



Macquarie Telecom

» BMC Software's Atrium Orchestrator, BladeLogic Server and Network Automation tools have effectively decoupled growth from cost, providing Macquarie Telecom with substantial savings

BEFORE

- » Macquarie Telecom was experiencing runaway growth and needed to ensure its infrastructure could meet that growth trajectory in a cost-efficient and reliable manner
- » Much of the server and network management was conducted manually with the support of only a handful of homegrown scripts
- » The patch management service that Macquarie Telecom offered was popular with its clients but cumbersome to provide, as it was based on a largely manual process

AFTER

- » Implementing BMC's solutions has effectively decoupled growth from cost, providing Macquarie Telecom with substantial savings
- » Automation is boosting efficiency with payback expected in well under two years
- » The automation has allowed Macquarie Telecom to innovate and offer new services to clients, which provides them with a competitive edge



GEOGRAPHY

Australia

INDUSTRY

Telecommunications

SOLUTIONS

BMC BladeLogic Server
Automation

BMC BladeLogic Network
Automation

BMC Atrium Orchestrator

BMC Consulting Services

Over the last 20 years, Macquarie Telecom has developed into a beacon in the Australian IT services landscape, providing a comprehensive range of hosting services to businesses from household names to start-ups. At the heart of its business proposition are its state-of-the-art, reliable, and secure data centres.

The company's growth trajectory has been steep; over the last four years it has tackled growth rates of 20-40 percent a year as it rapidly acquired new customers and infrastructure. Over the same period, its operations team has tripled to keep up with demand. It operates many thousands of servers for and on the behalf of clients, about 80 percent of which are virtualized. These are located in Tier 3 data centres in Sydney and Canberra which underpin the \$60 million a year hosting business.

Macquarie Telecom's technology has always been at the cutting edge, but over the last four years, it has invested in systems automation technologies and schooled its workforce in ITIL and Cobit practices. This has liberated more efficiencies and fueled Macquarie's growth.

GOOD, BETTER, BEST

James Mystakidis joined Macquarie Telecom as the general manager of hosting operations four years ago. Mystakidis' role goes well beyond keeping the lights on; he is focused on continual operations transformation. This allows the organisation to match customer expectations for scale and performance, while providing a platform to accommodate new customers and new services.

He arrived to find an already robust infrastructure which was managing to grow broadly in sync with what he describes as "exponential growth" in customer and infrastructure

acquisition. He needed to ensure that the hosting business could continue to scale efficiently and cost-effectively, while also distinguishing itself in the marketplace by dint of the services it could offer.

The first step was to audit the operation. Mystakidis and his team profiled the existing operations using the ITIL and Cobit frameworks and created what he describes as a “cityscape,” which formally mapped IT operations as it stood then. This allowed Mystakidis to identify gaps and clearly articulate to the business how to take the company’s hosting operations to the next level.

Along the way, he has also ensured that his entire team is trained and certified in ITIL, which has informed them about the best practice framework and created a uniform vocabulary. That’s important Mystakidis explains, “So when I say ‘change’ people know what that means, and when I say ‘incident’ or ‘problem ticket’ people understand. “

The audit process revealed a lack of formal toolsets to manage or automate network and server operations. Most processes were manual, supported by a handful of homegrown scripts.

While the operation still delivered a robust solution to clients, it wasn’t sustainable. As Mystakidis explains, “The cloud model for a vendor is predicated on infrastructure being in place or available on a just-in-time basis. To scale to meet the market expectations of time, cost, and breadth of service, Macquarie Telecom needed to automate network and server management.

NEVER LET IT REST

Having applied a rigorous process to analyzing the current situation, Mystakidis adopted similar rigour when determining what solutions might be available. Instead of issuing a standard open tender, he and his team conducted their own market research and took a trip to the US to study the experience of international hosting companies. Armed with this insight, the company invited a handful of vendors to pitch their wares, and then evaluated tools from BMC Software, HP and CA Technologies.

By this stage, Mystakidis understood that he needed best-of-breed operations management technologies to help Macquarie achieve the scale its growth trajectory demanded, while effectively decoupling cost from growth.

“The Network Operations Centre no longer does any patching. We were doing thousands and thousands of patches each month, now we don’t do any. It took hundreds of hours out of the NOC (workload), delivered value for customers, and is more efficient with no errors. It’s a step change. We have created unique value for our customers. Not one of our competitors in the Australian market has anything to this level of complexity or automation that engages the customer through a portal to engage in patch selection.”

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GENERAL MANAGER OF HOSTING OPERATIONS

“Our proof of concept testing was extremely thorough. We created an understanding of the environments — of the features, functions, and needs. Then we engaged the vendors for a technical presentation and evaluation. After that, the proposed tools were put through a two-week long detailed proof-of-concept test.”

Macquarie Telecom also ranked the three potential vendors on other criteria such as level of engagement, difficulty of learning the system, account model engagement, cost, and client references.

It was an extraordinarily comprehensive stress test, and took four months from the start of testing to the final decision. Mystakidis says that BMC’s tools passed the technical tests. BMC Software went on to win the deal by virtue of its high level of executive engagement, the focus it had on the product set and – this was key says Mystakidis – access to a local BMC Consulting Services team to work with Macquarie to deliver a turnkey implementation.

Mystakidis further explained, “BMC Software is actually one of the few vendors in the region that does their own consulting services in house, and that appealed to us as part of the selection. We felt that the BMC Services team was interested in not only making sure that their technology was fit for our purpose, but that we could actually achieve the right business outcomes from their technology.”

UNTIL YOUR BETTER'S BETTER

In October 2010 Mystakidis signed a deal with BMC Software for the supply of Atrium Orchestrator, Blade Logic Server Administrator and Blade Logic Network Administrator, to automate device management, processes, and workflows, and to replace the largely manual management of the infrastructure.

The BMC Services team worked with Macquarie Telecom on site, providing education services for staff and in-depth training on how to maximize the effectiveness of the overall solution. Mystakidis explains, “We took the training early on to get familiar with the technology, so when it came time to actual execution and implementation, it wasn't really a culture shock or a big surprise to our engineering team.”

There were a number of critical success factors for Macquarie Telecom during the implementation. “We needed a clear sense on what the desired outcomes would be, and strong project management, but most importantly, a vision and a strategy for what we were hoping to achieve,” says Mystakidis.

Both Macquarie Telecom and BMC had a dedicated project manager assigned who worked closely together, and Mystakidis explains, “The BMC Services team worked in concert with us every step of the way to help us achieve our business goals. From the planning stages to implementation, and on to knowledge transfer, this was a true partnership in every sense of the word.”

The systems were live by June 2011 and just two people are required to manage the system today. “As a package of technologies, they were the best. Some of the other vendors had good strengths, but we ultimately made the right decision,” says Mystakidis.

When it came to measuring the effectiveness of the solution patch, management has proved to be a perfect litmus test. One of the services that Macquarie offers its customers is patch management. “It's one good reason why customers choose to outsource; they don't want to do patching. It's complex, takes time, and there's no value to it. But you control risk by doing it – it's a necessary evil,” says Mystakidis.

Although Macquarie had some homegrown scripts to help with this, much of the patching process remained manual, and involved the company sending a form to clients which they had to fill out and send back – often via fax – to say what they wanted patched and when.

The BMC solution has allowed Macquarie Telecom to entirely automate patch management, freeing up operations staff time. No Macquarie Telecom personnel are required for patching any longer, decoupling cost from growth and also reducing the opportunity for error.

“The system scans the infrastructure and sends an email to the customer to say patches are waiting. The customers are hyperlinked to our online portal where there is a list of their servers and missing patches with detailed links to vendors' websites. Customers then have full control of the patch. They can pick a patch by server, by patch, and by time. There are variables for every patch and every server, and also some more global options such as ‘apply all for these servers at designated time,’” explains Mystakidis.

BMC and Macquarie Telecom also used the tools to create an execution engine that takes those customer preferences and executes them, including the testing and the completion notification. “The system would automatically log a ticket, go into the monitoring system

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and pause those assets from being monitored, and then go into server management to apply the patches. We had to integrate with 22 different systems to get this working, then into the server management system to apply the patches, and do so in a fully automated fashion, then chain the patches together, restart the servers, then go into monitoring tool, into ticketing system, append the results to ticket, close ticket, and send customer notification.”

Mystakidis says it took six months to define and build, but that the solution now gives Macquarie a competitive edge in the market, and has successfully decoupled cost from growth.

AND YOUR BETTER'S BEST

“The Network Operations Centre no longer does any patching. We were doing thousands and thousands of patches each month, now we don't do any. It took hundreds of hours out of the NOC (workload), delivered value for customers, and is more efficient with no errors. It's a step change.

We have created unique value for our customers. Not one of our competitors in the Australian market has anything to this level of complexity or automation that engages the customer through a portal to engage in patch selection.

I think this has given us a very clear competitive edge; at a global level there are few companies in the world which have developed something as sophisticated as we have, particularly around something like patch management,” says Mystakidis.

It's paying dividends in other ways too. Macquarie Telecom originally calculated that the payback period for the BMC solution would be two years, and it's currently running ahead of that projection. Its return on investment model was predicated on a calculation which looked at the link between rate of growth and engineering headcount. Automation has severed that direct link, to decouple cost from growth and allow significant savings to be achieved.

Macquarie Telecom acknowledges that in pioneering such an installation, it tested both itself and BMC Software, which had traditionally focused on end user computing requirements. Macquarie has now provided a lens to view BMC's toolsets from the perspective of a managed service provider.

ABOUT MACQUARIE TELECOM

Macquarie Telecom is a full service hosting provider offering managed hosting, co-location services and private and public cloud. The organisation, which was established in 1992 and is listed on the Australian stock exchange, offers a comprehensive range of data, internet, voice, and mobile services to many of the nation's household names and start-up companies through its Ninefold cloud storage subsidiary.

BUSINESS RUNS ON I.T. I.T. RUNS ON BMC SOFTWARE.

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