Transforming services for state constituents

Louisiana creates a transferable enterprise architecture for its state agencies, saving $2 million immediately

Business needs

The state of Louisiana wanted to provide a better experience to constituents by improving the way technology and IT services are delivered to agencies. It also sought to enhance the manageability, reliability and security of technology. The creation of a new systems architecture was essential to making this happen.

Solutions at a glance

- Data Center
  - Dell EMC XC Series Hyper-Converged Appliances
- Nutanix Software
- VMware NSX Network Virtualization and Security Platform

Business results

- Delivers agile, transferable enterprise architecture
- Improves constituents’ experience with state services
- Provides enterprise-level data security
- Streamlines technology purchasing and ensures use of newest technologies

Saves $2 million immediately

Boosts the value of IT as a service organization
When the state of Louisiana consolidated IT operations in the new Office of Technology Services (OTS), 15 agencies serving constituents became clients of a centralized support organization that provides such services as computing, infrastructure services, security and application development. “CIO Dickie Howze’s goal is to transform the Office of Technology Services into a service delivery organization,” says Michael Allison, chief technology officer at OTS. “The challenge is identifying technologies that will bolster the transformation.”

Helping the Louisiana Department of Health modernize the delivery of Medicaid services to constituents prompted OTS to design and build a powerful, new enterprise architecture. The OTS team also published an RFP to identify suitable technology vendors. Allison explains, “The state is no longer in the business of building monolithic, self-contained systems. Applications will reside on a set of core infrastructure services and perform API calls to interact with them. We can decouple these infrastructure services and make them available to other organizations.”

Deputy CIO Neal Underwood challenged OTS executives to find unconventional solutions from potential vendors rather than settling for a traditional multi-tier architecture. Says Allison, “Dell EMC answered the challenge by offering its strategy of building a hyper-converged, software-defined infrastructure.”

OTS wanted to take advantage of Nutanix software tools to manage the hyper-converged environment. “Michael Dell called to assure me that Dell would maintain its relationship with Nutanix after the merger with EMC,” notes Allison. “Dell EMC became one of our strongest partners in helping us define our objectives and build them into a solution.”

Building an agile enterprise architecture

Collaboration among OTS, Dell EMC, Nutanix and VMware finalized the new infrastructure, in which Dell EMC XC Series Hyper-Converged Appliances with Nutanix software are a key element. The inclusion of VMware NSX virtualization and security technology made it possible to manage the state of Louisiana’s complex access control lists efficiently. Allison says, “With Dell EMC, Nutanix and VMware, we created a private-cloud platform that comprises the best of the three companies’ offerings.”

Creating a hyper-converged infrastructure entailed discarding a traditional, three-tier network architecture with servers, storage, and Cisco and HPE routers and switches. Allison explains, “A software-defined data center enables the commoditization of traditional technologies, so we can do more within the hypervisor. This lets us drive down cost while increasing service availability and performance.”

Immediate $2 million savings — and counting

Transitioning to a standardized architecture generated substantial savings for the state of Louisiana. “The Dell EMC solution and Nutanix together enabled more than $2 million in immediate savings compared to other technology we considered,” says Allison. “We were able to further cut costs by close to $1 million by taking advantage of the software-defined data center architecture and by procuring more affordable, global load balancers from Dell EMC to manage the traffic in our two clustered data centers.”

“Dell EMC, Nutanix and VMware facilitate a transferable architecture that can be efficiently implemented for state agencies.”

Michael Allison
Chief Technology Officer,
Office of Technology Services, State of Louisiana
Transferable solution transcends agency boundaries

After a successful solution deployment to the Louisiana Department of Health, OTS decided to next bring the technology to the Department of Children and Family Services. Allison says, “Dell EMC, Nutanix and VMware facilitate a transferable architecture that can be efficiently implemented for state agencies.”

The centers for Medicare & Medicaid Services, which contributed most of the funding for the initial effort, opened the door to collaborations with other states by inviting OTS to its national Medicaid conference to share its experience. “By means of API gateways, we can integrate with systems in other states and entities without having to touch the underlying code,” notes Allison.

Enterprise-level data protection

OTS built advanced security into the enterprise architecture and has garnered positive attention from other states concerned about data protection. “Micro-segmentation through VMware NSX strengthened our zero-trust model,” explains Allison. “Nutanix running on Dell EMC, along with VMware NSX, adds to the state’s in-depth defense strategy.”

Greater scalability and security in the public cloud

The OTS team is pursuing migration of its enterprise architecture to the public cloud of Amazon Web Services. “Dell EMC is pushing the other vendors to take technology to its limits and helps us stitch our solution seamlessly into the public cloud,” says Allison. “When we can move an extremely agile service across boundaries from the private to the public cloud and to on-premises environments, we will benefit from the endless scalability of the public cloud and take a step further into disaster recovery and business continuity.”

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Working toward 99.99% availability

Louisiana state agencies see the advantages of standardized technology. For one thing, they don’t need to shop around. Also, agile technology management ensures that they can go live with solutions that are state-of-the-art instead of approaching obsolescence, which sometimes was the case in the past.

Other benefits of the enterprise architecture will take shape as OTS works with agencies to define success factors and service levels. Allison says, “Our platform is agile and adaptive enough to support ambitious goals, such as 99.99 percent availability.”

Enabling citizen benefits

State constituents are the ultimate beneficiaries of the enterprise architecture. Allison says, “Our work with Dell EMC, Nutanix and VMware is making people’s lives easier. The better we master the agile approach, the more they benefit. Eventually, everybody will have a consistent experience, using the same username and password when interacting with all state agencies.”

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Michael Allison
Chief Technology Officer,
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