SOLUTION BRIEF
Intel® Xeon® Processor 5600 Series
Healthcare

Derive Technologies Migrates Healthcare Client to Fully Virtualized Environment

Intel® Xeon® processors in VMware ESX* servers maximize performance and energy cost savings

"The Intel Xeon processors 5600 series provided the exceptional performance we were looking for and enabled us to reduce energy costs by adjusting performance to meet demand."

—Darius Stafford
CTO, Derive

CHALLENGES

- Large, multi-campus facilities running outdated architecture
- Increasing demands due to new initiatives, including electronic medical records
- Costly and complex maintenance and support requirements

SOLUTIONS

- Contracted with Derive Technologies to review current architecture across numerous IT domains
- Implemented new systems infrastructure featuring storage area network (SAN) virtualization, systems virtualization, and unified groupware and messaging technologies
- Deployed three VMware ESX servers using HP c7000* enclosure with HP BL490c* blades, powered by Intel Xeon processor 5600 series

New demands require new infrastructure

Jewish Home Lifecare (JHL) is a New York-based nonprofit that has been providing healthcare services and assistance for elders for more than 160 years. However, recent changes in the healthcare industry had overwhelmed JHL's existing IT infrastructure.

JHL's legacy systems were pushed to the limit just to meet day-to-day requirements. Given the organization's large-scale electronic medical record (EMR) initiative, as well as other plans for growth across three facilities, it was clear JHL needed to review and upgrade its IT infrastructure.

For help, JHL turned to Derive Technologies, a company with more than three decades of experience helping modernize data center facilities, infrastructure, and applications. JHL made its decision based in part on the support it had received from Derive on numerous other projects, including its EMR initiative.

"Derive is unique in that they have established competence in designing and managing complex architecture solutions, but they also have deep knowledge of issues at the point of care, including helping us with our EMR initiative and nursing and physician workflows," said Robert Lanfranchi, information technology director at JHL.

Review leads to new systems infrastructure

After an extensive review of JHL's current state across numerous IT domains, Derive implemented new architectures and other improvements that encompassed LAN/WAN, storage, server virtualization, application delivery, and messaging.

New infrastructure provides capacity to meet growing needs

JHL's main data center in Manhattan hosted 31 physical servers that consumed multiple racks as well as electrical and cooling resources. To reduce the overall footprint, Derive consolidated the servers and virtualized the storage infrastructure. As the consolidation foundation, JHL purchased an HP c7000 enclosure and three blade servers (HP BL490c).

The blade servers are powered by the Intel Xeon processor 5600 series, which automatically regulates power consumption and intelligently adjusts server performance according to application demand. Intel® Intelligent Power Technology reduces energy cost over single-core servers by automatically shifting the CPU and memory into the lowest available power state, while intelligently adjusting performance to application needs.

In addition, Intel® Virtualization Technology provides the power and flexibility to virtualize different generations of Intel Xeon processor-based servers within the same virtualization pool, which gives JHL the ability to migrate workloads to fewer servers at night to save energy.[1]

"The Intel Xeon processors 5600 series provided the exceptional performance we were looking for and enabled us to reduce energy costs by adjusting performance to meet demand," said Derive CTO Darius Stafford.

Smaller footprint, lower costs

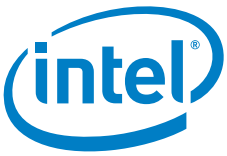
For JHL, moving to a fully virtualized environment was an effective way to lower total costs and increase efficiency, while giving the organization room to grow. The new platform achieved a physical to virtual consolidation ratio of 10:1, and as a result, JHL expects to save USD 22,000 each year, based on power and cooling reduction alone. And because it's easier to maintain and support fewer servers, Derive can now meet more aggressive timelines and reduce maintenance windows, shifting the focus from routine tasks to more strategic initiatives that translate into business value.

"We've been exceptionally pleased with the results thus far," said Lanfranchi, who added that achieving this highly available, "always on" access to vital patient data helped position JHL as a leading care provider. "Along with reducing our data center footprint, we've improved security within and from outside, and improved our high-availability and disaster recovery. And we've done it all cost-effectively."

ABOUT DERIVE TECHNOLOGIES

Derive Technologies is a business innovator that has served the needs of corporations and the public sector for nearly 30 years. Derive helps healthcare, financial services, government, legal, advertising, and educational enterprises of all sizes to obtain the maximal value of investments in IT infrastructure, with specific focus on cost reduction. The company maintains the highest levels of certification through strategic alliances with Intel, HP, Cisco, Citrix, Microsoft, and industry-specific technology providers.

Could your business benefit from moving to a fully virtualized environment? Contact Derive today to learn more about cost-effective virtualization solutions, powered by Intel® Xeon® processors. Visit **www.derivetech.com** for more information.



1. Intel® Virtualization Technology requires a computer system with an enabled Intel® processor, BIOS, and virtual machine monitor (VMM). Functionality, performance, or other benefits will vary depending on hardware and software configurations. Software applications may not be compatible with all operating systems. Consult your PC manufacturer. For more information, visit http://www.intel.com/content/www/us/en/virtualization/virtualization-technology/hardware-assist-virtualization-technology.html.

Printed in USA 1212/TLF/CMD/PDF ♻ Please Recycle 327678-001US