

CASE STUDY

VDI and Hybrid Cloud

Made Possible by Dell and VMware

Enhancing Patient Care and Response Times for a 30,000+ User Healthcare Provider with In Balance IT



Executive Summary

A prominent hospital network recognized the inefficiencies, unacceptable latency, complex administration, and security risks associated with their existing infrastructure. In Balance IT collaborated with the healthcare provider to identify operational redundancies and efficiencies achievable through VMware Horizon and VMware Cloud Foundation, running on Dell Technologies VxRail.

Introduction

Headquartered in Indiana, the healthcare provider faced challenges related to hardware lifecycle management and routine maintenance. Their previous environment, built on a VSAN architecture, required constant firmware management and patching. With nearly 30,000 users, the healthcare professionals experienced significant wait times and boot delays during their shifts and while attending to patients. VDI (Virtual Desktop Infrastructure) was critical for nurses, doctors, and essential imaging devices.

Challenge

The company had been utilizing VMware Horizon on standalone Dell servers for several years. However, managing the sprawling server hardware presented complexities and security risks. Moreover, the environment was approaching the end of support from VMware. To address these issues, the healthcare provider sought to streamline operations and deliver tier 1 applications with predictable low-latency responses at scale during peak periods. In Balance IT embarked on the investigation of solutions that could meet their hybrid cloud and private cloud requirements, while ensuring operational efficiency and support for critical hospital software applications.

Summary

Company

Prominent Hospital

Type

Healthcare

Location

Indiana

Challenge

The healthcare provider faced challenges related to hardware lifecycle management and routine maintenance.

Solution

In Balance IT conducted performance analysis, staff interviews, and load testing to design customized VxRail configurations tailored to various use cases.

Results

Over a year of implementing VDI and critical care applications on Dell Technologies VxRail and VMware, they now have a robust framework in place to support their staff for years to come.

Alternatives and Decision Criteria

While there were VDI alternatives available, including Citrix, Microsoft, AWS, and Nutanix, In Balance IT and the customer agreed, following interviews with key stakeholders and establishing solution requirements, that the industry-leading hyperconverged platform, VxRail, in conjunction with VMware Horizon and VMware Cloud Foundation, was the optimal choice.

Solution

In Balance IT conducted performance analysis, staff interviews, and load testing to design customized VxRail configurations tailored to various use cases. Physicians, nurses, imaging devices, and remote clinical care providers required different resource levels. Leveraging the flexibility to configure VxRail with a diverse range of node types and scalability options, In Balance IT eliminated the guesswork and management complexities associated with a build-your-own hardware approach. They seamlessly integrated and delivered a turn-key solution, providing immediate time-to-value.

Results

Over a year of implementing VDI and critical care applications on Dell Technologies VxRail and VMware, the healthcare provider achieved record-low trouble tickets, surpassed organizational goals for patient care response times, and granted nurses more time to dedicate to patients rather than waiting for technology. The healthcare provider's growth through acquisitions and new hospital constructions has been facilitated, and they now have a robust framework in place to support their staff for years to come.

