

Networkmaine switches to OpenDNS Professional to meet CIPA Requirements

Securing the Internet for the State of Maine's K-12 Schools and Libraries



Networkmaine, a unit of the University of Maine System, operates and maintains all network infrastructure and services in support of the statewide private research and education network. This network provides Internet access and related services to the state's University system, the state government and to the Maine Schools and Libraries Network that is comprised of almost 1000 schools and libraries across the state of Maine.

The Challenge

Finding a more scaleable approach to meeting CIPA

Jeff Letourneau, Networkmaine's Executive Director, needed to find a replacement solution for their legacy web filtering product that McAfee was ending support for. Their current solution was a hardware-based platform the State had been using for many years across nearly 1000 K-12 schools and libraries to comply with CIPA requirements to qualify for the E-rate program.

Through the years the hardware-based solution became more and more difficult to manage and scale. As the bandwidth usage across all 1000 schools and libraries increased significantly every year, Letourneau witnessed first hand the amount of hardware that needed to be added to the solution just to keep up with Internet usage and prevent the filtering from becoming the network bottleneck. "We run a very large network and had lots of load balancers and filtering server appliances. There was no way to keep up with increased Internet usage except to keep throwing more hardware at it each year."

In addition, Letourneau had run the cost-benefit analysis of their solution and found that the amount of money they were spending on supporting their current hardware-based solution was actually greater than the money they received back from the E-rate program. "We provide filtering functionality to schools and libraries at zero cost today and the alternative to start charging for this service was not going to be popular." Letourneau knew that he needed to find a more scalable solution that provided a better business return.

The Solution

Faster and more scaleable cloud based web filtering

Networkmaine looked at both new hardware-based solutions and cloud-based services as replacements and quickly ruled out the hardware-based approach as it suffered from the same scalability and cost challenges as their current solution. Letourneau shifted his focus to cloud-based solutions but quickly determined that the traditional cloud-based proxy approaches were going to be just as problematic and costly for them. Networkmaine is a member of Internet 2 which provides a commercial peering service that enables them to connect with major commercial networks, such as Content Providers and ISPs, settlement-free. If Networkmaine were to deploy a cloud-based proxy solution, all web traffic would need to be shifted over to the proxy and off of Internet2's network, which would require Networkmaine to start paying for the bandwidth. "We didn't pursue the proxy-based solutions because it would have raised costs so much in other areas that it didn't make sense for us."

Letourneau found that OpenDNS Professional provided a unique approach that enabled Networkmaine to meet CIPA requirements, reduce administrative overhead and did away with hardware equipment costs as their bandwidth needs increase. Since OpenDNS Professional's solution is a cloud based DNS approach, Networkmaine was able to reap the benefits of a cloud-based service without the need to pay for additional bandwidth required in a proxy-based solution.

Organization Snapshot

Location:
Orono, ME

Number of students:
188,000+

Number of schools and libraries:
1022

Using OpenDNS for:
Web Filtering, Malware Protection,
CIPA Compliance

What They're Saying

"Our previous content filtering solution was the Achilles heel for the network. Anytime it had a performance problem it was felt everywhere since all http traffic went through these appliances. With OpenDNS Professional we no longer have to worry about performance or scalability."

– Jeff Letourneau
Executive Director

The Benefits

Hardware needs eliminated and ongoing maintenance effort reduced

Before switching to OpenDNS Professional, Networkmaine's staff spent a good amount of time maintaining patches and updates on their hardware-based solution. By switching to OpenDNS Professional Networkmaine is able to reclaim at least a ½ FTE per year that was required to manage and maintain their previous solution. "Content filtering was one small piece of our overall service but it became very time consuming to manage."

In addition, OpenDNS Professional's DNS approach ensures that Letourneau and his team will not have to worry about how to scale the solution to meet increasing bandwidth needs. "Our previous content filtering solution was the Achilles heel for the network. Anytime it had a performance problem it was felt everywhere since all http traffic went through these appliances. With OpenDNS Professional we no longer have to worry about performance or scalability."

Most importantly the switch to OpenDNS Professional has enabled Networkmaine to put forward a business case that enables them to reap a positive benefit from the E-rate program while continuing to offer a CIPA compliant solution to their K-12 schools and libraries free of charge.



OpenDNS is the world's leading provider of Internet security and DNS services, enabling the world to connect to the Internet with confidence on any device, anywhere, anytime. OpenDNS provides millions of businesses, schools and households with a safer, faster and more intelligent Internet experience by protecting them from malicious Web threats and providing them control over how users navigate the Internet while dramatically increasing the network's overall performance and reliability. **For more information about OpenDNS, please visit:** www.opendns.com.