Balancing Security and Innovation at Boston Public Schools

See how Boston Public Schools uses the iboss cloud to provide secure Internet access to their students and staff

About Boston Public Schools

Boston is a city of "firsts," balancing a perception as one of the most historically rich cities in the nation with a reputation of always being on the cutting edge of innovation. Part of what's made Boston's innovation economy so successful has been a long and dedicated investment into education at all learning levels. Boston Latin, the system's flagship high school, is the first public school in the country and continues to be ranked among the nation's best.

125
Schools

54,000+
Students

139
Countries of Origin

The Challenge

More than 54,000 students across 125 schools

Educators at Boston Public Schools (BPS) teach more than 54,000 students across 125 schools. This includes 74 percent of the school-age children who live in Boston. Nearly one in every two students speaks a language other than English at home, and BPS students hail from 139 different countries. Any investments in educational technology must reflect the challenge of delivering multi-lingual programs and strategies.

Financing these initiatives is challenging. Not only do one in five students have a disability that must be accommodated, but half of all BPS students are considered to be economically disadvantaged. Like most educational networks, a portion of federal funding is contingent on remaining in compliance with the Children's Internet Protection Act (CIPA). Maintaining this financial assistance is critical to ensure that students with the greatest needs aren't receiving a subpar learning experience.

BPS manages a variety of computing devices, including iPads, Chromebooks, and Macbooks. This requires a solution that is able to consistently enforce CIPA while providing support for a wide array of operating systems and technologies. Rather than limit students' exposure to different operating systems and programs, BPS sought a solution that can cover a wealth of computing technologies.

The Solution

Increasing visibility and providing secure Internet access

By teaming up with iboss, BPS provided secure Internet access for their diverse range of devices. With SSL decryption, they increased visibility into their network traffic and enhanced their filtering options. This provides teachers and staff with more granular control over which websites and services their students can access. They also added access controls for devices and operating systems, such as the ability to ensure that an outdated operating system doesn't gain access to the network and create a vulnerability.

BPS deployed custom block pages and created policy groups to limit the exposure of sensitive web content to only a select few users. And if students attempt to take part in illegal activities, such as purchasing credit card numbers off illegal websites by usurping firewalls, the iboss Data Loss Prevention & Protection capabilities remain a step ahead.

The Results

Keeping students focused and safe

Leading the mission to provide the technology foundation, vision, and support for Boston Public Schools is Mark Racine, the Chief Information Officer for the office of Instructional and Information Technology. The iboss cloud gives Mr. Racine and his IT team at Boston Public Schools the tools they need to meet compliance and affordably support a wide range of devices across their expansive network of schools. BPS network administrators are able to provide secure Internet access to their devices, with consistent security policies, whether onsite or offsite.

There is a tremendous demand for IT services at Boston Public Schools, and we're now able to prioritize the growing demand for online security and accessibility thanks to the unique strategies that we have implemented as a result of the iboss partnership.

Mark Racine

Chief Information Officer | Boston Public Schools Board Member, K-12

National Advisory Council on Cybersecurity

Tech-savvy students are no longer able to easily circumvent network filters, while network administrators continually evolve their security practices. The ability to respond to incidents and potential misbehavior on a rolling basis is invaluable, allowing for IT to focus on expanding the school system's capabilities with minimal distraction.

As a school district known for innovation, iboss was the only choice for Boston Public Schools. Not only does the iboss cloud solve their existing challenges, but the granular reporting makes it easy to comply with CIPA and preserve federal funding — ensuring a bright future for young minds throughout the city of Boston.

Watch the Video

Highlights

Here are some of the key areas where the iboss platform demonstrated strengths that aligned well with Boston Public Schools' business requirements:

Secure Internet access for all popular platforms from any location

When a user takes their iPad, Chromebook, Macbook, or Windows laptop, onsite or offsite, the cloud connector stays connected to the iboss cloud continuously. The user experiences uninterrupted Internet access and consistent security policies, across devices and from any location.

Detailed and granular reporting with alerts for high-risk activity

The iboss cloud includes detailed event logs for auditing and reporting as well as real-time dashboards that help you quickly identify high-risk network activity. Choose from several, pre-designed layouts or manually drill-down into the details with flexible and granular filtering controls.

Complex policy definitions with inheritance and layers

iboss has an enterprise-class policy system that allows you to quickly apply the same set of base rules to multiple child policies. More specific rules or policy layers can then be added, allowing you to tailor the same base rules to different networks and groups. These time-saving capabilities are essential to large enterprises, where manually applying the same rules to a large number of policies would require an unacceptable amount of redundant work.

SSL decryption that adds visibility into HTTPS traffic

With the included support for SSL decryption, you can selectively inspect encrypted HTTPS traffic. SSL decryption gives you more visibility into your traffic and enhances your filtering options. This enables you to block websites or applications that are causing distraction or are placing your organization at risk.

Comprehensive malware protection

Instead of relying on only one anti-virus vendor to provide malware protection, iboss uses an optimized combination of malware engines and threat feeds from industry-leading vendors and research labs. Multi-engine approaches offer more-thorough protection because each malware engine uses a different methodology. One engine often detects what another one misses.

About iboss

iboss is a cloud security company that provides organizations and their employees secure access to the Internet on any device, from any location, in the cloud. This eliminates the need for traditional security appliances which are ineffective at protecting a cloud-first and mobile world. Leveraging a purpose-built cloud architecture, iboss is designed to make transitioning from security appliances to cloud security a seamless process. iboss is trusted by more than 4000 organizations worldwide, spans over 100 points of presence globally and is backed by over 110 patents.

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