Catalyst Housing, Ltd

ATLANTIS™

ATLANTIS ACCELERATES DESKTOP PERFORMANCE AT LEADING HOUSING ASSOCIATION

Virtual desktops at Catalyst Housing Ltd perform **ten times faster** and deliver a vastly improved user experience, thanks to the deployment of a software-defined storage solution from Atlantis.

Catalyst Housing Ltd (Catalyst) is one of the UK's leading housing associations with 21,000 homes across London and the South East of England. An early adopter of virtualization technology, the organization deployed its first virtual desktop infrastructure (VDI) back in 2009 to give employees the flexibility to work from any of its 40 office locations or from home. Over time, it upgraded and expanded its VDI platform to meet the changing needs of growing numbers of employees. However, despite the unmistakeable success of VDI within the organization, Catalyst had serious concerns about the performance of the storage hardware that underpinned its desktop environment.

A SOFTWARE-DEFINED STORAGE SOLUTION

The organization wanted to migrate to Microsoft Windows 7 and Microsoft Office 2013 to offer improved IT capabilities for end users. However, both of these applications are renowned for being incredibly resource-hungry, and Catalyst's employees were already experiencing performance issues. "Our storage hardware was barely coping with our existing applications, and we encountered boot storms and log-in storms quite often," recalls Konrad Kowal, Technical Architect at Catalyst. "This discouraged us from updating the base desktop image and launching new applications, which was not good for security and not good for users."

To address these issues, Catalyst decided to redesign the storage attached to its VDI and undertook a comprehensive evaluation of three potential options: hardware-based storage products from Nimble and Nexsan and software-defined storage from Atlantis. At first, decision makers were rather nervous about selecting a purely software-based solution but, as Kowal explains, the test results were conclusive. "Atlantis was absolutely the fastest; the other two products tested simply couldn't compare."

CHALLENGES
- Resolve user performance issues and boot storms
- Increase storage capacity to allow for new applications

SOLUTION
- 500 x Atlantis USX for VDI licenses
- 2TB USX for Local Storage Capacity

BENEFITS
- 10x faster desktop performance
- Up to 96% reduction in storage latency
- Improved user experience, especially at peak times
- 20% less expensive than alternative storage options
- Improved return on prior IT investments
- Greater scalability to accommodate growth in user numbers

"The speed of the Atlantis solution is just astonishing."

Konrad Kowal, Technical Architect, Catalyst Housing Ltd

20% MORE COST EFFECTIVE

The solution proposed by Atlantis was significantly more cost effective than the other products evaluated too. It integrated with the storage hardware that Catalyst already had in its network and only required the purchase of some extra RAM to accommodate the anticipated future growth in user numbers. "Even taking into consideration the cost of the additional RAM, the Atlantis solution was still 20% cheaper than the other storage solutions we considered," Kowal says.

The organization will also save money on an ongoing basis as a result of the deduplication and compression capabilities of the Atlantis solution. "We have freed up 85% of the storage on our shared storage platform, thanks to the Atlantis compression capabilities," says Kowal. "This means that we won't have to buy additional storage hardware for more users over the next 3 to 5 years and will gain a far better return on our prior IT investments."

10X FASTER PERFORMANCE

Installed within just one day, the Atlantis solution now supports a VDI environment used by 95% of Catalyst's 650 employees. The migration to Microsoft Windows 7 and Microsoft Office 2013 was accomplished without any worries about user performance, and log-in storms are most definitely a thing of the past. Significantly, storage latency has improved by up to 96%. "Our storage latency used to be 5-25 milliseconds; now it is less than 1 millisecond," says Kowal. "This is a massive improvement, which contributes to a better user experience across the board."

Catalyst used the open source tool Iometer (www.iometer.org) to test desktop performance before and after installing the Atlantis solution. Kowal reports: "With our old storage infrastructure, we recorded 30 IOPS per user, but now we get 300 IOPS per user. These performance tests show that the Atlantis software-defined storage solution is 10 times faster than our previous hardware-based storage platform. The speed of the Atlantis solution is just astonishing."

SCALABILITY FOR AN AMBITIOUS BUSINESS

Catalyst anticipates that its user numbers will increase substantially in the future, partly through organic growth and partly through mergers. Whatever the future holds, the Atlantis solution offers the scalability necessary to support this ambitious business. "When we want to expand, we just purchase additional Atlantis licences," Kowal says. "It is very easy to calculate the cost of storage for additional desktops, plus we will always gain dependable performance. There will be no hidden performance ceilings or storage bottlenecks as we add more desktops."
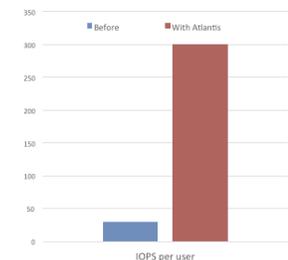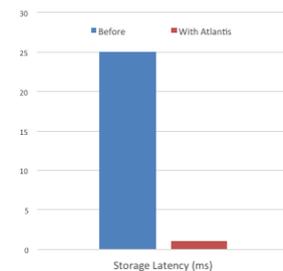
Catalyst is confident that it made the right decision in selecting a software-defined storage solution from Atlantis. Indeed, such has been the success of Atlantis' software for virtual desktops that the organization now plans to use Atlantis to accelerate general virtual workloads and applications with the Atlantis USX for local storage solution.

VIRTUALISED IT ENVIRONMENT

- VMware Horizon View
- 500 x Atlantis USX for VDI licenses
- 2TB USX for Local Storage Capacity
- Dell PS6110XS
- Microsoft Windows 7
- Microsoft Office 2013

"Our performance tests show that the Atlantis software-defined storage solution is 10 times faster than our previous hardware-based storage platform."

Konrad Kowal, Technical Architect, Catalyst Housing Ltd

ATLANTIS™
The New Order of Storage Freedom

atlantiscomputing.com