QIC Fails Systems Over Seamlessly and Continues Managing Client Portfolios During Brisbane Floods

“Ensuring our systems can be recovered within the timeframes set out in our disaster recovery and business continuity plans—and organise testing of those plans—is now much simpler and less time-consuming. I don't have to organise a full weekend to test our systems—we can just do it when we need to.”

— Tony Hilton, Team Leader—Servers, Storage and Internet, QIC

From its origins in 1989, QIC has grown to become one of Australia’s largest institutional investment managers, with 88 clients and more than A$60.2 billion in funds under management as at 30 June 2011. The organization provides investment products and services for superannuation funds and other institutional investors. It also manages infrastructure and real estate assets including the Grand Central and Garden Town shopping centres in Toowoomba; Brisbane Airport; and the Port of Brisbane.

For QIC’s business to operate smoothly, it needs to trade in financial markets; operate orderly internal workflow and business processes; report internally and to clients, and enable its staff to collaborate. If any of the business-critical systems that enable these functions fail, the damage to QIC’s business could be significant.

“Our financial trading systems are particularly critical as they allow us to view our standing and positions in the market and trade accordingly,” said Tony Hilton, QIC Team Leader—Servers, Storage and Internet.

These systems also enable QIC to comply with internal governance and external regulatory requirements.

“We also have reporting systems that keep our clients up to date, and a Microsoft SharePoint system that allows our investment boutiques to share information and collaborate on projects,” Hilton said. “This system also provides approval, lease payment and other workflows across our property portfolio.”

Disaster Recovery Took Several Hours

“We have had a disaster recovery and business continuity system in place since the early 2000s for our key systems,” Hilton said. “We had to use a range of processes to replicate our application servers, which was effective, but it took a long time to fail over to the secondary systems because we had to address each server individually.”

Completing a failover for more than 50 servers would take several staff a number of hours. IT staff had to bring up systems in the correct order, or restart the failover procedure. Without automation, this required extensive coordination and planning. As a result, QIC had to ensure its IT staff were skilled in several different backup systems and processes, increasing the cost and burden of training.

Datacenter Highly Virtualized

As a long-term VMware® customer, QIC had virtualized 80 percent of its Microsoft Windows Server production servers, and 95 percent of its test and development environment.
In 2008, the organization decided to implement VMware vCenter Site Recovery Manager™ to complement VMware vSphere’s backup and recovery capabilities.

“When we see a good product we know we can use it,” said Hilton. “I don’t think I’ve seen any rival system that performs as well as the VMware product.”

QIC completed its implementation of VMware vCenter Site Recovery Manager in 2009. Hilton did not have to call on any external help to install and configure the product.

**VMware Facilitates Work-Life Balance**

With VMware vCenter Site Recovery Manager in place, QIC’s IT team now has to press only one button to start the disaster recovery process for each of group of its systems. QIC can restart applications in the correct order through automated, controlled starts.

Thanks to VMware vCenter Site Recovery Manager, QIC can fail over more than 100 virtual machines in about an hour, allowing critical business systems to be brought back online quickly in the event of a disaster.

“Another big plus is that we can now test the failover of all the applications running in our VMware environment during business hours,” said Hilton. “Ensuring our systems can be recovered within the timeframes set out in our disaster recovery and business continuity plans—and organising testing of those plans—is now much simpler and less time-consuming. I don’t have to organize a full weekend to test our systems—we can just do it when we need to.”

This improved staff work-life balance and enabled the IT team to conduct disaster recovery exercises during more realistic conditions.

**Seamless Disaster Recovery and No Impact on Clients**

The flooding of the Brisbane River in January 2011 provided a robust test of VMware vCenter Site Recovery Manager’s functionality and performance. QIC’s head office, including its primary datacenter, is located close to the river and the floodwaters blocked staff access for almost two weeks.

“We called our business continuity plan into effect on the morning of Tuesday, 11 January,” said Hilton. “At that time, there was no water around our office, but the river was very high and they were predicting a flood.”

The plan required the organization to fail over its virtual servers, which ran in five different protection groups, to its secondary facilities. “We had all our servers up and running at our secondary locations in a couple of hours, and I was able to leave the building at 3.30pm with no concerns,” said Hilton.

In line with QIC’s disaster recovery and business continuity plans, staff could access critical business systems from home or either of two dedicated disaster recovery locations. “We temporarily lost some of our test and development functionality, but from our clients’ point of view, the process was seamless,” said Hilton. “We were still able to manage client portfolios without interruption throughout this period.”

When QIC staff returned to their offices nine days after the evacuation, the organization transferred its critical systems back to its primary datacenter. “We re-created the protection groups and then moved our servers and applications in about an hour and a half,” said Hilton. “The disaster recovery process actually enabled us to identify some additional semi-critical virtual machines, which we then added to the groups.”

Hilton was considerably impressed by the performance of VMware vCenter Site Recovery Manager in helping the organization recover from a disaster as significant as the Queensland floods. “VMware vCenter Site Recovery Manager gives us a consistent approach that we can use across all our virtual servers. The product is easy to use, easy to test and easy to learn.”

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