White Label Broadband
Reliable, scalable and affordable internet service throughout Ireland

Definition
The Enet **White Label Broadband** product enables RSPs to develop their SME and Retail market by allowing them to self-brand Enet’s end-to-end Broadband solution to their customers. White Label Broadband is a Layer 3 internet service provided by Enet through our Aggregation Platform (known as **Enet Connect**). This provides access to several Access Service Provider (ASP) networks to ensure maximum geographic penetration and potential customer access.

The RSP can offer their customers a range of different broadband speeds to suit their End-Users’ needs.

Service Description

**White Label Broadband** is a comprehensive Layer 3 end-to-end broadband solution and 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: Using Enet’s backhaul to get from the interconnects to the Enet Edge Routers
- Enet ISP: Accessing the Internet via Enet Edge and ISP Gateways

This is a stand-alone service, with broadband only, and by default excludes a Voice Service. To facilitate an effective self-branded 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 will utilise the Enet Network
- Traffic handoff: Enet manages the provision and delivery of an internet service for the RSP
- S-VLAN numbers are managed by Enet and are not visible to the RSP
- Network Security: IPoE [DHCP] only, Anti-MAC and Anti-IP Spoofing
- RADIUS and IPAM services are provided by Enet

An RSP can **fully** self-serve by using **Enet Connect** to perform the following key functions:

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

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

<table>
<thead>
<tr>
<th></th>
<th>FTTH</th>
<th>FTTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandwidth</td>
<td>Asymmetrical 1Gb, 500Mb, 150Mb products</td>
<td>“Up to 100mb” Rate Adaptive Asymmetrical products</td>
</tr>
<tr>
<td>Access Network Technology</td>
<td>PON</td>
<td>VDSL2</td>
</tr>
<tr>
<td>Splitter</td>
<td>Splitter: 1:32 (1:64 open eir IFN)</td>
<td>n/a: DSLAM</td>
</tr>
<tr>
<td>Enet Access demarcation</td>
<td>RJ45 Ethernet interface on an ONT for FTTH</td>
<td>RJ45 Copper NTU/Master Socket demarcation for FTTC</td>
</tr>
<tr>
<td>Maximum MTU</td>
<td>1950 (Siro &amp; open eir)</td>
<td>1500 (open eir)</td>
</tr>
<tr>
<td>ONT/NTU installation by Access Provider</td>
<td>Yes (ONT)</td>
<td>Yes (NTU-Master Socket)</td>
</tr>
<tr>
<td>Subscriber Identification</td>
<td>Performed on Enet Radius using DHCP/IPoE</td>
<td></td>
</tr>
<tr>
<td>N:1 or 1:1 service?</td>
<td>N:1</td>
<td>Yes</td>
</tr>
<tr>
<td>Max. no. of MAC Addresses</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>VLAN ID tagging</td>
<td>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</td>
<td></td>
</tr>
<tr>
<td>Connectivity</td>
<td>Single Unicast as standard and mandatory with Unicast bandwidth, downstream and upstream</td>
<td></td>
</tr>
<tr>
<td>Class of Service 802.1p</td>
<td>Default is Best Efforts “0”</td>
<td></td>
</tr>
<tr>
<td>Modem / RGW supplied by RSP</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>IP Addresses</td>
<td>Provided by the RSP by default or by Enet if required</td>
<td></td>
</tr>
</tbody>
</table>

Service Delivery

Partnering with Enet permits an RSP access to our Broadband 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: the 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: the access service is from the NTU-Master socket at the End-User premises via a copper pair to the cabinet DSLAM. Here services are aggregated before connecting to the local Colo via fibre.

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Enet Responsibilities

Enet is responsible for:

- Building links from our ASP partners’ local (c.200) aggregation points to enable RSPs to access the service
- Guiding and assisting RSPs during the Onboarding process (including the Enet Connect platform)
- Assisting RSP queries with our Order Support team
- Ensuring the RSP has access to the Enet Connect platform including process and Train-the-Trainer sessions
- Working with our ASP partners to ensure service provision from the End-User’s premises
- The operation and maintenance of the broadband service including RADIUS and IPAM
- 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
- Performing eligibility checks to determine service capability
- Manage the Order in delivery including appointment reschedules (all via Enet Connect)
- Providing the CPE for the End-User
- Owning the relationship with the End-User including change orders, fault handling etc.
- Acting as the first point-of-contact for any End-User enquiries

Glossary

- **ASP**  Alternative Service Provider
- **BNG**  Border Network Gateway
- **COS**  Class of Service
- **EVPL**  Ethernet Virtual Private Line
- **IPAM**  IP Address Management
- **IFN**  Ireland’s Fibre Network
- **ISP**  Internet Service Provider
- **MAC**  Media Access Control
- **MTU**  Maximum Transmission Unit
- **NTU**  Network Terminating Unit
- **OLT**  Optical Line Terminal
- **ONT**  Optical Network Termination
- **RGW**  Retail GateWay / Residential GateWay
- **S-VLAN**  Service-Virtual Local Area Network
- **VOIP**  Voice Over IP

Further Information

Contact your Enet Account Manager or contact us at:

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Webpage:  www.Enet.ie

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