Morgan County Schools Deploy Virtual Desktop Network

Morgan County School System delivers next-generation instruction and user-experience with Cisco networking solution.

EXECUTIVE SUMMARY
MORGAN COUNTY SCHOOL SYSTEM
• Education
• Madison, Georgia
• 3300 students; 5 campuses; 220 classrooms
CHALLENGE
• Offer technologically superior end-user experience and learning environment
• Implement cost-efficient, scalable network platform for new applications and anticipated user growth
• Streamline management responsibilities to serve multiple campuses
SOLUTION
• Transition to virtualized desktop network across all five campuses
• Integrate classrooms with scalable environment providing instantaneous computing power
RESULTS
• Advanced classroom environment with faster operating network over virtualized server environment
• Expanded capacity for teachers to add applications and serve growing user environment
• Contributed to cost savings

Education Challenge

The Morgan County School System (MCSS) has five campus locations, from pre-K through 12, including a school that provides alternative forms of instructional delivery. With a vacant tract of land designated for the construction of an additional elementary school, the Board of Education has prepared for growth beyond the approximately 3300 students enrolled at the existing Morgan County school locations. In addition to system wide strategic planning, each school has its own "School Improvement Plan" that evaluates short- and long-term planning.

MCSS leads its peers, and larger area school systems, in deploying new technologies to enable next-generation learning. To that end, MCSS desired a robust and cost-efficient computer networking system for its multiple campuses to engage students and faculty with a scalable networking platform that can accommodate an ever-growing population of end-users.

Previously, individual PC units outfitted the 220 MCSS classrooms and labs across five campuses. These units required replacement every 4-5 years, as well as hands-on maintenance provided by fewer than a handful of people. Faced with the decision of again replacing the out-of-date PC units, school administrators recognized maintaining this lifecycle would prove too expensive and unwieldy to meet the demands of a dynamic educating platform. The management system, too, required a cost-efficiency makeover to centralize and streamline technical maintenance responsibilities for a more flexible and scalable network platform.

Solution

MCSS officials and IT leadership decided to forego the replacement of all PC units and, instead, deployed a technologically superior, scalable solution that would yield long-term cost savings. MCSS is now running a virtual desktop environment across five schools, in 220 classrooms and labs, for approximately 3300 students, with 1200 endpoints for student devices. This undertaking represents the first "flexpod" deployment in the United States. A flexpod is a combination of the Cisco Unified Computing System™ (UCS) infrastructure, NetApp SAN, and VMware. This architecture has been tested for customers, supported, and verified under conditions of best

practices. According to MCSS Director of Technology Jay Cawley, "MCSS is one of the first school systems to introduce 100 percent virtual desktops for students at once … the end user doesn't see a difference in what they access; it's just new, faster and more robust …"

A departure from the typically languid advancements among academic institutions, MCSS took a calculated risk. With strong supporting evidence and the support of its board, MCSS officials and IT leadership took one year to vet the virtual desktop system, then agreed this technology would expand capacity and add value for teachers, students, and the IT department. By that time, MCSS had already been operating a virtualized server environment for three years, so introducing the infrastructure to virtualize desktops was neither a foreign concept nor a huge leap. Cawley says, "With individual PCs and computing power distributed across PCs, our ability to manage 1600 PCs across five campuses was limited. Now, management and maintenance of the system is a more streamlined, centralized process."

Results

MCSS has been offering a quality learning experience to students from pre-school through high school for many years. With this upgrade, students at all five campuses will experience the benefit of a more dynamic learning environment; teachers will have access to more resources with the scalable technology; MCSS can easily accommodate its growing student population; and the school district will benefit from long-term cost savings. The cost of installing a virtualized desktop environment is financially equivalent to purchasing new PC units, and the virtual system will not require replacement every 4-5 years.

Several school systems are following the lead of the Morgan County School System, and larger school systems will start piloting virtual desktops in smaller scenarios. As MCSS continues to

PRODUCT LIST
• Cisco Unified Computing System

demonstrate the short- and long-term benefits of the virtualized desktop for multiple audiences, other area schools will begin to move forward, first, with the virtualization of their server environments, then on to virtual desktops. The Morgan County School System believes that it will serve as a reference for other school districts across the country, particularly those serving the K-12 grade levels.

For More Information

To find out more go to: Cisco Education Solutions.

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