

VKernel Case Study: Installed Building Products



Industry: Building Materials and Products

Challenge

In its VMware server environment, IBP needed to get more proactive visibility into its resource utilization to ensure optimal performance and help justify purchases ahead of running out of resource capacity.

Solution

Using the VKernel Capacity, IBP is able to continuously monitor shared CPU, memory, and storage; set proactive alerts; and continually access critical resource utilization data to practice better and more efficient capacity planning.

VKernel at Work

Capacity Analyzer proactively and continuously monitors shared resource capacity utilization trends in VMware ESX environments across hosts, clusters, and resource pools to properly plan for growth, ensure optimal performance, and lower the costs per virtual machines.

Deployment Environment

- VKernel Capacity Analyzer Virtual Appliance
- VMware ESX Server 3.5 on Dell 2950 servers
- Guest operating systems: Windows Server 2000, 2003 and 2008
- Applications: SQL Server 2000 and 2005, MAS200 financial software, Citrix 4.5, Microsoft Exchange, Active Directory 2008, FRX financial software, Ultipro human resources software, and more.

"The first time we used VKernel's Capacity Analyzer we instantly identified a test virtual machine that was constantly consuming 89 percent of its allocated CPU resource. By pinpointing the problem, Capacity Analyzer allowed us to make changes and reallocate resources so that it is now running at only one percent of CPU capacity."

Gary Boy, Director of IT Operations, Installed Building Products

Installed Building Products (IBP)

Headquartered in Columbus, Ohio, IBP is a dynamic, fast growing family-owned company (a division of Edwards Companies) that specializes in the sale and installation of a wide range of building products, including insulation, shelving units, shower doors manufacturing and installation, custom mirrors, foundation waterproofing, and more. IBP is the second largest contractor of its kind in the United States. For more information, visit www.ibpteam.com.

In a situation in which IBP always needed to buy more server hardware and as a result was quickly running out of space in its data center, the company decided it needed to virtualize. Now, with 80 servers virtualized (about 30 more to go), IBP has found new space in its data center and the company is also seeing a significant savings in power consumption. While virtualization has provided IBP with many benefits, Gary Boy, director of IT operation for IBP, states that new challenges in managing shared resource capacity were created.

"The virtual data center is truly dynamic and the right amount of resource capacity is always required to ensure optimal performance," said Boy. "We needed to proactively monitor our resource utilization to not only continually meet expected performance levels, but also to justify our next hardware purchases to increase our capacity. This is why we chose to deploy VKernel's Capacity Analyzer."

With its predictive monitoring and analysis capabilities, Capacity Analyzer is providing IBP with an early warning system that alerts Boy days in advance about potential resource (CPU, memory, and storage) capacity issues. "Capacity Analyzer is enabling us to take a more proactive management approach," added Boy. "Additionally, I now have accurate and detailed reports that I can present to my boss that justifies purchases we will need to make ahead of running into performance degrading resource constraints."

Capacity Analyzer is also helping Boy to better handle capacity planning. Before deploying the VKernel tool, Boy was doing capacity planning for over 100 servers by hand – a time consuming process that Boy was finding impossible to proactively do himself. "We're using Capacity Analyzer all the time and it is helping us immensely with our capacity planning efforts," said Boy. "I now immediately know where I can add new virtual machines without impacting the production environment. In fact, it is tools like this which enable us to better manage our infrastructure with fewer people that are allowing me to save significant time and costs by more efficiently and effectively monitoring our environment to ensure optimal performance."

Results

- Gained immediate visibility into capacity utilization trends throughout its VMware environment to take a more proactive approach to ensuring optimal performance levels
- Making better capacity planning decisions and constantly improving the performance of its VMware ESX servers by having actual resource (CPU, memory, and storage) utilization data
- Automated a manual capacity planning process that saved the company significant time and money

