



"This upgrade has been amazing hasn't it? Almost transparent, which makes it completely elegant."

- Dale Sanders, CIO, Northwestern Medical Faculty Foundation

Client Profile

Northwestern Medical Faculty Foundation, Inc. (NMFF) is a premier, multi-specialty physician organization committed to providing high quality care for patients, and to supporting the research and academic endeavors of the Feinberg School of Medicine at Northwestern University.

Founded in 1980, NMFF is an independent not-for-profit organization with more than 500 physicians and over 1,000 health professionals in more than 40 medical and surgical specialties and subspecialties. NMFF provides state-of-the-art care for a wide variety of medical and surgical conditions.

"Two factors influenced our decision to select PointBridge. The way they put the project together – the presentation of how they would deliver the project, the set time frames – we liked the process. We also wanted to work with a local firm because they can be more responsive. The project plan was clear, structured, easy to follow, and you know where you are every step of the way. You know what to expect and you know what is expected of you."

- Watson Wright, Manager, Database & Systems Administration,
Northwestern Medical Faculty Foundation

The Challenge

Northwestern Medical Faculty Foundation, Inc. planned to implement an enhanced and more flexible information technology infrastructure to enable greater access to information. The initial motivation for the upgrade occurred when several doctors including the CEO were interested in using mobile devices for portable e-mail and calendar access.

The plan required an upgrade of NMFF's existing Microsoft® Windows® Server 2000 Active Directory® and Exchange 2000 environment to Microsoft Windows Server 2003 Active Directory and Exchange Server 2003. Adding new features such as synchronization of PDAs required Exchange 2003, which in turn required a Windows Server 2003 domain platform. In addition, NMFF opted at this time to implement Microsoft Systems Management Server (SMS) 2003 to speed application deployment.

The PointBridge solution ultimately needed to provide a more efficient way for doctors and staff to collaborate and access critical communications within a shared, centralized environment. The solution also needed to be stable, secure and easy to maintain.

The PointBridge Solution: A Comprehensive Upgrade of Active Directory and Exchange and Implementation of Systems Management Server

PointBridge worked with NMFF to design, develop and deploy a stable, efficient and flexible infrastructure based on the Microsoft platform. Upon implementation, NMFF gained the ability to support a variety

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- Design and rollout of Windows Server 2003, Active Directory and Exchange Server 2003
- Design and implementation of Systems Management Server 2003
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of applications that would improve the speed of communication and collaboration across the community of users. Simply put, the new solution's more extensible infrastructure enabled greater access to information and was crafted to accommodate the integration of additional applications.

The NMFF project focused on the upgrade from a mixed environment to Microsoft Windows Server 2003 Active Directory and Exchange Server 2003. The environment is now more stable and storage groups are organized in a way that, should there be an issue, fewer users are affected.

Following the upgrade of Active Directory and Exchange, NMFF planned an upgrade of their existing Microsoft Systems Management Server (SMS) 1.2 environment. PointBridge assisted NMFF with the creation of a new SMS 2003 architecture and the migration from the old to the new SMS environment.

This operational component of the project implemented into production asset management reporting, patch management and software distribution – all integrated with Active Directory. The implementation of SMS 2003 will make it much easier for NMFF to deploy applications to users.

Recognizing the Benefits

The upgrade enabled NMFF's IT department to get closer to its "zero-touch" environment goal, while providing:

- **Greater collaboration and information sharing:** Enhanced collaboration features such as shared calendars, shared contacts, public folders, meeting scheduling, and task lists with remote access will improve communication and productivity. NMFF doctors are always on-the-go. The PointBridge solution allows for easy access to timely information regardless of locale.
- **Increased staff productivity, including synchronization with PDAs:** Remote access and PDA synchronization provides NMFF with a solution that increases efficient access to information and enables staff to work more quickly and productively.
- **Increased stability, enhanced security and faster recovery times:** The combination of Active Directory, Exchange Server and Windows Server provides a secure platform from which employees can engage in effective collaboration and access critical information whenever and wherever necessary.
- **Ability to add more features:** This includes Microsoft Systems Management Server which allows automatic deployment of software, updates and patches to the desktop, which will also increase security. The Active Directory and Exchange 2003 Platform provide the necessary environment for the implementation of newer technologies that will further enhance collaboration and productivity.

Getting Started

PointBridge was engaged to analyze the existing environment, technologies and related administration and create a solution based on the Microsoft platform that would create a foundation for all the general and specialized applications active in the NMFF environment. The applications are anticipated to range from e-mail to medical imaging software. In creating the solution and preparing for implementation, PointBridge leveraged the

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PointBridge Solution Framework (PSF), which is based on best practices from the Microsoft Solutions Framework and past project experiences in complex environments.

Taking a phased approach, PointBridge worked with NMFF to create an Active Directory and Exchange architecture design. Members of NMFF's technical and management teams were interviewed to gather information on the current Windows NT domain environment including the implementation of existing Windows NT domain controllers, member servers, and operating procedures. PointBridge used the information collected as input for the design and configuration of Active Directory and the related domain controllers, servers and messaging environment. PointBridge also worked with NMFF to establish policies and procedures that would be implemented along with the solution.

PointBridge delivered a detailed project plan which included a system design document detailing NMFF's updated Active Directory, Exchange Server 2003 and Systems Management Server 2003 environments. The plan also included the migration plan outlining tasks and timelines and coordinating key activities, such as the migration of NMFF's 1800 online mailboxes.

Overcoming Obstacles

"The original environment was largely undocumented, so work had to proceed with caution to uncover any issues before we hit them."

- Watson Wright, Manager, Database & Systems Administration, NMFF

Other than dealing with the largely undocumented original environment, the joint PointBridge and NMFF team encountered few unforeseen obstacles. The only drama during the project occurred when NMFF's legacy production server went down for two days prior to the mailbox migration. After several months, NMFF still has yet to experience any downtime, and now if downtime should occur the impact would be minimal. The Exchange recovery times will be greatly reduced with the cluster environment.

"We've had a very favorable experience working with PointBridge. The people are very professional and open to working with us to solve problems. When glitches or anomalies occurred they worked through them with us. As we got into the project we found that there were things that needed to be corrected – little landmines that we needed to work around – and PointBridge worked with us to find new solutions."

- Watson Wright, Manager, Database & Systems Administration, NMFF

Successful Project Completion

Based on information gathered throughout the project, PointBridge worked with NMFF to create a detailed design and transition plan outlining the migration process to Active Directory and Exchange 2003, and the implementation of Systems Management Server 2003. The design and plan included several test and pilot phases and provided the guidance for the completion of the project. The project was completed on time and within

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budget in approximately three months with a blended project team that included a project manager and senior consultant from PointBridge and three NMFF employees.

PointBridge worked with NMFF to build a complete test environment representative of a cross-section of NMFF's production environment. This lab was used for ongoing testing with Active Directory, Exchange, SMS, and file, print and application servers throughout the duration of the project. PointBridge delivered a complete set of test results tracking all issues identified, which enabled the smooth implementation. This rigorous testing was a key enabler of project success.

Knowledge Transfer

The NMFF systems administration personnel are sophisticated users of Microsoft applications, very familiar with all aspects of the Microsoft platform, so a formal training program was not required. However, PointBridge was committed to knowledge sharing throughout the project so that NMFF could confidently take ownership of their new environment. According to Watson Wright, "The knowledge PointBridge shared over three months was comparable to a year of hands-on training. It was almost like a boot camp."

End Result

PointBridge assisted NMFF increase functionality and improve communication and collaboration. The solution will increase staff productivity and also satisfy changing security requirements. The solution has already:

- Improved mobile access to information
- Increased the ability to leverage and share information to collaborate
- Reduced Exchange recovery times through a cluster environment
- Enabled easier distribution of applications, upgrades and patches
- Provided a completely documented system to reduce future complications
- Created a technology infrastructure to support NMFF's goals

Users have noticed the increased functionality with handheld devices and improved mobile access. The user community barely noticed the upgrade. During the migration, the longest outage was 15 minutes. Approximately 1800 mailboxes were moved during the migration, and less than 10 failed on the first attempt. It was a very smooth transition to a solution delivered with minimal disruption.

About PointBridge

PointBridge leverages Microsoft technologies to enable collaborative work environments that improve business performance. Based in Chicago, PointBridge is a Microsoft Gold Certified Partner in Advanced Infrastructure, Information Worker and Security Solutions. PointBridge was recently named the worldwide Microsoft Partner of the Year for Advanced Infrastructure Solutions and won the Microsoft Exchange Solution of the Year Award in 2005.

For more information, please call 312.334.1900 or visit www.pointbridge.com