

Nutanix Simplifies IT Management, Slashes Data-center Footprint, and Improves Application Performance



Nutanix Enterprise Cloud Enables Presence Health to Improve Healthcare Delivery

CHALLENGE

Presence Health relies on two electronic medical records (EMR) systems and Citrix XenApp to provide its healthcare professionals with access to patient records. Six of its hospitals are using MEDITECH's EMR solution, and an additional six hospitals plus the majority of its outpatient facilities use Epic. "We spent the better part of this year restructuring and reorganizing our IT initiatives," noted Jeremy Bernstein, Interim CTO at Presence Health. "We needed to upgrade both of our EMR systems and the legacy existing infrastructure was due for a refresh. Improving reliability and disaster recovery were also high priorities for us, since it would severely impact patient care if any of our systems failed or our healthcare records were compromised."

SOLUTION

"Whenever we undertake major strategic initiatives, we look at how we want to do business five years down the road," Bernstein said. "We were tired of dealing with the confusing sprawl of vendor equipment that we'd inherited over the years, including practically every system that EMC and HP have ever made. Our goal was to simplify and standardize all of the infrastructure in our data centers. Nutanix Enterprise Cloud was the only solution that checked all of the boxes on our wish list. Nutanix is the leader in hyperconverged infrastructure—they actually created that term a few years ago. So, we decided to go with the market visionaries with the proven track record of success among other large health systems."

RESULTS

Fast Deployment and Smaller Footprint

Presence Health migrated Epic Hyperspace to Nutanix in 2017. "We were able to consolidate six racks of legacy infrastructure into just 16 RU of Nutanix. The smaller footprint is enabling us to rein in our co-lo costs and operating expenditures as we grow," Bernstein reported.

Nutanix collaborated with LoginVSI, to ensure that user experience would exceed expectations, as well as to validate configuration tuning. Configuration tuning resulted in increased overall system performance and an additional 1000 users' density. By doing this, pre-production Nutanix and LoginVSI were able to complete the project with no downtime during platform cut-overs. "To be able to quickly upgrade all of our Epic code and also deploy Nutanix at the same time—with only two days of support after the double upgrade—was a phenomenal accomplishment," stated Bernstein.

"People inside and outside of IT neither know nor care about the infrastructure to support their applications--they just want their applications to work reliably. Nutanix provides innovative technology which gives us the confidence to provide just that—reliability."

- Jeremy Bernstein, Interim CTO,
Presence Health

Easier Scalability

Presence Health has been growing rapidly over the last two years, acquiring 2-4 physician practices per month. “We were struggling with all of the expansion due to our lengthy purchase and deployment cycles,” noted Bernstein. “It used to take a month and a half to procure and implement new infrastructure with our legacy environment. With Nutanix, it only takes three days to rack, stack, and cable the systems, and then bring up VMs. This has enabled us to provide IT services to our new practices very quickly, improving our ability to provide excellent patient care.”

Cutting Epic Response Time Exceptions in Half

“Epic’s EMR system includes a web-based application that tracks Workflow Exceptions,” explained Bernstein. “All of our physicians and healthcare staff should be able to access patients’ records in a short period of time determined by Epic (based on their best practice). If it’s over that period of time, it’s called a Workflow Exception. Our goal is to remain below our threshold of 1% exceptions for every action. There was a dramatic improvement the day we cut over to Nutanix—the number of exceptions plummeted from .8% to just .4%. That doesn’t sound like a big change, but it’s pretty incredible to be able to cut that number in half just by moving to Nutanix. The reduction in exceptions translates directly to improved clinician user experience.”

Improving Healthcare Communication

“Efficient communications between healthcare providers is essential for ensuring quality patient care,” noted Bernstein. “There are many moments in healthcare where a provider has to decide on a course of treatment quickly. If the EMR system is down, it can lead to a delay in decisions, or decisions being communicated well, which could negatively affect patient care.”

Nutanix Enterprise Cloud improves the resiliency of the environment by removing all of the complexity of legacy 3-tier environments. “With Nutanix, you don’t have a separate compute environment, connected to a Fibre Channel environment, connected to a storage environment, with a lot of different things that can fail along the way,” Bernstein said. “The simplicity of the Nutanix design reduces the possibility of an extended outage, where the IT team has to manually perform many steps to bring things back up. With Nutanix’s simple approach and great resiliency, we are able to ensure that our EMR is always running and our patients get the highest quality of care.”

Enabling Barcode Medication Administration

“Closed-loop barcode medication administration is a great example of an important role applications play in healthcare today,” noted Bernstein. “Most healthcare professionals know that by using barcode scanners, it ensures that the correct medication is given to the patient and recorded in the correct chart. This key area is where IT can be very impactful, by making sure these critical systems are always available for use. If there ever is any downtime with Nutanix, recovery is much simpler and faster. You may not need an IT analyst to do anything because of the architecture and the way it can automatically recover. This is another area where Nutanix is helping us improve healthcare delivery and patient outcomes.”

NEXT STEPS

Presence Health is now getting ready to move additional workloads to Nutanix. “Our goal is to minimize the number of different platforms in our datacenters and standardize on Nutanix Enterprise Cloud software,” Bernstein reported. “We are looking at the option to consume services with Xi, Nutanix’s new cloud service offering. We are also evaluating the use of AHV, Nutanix’s hypervisor, for our production and DR workloads.”

Final Thoughts

“The Nutanix value proposition of ‘one OS, one-click’ simplicity is very powerful,” Bernstein concluded. “Our job, as leaders in IT, is to have our finger on the pulse of changing technology and capture innovation to transform our organization’s ability to provide and improve services. This allows our business to pivot in coordination with strategy while not worrying about the underlying equipment and software. When we make the right decisions, we enable all of our healthcare providers and revenue-generating activities to be more productive for patients and sustain a healthy financial operating model. People inside and outside of IT neither know nor care about the infrastructure to support their applications – they just want their applications to work reliably. Nutanix provides innovative technology which gives us the confidence to provide just that – reliability.”

COMPANY

Presence Health is one of the largest Catholic health systems in Illinois. With over 150 locations, including 12 hospitals, 27 long-term care, and senior living facilities, it currently provides care to over 4 million people each year.

INDUSTRY

Healthcare

BUSINESS NEEDS

Wanted to upgrade existing Epic EMR systems and replace aging IT infrastructure.

SOLUTION

- › Nutanix Enterprise Cloud Software
- › Nutanix Prism management infrastructure
- › Citrix XenApp and XenDesktop
- › Epic EMR systems
- › Login VSI performance testing tools

BENEFITS

- › Provided healthcare providers with faster and more reliable access to patient records, improving the quality and accuracy of patient care
- › Decreased infrastructure deployment time from 1.5 months to 3 days
- › Cut the number of Epic EMR ‘Response Time Exceptions’ in half



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

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless application mobility for a broad range of enterprise applications. Learn more at www.nutanix.com or follow us on [Twitter@nutanix](https://twitter.com/nutanix).

©2018 Nutanix, Inc. All rights reserved. Nutanix is a trademark of Nutanix, Inc., registered in the United States and other countries. All other brand names mentioned herein are for identification purposes only and may be the trademarks of their respective holder(s).