

Project Summary

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Warning:

Our Confidentiality Agreement prohibits the sharing of detailed project information

1. Business Objective

Develop a secure *Internet* application that integrates with clients back-office Energy Management System.

2. Project Overview

In some areas, deregulation is prompting a greater emphasis on customer service. Enhancing the way it interacts with people can help distinguish a company from its competitors when the time comes to retain existing customers and attract new ones. For other companies, rapid growth or, conversely, consolidation is the driver says Sandra R. Sabo of American Gas Magazine.

Our client, a holding company of numerous Gas Local Distribution Companies with over \$20 billion in assets and revenues in excess of \$6.031 billion, anticipating FERC order 636, (which initiated the restructuring of interstate pipeline services) embarked on the creation of an internal Gas Management System to meet the demands of a deregulated environment. After the internal system was brought live, one of the final objectives of the implementation was to extend business processes to its customers via the Internet.

Our project objective was to streamline business partner access to their state-of-the-art energy management system (EMS). Offer secure internet access for commercial customers and marketers so they can better manage their energy needs.

3. Solution

As the first site internally hosted (February 1999), the initial tasks were to educate senior level management on the risks and rewards of Internet technologies. The client immediately concurred with the need for a robust Security Strategy.

The application development effort was segmented into two development tracks, a Framework Team and an Application Team. The Framework Team designed and implemented such common components as a Security Framework, Reports Framework, Forms Framework, and Data Access/Peer Framework. The Security Framework provided the Application Administrator the ability to maintain the role based security model. This model was implemented in a Directory Server which was accessed using the Lightweight Data Access Protocol (LDAP). The Report and Forms Frameworks were extended by the

Application Team, and provided such functions as authentication, session management, and error recovery. The Data Access/Peer Framework was extended to provide access to the legacy database and integration with legacy application.

This robust internet application consists of over 700 Java, HTML, JavaScript, and graphic components.

4. Solutions Architecture

Technologies used to complete project objectives were:

- HTML/CSS/JavaScript
- Java™ Servlets
- Java™ custom objects
- IBM WebSphere Advanced Server
- Netscape Enterprise Server on AIX
- C on AIX
- OOA/OOD
- UML
- Rational Rose
- XML