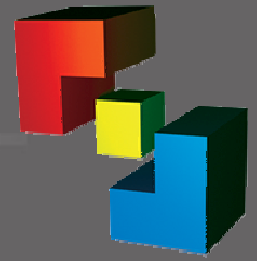


# Case Study Lehman Brothers



## Active Directory Deployment

**The Henson Group, Inc. (THG)** implemented a custom solution for Lehman Brothers that applied Microsoft's Active Directory (AD), a directory service that is completely integrated with Windows Server 2003, to significantly increase IT system security and functionality.

THG recently architected a highly customized technology solution for Lehman Brothers to provide a more functional and secure environment across its investment banking and capital markets divisions.

During the initial planning phase, THG demonstrated to key Lehman IT professionals that implemented properly, Microsoft's Active Directory delivers a complete solution for managing enterprise wide resources. Having logged thousands of hours designing custom AD deployments, THG provides experts with proven field experience architecting AD solutions for both single-forest and multi-forest domain environments. These solutions provide intuitive naming of the objects contained in the directory; scalability from a small business to a global enterprise; and the ability to access application programming interfaces.

A central component of the Windows platform, the AD service provides functionality for managing the identities and relationships that make up network environments — a key consideration for Lehman for this particular project.

### BUSINESS SITUATION

Lehman Brothers needed a computing platform that offered it investment banking and capital markets operations with enhanced security, more reliable software distribution, and improved operation system stability and load time than its existing environment provided. Therefore, Lehman Brothers approached Microsoft to explore the possibilities of leveraging the improvements made in the AD service in Windows to serve as an effective platform to address these critical challenges.

Affirming THG's expert proficiency in architecting custom AD solutions, Microsoft requested that THG design and deploy such a solution.

### SOLUTION

To leverage the full capabilities of AD, THG first needed to accomplish a significant migration at Lehman Brothers, involving and integrated program migrating Lehman Brothers' existing servers from Microsoft's Windows NT 4.0 to Windows 2000 and Windows XP.

This strategy also entailed upgrading Lehman Brothers' security and virtual private networking (VPN) capabilities to Windows 2000 Server.

THG was also instrumental in developing and deploying Kerberos and Public Key Infrastructure (PKI), along with IP Security (IPSEC), enabling Lehman Brothers to increase network and application security.



## Lehman Brothers

### Project Vitals

**Industry:** Financial Services

**Customer Profile:** Lehman Brothers serves the financial needs of corporations, governments and municipalities, institutional clients, and high net worth individuals worldwide. The Firm is headquartered in New York, with regional headquarters in London and Tokyo, and operations around the world.

**Business Situation:** Lehman Brothers needed a computing platform that offered its investment banking and capital markets operations enhanced security, more reliable software distribution, and improved operations system stability and load time than its existing environment provided. Therefore, Lehman Brothers approached Microsoft to explore the possibilities of leveraging the improvements made in the AD service in Windows to serve as an effective platform to address these critical challenges.

**Results:** THG's deployment exceeded expectations, providing greater security, reliable software distribution, and improved operation system stability and load time. AD now enables Lehman Brothers to centrally manage and share information on network resources and users for its investment banking and capital markets divisions.



THG structured the Lehman Brothers' deployment into three development and implementation phases:

**1) Domain Directory Upgrade** – This critical phase entailed migrating user authentication accounts to AD from the existing Microsoft NT Domain environment. With AD in place, THG was able to effectively consolidate all of the disparate repositories for user and application information into a single place for Lehman Brothers, thereby achieving the main objectives set by the client.

**2) Operating System Upgrade** – This phase involved migrating to the Microsoft Windows XP operating system from the current Windows NT 4.0 environment. This deployment strategy provided the company with significant improvements to user security and authentication.

**3) Software Distribution Upgrade** – This phase required modernizing and upgrading the system that distributes software updates to user desktops.

## RESULTS

THG's deployment exceeded expectations, providing greater security, reliable software distribution, and improved operation system stability and load time. AD now enables Lehman Brothers to centrally manage and share information on network resources and users for its investment banking and capital markets divisions, while acting as the central authority for network security.

In addition to providing comprehensive directory services to a Windows environment, AD now serves as a consolidation point for isolating, migrating, centrally managing, and reducing the number of directories that Lehman Brothers requires for these divisions.

Meanwhile, THG increased server security at Lehman Brothers by not only implementing the additional security features in Windows 2000 and XP, but also by deploying a Public Key Infrastructure (PKI). The PKI coupled with IPSEC provided the basis for server-to-server communications. THG also deployed certificate servers that enhanced security by providing user access and authentication through a smart card login.

To improve Lehman Brothers' software distribution process, THG implemented IntelliMirror, including Group Policy, enabling Lehman Brothers to more efficiently manage its computers and resources. Essentially, the system administrator can now deploy applications and assign access to servers and other network resources based on group membership. This helps reduce administrative costs and increases the efficiency of software distribution.

To speed up boot time performance, THG's customized the Windows XP deployment to take full advantage of XP's operating system enhancements. And, THG also tested Lehman Brothers' custom applications for Windows XP compatibility. This enabled consultants to identify several applications that needed to be enhanced for better performance and stability while running on Windows XP. These improvements drastically reduce computer boot time and provided additional application stability.

## About The Henson Group



**Founded:** June, 2000

**Headquarters:** New York City

**Consultants:** 37 (including both full-time and part-time professionals)

**Partners:** MS, HP, IBM, Cisco, Avicode, Dell, EMC, eXc Software, K2.net, Netscaler, Network Engines

**Certifications:** Microsoft Gold Certified and Cisco Certified

**Official Microsoft Competencies:**  
Advanced Infrastructure Solutions  
Information Worker Solutions  
Integrated E-Business Solutions  
Learning Solutions  
Networking Infrastructure Solutions

**History:** Founded by former Microsoft employees from the development teams in Redmond and Microsoft Consulting Services

**Consultants:** All MS Certified, most former Microsoft engineers, and each have a minimum of three years of vertical-specific experience

**Annual Client-Retention Rate:**  
(2000 through 2004) 98%

**Annual Client-base Growth:**  
(2000 through 2004) 50%

**Company Description:** THG is an award-winning Microsoft Gold Certified Partner specializing in deploying Microsoft technologies for U.S. and international companies across 20 industry categories.

Founded by former Microsoft employees from the development groups in Redmond and Microsoft Consulting Services, THG offers clients direct access to Microsoft's product groups and technical information often not publicly available.

THG's competencies include .NET application development, infrastructure deployments, Line-Of-Business solutions, security, product training, and strategic consulting.

Delivering projects in a fraction of the time it takes competitors, THG's proprietary project management process and attention to detail consistently produces a 98% client-retention rate.

Everywhere clients need THG to be, the consultancy has operations, engineers, and partners located in countries around the world that are committed to the highest level of client satisfaction.

**To learn more about THG, please visit [www.HensonGroup.com](http://www.HensonGroup.com). For more information on how THG can deploy this type of solution in your environment, please call 800.980.1130 or e-mail [Info@HensonGroup.com](mailto:Info@HensonGroup.com).**

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