

Newport News Public Schools earns top grades in cybersecurity

Large school district disables phishing emails before teachers receive them, gains 100% protection against cybersecurity threats, improves productivity



Newport News Public Schools (NNPS) in Virginia educates 28,680 children in 42 schools ranging from early childhood through high school and employs about 4,700 people.

Industry
Education

Headquarters
Newport News, Virginia, USA

Employees
4,700 (IT staff, 93)

Results

- Proactive EDR intelligence provides 100 percent protection against threats
- Disables phishing email links before users receive them
- Decreases endpoint security administration time from 40 hours to five hours per week
- Teacher and student productivity increases

THE CHALLENGE

With classrooms increasingly depending on computers, online lesson plans and other resources going off-line can disrupt teaching. Newport News Public Schools (NNPS) was learning this the hard way as their Microsoft System Center Endpoint Protection and Windows Defender Antivirus solutions were not consistently keeping out ransomware and other threats. Supporting 42 schools at NNPS, a lean technology team faced a monthly work list of about 100 security issues. Teachers would lose their affected workstations for up to a week. Endpoint reporting also was limited, making it difficult to develop a proactive cybersecurity stance.

NNPS consulted with analyst firm Gartner to help evaluate solutions offered by Trend Micro, Symantec, Bitdefender, and other security vendors. Bitdefender GravityZone Ultra Security with Full-Disk Encryption emerged as the clear choice.

Dave Saunders, Information Security Analyst, Newport News Public Schools, says, "Bitdefender offered the best-value all-in-one solution that would address our full range of threats, from viruses to ransomware. Bitdefender's lightweight footprint was important too because our teachers' desktops and laptops are often at least a few years old. We didn't want security software bogging down their machines."

THE SOLUTION

Today, NNPS depends on GravityZone Ultra Security to protect 5,000 endpoints, such as Microsoft Windows workstations for teachers, administrative staff, and classrooms, physical Windows servers, and virtualized application servers. Applications running on NNPS endpoints protected by Bitdefender include Microsoft Office, SMART Board interactive displays, Google Chrome, and Firefox.

In addition, NNPS is rolling out Full-Disk Encryption to centrally manage encryption keys across all district workstations.

Bitdefender Professional Services provided NNPS with on-site implementation and training. After testing and quality assurance was completed, it took 120 days to roll out Bitdefender to the entire staff.

THE RESULTS

It didn't take long for GravityZone to prove its worth. Within minutes of deployment, GravityZone quarantined about 2,000 files that had been infected with ransomware, bitcoin miners, adware, spyware, and other threats. GravityZone has provided NNPS with 100 percent protection against threats since implementation one year ago.

"When phishing attacks occur, Bitdefender automatically blocks malicious URLs before the staff even open the emails," recalls Saunders. "This happens even before we're able to email warnings to the staff to not click on the URLs."

The endpoint detection response (EDR) capabilities of GravityZone Ultra has provided increased visibility and intelligence about security across the NNPS infrastructure.

Saunders explains, "As an EDR solution, GravityZone drills down to the file level and captures detailed insights for our security investigations. We use this intelligence to modify our policies to provide better security and prevent issues from occurring. If there is something suspicious, Bitdefender notifies us immediately whereas before we often didn't find out until we started getting calls from users."

Ease of use has been a major asset of GravityZone. The IT and security teams at NNPS spend five hours a week on endpoint security administration versus 40 hours before. Time spent manually scanning and re-imaging desktops has virtually disappeared. These improvements also have made teachers and students more productive.

The technology team found that encrypting devices varied across hardware differences, making it a time-consuming process. By centralizing encryption with GravityZone Full-Disk Encryption, NNPS will be able to reliably and efficiently encrypt all NNPS laptops and desktops and prevent unauthorized access to personal student and staff information stored on devices.

Saunders expects that the partnership with Bitdefender will continue to expand: "Our entire experience with Bitdefender has been positive from support to implementation to training. Everything is done right, which is what you expect from a world-class software vendor. In the future, we hope to extend GravityZone to protect student devices. We're excited to see how GravityZone continues to evolve and deliver new protection layers."

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Dave Saunders, Information Security Analyst, Newport News Public Schools

Bitdefender Footprint

- GravityZone Ultra Security
- Full-Disk Encryption

IT Environment

- Check Point Software
- Dell Technologies

Operating Systems

- Microsoft Windows