

“Intel’s Xeon processors work with the VMware Infrastructure 3 platform to give us the maximum server consolidation per dollar. If our virtual infrastructure was a car, we’d be getting more than 100 miles per gallon.”

Matt Mancini

*Network Administrator,
John C. Lincoln Health Network*

HIGHLIGHTS

CHALLENGE

Server consolidation needed within data center to avoid power and cooling limitations

SOLUTION

VMware® and Intel technology creates a virtualization platform that drives server consolidation and reduces IT costs.

VMWARE AND INTEL AT WORK

VMware® Infrastructure 3 Enterprise, featuring:

- ESX Server 3
 - HP BL 460 C servers with Intel Xeon processors attached to EMC DMX 4000 SAN
- VirtualCenter 2
- VMotion™
- Distributed Resource Scheduler (DRS)
- High Availability (HA)

DEPLOYMENT ENVIRONMENT

- Guest operating systems: Windows 2003, Windows 2000, Linux CentOS 5.2
- Virtualized Applications: Homegrown healthcare based administrative applications and patient care applications

DIAGNOSIS: OVERCROWDED DATA CENTER. REMEDY: VIRTUALIZATION

Based in Phoenix, Arizona, John C. Lincoln Health Network (JCL) is an acclaimed health system that includes two hospitals, physician practices, community outreach programs and the John C. Lincoln Health Foundation.

JCL seeks to “set the standard for excellence in all aspects of healthcare”, and that yen for excellence extends to its IT infrastructure. “We took a look at our existing data center and decided it was time to consolidate our servers to avoid future problems with power and cooling, while at the same time providing more reliability and redundancy,” says Matt Mancini, network administrator at JCL. “Virtualization was the perfect avenue to achieve these objectives.”

Using the VMware Infrastructure 3 platform and new blade servers outfitted with the latest Intel Xeon processors, JCL was able to drive consolidation of servers within its data center. “When you buy an Intel platform, you know that it is an industry standard, that it has been well tested, and that it is going to perform well for you,” says Mancini. “And that has certainly been our experience in using it with VMware’s virtualization solution.”

RESULTS

- Achieve 15:1 server consolidation. “Right now, we have four VMware ESX hypervisors handling approximately 15 virtual machines each, and Intel’s Xeon processors ensure that the performance is solid,” says Mancini. “There’s plenty of processing power – I never have to worry about that element.”
- Increase CPU utilization ten-fold. “Prior to virtualization, we had servers running at 2-3 percent CPU utilization,” says Mancini. “Now, we can get closer to 20 percent utilization for our servers, and still have plenty of headroom.”
- Annual savings of \$50k. “Between reduced power and cooling costs, and our ability to eventually take 150 servers down to just ten blades, we expect to save \$50,000 per year,” says Mancini.

