

## Barnsley Metropolitan Borough Council Goes Virtual With Bull TCL



### / The challenge

A successful, growing business raises space, power and cooling challenges along with concerns over the reliability of business-critical systems.

### / The background

In 2006, Barnsley MBC and Bull formed a groundbreaking joint venture company, Bull TCL, to manage BMBC's IT operations and proactively pitch for IT support contracts in the wider world.

Bull TCL quickly delivered substantial efficiencies under the government Efficiency Agenda as well as helping to secure commercial ICT contracts worth several million in the first few months of trading. These early successes laid the foundation for improvements in both council services to Barnsley residents and further economic development in the town.

However, with an initial count of 56 physical servers and ever increasing demands for power and storage, Bull TCL needed to urgently consider the financial and environmental concerns raised by the ever-increasing need for physical space and power, the cooling issues associated with a large server estate and rapidly expanding storage needs.

Added to this, Barnsley's applications were spread over a raft of different technologies and hardware platform technologies and vendors. This ever growing server sprawl was difficult to manage and contained a number of single points of failure for business critical applications.

### / The solution

The answer was to consolidate server hardware into a single VMWare Infrastructure which, integrated with a EMC Clariion® enterprise storage area network provided a solid and reliable platform to host Barnsley's business critical applications and services.

To date, Bull TCL has achieved a consolidation ratio of 24:1 with the original 56 physical servers and a further 54 new virtual servers deployed on a VMWare® farm made up of just five physical servers. By investing in a virtual server infrastructure, this has enabled the deployment of new systems within a much reduced timeframe and at a reduced cost both in terms of power and cooling, as well as significantly reducing the space needed in the computer centre.

### / The results

- 73% saving in annual power costs
- Reduced expenditure in hardware, software and administration costs
- A significant reduction in real estate needed for data centre

### / The technology

VMWare® Infrastructure 3 Enterprise, featuring:

- VMWare ESX Server 3 with VMFS
- VMWare VirtualCenter 2.5
- VMWare Virtual SMP
- VMWare VMotion
- VMWare Distributed Resource Scheduling (DRS)
- VMWare High Availability (HA)

### / Deployment environment

- 5 x Bull NovaScale® R480s each with 4 x Dual Core CPUs and 64GB Ram
- Brocade® Dual Fabric SAN
- EMC UltraScale® CX3-30

Guest operating systems include: Microsoft® Windows® 2000, 2003, 2008, Vista and Linux Redhat®

Applications running in VMWare include:

- Microsoft Terminal Server
- Microsoft SQL 2000 & 2005
- Microsoft SharePoint
- Microsoft Exchange 2007
- Windows 2003R2 File Server
- Corporate Web Services
- Apache® Web Server
- BlackBerry® Enterprise Server
- Active Directory®
- Citrix® PS4.5 Farm
- McAfee® EPO

### / Further details

For further information about this project or other Bull solutions please contact Bull at:

[information@bull.co.uk](mailto:information@bull.co.uk)

Or call us direct on

**0870 240 0040**