



Xavier University of Louisiana Modernizes with a Robust Cloud Foundation

INDUSTRY

HIGHER EDUCATION

LOCATION

NEW ORLEANS, LOUISIANA

KEY CHALLENGES

- Taxed by limited resources and rising demands
- Lacked an adequate disaster recovery strategy
- Needed to further address possible data security vulnerabilities

SOLUTION

With VMware partner RoundTower Technologies, Xavier University of Louisiana implemented VMware Cloud Foundation™, an integrated platform of software-defined services for compute, storage, networking, security, and cloud management.

BUSINESS RESULTS

- Fast deployment and migration save significant time and money
- IT automation frees staff to better support customer needs
- Enhanced security and data protection safeguard data and improve disaster recovery response

Xavier University of Louisiana has weathered hurricanes and other natural disasters while advancing educational opportunities for its more than 3,000 students from Louisiana, 40 other states, and 15 countries. With a small IT staff taxed by disaster recovery challenges, data security vulnerabilities, and heavily manual refresh and update cycles, Xavier chose to leapfrog ahead in its infrastructure modernization with VMware Cloud Foundation.

Founded in 1925, Xavier University of Louisiana is the only historically black, Catholic university in the United States. The university graduates the largest number of African American undergraduate students in biological and biomedical sciences, physical sciences, and physics, in addition to those who go on to complete medical school. The *U.S. News Best Colleges Guide 2018* ranked Xavier as the number one best value among southern regional colleges and universities.

The challenge

Facing an impending deadline on its leased data center infrastructure, Xavier's IT team was determined to identify new ways to overcome the challenges of all-too-frequent refresh cycles. The small IT department was under pressure from limited resources and high client demand. Manual updating of servers and laptops was time consuming. Shadow IT initiatives by other parts of the organization, such as for backups and storage, also made it harder to manage the school's data protection responsibilities.

At the same time, Xavier needed to improve its disaster recovery (DR) capabilities. It required a more effective DR strategy that would prevent Xavier's precious IT resources from being repeatedly drained by recovering data and rebuilding systems after hurricanes and severe storms affected Louisiana.

The time was ideal to explore if a cloud-first, software-defined data center approach, including greater IT automation, could help address these challenges.

The solution

With assistance from RoundTower Technologies, a VMware Partner and Premier Solution Provider, Xavier deployed VMware Cloud Foundation, an integrated solution that provides a complete set of software-defined services for compute, storage, networking, security, and cloud management to run enterprise applications.

The VMware Cloud Foundation platform automatically deploys a hyperconverged architecture based on a VMware Validated Design™ and leverages the market-leading technologies of VMware vSphere®, all-flash VMware vSAN™, VMware NSX® Data Center, VMware vRealize® Automation™, and more. The solution delivers storage with superior elasticity and performance, self-driving operations, self-service automation, and automated lifecycle management. Intrinsic security features include network-level micro-segmentation, distributed firewalls and VPN, compute-level encryption for virtual machines (VMs), hypervisors, and vMotion® migrations, in addition to storage-level encryption for clusters and data at rest.

“As VMware vSphere customers, we were already familiar with VMware products and virtualization. With VMware Cloud Foundation, and with RoundTower to help us, our two-person department didn’t need to learn how to install and manage a lot of new products to get the time and cost savings, cloud capabilities, and automation benefits we wanted,” said Thomas Wimprine, senior system administrator for Xavier University of Louisiana. “RoundTower’s expertise gave us confidence we could achieve our goals in the compressed timeline we needed.”

RoundTower is the winner of the 2018 VMware Partner Innovation Award in the Solution Provider category for the Americas. It was one of the first solution providers to attain all four of VMware’s Master Services Competencies, including Data Center Virtualization, Desktop and Mobility, Cloud Management and Automation, and Network Virtualization. More than 150 individual certifications further underscore RoundTower’s commitment to helping organizations accelerate their digital transformations by leveraging its validated services delivery capabilities around advanced VMware solutions.

Business results and benefits

Xavier was able to stand up its new server hardware with software-defined infrastructure and then retire its old environment quickly, completing the entire process in just three weeks. “This was a project that would normally take at least a month. Fast deployment and migration were key to avoiding additional costs of our expiring lease. Thanks to RoundTower and the integrated, standardized nature of VMware Cloud Foundation, we clocked in at three weeks,” said Wimprine.

Xavier trimmed its physical infrastructure footprint by 90 percent by consolidating five racks of outdated hardware to a half rack of Dell PowerEdge servers, reducing power usage and costs. Xavier continues to save time and money with the centralized management software in VMware Cloud Foundation, which automates the lifecycle of logical resources, from boot-up to configuration, infrastructure provisioning, and handling upgrades and patches.

“VMware Cloud Foundation was less expensive than other solutions, and at the same time, it removes a lot of the administrative burden from us,” said Wimprine. “It allows us to deliver reliable application performance and focus on bigger-picture projects, rather than the crises of the day.”

Xavier’s increased IT agility allows staff to better serve its customers. “With our cloud strategy, we can be more responsive to the IT needs of our faculty, staff, and students to support today’s requirements, while having flexibility as needs further evolve and grow,” said Tony Moore, vice president of the Office of Technology Administration for Xavier University of Louisiana.

The VMware Cloud Foundation infrastructure provides Xavier a highly secure environment to help ensure its data protection needs are met, both day to day and in the event of a disaster. “Security and data protection are of pivotal importance. Now we can mitigate threats in a better, more programmatic way. We are also better prepared for disaster recovery events with superior SLAs,” said Wimprine.

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THOMAS WIMPRINE
SENIOR SYSTEM ADMINISTRATOR
XAVIER UNIVERSITY OF LOUISIANA

Looking ahead

Future projects the university is exploring include empowering students and staff with digital workspaces. Xavier has been piloting VMware Horizon® to provide virtual desktops that can be easily customized and provisioned on demand while allowing anytime, anywhere access to apps and resources that support learning.

Xavier continues to collaborate with RoundTower to maximize the self-service and automation capabilities of its cloud environment, with an eye toward delivering ongoing, superior value to the university. “We now have a dynamic, future-ready cloud infrastructure to support the IT service enhancements our constituents need,” said Moore.

VMWARE FOOTPRINT

VMware Cloud Foundation

- VMware vSphere Enterprise Plus 6.5
- VMware vSAN Advanced
- VMware NSX Data Center Professional
- VMware SDDC Manager
- VMware vRealize® Suite
- VMware vRealize Automation
- VMware vRealize Operations™
- VMware vRealize Network Insight™

VMware Horizon (in pilot)

PLATFORM

Dell PowerEdge servers

