

HOW IT WORKS

Ethernet Reach™ uses a partner network to provide transparent connectivity between the VectorFibre network and your sites. You use the connectivity as a part of the aggregate solution that ensures best performance, delivered directly to your chosen Point of Presence (POP).

The service is available in three variants – Premium, Plus and Lite.

Premium connection is suitable for any purposes that require capabilities such as high MAC address limit, bandwidth over 10 Mbit/s or large MTU size.

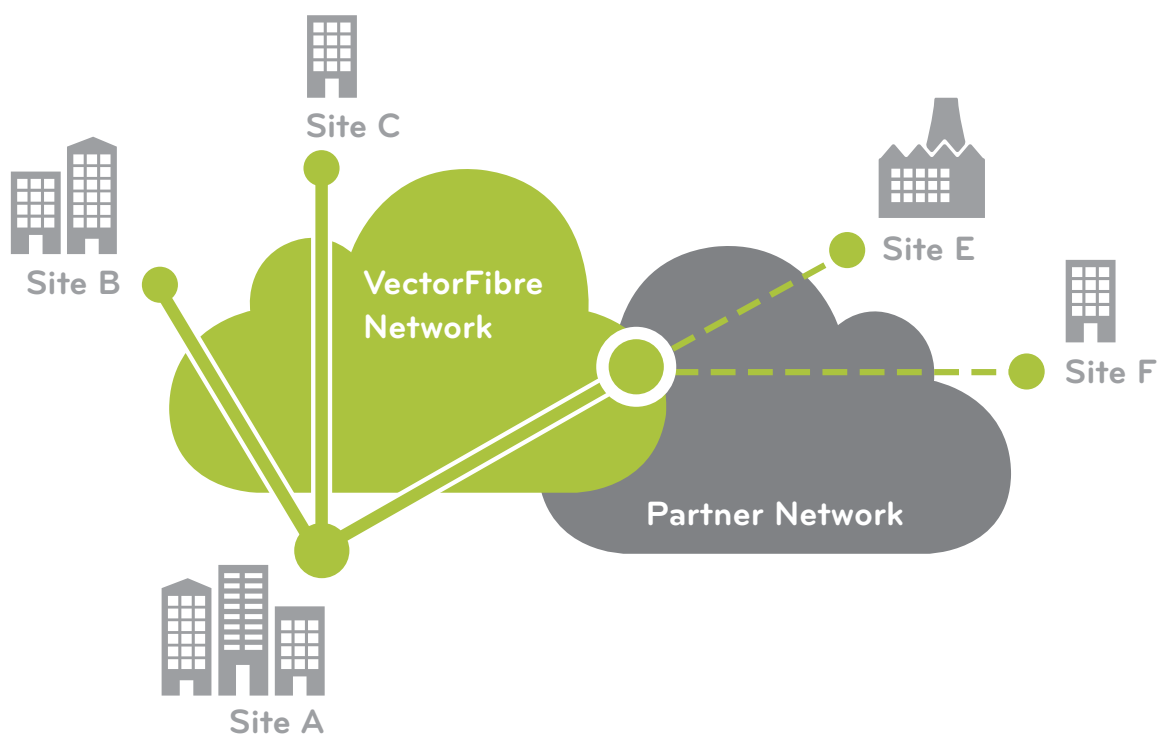
Plus variant is suitable for any applications that do not require consistent WAN performance.

Lite is suitable for any purpose that requires bandwidth lower than 10 Mbit/s or when there is no requirement for specific characteristics.

You can choose between a point-to-point connection and multipoint-to-multipoint connection.

TECHNOLOGY OVERVIEW

Ethernet Reach™ uses a partner circuit to provide seamless, transparent connectivity between the VectorFibre network and your Point of Presence.



SERVICE OPTIONS

Service	Options	Selection Guide
Service Type*	Ethernet Reach™ – Lite Default for < 10 Mbit/s	Pick this option if the bandwidth is unlikely to go beyond 10 Mbit/s in the near future and you require MTU size ≤ 1518, MAC Address Limit ≤ 19.
	Ethernet Reach™ – Plus	Pick this option if you variable bandwidth profile and require ability to burst and MTU size ≤ 2000, MAC Address Limit ≤ 16.
	Ethernet Reach™ – Premium Default for > 10 Mbit/s	Pick this option if you require MTU size > 1522, MAC Address Limit > 19 or if your bandwidth requirement is likely to exceed 10 Mbit/s in the near future. Note: Unless specified, default service type is applied depending on the bandwidth.
Configuration	EVPL	Pick this option if your require Point-to-point connectivity. It is suitable for securely connecting your customer's sites to your network.
	EVP-LAN	Pick this option if your require Multipoint-to-multipoint connectivity. It is suitable for connecting multiple trusted sites of your customer to your network enabling easy communication between these sites.
UNI Speed*	1 Mbit/s – 10 Gbit/s	Must be equal or greater than the bandwidth chosen.
EVC Bandwidth*	1 Mbit/s – 1 Gbit/s	Choose according to the requirement at the site. Note: Maximum bandwidth may depend on the location of the site and the actual bandwidth achieved may vary in some cases.

*These service components have impact on pricing depending on the option chosen

SERVICE SPECIFICATIONS

UNI Service Attributes

Physical Medium	RJ45 10BaseT RJ45 100BaseT RJ45 1000BaseT Optical 1000Base - LC Optical 1000Base - SC Optical 10GBase - LC Optical 10GBase - SC	
Mode	Full duplex	
MAC address limit	EVPL: Lite - 19 Plus - 16 Premium - No limit	EVPLAN: Lite - 19 Plus - 16 Premium - 19
UNI speed	Lite - 1 Mbit/s, 2 Mbit/s, 3 Mbit/s, 5 Mbit/s, 7 Mbit/s, 10 Mbit/s Plus - 100 Mbit/s Premium - 100 Mbit/s, 1 Gbit/s, 10Gbit/s	
CE-VLAN ID for untagged and priority tagged Service Frames	MUST specify CE-VLAN ID (IEEE 802.1 Q frames) for untagged and priority tagged Service Frames in the range of 1-4093.	
Service Multiplexing	No	

EVC Service Attributes

Service Type	EVPL, EVP-LAN
Egress & Ingress bandwidth profile per EVC	Lite - 1, 2, 3, 5, 7, 10 Mbit/s Plus - Up CIR:2.5*, Up EIR:50, Down CIR:10*, Down EIR:100 Mbit/s; Up-CIR:10**, Up EIR:100, Down CIR:10**, Down PIR:100 Mbit/s; Up CIR:50**, Up EIR:100, Down CIR:50**, Down EIR:100 Mbit/s Premium - 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900 Mbit/s. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 Gbit/s
Max Frame Size	Lite - 1518 bytes, Plus - 2000 bytes, Premium - 8996 bytes CE
CE-VLAN ID Preservation	No
CE-VLAN CoS Preservation	Yes
All to One Bundling	No
Layer 2 Control Protocol Handling	Discard

Service Performance Targets

Frame Delay	< 10 ms
Frame Jitter	< 8 ms
Frame Loss	< 0.1%

* Traffic must be tagged with PCP = 4 **Traffic must be tagged with PCP = 1 to 7

Make sure your business gets the full benefit of Ethernet Reach™ as soon as possible.

Call Vector Communications on 0800 826 436 or email contactus@vector.co.nz today.