



NANTES CHU LEVERAGES VMWARE FOR ITS TRANSFORMATION AS A “DIGITAL HOSPITAL”



CUSTOMER

NANTES UNIVERSITY HOSPITAL CENTER

WEBSITE

WWW.CHU-NANTES.FR

INDUSTRY

HEALTH

LOCATION

NANTES, FRANCE

KEY CHALLENGES

- Support all Territorial Hospital Group establishments
- Innovate to become a Digital Hospital

SOLUTION

Implementation of a software-defined data center (SDDC) approach based on VMware Data Center satisfied requirements in terms of security, reliability, and user experience for the CHU's digital services

BUSINESS BENEFITS

- Satisfaction of establishments hosted by the Territorial Hospital Group
- Nantes CHU exposure as an innovative image and brand name
- Increased level of security against cyber-threats
- Reduced cost of ownership and support for operational continuity

The Nantes University Hospital Center (CHU) is transforming to meet the challenges of its new status as a support platform for all the other establishments in its area's new Territorial Hospital Group. The CHU will notably use VMware solutions to quickly and securely provide high-quality digital services for all. The Nantes CHU is thus preparing itself for a profound transition towards becoming a “Digital Hospital” that will occur with its upcoming relocation. The effort will enable the CHU to continue carrying the torch of excellence and innovation in France and around the world.

The Nantes University Hospital Center carries out a public service mission to provide local health care for the greater Nantes area in France, providing cutting-edge medical expertise for the Pays de la Loire region and its neighboring departments, such as Morbihan. Its fields of excellence include organ transplants, oncology, neurosurgery, and care for severe burn victims. The Nantes CHU also plays an important role as a support center for the Loire-Atlantique department's Territorial Hospital Group (GHT 44) consolidating its role as a catalyst for local health care policy.

The Challenge

Over the past several years, the Nantes CHU's missions have changed in scope with the implementation of GHT 44, a reference for the entire region. In this context, the hospital effectively became the center for information services for all GHT 44 member establishments. Cédric Quillévé, in charge of the Architecture team for the CHU's Territorial Digital Services Department, explains: “We need to reinvent ourselves with respect to three major challenges. We must first be able to handle the concentration of resources required as part of developing the Territorial Hospital Group. This involves staff reorganization and optimization required for support functions such as purchasing, logistics, information systems, and above all, health care services. But at the same time, we also need to drive excellence for our activity to be able to stand on equal ground with respect to competition from private establishments. For example, the patient's perception of quality as well as the speed of making appointments are essential. We also need to prepare to relocate the hospital's “short stay” activity by 2026. This includes our emergency department.”

Many university hospitals in France are finding themselves in a similar situation, with a need to implement change at a fast pace. Nonetheless, the Nantes CHU's upcoming relocation requires particular attention, as there will undoubtedly be significant impact on the hospital's information system. The time frame corresponds to the IT equipment life cycle. The future hospital is strongly

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THE CHU'S TERRITORIAL DIGITAL SERVICES
DEPARTMENT

VMWARE FOOTPRINT

- VMware vSphere
- VMware vRealize Suite
- VMware Cloud Director
- NSX Data Center
- VMware vSAN

committed to being based on entirely digital processes. The associated budget is aligned with the stakes: 1 billion euros will be dedicated to the relocation project.

The Solution

As a support service for GHT 44, the Nantes CHU holds a key position regarding health care staff at all member establishments and needs to show them that it is going to offer them something better than what they formerly had locally. This is truly a question of both service quality and security requirements. The Architecture team leader recognizes that health care data is indeed increasingly targeted by many threats, including both unavailability and theft for resale purposes. He also feels that the issue must not interfere with providing a top-quality employee experience. “There are not many players in the market able to provide solutions that cover all mobility, security, resilience, and user experience issues while offering a consistent global strategy. Those are the reasons why we chose VMware to accompany us during our transformation,” summarizes Cédric Quillévére.

Requirements to implement the least restrictive security methods for users, increased application reliability, and seamless digital services for mobile users further convinced the Nantes CHU to adopt solutions that limit constraints at the user level. “Doctors in particular are considered as a population of VIP users who want digital tools to bring them clear improvements in their daily lives, and for whom we must guarantee security,” adds the Architecture team leader.

To achieve those goals, the establishment is leveraging VMware solutions and a software-defined data center (SDDC) approach to ensure data center agility, notably by leveraging vRealize Suite, vSAN, and NSX Data Center solutions. This agility results in greater operational efficiency and significant reductions in operating costs. “I particularly emphasize the importance of security issues that impact our everyday activity. These issues are resolved almost entirely by implementing NSX, which allows us to secure the hospital information system’s critical data and applications. Our organization is taking a major step forward,” adds Cédric Quillévére.

Business results and benefits

Given the investment made to both ensure dedicated support for the Territorial Hospital Group, and prepare for the upcoming relocation, all departments at the Nantes University Hospital Center are paying close attention to the indicators confirming the establishment’s successful transformation. For teams in the Territorial Digital Services Department, the aggregated production indicators to be improved are those concerning service availability, the number of technical incidents, as well as the number of attacks detected on systems. “With respect to our role within the Territorial Hospital Group, success is primarily based on the satisfaction of hosted establishments.”

“We are proud to stay at the forefront of technology despite budget and operational constraints. People contact us regularly and ask us to share our vision and provide feedback based on our experience. Our establishment’s maturity regarding digital services is well recognized, and we have even become a player that is watched by the health sector in matters related to our data centers,” Cédric Quillévére says proudly.

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Looking towards the future

All eyes are focused on the huge step represented by the CHU's relocation and its Digital Hospital efforts for 2026. In the meantime, teams at the Nantes CHU continue to carry out tasks that help change people's perception about the information system. "The transformation potential that we are promoting reaches far beyond our position as a cost center or a simple vector for possible cost savings. Digital solutions are starting to be seen for their true value," says the Architect team leader. To perpetuate momentum and continue to be considered as a key player for transformation, with an ongoing quest for innovation, Nantes CHU teams also count on the solid partnership with VMware: "We saw the potential for VMware in the early 2000s and now have a very high-quality relationship with them. Our partnership provides us with privileged access to discussions and roadmaps that are not yet publicly available, while continually giving us opportunities to work with the latest technologies to maintain our innovation momentum at the cutting edge of the health sector."

