



## KEY HIGHLIGHTS

INDUSTRY: EDUCATION



## CHALLENGE

Decrease server deployment time for faculty special projects; reduce amount of physical hardware; reduce the power consumption across all infrastructure

## SOLUTION

VMware® Infrastructure decreases costs, streamlines server deployment, and reduces energy consumption.

## VMWARE AT WORK

VMware Infrastructure 3 Enterprise, featuring

- ESX Server 3 with VMFS
- VirtualCenter 2
- VMware Workstation

## DEPLOYMENT ENVIRONMENT

- Hardware: IBM X Series RAID 5 Dual Xeon Servers; HP Proliant DL385s attached to an ECM CX3-20 SAN
- Operating systems: RHEL 4,5, Microsoft Windows 2003/2000 Server, XP, Vista
- Guest operating systems: Windows Server 2003 (Enterprise and Standard), Windows XP
- Applications: SQL, SharePoint 2.0/3.0, Symantec Ghost, Blackberry, Outlook Web Access, Print servers

*“Stop living in the past and jump on board with the future. In 2001, we were testing applications with various browsers with VMware Workstation. It was an exceptional product in its infancy and, today, it’s the standard for long-term IT upgrades and infrastructure utilization.”*

Jared Beard, Associate Director of Information Technology Labs and Studios  
Indiana University, Kelley School of Business

## Indiana University, Kelley School of Business

The Kelley School of Business at Indiana University is a premier business school ranked in the top 25 nationally according to U.S. News and World Report. The Kelley School of Business has always been on the cutting edge of technology, embarking on server virtualization in 2001. It prepares its students for modern-day business by utilizing the latest business software applications in lectures and hands-on projects. Its computer systems are directed by Information Technology Labs and Studios and the Kelley School of Business coordinates services with the University Information Technology Services, which is responsible for over 38,000 users on eight campuses.

Like many universities and other large corporations on sprawling campuses, the Kelley School of Business faced deployment delays and high costs, inefficient use of physical server capacity, and a lack of physical space in their data center. In the interest of energy conservation, the Kelley School of Business also wanted to reduce its energy consumption and power costs.

Once the Kelley School of Business began to use VMware virtual machines, it reduced server deployment time, reclaimed significant physical space, reduced its energy usage, and increased the use of each physical server’s capacity.

## Results

- Reduced deployment time from up to five days to less than an hour
- Increased CPU utilization from between one and three percent up to 70 percent
- Decreased physical server footprint by 85 percent
- Drastically reduced the labor and hardware budget
- Reduced debugging efforts
- Increased customer service opportunities
- Reduced power consumption by almost 70 percent
- Increased IT management flexibility
- Saved money on additional hardware purchases