

S U C C E S S S T O R Y

Hitachi Storage Solutions at Work

Alcan Engineering Pty., Ltd.

INDUSTRY Services: Engineering Design and Construction Management

SOLUTIONS Consolidation

Hardware—Hitachi modular storage and high-end modular storage models

Services—Provided by Hitachi Data Systems and Technology Solutions Provider SureBridge IT



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Manager IT Operations
Alcan Engineering*



ALCENG
Alcan Engineering Pty Limited



Alcan Engineering Keeps Data Online and Available with Hitachi Storage Area Network

The alumina industry's preferred engineering provider, Alcan Engineering, has been on a growth path since its establishment in Brisbane in 1997. To serve clients around the world, the company's staff requires access to a tremendous amount of data, but an increasingly "sensitive" storage architecture and resulting system outages were hampering workflow. For a much-needed upgrade Alcan Engineering chose a Hitachi Data Systems solution, supplied by SureBridge IT.

A wholly owned subsidiary of Alcan, Alcan Engineering operates from three Australian sites—Brisbane, Gladstone, and Gove—as well as Gardanne, France, to serve clients around the globe. The company currently employs more than 400 people working on a wide variety of projects, including Alcan's Gove expansion, a gas conversion project, and a range of projects for third parties. These services include: alumina refinery technologies and engineering, dust-free pneumatic materials-handling, minerals processing industry engineering, residue disposal systems design, power generation and energy systems design, and control systems design. Although projects are located around the world, normally in remote locations, most of the engineering work is done in Brisbane and requires access to huge amounts of data.

Reliable Storage Removes Downtime

Alcan Engineering first installed a storage area network (SAN) based on Hitachi storage systems in 2001. The company had previously used an 80GB disk storage system from another company, which it had installed two years earlier, but the storage requirements grew as quickly as the business did. That storage system was expandable, but its controller card proved "very sensitive" and there were times when the entire staff, at that time 60 people, could not do their jobs for a whole day because of system outages. An upgrade was evidently required.

After reviewing proposals from Compaq, Hitachi and IBM, Alcan Engineering selected

Hitachi modular storage. The two key reasons for this decision were the local support offered and delivered by Hitachi Data Systems and the rich feature set embodied in Hitachi modular storage. The solution was also competitively priced and highly scalable.

"The biggest challenge was securing the commitment of the management team to invest in a storage upgrade to support a small business of only 60 people," said David Frazer, manager IT Operations at Alcan Engineering. The clinching argument for this was that the company was set to double in size over a very short period and it needed a storage foundation with the potential capacity and performance that could take it into the future.

Frazer highlights the simplicity of the management interface, the flexibility of partitioning, and the ease of administration and interfacing as further favorable factors. Another important feature was the degree of redundancy in the Hitachi design. Apart from the inherent storage redundancy provided by the RAID-5 configuration, all the subsystems, including power supplies and controllers, were also duplicated. "We had an extra set of everything," said Frazer.

Choosing Expandability Pays Off

Alcan Engineering's management recognized that the Hitachi equipment was a good investment, and supported three additional requests for expansion of the SAN to 12TB. SureBridge IT replaced the original Hitachi modular storage model with a new, higher capacity Hitachi high-end modular storage system, and moved the original Hitachi model to Gardanne, where it is used to replicate certain files and databases, providing long-term investment protection to Alcan Engineering. "The hardware is still very good for data storage, but we recognize the added functionality and value of the newer technology," said Frazer.

More recently, the Hitachi high-end modular storage configuration was expanded by SureBridge IT without interruption of service. Although the company operates around the

clock, there is a window when the systems are relatively lightly used, “so we practice after-hours installation for upgrades,” he explained.

The company went from three servers on their original disk storage system to around 60 servers on the Hitachi system, including some run on behalf of its customers. All are connected to the SAN apart from 20 Citrix servers. The bulk of the data stored on the SAN relates to specific projects, which include AutoCAD drawings and 3D models.



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The servers’ operating systems are stored on directly attached disks, but Alcan Engineering also operates around 10 virtual servers that run from the SAN.

“Subsequently, the SAN is completely transparent to users,” said Frazer. “People just see it as a mapped drive. The performance is no different to opening a file from a disk on the server itself, but they get the additional benefits of redundancy, data integrity, and scalability.”

According to Frazer, reliability was a key reason for staying with Hitachi products. “We have not had a problem in the five years we’ve had a Hitachi SAN,” he said. “The storage has proven itself with functionality and reliability. We have not had an unscheduled disk storage system outage since it was installed, and the relationship with Hitachi Data Systems and SureBridge IT has been excellent. The service and support from both Hitachi Data Systems and SureBridge IT is the benchmark that Alcan now sets for all of their IT suppliers.”

Even the original installation was quick and trouble free, taking around five hours on a Saturday morning. Most of that time was

spent loading the data. “It was a simple case of data copy from the troubled RAID to the Hitachi storage, plus a lot of restoration from tapes was also necessary at the time,” Frazer recalled.

More recently, the entire data centre was moved two kilometers across town with the storage being moved jointly by SureBridge IT and Hitachi Data Systems. The systems were down for six hours during the relocation, but the SAN was back up and running within one

hour. This further demonstrates the reliability of the hardware and efficiency of the joint SureBridge IT and Hitachi Data Systems technical support. The data was protected at all times during the move, and there were no problems from the SAN, which is what Alcan has come to expect.

IT Gets Users' Respect

The Hitachi storage systems help Frazer and his team to provide a same-day service on the deployment of new servers or applications, subject of course to risk management procedures.

“Our users see IT Operations as a responsive provider of leading-edge technology,” said Frazer. “Just nine people support the infrastructure, systems, and customer service to over 1100 staff, including those at other Alcan businesses. We can also quickly deploy new applications, which are essential as the company’s growth depends on its ability to acquire new customers and projects.”

About SureBridge IT

SureBridge IT is an Australian owned and managed service provider contributing a unique understanding of the IT Industry for more than 15 years. SureBridge IT provides Information Technology-based solutions and support as an end-to-end customer service on a 24/7 basis.

Experienced consultants design, implement, and monitor technology solutions every step of the way so that customers can focus on growing their businesses. SureBridge IT partners with clients 24/7 and for the long term, taking the worry out of negotiating with vendors and technology providers while monitoring systems performance and improving access and protection to valuable information.

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