K-12 SCHOOL DISTRICT GAINS FULL VISIBILITY INTO CONNECTED DEVICES

Armis lays the groundwork for a consistent and effective security foundation

This fast-growing K-12 public school district in Cleveland, Texas, had virtually no security in place, other than a patchwork of disparate products. At the suggestion of a trusted technology partner, Cleveland Independent School District deployed Armis to gain visibility to all devices on the network. By deploying Armis, the school district had the crucial data they needed at their fingertips, which enabled them to move forward with a well-thought-out security strategy.
Cleveland Independent School District in Cleveland, Texas has recently experienced explosive growth—and this expansion is not showing any signs of letting up. When Director of IT Nguyen Bui joined the district two years ago, the district had 6,700 students. The student population is now 11,000 students across seven schools, and plans are in place to open four more schools this year.

Bui quickly discovered that the district lacked a cohesive infrastructure and a consistent approach to security in its environment. There was a collection of piecemeal solutions from multiple vendors across the campuses that didn’t necessarily work together or provide any visibility into managed and unmanaged devices on the network.

As Bui points out, “At the time, there was no way to assess the total security of the district. Some campuses were more secure than others. What my team and I set out to do is to get a picture of what we were trying to protect and where the weak points were.”

First Step: Identify Assets and Devices on the Network

Bui had a vision to transform the district’s IT environment and make it more robust—and knew he had a big job ahead of him. He took the first critical step, which was to understand what the environment and infrastructure had and did not have. He enlisted the help of consultants to capture data on the district’s security posture. They provided moment-in-time snapshots, which were helpful initially, but, since the district was growing so swiftly, the information soon became inaccurate and dated.

Bui then reached out to trusted partner GTS Technology Solutions, which offers custom IT solutions, services, and staffing to government, education, and private sector organizations. In 2019, GTS Technology Solutions was among CRN’s list of the top 500 solution providers.

Armis Surfaces Valuable Device Data Fast

The partner introduced Bui and his team to Armis. GTS Technology Solutions invited them to a field event so that they could get to know Armis, view a live demo, and discuss the district’s challenges. Bui learned how Armis provides a real-time, comprehensive view into all connected assets across the district—laptops, computers, tablets, smartphones, and even Internet of Things (IoT) devices. Additionally, because the district has a bring-your-own-device (BYOD) policy, Bui understood how critical

**Challenges**

- Lacked comprehensive visibility into devices connecting to the internal network
- Had no way of deriving detailed, accurate, and up-to-date information on devices, including their vulnerabilities and security posture
- No reliable data to help the board and superintendent make informed decisions on security budget allocations
it was to ensure that these potentially risky devices did not tap into the district’s private network.

Bui agreed to a proof-of-value (PoV) so he could see the solution in action and evaluate it thoroughly in his own environment. The value of Armis was apparent to him almost immediately. When the superintendent inquired about how many devices were in the environment, he was able to break down the number of district-owned devices and guest devices and provide up-to-date reports on a weekly or monthly basis.

“GTS gave us the solution we were looking for at the right time and with the right price point. “Through my many years of experience in the education sector, I’ve learned that it’s important to have the right partner,” asserts Bui. “GTS presented us with exactly what we were looking for—Armis.”

**Better Visibility Paves the Way to Stronger Security**

Bui soon realized that it was important to look at the district’s total network health and how he and his team could secure their devices. After presenting these detailed data points to the board and district, he was able to build a case for investing in foundational security.

“The biggest thing for us is not stability as much as security. All it takes is one device without the proper controls or one person without sufficient security awareness to affect the whole network,” affirms Bui. “While the best preventative is an educated user base, Armis is the perfect complement.

In the past, it would take Bui and his team weeks to drill down in switches and firewalls to find a vulnerable or compromised device. Thanks to Armis, it only takes a few hours or even minutes to pinpoint these assets and trigger faster detection and response. As he points out, “The value we get from Armis is humongous because we are constantly getting the updated data we need.”

“Armis continues to surprise us. We don’t realize what it provides for us until we need it. The value of Armis is growing exponentially weekly and monthly,” notes Bui.

He’s also well aware that other systems have some useful features, but it’s just a small subset of what Armis does. Plus, he has found that the data generated from competing vendors is always vague. Armis,

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**Armis Results**

- Provides total visibility to managed devices and unmanaged BYOD across the entire environment
- Monitors and classifies devices in real time for fast, granular reporting
- Speeds time to identify improperly secured and rogue assets for faster detection and response
- Creates minimal network impact while collecting data
- Helps justify security investments based on hard data
- Reduces the number of security tools needed, saving time and costs
- Integrates with existing tool set for remediation, automation, and orchestration tools
- Triggers faster and more accurate incident response through real-time behavioral analysis
- Deploys quickly and easily
however, is purpose-built for continual visibility and fast, accurate reporting. With Armis, Bui and his team can look at any device and drill down into the operating system level to uncover threats or suspicious behavior—with zero impact on the network. This valuable information helps IT best determine how to restructure the district’s network. He also emphasizes how easy-to-use and intuitive the solution is.

**Armis Helps Streamline Security Operations and Save Costs**

According to Bui, the district currently has five access IDs. Bui’s goal is to narrow that down to one access ID—and Armis makes that possible. Soon, he and his team will be able to gather enough information from Armis to channel devices either to the district’s private network or a secure guest network. Armis can pull media access control (MAC) addresses, enabling the team to easily segregate what belongs to the district and what belongs externally. This will help eliminate excess IDs.

Armis has also simplified IT operations. When Bui joined the district, there were multiple tools, but, with Armis in place, he’s been able to eliminate superfluous solutions and keep only the ones that are absolutely necessary. In addition, he has also saved on staffing and training costs. Rather than hiring professionals to juggle multiple, diverse products with separate management consoles, his team is focused primarily on Armis.

**Up and Running in No Time**

Deploying Armis was fast and easy. As soon as Bui expressed interest in the solution, it was shipped to the district, and Armis was ready to help with installation: “Armis was right there for us. And, when issues cropped up, they resolved them quickly. For example, there was a rogue student device that Armis identified quickly by locating the MAC address. Once we received that information, we blacklisted the device.”

**Looking to the Future**

Bui intends to leverage Armis more fully. Plans are already underway to take advantage of integrations, and he will soon hire a professional who will be solely dedicated to that task.

He is also looking at how Armis can help him shape policy. “The most valuable feature is real-time statistics of devices online, especially on first appearance, and the ability to project potentially threats on the network. This is absolutely critical. We have a lot of Android devices that run outdated OS, such as 7.0, and these are a major security risk. I may just have to create a network policy to block Android devices with an OS lower than 10.0,” he explains.

For Bui, his team, and the district overall, deploying Armis has really paid off. “We’re making million-dollar decisions based on the data that Armis provides us. In the long run, that translates to significant savings because it prevents costly mistakes in the decision-making process. The confidence level that Armis gives our stakeholders and our administrators is invaluable,” affirms Bui.

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Nguyen Bui
Director of IT
Cleveland Independent School District
About Armis

Armis is the leading unified asset visibility and security platform designed to address the new threat landscape that connected devices create. Fortune 1000 companies trust our real-time and continuous protection to see with full context all managed, unmanaged, and IoT devices, including medical devices (IoMT), operational technology (OT) and industrial control systems (ICS). Armis provides passive and unparalleled cybersecurity asset management, risk management, and automated enforcement. Armis is a privately held company and headquartered in Palo Alto, California.

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