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WTL Give COLT Total Network Security

Background

WTL and COLT have joined forces to offer COLT customers in the Netherlands enhanced network resilience. COLT offers voice and data services to large and medium businesses, government agencies and other organisations. COLT operate a Siemens-based TDM network which is designed to be highly resilient. However, for the most reliability-conscious businesses there is a further requirement that the switching should be fully duplicated (dual-homed). This meant that COLT potentially faced the costs and logistics of creating a complete duplicate of their existing infrastructure. The main business driver for this project was the need to provide switching back-up for a major COLT client. The client (who cannot be named for reasons of confidentiality) has hundreds of locations in the Netherlands each with E1 connectivity to its PABX. The central switch needed to be capable of switching traffic between these locations and breaking out to KPN and COLT's own network.

WTL Solution

The WTL solution was implemented using the IPNx switch. This highly flexible, carrier-grade switch is able to operate with any combination of TDM and VoIP traffic. For this project the proposed configuration was 100% TDM device with the option to enable VoIP at any time. The initial requirement was to back up 144 E1s of the core COLT network plus SS7 signalling to the main carrier partners. This was achieved using 3 IPNx switches linked together with Gigabit Ethernet inter-chassis connections. This technology allows WTL to create a large scale, non-blocking switching architecture capable of growing to 1000s of E1s simply by the addition of further IPNx building blocks.
The design also used DMTP3, WTL's advanced, resilient SS7 signalling technology. This allows SS7 signalling links to be distributed across physically separate switches which operate in fail-over mode.
The scale of the network, involving hundreds of sites meant that the high call switching throughput and powerful numbering and routing features of the IPNx were key benefits.

Expert Support

A major factor in the success of this project was the speed and accuracy of the installation. With hundreds of E1s to connect, a high level of planning and attention to detail was required. As Colt's Solution Architect, Mohieddine Messousi, explained, "WTL were not the cheapest offer we received but I had experience of working with them before and had been impressed by the flexibility of the equipment and the expertise of the engineers I dealt with.In this project they were a pleasure to work with. We placed some tough requirements on WTL in terms of timescale and quality of delivery but they met everything that we threw at them."

Outsourced Management

Another feature of the deal was that COLT did not want the overhead of managing another set of equipment from a new vendor. To overcome this WTL offered SwitchCare, an outsourced network management solution. Under this arrangement, WTL engineers manage the equipment remotely. Regular, automated tests are run to check that the equipment is functioning correctly and the results of these are published for COLT to see.

WTL's Managing Director, Leigh Smith, observed,"This project underlines what we have known for some time: - the WTL switches have the features and reliability of legacy 'big switches' but at a significantly lower price level. Here, we have also proved our speed and flexibility compared to the traditional telco vendors. I think COLT have shown that successful network operators need to be more creative these days in terms of how they design solutions to their business problems."

Next Steps

The initial installation was achieved on target against very aggressive timescales. The first 6 months of operation since implementation have shown that the network design has worked perfectly, and there has been no downtime or interruption to service. The automated reporting of network health and performance is also running well. As a result, the capacity of the system has already been significantly increased.

Similar back-up solutions are being discussed for other clients. These are need fewer E1s or will require greater VoIP provision and will therefore use WTL's smaller SoIP gateway. This has the same high availability features as the IPNx switch but as an entry-level SS7 to VoIP unit.

About COLT

COLT is a leading European provider of business communications. COLT specialises in providing data, voice and managed services to major businesses, SMEs and wholesale customers. COLT owns and operates a 13-country, 25,000km network that includes metropolitan area networks in 34 major European cities with direct fibre connections into 15,000 buildings and 18 COLT data centres.

COLT Telecom Group S.A. is listed on the London Stock Exchange (COLT). Information about COLT and its services can be found at **www.colt.net**

About WTL

World Telecom Labs is a Belgium-based company which has long been a leader in the provision of VoIP switches, Pre-Paid applications and signalling gateways for emerging carriers and telecom service operators. WTL has an installed base of 100,000s of voice ports with service providers worldwide switching billions of minutes of VoIP traffic using WTL equipment. For more information about WTL and its products, please visit **www.wtl.dk** or email **sales@wtl.dk**.