

CREATIVE SERVER VIRTUALISATION HELPS LEEDS PARTNERSHIPS NHS FOUNDATION TRUST SAVE TIME AND MONEY FOR IMPROVED DISASTER RECOVERY



Leeds Partnerships **NHS**
NHS Foundation Trust

INTRODUCTION

Storage is growing at an accelerating rate, and data is becoming more valuable by the day. However, it is green issues such as power consumption, cooling costs and carbon footprint as well as server management that is driving major strategic moves towards server consolidation and new approaches to Business Continuity.

Leeds Partnerships NHS Foundation (formerly Leeds Mental Health Teaching NHS Trust) is one pro-active organisation that CSA Waverley has successfully helped reduce its hardware with HP Blade server technology and VMware virtualization, moving from direct attached storage to a centralized SAN approach. The Trust now enjoys an architecture that supports future growth and change requirements as well as critical business continuity through an improved remote disaster recovery site.

THE CLIENT

Leeds Partnerships NHS Foundation Trust (LPFT) provides effective, accessible and modern mental health and learning disability services to over 725,000 people within the metropolitan boundaries of Leeds. LPFT operates from over 60 sites and provides help to over 2,000 people every day.

The business relies upon a robust IT infrastructure that uses an industrial standard Service Management framework IT Infrastructure Library (ITIL) to improve service delivery and drive service improvements. It covers six main sites consisting of two data centres, 32 servers, 1500 PC desktops and over 2500 users. An ICT team of 19 staff provides service, support and management functionality.

THE CHALLENGE

- > **Consolidate servers**
- > **Transfer from direct attached storage to a centralised approach**
- > **Provide resilience and redundancy at the main data centre**
- > **Business continuity and disaster recovery at a core satellite location**
- > **An architecture able to adapt to Trust growth and change requirements**

Russell Hornshaw, Server Desktop & Applications Manager, said:

“Waverley presented us with a creative ‘best value’ solution that recycled existing physical servers as part of the plan. As a result their proposition unlocked investment to help us build a DR site. An element not possible with other more traditional solutions put forward.”

THE SOLUTION

LPFT purchased a virtual environment that uses four HP Blade servers (BL460) to host VMware VI3 virtualisation technology. The hosts connect to HP's Storage Works Enterprise Virtual Array (EVA4000) shared storage device, which uses high performance fibre connected disk drives. The virtual infrastructure uses the flexibility of VMware's VMotion and VirtualCenter for centralised management, automation and optimisation of the environment.

In the plan 23 physical servers were to become redundant as they became virtualised, the team redeployed some of the newer models to remote sites running file and print as a tech refresh. Three of the newer, higher specification SQL servers have been recycled and used at the disaster recovery site at Becklin Centre 3 miles away from the main data centre. Having been virtualised, they now form the back bone of the DR site. Vizioncore's vReplicator provides effective and manageable failover to the DR site and undertakes scheduled data replication via a WAN link to complement normal tape back-up procedures.

THE RESULT

Leeds Partnerships has consolidated by virtualising its physical server estate by 75%, saving time and money, adding value to the agility and continuity of the organisation's IT infrastructure.

Hornshaw explains:

“Virtualization has challenged the way we think about how our services are delivered to the business. It has enabled us to be more agile in our approach moving from a physical model to ITIL principles of service delivery focusing on business functionality tied to service and operational level needs.”

“Direct and tangible savings stem from better management of our IT infrastructure, which has instantly reduced operational costs. These include a saving on power and cooling giving us a reduced carbon footprint.

“The system allows us to deploy, manage and utilise our IT staff more efficiently rather than wasting their time on legacy tasks like manual tape backup across our large historical server estate.

“We can now deploy new applications in minutes, instead of weeks and staff can easily create test builds before launching new services. Development and testing can all be undertaken within a virtual rather than physical environment. This is saving at least a day a week in time to build and deploy a fully patched server.

“This time is now being better used to develop, manage and test our DR site as well as focus on our core role of managing and maintaining the system to help users deliver a better service to the public.

“Our improved utilisation levels will save thousands in capital costs in the long term that would otherwise have been spent on hardware to keep up with storage growth and demand.”

Other benefits yet to be experienced are indirect savings, which account for disaster recovery costs associated with the old infrastructure and saved time on unplanned downtime.

Dave Shelley, Head of ICT at the Trust, said:

“CSA Waverley has been creative in its response to our brief with a value for money 'virtualised' solution, stretching the reach of our budget by 50%, recycling existing hardware for remote DR site capability. This would otherwise have been unachievable.”

“We have increased the effectiveness of our overall ICT infrastructure. With a consolidated centralised provision we can better manage and monitor servers, reducing our total cost of ownership and increasing the productivity of IT staff.

“The new IT environment ensures we can support service users and staff seamlessly in the event of a system failure at the same time as improving ICT costs and server footprint. This means the organisation has the best platform on which to provide more efficient care to its service users, and that is the bottom line for us.”

