

Network Monitoring & Analysis Project

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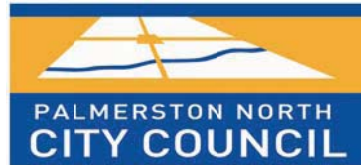
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Project Sponsor: Kelly Lawton

Palmerston North City Council

1 Introduction

As the Local Government, Palmerston North City Council (PNCC) is charged with



the general administration & maintenance of the city. It provides a diverse range of services to the people of Palmerston North, and like any large organisation today it relies on a network of Information Services where reliability is vital to day-to-day business.

Kelly Lawton identified a vulnerability in the Council's Information Systems in the lack of a monitoring tool. A system is needed that will keep an eye on the many vital devices 24/7, and alert the appropriate staff when things go wrong.

2 Objectives

The objectives of the project were to:

- Update the documentation of the current network
- Deploy appropriate network monitoring/diagnostic tools
- Identify network performance or security problem areas
- Research and recommend a solution
- Implement and test the recommended solution

3 Method

3.1 Discovery & Needs Analysis

As much of the network was not properly documented, a process of physical verification & inspection of all network switches was undertaken. This was done to not only create up to date documentation, but also to get a general understanding of the existing network & systems.

Analysis was also undertaken as to exactly what kind of monitoring tools were required.

3.2 Research & Implementation

Network Monitoring/Troubleshooting systems & the technologies involved were researched & evaluated. A short-list of tools were then presented to the project stakeholder for feedback, after some

refinement in configuration and implementation a final system was agreed upon.

The agreed upon software was then deployed on a server and configured, guidelines and instructions for usage were written.

3.3 Overall Network Analysis & Improvement

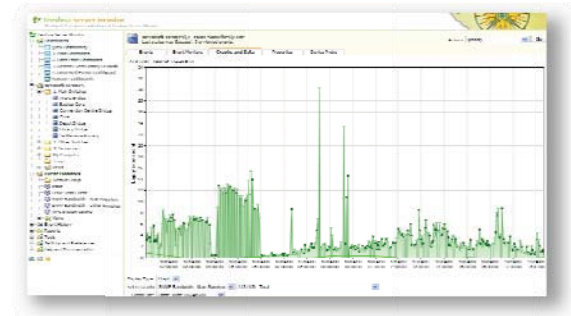
Using the newly deployed monitoring systems, in addition to other tools, the network's activity was analysed to discover opportunities for improvement in performance and security. Where immediately possible these improvements were then made.

4 Results

Network documentation is now improved and updated, providing all IT staff a current overview of equipment location & details.

Using the Tembria Server Monitor, vital information systems are now monitored 24/7, with a variety of notifications/alerts customised to requirement.

Previously unknown network issues have been identified and actioned upon.



5 Conclusion

With new and improved documentation and a capable monitoring system the PNCC's ability to quickly deal with network issues has been greatly enhanced.

The capabilities introduced with the Tembria Server Monitor and other tools now allows for accurate future planning of capacity requirements, and further enables future identification and resolution of issues. Combined, this allows for a pro-active rather than a re-active approach to network management