

CONFIDENCE RESTORED

A look into what Australia's largest electronic transaction Company did to flatten, secure and simplify their network architecture.

Confidence Restored

The massive surge in online transactions over the past five years caught most companies in the financial services industries completely off guard. And Australia's largest electronic transaction company was no exception.

Having established a close working relationship with ICT Networks previously, the electronic processing company sought advice from the experts in network change about designing a new network and new network strategy to better prepare it for the challenges lying ahead. Today the electronic transaction company has a fully integrated, highly redundant and agile end-state network architecture; the envy of many in the financial services industry.

TAKING THE RISK

As Australia's largest electronic transaction company, the client manages around 30 million bills each month valued at over \$20 billion.

With such massive volumes of transaction data being transmitted every hour, minute and second of the day, even the smallest window of unscheduled downtime would have resulted in large-scale and measurable financial losses.

Not only did ICT Networks help the client essentially build a new network from scratch, but it also managed a critical reworking of the company's datacentre facilities in Sydney. Risk management was therefore a critical component of the project.

Obsolete infrastructure and an architecture that was no longer fit for purpose meant errors in one part of the network could trigger outages in other parts. But with a flat network topology this domino effect of risk and associated bottlenecks has now been eliminated.

ICT Networks helped the client plan and execute a full network infrastructure upgrade, which was undertaken smoothly without any unplanned downtime and no disruption to business operations. Such was the complexity of the client's network ecosystem, ICT Networks had to work especially hard to replicate it within its Sydney-based lab environments. Nevertheless, this was key priority for ICT Networks so as to ensure rigorous design testing was conducted prior to deployment.

"The client essentially had three different networks layered over each other," said Mitch Barr (ICT's lead engineer on the project). "There was massive complexity that had become extremely time-consuming and expensive to manage."

The client went from a highly complex multi-vendor network to a simple, scalable, adaptable network, decreasing operational risk and improving transaction-processing speeds using Juniper Networks as their prime vendor and backbone. ICT's engineers worked with the client to isolate and eliminate multiple bottlenecks, as well as single points of failure, all with strict adherence to PCI DSS compliance standards.

MOVING FROM OLD TO NEW

- Conduct full audit of existing environment and supplier contracts
- Undertake assessment of compliance requirements
- Document all relationships between systems, processes and stakeholders
- Consult closely with client to understand what stays and what goes
- Undertake full change-managements testing at every stage

TRUE CONSULTATION

Australia's largest transaction-processing company was facing a perfect storm of complexity within its operations.

Exponential growth in the electronic transaction volumes were pushing its existing network infrastructure to its limits, posing significant risks to operations.

"The previous configuration was totally ineffective" said Mitch Barr, Senior Network engineer at ICT.

Consultation between ICT's team of Level 3 engineers and the client's system administrators led to a mutual understanding of the need for a major overhaul.

It was this level of deep interaction set from the start which ensured a fully cooperative, transparent approach to identifying problems and deploying solutions.

ICT employs only the most experienced engineers, which together have decades of combined exposure to multiple network and IT platforms, and within multiple industries including financial services.

This enabled them to help the client gain a clearer understanding of its current situation, ensuring both parties were on the same page at every stage, from initial consultation to design, deployment, change management and monitoring.

CLOSE TIES

Key to the project's success was the close relationship between the client's network administrators and ICT Networks' team of Level 3 engineers. From the earliest stages of initial consultancy, right through to planning, design and implementation, ICT's engineers were on-hand and on-site to ensure every stage of the project was meticulously managed and documented, in full consultation with the client.

With multiple project meetings each week, all parties had the opportunity to discuss and test ideas on a regular basis before they were put into place. Money was also saved by ICT's engineers helping to protect the client's investment in existing equipment and systems, with all technology assessed in terms of its value within the redesigned network environment. Furthermore, all ongoing costs remained completely transparent throughout every stage of the project.

Work was structured according to regular, strict milestone deadlines, ensuring that all deliverables were achieved on time and on budget. Key to achieving this was the maintenance of detailed documentation at each stage, along with regular consultation on compliance, especially PCI DSS.

CHANGE MANAGEMENT

ICT's Level 3 engineers possess deep experience and insights into complex IT environments - including the character and interplay between all major enterprise platforms - making them uniquely well-placed to manage risk down to the most granular level, ensuring organisations have complete confidence regardless of the specific project being undertaken.

Not only did ICT help its transaction client understand the immediate impact of each aspect of the upgrade and relocation, it also ran and observed every change in its labs over an extended period, guaranteeing full regression testing and therefore peace of mind, not only for the client, but also the many financial institutions and their customers that rely on it.

In today's complex business environment, it is critical to have well-designed communications systems that reflect the particular circumstances of individual businesses and the challenges they face so that they can confidently guarantee high levels of service for their customers and partners. For Australia's largest Electronic Transaction Company, the key to achieving this was a quality, ongoing relationship between its senior IT managers and ICT's team of Level 3 engineers, ensuring that each stage of the project was carefully designed, deployed and tested in full consultation.

From a complex knot of multiple technologies accumulated over a decade, to a fully integrated end-state network architecture, the company has not only resolved what had been a fast-growing headache and risk to the business, but it has also future-proofed itself to handle the exponential growth in payment transactions expected over the years and decades to come.

ICT Networks has proven expertise in the design, integration and support of some of Australia's most demanding networks.

Call **02 9078 7700** to find out how your business can take advantage of our experience or, email **info@ictnetworks.com.au**