



BUILDING A VIRTUALISED ENVIRONMENT

Housing Solutions is a not-for-profit organisation dedicated to providing affordable and supported homes. With a housing stock of over 6,000 properties in the South East of England, Housing Solutions offers affordable homes to rent, shared ownership schemes, homes for the elderly and specialist accommodation for people who need support and care to live within the community.

Housing Solutions also provides homes for key workers such as teachers and firemen. All homes are backed up by a range of housing services, including professional teams of trades staff who provide a comprehensive repair and maintenance service. There are two subsidiaries within Housing Solutions:

- **Bridgewater Housing** – a charitable housing association, specialising in providing sheltered housing and support services for elderly people.
- **Furnival Housing** – a Slough based registered social landlord with more than 100 homes, which joined Housing Solutions in February 2005.

The Challenge

With increasing responsibilities, an expanding housing base and an ongoing commitment to training and development (which has been recognised by the Investors in People accreditation), Housing Solutions relies heavily upon its IT infrastructure and has a programme of regularly upgrading its desktops and networks. As with all not-for-profit organisations, Housing Solutions seeks IT partners that understand the constraints that the organisation is under and which work closely with it to ensure solutions implemented are the most cost-effective available.

At the beginning of the year, Housing Solutions decided to upgrade their existing server farm by implementing a virtualised environment. “We faced three issues that we needed to resolve if we were to continue to deliver the services that our staff and managers required,” explained Housing Solutions’ IT Systems Analyst, Richard Harvey.

“Firstly, our traditional servers occupied a fair amount of physical space and with a need for additional storage capacity we would need to expand this even further. Secondly, server and data back-ups were becoming a lengthy and time consuming process – often taking longer than the backup window that was available to us, and thirdly, we were encountering server performance issues that were affecting the performance of our infrastructure and causing delays in applications and data manipulation.” The obvious solution for server sprawl was to move to a virtualised environment.

Why Softcat?

DHA had always worked with Softcat for the supply of their basic IT equipment. “We were impressed with Softcat’s response in fulfilling these initial orders,” continued Richard. “When we discussed our business issues with Softcat and realised how highly accredited they were with virtualisation infrastructures, and that they could help us with our server issues, we invited them to submit a proposal for our virtualisation project.”

As with all not-for-profit organisations, Housing Solutions required proposals from a number of IT suppliers but having evaluated several proposals, recognised that Softcat had the potential to become its IT partner of choice.

"It was immediately obvious that Softcat's proposal stood out from the rest," explained Richard. "They seemed to be on top of things from day one and had clearly put a great deal of effort into the proposal, even to the extent of recommending an alternative option for the hardware, from the one that we had originally identified."

The Solution

Housing Solutions' incumbent server supplier was Dell, but Softcat, with its years of experience and expertise in all forms of virtual server technologies and successful implementations, suggested Housing Solutions also consider HP Proliant server technology. Something Softcat had first-hand experience having implemented them within their own server environment.

"The first step was to undertake a performance monitoring analysis, to check the suitability of the old servers for the planned move to a virtualised environment," explained Softcat's specialist virtualisation team. "Although some of Housing Solutions' existing servers were adequate, together, we concluded that the HP Proliant servers would be the best option to tackle the performance targets as well as giving the required scalability capacities for the future." Following further discussions around the immediate and long-term objectives of Housing Solutions, Softcat invited the IT team to its Marlow demonstration facility to further highlight in a live environment, the advantages and capabilities of the HP servers.

With the added confidence that its IT partner was using the exact same technology to resolve its own issues, Housing Solutions accepted Softcat's recommendations.

"There is no point in partnering with a specialist organisation such as Softcat and then ignoring their advice," continued Richard. "Softcat's own internal virtualisation solution matched our requirements and we were also impressed with the knowledge and understanding that Softcat brought to the table." When the virtualisation project began, it proceeded extremely smoothly according to Richard. The HP Proliant servers (augmented by some of Housing Solutions' existing servers that had been identified as being suitable) formed the platform for the current market-leading virtualisation technology – VMware vSphere.

The 3 x HP Proliant servers were used for the basic n+1 redundancy protocol, with all virtualised applications spread over two servers with the third available for redundancy in the event of server failure or maintenance procedures using VMware's High Availability and vMotion features.

To resolve and streamline Housing Solutions' backup issues, Softcat installed an HP backup tape library linked to the three servers and the HP SAN shared storage solution (again a scenario that Softcat had successfully implemented in house and for other clients) using a dedicated virtual backup server, effectively reducing backup times from 14 to 4 hours!

Excellence as standard

"Softcat had an answer for everything," said Richard. "They even went that extra mile when we encountered a network problem the following month."

Some six to eight weeks after its virtual server farm went live, Housing Solutions discovered that its internal PCs were unable to communicate with the servers. "We undertook a number of trouble-shooting procedures but were unable to solve the problem," explained Richard. "At 6:00pm we called Softcat who arrived within 30 minutes and worked with us throughout the evening to resolve the issues."

Softcat have continued to work closely with Housing Solutions, assisting them with their software requirements and signing them up to a Microsoft Select licensing agreement.

"Softcat provides a great service, with a wide spectrum of knowledge across hardware and software," concluded Richard.

"They have organised support and training and are always there to provide impartial, knowledgeable advice. We are currently evaluating the advantages of a SharePoint intranet solution to improve our internal collaboration and provide a centralised document repository. Softcat will certainly be invited to submit proposals."

Key Facts

- Housing Solutions is one of the largest housing associations in the South East

- Housing Solutions provides housing for a variety of groups across the community including the elderly and those with learning difficulties
- Their goal is to provide high quality housing to enrich the lives of the residents

Critical Success Factors

- Free up data centre real estate
- Dramatically reduce back-up windows
- Halt server sprawl
- Expand available storage capacity

Working with Softcat

- Demonstrated a keen eye for detail
- Constructive suggestions beyond the original brief which enhanced the solution
- Real world experience of similar projects
- Impressive knowledge and understanding of the requirements and the technologies needed to satisfy them

Benefits at a Glance

- Virtualised environment live in under 8 weeks
- Back up windows slashed from 14 to 4 hours
- Highly resilient infrastructure with capacity to grow with the organisation