



State of Delaware Relies on Blue Coat Proxy Appliances as Foundation for Web Security

Proxy-Based Network Architecture Enables Spyware Prevention, Web Anti-Virus and Web Filtering While Improving Web Performance

The adoption of the web browser as the medium for application access and Internet communication has completely permeated the desktop environment. More than ever, companies are implementing browser-based applications as solutions for nearly every aspect of their business operations. With the same intensity, employees have adopted the use of the browser as the means to obtain and communicate information over the Internet.

While the web browser has become the universal client for mission-critical business communications and information, it has also led to growing risks for the enterprise. Organizations are now facing increased help desk calls due to spyware-infected PCs, legal liabilities associated with inappropriate web surfing and content, and opened backdoors for viruses with instant messaging (IM) and personal web-based email. When every user on the network has Internet access, every user also has the means to negatively affect the business, intentionally or not.

The State of Delaware Department of Technology and Information (DTI) ensures that Internet resources satisfy the needs of each agency and user across the State, while simultaneously securing web communications. The State of Delaware DTI thwarted web-based risks by deploying Blue Coat proxy appliances as the foundation of the state's web security infrastructure. The DTI deployed the Blue Coat ProxySG™ and ProxyAV™ appliances centrally in the state's network infrastructure to maintain web security and availability for more than 114,000 education users and 35,000 state users. The proxy appliances are situated at the state's 200 Mbps Internet gateway and provide comprehensive visibility and control over all web communications.

“The ProxySG and ProxyAV appliances from Blue Coat serve as a central platform for enabling spyware prevention, Web virus scanning and Web filtering across our statewide network. We are very pleased with the effectiveness of Blue Coat's products in preventing viruses from attacking our network and actually making our network perform faster.”

*--Thomas Jarrett, CIO
State of Delaware Department of Technology and Information.*

Proxy for Spyware Prevention

Spyware was severely impacting any computer use on the Delaware network. The performance of computers and the network was slowed, and some computers had so many infections that the machines became nearly inoperable. Keeping spyware off the network seemed like an impossible task for the Delaware DTI. Spyware leverages multiple vectors to infiltrate the network, and this left the Delaware IT team feeling like the only option was to choose among numerous “reactive” tools, such as 1) pure-play anti-spyware software, which requires manual installations and only addresses spyware after it infects the network; 2) desktop anti-virus scanners that only focus on high-frequency attacks and only detect a subset of known spyware signatures, and 3) URL filtering, which only blocks known spyware web sites.

Delaware solved their spyware problem with Blue Coat's preventive gateway anti-spyware solution, which combines high-performance Blue Coat ProxySG and ProxyAV appliances. The integrated, proxy-based solution stops “drive-by” installations, controls communications with known spyware web sites, and scans web content for spyware downloads – all while enabling legitimate and necessary web applications to install and function. As a proxy between users and the Internet, Blue Coat enables the State

State of Delaware



Organization

State of Delaware
Dover, DE
www.delaware.gov

Challenge

The State of Delaware needed a comprehensive web security solution to keep spyware and viruses from entering the state's networks, prevent users from accessing inappropriate web content, and maintain a 200 Mbps connection to the Internet.

Solution

Blue Coat Web Filter on ProxySG and integrated with ProxyAV — all centrally situated in the state's network infrastructure to maintain web security, performance, and availability for all education and state users.

of Delaware to apply spyware policy controls that inspect, filter, and block web content associated with spyware installation software.

Proxy for Deployable Web Anti-Virus

Just as web use opened the door for spyware infections, it also opened up back doors that allowed numerous viruses to infiltrate the Delaware network. The state had fallen victim to virus infections through these open back doors because, unlike the multiple layers of virus protection they had installed for email traffic, Delaware depended solely on desktop anti-virus software to defend against viruses over web-based traffic. This single layer of defense proved ineffective, as not all desktop systems could be updated during an outbreak, and certain Trojans would disable the desktop anti-virus software before an update could be distributed.

“Viruses were entering our network through web traffic, and we had no way of knowing about or stopping it,” said Glenn Wright, senior telecommunications technologist for the State of Delaware Department of Technology and Information. “Web traffic from web email use, instant messaging communications, and file downloads via the web browser was allowing virus threats to bypass all of our existing anti-virus security.”

The Delaware DTI thwarted web-based virus infections with the Blue Coat ProxyAV appliances. The ProxyAV works in concert with Blue Coat's ProxySG platform, which quickly and intelligently processes web objects and determines which should be scanned for viruses. Suspect web objects are then sent to the ProxyAV appliance, where they are quickly scanned for viruses. If deemed clean by the scanning engine, a signal is sent back to the ProxySG indicating that delivery of the object may proceed to the end-user, and cached for a “scan once, serve many” benefit. This integrated solution provided the State of Delaware with scalable, high-performance web anti-virus protection that met the “real-time” requirements of their 200 Mbps connection to the Internet. By providing web traffic throughput of up to 249 Mbps with only 4 milliseconds average latency, the ProxyAV solution easily handled the web traffic virus scanning loads created by the more than 100,000 users on the network.

“As an organization, if we do nothing to protect our web channels, then we have failed if we get attacked by viruses over web traffic,” said Wright. “Those who implement protection for this now are the ones who will be protected in the end.”

Proxy for 10x Web Filtering Performance Increase

Although the Internet had become a business-critical communications tool for the State of Delaware, it introduced several key challenges for the Delaware DTI, including productivity losses caused by misuse of the Internet during business hours, as well as liability risks due to users accessing pornography and other offensive websites from work or school computers.

To prevent its users from accessing inappropriate web content, Delaware leverages Blue Coat Web Filter on ProxySG to set and enforce web access policies across the state – including keeping pornographic material off of school computers. By deploying URL filtering from Blue Coat “on-proxy,” Delaware has realized a 10-times web filtering performance increase. The state also benefits from a comprehensive database of more than 8.0 million URLs and the industry's only URL filtering database with two separate URL filtering categories for spyware – one for applying policy controls to known spyware sources and one for applying policy controls to known destinations where spyware attempts to “phone home.”

On average, an extremely high 93% of all requested sites at the State of Delaware are already categorized by Blue Coat Web Filter. And very few of these classifications are disputed by the state's Internet users. This is thanks, in large part, to the relevance and accuracy of the Blue Coat Web Filter database.

The Result

After installing the Blue Coat products, the State of Delaware Department of Technology and Information was able to prevent spyware, choke off the threat of viruses entering the network through open back door web channels, and achieve increased visibility and control over web use on the network. The proxy appliances and Blue Coat Web Filter installed seamlessly into the state's network, and web controls were activated without users noticing.

“Blue Coat proxy appliances are an important element of our web security infrastructure,” said Thomas Jarrett, CIO for the State of Delaware Department of Technology and Information. “The ProxySG and ProxyAV appliances from Blue Coat serve as a central platform for enabling spyware prevention, web virus scanning and web filtering across our statewide network. We are very pleased with the effectiveness of Blue Coat's products in preventing viruses from attacking our network and actually making our network perform faster.”

About the State of Delaware DTI

The State of Delaware Department of Technology and Information (DTI) was created to ensure that the state's information technology resources are focused on areas core to the state's mission, while maintaining network security and availability for its more than 114,000 education users and 35,000 state users. The State's DTI only deploys IT functions provided by world-class technology providers, and only partners with IT vendors who understand the latest technologies and keep up with rapid changes in information technology. The DTI provides important services to agencies throughout the state to help them achieve their goals, which includes maintaining the 200 Mbps connection to the Internet.