

AKAMAI CUSTOMER STORY

Network for Learning

Secure Internet Access Enterprise provides a unique and free safety filter for students learning from home in New Zealand

Network for Learning (N4L) is a Crown-owned company set up in 2012 to help bridge the digital divide and make sure every young New Zealander has access to the digital world for learning, regardless of where they live or go to school. Its mission is to connect all schools and kura — state schools where the teaching is based on Māori culture and values — across New Zealand to fast, reliable, and safe internet services. N4L accomplishes this through its Managed Network, serving more than 850,000 students and teachers within all New Zealand schools and kura.

When children are at school, N4L blocks upward of 25 million websites a day. The company blocked more than 582 million security threats from impacting school internet users during its 2019 reporting period (1 July 2018 – 30 June 2019). N4L was named New Zealand's 2018 Broadband Provider of the Year and works alongside education, government, and technology partners to help schools get the most from digital connectivity and keep their students safe online.

Driven to continually evolve ways to keep kids safe while learning, N4L deployed Akamai Secure Internet Access Enterprise in 2018 to provide enhanced protection for New Zealand schools. As a technology-forward company with a goal to provide robust and secure infrastructure for all schools, N4L is well positioned to navigate unforeseen scenarios. When COVID-19 hit, N4L took advantage of Secure Internet Access Enterprise to further protect students as they shifted to learning at home.

Extending online safety and security for at-home learners

N4L's Managed Network was already designed around industry-leading safety and security tools, giving principals, teachers, and parents the confidence to use digital technologies for learning. While this has served New Zealand schools and kura for nearly a decade, N4L needed to expand its vision to address at-home learners. Key to this was providing an effective security solution that was easy to apply and simple to use in line with "Switch on Safety." This new initiative, led by N4L with support from Netsafe and the Ministry of Education, is focused on providing safer connectivity for learning while students are away from school.



Network for Learning

www.n4l.co.nz

Industry

Public Sector

Solutions

[Secure Internet Access Enterprise](#)

Key impacts

- Satisfied N4L's accelerated timeline
- Provided highest efficacy rate with fewer false positives
- Enabled safe remote learning for the nation's children
- Used by nearly 15,500 households within six weeks
- Blocked more than 1.3 million websites and 300,000 online threats in the first six weeks



“We had already been shifting our strategy to move beyond the classroom to focus on learners. COVID-19 simply meant we had to accelerate our strategy to protect them as they moved into an unsupervised environment at home in the midst of a rise in cybercrime, ransomware, and phishing attacks,” explains Gavin Costello, CIO of N4L. To that end, the N4L IT team required a DNS filtering service that restricted access to sites not suitable for schoolchildren and staff, such as pornography, self-harm, and other inappropriate sites. The service needed to enforce SafeSearch across major search engines, such as Google, and include malware/phishing protection.

Building on a strong foundation

As part of its commitment to meet schools’ changing needs around internet capacity and security, N4L upgraded its network in 2018 with many more capabilities to keep kids safe online. One of the new capabilities included Akamai Secure Internet Access Enterprise, which makes it possible to remotely and proactively identify, block, and mitigate targeted threats.

Before using Secure Internet Access Enterprise, N4L relied on an onsite firewall and centralised filtering system to manage threats across all New Zealand schools. The company deployed an upgraded solution based on Fortinet FortiGate firewalls — which significantly improved N4L’s security posture — and Secure Internet Access Enterprise to get ahead of threats in a fast-evolving threat landscape.

“We know students and staff are safe on the school network due to FortiGate and Secure Internet Access Enterprise, but there was nothing in place to protect them at home. While the majority of ISPs offer solutions for home protection, only around 3% of households use these, because they’re too complicated” explains Costello.

With just two weeks to put in place a solution for at-home learners, N4L’s savvy IT team figured out how to quickly call on its existing solutions. “We knew Secure Internet Access Enterprise was effective but hadn’t used it beyond the school network,” continues Clayton Hubbard, Enterprise Architect for N4L.

On a typical school day, the N4L Managed Network receives more than 250 million DNS requests from the 825,000 users on the network, and Secure Internet Access Enterprise blocks approximately 1.8 million of those requests per day. “N4L is unique in the education sector in terms of the number of users we serve. Many security solutions don’t scale to support our user base, but Akamai handles a mind-boggling volume of internet traffic daily. That, along with Akamai’s efficacy rate with fewer false positives, set the Secure Internet Access Enterprise solution apart. Plus, we’re excited about Akamai’s roadmap for this solution,” says Hubbard.

Protecting thousands of schoolchildren

As part of N4L’s unique Switch on Safety filter, Secure Internet Access Enterprise was tested and ready to go live in a day. N4L was able to easily make available the safety filter to all students in New Zealand, so they could be protected from inappropriate content and threats on the internet.

The safety filter blocks access to a range of websites known to be unsafe and inappropriate for learning, including adult websites and those known to host unsafe software, such as malware and phishing scams. As an extension of one of the multiple safety and security services N4L has in place at schools, the filter is available at no cost to students and teachers for the next two years. It was made available on the laptops provided by the Ministry of Education to students in need during the country’s COVID-19 lockdown. Instructions on how to set it up for parents and other users were available on the N4L Switch on Safety website.



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Gavin Costello
CIO, Network for Learning

Within six weeks of its release, the safety filter was being used by nearly 15,500 households on one or more of their childrens' devices. Moreover, the filter had blocked more than 1.3 million harmful websites and 300,000 online threats during that time.

Bream Bay College in Ruakaka, Northland, was one of the first schools to test the filter before its wider release. According to Wayne Buckland, Principal at Bream Bay College, "It's not about whether you trust your kids or not. It's about stopping that world out there that is trying to get on your devices and steal information and do things that are inappropriate. We appreciate that N4L has been looking after our students while online at school and that they've come up with a brilliant method to help keep them safe from bad content while learning online from home. The safety filter will help relieve some of the anxiety from our parent community, who are concerned about the safety of their children online."

The principal of Oamaru's Weston School, Deidre Senior, adds, "When we learned devices were going into homes, my biggest concern was what websites the kids might access if there was no filtering in place like we have at school. The N4L filter helps us support parents who may not be aware of all the dangers online; particularly the families without devices and limited internet, whose children are getting a device to use at home for the first time."

"Akamai enables our strategy to protect children beyond the school gate. In all my years, I've never seen such swift uptake of a similar offering. We responded to a latent demand and told a story that made it easy to understand the value and need for this solution," concludes Costello.

Secure Internet
Access Enterprise
blocked more than
12 million DNS
threats in a month
while delivering
more than 1.4 million
security alerts.



N4L is a Crown company supporting the government's goals for education since 2013 through its Managed Network, which today connects all New Zealand schools and kura to safe, fast, reliable internet services that are fully funded and supported for state and state-integrated schools. The company blocked more than 582 million security threats from impacting school internet users during its 2019 reporting period (1 July 2018 – 30 June 2019). N4L has also been named New Zealand's 2018 Broadband Provider of the Year and works alongside education, government, and technology partners to help schools get the most from safe and secure digital connectivity. <https://www.n4l.co.nz/>