

HOW IT WORKS

Our Managed Network provides a reliable private network to any of your locations to bring all your employees, offices, data and applications together.

We will build you a solid reliable network using fibre or the most appropriate access technology for your business. We'll install and maintain a router at each of your sites taking the responsibility of keeping everything running.

Our Network Operations Centre will monitor and manage the performance and availability of your network 24/7.

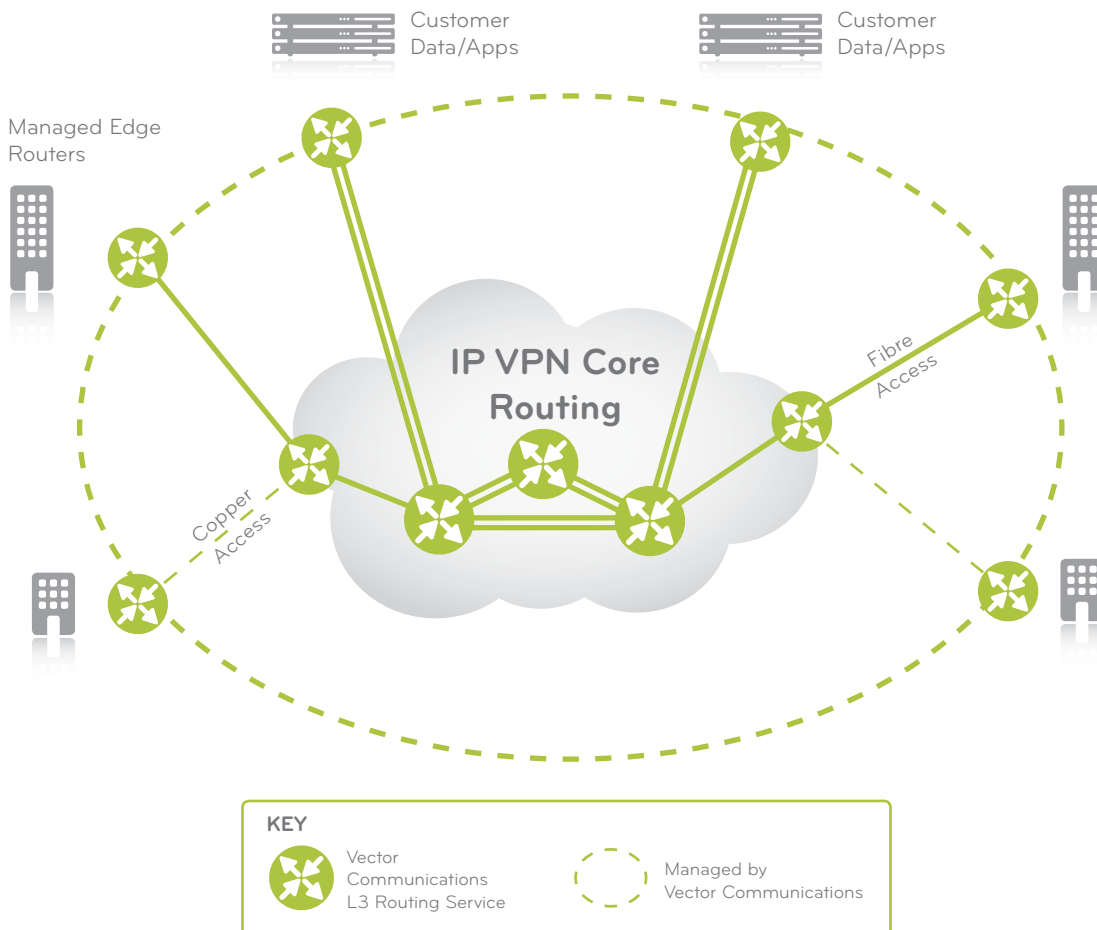
And we design the network solution so that it can grow easily with your business.

TECHNOLOGY OVERVIEW

Our Managed Network connects your businesses sites together by creating a private wide area network. A managed router is provided at each of your sites passing data over a private leased line to our virtual routers located in national POPs. These central routers forward the data, manage prioritisation, and ensure it gets to the destination.

The entire network, between managed routers, is actively monitored and managed 24x7 by our engineers. Active monitoring and managing of all service infrastructure includes: -

- Proactive monitoring to detect and escalate faults.
- Incident managed providing fault restoration, including on-site restoration nation-wide.
- Full management of all provided components, including all critical software upgrades released under our change managed processes.
- Access to a reporting portal enabling near real-time reporting on network performance.



The demarcation point is the Ethernet LAN port on the CPE (Customer Premise Equipment). This service specifically excludes: -

- Configuration, monitoring, operation, support and maintenance, equipment of application, equipment or network beyond the demarcation point.
- Configuration or on-going support of the customer's applications.
- Control of access to the Managed Network service end-point through any network beyond the Vector Managed Network service end-points. Exceptions to this can be negotiated but will incur design, implement and project costs.
- On-demand (i.e. non-permanent) connections to the Managed Network service.

SERVICE SPECIFICATIONS

Characteristics	Values	Comments or Conditions
Contract Term	12, 24 or 36 months	Other terms available on application.
Availability	Availability depends on access type and will be Standard or Enhanced. Target availability for Standard Service is 99.7*% Target availability for Enhanced Service is 99.9*%	For full SLA please see Managed Network Service Legal Agreements.
QoS	Managed Network offers either a single Class of Service – i.e. all packets are treated the same (in accordance with the class to the left) or multiple classes of service. In order to classify the packets ingress PE routers inspect the IP DSCP bits.	Values are valid for in-profile traffic only. Extended products consuming third-party access services where QOS isn't provided are best effort only.
IP Address Schema	IPV4	
MTU	1500 (default)	
Exchanges	Wherever UFB, HSNS and EUBA are available.	
POP	Available on any VectorFibre POP. List of POPs available on request.	
Protocols/Routing Type	<ul style="list-style-type: none"> • None • Static i) Prefixes to be routed towards CE (ref: VR-C1.2) • RIP v2 • OSPF i) OSPF area number (ref: UVR-C1.4) • BGP i) CE's AS number (ref: UVR-C1.5) ii) Password, if required (ref UVR-C1.6) 	
Redundancy	Full Path only, etc. For BGP and Static routing only.	If the service is providing redundancy specific design is required.
Routes/Prefixes	There are 5 available: 0-99, 100-199, 200-499, 500-999, 1000+	
Access Types	VectorFibre HSNS Premium HSNS Lite (Fibre) HSNS Lite (Copper) EUBA UFB (all Local Fibre Companies)	
Access Speed	1, 2, 3, 5, 7, 10, 100 Mbit/s and 1, 10 Gbit/s	Into core node from access path.
Bandwidth	1, 2, 3, 5, 7, 10, 15, 20, 30, 40, 70, 150, 200, 300, 500, 700, 800, 900 Mbit/s and 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 Gbit/s	The bandwidth available will depend on the access method chosen.
Encapsulation		Encapsulation and VLAN tag values (Dark Fibre Only).
Service Monitoring period	24x7x365	



MANAGED WAN™

TECHNICAL PROFILE

Characteristics	Values	Comments or Conditions
On-site restoration	On-site restoration shall be 4 hours, 9 hours or next business day depending on location and Assurance Level purchased.	
Monitoring	Monitoring shall be done on the following elements: <ul style="list-style-type: none"> • Availability of CPE and network access • Configuration changes and backups • Patch updates • CPU utilisation 	

* Calculated as the availability of the service across a 12 month period and excludes planned outages. Higher availability levels available on request.

The following reporting will be provided on a per site basis via Vector Communications Customer Reporting portal and is available near real-time:

Parameter	Frequency	Delivery Timeframe
Availability	As required	Available in near real-time via Reporting Portal.
Performance	As required	Available in near real-time via Reporting Portal.
Capacity	As required	Available in near real-time via Reporting Portal.
Service Level Compliance	As required	Within 5 Business Days of the end of each month.

Make sure your business gets the full benefit of Managed WAN™ as soon as possible.

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