Broadband Enabler

Layer 2 access via FTTx connections throughout Ireland

Definition

The Enet ***Broadband Enabler*** product enables RSPs to develop their SME and Retail market by providing connectivity from the End-User premises to the Carrier Interconnect handoff via our national backhaul. The RSP can rebrand this product and build their Internet offering with a range of asymmetric broadband speeds.

Broadband Enabler is a Layer 2 service available through our Aggregation Platform (known as ***Enet Connect***). This provides access to several Access Service Providers' (ASP) FTTx networks to ensure maximum geographic penetration and End-User access.

Service Description

Broadband Enabler includes the following key elements:

- FTTx Access: FTTC or FTTH access for the last mile to the End-User premises
- Enet Interconnect: Availing of Enet's interconnects to the ASPs
- Enet Backhaul: Transports data from the ASP interconnects to the RSPs' chosen interconnect with Enet

To facilitate an effective rebranded solution, the RSP is responsible for managing all aspects of the End-User delivery beyond the ONT/NTU-MasterSocket. This includes in-home equipment (CPE, RGW, modems), connection to and all cabling and equipment beyond the ONT / NTU-MasterSocket.

The main features include:

- Bandwidths: Asymmetric 150Mb to 1Gb downstream for Fibre, up to 100Mb downstream for FTTC (VDSL)
- End-user Traffic uses the Enet Network
- Traffic handoff: Enet manages provision and delivery of RSP Layer 2 traffic to an Interconnect of their choice
- S-VLAN numbers are used at the Enet Interconnect with the RSP
- This is a Layer 2 Unicast Service and so does not include Internet access, Radius authentication and IP address management. These activities must be performed by the RSP to provide an Internet service.

An RSP can self-serve by using ***Enet Connect*** to do the following:

- Address Search Facility
- Eligibility requests that query all ASPs and return a suitable set of products
- Ordering and Order Management
- Fault Handling
- Diagnostics etc.

Summary

	FTTH	FTTC
Bandwidth	Asymmetrical 1Gb, 500Mb, 150Mb products	"Up to 100mb" Rate Adaptive Asymmetrical products
Access Network Technology	PON	VDSL2
Splitter	Splitter: 1:32 (1:64 open eir IFN)	n/a: DSLAM
Enet Access demarcation	RJ45 Ethernet interface on an ONT for FTTH	RJ45 Copper NTU/Master Socket demarcation for FTTC
Maximum MTU	1950 (Siro & open eir)	1500 (open eir)
ONT/NTU installation by Access Provider	Yes (ONT)	Yes (NTU-Mater Socket)
N:1 or 1:1 service?	N:1	
Max. no. of MAC Addresses	1	
VLAN ID tagging	The End-User CPE, provided and managed by the RSP, must be configured to tag all traffic with VLAN ID 10 irrespective of the underlying ASP	
Connectivity	Single Unicast as standard and mandatory with Unicast bandwidth, downstream and upstream	
Class of Service 802.1p	Default is Best Efforts "0"	
Modem / RGW supplied by RSP	Yes	

Subscriber Authentication and IP Peering etc. to be performed by the RSP.

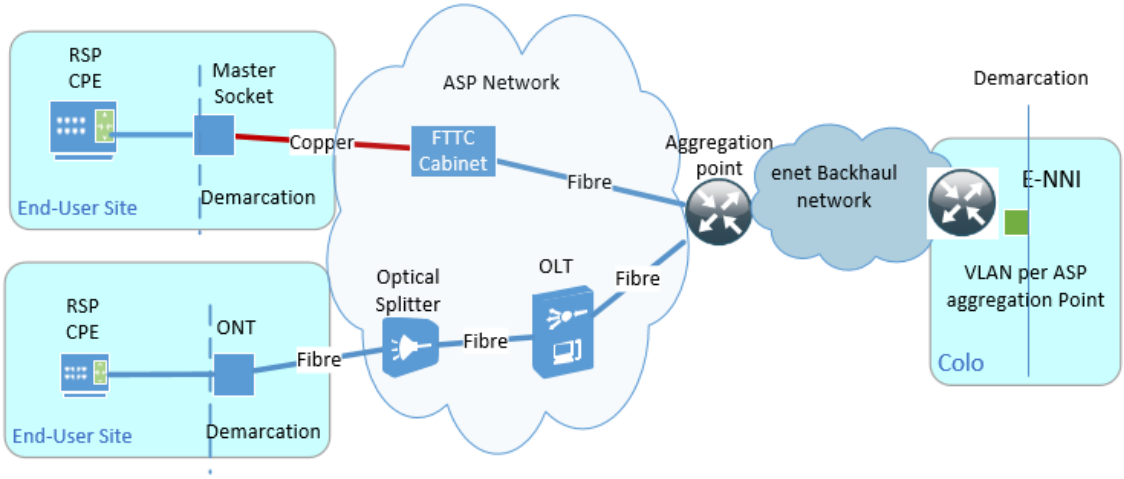
Service Delivery

Partnering with Enet enables an RSP to avail of Enet's FTTx aggregation portfolio which provides:

- Access to the *open eir* and SIRO's FTTx networks (1.8 million locations) through a single integration point
- Reduced integration time and speed to market
- A common ordering and fault process irrespective of the FTTx access provider

FTTH: Access service is from the ONT at the End-User premises via fibre to a splitter in the access network and on to an OLT (remote, or at a Colo).

FTTC: Access service is from the NTU-Master socket at the End-User premises via copper pair to the cabinet DSLAM. Here services are aggregated before connecting to the local Colo via fibre.



This document is for illustrative purposes only, detailed specifications will be agreed at the time of purchase.

Enet Responsibilities

Enet is responsible for:

- Building links from our ASP partners' local aggregation points (c.200) to enable RSPs to access the service
- Guiding and assisting RSPs during the Onboarding proves (including using ***Enet Connect***)
- Assisting RSP queries with our Order Support team
- Ensuring the RSP has access to ***Enet Connect*** including process and Train-the-Trainer sessions
- Working with our ASP partners to ensure service provision from the End-User's premises
- Building backhaul from the aggregation points to the Carrier's Interconnect
- Effective Service Assurance through our NOC and Support Team

RSP Responsibilities

The RSP is responsible for:

- Supporting effective Onboarding by providing relevant points of contact
- Completing the VPN set-up to ensure access to ***Enet Connect***
- Providing any required Internet / broadband service including but not limited to Radius authentication, IP address management, IP Transit etc.
- The operation and maintenance of the services purchased by the End-User
- Owning the relationship with the End-User
- Acting as the first point-of-contact for any End-User enquiries
- First-line diagnostics and submitting faults to Enet via ***Enet Connect***

Glossary

- ASP Alternative Service Provider
- COS Class of Service
- DSLAM Digital Subscriber Line Access Multiplexer
- EVPL Ethernet Virtual Private Line
- GPON Gigabit Passive Optic Network
- ISP Internet Service Provider
- IPAM IP Address Management
- MTU Maximum Transmission Unit
- MAC Media Access Control
- NTU Network Terminating Unit
- OLT Optical Line Terminal
- ONT Optical Network Termination
- RG Retail GateWay / Residential GateWay
- SV-LAN Service-Virtual Local Area Network
- VOIP Voice Over IP

Further Information

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