"The Hitachi solution was the most cost-effective, in terms of total cost of ownership (TCO), and delivered on all the features that we needed, including high availability, scalability and performance."

**Matt Tranter, ICT Project Services Manager
Synergy**

**CASE STUDY**

# Energy Provider Synergy Takes Data Protection and Disaster Recovery to New Level With Hitachi Solutions

**Challenge:** Ensure continuous service during data center migration and consolidation following business merger.

**Solution:** Hitachi Data Systems Global Services Solutions team designed, installed and configured the SAN infrastructure at two data centers, based on Hitachi storage, NAS and data protection solutions.

**Outcome:** 24/7 data replication means zero downtime for business-critical applications.

## The Challenge

Synergy is Western Australia's largest provider of gas and electricity, serving one million residential, business and industrial customers in Western Australia. Synergy generates electricity using a range of non-renewable and renewable energy sources, with major power stations located in Collie, Kwinana, Cockburn and Pinjar, north of Perth. The company also trades wholesale electricity and gas.

In 2013, the Government of Western Australia announced a merger of the state's electricity retailer (Synergy) and generator (Verve Energy). The new entity is called Synergy. The merger resulted in the consolidation from four data centers, two for each business entity, into just two with new providers. The previous Verve Energy infrastructure had reached its end of life and the Synergy platform had insufficient capacity to cater for the new,

larger business entity. The new business was experiencing capacity issues and a degradation of performance.

According to Synergy ICT Project Services Manager Matt Tranter, the data center redesign and migration presented the opportunity to procure the new storage, computer and security solution for the new facilities.

"It was financially more astute to consolidate our environments onto new upgraded infrastructure in two new data centers," Tranter explained. "By moving to new facilities and implementing new solutions, we knew we could consolidate and get better value for money."

In addition to cost savings, key requirements included scalability, business continuity and the ability to deliver next-generation data replication and protection capabilities.

## Synergy

**INDUSTRY**
Energy and Resources

**SOLUTIONS**
Enterprise, Virtualization, Data Protection

**HARDWARE**
Hitachi Virtual Storage Platform G600
Hitachi NAS Platform

**SOFTWARE**
Hitachi Storage Virtualization Operating System with global-active device, Hitachi Data Protection Suite, powered by Commvault

**SERVICES**
Hitachi Data Systems Global Services Solutions

### Outcomes

- Successful migration of 700TB with zero business downtime and full application availability.
- 24/7 business continuity for key apps on 1,000+ virtual machines.
- Full application protection and resiliency for SAP environment, Microsoft® SQL Server®, and VMware virtual desktop infrastructure (VDI).

"We had about a thousand virtual machines – production and nonproduction – that were running in our data centers. As we upgraded our infrastructure, we knew we wanted active-active data replication to replace the traditional, cold standby disaster recovery setup across primary and secondary data centers," Tranter said. "We needed a technology that would provide a highly available, robust storage solution in the new environment."

## The Solution

Following a careful selection of market options, Synergy tasked Hitachi Data Systems with delivering the storage infrastructure for the new data centers.

"The Hitachi solution was the most cost-effective, and delivered on all the features we needed, including high availability, scalability and performance," said Tranter.

Hitachi Virtual Storage Platform G600 (VSP G600) laid the foundation for the infrastructure refresh. The system's global-active device feature allows Synergy to create active-active clusters across the two data centers, where applications can read and write to the storage at the same time.

"Hot data replication was a key feature for us as it renders traditional backup redundant," Tranter said.

VSP G600 integrates with Hitachi NAS Platform (HNAS) as the platform for distributed enterprise and data center application workloads, to ensure optimized performance for Synergy's virtual servers, SAP environment, SQL Server, Oracle and VMware VDI.

Besides delivering cost savings and improved technical capabilities, Hitachi Data Systems Global Services Solutions provided extensive planning, design and implementation services, to enable the transition and migration

to run smoothly. The Verve Energy and the Synergy components took as little as three months each to migrate completely to the new infrastructure solution, with no unscheduled downtime for the business.

"The HDS team was technically astute, consultative and responsive. They provided the on-site support we needed at a time of internal and external change following the merger, and delivered on time and on budget," Tranter said.

## The Outcome

The Hitachi platform provides the performance, robustness and high availability needed to power the new, larger business entity with IT systems running on more than 1,000 virtual machines. The new enterprise-class infrastructure solution fully integrates with Hitachi Data Protection Suite, powered by Commvault, to deliver tightly integrated snapshot and replication technology from a single platform.

Already, the shift from traditional, backup-based disaster recovery to hot, 24/7 replications across the data center sites has positively impacted the business.

"We had an instance where we lost one node from a SAP cluster, but due to Hitachi's active-active metro clustering capabilities, the business didn't even notice," Tranter said. "The new business continuity design also negates the need to schedule regular downtime for applications and infrastructure testing, which brings further efficiencies and benefits."

The Hitachi architecture also makes hardware and feature upgrades easier, with the scalability and flexibility to increase the useful life of the storage infrastructure and, ultimately, to further reduce TCO.

"The highly skilled technical and project management capability of the HDS team members, who have undertaken projects of this nature many times before, delivered the new equipment with minimal business and operational impact. It was done during a time of cost reduction and significant change," said Tranter.

## HDS at a Glance

Digital transformation improves enterprises' cost-efficiency, time to market, customer experience, and revenue through better data management. Hitachi Data Systems uses data to power the digital enterprise.

## Hitachi Data Systems