

Low-cost green computing for education

Ramona Unified achieves e-learning goals

Challenge

Upgrade old PCs to enable new software applications on a limited budget.

Solution

Install NComputing virtual desktop solutions in the district's labs and classrooms to increase available desktops while limiting impact to budget and the IT support team.

Impact

Reduced deployment costs by more than half. Run powerful new e-learning applications problem-free, preserving the district's significant software investment. Eliminated noise, heat, and space problems in the lab.

The challenges seemed insurmountable. The Ramona Unified School District (California) computer labs' aging PCs were unable to run innovative and costly e-learning software it had recently purchased, and they had too few of the outdated machines to allow the students time for effective learning.

Worse still, the heat generated by the old PCs and CRT monitors made the computer labs unbearably hot and noisy, and the lab's crowded desktops had little room for papers, notes, and books. With a limited budget and IT staff, finding a cost-effective solution was daunting.



NComputing's solution eliminated heat and noise in Barnett Elementary School's computer lab, vastly improving the learning environment.

A wasted investment

With 33 classrooms, a large library-media center, and a computer lab, Barnett Elementary School exemplified the Ramona district's challenges. The computers in the school's lab couldn't run a new e-learning application that cost them more than \$20,000, and there weren't enough computers to meet the needs of the students. "We realized it would take us three years to save the money we needed just to buy the computers for the lab," said Barnett principal Shelagh Appleman. "And that meant our investment in the new software would be wasted."

As with most schools, Ramona's budget for purchasing new PCs was extremely limited, as was the size of the district's IT staff, which would have to deploy any new machines and the applications they would run. "We had used refurbished machines in the past, but we found that with their limited lifespans they weren't

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KEITH WRIGHT
DIRECTOR OF INFORMATION AND
EDUCATION SERVICES
RAMONA UNIFIED SCHOOL DISTRICT

cost-effective,” said Keith Wright, director of information and education services for the Ramona USD. “We also looked at a thin-client solution but found the upfront costs for servers, hardware and network bandwidth was prohibitive.”

“We needed to find a solution that the district could afford, and that our IT team could deploy and support without being overwhelmed,” added Mr. Wright. “We also needed a flexible solution that would bring more PC desktops to our classrooms and computer learning pods. After testing an evaluation unit, we decided NComputing’s solution would help us meet all of those needs.”

Leverage existing computing capacity

“NComputing was able to show us how we could take advantage of the computing power in desktop PCs,” said Mr. Wright. “They also showed us how we could dramatically cut the time it took our IT team to deploy and support our district’s computers.”

NComputing’s desktop virtualization software and hardware taps the unused capacity of today’s powerful PCs by simultaneously sharing it among multiple users, spreading out the cost of the PC, and typically providing four times the number of seats for the same money.

The NComputing virtualization software works with standard Windows and Linux PCs, and each user’s monitor, keyboard, and mouse connect to the shared PC through a small and highly reliable NComputing access device. The device itself has no CPU, memory or moving parts, so it’s easy to deploy and maintain. And the model Ramona chose gets its power through the network cable, reducing cable clutter and the need to install extra power outlets.

NComputing made me a hero

“The complete installation at Barnett Elementary took just one day. Before, it would have taken the better part of a week,” said Mr. Wright. “And the environment was immediately more pleasant for learning, with the heat and noise eliminated. Just as important, we were able to install the NComputing devices along with high-end Dell PCs, new flat screen monitors, keyboards and an optical mouse for less than half of what we spent when we last upgraded the lab.”

“NComputing made me a hero,” said principal Appleman. “Our new e-learning software now works perfectly, preserving our \$20,000 investment. And we have more computers available to our students than we ever thought we’d be able to afford. We literally would not have a lab today at our school if not for the NComputing technology.”

“NComputing has provided us with a fantastic solution. Rolling it out has been very easy, and we’ve experienced virtually no problems,” said Mr. Wright. “It has been a great investment for the district, and has made a huge impact on our ability to increase the number of computers in each of our schools. As a result of increased student access to our e-learning programs, we are seeing learning improvements throughout the district.”

