The City of Cape Coral Makes the Move to Nutanix

CHALLENGE
Matt Vilord is the ITC manager for the City of Cape Coral, Florida. He and his team are responsible for managing all data center infrastructure, desktop hardware and printers, tablets, disaster recovery, backup solutions, and vital technology services for the city’s fire and police departments. “We’re always looking for new technologies to enhance our existing services and reduce the amount of effort required to achieve our goals,” explained Vilord.

Prior to Nutanix, Vilord and his team were managing several data centers filled with a mix of aging SAN storage, Fibre Channel switches, and blade server infrastructure. “It was a large, complicated environment that expanded through multiple racks. It took a lot of time to manage and maintain all of that disparate hardware. Everything needed a lot of attention, but all of the different components required separate skillsets.”

One of the most important roles for Vilord’s team is to keep the city’s emergency services up and running. “It’s our responsibility to make sure that our police and fire department’s life-saving systems are always ready with back-ups in place and viable,” Vilord said. “From our HR, ERP, GIS and Land Management systems, to our city’s 911 and public safety software system, everything is shifting to more advanced technology. It falls on our department to make sure everything is available and integrates with the IT systems that are currently in the datacenter.”

SOLUTION
The city decided to test Nutanix Enterprise Cloud in 2014. “The Nutanix team said, ‘This is the answer to everything—it works, it doesn’t fail, it sets up easily, it’s easily manageable, and it maintains itself.’ Having tested a lot of IT systems over the years, I must admit that our team was very skeptical of the promises.”

After setting up the first 3-node cluster, the team migrated several test VMs over to Nutanix. “We were amazed when it worked just like we were told,” admitted Vilord. “The solution was reliable and the performance was excellent. We quickly gained enough confidence to move all of our production systems over to Nutanix Enterprise Cloud.”

The City of Cape Coral has now virtualized 98% of its environment. Applications running on Nutanix include Active Directory and Microsoft Windows Servers, a JDE financial system, Kronos Time and Attendance solutions, and Superion public safety products. “Our Computer Aided Dispatch and mobile dispatching systems for both public safety departments are now on Nutanix, along with our city’s ERP system, print, and file services,” added Vilord.

Adopting AHV
Cape Coral is also using AHV, the Nutanix hypervisor. “AHV is designed to work with Nutanix and is included with the Enterprise OS solution,” said Vilord. “We have two clusters that are running AHV now, and we plan to expand that over the next year. With AHV, the functionality is there, the performance is there, and it also enables us to eliminate our existing hypervisor licensing fees.”

“Nutanix Enterprise Cloud is a life-changing solution. Not only does it enable us to provide highly available emergency services to the people of Cape Coral, it allows our IT team to focus on more strategic projects.”
Matt Vilord, ITC Manager, City of Cape Coral, Florida
RESULTS
Improving Emergency Services Public Safety
“All of our police and fire department vehicles have mobile laptops,” explained Vilord. “We also have servers in our dispatch center for emergency services and our 911 center. Now that our public safety applications are running on Nutanix, we have higher reliability since the infrastructure is set to self-heal in case of hardware failure. Nutanix has enabled us to improve public safety for our 180,000 citizens.”

Focusing on New IT Projects
“We used to spend a lot of time on firmware and system upgrades with our legacy infrastructure, since all systems had to be upgraded one by one,” Vilord said. “With Nutanix, upgrades are a one-click experience. We just download the files, make sure everything is in place, click the button for the upgrade, and come back an hour later to see the ‘green light’ to confirm that the upgrades are complete. Nutanix Enterprise Cloud is a life-changing solution. Not only does it enable us to provide highly available emergency services to the people of Cape Coral, it allows our IT team to focus on more strategic projects.”

Implementing Disaster Recovery
“With the responsibility of maintaining the city’s public safety applications, my team never has the ability to rest easy,” admitted Vilord. “Last year Hurricane Irma presented a unique challenge when the forecast indicated we’d be directly impacted by that storm. We needed to create plans for moving our entire data center to a new location within a four-hour period.”

By moving to Nutanix, the City of Cape Coral is better prepared for disasters. “We now have an offsite DR center with redundant Nutanix hardware, and we replicate our Tier-1 apps to that site every night. With Nutanix, we have less than one full rack of infrastructure, compared to the five racks we had before. In addition to having redundant hardware ready to go at the new site, we feel confident that we could move the remaining rack to our backup location in just a few hours. With Nutanix, we can breathe a little easier knowing that the redundancy and the reliability of the solution has enabled us to be even more prepared for anything Mother Nature throws our way.”

CONCLUSION
“We have an excellent partnership with Nutanix, and I fully expect it to grow over time. The people that we work with understand our unique needs and challenges. Moving to Nutanix has been a great decision for the city and citizens of Cape Coral,” concluded Vilord.

COMPANY SPECIFFICS
Cape Coral is one of the largest cities in Florida, with a population of approximately 180,000 citizens covering 115 square miles.

INDUSTRY
City Government

BUSINESS NEED
Managing multiple data centers with disparate storage, blades, and switches was complex and time-consuming. Wanted to improve emergency services and keep pace with technological advancements in government, fire, and police department applications.

SOLUTION
Nutanix Enterprise Cloud running Acropolis OS, including AHV virtualization and Prism Pro management

BENEFITS
• Increased reliability and availability of vital emergency services
• Enabled IT team to spend time on more strategic projects
• Achieved fast deployment and quick time to value
• Improved DR with the ability to quickly move infrastructure during a disaster