CUBIC TRANSPORTATION SYSTEM ENSURES EFFICIENT AND SEAMLESS SERVICE TO NSW OPAL CARD HOLDERS WITH SOLARWINDS

solarwinds

CASE STUDY

The Company

CTS is a division of the global parent company, Cubic Corporation, providing diversified systems and services to the transportation market worldwide.

CTS is a leading integrator of payment and information technology and services for intelligent travel solutions, with successful programs rolled out in many cities across the world including London, Vancouver and Chicago.

CTS provides innovative technology and an integrated approach to systems and services for government and commercial customers.

Summary

Cubic manages the Opal® card system for Transport for New South Wales (TfNSW) spanning ferries, trains, light rail and buses across the greater Sydney area which stretches north beyond Newcastle, south beyond Wollongong and east across the Blue Mountains.

The Opal card is a smartcard that users load value onto and use on public transport. Commuters tap on at an Opal card reader to start their journey, and tap off at the end of their journey, with the system automatically calculating their fare and from the value stored on the smartcard.

The Opal card roll out was a high profile public project with much riding on a successful outcome. The public and real-time nature of the project puts Cubic under constant pressure to detect critical network issues before they occur and resolve them quickly.
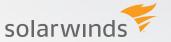
The Challenge

The plan was to gradually roll out the Opal card system across the TfNSW public transport network under strict and demanding SLAs from the NSW Government.

CTS needed a technology solution capable of effectively monitoring the full infrastructure environment required to support the new system, as well as the ability to flag any potential issues ahead of them occurring.

With the company's SLA requiring quick responses and adherence to tight timeframes in terms of prevention and resolution, while handling millions of transactions during very narrow peak rush hour periods, CTS began reviewing a range of potential IT monitoring options.

> *... We needed something that was not going to be a massive overhead, was going to deliver and would ensure a seamless customer experience ...*

solarwinds

The SLAs outlined that CTS needed to report any network issue within 15 minutes and solve it within two hours or four hours, depending on the criticality of the issue.

The CTS system is cash flow sensitive, which means if public transport users can't record their fare due to an infrastructure fault then TfNSW can't capture that revenue.

Of particular importance was the need to find a solution which could improve the current network monitoring of the CTS system.

Jeff Shaw, Cubic's Operational IT Services Manager says - "At the time, the network monitoring and learning aspect of the project was not very well scoped. We needed something that was not going to be a massive overhead, was going to deliver and would ensure a seamless customer experience for all public transport users across the greater Sydney network, covering 40,000 square kilometres."

When it came to SLA targets there were high expectations, which drove Shaw and his team to scope the market for a best of breed solution.

"Because of the challenging demands of the SLA, senior management were extremely keen to see that we were achieving our SLAs," Shaw said. "So we were under a lot of pressure to perform."

With the knowledge that CTS was already using SolarWinds successfully to carry out similar roles in both the US and UK and after considering various other options, Shaw selected SolarWinds as CTS' network monitoring solution of choice. It would soon become the largest single CTS project using SolarWinds.
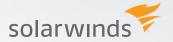
The Solution

After careful consideration, CTS implemented SolarWinds Network Performance Monitor and SolarWinds Network Configuration Manager, as part of the initial solution. Later SolarWinds Server & Application Monitor was added to the mix.

Shaw and the team found that the highly agile solutions took less than a day to install and configure, allowed them to immediately begin learning while simultaneously exploring the capabilities of the offerings.

"I would describe it as an organic learning implementation," said Shaw. "We installed the products and started using them instantly. The ease of use also made ongoing evaluation of the products very straight-forward. Now we are able to keep adding more solutions in a modular approach as needed and continue to review additional features."

" We installed the products and started using them instantly. The ease of use also made ongoing evaluation of the products very straight-forward. "

" The ease of SolarWinds' tools means that everyone in the team is a monitoring guy and can set up a new template, add something to it. "

solarwinds

As CTS was already an existing SolarWinds customer, Shaw and his team had great confidence in SolarWinds' capability to deliver. This, combined with the affordable price point for the features and the functionality received, the ease of setup an positive testimonials from other colleagues around the world who were already using SolarWinds were all factored into the decision making process.

"There was no one single thing that won it for SolarWinds - it was the whole package, a strong business case that got them across the line."

The team at CTS have continued to evolve processes based on the new system, in particular setting up all email notifications to route to the service desk and educating staff about updated processes and procedures.

"With our previous setup, the team were largely monitoring a screen and looking for issues in a more reactive fashion. But thanks to the flexible nature of the SolarWinds solutions, we were able to put new monitors in place, with new business processes to complement those monitors and alerts," said Shaw.

"We didn't sit down and plan the whole thing out and deliver a complete solution. We put it in and then we learned what it was capable of and developed an agile approach – all enabled by the software."

Due to the flexible and vendor-agnostic nature of the SolarWinds IT management software portfolio, Shaw and his team easily and quickly adapted the technology to complement existing CTS devices and IT systems, without the need to discard existing hardware or software investments.

Everything from devices located at the gates at railway stations to location readers on buses are now complemented by SolarWinds.

" ... the guys love the ability of SolarWinds to help them to crack issues. It's a real morale lifter to have a good piece of technology that is also fun and extremely useful to use. "

Business Benefits and Results

CTS are already seeing the delivery of strong results off the back of the installation of SolarWinds technology.

SolarWinds Server & Application Monitor has enabled CTS to understand very quickly how infrastructure issues are beginning to impact an application, allowing CTS to address the identified issues by providing ample time to alert and resolve an infrastructure issue before it takes place and impacts customers.

The local CTS team has also been pleased with the ability for everyone to use the solution. All employees can take on tasks, which means that there is not just one person monitoring the network and able to make changes.

CASE STUDY: CUBIC TRANSPORTATION SYSTEM ENSURES EFFICIENT AND SEAMLESS
SERVICE TO NSW OPAL CARD HOLDERS WITH SOLARWINDS

solarwinds

"The ease of SolarWinds' tools means that everyone in the team is a monitoring guy and can set up a new template, add something to it," Shaw said. "It avoids the strain on the team which can occur when you only have one guy that can do it. This new system is quite intuitive and easy to use."

One particular scenario that confronted Shaw and his team note was when an alert was received from a disk controller, signalling that something was going to crash.

CTS were able to displace the disk array vendor in the middle of the night to swap the controller before it went down and affected the applications.

Shaw says SolarWinds has been adopted positively by the IT team.

"Sometimes people put these tools in, and then it's too much effort to make it work, but the guys love the ability of SolarWinds to help them to crack issues. It's a real morale lifter to have a good piece of technology that is also fun and extremely useful to use," Shaw said.

Opal has been a stunning success. Beginning with the first trials on a single ferry service in Sydney in late 2012, the Opal system rollout was completed in late 2014, well ahead of time and within budget.

> *Using SolarWinds to internally manage the IT network required a third of the cost of implementing a third party supplier.*

ABOUT SOLARWINDS

SolarWinds (NYSE: SWI) provides powerful and affordable IT management software to customers worldwide from Fortune 500 enterprises to small businesses. In all of our market areas, our approach is consistent. We focus exclusively on IT Pros and strive to eliminate the complexity that they have been forced to accept from traditional enterprise software vendors. SolarWinds delivers on this commitment with unexpected simplicity through products that are easy to find, buy, use and maintain while providing the power to address any IT management problem on any scale. Our solutions are rooted in our deep connection to our user base, which interacts in our online community, thwack, to solve problems, share technology and best practices, and directly participate in our product development process. Learn more today at www.solarwinds.com.

Level 9, 15 Blue Street | North Sydney NSW 2060, Australia | P: +61.2.8412.4900