



## KEY HIGHLIGHTS

INDUSTRY: MANUFACTURING



## CHALLENGE

Implement a lower-cost infrastructure that could outperform a physical environment in flexibility, availability and manageability.

## SOLUTION

VMware virtualization delivered NZ\$200,000 in savings on an infrastructure refresh while meeting business requirements and reducing environmental impact.

## VMWARE AT WORK

- ESX 3.5.2
- VMotion
- Distributed Resource Scheduler (DRS)
- High Availability (HA)
- Consolidated Backup
- VirtualCenter

## DEPLOYMENT ENVIRONMENT

- HP ProLiant BL460c blade servers with quad-core dual Intel Xeon 5300 series processors and 32GB RAM
- EMC CLARiiON CX500 networked storage
- Guest operating system: Microsoft Windows Server 2003
- Virtualized production applications: StayinFront CRM, JD Edwards OneWorld ERP system, Avantis IPS asset management, Microsoft Windows Server 2003 Active Directory, Citrix Terminal Services, Microsoft SQL Server, applications specific to the fertilizer industry

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John Ward, IT Infrastructure Systems Manager  
Ravensdown

## Ravensdown

Formed in 1977, Ravensdown is New Zealand's largest supplier of fertilizer. With around 600 staff in the country and 50 in Western Australia, Ravensdown is a cooperative 100 percent owned by farmers. The organization runs manufacturing plants in Awatoto in Napier, Hornby in Christchurch and Ravensbourne in Dunedin, as well as a compaction plant in Fremantle, Western Australia. Ravensdown operates a production datacenter in Christchurch and a test and development and disaster recovery center in Napier.

In 2002/03, Ravensdown acquired a large number of servers on five-year warranty and maintenance contracts. With these arrangements expiring in June-August 2007, the organization decided to virtualize its infrastructure. "We conducted a review using VMware's Capacity Planner tool and realized we would have to spend NZ\$500,000 replacing our ageing server fleet with new physical servers or NZ\$300,000 on a flexible, scalable infrastructure based on VMware technologies" said John Ward, IT Infrastructure Systems Manager for Ravensdown. "We chose VMware because it offered a production-ready virtualization tool, whereas products from Xen and Microsoft had not been 'real-world' tested."

Following the successful consolidation of 60 physical servers at its production center at Christchurch, Ravensdown is implementing virtualization at its four manufacturing sites. "In October 2007, we consolidated production server hardware that was running at only about 10 percent utilization to six blade servers running at about 25-30 percent utilization," said Ward. "These blade servers are hosting 68 production virtual machines."

## Results

- Boosted CPU utilization from 10% to 20-30%
- Saved NZ\$200,000 on infrastructure refresh costs
- Achieved a server consolidation ratio of 10:1 and freed 3.5 racks
- Saved NZ\$18,000 per year in power costs with power draw from the server farm falling from 23 kW to 9kW per hour
- Reduced server provisioning time from three to four weeks to 15 minutes
- Enabled "bulletproof" rollback when undertaking upgrade or installation due to snapshot capability