Customer Case Study

Water Provider Relocates, Modernizes Data Center



Melbourne Water enlists Cisco to manage safe, expedited migration to more sustainable, efficient data center.

EXECUTIVE SUMMARY

Customer Name: Melbourne Water Industry: Public Utilities Location: Melbourne, Victoria, Australia Number of Employees: 800

Challenge:

- Relocate data center IT assets from existing location to next-generation facility on shortened timetable
- Manage risk and avoid disruptions of mission-critical services and applications
- Increase performance, virtualization capacity, and energy efficiency of data center

Solution:

- Cisco engaged to lead data center migration initiative and build nextgeneration unified network
- Cisco Unified Fabric improves energy efficiency and SAN support
- Cisco Nexus and Catalyst Switches increase network throughput and reduce complexity

Results:

- Managed smooth data center migration of 260 servers and 60 applications without time extension or service disruption
- Contributed to Melbourne Water's data center sustainability goal of reducing energy consumption by up to 40 percent with associated annual savings of up to AU\$250,000.
- Improved response time and performance in customer-facing applications

Challenge

Established in 1890, Melbourne Water is the largest water authority servicing greater Melbourne, Victoria's capital city. Melbourne Water is the wholesaler of Melbourne's water supply and sewage removal and treatment. It is also responsible for managing 8400 kilometers of waterways and the major drainage systems throughout the Port Phillip and Westernport region.

After many years of spreading its city-based offices across four locations in East Melbourne, Melbourne Water was planning to move to a facility in Docklands to consolidate the separate sites and bring employees under one roof. The move to new headquarters was also an opportunity to increase sustainability, but the existing data center posed a problem. The Docklands building was designed to be energy efficient which prevented Melbourne Water from running a typical data center environment

Melbourne Water's data center supports vital financial systems, asset management systems, and, most importantly, mission-critical components for a 2000-person community of employees and partners. The most vital applications are those associated with the SCADA system, which manages the city's water and sewer systems.

In 2011, Viviann Zavlanos, chief information officer at Melbourne Water, and her team realized that they required a more streamlined, consolidated data center to support growing business requirements and a new EMC Storage Area Network system. They also needed to build it with minimal downtime or disruption to vital service applications. "It was important for us to maintain the confidence of our key stakeholders and also our customers by completing the migration phase without any downtime or critical impact to them," says Zavlanos. Furthermore, Melbourne Water could not afford to take the usual 12 to 24 months required for such a project. With staff scheduled to be working at the new Docklands office by the end of June 2012, the organization needed to accomplish the move in only six months.



"It wasn't just about the right technical planning. Cisco put themselves in our customers' shoes and thought of how this move could impact the applications that affect them."

Viviann Zavlanos Chief Information Officer Melbourne Water

Solution

Melbourne Water engaged Cisco Services to plan and manage the data centre migration, which also involved EMC and IT outsource provider Kinetic IT. Zavlanos said that the right technical planning was important, and that she was particularly impressed with the Cisco team's application-centric approach. "Cisco put themselves in our customers' shoes and thought of how this could impact the applications that affect them," she said.

After thoroughly assessing the end-to-end data center environment and identifying several high-risk areas, Cisco began the migration strategy phase. Continuing throughout November 2011, this stage considered class of server, application logic/dependencies, and required network services, before delivering a set of recommended migration approaches based on application groupings.

Migration planning followed, which included development of a migration schedule and detailed work instructions to support the move of individual servers and other IT assets within pre-defined move groups. Implementation of the migration took place over the course of eight weeks during February and March 2012.

Cisco upgraded the data center's networking infrastructure with Cisco Nexus[®] and Catalyst[®] switches, and implemented Cisco[®] Unified Fabric to consolidate LAN and SAN traffic onto a single platform. Cisco also oversaw the integration of the EMC SAN system into the Cisco Unified Fabric and worked with Kinetic IT to hand over ongoing management of the environment.

Results

With the help of Cisco, Melbourne Water was able to move its data center to the new facility by its March 2012 deadline. In terms of business performance, the transition was smooth, with no disruption to any applications or service to its customers.

The Cisco Nexus and Unified Fabric solution increased throughput to key applications, which has led to better response time, more accurate supplying, and greater performance overall. Furthermore, this improvement eliminated unnecessary infrastructure, increased floor space, and reduced energy used for cooling.

The new data center is designed to consume up to 40 percent less energy and along with other features provides Melbourne Water with up to AUD \$250,000 in annual savings. This improvement meant up to 600 fewer tons of CO2 per year and helped the building achieve its prestigious six-star sustainability design.

The migration plan also gave Melbourne Water enhanced asset visibility for better investment and risk planning, while providing a simplified, stable data center for further optimization and innovation. "Cisco was able to have the right conversations, make the right decisions, and immediately implement," says Zavlanos.

Next Steps

With its new scalable data center in place, Melbourne Water is looking at how it can use the Cisco Unified Computing System[™] (UCS[®]) to further consolidate its server infrastructure and deliver greater business efficiency. The organization will expand upon the current implementation of Cisco UCS to underpin the full Cisco Unified Communications suite, including Cisco Jabber[™] and Cisco TelePresence[®].

For More Information

- To find out more about Cisco Services, visit: <u>http://www.cisco.com/en/US/products/svcs/services_area_root.html</u>
- To find out more about Cisco Data Center solutions, visit: <u>www.cisco.com/go/datacenter</u>

Product List

- Cisco Nexus 7000, 5000, and 2000 Series Switches
- Cisco Catalyst 6500 Series Switches
- Cisco ASR 1000 Series Routers
- Cisco MDS 9509 Multilayer Director

Service List

- Cisco Services, Data Center Migration Service
 <u>http://www.cisco.com/en/US/products/ps11221/services_segment_service_home.html</u>
- Cisco Services, Nexus Planning and Design Service
 <u>http://www.cisco.com/en/US/products/ps9443/serv_group_home.html</u>



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Note: The image on page 1 is not an actual representation of the Melbourne Water Data Centre.

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