



**HIFX COUNTS ON
XSIGO VIRTUAL I/O
FOR SAVINGS**

Currency broker deploys fully virtualized data center for cost and efficiency

HiFX plc, the UK's leading independent foreign currency exchange broker is headquartered in Windsor, UK, with additional offices and operations in Europe, North America and Australasia. The company helps over 30,000 people annually buy and sell currency, and provides a variety of foreign exchange services to more than 2,500 corporate clients in over 100 different industry sectors.

BUSINESS GROWING FAST

HiFX IT operations include a primary data center, with a secondary remote DR failover site. The company had relied on a traditional data center architecture, with applications tied to specific physical servers designed to handle peak loads. A Fibre Channel SAN provided the storage with a 1Gb Ethernet network for LAN services. As business requirements grew, server and memory upgrades had been sufficient to provide additional capacity. However, by early 2008 it was clear that this strategy was reaching its limit of effectiveness.

VISION FOR THE FUTURE

Increasing business and new on-line client services demanded more capacity, but the required upgrades would be prohibitively expensive following the traditional architecture.

The new architecture provides near-instantaneous reconfiguration of servers, networks, and storage.

VIRTUAL I/O COMPLETES THE VISION

IT executives at HiFX developed a new strategy with a comprehensive approach to virtualization; replacing the existing server architecture with a more flexible design, allowing servers to be treated as a resource pool, shared across multiple applications. I/O virtualization plays a central role in the strategy, with the "any-to-any" connectivity required to execute the vision of the dynamic data center.

BENEFITS AT HIFX

- 90% reduction in physical servers
- Flexible use of IT resources across sites / regions
- Enables staff to manage IT resources remotely

Transform your IT infrastructure with the Xsigo I/O Director, a hardware and software solution that streamlines server I/O management. Instead of deploying multiple I/O cards and cables to every server, Xsigo lets you connect servers with a single cable and then create virtual I/O resources instantaneously. The result is 100x faster server management, 70% fewer cables and cards, and up to 50% less capital cost

Currency broker improves quality of service and quality of life through virtualization

“The Xsigo I/O Director has played a central role by providing a virtualised I/O infrastructure that allows all server resources to be flexibly deployed.”

- David Christie
CIO



The Xsigo VP780 I/O Director consolidates server I/O by replacing a server's multiple Ethernet and Fibre Channel interfaces with a single high-speed low-latency 20 Gb/s link.

DEPLOYING NEXT-GENERATION ARCHITECTURE

After extensive proof-of-concept testing, HiFX selected the Xsigo I/O Director and VMware ESX software, together with HP DL580 G5 quad core servers. Because Xsigo enables connectivity from any server to any storage and network type, the existing SAN, FC and Ethernet networks could remain in place and unchanged.

The new architecture was deployed at both the primary and DR sites and has fully delivered on the benefits anticipated:

- **Server consolidation of 10 to 1**
Multiple VMs per server are connected to whichever external resources are needed, driving significant reductions in data center power, space, and cooling requirements.
- **IT infrastructure consolidation**
Beyond the consolidation of servers, the Xsigo I/O Director reduced the need for Ethernet and Fibre Channel ports by consolidating the server's network and storage connections with further reduction of rack space requirements at each of the data centers.
- **Efficient use of IT staff**
HiFX takes pride in providing an excellent working environment, recognized by the London Times as one of the best UK companies to work for. A high quality-of-life can be elusive in the 24x7 world of currency exchange, but the Xsigo I/O Director helps by enabling remote resource management. For example, an out-of-hours issue at the Windsor data center can now be resolved by an IT team member in the company's San Francisco office.

- **Extra server capacity on demand**

The company also recognized that capacity at the DR site should be able to absorb peak traffic workloads, but the previous architecture made this unrealistic. The new architecture provides near-instantaneous reconfiguration of servers, networks, and storage. Server virtualization alone would not have provided the same benefit because applications have specific connectivity requirements. By incorporating Xsigo's virtual I/O, the portability benefits of virtualization enable higher utilization at all sites.

- **Predictable performance**

The IT staff at HiFX used the Xsigo I/O Director's bandwidth control attributes to maintain a high QoS for user applications. This also gives IT staff visibility of I/O performance and the flexibility to prioritize resources by application.

SUMMARY

David Christie, CIO at HiFX, summarized the project, “Our virtualization project was a complete success, achieving our ambitious objectives. The Xsigo I/O Director has played a central role by providing a virtualized I/O infrastructure that allows all server resources to be flexibly deployed. This boosts our IT resource utilization and also lets us rapidly deploy new applications and services. Importantly, while Xsigo helps HiFX economize on IT resources, delivering 90% saving in physical server requirements and reducing operating expenses, it additionally improves quality-of-life for IT staff - a benefit that aligns closely with one of the core company values for staff capability and care.” ■