Clay County Schools District teaches cyberthreats a lesson

Provides safe online learning for 42 schools

THE CHALLENGES

In today's classroom, learning takes place online as much as it does with books. That means school systems must keep students and teachers safe online and comply with the Children's Internet Protection Act (CIPA). With thousands of user devices and a myriad of operating systems and browsers, the School District of Clay County knows this is no easy feat.

The district tried the Kaspersky solution, but virus scans slowed device performance. As a result, the information services (IS) team turned off many of the solution's security features, leaving endpoints vulnerable to cyber threats. IS tried Microsoft System Center Endpoint Protection and had a similar problem. Then it deployed Avast, which crashed 90 percent of the computers.

"We needed to find a solution that worked on all our devices and gave us good visibility with effective remediation," said Jon Skipper, Clay County's information services supervisor.

THE SOLUTION

To strengthen endpoint protection, the IS team evaluated various solutions. With its layered, next-generation security capabilities and streamlined manageability, Bitdefender proved the best choice.

Clay County Schools deployed Bitdefender GravityZone Enterprise Security, including GravityZone Security for Endpoints and GravityZone Security for Virtualized Environments. Using Bitdefender GravityZone management console, IT is rolling out GravityZone to 11,000 endpoints across 42 school campuses. Endpoints include Microsoft Windows and Apple laptops, as well as 100 physical servers and a mix of 250 Microsoft Hyper-V and VMware vSphere virtual machines (VMs).

THE RESULTS

Since adopting the GravityZone solution, Clay County Schools reports reliable, high-performance endpoint protection. For example, Bitdefender offloads resource-intensive security tasks to a security virtual appliance, which helps reduce impact on the VM's performance, increase virtualization density, and improve application response times.

GravityZone's machine-learning based engine proactively detects and prevents ransomware, which affected users in the past. In the case of WannaCry and Petya, Bitdefender provides

The School District of Clay County serves approximately 38,500 students in grades K-12 in Northeast Florida. Its mission is to work collaboratively with parents, teachers and administrators to provide students a motivating, challenging and rewarding public education.

Industry
Education

Headquarters
Green Cove Springs, Florida, U.S.A.

Employees
4,900 (IT staff, 48)

Results

- Secured devices on and off the network
- Blocked malicious batch files automatically
- Reduced trouble calls with proactive reporting
- Enabled flexible security policies based on device usage

automatic protection from zero day threats without requiring any updates. And it prevents viruses from infecting endpoints via external media such as USB drives, which also is a common problem.

In addition, more advanced features, such as GravityZone's built-in environment-aware firewall, protect devices regardless of location. This allows IS to implement one policy when a device is on its secure internal network and another when the device travels outside of school.

"With GravityZone, we now can leverage the built-in content filtering policy for take-home devices and protect our students from accessing malicious websites or inappropriate web content when they're off the network," Skipper says. "Being able to turn on firewall protection and then flip the rule set depending on where users are located really strengthens our control."

Jeremy Bunkley, information services director, Clay County Schools, adds, "Public education is evolving so that classroom learning can occur anywhere in the world. We're tasked with protecting students and teachers no matter where they are located, and GravityZone enables us to do that."

GravityZone's malware detection capability also provides increased endpoint visibility and allows IS to identify and block rogue applications on devices before they inflict any damage. In a previous incident, students created batch files that consumed massive server resources and crashed the network. It cost the district $10,000 in staffing and computer costs to recover.

"The instant a student tries to save a batch file, GravityZone quarantines it before it has a chance to execute," Skipper says. "It has already proactively blocked two attempted attacks like that, which saved us time and money."

Real-time reporting also lets the team get ahead of problems, reducing security-related help desk calls dramatically.

"With Avast and Kaspersky, you had to wait for people to start reporting issues and then figure out the problem. Now, we can go into the machines and spot suspicious activities and prevent damage before users are affected," Bunkley says.

Skipper concludes, "When teachers don't have to think about what phishing sites are because GravityZone automatically blocks them, that's what I consider success."

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— Jeremy Bunkley, Information Services Director, School District of Clay County

Bitdefender Footprint
- GravityZone Enterprise Security
- GravityZone On-Premises Management Console

IT Environment
- Microsoft Hyper-V
- VMware vSphere

Operating Systems
- Apple (Mac)
- Linux
- Microsoft Windows

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