Overview

Country or Region: United States
Industry: Media Services

Customer Profile
A full-service media buying and planning shop with more than 100 offices in 60 countries, OMD also has specialist units focused on such areas as direct response, digital services, and integrated marketing.

Business Situation
OMD required a method of synchronizing user data contained in the separate Active Directory forests used by independent OMD business units, and various third-party directory services employed by its partners and clients to create a unified SQL database of all user identities.

Solution
The Henson Group architected an MIIS 2003 solution enabling virtually any foreign directory service to integrate with OMD's various directories.

Results & Benefits
- Natively provides MA's that support virtually every directory services product on the market
- Ability to connect directly to SQL databases.
- Architecture highly scaleable and flexible

MAJOR MEDIA SERVICE PLAYER ACHIEVES NEEDED IDENTITY INTEGRATION ACROSS THE ENTERPRISE WITH MIIS 2003

OMD WORLDWIDE

Microsoft Identity Integration Server 2003

"Identity integration is a challenge most organizations face today. Those that actually do something about it, such as OMD, realize productivity gains and strategic advantages."

Greg Henson, President/Architectural Consultant, The Henson Group

Microsoft Gold Certified Partner The Henson Group, Inc. (THG) designed and deployed a solution based on Microsoft Identity Integration Server 2003 (MIIS 2003) enabling virtually any foreign directory service to integrate with media-buying giant OMD Worldwide's various directories, while creating a customized SQL database for reporting purposes and application integration.

BUSINESS SITUATION

OMD Worldwide is a full-service media buying and planning shop with more than 100 offices in 60 countries. OMD also has specialist units focused on such areas as direct response, digital services, and integrated marketing.

Specifically, OMD required a method of synchronizing user data contained in the separate Active Directory forests used by independent OMD business units, and various third-party directory services employed by its partners and clients to create a unified SQL database of all user identities.

Considering the sheer volume of directories and systems that OMD has already deployed—each one of them unique, in terms of identity attributes and levels of accessibility—OMD was forced to manage a significant amount of related information in many different places.

This includes providing identity management-related support to network operating systems and directory services, e-mail systems, application systems, and database systems. These systems not only contain information on OMD HQ employees, but also the company's contacts, clients, field workers, and independent advisors as well.

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MIIS 2003 assists organizations in simplifying this chaos...managing and coordinating identity information from multiple data sources across an organization, enabling you to combine that information into a single logical view.

Recognizing the advantages of more seamlessly automating the processes associated with identity management, OMD approached Microsoft regarding the potential of leveraging Microsoft Identity Integration Server (MIIS).

Most enterprises today store personnel identity and access control data in dozens, or even hundreds, of disparate directories\databases, such as mail servers, phone voice mail systems, HR databases, and payroll systems. All of these various database systems have their own definitions of the user's identity information and many have their own password for authenticating the user.

MIIS 2003 assists organizations in simplifying this chaos. Essentially, MIIS is a system that manages and coordinates identity information from multiple data sources across an organization, enabling you to combine that information into a single logical view that represents all of the identity information for a given user or resource.

When data in MIIS is modified, data is changed on connected data sources to ensure cross-database identity synchronization.

Specifically, MIIS 2003, Enterprise Edition, includes management agents for the following identity repositories: Active Directory, Active Directory Application Mode (ADAM), attribute-value pair text files, comma-separated value files, delimited text files, Directory Services Markup Language (DSML) 2.0, Exchange 5.5, Exchange 5.5 Bridgehead, Exchange 2000 and Exchange 2003 Global Address List (GAL) synchronization, Fixed-width text files, LDAP Directory Interchange Format (LDIF), Lotus Notes/Domino 4.6/5.0, Novell NDS, eDirectory, DirXML, Sun/iPlanet/Netscape directory 4.x/5.x (with "changelog" support), Microsoft SQL Server 2000, SQL Server 7.0, Microsoft Windows NT4 Domains, Oracle 8i/9i, Informix, dBase, and ODBC and OLE DB support via SQL Server Data Transformation Services.

As a top "Got To" Gold Certified Partner for MIIS implementations, The Henson Group received the assignment from Microsoft to design and deploy a custom MIIS solution for OMD.

The Henson Group offers a full-service Identity Management Technology unit staffed by experienced Microsoft Certified consultants, usually specializing in multiple technologies.

The Henson Group is consistently ranked at or near the top of Microsoft's official Resource Directory for Microsoft Certified Partners for MIIS infrastructure projects (http://directory.microsoft.com).

The Henson Group also achieved Microsoft's Advanced Infrastructure Solutions Competency by demonstrating its

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expert-level Identity Management technology-related abilities, maintaining a roster of Microsoft Certified Consultants with applicable experience, and producing numerous client references to objectively testify to our abilities.

What this meant for OMD was that The Henson Group had the resources, project experience, and proven technical ability to achieve its objectives.

SOLUTION

The Henson Group proposed designing and deploying a solution based on Microsoft Identity Integration Server 2003 (MIIS 2003) that would enable virtually any foreign directory service to integrate with OMD's various directories to create a customized SQL database for reporting purposes and application integration.

With extensive planning, architectural design, policy, and implementation experience in Microsoft Active Directory and Exchange infrastructure solutions, THG was in a good position to tailor a flexible and robust MIIS design and implementation for OMD.

As a Microsoft Gold Certified Partner specializing in identity management technologies, THG assigned a seasoned expert to this project with extensive experience implementing cost-effect MIIS solutions, providing expertise in project planning, architecture\design, coexistence\migration, and directory implementation.

Successful implementation of MIIS 2003 requires detailed planning. Therefore, The Henson Group initiated the engagement with a Discovery phase dedicated discovery to understand OMD's identity management strategic objectives. This information was then compared to MIIS 2003 and an implementation methodology was conceived based on the cumulative discovery.

Additionally, the business requirements—such as product functionality, load-balancing requirements, usage models, environmental/topology needs, scalability concerns, security, and supportability—were also explored and thoroughly documented for OMD.

With the discovery complete, THG then developed and documented the optimum physical and logical architecture, delivering a Solution Architecture Document that was carefully reviewed during a Review Meeting.

With the Solution Architecture Document approved, The Henson Group set up and installed the initial servers for the solution. This included building a separate infrastructure for deployment purposes including Windows 2003, MIIS 2003, and SQL 2000 in the new environment.

When data in MIIS is modified, data is changed on connected data sources to ensure cross-database identity synchronization.

Based on the extensive information THG gathered and analyzed during Phase One, THG's MIIS specialists assisted OMD in configuring MIIS and developing OMD's Management Agents (MAs) in MIIS for OMD and TVD domains. THG also assisted in implementing and exporting User Name and Password data from TVD to a SQL Server for extranet access.

Subsequently, The Henson Group completed testing of the MIIS environment to ensure that MIIS successfully manages and coordinates the identity information derived from multiple data sources throughout OMD's organization that were intended.

With the solution deployed successfully, THG and OMD then met to review all aspects of the deployment. As part of this process, The Henson Group documented all of the concerns of OMD's project leaders, including requests for modifications and/or programming enhancements.

THG also recommended specific support procedures and issues to monitor, including threshold and security auditing.

With the custom THG MIIS solution successfully deployed, The Henson Group initiated another round of discussion and examination to ensure any, and all, of OMD's outstanding issues were addressed and quickly resolved. This was also an educational phase whereby THG instructed OMD's IT professionals on optimum usage of the solution.

This phase included the following main stages:

- Solution Specification: THG delivered a detailed Solution Definition document and workflow that clearly specified the usage, deployment, and backup process for OMD's MIIS environment.

- Extensibility: THG delivered detailed documentation creating a framework around which additional directory systems, including Windows 2000 Active Directory, Windows 2003 Active Directory, LDAP, eDirectory (formerly NDS) and other technologies for the purpose of facilitating future enhancements to the solution.

- Enhancement: THG will provide documentation describing specific configuration changes that will provide improved functionality in terms of security and application performance, using tools including Active Directory Application Mode (ADAM).

RESULTS & BENEFITS

The THG solution developed for OMD was based upon implementing MIIS 2003 with the appropriate data connectors, known as Management Agents (MA), that enable it to pull identity information from connected data sources to create a

All Rules for a given connected data source are processed strictly within the associated connector space, which continues to be available for processing even if a data source becomes disconnected.

metaverse, a centralized store of merged identity data. This aggregated data store is then exported via another MA to create a separate SQL database for access by other OMD applications that require knowledge of the various user objects that have been gathered over time.

The identity management architecture that THG implemented consists of several key components, (a) an MIIS 2003 server also running SQL Server 2000 to provide the necessary integrated data store, (b) two connected identity data sources, the OMD Active Directory Domain and the TMV Active Directory Domain, (c) a separate server running SQL Server 2000 on which the UserData database is stored, and (d) the three Management Agents (MA's) that connect each external data source.

MIIS 2003 Namespace

Internally, MIIS 2003 server is comprised of two namespaces, which store the identity information. The two namespaces are:

- The connector space (CS)
- The metaverse (MV)

The connector space is a staging area that contains representations of the designated objects from a connected data source and the attributes specified in the attribute inclusion list. The MA's import from or export identity data to a connected data source (CD) for processing in the CS. MIIS 2003 maintains a distinct connector space as a staging area for each management agent. All Rules for a given connected data source are processed strictly within the associated connector space, which continues to be available for processing even if a data source becomes disconnected.

The metaverse is a storage area that contains the aggregated identity information from multiple connected data sources, providing a single global, integrated view of all combined objects. Metaverse objects are created based on the identity information that is retrieved from the connected data sources and a set of rules that allow you to customize the synchronization process.

The strength of the MIIS 2003 product lies in its highly scaleable and flexible nature. It natively provides MA's that support virtually every directory services product on the market, as well as variety of file data structures. It also offers the ability to connect directly to SQL databases.

While the current OMD Worldwide implementation only connects Active Directory data sources to each other and a SQL database, the architecture can be readily extended by implementing the appropriate connectors. This gives the solution the ability to incorporate identity information from Lotus Notes users, iPlanet directory users, Novell NDS/eDirectory users, etc.

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Management Agents

Each Management Agent (MA) is an object that controls the communications between its connected data source and the metadirectory, also known as the metaverse. Each MA is designed to perform as a set of instructions that direct how the metadirectory integrates the data from the connected data source.

The instructions contained in an MA perform the following metadirectory functions:

- Create objects
- Delete objects
- Configure parameters
- Ensure data integrity
- Implement transformation rules
- Maintain attribute ownership
- Set attribute flow rules
- Discovering, Synchronizing, and Updating Data

The implemented management agents perform the following in the initial implementation:

- Discover the connected data source, in this case OMD's Active Directory implementations in each forest.
- Synchronize the data in the connected data sources, ~~the OMD and TMV domains,~~ with the metadirectory.
- Update the data in connected data source, a separate SQL 2000 database named UserData.

The Henson Group achieved OMD's expectations by implementing a business processing solution that provides all OMD users, regardless of geographic location or division affiliation, enhanced access to corporate information resources. This solution does so while simultaneously supporting the existing security boundaries that guard access to sensitive data.

The system works by synchronizing usernames and related identity information between the separate Active Directory forests that have been created worldwide.

A username created in OMD France, for example, will also be created in the TMV forest here in the US against which the French OMD user can authenticate and gain access to designated TMV resources. This identity information is then aggregated and posted to a local database for analysis, audits, and other applications as business needs dictate.

In addition, this solution is extensible to give selected external clients, independent OMD business units, and partners the ability to access OMD information resources by making use of the same usernames they currently use to access internal

corporate resources. This new network infrastructure, based on MIIS 2003, provides these users a nearly seamless method of accessing OMD resources as though they were their own.

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