

Fernbank Museum of Natural History: Technology Modernization Project



FERNBANK[®]
MUSEUM OF NATURAL HISTORY

Modernizing technology at the museum

Mission

Fernbank Museum's mission is to inspire life-long learning of natural history through immersive programming and unmatched experiences to encourage a greater appreciation of our planet and its inhabitants.

"When you undertake a project of this scope it's nice to have a partner that understands technology and not-for-profits. The LAN Systems team listened to our objectives and created a project plan to meet them all within the tight implementation window of a 7-day-a-week operation, on schedule and on budget!"

- Dana Harvey, VP & CTO

Executive Summary

The Fernbank Museum of Natural History (Fernbank) is an award winning museum with thousands of visitors each year. Since its opening in 1992, the museum has provided an educational, interactive and memorable experience for its guests. And just as Fernbank has modernized its exhibits to provide a richer experience, it came time to update the IT infrastructure for performance and efficiency.

With the help of LAN Systems and TechBridge, Fernbank developed a plan to combine Cloud and on-premise solutions to modernize their infrastructure while minimizing costs. Using Microsoft Office 365 for email and collaboration along with a server refresh and consolidation project, Fernbank was able to upgrade their network to support their future productivity needs.



4711 Peachtree Industrial Blvd
Berkeley Lake, GA 30092
770 662-0312
www.lansystems.com

Challenges

Fernbank is open seven days a week, so we had to ensure there were no interruptions to ticketing, the cafe or the museum store. Since several servers were being replaced using the existing racks, the swap had to be well-planned. Also, the Fernbank staff collaborates with each other and museums around the world to coordinate permanent and temporary exhibits, so staff downtime had to be minimized. Adding Office 365 for email and collaboration implemented a new way of working that required staff training.

A Hybrid Cloud Environment

Maintaining on-premise systems while moving email to the Cloud using Office 365 and moving applications to Microsoft Azure was a good fit for Fernbank. They are a busy museum with a lean staff so efficiency is important. Not only do they utilize business operational software and office productivity tools, but they have several systems for the unique needs of the museum. The Fernbank staff completed a migration of their web site and eNewsletter application to Azure prior to the server consolidation. Additionally, they moved their membership applications to a hosted Cloud solution which allowed the retirement of several physical servers.

The new infrastructure is designed to last for many years using Microsoft Server 2012 R2 in a Hyper-V environment with Server Essentials. Server Essentials provides integration to easily manage Office 365 and local user accounts. Reducing and consolidating servers while maintaining the domain with file, print, and application services allows for growth, streamlined

maintenance, easy backup and disaster recovery.

For the most comprehensive disaster recovery, Hyper-V replica can be deployed. It is a simple and flexible feature that provides disaster recovery, scalability and automation. When deployed in conjunction with Azure Site Recovery to replicate Hyper-V roles in the Cloud, it provides a flexible, cost-effective, robust disaster recovery and high-availability failover solution.

Below is a summary of some of the modernization features:

- On-premise server with Microsoft Server 2012 R2 is being used for point-of-sale software, applications, including accounting and shared resource access
- Hyper-V replica available for scalability and disaster recovery
- Microsoft Office 365 for email and collaboration
- Web site and eNewsletter application moved to Microsoft Azure
- Membership software moved to a hosted Cloud solution
- Simplified backup and disaster recovery that combines local and Cloud solutions

Results, Return on Investment and Future Plans

Fernbank has world-class IT infrastructure that is designed for its current and future needs. The modernization allows them to take advantage of the latest Cloud architecture for applications and collaboration. It will be easy to add Hyper-V Replica, additional virtual machines, Cloud services and mobile applications.

Retiring and consolidating servers provided hardware and energy savings. Reduction in maintenance delivers additional cost savings while the simplified backup and disaster recovery plan provided peace of mind. The scalable and portable strategy allows easy expansion by reconfiguring virtual servers or migrating on-premise server functions. Built-in high-availability ensures that the museum will provide for many years to come an unmatched experience to its members and guests without interruption.



4711 Peachtree Industrial Blvd
Berkeley Lake, GA 30092
770 662-0312
www.lansystems.com