



STATE OF LOUISIANA UNIFIES IT SERVICE DELIVERY, IMPROVES MEDICARE ENROLLMENT, AND RAPIDLY RESPONDS TO DISASTERS WITH VMWARE HYBRID CLOUD



INDUSTRY
GOVERNMENT

LOCATION
UNITED STATES

KEY CHALLENGES

- Create a more secure, stable, and scalable technology platform for the state
- Modernize and consolidate IT systems for 16 agencies with a service-first approach
- Streamline critical services, such as Medicaid and workers' comp
- Simplify workload portability to adopt a public cloud-first strategy

SOLUTION

To help support an extensive statewide IT modernization project, the State of Louisiana worked with Venture Technologies to consolidate its infrastructure into a private cloud using VMware SDDC solutions on Intel-based hosts.

Reforming government is a constant process requiring continuous innovation, creativity, and vigilance, including the technology on which government operates. For the State of Louisiana, that meant embarking on a statewide initiative to transform security and modernize data center operations. To shape and change how IT services and infrastructure were built, delivered, and managed, it formed a new entity—the Office of Technology Services (OTS)—to take over the operations of 16 agencies, including healthcare, education, and public safety. The goal: Take IT from legacy mainframes to cloud-based, mobile-ready application delivery.

Louisiana decided to partner with VMware to modernize its data centers, transform digital workspaces for users, and move toward a common operating model that spans both private and public clouds. To more securely manage and scale its consolidated IT operations, the state used VMware vSphere®, VMware vRealize® Suite, and VMware NSX®, saving millions in CapEx and OpEx. The state also uses the VMware Workspace ONE™ platform, powered by VMware AirWatch® technology, with VMware Horizon® virtual desktops to enhance mobility for first responders. It also plans to use VMware Cloud™ on AWS as part of a public cloud-first initiative.

Organization Overview

Louisiana is a southeastern U.S. state on the Gulf of Mexico with a population of more than 4.6 million.

The Challenge

OTS is responsible for thousands of applications spanning public safety, education, healthcare, tax, unemployment benefits, workers' compensation, and other government services. It also supports two of Louisiana's largest healthcare services, the Medicaid Eligibility and Enrollment System and the Medicaid Management Information System. With many of the applications running on legacy systems 20 to 30 years old, OTS needed to modernize data center infrastructure and leverage hybrid cloud in order to deliver a service-first approach. End-user security and scalability were also top priorities, but OTS struggled with how it would manage the network for all 16 agencies.

"We're trying to develop new applications to give us the agility to build faster and more reliably," says Michael Allison, chief technology officer (CTO) for the State of Louisiana, division of administration/OTS. "We're looking at automation and containers, continuous integration/continuous deployment, and the whole

BUSINESS BENEFITS

- Improving experiences for residents and employees
- Helping state agencies deliver on their respective missions
- Keeping Department of Health IT systems online 24/7
- Saving millions in CapEx and OpEx

continuum of modern application approaches. We needed a single platform to bring them on and tie them together, without risking security policies or having to manage separate environments.”

The state also needed to secure and unify endpoint management and be able to deploy virtual desktop infrastructure quickly in a disaster scenario. If both data centers were to become unavailable due to a regional storm or flooding event, OTS needed to be able to turn to public cloud for resiliency.

“Hurricane Harvey came in on our western border, and unfortunately, it’s a fact of life, and it’s going to happen again,” says Allison. “The need is there to be always on, always available.”

The Solution

The state began its modernization project by consolidating nine data centers down to two active-active sites. Using vSphere on Intel-based hosts for compute, vRealize Suite for management, and NSX for network virtualization, OTS built a software-defined data center (SDDC) to achieve four-nines availability and near-zero recovery objectives. Venture Technologies, a VMware partner, provided NSX Ninja expertise to expedite and streamline the deployment.

“Intel is part of our core modernization strategy of migrating away from mainframes, affording us an important opportunity to take legacy applications and move them onto an Intel technology platform for higher performance,” says Allison.

With NSX, the state improves information security with network micro-segmentation and automated networking operations, enabling a fundamentally more secure data center. When peaks in demand occur, OTS can scale the network quickly and securely. And by complementing NSX with vRealize Network Insight™, engineers can effectively manage networking and security events and receive alerts, allowing OTS to rapidly solve issues before they impact users.

“NSX was the missing piece of the puzzle, the solution that glued everything together,” says Allison. “It brought our vision to life in a way that didn’t compromise security, agility, and most importantly, service.”

To quickly deploy virtual desktops that first responders can access from any device, the state uses VMware Horizon. It’s also implementing Workspace ONE, powered by AirWatch technology, for enterprise mobility management and to enable secure bring-your-own-device programs for state agencies.

“AirWatch technology will give our users a self-service support model and a consistent experience,” says Dustin Glover, chief information security officer for the State of Louisiana. “It also brings valuable integrations with NSX and Boxer to improve data security and regulatory compliance.”

To extend its on-premises data centers and easily migrate application workloads to public cloud, the state will use VMware Cloud on AWS, an on-demand service from VMware. With VMware SDDC software running on the AWS cloud, the state can seamlessly integrate with public cloud and scale easily while leveraging existing VMware skillsets. It can also use familiar tools, such as vRealize Suite and NSX, to extend intelligent operations and micro-segmentation to public cloud, helping keep its environment manageable and secure.

“VMware Cloud on AWS will help us take advantage of the elasticity of public cloud, giving us workload portability, a platform for next-gen apps, and easy

“The work we’ve done with VMware will serve as a model for other states looking to consolidate and streamline their IT operations while improving security.”

MICHAEL ALLISON
CTO
STATE OF LOUISIANA

VMWARE FOOTPRINT

- VMware vCloud Suite® Advanced
- VMware vSphere
- VMware vRealize Automation™
- VMware vRealize Operations™
- VMware Cloud on AWS
- VMware NSX
- VMware vRealize Network Insight
- VMware Horizon
- VMware Workspace ONE powered by VMware AirWatch

APPLICATIONS VIRTUALIZED

Medicaid Eligibility and Enrollment System, Medicaid Management Information System

PLATFORM

Dell servers based on Intel Xeon processors

PARTNER

Venture Technologies

access to AWS services,” says Allison. “VMware’s integrated cloud strategy aligns directly with our vision of how we can step into the AWS space and have a truly seamless enterprise cloud. We’re very excited about how this helps catalyze application development for the State of Louisiana.”

Business Results and Benefits

Leveraging VMware solutions for security, mobility, and hybrid cloud, the state is transforming its infrastructure to support a holistic, flexible, service-oriented architecture. By better equipping IT teams with the tools they need to scale and recover systems, it’s driving better outcomes at a lower cost, helping state agencies deliver on their respective missions.

“For the State of Louisiana, a significant driver is the modernization of application platform technologies that enable better quality and a more highly available experience for our citizens, whether for Medicaid, unemployment insurance, or workers’ compensation,” says Glover.

Modernizing Medicaid While Saving Millions

With NSX, the state can better service the more than 1.4 million constituents who use the Department of Health’s Medicaid Eligibility and Enrollment system by providing 24/7 availability and application continuity. When traffic increases by as much as 20-fold, as was the case with the availability of a new Medicaid service, OTS can scale virtual network infrastructure in minutes. And with the built-in load balancing, switching, and routing capabilities of NSX, it can move many previously hardware-based functions into software. So far, the state has reduced CapEx by more than \$1 million and realized significant savings in OpEx.

“We saved millions by going the NSX route,” says Allison. “The work we’ve done with VMware will serve as a model for other states looking to consolidate and streamline their IT operations while improving security.”

Responding Quickly to Natural Disasters

By giving first responders immediate access to virtual desktops based on VMware Horizon, the state can respond faster and help communities recover from events such as hurricanes and floods. In the case of a serious disaster, OTS will be able to quickly mobilize Louisiana’s Disaster Supplemental Nutrition Assistance Program and deploy workers in the field to provide food assistance.

“Workspace ONE, Horizon, and AirWatch play a huge role in our ability to respond quickly in a hurricane-prone area,” says Matthew Vince, director of project management and chief design officer for OTS. “It’s a capability we will only use once in a great while, and we were able to operationalize that expense instead of keeping hundreds of laptops sitting idle.”

Building Resiliency with Public Cloud

With the ability to deliver consistent hybrid operating environments in the public cloud, the state is greatly increasing flexibility while keeping its infrastructure secure and compliant. In a flood situation, it can quickly leverage public cloud to crunch graphical information system data and estimate potential damage impact without relying on or expanding its on-premises data centers.

“With VMware Cloud on AWS, we can be truly seamless in building our enterprise hybrid cloud,” says Allison. “When we’re dealing with restricted data, whether it’s Criminal Justice Information System, protected health information, or personally identifiable information, that data can now be moved and stored in the public cloud, and our security baseline doesn’t change.”

Looking Ahead

As Louisiana adopts a public cloud-first strategy to further reduce costs, it will use VMware Cloud on AWS to evolve into DevOps methodologies and become an even more efficient broker of IT services.

“VMware has been one of the strongest partners we’ve had through this journey by providing the foundation for everything we do,” says Allison.

