

# Managed Wavelength

Your managed alternative to dark fibre



Managed Wavelength is a dedicated, high-capacity data transport service connecting two locations at up to 40 Gbit/s. With Managed Wavelength you can optimise your capacity utilisation and transport costs by aggregating all your different traffic types into a single stream. All your data is transported securely and transparently through the VectorFibre network and full management visibility of the service is retained at all times.

## How it works

Managed Wavelength services are supported by the VectorFibre Optical Transport Network. This state of the art network is based on the internationally accepted standard for optical transport; ITU-T G.709. We use Dense Wavelength Division Multiplexing to transport up to 40 optical signals of different wavelengths onto a single fibre pair, enabling data transfer speeds ranging from 2.5 to 40 Gbit/s. The signals are mapped transparently onto the different wavelengths, without touching user data.

## Business Benefits

### Dedicated Connectivity

You get exclusive use of the provisioned wavelength, so your capacity will not be affected by other network traffic.

### Transparency

Your data is not touched during transport and all your marking and tagging is maintained.

### High Capacity

Bandwidth of up to 40 Gbit/s can be provided.

### Bandwidth Efficiency

You can aggregate different data protocols (e.g. Ethernet, SDH) into a single signal, enabling you to get maximum utilisation of the capacity you purchase.

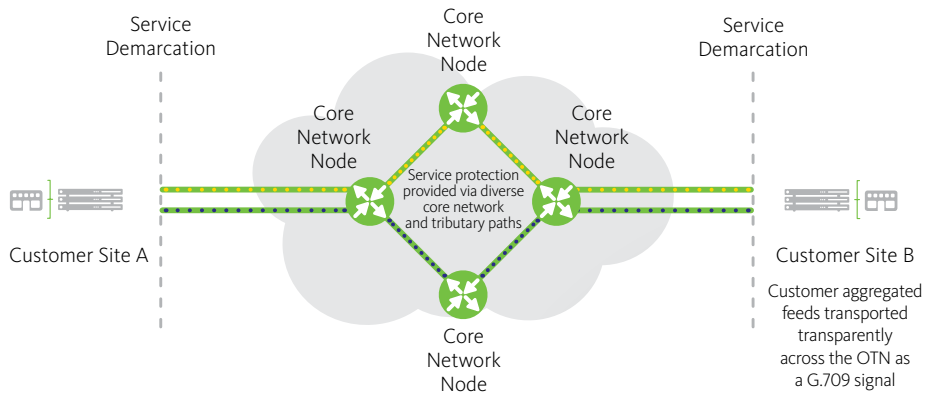
### Ready for Growth

Capacity can be scaled from 2.5 Gbit/s to 40 Gbit/s to meet your requirements as they grow over time.

### Carrier-Grade Reliability

Protection options enable you to achieve the level of service availability you require, from 99.9% to 99.999%.

## Technology overview



Managed Wavelength provides for the transparent transportation of large quantities of data between two locations. You can configure your own transmission and protection protocols or alternatively we can provide a range of protection options to match your availability requirements.

## Service Specification

### Performance Characteristics

Latency	< 2ms
Jitter	< 2ms
Bit Error Rate	$10^{-12}$
Demarcation Points	Optical demarcation, with a patch panel installed at the customer site as directed. Connection type SC, unless otherwise specified.
Service Availability	From 99.9% (depending upon protection options)

### Redundancy / Protection options

Core and Access protection	Optical layer, sub-50ms protection switching upon loss of signal or exceeding pre-defined thresholds can be provided at both core and access levels.  Please contact your Account Manager to discuss in detail your specific protection requirements.
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### Service and Interface Specification

2.5 Gbit/s	OTU1, STM-16
10 Gbit/s	Please contact your Account Manager to discuss your options
40 Gbit/s	OTU3, STM-256, 40GE (Please see your Account Manager)

Make sure your business gets the full benefit of Managed Wavelength Services as soon as possible.  
Call Vector Communications on **0800 826 436** or email [contactus@vector.co.nz](mailto:contactus@vector.co.nz) today.