COLLEGE BOARD LIFTS EFFICIENCY AND READIES FOR PRIVATE CLOUD SERVICES WITH VBLOCK™ INFRASTRUCTURE PLATFORMS

Executive Summary

About the Mississippi Community College Board
The Mississippi Community College Board (MCCB) is the coordinating organization for Mississippi's 15 community and junior colleges. The board coordinates and distributes funds throughout the community colleges, which serve more than 88,000 students. MCCB's Technology Division coordinates, plans, and manages a variety of information technologies used by each of the colleges to support educational, operational, and administrative functions.

Challenge

- Data center running out of space
- Power, cooling, and support costs increasing

Solution

- Vblock™ Infrastructure Platforms

Results

- Decreased data center footprint by 40 percent
- Reduced management time by 60 to 70 percent
- Achieved 97 percent server virtualization
- Improved IT agility and reduction of provisioning time of new services

Challenge

The Mississippi Community College Board (MCCB) wanted to leverage server virtualization, but its aging physical infrastructure was slowing adoption. Rather than update infrastructure elements sequentially, MCCB was able to fast-forward its enterprise-wide upgrade and virtualization strategy with Vblock Infrastructure Platforms.

Ray Smith, MCCB's Technology Division's assistant executive director for technology, explains, "We wrestled with all the bad things that come with equipment nearing end of life. We were running out of data center space, and our power and cooling costs and support expenditures were growing. Initially, we wanted to move to HP blades, but our IT partner, Venture Technologies, told us about the Vblock platform. We saw that the Vblock solution would resolve our issues, simplify our operations, and let us deliver new services."

In addition, MCCB needed an infrastructure that would enable it to participate in the Statewide Longitudinal Data System (SLDS), a national program that enables tracking of student information from early education to the workforce.

Solution

At MCCB's data center in Jackson, Miss., where business-critical applications are hosted, a Vblock platform replaced three HP servers and EqualLogic storage. The Vblock platform includes Cisco Unified Computing System (UCS) blade servers, Cisco Nexus switches, EMC unified storage, EMC Ionix Unified Infrastructure Manager (UIM) software, and VMware vSphere virtualization.

Converged, fully tested, and supported by VCE, the Virtual Computing Environment Company, MCCB's Vblock platform hosts all of MCCB's applications including online registration, Mississippi Virtual Community College, Microsoft Exchange, SharePoint and SQL Server, as well as DNS servers for the colleges.

MCCB engaged professional services from VCE and Venture Technologies for the implementation. Venture Technologies used its experience with the Vblock platform to provide services that included migrating MCCB's existing VMware servers to the new architecture.

"VCE and Venture are a great team," notes Smith. "Both companies have top-class engineers and are committed to working with us as trusted partners."

Results

Smaller Footprint from Day One

The plan called for VCE and Venture Technologies to spend five days at MCCB's data center implementing the Vblock platform. The on-site work took only three days, which pleased Smith.

"We were able to empty two racks of file servers on day one. The simpler physical setup also works to our advantage because we streamlined all the different power supplies, cooling fans, and cabling behind our racks," states Smith.

Using the Vblock platform has since let MCCB consolidate its server equipment racks down from three to one, so the hardware occupies 40 percent less space in the data center.

Efficient Support Model Saves Time and Money

"With VCE and the Vblock platform, we're not dealing with multiple vendors. It's a different model that translates into saving time and money. We call one number for answers to a variety of things without finger-pointing," Smith observes.

When it comes to managing computing, storage, and network resources, the Vblock platform lets MCCB manage everything from a single console. Smith estimates the division's three-member IT team regained 60 to 70 percent of the time spent managing their older systems.

"The beauty of the Vblock platform is that we're managing everything from one point and much more easily than I ever imagined. Before, we were often blind to issues that were brewing in our environment," Smith remarks.

"Since we've had the Vblock platform, I haven't had to spend any time in the data center looking for red lights on my disk drives or checking whether everything is plugged in. I even put in a new network management appliance the other day, and it linked to my wide area network and didn't have to fish through cables," he adds.

Predictable Performance for Mission-Critical Applications

Having virtualized 97 percent of MCCB's centrally hosted applications, the Technology Division maintains high service levels for tens of thousands of users in the state's community and junior colleges.

"The Vblock platform lets us easily give critical workloads the horsepower to get the response times we need," says Smith. "If a counselor or student is registering for an online class, or checking for open seats in a class, performance is critical because courses are filled on a first-come, first-serve basis. Our database lookups now get subsecond responses. I'm seeing smiles instead of hearing complaints."

Along with the performance, MCCB's distance-learning applications require 24x7 availability. "Our virtual community college makes it just as important for our system to be up on Saturday night at 2 a.m. as during regular business hours," Smith comments. "The Vblock platform keeps us running without downtime, if we have a hardware failure. It has virtual server replication, and the servers and switches are redundant, so we can go on with our mission."

Predictable performance also enabled MCCB to virtualize key databases with confidence, including enrollment, adult basic education, audit and athletic databases, which are accessed by its customers on a 24x7 basis.

Primed for Private Cloud

Next, MCCB expects to use the Vblock platform to enable private cloud services for the community and junior colleges.

Smith notes, “The Vblock platform gave us the headroom to offer up services we didn’t have before. We’re looking at things with the colleges, like disaster recovery and virtual server provisioning.”

Having the Vblock platform also removes anxieties about the future. “We can grow to whatever capacity we need, without the expense of changing everything out and starting over. With the way the Vblock platform is engineered, our window is bigger than the normal three-year technology life cycle. It’s great not to be locked into something inflexible where the technology is outdated before you get the benefits,” states Smith.

For More Information

www.vce.com

ABOUT VENTURE TECHNOLOGIES

Venture Technologies is an IT solutions company founded in 1986 that provides Premise Solutions, Collaboration Solutions, and VTCloud Services. Venture serves private and public sector clients across the Southeast with locations in Alabama, Florida, Louisiana, Mississippi, and Tennessee. The company also owns and operates a SAS 70 Type II Certified Data Center in Jackson, Miss., from which it provides Cloud Services across the U.S. and internationally. For more information, visit www.ventech.com.

ABOUT VCE

VCE, the Virtual Computing Environment Company formed by Cisco and EMC with investments from VMware and Intel, accelerates the adoption of converged infrastructure and cloud-based computing models that dramatically reduce the cost of IT while improving time to market for our customers. VCE, through the Vblock platform, delivers the industry's first completely integrated IT offering with end-to-end vendor accountability. VCE's prepackaged solutions are available through an extensive partner network, and cover horizontal applications, vertical industry offerings, and application development environments, allowing customers to focus on business innovation instead of integrating, validating and managing IT infrastructure. **For more information, go to www.vce.com.**