



## KEY HIGHLIGHTS

INDUSTRY: **MANUFACTURING**



### CHALLENGE

Server sprawl, rising power and cooling costs, increasing networking conflict issues

### SOLUTION

VMware® infrastructure decreases costs, streamlines server deployment

### VMWARE AT WORK

VMware Infrastructure 3 Enterprise, featuring:

- ESX Server 3
- VirtualCenter 2
- VMotion™
- Distributed Resource Scheduler (DRS)
- High Availability (HA)

VMware Virtual Desktop Infrastructure (VDI)

VMware Converter

### DEPLOYMENT ENVIRONMENT

- ESX Server on 4-processor DL580 (HP Proliant)
- VirtualCenter on 2-processor BL20p (HP Proliant Blade)
- EMC CLARiiON and DMX SANs
- Guest operating systems: Microsoft Windows 2003 Server, Windows 2000 Server, Windows XP Server, Windows NT 4.0
- Applications running in virtual machines include: SQL instances, Citrix instances, IIS, MS Project Server

*"Our whole objective is to drive up our system utilization, and the beauty of VMware virtual infrastructure is that it allows us to do this—without performance degradation."*

Philip Cramer

Windows Team Supervisor, Johnson Controls, Inc.

## Johnson Controls, Inc.

Johnson Controls, Inc., is a global leader in interior experience, building efficiency and power solutions. The company provides innovative automotive interiors that help make driving more comfortable, safe and enjoyable. For buildings, it offers products and services that optimize energy use and improve comfort and security. Johnson Controls also provides batteries for automobiles and hybrid electric vehicles, along with systems engineering and service expertise. Johnson Controls Inc., (NYSE: JCI) has 136,000 employees in more than 1,000 locations serving customers in 125 countries.

In early 2004, the Johnson Controls Windows team found itself running into physical constraints in the data center. The data center had classic signs of server sprawl: disappearing footprint, rising power and cooling costs, increasing networking conflict issues and hardware expenditures that rose out of step with productivity gains.

Since installing VMware technology, Johnson Controls has decreased hardware costs, streamlined server deployment and enabled secure offshore-productivity gains.

## Results

- Saved \$760,000 in hardware renewal costs
- Simplified provisioning and management of remote developer desktops with VMware Virtual Desktop Infrastructure (VDI)
- Increased CPU utilization from less than 0.1 percent to 70 percent
- Achieved 20:1 server consolidation ratio
- Reclaimed 180 square feet of data center space
- Regained 32 tons of cooling capacity
- Reduced average new server deployment time from six weeks to one week
- Redeployed 200 physical servers to other parts of the company