

A Virtual Good Idea: Virtualization software allows districts to stretch dollars, conserve resources

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School districts across the country always have had to do more with less. Funding only goes so far, leaving administrators and IT staff to find innovative ways to save money while maintaining a high level of academic quality.

Creating virtual servers accomplishes both tasks, district technology personnel say. Not only do virtual environments allow districts to use fewer servers, performance often is enhanced, saving money on electricity and the cost of new equipment.

There are very few win-win situations in the current business climate, but virtualization may well be one of them.

Superior Performance, Quick ROI from VMware

Not many technology projects can achieve ROI in a single year, but the School District of the Chathams' server virtualization project did just that.

The six-school, 3,700-student K-12 district reduced the number of servers it uses by 60%, from 44 to 18, reports John Abdelmalak, director of technology for the district based in Chatham, NJ. Three Dell servers in the data center are running VMware ESX to allow virtualization, while a server in each of the district's six sites is running VMware's free ESXi software. Local servers run a domain controller, deployment server, and antivirus software, while the data center servers operate mission-critical functions.

As a side benefit, the district is saving an estimated \$30,000 a year in electricity costs by running fewer servers.

Abdelmalak attended a Dell Lunch and Learn about virtualization last year, which piqued his interest. "It took us several years to get on a technology refresh cycle in the district," says Abdelmalak, who joined the district four years ago but has been in education IT for 13-plus years.

"We were replacing seven to eight servers every summer, which is a lot of money and a lot of manpower to decommission old servers and transfer operations to new ones.

The IT director asked Dell to look at the district's server environment, and the company brought in VMware to perform a virtualization readiness assessment, which looks at memory, processor, and network utilization, along with disk I/O. The only two servers with higher than average usage were the e-mail and e-mail archive servers.

After making the virtualization decision, the district contracted with Dell for a four-day virtualization workshop to learn the basics and start the process. Abdelmalak says the hands-on experience was critical, allowing his staff to get two virtual machines up and running while becoming comfortable with the principles and practicalities involved.

ROI already has been achieved since the district bought just three servers last year and plans to purchase none this year. "Virtualization made financial sense," Abdelmalak says. "We're operating fewer servers with increased performance. It's been a home run, basically."

Virtual Iron Performs at a Good Price

Who in his right mind would upgrade server software during the school day?

Lane Virgin, for one.

Virgin, systems administrator for the Bonneville (ID) Joint School District No. 93, says the virtualization solution from Virtual Iron has helped the district reduce physical server count by 13 while offering unparalleled reliability.