

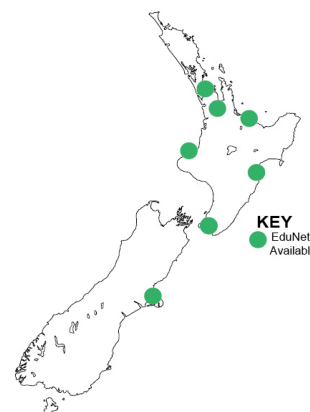
EduNet Access and EduNet InterNet™

Fixed Cost Ultra Fast Broadband (UFB) for Education



EduNet is a high-speed fibre network that provides unmetered access to educational resources for schools and other educational institutions throughout New Zealand.

With its combination of on-net educational content and collaboration between EduNet schools at up to 1 Gbit/s, and EduNet InterNet at up to 100 Mbit/s, EduNet breaks new ground for schools to collaborate and access knowledge without the meter running.



How it works

EduNet is delivered using either the VectorFibre MetroEthernet service or UFB and offers completely open connectivity between institutions and their users.

With access speeds of up to 1 Gbit/s, EduNet connects educational institutions and Content Providers to each other for rapid, cost-effective collaboration. Content Providers include libraries, universities, TV3, e asTTle, eTV and a number of data centres in the Auckland region*.



Where available, this service is delivered over VectorFibre MetroEthernet, which is internationally certified for performance and reliability by the Metro Ethernet Forum.

Content is delivered purely over fibre, not using legacy technologies such as copper. Fibre's outstanding throughput moves the goalposts for multi-media delivery, and at the same time reduces the overall bandwidth costs which we pass back to schools.

Standard EduNet InterNet offers schools a choice of flat-rate bandwidth up to 100 Mbit/s, with no limit on the volume of data traffic, giving schools full use of the public Internet.

Schools requiring a dedicated Internet service can choose EduNet InterNet Plus, our 1:1 Internet offering.

*Correct at time of printing. Peered services may change from those stated here.

Benefits

Future Proof

Connection flexibility and capacity mean decisions made today are not restricting your options tomorrow

Unlimited learning

Flat-rate access to the Internet and educational content ensures learning programmes can be run the right way, without the fear of budget blow-outs.

Ultra high-speed

EduNet gives schools unmetered access to rich content, educational services and national internet** at up to 1 Gbit/s, with EduNet InterNet connections at up to 100 Mbit/s.

Collaboration

EduNet schools and learning institutes are directly connected with one another for seamless collaboration and knowledge sharing.

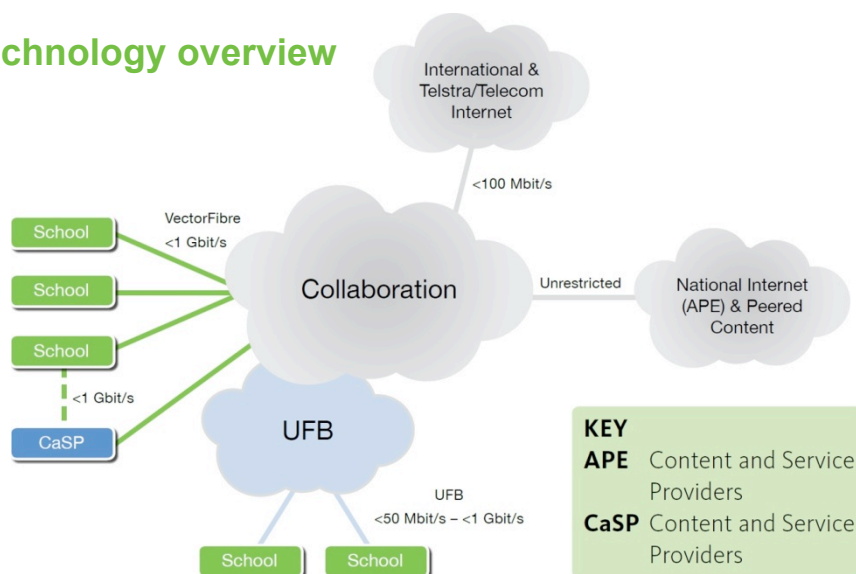
Complements other Networks

EduNet works alongside other Education Networks, which means connecting EduNet now does not prevent your school adding other education networks as they come on-stream.

ICT savings

Schools can control their ICT spend with flat-rate charging, and have the option to effectively outsource ICT services to the Cloud for further savings.

Technology overview



** Excludes Internet services on Telecom or TelstraClear network.

What's in it for Schools?

EduNet schools with EduNet InterNet get unmetered access to EduNet content, other schools and to the Internet with fixed billing to remove bill anxiety.

Bandwidth options

| Name | Service | Delivered Over | Options |
|--|---|--------------------|--|
| EduNet Access | Access Plus National Internet, Collaboration & Peered Content | VectorFibre UFB | 50 Mbit/s, 100 Mbit/s, 1 Gbit/s (subject to fair use policy) |
| | | RBI | 100 Mbit/s |
| EduNet InterNet - Standard - Plus | International & Telecom/ TelstraClear Internet | VectorFibre or UFB | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 Mbit/s |

Service Attributes

| | |
|-----------------------|--|
| Customer Connections | Copper (RJ45 connector): 100Base-TX (100 Mbit/s) 1000Base-T (1 Gbit/s) |
| | Fibre (LC Connection): 1000Base-SX/LX/ZX (1 Gbit/s) (subject to technical feasibility) |
| Mode | Full duplex |
| MAC Layer | IEEE 802.3 |
| Interface Speed | 50 Mbit/s, 100 Mbit/s, 1 Gbit/s |
| IP Address Management | Further IP Addresses are available for an additional monthly charge. |
| VLAN Tagging | Traffic should be presented with a VLAN tag for the 100 Mbits/s and 1 Gbit/s EduNet services delivered over UFB. |

Network Security

Vector Communications cannot guarantee the content and sources of IP data coming via the Internet. It is vital that customers run their own security systems to protect their networks, equipment and business. Threats from external networks may include Denial of Service attacks or hackers. There may also be internal security breaches caused by viruses, trojans or insufficient security precautions.