Wave WebPD V2.0



Overview

Enet's optical Managed Wavelength product is a cost-effective alternative to building, lighting and managing Dark Fiber. It is ideal for enterprise, Carriers and government IT organisations managing digital transformation to meet network demands for increased reliability, scalability and operational efficiency. It transmits data, voice and IP traffic via our WDM network with the security and dependability of a private network without the operational complexity.

Managed Wavelength enables a high bandwidth (1G and 10G) point-to-point circuit between customer sites, data centers and key core sites. As a Layer 1 product, it makes efficient use of bandwidth with increased resiliency, low contention and fewer network elements on a custom designed network solution. Services built upon a Managed Wavelength product are transported through a dedicated, secure and high-availability connection, port to port.

Managed Wavelength is widely available both as a local and national solution across our WDM enabled MANs and with ready access to Near-net sites. Customers can plan their network, with high capacity under their full control, a choice of standard handoff interfaces with enhanced availability through diverse routing options.

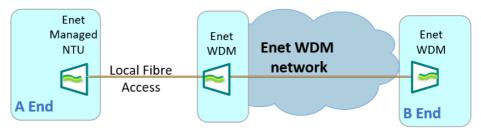


Figure 1 Managed Wavelength with on-site NTU Termination

Technical Description

Enet's Managed Wavelength product offers dedicated, flexible and high capacity connections for Carriers' backhaul networks or for service between customer sites. The wavelength is built across Enet's WDM network. Connections can be made with Enet's existing local fibre network and Near-net extensions can be built if required. Service is provided as:

- Wavelength service with fibre hand-off
- Managed Wavelength with on-site NTU termination

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Dedicated handoff can be provided at a customer's site, Colocation or datacenter. Standard service termination is on software configurable SFP/XFP single mode fibre interface modules. Demarcation is on the customer side of the managed NTU, at the customer-rack patch panel in a Colo or a port in the datacenter meet-me-room (MMR).

With this product you can lease the wavelengths you require without being responsible for the end-to-end management, so if anything goes wrong, you will have access to customer support 24/7. This is useful if multiple wavelength services are to be delivered in the future. The Managed Wavelength product is configured as a standalone wavelength. If protection is required, two individual wavelength circuits can be used in tandem as worker and protection paths and switched over by the Carrier in case of a failure.

For Near-Net orders, Enet has an established track record for delivery where civils and/or equipment installations are required.

Managed Wavelength Product Features	Description
Bandwidths	1Gbps, 10Gbps
Client Interface Types	XFP 10G LAN / WAN Phy
	LR 1310nm up to 10Km
	• ER 1550nm up to 40km
	• ZR 1550nm up to 80km
	10G OTU handoffs will use ER at >2.5km due to the increased clock rate (c.11.07Gbs) impact on forward error correction
	SFP 1Gbs LAN
	• LX 1310nm up to 10Km
	• EX 1550nm up to 40km
Launch Power	-1 to -6dBm
Receiver Sensitivity	-1 to -11dBm
Wavelength at Handoff Port	1310 nm, 1550nm
Protection	 Unprotected, no network or client protection Load Sharing, two interfaces with dual physically diverse unprotected connections (the Carrier performs switching)
Availability	99.5% unprotected single wavelength, 99.99% with diverse paths
TTR target	8 hours
NOC Support	24 x 7 x 365
Delivery Lead time	8 weeks for 10G on WDM enabled sites
Supported Protocols/Standards	Ethernet, SDH & OTN.
	Other client signals available on request

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Benefits

For Carriers:

Uncontended, flexible and large capacity connection to data centers and core sites

- Full protocol transparency
- No MTU size limitations
- No congestion
- Tight control over service latency
- Proactive monitoring that reduces network management costs
- Less network equipment and network complexity with lower operational costs

For end-users:

- Fast low-latency service
- Port-to-port security and privacy for critical data
- Point-to-point, end-to-end dedicated bandwidth
- Reliability and survivability
- The optional of extra protection through diverse physical access routing

Responsibilities

Enet is responsible for

- building the service to the demarcation points
- provisioning the wavelength(s) between the service demarcation points
- the operation and maintenance of the Managed Wavelength service
- supplying, installing, connecting, operating & maintaining the optional NTU
- acquiring any public wayleave required for civil elements of the service

The Carrier is responsible for

- the operation and maintenance of the services purchased by the end-user
- owning the relationship with the end-user
- acting as the point of contact for any end-user enquiries
- ensuring adequate rack space for the fibre patch panel and Enet NTU where required
- provisioning a clean, protected power supply for the NTU
- Failover to diverse circuits

Further Information

Should you require any further features, please contact Enet and we'll be happy to discuss your requirements, please contact your Enet Account Manager or Enet at:

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