Located on southwest Florida’s Gulf Coast, Manatee County School District works to inspire its pupils to “Learn, Dream, and Achieve.” The student body of over 47,500 children, supported by 10,500 teachers and staff, is rapidly growing; the county’s natural beauty and commerce-friendly environment have made it a favored destination for families and businesses alike. New schools—at all age levels—are being constructed to accommodate the expanding population.

The school district has been a long-standing advocate of the positive impact of technology in education. In 2006, to accelerate pervasive internet use, Manatee implemented a districtwide fiber network that provided each school and administration building with multiple 10 Gbps connections.

Growing Pains

Since that time, the number of students has grown by 10,000 and because of the spectacular expansion of web-based resources and applications, network traffic has experienced an almost exponential increase in volume.

Today, each teacher is given their own computer, and the internet is tightly integrated into the daily curriculum, including testing. There are an estimated 30,000 computers in the district, and 90% of students connect on a phone or tablet during each school day.

Steven Wright, communications and technical systems manager for the district, explains: “A primary goal of ours is to provide students and staff with a safe environment in which to learn and grow. We saw that countering the escalating number of cyber threats required a more sophisticated approach than we currently had in place; we got budget approval and drafted an RFP [request for proposal] for what was known as the E-rate Firewall RFP project.”

Memorable Moments

The highly detailed RFP solicited proposals from vendors and third parties. After a rigorous evaluation process, Wright and his team narrowed the field down to two contenders; both were invited to participate in a proof of concept (POC) conducted over a one-week period. Vincent Hoaglin, infrastructure site support supervisor for IT, recalls, “The POC was our first exposure to the Fortinet FortiGate NGFW [next-generation firewall], and our initial impressions were extremely positive.”

“The FortiGate solution enables us to eliminate multiple points of failure, simplify our infrastructure, and save money—all at the same time!”

– Steven Wright, Communications and Technical Systems Manager, Manatee County School District

Details

Customer: Manatee County School District

Industry: Education

Location: Manatee County, Florida

Partner: Maxis360

Business Impact

- Enhanced threat protection across the entire infrastructure
- Low ongoing maintenance and renewal costs
- Reduced operational costs and simplified management
- Ability to accommodate growing headcount and facilities without additional investment
Following completion of the POCs, the two frontrunners were given the opportunity to do a final presentation. “The Fortinet solution had been put forward by Florida-based IT services specialist, Maxis360,” Wright says. “The team was able to demonstrate—frequently using live data from our own systems—how the FortiGate NGFW met or exceeded every single requirement in the RFP, line by line; it was very impressive.”

Wright notes that the competitor’s presentation was memorable for different reasons: “The second vendor elected to use a Gartner Magic Quadrant to show how well their product compared to others in the same category; however, with all leading vendors clearly displayed, the graphic just served to reinforce the superiority of the FortiGate platform!”

He continues, “We put a lot of effort into defining technical requirements, but as a public school district, the number one consideration for us beyond student safety and security is financial. So, the fact that the alternative proposal was two to three times the total cost of the Maxis360/Fortinet solution over a five-year period made it a very easy decision to go with the FortiGate NGFW.”

Easy Implementation, Easy Optimization

Manatee County School District implemented two FortiGate NGFWs at its central data center, configured as a high-availability pair. “I was amazed both during and post-implementation; there were no problems, no complaints,” praises Hoaglin. “Even having to integrate with our Active Directory, we had the FortiGate NGFWs up and running within 45 minutes, without our end users even noticing.”

The ability of the FortiGate NGFW to perform web filtering makes a significant contribution to the district being able to maintain compliance with the Children’s Internet Protection Act (CIPA), a law holding schools responsible for the content their pupils access online. Five servers that were originally tasked with content filtering were replaced with a single FortiGate NGFW, and the integrated suite of reports conveniently delivers the information necessary to fulfill audit requirements. An even more impressive reduction took place with the number of devices needed to perform load balancing: “Because of the way the FortiGate NGFW is designed, we were able to go from 11 different servers down to four and get rid of two core switches,” said Wright. “The FortiGate solution enables us to eliminate multiple points of failure, simplify our infrastructure, and save money—all at the same time!”

Maximizing Resources

There have been operational benefits as well. “We’re a small team and we’ve found the FortiGate GUI to be extremely intuitive and the reports very easy to run. There’s no training or steep learning curve involved,” comments Hoaglin. “The visibility we have across the district’s entire infrastructure, from a single pane of glass, enables us to really maximize our efficiency and elevate the quality of protection that the team can provide.”

He adds, “The tangible sense of commitment we have from the Maxis360 and Fortinet partnership is amazing. The FortiGate NGFWs have more than lived up to our expectations, and I would strongly, strongly recommend the entire range to anyone in a similar situation to us.”

Wright concludes, “We’re here to educate and protect, but the dollars we spend on IT come from the same place that teachers and support staff are paid from. To have the levels of protection and performance that we get from the FortiGate NGFWs, at such a great price point, makes a huge difference to us.”