# RAS Migration Case Study

## The Client

A European telecom service provider specifically for businesses provides over 20, 000 dial connections for use in telemetry, financial transaction and internet access. The end users are utilities, ISPs, and financial institutions.

## Business Challenges

Legacy services are still in use worldwide for a range of applications. Over the years, many customers have made significant investments in equipment and processes that depend on these services and specific features the service offers, making it difficult or disruptive for them to move to alternative services.

A key challenge is the need for a highly reliable service. However, the existing RAS in use is out of support, this makes it impossible to guarantee service levels required by customers.

What is needed is a way of providing a fully supported RAS service to meet the customer SLAs.

## Why Virtual Access?

Virtual Access offers a fully supported like-for-like replacement of the existing equipment, eliminating disruption to the end user. Based on an up to date modern platform, meaning the customer does no t have to worry about the service being terminated due to platform obsolescence.

## The Solution

The customer replaced their existing RAS equipment with the Virtual Access platform on a phased basis. The PRI interfaces were swapped from the existing RAS and the Ethernet interface was connected to their secure VPN network, connecting to private or public IPVPNs.

The client moved over 20,000 customers from the old RAS platform to the new Virtual Access platform. The system currently has over 20,000 live customers.

## How it Works

The heart of the service is based on the Virtual Access Always-On Server (AOS) RAS. This product terminates the PRI lines containing the dial modem traffic. The RAS supports all common modem standards and can be simply scaled by adding new modem and PRI processing cards.

The DSP decodes modem signalling and then extracts the data packets, which are forwarded to the protocol engine. Depending on the configuration of the device, the WAN protocols such as PPP are terminated on the RAS or forwarded over an aggregation protocol such as L2TP to an external BAS.

The packet data is then sent over IP on the Ethernet interface to the public or private internet, a BAS, or another AOS.

## AOS

The AOS is responsible for providing PRI, dial modem processing, PPP, and packet forwarding, L2TP and IP interfacing.

## Activator

Activator, the Virtual Access provisioning system, provisions the router and AOS and provides an OSS interface to other systems. It also assists in the migration process from the legacy network to the new network.

## Solution Benefits

• Simple migration procedure

• Designed as a replacement for unsupported legacy RAS devices

• Connects to softswitches or MSANS over G.711 for NGN service migration

• Maintain fully supported service to dial PSTN users

• Operates over TDM or an IP infrastructure

• Connects to PSTN switches over PRI

Activator is used for:

• Provisioning

• Configuration and management



### Remote Access Server

Dial-Up Users

PSTN/ISDN

30 calls on each E1/PRI Access Port

RAS

RTP

IP

AOS

MSAN

Other Server