

» Company Background

- Xcel Energy is a major U.S. electricity and natural gas company with regulated operations in eight Western and Midwestern states.
- Xcel offers a comprehensive portfolio of energy-related products and services to 3.4 million electricity customers and 1.9 million natural gas consumers.
- The American Wind Association ranked Xcel Energy as the nation's No. 1 wind energy provider for the fourth year in a row. The company's Wind source program also is the No. 1 voluntary green-energy program in the country with 72,000 participants.
- In 2009, the Solar Technology and Acceleration Center (SolarTAC) opened in Aurora, Colo. Funded in part by Xcel Energy, SolarTAC will become one of the largest facilities in the world to test and demonstrate advanced solar technologies.
- Xcel Energy worked with policymakers to expand energy-conservation goals in Minnesota, Colorado and Texas. The company spent more than \$140 million on energy-efficiency programs. 2009 energy conservation projects saved enough energy to meet the electricity needs of more than 80,000 homes and the natural gas needs of more than 15,000 homes for one year. Since 1992, Xcel Energy customers have saved enough electricity to avoid the need to building more than 12, 250-megawatt power plants.



As a leading combination electricity and natural gas energy company

» Business Needs

- To make existing system to be more robust, accessible and available, which are accessed by a vast number of customers for fulfilling their organization, servicing and settlement needs?
- To improve visibility, navigability, accessibility and serviceability of the mainframe based applications, through enterprise application modernization tools/methods.
- To implement hosting solution for the customers in order to host their business at our in house location.
- To ultimately increase business by satisfying the existing customers to a whole new level in usability, along with the increase in overall number of customers.

» INITIAL STEPS

- Analyzed current system to replicate the scenario in new environment
- Suggested Host On Demand V7.0 (HOD) for establishing mainframe sessions
- Presented Demo on HOD to access mainframe applications and different models that can be applied and proposed a solution for their business
- Received positive feedback from the clients
- Client agreed on the proposed solution

» Business Problem Case

- To improve accessibility aspect since there is a great need for connecting to mainframe via web or using graphical user interface so customers can access the applications via web browser regardless of their location.
- Not only be able to provide a connection to mainframe applications over the internet but also be able to provide secure connection for the dataflow and transaction.
- To avoid the intricacies and cost of going via a communications server for securing connection with the mainframe.

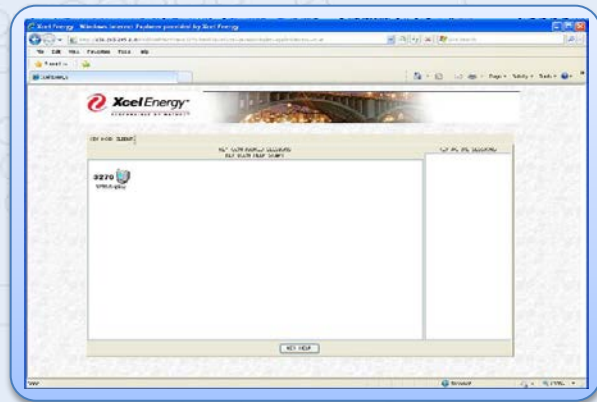
» Solution (IBM Rational Host On Demand)

- ➔ HOD server was setup on the webserver avoiding need for separate hardware
- ➔ Setup the HOD server to be able to redirect connections from users to the mainframe
- ➔ Created a servlet that would avoid the security changes since it could still be access through the firewall
- ➔ Created a customized HTML webpage to suit customer needs
- ➔ Configured mainframe session for users and their groups to access their application
- ➔ Set up security for the restricted use and users able to only access to applications they are allowed

» Key Technologies and Tools Used

- ➔ Rational Host On Demand
- ➔ WebSphere Application Server
- ➔ Internet Information System
- ➔ HTML
- ➔ SSL & TLS Security

» FINAL RESULTS



» Achieved Project Milestones

- ➔ Xcel website with company logo and profile to access the mainframe
- ➔ Setup server for user to access applications from website

» Design Architecture

