



## KEY HIGHLIGHTS

INDUSTRY: MANUFACTURING



## CHALLENGE

Constrain server sprawl and improve environmental performance while providing a cost-effective infrastructure to support burgeoning business demand

## SOLUTION

Engaged VMware Premier Partner Data#3 to deploy a flexible, dynamic and scalable virtualized environment based on VMware Infrastructure

## VMWARE VIRTUAL INFRASTRUCTURE AT WORK

VMware Infrastructure 3 Enterprise, featuring:

- ESX Server 3.0.1
- VMotion
- Distributed Resource Scheduling
- High Availability (HA)
- Consolidated Backup
- Virtual Center Manager 2.0.1

## DEPLOYMENT ENVIRONMENT

- ESX Server running on 10 IBM LS41 blade servers each with four dual-core 2.4GHz AMD Opteron processors
- Two IBM DS4000 storage area networks
- Guest operating systems: Microsoft Windows 2000, Windows 2003, Windows NT, Red Hat Enterprise Linux
- Applications running in virtual machines include: IBM Lotus Notes, Material Safety Data Sheet system, BlackBerry server and Oracle Hyperion business performance management, domain controllers

*“Our virtualized server infrastructure has enabled us to quickly deploy applications in response to business demand, particularly from our mining services operation which is riding the wave of the resources boom.”*

Donald De Foe, Project Sponsor, IT Shared Services, Orica

## Orica

Orica is a publicly-owned business with operations in 50 countries. It operates in mining services, chemicals and consumer products ranging from paints to garden care. With ageing hardware and constrained capacity in two managed data centers in Melbourne, Orica turned to VMware server virtualization to support business growth.

*“The key driver behind this project was the fact our critical application and infrastructure servers were approaching the end of their financial lifecycle, coupled with demand for new capacity to enable new business initiatives,”* said Donald De Foe, Project Sponsor, IT Shared Services, Orica. *“We are also consciously curbing real estate expansion and expense in our data centers.”*

This initiative gained impetus as Orica’s US business virtualized its communications and application servers. VMware Premier Partner Data #3 prepared a feasibility study for the Australian operation. Orica then engaged Data#3 to implement VMware virtualization across both data centers. The organization migrated 40 physical servers to 10 blade servers running 50 virtual machines. It then increased the number of virtual machines to more than 60 and enhanced its disaster recovery capabilities. The business plans to introduce full data replication and workload management across the two Melbourne facilities. *“As with all Orica’s business initiatives, we proceed with virtualization where we can achieve returns and the application environment is suitable,”* said De Foe.

## Results

- Cut power consumption from 120 watts per processor to 68. Savings are enhanced by the capacity to power down servers during periods of low resource demand.
- Saved one million tonnes in CO2 emissions over three years by using less cooling and power
- Reduced number of racks required from 15 to two
- Slashed time to provision servers from two weeks to two days
- Enabled rapid server provisioning to run an application determining the effect of explosion vibrations on remote communities
- Provided a platform to enhance disaster recovery capabilities through full replication of data across two data centers