Improving care for a million AIDS patients

Dealing with an aging IT infrastructure, AIDS Healthcare Foundation opted for the exceptional performance and efficiency of NVMe flash storage to deliver care and advocacy for AIDS patients worldwide.

Business needs

The mission of AIDS Healthcare Foundation (AHF) is to provide cutting-edge care and advocacy for more than 1.1 million people living with AIDS in 43 countries. This requires that doctors, nurses, pharmacy staff and patients have immediate access to the reliable, always-available medical information they need.

Solutions at a glance

- Dell EMC PowerMax 2000
- Dell EMC CloudIQ
- Dell EMC Data Domain
- Dell Technologies Services
- VMware vSphere, vCenter Server and Site Recovery Manager

Business results

- 30x performance gain provides faster access to patient information
- Safeguards medical records through 99.9999% availability and streamlined replication
- Simplifies storage management, freeing time for other tasks
- Shrinks footprint by 88%—from two racks to about 1/4 rack
- Drives down power and cooling costs by more than 50%

Up to 97% lower latencies

8x storage density improvement
Founded in 1987, the Los Angeles-based AIDS Healthcare Foundation is a global nonprofit that began as an advocacy group and has evolved into the largest provider of specialized healthcare for HIV and AIDS patients worldwide, regardless of an individual’s ability to pay. The organization is committed to finding cutting-edge ways to treat and prevent AIDS and advocate for people living with the disease.

But with aging storage technology impacting the ability of care providers and patients to quickly and efficiently access needed medical information, AHF responded by tapping the next-generation performance and efficiency of NVMe-based Dell EMC PowerMax 2000 arrays.

Ready data access for advanced care

To achieve its mission, AHF operates hundreds of clinics and pharmacies designed specifically to give HIV-positive clients access to the specialists, medications and services to be as healthy as possible.

Having a state-of-the-art IT infrastructure helps doctors and nurses care for as many patients as possible. It enables AHF pharmacists to efficiently fill and ship lifesaving medications. It also provides patients with easy access to medical records and treatment guidance.

“PowerMax, with its end-to-end NVMe flash storage, is a game-changer for us,” says Vince Vitro, senior solutions architect on the network and infrastructure team for AHF. “Storage will never be a bottleneck again, thanks to NVMe technology.”

AHF runs its most important applications on PowerMax, including Microsoft SQL Server databases, business intelligence solutions, Citrix, and essential electronic medical record (EMR) platforms from Cerner and GE Healthcare. In the past, some critical workloads were experiencing latencies of as high as 30 milliseconds.

“With Dell EMC PowerMax, we’ve seen up to a 97 percent improvement in our latencies,” Vitro explains. “This ensures immediate access to data needed for care.”

The organization’s IT infrastructure is nearly 100 percent virtualized using VMware vSphere, VMware vCenter Server software and VMware Site Recovery Manager for disaster recovery. “For our VMware environment, we require fast, consistent and reliable performance—and we get that with Dell EMC PowerMax,” notes Vitro.

Efficient storage and reliable replication

The inline, global deduplication and compression built into PowerMax enables AHF to fit more data onto its production array in Los Angeles, even as it enjoys exceptional scalability to meet future demands. AHF also relies on PowerMax, Dell EMC Symmetrix Remote Data Facility and Dell EMC Data Domain to deliver six nines of availability and seamlessly replicate data to its Florida backup facility for business continuity and disaster recovery.

“We back up about 40TB of data,” Vitro remarks. “Data Domain has greatly reduced our backup storage requirements, and the consistently high dedupe and compression ratio allows us to fit much more data onto the Data Domain appliances than before.”
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Vince Vitro
Senior Solutions Architect
AIDS Healthcare Foundation

Simplified installation and management

When it came time to install the PowerMax arrays, AHF called upon the experts, tools and technologies provided by Dell Technologies Services.

“Dell specialists came out and racked and powered up our arrays,” states Vitro. “They handled the initial configuration, upgraded code, ran health checks, shared best practices and started us on the path to maximizing the benefits we receive. The Dell Technologies Services team really complemented our small IT group well.”

Vitro has also been pleased with how Dell EMC Unisphere has made PowerMax easy to manage, saving time for his storage team to work on other tasks to support the organization’s mission. In addition, AHF uses Dell EMC CloudIQ to continually monitor, analyze and troubleshoot the health of its storage environment—viewing all performance metrics through a single “pane of glass.”

“With our partnership with Dell EMC, we have the confidence to move forward with our IT initiatives,” Vitro says. “As we strive to care for patients and serve those we advocate for, we look forward to having the help of Dell Technologies.”

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Senior Solutions Architect
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