EXCEL SWITCHING

ONE ARCHITECTURE™

SEVERAL CHALLENGES...

TNS wanted a switching platform that would give them full control of switching functionality and the ability to tightly integrate their own previously developed SS7 technology. Their typical call duration of 15 seconds or less also required very fast call switching. Additionally, TNS wanted a switch with high T1 card densities to provide maximum concentration per site and reduce footprint.

TNS knew that a traditional switch would not suit their needs, so they evaluated all other potential products on the market. It did not take them long to realize that there was only ONE Architecture™ that could provide the functionality they needed.

Creating Advanced Data Solutions

Transaction Network Services, Inc. (TNS), a rapidly growing provider of value-added dial-up data networking between merchants and credit-validation companies, was using an in-house developed PC-based switching application for their trunk management. These PC systems connected to many different LATAs and Bell companies, often with multiple disparate services. With a steady flow of new business coming in, TNS saw the need for technology that could cost-effectively support this growth. The company determined that their best alternative was to use a full-featured switch that could further condense network traffic for greater call handling efficiency and management.

ONE SOLUTION

Excel's Open Network Expansion (ONE) Architecture, based on the Expandable Switching System (EXS®), was the only product that provided the flexibility, scalability, programmability, and high performance that would suit TNS' needs. The in-depth programmability of the EXS platform allowed TNS to precisely optimize their call model, streamlining system processes and assuring maximum performance. EXS functionality allowed them to port their application easily, while tightly integrating their own SS7 technology. The new system increased performance, resulting in a measurable reduction in call duration for certain call types.

TNS®

TNS also valued the platform's scalability. Their old PC-based application could only support 32 T1 ports per chassis. With underutilized incoming T1 trunks, the replication of hardware was difficult to manage and very expensive. Using the EXS platform, TNS was able to aggregate more trunks, minimizing hardware and substantially increasing call-handling density per port. The result allowed TNS to deploy one EXS system to replace several of the PC-based systems. Furthermore, EXS line card scalability allows TNS to deploy dense 8 and 16-span T1 cards, activating capacity in two span increments through software keying.

This enables the company to keep costs precisely in line with capacity needs. The ability to quickly integrate additional switching nodes provides further advantages for TNS because many sites in larger cities are growing quickly enough to require multi-node systems.

"The density, price-per-port, and technology were all better with Excel," said TNS' Senior Vice President of Development Rod Lyman. "We have very stringent demands, processing over 100,000 SS7-to-SS7 calls per hour in each switch. We needed best-in-class technology to serve a marketplace that has mission critical uptime requirements, as well as stringent call handling performance requirements."

TNS continues to grow rapidly, deploying new systems on a regular basis to keep up with network traffic. With ONE Architecture, TNS has a platform that can expand with its growing network, supporting current and future requirements.

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