commtel™ case study

modern migration
the power to grow through renewed network inventory and design

In a joint project based on dedication, trust and open communication, CommTel has worked alongside South Australian electricity transmission specialist ElectraNet to carry out a comprehensive network data migration plan.

ElectraNet is the owner and operator of the South Australian electricity transmission grid, with a 275 kV backbone transmission network transporting power throughout the state. As such, timely and accurate network inventory forms a crucial part of its day-to-day processes and operations. With an existing network inventory system reaching the end of its life, an initiative was launched between ElectraNet and CommTel to migrate to a future-proof solution that would support network expansion and operational efficiency.

Specifically, with such a vast network, ElectraNet sought a turnkey product that would improve the efficiency of maintaining its network inventory and design activities, as well as the accuracy of the information. In addition, it required the Network Operation Centre (NOC) to rapidly identify the impact of any network faults – all the while reducing the number of systems and repositories where information is stored.

Inventory and design
The project was undertaken without needing to expand ElectraNet's existing in-house team. Together, the two companies implemented ConnectMaster, a best-of-breed telecommunications network inventory and design system. Powerful, intuitive and user-friendly, it provides an expansive and configurable platform for documenting all aspects of infrastructure-based telecommunications networks, giving users an integrated view of their operations.

Several key steps had to be carefully observed to bring the project to completion. Beginning with the installation of ConnectMaster, user training and device model development were then carried out, followed by the initial trial migration and further testing of the migration strategy and tools.

As with many system replacements, the data migration presented considerable challenges, such as the sheer quantity of data, its dynamic nature, and the need to keep expanding and changing the network as the migration progressed. After the migration had taken place, the system was able to go live.

Objective
- Establish a future-proof network inventory and design system
- Improve the efficiency and accuracy of network inventory and design activities
- Reduce the number of systems and other information repositories
- Continue with network expansion while migrating to the new system

Solution
- ConnectMaster – a turnkey network inventory and design system

Outcome
- Ability to conduct significantly more design work
- Rapidly able to determine the operational impact of a network fault
- Improved accuracy and reliability of network data

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Using sophisticated data validation and integrity checking tools, a considerable amount of data was identified that needed correction before it could be migrated.

Swift fault assessment

With the hurdles overcome, the ConnectMaster system now covers approximately 140 sites, 1,400 equipment racks, 4,500 devices and equipment cards, and 14,000 routing points. The network itself is comprised of copper, optical fibre, microwave PDH, SDH and IP technologies, all sourced from a wide range of manufacturers.

With the previous Microsoft Access system retired, the ConnectMaster system is now providing ElectraNet and its contractors with the ability to conduct significantly more network design activities, as well as to swiftly determine the operational effects of a network fault using the impact analyser facility. It has also shown a marked improvement in the accuracy and reliability of data – fulfilling the customer's primary objective.

Throughout the project an open and honest dialogue was maintained between CommTel and ElectraNet, fostering a proactive and dedicated environment that allowed the task to be completed thoroughly, despite the challenges that were presented.

People with the requisite skills and experience in major data migration projects were able to pull together to ensure that the ConnectMaster system implementation was a success, measuring the results using a sophisticated data comparison and validation tool, as well as a comprehensive data dictionary.

A synergistic solution

With a sound understanding of the business, CommTel is able to identify and deliver solutions that will best fit ElectraNet's needs, providing tailored, integrated solutions all from one vendor. It's all about creating a synergistic solution to suit the specification – one that would otherwise not be available.

"Having worked in partnership with CommTel for a number of years, they know our business well and were able to approach this project with a strong working knowledge of what was required, ultimately delivering a system that will benefit us for many years to come" says David Schutz, ElectraNet's Telecommunications Manager.

With its wide range of equipment, management platforms, knowledge, skills and toolsets, CommTel is in a unique position to provide electricity companies with solutions precisely engineered to address their objectives – delivering significant business advantages in a thorough, professional and cost-effective manner.

About Commtel

CommTel is a leading international provider of advanced and engineered solutions for mission and business critical networks. We are a technology integrator, specialising in the delivery of network solutions that ensure the reliable delivery of vital services such as water, gas, electricity, public transport, and emergency services.

CommTel is widely known for innovative technology solutions, providing the network infrastructure and associated applications that optimise existing networks, as well as delivering digital transformation programs that provide a seamless transition from legacy to new technology.

Businesses in the mining, transport, oil & gas, utilities and emergency services sectors rely on CommTel as their trusted, long-term partner to ensure their systems meet their exacting requirements in the critical areas of safety, reliability, capacity, efficiency, intelligence and security. CommTel is certified to the highest international standards for Security, Health & Safety and Quality, and maintains a strong commitment to the environment.

To find out more about how CommTel can take your business into the future, visit www.commtelns.com

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