Northern Territory Primary Health Network

C1 CALIBRE ONE

ENHANCING BUSINESS THROUGH TECHNOLOGY

Northern Territory's key health care provider modernises and simplifies IT and telecommunications infrastructure

phn NORTHERN TERRITORY

An Australian Government Initiative

Calibre One builds the platform for continual service improvements at NT PHN

Northern Territory Primary Health Network (NT PHN) was established in 2015 by the Australian Government as one of 31 PHNs nationwide. NT PHN coordinates primary health care delivery, and tackles local health care needs and service gaps across an area of 1.3 million square kilometres, which is sparsely populated with roughly 245,000 people, including a significant constituency of Aboriginal people. NT PHN operates a single, integrated management and program structure for efficient, coordinated and integrated service planning and has strong links with regional clinical public health advisory groups, hospitals, health services, peak bodies and government departments.

Infrastructure Improvement Objectives

Australia's PHNs replaced 61 Medicare Locals resulting in their consolidation. NT PHN, however, was a direct replacement of the former organisation. While NT PHN didn't have to restructure or consolidate its infrastructure, the new organisation still inherited a legacy environment with multiple domain names, which was having a major impact on operational security, flexibility and productivity.

"Our virtual desktop environment was very poorly viewed," said Shari Tanzer, Executive Manager Operations, NT PHN.

"We could have between 50-70% downtime for three to four weeks running, and the impact of unsolicited and malicious messages was regularly shutting down our email system."

Due to the issues with the legacy Citrix virtual desktop environment (VDE), frustrated staff resorted to working on files and documents

Challenge:

Poor network and application reliability, security and stability, latency issues impacting on telecommunications, under-performing virtual desktop environment having a direct impact on end users, duplicate server and multiple domain issues, disconnected and disparate telephony.

Solution:

Calibre One Managed IT Services and Helpdesk, a complete infrastructure migration to Telstra's CSX2 cloud platform, implementation of Microsoft Office 365 and Skype for Business, and ShoreTel (now Mitel) Connect unified communications.

Benefits:

- Restored user confidence in IT communications, applications and services

- Reduced downtime from 50-70% for email and video conferencing to negligible levels

- Maintained overall network and application service availability at 100%

- Provided a stable platform for further service and business improvements

- Assisted NT PHN in progressing its vision towards a true cloud-based infrastructure

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locally then emailing them back and forth. This put a lot of strain on the email systems, creating duplication of effort, version control issues and inefficiencies, as well as potential risk to the organisation with a lot of critical data residing on local desktop and laptop drives that were not being stored appropriately or backed up.

NT PHN was operating separate telephony systems at each of its three sites, with older-style Panasonic PABXs in Alice Springs and at one office in Darwin, and a cloud-based IP telephony solution at its second Darwin location. Microsoft Lync was in use for internal conferencing, but suffered from frequent crashes and poor performance quality.

"NT PHN'S STAFF ARE NOW ABLE TO FOCUS ON THEIR OWN DAY-TO-DAY BUSINESS AND PLAN FOR THE FUTURE."

Shari Tanzer
Executive Manager Operations
NT PHN

The organisation published a closed tender for a managed services provider (MSP) to re-design and upgrade its entire telecommunications and IT infrastructure, then take over management, helpdesk and ongoing improvement of communications and IT services and applications.

NT PHN was looking to modernise and simplify its network, improve the application performance response times for its users and increase the overall reliability and stability of the network and the services running on it.

Calibre One was chosen from the shortlisted candidates based on the company's level of technical depth and support, extensive engagement with Telstra, geographical spread and the high level of professionalism demonstrated in all their interactions with NT PHN.

As part of the tender process, NT PHN was clear on the objectives it wanted to achieve:

- To build a cloud environment that would host a virtual desktop environment, running all its applications from ERP and CRM to basic file and print server management;

- To have an environment that meets ISO-27001 Security and AS/NZ 13000:2009 Risk Management Standards;

- The environment needed to be able to support all devices including Windows, Mac, Linux/Unix and mobile devices;

- Detailed reporting of users' activity was a critical audit requirement, as a prerequisite of how NT PHN received its government funding; and

- Service level requirements with 24x7 support on helpdesk and a 1, 4 and 24-hour response on Severity 1, 2 and 3 issues.

"When Calibre One met with us to present its tender response, the whole team came in. They ticked every box of the tender and demonstrated that we would have a connected service experience and get the level of support we needed," said Ms Tanzer.

Key Service Improvements

Calibre One was engaged in April 2016 by NT PHN to completely rebuild the regional healthcare provider's IT environment, and migrate NT PHN's legacy applications and data across to the new infrastructure. Additionally, Calibre One upgraded all the applications and services that were causing issues, and assumed responsibility for running NT PHN's IT service desk and managing the organisation's entire ICT services. The new infrastructure and services were scheduled to go-live on 1 July 2016.

The first step was to improve NT PHN's internet connections, then migrate the servers over to the new Telstra CSX2 cloud service. Calibre One's proposed strategies around utilisation of technologies like Microsoft Office 365 enabled NT PHN staff to coordinate clear video conferences with one click of a button using Skype for Business, and collaboration around projects utilising Microsoft SharePoint or Microsoft Teams. Calibre One's track record

Benefits (cont.):

- 6.9% increase in utilisation of Skype for Business, with a total of 3,000 instant messages and 90 conferences by up 51 active users

- Increasing email activity at a rate of 19% per annum

- Detecting and stopping both peaks of 3,000 spam emails and an average of 300 spam messages per day

- 110,000 non-legitimate emails stopped before reaching end users' mailboxes in 12 months

- Stopped over 70 external attacks, and blocked 90 dangerous websites in 12 months

as the most experienced IT services provider in the Northern Territory, by number of Office 365 seats deployed, gave NT PHN confidence in Calibre One's ability to deliver these types of solutions effectively.

"WE LOOK FORWARD TO CONTINUING TO WORK WITH THE CALIBRE ONE TEAM AS WE NAVIGATE THE CHALLENGES OF TECHNOLOGICAL CHANGE."

Shari Tanzer
Executive Manager Operations
NT PHN

Calibre One also consolidated NT PHN's telephony environment with a ShoreTel (now Mitel) Connect on-site unified communications (UC) solution, giving the organisation a 100-number range in both Darwin and Alice Springs, and internal dialling capabilities between the two locations, and also with remote staff working from home.

Migration Requirements

As part of the migration of NT PHN's servers to the new Telstra cloud platform, Calibre One ensured minimal business downtime, and minimal user impact. It was also critical for Calibre One to complete the migration before NT PHN's existing MSP contract expired and to limit the costs of paying two service providers during the cutover period.

A further complication was added to the project when NT PHN moved its main office four weeks after the new environment went live, giving Calibre One only 4-5 weeks to prepare.

One of the requirements in the migration of the application servers and data to the new Telstra CSX2 platform was to reduce the number of servers from the 41 that were currently in commission. That included the upgrade of a hosted environment that was running Microsoft Windows Server 2008, 2008R2 and 2012 along with Linux and Citrix as the delivery method to

each user – and the applications being served up to users. This was a shared infrastructure environment which provided resources in the data centre that had the underlying hardware shared with other clients. NT PHN users were accessing Microsoft SharePoint 2007 and 2010, MYOB, and Microsoft Office, Lync and Dynamics CRM via this environment.

This dedicated infrastructure, with limited shared internet connectivity, made a migration to Microsoft Office 365 a challenge for Calibre One. In order to achieve this, an escalated approach was taken where the bulk of the migration was done over several weeks, leaving the final stage for a weekend.

There were a number of servers with limited visibility which made their migration a challenge. The same network was replicated on NT PHN's new CSX2 infrastructure, which allowed SharePoint and CRM servers to be migrated without changes. To replicate those servers a tool from Double-Take was used which allowed Calibre One to block replication and failover on the "go-live" day.

Performance, Availability and Reliability

Calibre One was able to complete the server migration within the scheduled timeframes and, in the process, simplify the server environment and reduce the entire infrastructure from 41 servers to just 18.

Through its engagement with Telstra and utilising the telco's technology funds, Calibre One offset 90% of the upfront professional services costs for NT PHN. Also, the new monthly IT operating expenses for NT PHN came within the set budget outlined.

NT PHN is now more than 12 months into the migration to its new environment and applications.

The core issue – performance and reliability issues for users – has been eliminated. The downtime for email has been reduced to zero. And for the first 12 months, the service availability has been 100%.

That has resulted in greater utilisation of the new productivity and collaboration applications

deployed. NT PHN has seen a 6.9% increase in utilisation of Skype for Business over its former Lync service, with a total of 3,000 instant messages and 90 conferences completed by up to 51 active users. Email activity is increasing at a rate of 19% per annum, with Calibre One predicting that 320,000 emails will be sent and 654,000 emails received in the year up to July 2018.

Calibre One is now detecting and stopping peaks of 3,000 spam emails and an average of 300 spam messages per day. Over the past 12 months, that has translated into around 110,000 non-legitimate emails stopped before reaching end users' mailboxes.

The implementation of edge security devices for the new Telstra CSX2 infrastructure has stopped more than 70 external attacks, and 90 dangerous web sites have been blocked, minimising the exposure to users and infrastructure from external threats.

The ShoreTel (now Mitel) Connect UC platform has given staff integrated voicemail, which can also be configured for access by workgroups, three-way audio conferencing, and an IVR automated attendant for incoming calls is integrated across both NT PHN offices in Darwin and Alice Springs. Remote workers are able to connect to the internal telephony network via home broadband, and it's a simple step for users to forward calls to their mobile, another colleague or voicemail.

"NT PHN's staff are now able to focus on their own day-to-day business and plan for future ways in which new projects could further

better NT PHN's ability to conduct business in the Northern Territory, with improved speed, reliability and with the knowledge that we have a strong partnership with Calibre One to support us on our journey," said Tanzer.

Future Plans

Now that NT PHN has the core infrastructure and services optimised, the organisation can turn its attention to upgrading its various business applications, including HR, finance, data analytics, CRM and contract management solutions.

Calibre One's helpdesk and support services are identifying opportunities for improvement and future planning. NT PHN's account management team delivers a monthly report on data and trends which has also been beneficial in finding IT weaknesses within the organisation and allowing focus on individual users or teams who may need further training or help in certain areas. One of the first improvements made was to implement a self-service password reset application, from trends uncovered in the helpdesk tickets.

Based on the positive experience with Microsoft Office 365, NT PHN is also considering a move to more cloud-based services and applications, balancing the economic constraints of a not-for-profit organisation with the efficiencies and performance gains of cloud.

"We look forward to continuing to work with the Calibre One team as we navigate the challenges of technological change and continue to reshape the future for our organisation," concluded Tanzer.

Calibre One. Enhancing Business Through Technology.

Calibre One has been providing ICT business solutions for over 20 years. Our consultants will work with you to understand your business needs and then align these to your ICT strategy. Calibre One provides innovative business solutions including; Computing and Cloud, Unified Communications and Telephony, Connectivity through Networks or Mobility, Management and Tracking of your Business Fleet, all complemented by our IT Support and Management.