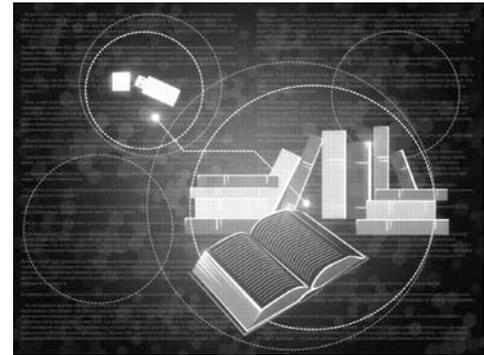


MIAMI-DADE PUBLIC LIBRARY SYSTEM

Dell EMC Isilon and XtremIO drive up performance and efficiency for next-generation library services



ESSENTIALS

Industry

Public library

Company size

426 employees

Business challenges

- Transforming from paper to digital catalogs and content
- Small IT staff struggling to manage a fast-growing infrastructure

Results

- Improved library system response times from 11 to 4.4 milliseconds
- Cut storage provisioning from eight hours to 20 minutes
- Reduced latency for critical SQL Server reports to near zero

Solutions

- Dell EMC Isilon
- Dell EMC XtremIO
- Dell EMC SourceOne Email Management for Microsoft Exchange
- Dell EMC SourceOne for Microsoft SharePoint
- VMware vSphere
- Polaris, Canto Cumulus, Microsoft Exchange, Microsoft SQL Server, Microsoft SharePoint, Microsoft Office 365

It transformation paves the path toward the digital library

In today's library systems, long rows of paper card catalogs and stacks of printed collections are disappearing. In their place: online catalogs and digital content, often shared across an integrated network of libraries. Miami-Dade Public Library System (MDPLS) is leading the charge toward next-generation library systems.

MDPLS comprises 49 branches linked to a central IT hub that delivers modern services such as online courses, collaboration platforms, community Internet, and access to millions of books and hundreds of knowledge-filled databases.

With more than one million patrons, MDPLS continues to expand its digital collections, driving annual data growth of 15 percent. While earlier-generation Dell EMC® platforms served MDPLS well for years, the library system's small IT staff needed systems with even more horsepower and simplified management to advance the digital transformation.

Working with Dell EMC, MDPLS migrated to Dell EMC Isilon® scale-out storage and Dell EMC XtremIO® all-flash storage.

With the combination of Isilon and XtremIO, MDPLS improved application performance dramatically, accelerating response times for its integrated library system (ILS) from 11 to 4.4 milliseconds and improving patron satisfaction. IT benefited from easier administration, trimming the time for many common tasks from hours to minutes and freeing more time for researching new IT solutions.

Environment

MDPLS deployed a Dell EMC Isilon X-Series cluster with XtremIO to deliver the full range of its IT and library services through 2,700 public computers and laptops, and patrons' personal devices.

XtremIO runs all of the library system's VMware virtual machines, which support Polaris ILS, Canto Cumulus digital asset management, Microsoft Exchange, Microsoft SQL Server, Microsoft SharePoint, Microsoft Lync, Microsoft Active Directory, and other applications.

“Before, ILS response times were around 11 milliseconds. Now, we’re down to 4.4 milliseconds. That gives our patrons a much better user experience, which keeps them coming back.”

Julio Campa, IT System Manager,
Miami-Dade Public Library System

Company Overview

With 49 branch locations and two bookmobiles, Miami-Dade Public Library System serves more than eight million visitors annually. The library system provides patrons with access to a collection of more than 3.9 million books and materials, 1,735 public computers, 120 self-checkout machines, Wi-Fi at every location, and a wide range of digital resources, including downloadable e-books, audio books, music, and videos.

Isilon provides the repository for files and content such as Microsoft Office 365 documents and spreadsheets, digital library collections, photos and videos, as well as Exchange and SharePoint archives. MDPLS also relies on Isilon infrastructure software, including Dell EMC Isilon InsightIQ® performance monitoring and reporting, and Dell EMC Isilon SmartQuotas™ quota management and provisioning.

In addition, MDPLS uses Dell EMC SourceOne™ for Microsoft SharePoint and SourceOne Email Management for Microsoft Exchange to archive SharePoint content and email from Office 365 onto Isilon.

Approximately 98 percent of MDPLS’s infrastructure is virtualized with VMware vSphere.

Patrons keep coming back

With XtremIO and Isilon, MDPLS dramatically improved performance for patrons, library employees, and IT staff. For example, IT planned 12 hours to migrate the Polaris ILS to XtremIO, but completed the process in less than two hours.

Julio Campa, MDPLS’s IT system manager, remarks, “Before, ILS response times were around 11 milliseconds. Now, we’re down to 4.4 milliseconds. That gives our patrons a much better user experience, which keeps them coming back.”

Similarly, the SharePoint environments at MDPLS run 30 percent faster with file services on Isilon. With SQL Server on XtremIO, long latencies for reporting are a thing of the past.

Gustavo Cardenas, MDPLS senior system administrator, notes, “Since moving SQL Server to XtremIO, latency has dropped to almost zero. I am in awe sometimes at how fast things run now.”

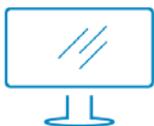
Provisioning in a fraction of the time

Day-to-day administration is easier today with Isilon and XtremIO. For example, IT can provision storage in a fraction of the time it took on legacy storage. This allows staff to focus more on serving internal library customers than keeping systems operational.

Simple tasks like creating a CIFS share, which could take between two to three hours, now can be configured on Isilon in 10 minutes. Because the XtremIO system’s scale-out architecture does not require any RAID or cache sizing, what once took 8 hours to provision logical unit numbers (LUNs) now takes 20 minutes.

Planning for growth also is easier, especially with the analytics reporting of Isilon InsightIQ.

Cardenas explains, “The analytics from InsightIQ let me quickly see if we need to grow the system based on capacity utilization, or adjust volumes to improve performance.”



[Learn more](#) about Dell EMC Isilon



[Contact](#) a Dell EMC Expert



[View more](#) resources



[Join](#) the conversation with #DellEMCStorage