

Doctors' Center Hospital - Orlando Health transforms IT Infrastructure with Nutanix

Puerto Rico's leading healthcare provider boosts operations with Nutanix hyperconverged infrastructure

Overview

Doctors' Center Hospital - Orlando Health, a Puerto Rican healthcare provider with over 60 years of experience, operates five facilities located in Manatí, Bayamon, San Juan, Carolina, Dorado, and Arecibo, with a total of 630 beds. The hospitals are built to offer patients the same comfort they should expect at a hotel, serve the northern region of Puerto Rico, and provide essential healthcare services, including general medicine, gynecology, cardiology, pediatrics, and much more.

The hospital's IT environment is crucial for daily operations, supporting everything from electronic medical records to radiology imaging systems. With most IT operations centralized in the Manatí facility, the hospital required a robust solution to enhance its IT infrastructure, ensuring seamless connectivity, consistent performance, and reliable support across all locations, particularly in managing data flow and access between the central hub and the other hospitals in the network.

Key Results

Robust data protection	Seamless connectivity	Enhanced performance	Proactive support
All sensitive patient information and medical records remain secure and accessible with built-in redundancy and failover capabilities.	Unified network infrastructure allows for seamless communication and data sharing between different systems and locations.	Application system speedups, leading to improved efficiency and patient care.	Monitoring tools helped identify and address potential issues before they caused disruptions, reducing downtime and improving system reliability.

“ Our hospital has always been one of the pioneers in technology in Puerto Rico. Many colleagues from other hospitals have approached me about the Nutanix platform, asking how I feel about it and how it's running. We've always had a reputation in the market where, if a new technology is entering another hospital, they ask the vendors if Doctor Center has it. We've had the privilege of providing evidence of the technology we use, showing how it works, and demonstrating both the direct and indirect savings from moving to this platform. Nutanix provides lots of power using little space with good savings and high redundancy. “

Pedro Rios.

CPHIMS, Chief Information Officer of Doctors' Center Hospital - Orlando Health

Challenge

Before implementing Nutanix, the hospital's data centers were constrained by limited space, and the IT team struggled with frequent bottlenecks and unreliable hardware, causing unreliability for a hospital that runs 24/7. These issues were exacerbated by the difficulty of obtaining replacement parts in Puerto Rico, leading to extended downtimes. "The first challenge we had was keeping the system up and running," Pedro Rios, the Chief Information Officer (CIO) of Doctors' Center Hospital - Orlando Health, explained. "If a part broke, we were down for at least a day because the necessary components were often unavailable on the island. Even with redundancy, maintaining uptime was a constant battle."

Rios further explained, "The space in the Data Center is controlled, it's small, and in the hospital, spaces are expensive and should be used for patient care rather than equipment. One of the first things was conserving space; to add another application, we had to add 4, 5, and 6 servers with a lot of power." He continued, "We were also limited in where to get the power to keep feeding the servers."

William Tirado, the Systems Administrator for Doctors' Center Hospital - Orlando Health, has been with the institution for 13 years. His role involves managing and monitoring the hospital's IT systems across multiple facilities. "The constant struggle we had when we needed to implement a new project was finding spaces, power outlets, and so on, and obviously, Nutanix gives us that relief in a certain sense, both for the institution and us, as IT has limited space and has been of great help and advantage," stated Tirado.

Solution

Doctors' Center Hospital - Orlando Health partnered with CPCorp, Inc. to implement Nutanix's hyperconverged infrastructure solutions, including Nutanix Cloud Infrastructure (NCI), Nutanix Cloud Management (NCM), and Nutanix Unified Storage (NUS) for file services. CPCORP's Team helped us with the design, sizing, and technical implementation of the solution.

Doctors' Center Hospital - Orlando Health began the relationship with Nutanix in 2014, initially using the platform for non-critical applications. The relationship has kept growing, and this year, they expanded their use of Nutanix to include all critical applications, including their electronic medical records and radiology systems.

"We started with Nutanix by managing the Virtual Desktop Infrastructure (VDI). That's when they started organizing meetings for us at the most well-known convention in the world, HIMSS, where we met with specialized MedIT staff. And from there, we began the process of moving healthcare software to that type of platform," Rios explained. "Right now, we are 100% operational. All our medical records from Meditech are running on Nutanix. Everything that is clinical applications runs there, including administrative and operational applications."

Customer Outcome

Enhanced uptime and service

Tirado shared the impact of Nutanix on their enhanced uptime, stating: "The performance improvements have saved us a significant amount of time. Everything is now much faster and more reliable." With Nutanix, the hospital has significantly minimized downtime, allowing both administrative and medical operations to run smoothly and efficiently, ultimately enhancing the quality of care provided to patients.

Reduced costs

"We've seen significant savings in licensing costs since transitioning to Nutanix. We no longer have to renew expensive licenses for other platforms, and our overall IT costs have decreased," Rios highlighted. The move to Nutanix provided a more scalable and cost-effective solution, allowing the hospital to reallocate budget savings to other critical areas of patient care and technology investment.

Improved system reliability

The hospital experienced fewer system failures and a more stable IT environment, ensuring critical applications, such as electronic medical records and radiology systems, remained consistently available. "The promise of the Nutanix software is accurate. Taking that step, knowing that you're more confident in that software, makes you feel like you have no problems," Rios highlighted. This improved reliability meant that the hospital could deliver uninterrupted patient care and reduce the risk of disruptions in medical services. "We sleep more peacefully knowing that the application is running on Nutanix because if a node fails, it will keep running, and there won't be an exaggerated degradation like we've had with others," Rios shared.

Unified Management System

"It's great to be able to control and manage all the systems and servers in one platform, especially when accessing the main center and having a visual overview of the general system as a whole and the individual of each server. That has also added to our management and monitoring of all the servers," shared Tirado.

Next Steps

Doctors' Center Hospital - Orlando Health plans to leverage Nutanix further for future upgrades, such as the upcoming Meditech update called Expanse. "We will need the application to consume almost 128 servers, so adding similar equipment with better performance will be crucial for us," said Pedro Rios, highlighting their ongoing commitment to expanding their IT capabilities with Nutanix.

The hospital remains committed to Nutanix as a cornerstone of its IT strategy, ensuring a robust and reliable infrastructure that supports the growing needs of its healthcare services. "Going forward, we rely on Nutanix. It's difficult to think we would deploy an application on another server," Rios added, reflecting their confidence in Nutanix's ability to meet their evolving requirements.

About Doctors' Center Hospital - Orlando Health

Industry: Healthcare

Employees: 2,400

Geo: Puerto Rico

Website: <https://doctorscenterhospital.com/>

Products:

- [AHV Virtualization](#)
- [Nutanix Cloud Infrastructure \(NCI\)](#)
- [Nutanix Cloud Manager \(NCM\)](#)
- [Nutanix Unified Storage \(NUS\)](#)