Waking Up to Cost Savings and Efficiency

With “best platform for virtualization,” Slumberland lowers server deployment costs by 57 percent

Slumberland Furniture sells name-brand products at a value price, which makes efficient operations a corporate imperative. Slumberland’s IT department plays a vital role, both by running the applications that streamline business processes and by making smart technology choices. Slumberland is executing a four-year plan to standardize all corporate computing on the Cisco Unified Computing System* (UCS*) based on the Intel® Xeon® processor, and Seth Mitchell, Slumberland’s infrastructure team manager, says every server the company deploys helps improve the bottom line.

CHALLENGES

• **Optimum value.** With retailers affected by shifts in consumer spending, Slumberland looks for technologies and strategies that can streamline the business, enhance IT’s efficiency, and reduce total cost of ownership (TCO).

• **Growing capacity requirements.** As a result of increased business demand, IT had pending requests for 30 new servers.

SOLUTIONS

• **Virtualize and standardize on the Intel Xeon processor family.** Slumberland virtualized its environment on Cisco's next-generation UCS powered by the Intel® Xeon® processor 5500 series, consolidating its servers by 20:1.

• **Adopt advancing technologies.** Slumberland is moving quickly to deploy Cisco UCS platforms based on the Intel® Xeon® processor 5670, and expects to run 60 virtual machines (VMs) on a single, full-width physical blade.

IMPACT

• **High performance for server virtualization.** Slumberland estimates that it has reduced its requirements for physical space, power, and cooling by 95 percent by virtualizing on the Intel Xeon processor 5500 series-based Cisco UCS.

• **TCO savings.** Server management costs have dropped from USD 1,575 per server to just USD 80 per server with the Intel Xeon processor 5500 series-based UCS. The Intel Xeon processors’ automated energy efficiency contributes further TCO savings.

• **IT efficiency, business agility.** Using the new platforms, IT’s two-person server team manages 120 servers. IT deploys new business applications rapidly, helping Slumberland execute its business strategies and deliver an outstanding customer experience.

Rising Capacity Requirements

Slumberland is a fast-growing, privately held company that’s committed to great customer service, including the best value in town. The Minnesota-based retailer even refunds the difference if customers find a lower advertised price within 30 days of their purchase. To maintain its low prices, Slumberland works hard to drive down operating costs and uses virtualization to maximize the use of computing resources.

Mitchell and his team explored a range of options before deciding on the Cisco UCS with the Intel Xeon processor 5500 series to serve as its virtualization platform and meet rising capacity requirements.
Every Slumberland sales transaction is powered by an Intel processor.

The Cisco UCS integrates networking with computing to reduce infrastructure costs and footprint, and the Intel Xeon processor delivers intelligent performance, energy efficiency, and hardware-assisted virtualization capabilities. Slumberland chose Microsoft Hyper-V Server 2008 R2 virtualization software for its low overhead.

“Our priorities were to get the best platform for virtualization, the highest performance (to give us the most value for our per-processor licensing dollar), and the greatest energy efficiency,” says Mitchell. “The UCS was right in the sweet spot. The processor’s virtualization performance allows us to run 20 VMs on a single half-width blade, and the Cisco architecture and the processor’s energy efficiency enable us to dramatically reduce TCO.”

The virtualized infrastructure gives Slumberland the flexibility to deploy a mixed environment of operating systems and applications that meet business needs. The UCS hosts Microsoft Windows Server R2 and Red Hat Enterprise Linux, and runs databases and data warehouses based on Microsoft SQL Server and Oracle 10g and 11g, as well as Cisco Unified Communications Manager for IP telephony. A move to Oracle Real Application Clusters (RAC) is in the works.

Immediate Value
With the combination of high performance and easy management, Mitchell’s team is able to support business growth without adding staff. Slumberland calculates that deploying 14 logical servers on the Cisco UCS costs 57 percent less than it did on the company’s previous platform. The savings increase as the system grows, Mitchell says, with 20 logical servers costing 67 percent less and 28 logical servers 74 percent less. (Calculations include operating system and backup licensing for three years.)

“During the first three days of operation, we provisioned 28 logical servers, spending USD 46,984 less than we would have with our previous server architecture,” Mitchell says. “Going forward, we will save USD 1,678 on each logical server we deploy. We have also freed up 10 hours weekly for each system administrator to spend on tasks that add business value.”

Now, Slumberland is bringing in Cisco’s full-width UCS B250 M2 blades based on the Intel Xeon processor 5670. “The B250 takes full advantage of the processor’s memory capacity and performance, and uses patented technology to provide up to 384 GB of RAM,” explains Mitchell. “We anticipate being able to run 60 virtual servers per full-width blade, with each server getting an average of 6 GB of RAM.”

Mitchell expects to use half-width UCS blades with the Intel Xeon processor 5500 series for processor-intensive workloads, and full-width UCS blades with the Intel Xeon processor 5600 series for memory-constrained workloads. “We hope to consolidate all our computing, including some large RISC systems, onto the UCS with the Intel processors, and have that be our single, unified platform going forward,” he says. “We’ve found Intel to be the most cost-effective platform for computing by far, and because of our highly centralized design, every sales transaction Slumberland handles is powered by an Intel processor.”

Virtualization: dynamic resource management. Optimize server utilization and increase agility through virtualization and dynamic policy-based resource management.

Find a solution that is right for your organization. Contact your Intel representative or visit the Reference Room at www.intel.com/references.