

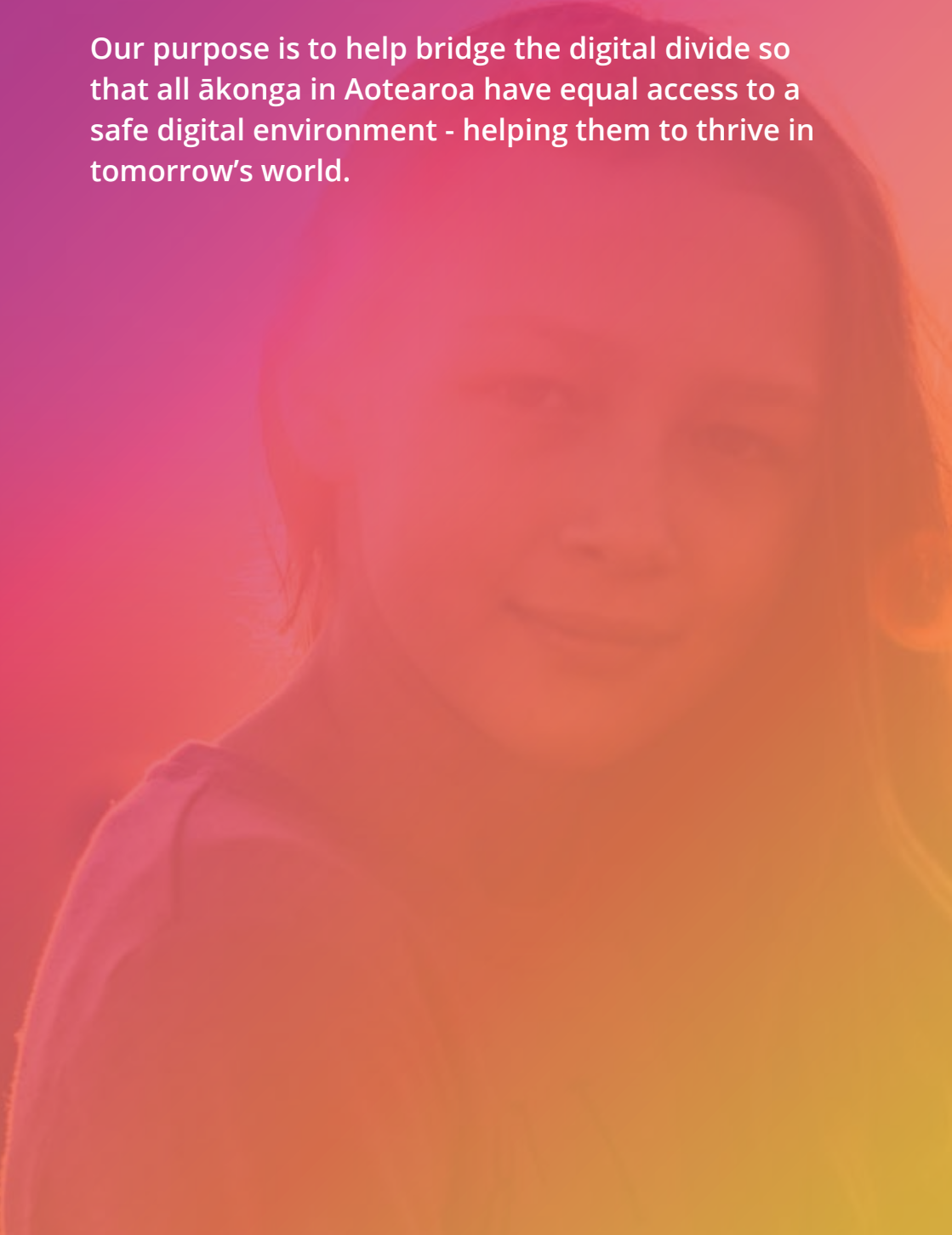


**Smarter, safer  
internet for learning**

Kia ora. We're all about making digital learning environments smarter and safer.

Network for Learning (N4L) is a crown company that supports digital inclusion by connecting all schools and kura in Aotearoa to the internet through our smarter, safer Managed Network. We're one of the largest networks of our kind in the world, and we aim to support all ākonga to learn safely online regardless of where they live or go to school.

Our purpose is to help bridge the digital divide so that all ākonga in Aotearoa have equal access to a safe digital environment - helping them to thrive in tomorrow's world.



# Our mahi



## Connect

We deliver a fast and reliable internet connection to support ākonga learning online while at school. And because we don't believe bandwidth should be a barrier to learning, we make sure schools can access all the internet they need. Best of all, it's maintained by our team of experts and it's fully funded for schools and kura across Aotearoa.



## Protect

Through our Safe & Secure Internet, schools have access to a range of industry-leading services to help protect ākonga from inappropriate content and online threats. We also provide built-in protection to help prevent DDoS attacks impacting schools.



## Support

Schools have the support of our Helpdesk and team of specialised engineers, plus their own School Relationship Manager – so help is only ever a phone call away. We also proactively monitor the health of a school's connection and provide insights into online activity for both individual users and devices.

# What is the Managed Network?

If giving your school access to the internet is what we do, the Managed Network is how we do it - but it's more than just an internet connection.

The Managed Network comes with industry-leading safety and security services, giving your school the confidence to use digital technologies for learning. It's all about making online learning environments smarter and safer, and best of all, it's fully funded for state and state-integrated schools.

## What's included?

### Internet connection

We provide your school access to fast and reliable internet when you're connected to the Managed Network. Plus, you don't need to worry about how much internet your students are using as we provide them with unlimited data.



#### Good to know

Internet speed and bandwidth utilisation is dependent on the number of users online, what is being downloaded, the devices used in your school, and the school's wireless network performance. All these factors need to be taken into account as this will impact the speed that any single user can achieve.

***"The best learning will happen in an environment that is protected from the worst of the web and free from content that is inappropriate and distracting to learning."***

**Nicola Ngarewa**

Principal of Spotswood College & chair of the Teaching Council of Aotearoa New Zealand



## Safe & Secure Internet

To help protect your ākonga online while they're at school, we recommend using our fully funded Safe & Secure Internet.

### Web Filtering

Our Web Filtering helps protect staff and students from accessing inappropriate content. Filtering rules can be customised for your school based on the content you do or don't want to allow.



#### Good to know

##### Category filtering

We can block entire internet categories that are unwanted by your school, or we can block specific websites within a category.

##### Application filtering

Similar to category filtering, we can block the use of unwanted apps within your school.

##### Customised filtering

Customised filtering allows us to apply a specific filtering policy to different groups of users, and requires each user group to connect to a different wireless network or VLAN, e.g. senior students, junior students and staff each connect to a separate network.

### Blocking VPNs

We do our best to block unwanted VPNs (Virtual Private Networks) as they can be used to bypass your school's filtering or security, but unfortunately no solution can be 100% successful. If a new VPN is discovered at one school, our network can block this same VPN from being used at another school - which means we're continuously improving our ability to block unwanted VPNs.

### Firewall

A firewall helps to protect against threats and malicious activity accessing your school's network. It acts as a 'wall' between your school's network and the internet, assessing content to determine if it's allowed through or not.



#### Good to know

Your school can set up your own firewall rules to protect your internal networks, as well as different rules for different groups of users.

## DNS Threat Protection

This is an additional layer of protection that we apply to help block unwanted content. It helps to minimise the impact of online threats and protects your school against malware, ransomware, phishing scams, VPN use, DDoS attacks, and more.

This protection provides a second line of defence, blocking only the really bad content. We don't customise this layer of filtering for your school and it's provided to all schools by default. Your school will need to use our DNS servers to enable this protection.

### *Google SafeSearch*

DNS Threat Protection also enables Google SafeSearch for schools, which allows you to filter out adult content in search results. There are two ways to enforce SafeSearch on the Managed Network; one is through our DNS infrastructure, the other is through your school's firewall. There's no harm having them both enabled, we do this by default. At this stage, SafeSearch is enforced for Google, Yahoo! and Bing.

## DDoS Protection

This is automatically included as part of every school's connection and can't be disabled. It helps to protect against the impact of Distributed Denial of Service (DDoS) attacks, which is when your school's network gets deliberately bombarded from lots of different places causing the internet to crash.

*We've optimised these services specifically for schools here in Aotearoa, so you're getting the best tech available to help protect ākonga online. We make sure they continue to protect against evolving online threats, meaning it's one less thing for you to worry about.*



*"Schools are increasingly reliant on safe internet for teaching and learning and we are doing more to keep them safe and secure while at school and beyond."*

**Larrie Moore**  
CEO, N4L

# How do I get Safe & Secure Internet for my school?

Your school needs to have our recommended settings applied to enable our Safe & Secure Internet. This provides you with a baseline level of protection, meaning your online learning environment, and the ākonga using it, are protected by us from the worst of the web. Our recommended settings are supported by our friends at Netsafe and CERT NZ, and include:



## Web Filtering

With all default categories blocked



## Firewall

With specific settings applied



## DNS Threat Protection & SafeSearch

Enabled

Head to [n4l.co.nz/settings](https://n4l.co.nz/settings) to find out more detailed information about our recommended settings.

Your school can still have a safe and secure online learning environment by having appropriate settings applied via third party providers.

It's **important to remember** that there's no way to guarantee 100% protection from online threats or inappropriate content. There are other measures your school can take to help keep your online learning environments safe and secure, such as promoting digital citizenship and making sure that systems and software are up to date.

CERT NZ has helpful information about keeping your school network secure and Netsafe has some resources on online safety, which we highly recommend checking out!



## Want to supercharge your protection?

To protect your ākonga online even further, your school can choose to add these additional options to your Managed Network connection.

### Enhanced filtering and reports

Your school can get greater visibility, security and management of students on your network by using HTTPS Inspection or Identity Awareness. When used together, these options significantly improve your school's ability to protect your ākonga while learning online.

#### **HTTPS Inspection**

- It allows encrypted traffic to be inspected before it reaches your school's network – greatly improving the ability to block malware and viruses.
- Web Filtering can go beyond blocking a domain (e.g. badwebsite.com) and filter down to the URL level (e.g. goodwebsite.com/badcontent).
- It can also be used to control websites at a granular level, like allowing YouTube but blocking uploads or commenting.
- Online usage reports can detail specific URLs, helping your staff to get a better understanding of which webpages students visit to assist with pastoral care.



#### **Good to know**

HTTPS is the technical mechanism behind the scenes of a webpage that helps keep users' online information private - but this means that most of that information is also private from our Firewall, making it harder to prevent viruses and other malicious content from getting through.

If you're concerned about students accessing inappropriate websites, HTTPS Inspection can be implemented by installing our SSL certificate on your student devices. This allows content within HTTPS websites to be inspected to make sure it's safe. Your school can choose which categories that they do or don't want inspected.

#### **Identity Awareness**

- Your school can tailor filtering for specific groups (such as year groups or classes), or down to an individual student.
- It can be used to see who at your school has an infected device.
- Reports with usernames can help to identify at risk students or positive online behaviour.

*Note: Currently we support onsite directory services such as Microsoft Active Directory, LDAP and RADIUS.*



## Mail Relay

Mail Relay allows your school to send large volumes of emails to keep in touch with whānau and the school community. It also provides you with an additional layer of spam and virus protection.

## Secure Remote Access

Our Remote Access provides teachers and school staff a secure way of accessing your school's onsite systems and resources regardless of where they are. This means they can work anytime, from anywhere. It also aligns with the Ministry of Education's security guidelines for remote access.



### Good to know

Software will need to be installed on each staff member's device to allow them to access the network remotely, and they'll need to be connected to the internet. It's also worth noting that this service isn't designed for student use.

## Making your Wi-Fi more reliable and secure

Up until 2020 we'd been taking care of the internet connection to the school gate. But now we're extending the Managed Network into classrooms so that we can help connect, protect and support your internet connection every step of the way - which means better Wi-Fi throughout your school or kura. This is part of the Ministry of Education's Te Mana Tūhono programme that provides long-term IT support for your school's network.

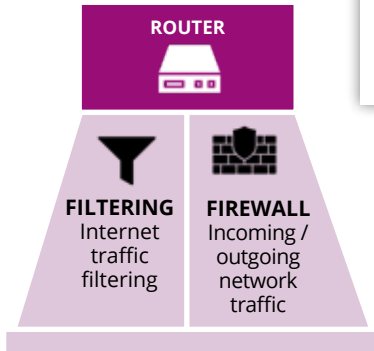


# The Managed Network

1Gbps | DDOS PROTECTION  
REMOTE ACCESS (VPN)

**MAIL RELAY**  
Securely send large volumes of emails

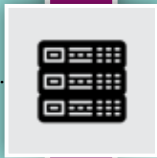
**DNS THREAT PROTECTION**  
Additional protection against VPNs, malware & phishing



**REPORTING APP**  
Integration with user database for group filtering & advanced reporting

**HTTPS INSPECTION**  
Keyword & website filtering

**FILTERING PORTAL**  
Access to make firewall & filtering changes



**EQUIPMENT SUPPORT**  
Warranty for SNUP switches & Wi-Fi access points + hosted controller

**EQUIPMENT REPLACEMENT**  
Ruckus Switch & Wi-Fi access points (installed & configured)

**SECURE ACCESS**  
Network segmentation by user type/device (Staff, Student & Guest)



---

## How to reach us

Head to [n4l.co.nz](https://n4l.co.nz) to learn more about us. Or if you've got any questions, our dedicated team are on hand to help. Give our Helpdesk a call on **0800 LEARNING** or email [support@n4l.co.nz](mailto:support@n4l.co.nz)

---

## Keep up with the latest

For helpful tips, more on our services and information about new projects we're working on, subscribe to our blog and newsletter at [n4l.co.nz](https://n4l.co.nz)

---

**Auckland Head Office**

The Textile Centre  
Level 2, 117 – 125 St Georges Bay Rd  
Parnell, Auckland 1052  
New Zealand  
PO Box 37 118  
Parnell, Auckland 1151

**Wellington Office**

City Chambers  
Level 5, 142 Featherston Street  
Wellington Central 6011  
New Zealand

**W** n4l.co.nz  
**P** 0800 LEARNING  
**E** info@n4l.co.nz

