CASE STUDY

Alabama school district solves security with Barracuda.

Tuscaloosa County School System cites reliable products, excellent support as reasons for longstanding partnership.

Tuscaloosa County School System

- 36 schools
- More than 19,000 students
- 2,400 faculty and staff

Challenges

- Needed to maintain CIPA compliance with advanced web filtering
- Wanted to upgrade from VPN to zero trust for remote access
- Needed state-of-the-art email security for Microsoft 365
- Needed a multiple-redundant backup system to adhere to state funding guidance
- Required a distributed, centrally managed network of firewalls
- Needed to ensure security for web applications

Solutions

Barracuda **Email Protection**™

Barracuda **Backup**™

Barracuda **SecureEdge**™

Barracuda **CloudGen Firewall**™

Barracuda **CloudGen Access**™

Barracuda **Application Protection**™

Benefits

- Effective, reliable email security for Microsoft 365
- Simplified compliance with CIPA requirements
- Ability to respond to incidents system-wide from central management console
- Reliable, redundant backup system that conforms to industry best practices

When Brad Jessen was promoted to Tuscaloosa County School System's (TCSS) Director of Information Technology in 2023, he became responsible for, among other things, cybersecurity for a network distributed across 38 locations. The users he was bound to protect against cybercrime and abuse included more than 19,000 K-12 students. As Brad puts it, "a lot of these young people are very technically savvy, while also being very naïve about cyber threats and vulnerability. That can make it a challenge to enforce CIPA requirements effectively."

A strong security baseline

Fortunately, TCSS had already implemented a well-thought-out security infrastructure built around several Barracuda products and solutions.

Network security

"My predecessor had a clear vision for the network," says Brad. "One thing that was important to him was for every location to be protected by an onsite firewall, while ensuring that network admins could manage all those firewalls remotely. Security issues are time-sensitive in nature and centralized management was — and still is — a critical requirement because of the large geographical area that we cover."

Barracuda CloudGen Firewall appliances were chosen to ensure secure, optimized traffic for each location, with a centrally placed Barracuda Firewall Control Center to provide single-pane-of-glass visibility and management across the distributed network.

Advanced access control

"The built-in VPN feature of the Barracuda CloudGen Firewalls was effective at enforcing our remote access The TINA VPN protocol that was built into Barracuda CloudGen Firewall was very effective at enforcing access control policies," Brad says. "But with the high volume of attacks targeting remote access after COVID, we wanted to move to something even more secure. We signed up for Barracuda CloudGen Access, in order to get the security benefits of zero-trust access controls."

Powerful web security

A key technology for protecting students and enforcing CIPA regulations is strong web content filtering and traffic monitoring. Brad and his team recently deployed Barracuda SecureEdge — a full-featured Secure Access Service Edge (SASE) solution — to deliver web security.

"Barracuda SecureEdge is an important upgrade for us," says Brad. "The convenience of being able to manage it remotely from anywhere is a big plus. It lets us fully protect students against inappropriate or malicious web content. And it has a lot of other capabilities that we're eager to implement over time."

Evolving email security

One of the first Barracuda products acquired by TCSS was a Barracuda Email Security Gateway appliance, deployed onsite to filter traffic to and from their on-prem Exchange server. "We migrated our email to Microsoft 365 pretty early on," says Brad. "And at that time we also got the cloud-based email security of Barracuda Email Protection."

> "We are very happy with Incident Response. When a malicious email does get into users' inboxes, we can find and delete every instance with just a few clicks. That dramatically cuts down on the time users have to click on or respond to something that they shouldn't — we're literally resolving these incidents in mere minutes."
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> **Brad Jessen, Director of Information Technology**
> Tuscaloosa County School System

He continues: "Over time we've implemented more capabilities, including Phishing and Impersonation Protection, which does a great job of stopping a large number of attacks automatically. That makes us more secure, and it saves us the time we'd have to spend remediating attacks. And we are very happy with Incident Response. When a malicious email does get into users' inboxes, we can find and delete every instance with just a few clicks. That dramatically cuts down on the time users have to click on or respond to something that they shouldn't — we're literally resolving these incidents in mere minutes."

Data protection and compliance

Brad's predecessor had installed two Barracuda Backup appliances to protect TCSS's data stored in their on-prem servers. "Having the two mirrored backup appliances gave us basic redundancy and protection against one of them failing," says Brad. "But they were both in the same building, meaning a bad fire or other disaster could cause complete data loss. What's more, the state of Alabama, to qualify for certain kinds of funding, requires a '321' backup strategy. That is, you have to have three copies of your backup files, stored in two different types of media, with one kept offsite."

> "I can't say enough about Barracuda support and sales personnel. Unlike so many other vendors, they are always one hundred percent focused on figuring out the best solution for whatever issue we're having. That goes for any kind of technical issue — they actively educate us, and they get creative about finding solutions to fit our specific needs."

Brad Jessen, Director of Information Technology
Tuscaloosa County School System

Learn more:

Barracuda Email Protection™

For organizations that want to protect their businesses, brands, and people against the most advanced email-borne threats, Barracuda Email Protection is a comprehensive, easy-to-use solution that delivers gateway defense, API-based impersonation and phishing protection, incident response, data protection, and compliance capabilities.

"We consulted with Barracuda and moved one appliance to an offsite location with replication to the Barracuda Cloud. This brings us in alignment with cybersecurity standards and makes us resilient against data loss."

Application-layer protection

"The Barracuda WAF appliance has been a reliable component of our security environment for years," Brad continues. "I was hyper-alert to risks like SQL injection and buffer overflows on our internal websites, and at first I didn't really understand what the WAF's capabilities were. However, the support technicians at Barracuda were incredibly helpful in talking me through everything. They helped me gain a complete understanding of how to configure it to detect and block different kinds of attacks. Ultimately that gave me a lot more peace of mind, which is literally my favorite thing about Barracuda WAF."

Learn more:

Barracuda Backup

Barracuda Backup offers complete, flexible backup for your on-premises and virtual data, including Hyper-V, VMware, Windows Server, Linux, Exchange, SQL, and MacOS.

Barracuda SecureEdge

Barracuda SecureEdge secures your users, sites and things with an easy-to-deploy cloud-first platform that connects any device, application, and cloud/hybrid environment.

Barracuda CloudGen Firewall

Barracuda CloudGen Firewall provides a comprehensive set of next-generation firewall technologies to ensure real-time network protection against a broad range of network threats, vulnerabilities, and exploits, including SQL injections, cross-site scripting, denial of service attacks, trojans, viruses, worms, spyware, and many more.

Exceptional support and ongoing partnership

"I can't say enough about Barracuda support and sales personnel," Brad concludes. "Unlike so many other vendors, they are always one hundred percent focused on figuring out the best solution for whatever issue we're having. That goes for any kind of technical issue — they actively educate us, and they get creative about finding solutions to fit our specific needs."

"That support also goes for non-technical things, like pricing and billing. For a school district, budgeting and spending is very constrained, and where other vendors might say 'well, that's our billing structure, sorry,' Barracuda folks do everything possible to accommodate our situation and make sure we can get the security we need. I guess I'd sum it up by saying that whatever problem we have, they don't hesitate to fully take it on as their own problem. That attitude is a huge part of why Barracuda has been our security partner for so long, and why we'll continue to work with them in the future."

Learn more:

Barracuda CloudGen Access™

Barracuda CloudGen Access is an innovative ZTNA solution that provides secure access to applications and workloads from any device and location. CloudGen Access continuously verifies that only the right person, with the right device, and the right permissions can access company data or apps, or any infrastructure.

Barracuda Application Protection™

Barracuda Application Protection is a full-featured, cloud-delivered application security service — that includes web application, API, botnet protection and comprehensive protection against DDoS attacks that also ensures continuous application availability. Barracuda Application Protection can be deployed, configured, and commissioned in minutes. It provides out-of-the-box protection with the default security policies, and the intuitive interface makes it easy to set up custom policies.

About Barracuda

At Barracuda we strive to make the world a safer place.
We believe every business deserves access to cloud-first,
enterprise-grade security solutions that are easy to buy, deploy,
and use. We protect email, networks, data, and applications with
innovative solutions that grow and adapt with our customers'
journey. More than 200,000 organizations worldwide trust
Barracuda to protect them — in ways they may not even know
they are at risk — so they can focus on taking their business to
the next level. For more information, visit barracuda.com.