Leading nonprofit healthcare organization facilitates excellent patient care and exponential growth by keeping 99 petabytes of records available while achieving 40:1 deduplication.

Business needs
One of the nation’s leading nonprofit, faith-based healthcare providers, needed a more capable and scalable backup solution that could protect petabytes of data from 2,500 applications used at 100 hospitals in 17 states without interrupting users’ workflows — and quickly restore files even if disaster strikes.

Business results
- 98% success protecting more than 99 petabytes of data
- 40:1 data deduplication
- Increased IT staff efficiency

Solutions at a glance
- Dell EMC Data Protection Software
  - Dell EMC RecoverPoint and RecoverPoint for Virtual Machines
- Dell EMC Data Domain
- Dell EMC Services
- VMware vSphere

$1.6 million savings in capital expenditures
Hospital staff need quick access to patients’ medical records to provide high-quality care even if systems go down. However, many healthcare organizations can’t meet backup and restore requirements because they’re managing exponential data growth.

This was particularly true for one of the nation’s largest nonprofit health systems. As it cared for increasing numbers of people, the organization’s Veritas NetBackup software struggled to replicate all data. “Our legacy backup environment never functioned properly,” explains the organization’s manager of disaster recovery, data center operations and data protection. “We were always dealing with backlogged jobs and replication issues.”

One seamless enterprise solution

Instead of continuing with its struggles, the organization evaluated leading backup and recovery technologies and found an option that reduces risk, saves money and boosts efficiency. It engaged Dell EMC Services to help replace Veritas software with a comprehensive solution based on Dell EMC Data Protection Software and Dell EMC Data Domain. By automating enterprise processes for continuous file replication, snapshots, deduplication and traditional backups with Data Protection Software, the organization ensures that staff can always access mission-critical applications. These include electronic health record (EHR) and electronic medical record (EMR) technologies from MEDITECH, Cerner, EPIC, Allscripts, McKesson STAR and other vendors.

The organization also uses Dell EMC RecoverPoint technologies and RecoverPoint for Virtual Machines, included in Data Protection Software, to enable continuous data protection and rapid any-point-in-time recovery for more than 7,000 virtual machines supported by VMware vSphere and 13,000 servers. In addition to providing digital video recorder (DVR)-like recovery, RecoverPoint ensures consistency for interdependent applications, reduces network costs up to 90 percent with efficient WAN bandwidth utilization, and simplifies data center migrations and disaster recovery with built-in orchestration and automation.

The organization chose Dell EMC Data Domain systems for storing backups because they deliver an efficient, low-cost deduplication technology. They also work seamlessly with Data Protection Software to back up new data that hasn’t yet been replicated. As a result, the organization significantly reduces network usage and requirements.

“We protect more than 99 petabytes of data with a 98 percent success rate with our Dell EMC Data Protection solution.”

Manager of Disaster Recovery, Data Center Operations and Data Protection, Leading nonprofit healthcare organization

98% success protecting more than 99 petabytes of data
To further minimize any risk of backlogged or failed backups, IT staff worked with Dell EMC Services to decentralize initial backups to local systems. “Every day, we use Dell EMC Data Protection to back up new data from each site to its own secure and encrypted Data Domain,” says the manager. “Then, we send snapshots of the new data to a site in Colorado, Texas or Nebraska. By using this new architecture, we send less than 1 percent of our backup traffic over the network each day, instead of 100 percent.”

The organization engaged with Dell EMC Professional Services and onsite consultants to roll out the architecture to achieve the level of success it has today. “Our consultants from Dell EMC feel like they’re a part of our organization because our concerns and organizational requirements are what’s most important to them,” says the manager. “I’ve worked with a lot of companies in the past, and I like Dell EMC’s service model the best.”

**Delivers transformative results**

With its new solution, the organization has cut risk. It has achieved 100 percent restoration rates and its backup success rate has improved significantly from the previous level of 55 percent. “We protect more than 99 petabytes of data with a 98 percent success rate with our Dell EMC Data Protection solution,” says the manager. “Hospitals don’t even know our backups are running.” What’s more, enterprise backups reside on less than 3 petabytes of disk space. “We’ve improved data deduplication ratios from less than 10:1 to more than 40:1 with Dell EMC Data Protection Software and Dell EMC Data Domain technologies for backup and recovery, which is the best rate in the industry. We’re also realizing $1.6 million in capital savings. It’s clear that Dell EMC is an investment worth making.”

“We’ve improved data deduplication ratios from less than 10:1 to more than 40:1 with Dell EMC Data Protection Software and Dell EMC Data Domain.”

Manager of Disaster Recovery,
Data Center Operations and Data Protection,
Leading nonprofit health organization