates."

He continues, "Technology should be an enabler to learning, not an impediment, so we launched an initiative to transform our security stack."

Fortinet as the Enabler of Digital Learning

Delsea Regional School District initially focused on the foundational layer of its architecture by researching viable firewall options that could simultaneously expand visibility and reporting capabilities across its infrastructure. "The feature set of the Fortinet FortiGate firewall really stood out in many of our key categories, and then when we took the price point into consideration, it became very compelling," recalls Thibault.

"Fortinet is clearly on top of the current trends in cybersecurity and our partnership ensures that children can learn and grow in a secure, protected environment."

– *Kevin Thibault, Chief Technology Officer, Delsea Regional School District*

Details

Customer: Delsea Regional School District

Industry: Education

Location: Gloucester County, New Jersey

Business Impact

- Multivector coverage using single pane of glass
- Visibility and control across entire infrastructure
- Streamlined CIPA compliance
- Advanced real-time threat protection facilitates proactive protection

Children's Protection Act Compliance

A FortiGate next-generation firewall (NGFW) is used for the entire district's content filtering and all ingress/egress traffic, as well as east-west flows within the environment between VLAN segments. The FortiGate NGFW is vital to ensuring that the schools adhere to requirements of the Children's Internet Protection Act (CIPA) by constantly monitoring network traffic and filtering content in real time.

"We've enabled full SSL content inspection to perform a deep packet scan of all web traffic, including encrypted data. This is really significant from a CIPA perspective," Thibault notes. "In actuality, we use most of the features of the FortiGate NGFW to give ourselves really comprehensive protection. The breadth of coverage against cyber threats, including zero-day attacks and ransomware, really gives peace of mind." The Fortinet FortiAnalyzer centralized logging and reporting solution was added to provide even deeper reporting capabilities and to help meet data privacy requirements by providing extended log-file retention.

Multivector Protection

Over the course of the initiatives to refresh its security posture, the district has subsequently added multiple Fortinet solutions: The FortiMail messaging security server is a secure email gateway that is being used to protect against volume-based and targeted cyber threats. FortiSandbox advanced threat prevention has been deployed to deliver a powerful combination of advanced detection, automated mitigation, and actionable insight to stop targeted attacks and any subsequent data loss.

"Being able to protect all of our key threat vectors using solutions from the same company is huge for us, especially as I can manage multiple platforms using the same interface," describes Thibault. "We always retain an objective mindset and execute our usual rigorous standards of due diligence as we add capabilities to our infrastructure, but we frequently see Fortinet solutions as the top candidate in our evaluations."

The addition of Fortinet FortiClient endpoint protection to secure the district's numerous endpoints addresses a critical challenge for any school: "We have a 1:1 student-to-Chromebook ratio, and FortiClient endpoint protection enables us to protect our students even when they take their devices outside of the school environment," states Thibault. "Having this level of control and visibility is added peace of mind for all."

Fortinet FortiCamera cameras, as well as numerous Fortinet transceivers and switches, have been added to further complement the district's growing suite of Fortinet solutions. The cameras are strategically placed in key positions to provide additional security for students and staff, with the ability to centrally monitor all feeds.

"For all of our purchases, Fortinet is typically up against three or four other vendors, but the price points, the performance, and the functionality are what keep us coming back," recounts Thibault.

Solutions

- FortiGate
- FortiAnalyzer
- FortiSandbox VM
- FortiClient
- FortiMail
- FortiGuard Security Services
- FortiCamera
- FortiSwitch

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Fortinet Security Fabric

The deployment of multiple Fortinet solutions provides Thibault with direct insight into the capabilities and benefits of the Fortinet Security Fabric. The Security Fabric is an architectural approach that unifies the traditionally discrete elements of a security stack to deliver integrated end-to-end protection across the entire attack surface.

"Having centralized management for the whole infrastructure is the only way my team can manage our environment. The Security Fabric gives us the ability to define a policy and then have it propagated across the whole infrastructure," describes Thibault. "We've moved away from being reactive and are now able to take a very proactive stance with our security."

He adds, "The Security Fabric also gives us great collaboration between our solutions. Files get sent to FortiSandbox from FortiClient, FortiMail, and the FortiGate NGFWs. If a threat is verified, FortiSandbox communicates to the other devices. Everything is tied together. The open API also gives me the flexibility to add non-Fortinet components into the stack, too. Having this level of collaboration between all the components is just so efficient."

United We Stand

Thibault also benefits from being part of the worldwide population of Fortinet users. He notes, "There are countless peers online that are always willing to share best-practices and give advice. There's a real sense of community. As a company, Fortinet is really good at listening to its customers and incorporating the feedback to further enhance its solutions."

Thibault concludes, "It's amazing to walk around the school and see kids engaged and interacting with technology so effortlessly. Fortinet is clearly on top of the current trends in cybersecurity, and our partnership ensures that children can learn and grow in a secure, protected environment."

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