



Calor Gas Airs Server Consolidation Success

Calor Gas Achieves Twenty to One Server Consolidation With Solution Based on IBM Hardware and VMware ESX Server

RESULTS

- Hardware cost savings from 20:1 server consolidation
- Consolidated all data storage onto a single, high availability platform
- Automated routine processes
- Improved performance and availability
- Reduced processing time
- Simplified management and reduced complexity
- Built a scalable, future-proof infrastructure

The Drive for Reliable Infrastructure

Calor Gas is a wholly owned subsidiary of SHV, the largest distributor of liquefied petroleum gas (LPG) in the world. The company's core business is the importation, marketing and distribution of LPG in both bulk and cylinder applications. Calor Gas is Ireland's leading supplier of LPG to homes as well as industrial, agricultural and commercial customers throughout the country.

Following the integration of operations across nine sites in the Republic of Ireland and Northern Ireland, Sean O'Donohue, ICT Manager at Calor Gas, was tasked with streamlining business processes and reducing overheads across the organisation. In order to support its 200 end users, Calor Gas made a significant investment in software and communications technology, which led to a complex, diverse and rapidly changing environment. Existing infrastructure was not sufficiently robust to handle the change, and O'Donohue was faced with the following challenges:

- Lack of space due to an expanding server farm
- Need for a common set of processes to ease data centre management
- Unsatisfactory networking performance
- Multiple, uncoordinated backup methods
- Requirement to replace old, out-of-date servers
- Lack of flexibility in existing infrastructure

Triangle Proposes Future-Proof Solution Based on IBM Hardware and VMware Software

In his search for an infrastructure that would facilitate rather than hinder growth in the enterprise, O'Donohue considered two solutions: one that involved several powerful servers, and a second based on a single high performance IBM server running VMware® ESX Server™. The latter solution, proposed by VMware partner Triangle Computer Services Ireland Ltd, a fast-growing technology solutions provider, addressed all of Calor Gas' challenges and offered flexibility and reliability at a fraction of the price.

Experienced Triangle consultants worked with Calor Gas to implement the solution based on IBM hardware and VMware virtual infrastructure software, which has resulted in the following benefits:

- **Process Automation.** Calor Gas estimates that it has saved up to 40 percent in administration time on routine processes, such as backup procedures. As a result of this, and the automation of other processes, the company has been able to reduce the computer operation staff by one.
- **Future-Proof, Flexible Architecture.** IT administrators can now add new servers and transfer existing physical servers to the virtual environment simply and easily. The use of VMware ESX Server eliminates the need to purchase a dedicated server each time a new application is required, allowing Calor Gas to be more agile in responding to business needs.

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*Sean O'Donohue
Information and Communications Technology Manager, Calor Gas*



VMWARE ESX SERVER AT WORK

- Used VMware P2V Assistant for server migration
- ESX Server on 4-CPU IBM x445
- Storage server: IBM ESS 800 with 3TB
- Single processor IBM 810
- Two single processor IBM 270s
- IBM 3580 LTO tape library for backup
- Resilient fibre HBA connections
- Guest Operating Systems: Microsoft® Windows® 2000, migrating to Windows 2003
- Applications running in virtual machines include: Document Management, Enterprise Reporting (Showcase Strategy product), Hyperion, Handheld Computer Application Servers, SQL servers, SAGE, PMAC, Sigma, Print Server, Mail Meter/Monitoring, Web Marshal/Monitoring, Outgoing FAX

- **Space and Hardware Cost Saving.** Calor Gas has achieved a twenty to one server consolidation ratio, which has created much-needed space in the data centre as well as significant hardware cost savings.
- **Consolidation of Data Storage.** Having a single, high-speed platform for all data storage requirements has led to increased efficiencies, eased support challenges, and replaced a complex system that was difficult to manage.
- **Performance Improvements.** The new infrastructure has led to significant performance enhancements, with the number of hours spent processing month-end reports reduced from 36 to five.

Achieving a Flexible Infrastructure

Triangle designed a solution for Calor Gas that began by consolidating the disparate data storage solutions onto a single, high specification IBM ESS 800 (Shark). Following that, twenty legacy servers were migrated onto a single IBM x445 using VMware P2V Assistant, software that transforms the image of a physical machine into a VMware virtual machine.

"VMware P2V assistant has made the migration of physical servers to virtual machines a breeze," comments Sean O'Donohue. "Twenty servers have been set up in a virtual environment in a fraction of the time it would take to do the equivalent task in a physical environment. With such compelling time-savings it makes perfect sense for Calor Gas to make virtual infrastructure part of its long-term strategy."

IT administrators at Calor Gas can now manage twenty servers from a single point and dynamically allocate resources, such as memory and CPU, as servers reach maximum utilisation or experience peaks in demand. Calor Gas next plans to migrate a further twenty servers into the virtual infrastructure as part of its constant drive to streamline processes.

"The total solution is now fully implemented and I am satisfied that all my expectations for the system have been realised," comments O'Donohue. "With IBM hardware and virtual infrastructure software from VMware, we now have a consolidated hardware infrastructure capable of supporting all current demands across many platforms with potential for significant increase in growth."

For more information about Calor Gas visit www.calorgas.ie

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