Hewlett Packard Enterprise

St. John's Riverside Hospital gains flexibility through HPE SimpliVity

Hyperconverged infrastructure reduced costs and enables "cloud economics"

Objective
Increase SAN and compute with a technology refresh, while staying within expansion budget and supporting backup and data protection initiatives.

Approach
Deploy HPE SimpliVity federation (five units) with a future phase planned for a full DR by deploying another five HPE SimpliVity systems.
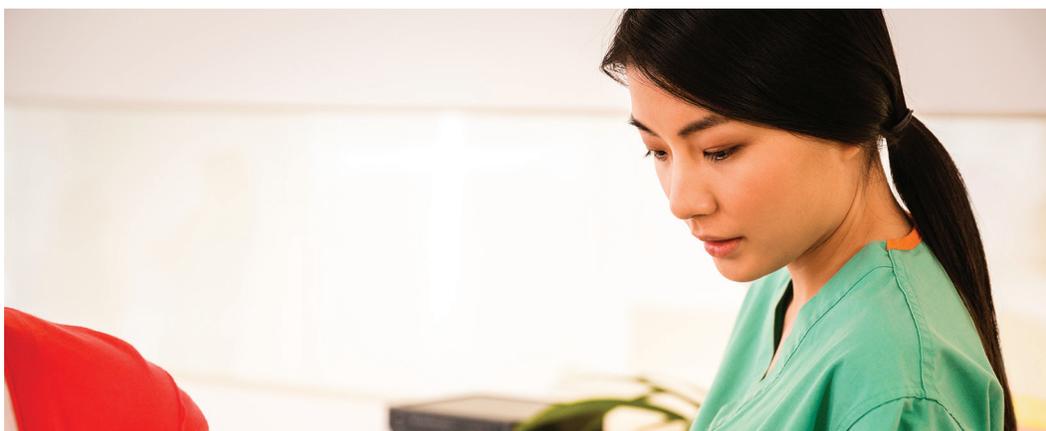
IT Matters
- 50% performance increase
- 46:1 data efficiency after two months and 106:1 after six months
- Management from within a single pane of glass
- VMware vCenter integration
- Reduced rack space from five RU down to two RU
- Improved RPOs/RTOs
- Integrated data protection
- Inline dedupe, compression, and optimization - Hyperconverged infrastructure
- Global Unified management

Business Matters
- Hyperconverged infrastructure yielding reduced costs to enable "cloud economics."

Introduction

St. John's Riverside Hospital has been a healthcare provider to the residents of the City of Yonkers and southern Westchester County in Greater New York City for almost 150 years. With a staff of 422 registered nurses that serves over 100,000 patient visits per year, St. John's Riverside must ensure that its state-of-the-art medical technology always delivers outstanding and consistent service. A dedicated IT staff of 17 manages all of St. John's mission-critical applications that range from the enterprise-standard Microsoft Office Suite, Citrix XenApp, MS Exchange, SFTP file server, Kronos, and Forward Advantage's FormFast to health industry-specific applications such as SOS that provides electronic records for their nursing home, Pyxis, a medication inventory tracker, and McKesson PACS System that houses images for their radiology unit.

Business Challenge: Technology Refresh, Data Protection, and Data Center Consolidation

St. John's Riverside Hospital had been running their existing infrastructure environment for seven years, and the time had come for them to expand and update their technology. A multitude of issues came to a head, the most urgent being that their 40TB storage systems were quickly running out of physical space loads, restricting their ability to scale and grow. Their legacy servers were also oversubscribed to the point that failover was completely prohibited, leaving St. John's Riverside Hospital in a compromised and unacceptable state if the system should ever crash.

"I love it! The HPE SimpliVity made my administration pains go away and has also given [St. John's Riverside] great flexibility in growing our enterprise."

— Nelson Carreira, director of servers and desktops, St. John's Riverside Hospital

With so many mission-critical applications running in their virtualized environment, data protection and speedy data backup are essential to the well being of St. John's Riverside and their patients. Using legacy backup software for their D2D backup as well as for an offsite location five miles away, St. John's was seeing RPOs of eight to ten hours with a three-month retention and, depending on the data, RTOs could take five to ten minutes for files, with full servers taking up to 30 minutes. These backup times were unfavorable for St. John's, who prides itself on continually improving efficiency and speed.

A core image-storing application for the Radiology Unit, the McKesson PACS System, had been running on their physical servers for about seven to eight years with minor upgrades, but virtualizing the application was a necessary transition for future mobility. The current servers could not handle virtualizing this workload.

The increasing need for information access and ability to scale at a moment's notice propelled the IT team at St. John's to search for a new strategy that could address and solve their pain points as opposed to simply continuing with their legacy architecture.

HPE SimpliVity Solution

Nelson Carreira, director of servers and desktops at St. John's, needed a new solution. With an infrastructure update due for their legacy systems, Carreira also evaluated NetApp, Dell Compellent, and EMC SAN storage.

What sold Carreira on Hewlett Packard Enterprise (HPE) SimpliVity, though, was its ease of management from a single tab on VMware's vCenter—the single pane of glass truly simplified St. John's IT environment that had, up until that point, been divided by siloed point solutions.

Along with the simplified management brought by HPE SimpliVity, St. John's IT team also experienced its ease of installation—migrating data to HPE SimpliVity was quick and painless. "The implementation took a day and a half, which is awesome, and then by the end of the second day, we already had a couple servers on the HPE SimpliVity systems," said Carreira. "It took us under two weeks to move everything on over."

Customer at a glance

Hyperconverged Solutions
- HPE SimpliVity

Benefits

After integrating the HPE SimpliVity into their IT environment, Carreira and his team saw backup times decrease dramatically. "HPE SimpliVity has given us the ability to increase retention times—we're going from a three-month retention to at least a two-year retention—and also, backups are now instant," said Carreira. The risk of data loss associated with possible failovers are mitigated due to HPE SimpliVity systems ability to perform instant backups as well as hardware refreshes without taking everything offline. "The best thing that we noted was the fact that users were unaware of any change. The implementation was so seamless, everything just fit like a dream," stated Carreira. "This is probably the easiest implementation that I've ever worked on."

HPE SimpliVity has consolidated St. John's core data center from five full racks of gear down to two, driving down space, power, and cooling costs. In addition, after just two months, St. John's Riverside Hospital achieved 46:1 data efficiency, and was using 7TB of their total physical capacity of 43TB thanks to the HPE SimpliVity Data Virtualization Platform that performs inline deduplication, compression, and optimization of data right from inception. St. John's essential applications also run more quickly and securely and have the mobility and flexibility backed by HPE SimpliVity. With this new data efficiency and integrated data protection, Carreira can now rest easy knowing that a system crash would not impede the hospital's ability to quickly recover and resume normal activity.

When asked if he would recommend HPE SimpliVity to his peers and colleagues, Carreira enthusiastically replied, "Absolutely! Over and over and over again."

Key benefits include:
- Single pool of shared x86 resources that seamlessly combines all IT/services "below the hypervisor"
- Global Unified management and single pane of glass management via VMware vCenter integration
- Achieved 46:1 data efficiency after two months and 106:1 after six months
- 312TB IO and capacity savings after two months
- Instant backups, reduction in RPOs/RTOs, and integrated data protection
- Unsurpassed agility from modular, 2U building blocks
- Inline deduplication, compression, and optimization
- Hyperconverged infrastructure yielding reduced costs to enable "cloud economics."

Learn more at
hpe.com/info/simplivity

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