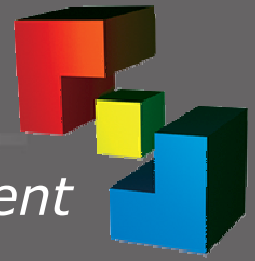


Case Study Bloomberg LP



Active Directory/GPMC Deployment

SOLUTION OVERVIEW

The Henson Group, Inc. (THG) implemented a custom solution for Bloomberg LP leveraging the combined power of Microsoft's Active Directory (AD) and the Group Policy Management Console (GPMC). This enabled the financial services giant to more cost-effectively deliver and manage consumer applications for users across the company's massive global proprietary network.

Microsoft Gold Certified Partner The Henson Group, Inc. recently designed and deployed a highly customized technology solution for Bloomberg LP to provide the financial services and media powerhouse with more security and cost efficiency in delivering group policy settings across non-trusted Windows forests. As part of this process, THG also recommended Group Policy settings to effectively lock down internet access to Windows and Internet Information Services (IIS) servers.

During the planning phase, THG demonstrated to key Bloomberg IT professionals that implemented and configured properly, GPMC offers the hierarchical view, extensibility, scalability, and distributed security they sought. Released in conjunction with Windows Server 2003, GPMC provides a single solution for managing all Group Policy-related tasks. The GPMC lets administrators manage Group Policy for multiple domains and sites within one or more forests, all in a simplified user interface (UI) with drag-and-drop support.

Solution features included functionality such as backup, restore, import, copy, and the reporting of Group Policy objects (GPOs). These operations are fully scriptable, which lets administrators customize and automate management. THG advised Bloomberg that a solution combining AD and GPMC would make the managing of Group Policy much easier and cost-effective across the enterprise.

THG was ideal for this project, having logged thousands of hours designing custom AD/GPMC solutions, offering its specially trained Microsoft Certified consultants with proven field experience architecting AD 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.

The AD service is a central component of the Windows platform, providing the means to manage the identities and relationships that make up network environments — a key consideration for Bloomberg for this particular project.

BUSINESS SITUATION

Bloomberg computer terminals provide real-time, around the-clock financial news, market data, and analysis to subscribers throughout the financial world. With some 170,000 terminals installed, Bloomberg is among the largest providers of such devices. The massive global technology infrastructure supporting this network is based partly on a version of the Unix Operating System.

With Bloomberg possessing so many custom-built Windows applications, THG quickly identified that Bloomberg needed a more robust utility for managing Group Policy, as ensuring Group Policy settings are consistent across multiple forests is very difficult. And, ensuring security standards across these forests was always difficult, as many of the servers had to be configured individually.

Essentially, Bloomberg's global infrastructure supporting this massive community of subscribers is linked by a large disparate collection of forests that provide an extensive array of digital services, content, and applications to subscribers.

THE
HENSON[®]
GROUP

Bloomberg LP

Project Vitals

Industry: Financial Services/
Business Media

Customer Profile: Bloomberg Professional Services' terminals provide real-time, around-the-clock financial news, market data, and analysis. With some 170,000 terminals installed, Bloomberg is among the world's largest providers of such devices.

Business Situation: Bloomberg needed a more cost-effective way to distribute and manage Group Policies across non-trusted Windows domains accessed by consumers using its proprietary network.

Solution: THG designed and deployed a custom solution using Microsoft Windows 2003 Server and Microsoft's Group Policy Management Console (GPMC).

Benefits: Reduced Application Development Cycle; Ensured consistent security settings; Reduced support and management of servers and applications.

Products Used:
Group Policy Management Console (GPMC)
Secure Shell (SSH)

Hardware:
1,200 Hewlett Packard Servers



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Unbeknownst to the subscribers, from a back-end perspective, this digital content and these applications reside on literally hundreds of servers in scores of separate domains spread across the globe, collectively comprising the networks. The issue with such an architecture is that while it has enabled Bloomberg to expand its services exponentially, from a technological view, linking such networks together has created a porous environment. That is because there is simply no way to enforce security uniformly from one domain to the next, creating an atmosphere of inconsistent security standards. Bloomberg approached Microsoft to remedy its situation. Validating THG's proficiency in AD and GPMC solutions, Microsoft requested that THG architect a solution to resolve Bloomberg's issues.

SOLUTION

THG achieved Bloomberg's objectives by leveraging GPMC to achieve a single solution for managing all Group Policy tasks. The GPMC enables administrators to manage Group Policy for multiple domains and sites within one or more forests via a simplified user interface (UI) with drag-and-drop support. These advantages enable Bloomberg to manage its subscriber-facing topology much more cost-effectively and securely. THG enabled Bloomberg to operate a Master Domain where all Group Policies were set. THG's solution exports those settings to all domains automatically, without having to manually set those Group Policies on each domain. GPMC has an expert feature that dumps out all group policy settings. Therefore, THG wrote individual scripts for all domains to import settings. This included no less than 20 scripts, to correspond with 20 separate GP settings. The scripts varied, but were no less than 100 lines of code.

With GPMC, THG would enable Bloomberg to access a Group Policy Object Editor that consists of two main sections: User Configuration, which holds settings that are applied to users (at logon and periodic background refresh) and Computer Configuration, which holds settings that are applied to computers. These sections are further divided into the different policy types, such as Administrative Templates, Security, or Folder Redirection. As Security Settings were a priority, Bloomberg can use the GPO Editor to edit security settings for users or computers, such as to require minimum password complexity, control the ability to log on to computers remotely, enable software restriction policies, set IP security, and much more.

Bloomberg's advanced network infrastructure includes a vast array of internal and external servers that exist in separate domains and DMZs. (In IT parlance, DMZ is short for *demilitarized zone*, a computer or subnetwork that sits between a trusted internal network and an untrusted external network.) Because of this, security was a critical issue. Therefore, in order to open a secure channel to communicate between DMZs and facilitate remote execution of scripts on the various servers, THG relied on its expertise with Secure Shell technology. Secure Shell enables you to log into another computer over a network to execute commands from a remote machine and to move files from one machine to another.

SSH protects a network from attacks such as IP spoofing, IP source routing, and DNS spoofing. An attacker who has managed to take over a network can only force SSH to disconnect. He or she cannot play back the traffic or hijack the connection when encryption is enabled. When using SSH login (instead of rlogin) the entire login session, including transmission of password, is encrypted; therefore it is almost impossible for an outsider to collect passwords.

RESULTS

THG provided a solution that gave Bloomberg the ability to replicate GPOs within a multi-forest domain structure. These GPOs ensured that application settings are now consistent throughout all domains. THG was also instrumental in deploying several network security measures, such as IP Security (IPSEC), enabling the Encryption of network information traveling from server to server. GPMC now enables Bloomberg to manage user and computer security settings from a central computer. This feature is especially important, as Bloomberg's servers exist in differing forests. With THG's solution leveraging the power of Windows Server 2003, replication of GPOs between forests is now possible. This significantly reduces the manual intervention and occurrence of errors for Bloomberg, as the company can now more efficiently manage its servers. And, by effectively configuring Bloomberg's firewalls and networking equipment to the specifications of the solution, THG enabled the company to protect its data throughout the replication process of forest-to-forest communications.

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. 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.