THE CHALLENGE

The amount of inappropriate content traversing across school networks is atrocious and is consuming a large amount of the bandwidth. This Wi-Fi traffic includes all types of inappropriate content along with students attempting to access restricted URLs and high bandwidth consumers such as YouTube videos. Every educational institute, regardless of size, must have a portal to the Internet and every user of the network needs access to external Internet URLs, but not every user should be able to access undesirable content.

The IT organization within the school needs to control access to the Internet differently from the corporate IT department. They need to ensure that every user is authorized to be on the network, confirm that IT has an up to date user profile and guarantee that the user can access content on the Internet in a safe, effective manner and in line with regulations and district policies.

A recent Web movement to HTTPS by major players such as Google and Facebook has made this difficult. Many deployed Web filter installations that have been rendered ineffective due to their inability to view HTTPS. To maintain the effectiveness, network admins require Web content filters supporting HTTPS inspections. School IT organizations are looking to identify mobile users BYOD without using security prone passwords. Finally, today’s students are also well versed in hacking the network security applications and school IT organizations require smart tools to real time detect and stop security breaches.

THE SOLUTION

Cloudpath integrated with Lightspeed Systems

Ruckus Wireless and Lightspeed Systems have partnered to on-board users without cumbersome passwords and are able to filter their access to Internet information. Ruckus and Lightspeed Systems have integrated critical user identity and Lightspeed Systems filters each end users traffic based on their education specific profiles. Cloudpath assumes the AAA and PKI function and can provide user identity information like username, IP address, MAC address etc. to Lightspeed Systems. Lightspeed Systems Web Filter provides the controls, reports, and customizability needed to keep web use appropriate and CIPA compliant.

With the integration of Cloudpath and Lightspeed Systems, network administrators benefit from enhanced content filter by the capability to inspect https traffic. All major search engine have adopted SSL encryption. Lightspeed Systems can selectively decrypt and filter SSL traffic based on user profiles. With the integration between the two systems, Cloudpath can provide the necessary elements needed to decrypt SSL traffic and enforce a proxy on the client side to make sure all client traffic hits Lightspeed Systems for inspection, thus enabling granular monitoring especially in deployments like primary education where student data privacy and safety is of utmost concern.

Lightspeed System Web Filter supports https inspection and features the most powerful controls for filtering SSL traffic making Wi-Fi access seamless and secure, while removing the sign-on page from the web filter. Lightspeed Systems filters and monitors across all ports and is able to detect and block attempts by users to bypass security using anonymous proxy servers and peer-to-peer networking. Web Filter
actively protects against all system threats, unwanted events, monitors and reports suspicious search behavior. Policies can be individually and collectively controlled and delegated by specific times of the day and days of the week. Granular controls over filtering, including the ability to apply different levels of access. Web Filter’s fully customizable application controls allow you to easily assign and monitor all applications.

Cloudpath Security and Management Platform

Cloudpath Enrollment System (ES) software is a security and policy management platform that enables any IT organization to protect the network by easily and definitively securing users and their wired and wireless devices—while freeing those users and IT itself from the tyranny of passwords. Available cloud-managed or as a virtual instance and priced per user, Cloudpath software lets IT do with one system what usually requires many, while easily and automatically integrating with existing access and network security infrastructure. Cloudpath software consolidates and simplifies the deployment of multiple services that are typically disparate and complex to manage: Certificate Management, Policy Management and Device Enablement.

Lightspeed Systems Web Filter

Lightspeed Systems has been building smart solutions for school networks — helping IT keep their networks and their devices safe and easily managed. With Web Filter, IT can create and enforce filtering policies across entire districts (with different policies for schools, user types, days of the week, and more). In addition, teachers have access to Web Zones to temporarily expand or restrict access for an instruction period — without having to open an IT help ticket. To ensure safety, IT gets to control who can use Web Zones and which categories/sites can be temporarily opened as well as report on Web Zones use. (Adult and security-risk websites are always blocked.)