

case study

Virtual Access, a leading supplier of managed network solutions, have developed an architecture for migration of legacy networks (e.g. X25, BiSync) to next-generation network (NGN) topologies. Asidua helped to develop solutions based on this architecture. Virtual Access provide a unique blend of network solutions and managed services. Their customers include BT, Belgacom, Deutsche Telekom, and NTT.

In their latest portfolio release, Virtual Access has included a platform which allows service providers to migrate legacy networks to 21st Century Networks. The solution works by deploying the cost effective Service Managed Gateway at the customer premises which presents the legacy network interface to the customer, but uses DSL (ADSL, ADSL2, ADSL2+ or G.SHDSL) as the backhaul to the central office.

□ NGN migration solution

Operators are planning to move to next-generation networks (NGN) but need to continue to support legacy services such as Frame Relay, X.25, leased line, and ISDN.

Virtual Access products solve this problem of legacy support by allowing for the transport of legacy services over next-generation networks with DSL and fibre access, making it possible for operators to continue providing legacy services while moving to a next generation architecture.

read more: <http://www.virtualaccess.com>

Legacy Network Migration Architecture

□ key objectives & specification

Asidua's Device Services Division played a key role in the development of the X.25 migration solution. Deploying our Embedded Telecoms Integration offering, Asidua set about drawing up a specification for presenting X.25 interfaces at the customer premises using ADSL as the connection to the central office.

Standards for this type of network solution exist: in this case we put together a solution in line with RFC 1613, X.25 over TCP (also known as XOT). Asidua generated a specification for the "XOT Project" which was reviewed in detail with our counterparts in Virtual Access.

Before engaging in the development phase, Asidua senior engineering consultants spent time in the Virtual Access offices in Dublin gaining a thorough understanding of the Service Managed Gateway software architecture.

In this project, like many of our engagements, we used an iterative development methodology (based on DSDM) to allow "early wins" in the project. This principle has the particular benefit of building confidence within the customer and our own team that we are on the right track.

The bulk of the development and validation work was carried out in Asidua's offices and laboratories in Belfast. With each iteration, demonstration and formal tests of the functionality were carried out and reviewed by Virtual Access.

Following the successful delivery of the X.25 migration solution, Virtual Access has built on the software framework constructed by Asidua in the Service Managed Gateway to develop migration solutions for other legacy services including BiSync.

□ successful outcome

Asidua continues to support Virtual Access in the development of the Legacy Network Migration Architecture, which is a key component of the network transformation programmes in a number of service providers around the globe.

