

PacketFront key benefits for ADSL operators

Introduction

The ADSL market has shown significant growth during the past couple of years and the number of ADSL operators has multiplied. While offers of ADSL services grow explosively in the market, ADSL operators are concerned about the lack of profitability. The line between an ADSL operator with a cash-generating operation or one with a support-demanding non-profit operation is thin, though most operators fall under the second category: the non-profit operator.

In broad terms, there are two general problems; the first problem is dealing with the high operational expenditure related to service- and network-activation. Some PTTs have no less than 12 people involved in activating one service for one customer, creating a cost-base that exceeds the revenue generated by that specific client. The second problem is related to the services offered. All operators offer an ISP service, but this is clearly not enough. The revenue per user must increase in order to balance the expenses. Efficient triple-play must, and will, become a reality for ADSL operators in the not too distant future in order to drive revenue. By increasing the number of services offered, the operator can not only generate more revenue but also increase customer satisfaction and customer loyalty.

The single most important factor for the ADSL operator is to increase the value of its existing investments and that of its future investments, by increasing revenue and minimizing operational expenditure.

Increasing the average revenue per user through triple-play over ADSL 2/+

PacketFront's ADSL solution is based on the ADSL 2/+ standard, which offers as much as 26 Mbps downstream and 2.6 Mbps upstream over existing copper lines. This is sufficient bandwidth to deliver TV, Video on Demand, telephony, Internet, and other services simultaneously.

Bandwidth alone, however, is not enough. PacketFront's ADSL solution is delivered with embedded Quality of Service mechanisms in combination with multicast functionality for secure, reliable and optimal distribution of all types of content.

The total flexibility in the creation of services allows for flexible offers to customers, including the ability to introduce new payment models based on time, capacity, and other possibilities creating flexible payment structures.

Services can be tailored on a per user device level, which means that individuals within one household can have access to different types of service levels within the same service category (within ISP services, for example).

In a traditional ADSL network, this would create substantial overhead for operations, thus driving OPEX to a level where introducing flexible services is no longer financially viable.

The PacketFront ADSL solution is ingeniously designed to support mass deployment and self-registration/activation of services without manual intervention, thus maintaining OPEX at a low level, regardless of the number of users and services supported.

Maintaining control over operational expenditures

The PacketFront ADSL solution is all about increased revenues in combination with cost control. Our background from building one of the largest, most sophisticated triple-play networks in the world taught us everything about the importance of automation in combination with maintaining control.

Replacing the BRAS

A CAPEX model to grow with

BECS™ is a control and provisioning system for broadband operators. It offers centralised, automated mass deployment tools for software and services allowing ADSL operators to implement and to carry out changes in the network in a systems-initiated and automated manner, incurring as low a cost as possible.

PacketFront hardware can be deployed with non-qualified resources, since software management and configuration are automated through BECS™. This means that no software download or configuration is necessary on-site. No special skills are required for the physical mounting, and thus outsourcing of the physical mounting of hardware is an easy task.

Once the network has been installed, services must be implemented on top of it. These services will all place different requirements onto the network, and reconfiguration of network elements will be required in order to support the requested service.

Once a service has been defined in BECS™, it will be available for the whole network or parts of the network, dependent of the geographical definition of the service.

The user will be able to register and to activate services through a portal linked to BECS™. Once the user has activated a service, BECS™ will dynamically reconfigure the network elements involved in the service delivery to include correct IP addressing, destination requirements, Quality of Service parameters and multicast availability.

This will be done without manual intervention from the network operator, and without interruption in the services that are already delivered.

Very efficient customer care – all in one system – ensures full traceability and insight into every aspect of customer care and service deployment.

BECS™ will search its service database before activating a service, allowing or denying the user access to a requested service. BECS™ is therefore considered to be a Conditional Access system for all types of services, anything from an ISP service to a TV service, or any other service.

In a traditional ADSL implementation, this functionality is implemented in the BRAS. The BRAS terminates the sessions from the end user, allowing control and billing data to be gathered. This approach has severe limitations from an operational standpoint, the most important of which is limitations in what kind of services that can be deployed on top of such a structure. Furthermore, it is disadvantageous from the point of view of operational cost.

Due to the nature of BECS™, a BRAS in the data path of the existing model can be retired. BECS™ will authenticate the user and provide the billing records that the operator requires, without involvement of the BRAS.

BECS™ does not require any form of end-user PPPoE implementation and it does not sit in the data path of the traffic. Very high performance services can therefore be implemented on any type of client.

The PacketFront ADSL solution scales from 48 to 4000 users per 19” rack. This also applies to our pricing strategies for software. We approach all ADSL operators with the same message – small or large – there is no need for massive up-front investment when

Freedom to choose business model

working with PacketFront. The operator can start small and increase his/her investment in line with the customer base.

We provide an out-of-the-box solution for the service and network operation. No surprises, just a fully integrated solution, ready to generate revenue.

Many customers of PacketFront have chosen an Open Access Network – business model. In an ADSL network this enables wholesale on service level, not on access level, thus giving the network operator the possibility to wholesale the access multiple times with much higher average revenue per user, ARPU. This allows network ownership to be separated from service ownership. The PacketFront solution allows for any kind of business model to be implemented on top of the physical network. The technology is there to support business, not determine what good business is.

The Open Access Network model allows an easy entrance for third party service providers into the network in order to expand the services offered, increase revenues and improve customer loyalty.

But again, the decision is for the network operator to make. The technology will not limit or dictate what to do or which business model to choose.

Summary

The PacketFront ADSL solution offers the following benefits:

- Support for triple-play on top of an ADSL2/+ platform with support for Quality of Service and multicasting for advanced services.
- OPEX control through the award-winning BECS™ control & provisioning system.
- Replacement of the traditional BRAS with a more flexible solution for authentication and billing that is easier to use and operate.
- A CAPEX model that grows to suit the network operator's needs.
- Freedom and flexibility in selection of business model, from a wholly owned and operated infrastructure to a wholesale solution with third party service providers.