City of Allen Enhances Public Safety and Delivers Exceptional Citizen Service with Nutanix

Combined Nutanix and CentralSquare Software solution keeps IT prepared for new services and applications

BUSINESS BENEFITS

Located just north of Dallas, the City of Allen, Texas is a vibrant community of more than 100,000 people. To meet its commitment to serving citizens by providing exceptional, dependable emergency services and communications, the City migrated its systems to CentralSquare software, backed by a flexible Nutanix hyperconverged infrastructure (HCI). The combined solution supports all public safety departments including Dispatch, Police, Fire, Animal Control, and EMT, and is easy to scale and modify as needed. Nutanix AHV provides virtualization software at no additional cost, and the solution's template approach lets the City stand up new servers in minutes, instead of days.

> "Our Nutanix infrastructure has allowed us to do more, and our environment is growing so much that we are able to manage it better. In the past, it was difficult to get anything done because we were constantly moving from fire to fire. Now, if someone needs a new server, we can deliver it. That type of responsiveness was not an option for us before."
>
> – Aaron Irwin, Systems Administrator, City of Allen

INDUSTRY
Public Sector

BENEFITS
- Advanced solution enables superior communication and improved resiliency for more responsive emergency services

- Nimble hyperconverged infrastructure lets IT respond to government needs faster and accommodate unexpected changes

- Test environment enables the City to develop innovative services without disrupting the production network

SOLUTION
- Nutanix Enterprise Cloud OS
- Acropolis AHV

Applications
- CentralSquare public sector software

CHALLENGE

Like most local government organizations, the City of Allen relies on its network to deliver essential services to citizens. Public safety is a top priority for its IT team, and its computer aided dispatch (CAD) system powers communications with essential agencies like police, fire, and EMS services. However, its existing emergency response systems were beginning to show their age, so the City had to migrate to a more flexible, scalable environment that was faster and easier to manage.

"For numerous reasons, our CAD system had not been upgraded in about four years," said Aaron Irwin, Systems Administrator at the City of Allen. "We decided to migrate the existing CAD, mobile public safety software, and police records management system (RMS) products to a single vendor solution. We also wanted to replace our aging servers, as well as add test and disaster recovery environments for all CAD, Mobile and RMS. We knew we might not be able to add staffing, so needed an alternative that would be manageable by our existing team."

SOLUTION

To support its communications and services, the City of Allen deployed a Nutanix HCI that uses software-defined storage to meet the growing need for server demands with limitless scalability and built-in resiliency. Nutanix pools flash and hard drive storage across the cluster, creates a distributed storage fabric that eliminates the need for dedicated SAN or NAS solutions. With Nutanix Prism, administrators can check the status of system and virtual machine details, all on a consolidated interface. "Nutanix Prism offers dashboard and detailed views that allow effective management for today, while providing accurate forecasting for upcoming projects," said Irwin.

A suite of CentralSquare applications deliver exceptional customer service through the City's 911 dispatching system, with enhanced communication for all public safety departments. CentralSquare solutions include CAD Enterprise, Mobile Enterprise, Records Enterprise, and National Crime Information Center (NCIC)/State Message Switch and Query. To keep these essential operations available, information is now stored on resilient hardware. In the event of a hardware failure, data is automatically dispersed onto new hardware until repairs or maintenance can be scheduled. "Our previous DR environment was very small," said Irwin. "Nutanix gave us the ability to move replication and DR functions to an entirely separate facility, for true disaster recovery."

CUSTOMER OUTCOME

The scalable, virtualized Nutanix environment makes it easy for Irwin and his team to spin up new infrastructure resources to support new citizen services. "Under our past environment, adding new IT resources could take days or weeks," said Irwin. "We would have to order a physical server, wait for delivery, then install and provision it. With Nutanix, if a stakeholder orders a new resource on Thursday, we can set it up and have it fully functional by Friday. It's great to be able to tell people, 'yes, we can make this happen.'"

This level of responsiveness has been especially helpful in enabling Irwin and his team to address last-minute changes or additions to IT initiatives, or "scope creep." "Scope creep is common in our industry, and Nutanix has saved us many times in dealing with it," said Irwin. "It has also helped us better manage over provisioned servers, which we suspected we had. The Nutanix software has been wonderful at helping us identify those devices, which enables us to free up infrastructure resources and overcome scope creep."

The Nutanix solution also helps the City ensure that its CAD system is always running the latest software, which provides new enhancements and features to end users. Running the latest operating systems with the most current security updates and patches helps reduce the risk of cyber-attacks, and lets the City utilize its limited resources more efficiently. "Security is obviously very critical," said Irwin. "We are a small team, and we can update our 90 machines in about a week. In another environment we would have had to hire another full-time employee."

Utilizing Nutanix AHV hypervisor also helps the City of Allen save money, by eliminating the licensing cost of other virtualization solutions.

NEXT STEPS

The City of Allen is completing the first phase of its migration to its new infrastructure, and is now preparing to enhance its mobile communications services. Nutanix Enterprise Cloud makes it easy to quickly provision test environments for new applications and services, without impacting its network.

"Now that we have a true test environment in place, we can set up new services and try them out, without worrying about breaking anything—and with no environment to fall back on," said Irwin.

NUTANIX™
YOUR ENTERPRISE CLOUD

T. 855.NUTANIX (855.688.2649) | F. 408.916.4039
info@nutanix.com | www.nutanix.com | @nutanix