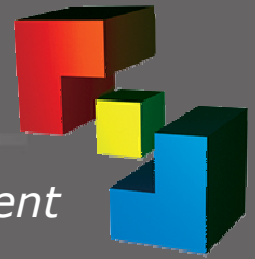


## Case Study

# Aurora Loan Services (A subsidiary of Lehman Brothers)



## Host Integration Server (HIS) Deployment

With support for its legacy Novell network technology expired, Aurora Loan Services, a Lehman Brothers subsidiary, turned to award-winning Microsoft Gold Certified Partner **The Henson Group, Inc. (THG)** to deploy Microsoft Host Integration Server (HIS) to enable Aurora's loan servicing professionals to access critical business applications.

### BUSINESS SITUATION

Aurora Loan Services, a consumer lending subsidiary of Lehman Brothers located in Denver, provides its loan services professionals with powerful applications to service clients and manage loans. These applications reside on a mainframe and were accessed through Novell's SAA gateway product. The connectivity method Aurora's loan servicing professional's relied on was 3270 access from a Dynacom software client.

While SAA was reliable, the product is no longer supported by Novell and additional licenses were not available, presenting significant challenges to Aurora's IT professionals. Meanwhile, Aurora's IT staff was gearing up for a major migration project that involved moving its network from Novell Directory Services and standardizing on Microsoft's Active Directory. Aurora Loan Services (ALS) has several locations spread throughout the US with loan professionals that require 3270 access to applications located on the Mainframe. These locations include Gaithersburg in Maryland; Dallas, Houston, and Irvine in Texas; Scottsbluff in Nebraska; and Denver, Water Park, Cherry Creek, and Park Ridge in Colorado. The total number of users in all sites is approximately 800, with the majority of users in Scottsbluff, Cheery Creek, and Park Ridge.

Additionally, Fidelity National Financial provides Aurora with the mainframe and loan applications needed to service customers and loans. As such, the mainframe and loan applications reside on Fidelity's site in Jacksonville, FL. Since this facility is owned by Fidelity, no Aurora equipment is allowed at this facility.

While an HIS specialist engineer in Microsoft Consulting Services (MCS) in New York several years before founding the consultancy, THG President Greg Henson managed several successful engagements for Lehman Brothers. Since leaving Microsoft, Mr. Henson maintained a positive relationship with key Lehman Brothers IT leaders, which resulted in their approaching THG to perform the implementation of HIS Server 2004 to replace SAA. Considering the importance of this particular project, Mr. Henson personally assumed the role of Principal Architect and managed the engagement on-site at Aurora's various operations.

### SOLUTION

Based on initial discovery, several deployment architectures were identified. While the various architectures would achieve the common goal of 3270 access and printing, none of the standard deployments for HIS provided intra-site load balancing and automated site-to-site failover sought by Aurora. Hence, working closely with ALS professionals, THG built a



## Aurora Loan Services

### Project Vitals

**Industry:** Consumer Lending

**Customer Profile:** Aurora Loan Services is a consumer lending subsidiary of Lehman Brothers located in Denver.

**Business Situation:** Facing expiration of its incumbent Novell network technology, Aurora required a solution that would provide its loan servicing professionals with access to critical business applications.

**Solution:** THG President Greg Henson designed and deployed a solution that including HIS 2004 and extensive customization to facilitate intra-site load balancing and automated site-to-site failover.

**Results:** THG President Greg Henson remained on-site for most of summer to configure HIS and bring the solution into production at the end of August. Despite several challenges beyond the scope of the project, though addressed and overcome by Mr. Henson, THG exceeded the expectations of Aurora's IT professionals.



custom solution that allows ALS to achieve these requirements.

Part of the Windows Server System, HIS 2004 helps customers integrate their mission-critical host applications, data sources, messaging and security systems within a Microsoft .NET Services-Oriented Architecture (SOA), enabling re-use of existing legacy assets across distributed environments. THG deployed two HIS servers located in Scottsbluff and two HIS servers in Water Park. All four servers are built identical, with the minor exception that the servers in Scottsbluff have 3GBs of RAM while the servers in Water Park have 4 GBs of RAM. There are two leased line connections from ALS to Fidelity: one located in Scottsbluff and the other in Parkridge. These links will connect simultaneously to differing PUs to provide defined users access. Additionally, users assigned to a specific site are load balanced between servers in that site.

However, the standard installation and configuration of HIS does not provide both intra-site and site-to-site failover, and does not facilitate site-aware load balancing. Hence, THG modified the standard deployment process to allow for auto-site failover and load balancing. This custom solution was developed using a set of scripts that automates the site-fail-over process and restoration.

Each server has one token ring card and four PUs with 250 LUs under each PU. As HIS clients log in, they are assigned LUs from a pool of LUs defined on the local HIS servers. This pool also serves as the load balancing mechanism, as each LU is assigned by availability on a first come first serve bases. Since LU names increment by server assignment, load balancing is achieved through the naming of the LUs.

If a server in a given site fails, the users in the local site will lose their session. When they reinitiate their session, the secondary HIS server in the site will assume the load of the local users in the same site. If both servers fail, or the link to the Mainframe fails, failover will occur through a custom process. In this scenario, a custom script will determine that a site is down—at which point the users from the fail site will be added to the LU pool of the active site. This automated failover should occur within 60 seconds of a site failover. If both sites fail, no action will be taken as this could be do to a mainframe issue.

## RESULTS

A comprehensive integration platform, Host Integration Server 2004 enables you to embrace Internet, intranet, and client/server technologies while preserving investments in existing systems.

THG President Greg Henson remained on-site for most of summer to configure HIS and bring the solution into production at the end of August. Despite several challenges beyond the scope of the project, though addressed and overcome by Mr. Henson, THG exceeded the expectations of Aurora's IT professionals.

As HIS supports more types of mainframe systems and AS-class host systems than any other product in the category, it easily met the integration needs of Aurora's loan servicing operations.

The custom scripting THG provided leveraged the mission-critical reliability with load balancing and hot failover functionality that Aurora sought, providing reliability for the most demanding situations with the lender's mainframe system.

## 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).**

The Henson Group, Inc. 1375 Broadway, Third Floor New York, N.Y. 10018

[www.HensonGroup.com](http://www.HensonGroup.com) (800) 980 1130 [Info@HensonGroup.com](mailto:Info@HensonGroup.com)

New York • New Jersey • Connecticut • Pennsylvania • Massachusetts • Florida • Texas • Illinois • California • Washington, D.C.