

Case Study



MOBILE PORTAL ENABLER WITH CONTENT CREATION & DISTRIBUTION CAPABILITIES



“Idhasoft is a global world-class organization providing best-of-breed localized business and technology solutions, with continuous innovation and quality backed by best-in-class people”

Client Requirement

The system will be a mobile content generation application as well as a mobile community portal enabler through its various modules.

Through its modules, the system will be aimed towards providing centralized wireless content generation through the desktop and enabling desktops to host mobile content as a server.

The modules will be devoted to managing all aspects of enabling a mobile portal such as monitoring the system and acting as an umbrella for exclusive services like client services, wireless security and messaging services.

The system will include the Client module, Mobile Security Server, Mobile Messaging Server, Command Center, and the Mobile Portal, which will be comprised of the aforementioned modules.

Designed to provide an extensive mobile networking experience, the system will be equipped with features to manage user information, plug-ins and content efficiently.

The system will also display dynamic content through the inclusion of RSS and ATOM feeds to maximize user experience.

Challenges

Developing a wireless community network enabler that generates and hosts content through the desktop by incorporating complex modules.

Implementing the framework for an application that includes content generation as well as hosting facilities with modules coordinate with each other to exchange information.

Equipping the modules with enhanced client services, messaging services and content-related functionality.

Developing support for incorporating RSS feeds into handheld devices.

Implementing stringent security measures that safely handle the vast transfer of data.

Technologies Used

Communication Center Environment

Development tools	Visual Studio 2005 (.NET)
Editors	Visual Studio IDE, Edit Plus
Testing tools	Rational Rose Enterprise Edition
Servers	Microsoft VSS.NET 2005
Database	MS-SQL

Security Server Environment

Development tools	Visual Studio 2005 (.NET)
Editors	Visual Studio IDE, Edit Plus
Testing tools	Rational Rose Enterprise Edition
Servers	Microsoft VSS.NET 2005
Database	MS-SQL

Server Development Environment

Development tools	Visual Studio 2005, VC++ (MFC/COM/ATL)
Editors	Visual Studio IDE, Edit Plus
Testing tools	Rational Rose Enterprise Edition
Servers	Microsoft VSS.NET 2005

Client Development Environment

Development tools	Visual Studio 2005, VC++ (MFC/COM/ATL)
Editors	Visual Studio IDE, Edit Plus
Testing tools	Rational Rose Enterprise Edition
Servers	Microsoft VSS.NET 2005

Manpower

Project Leader	1
Developers	6
Designers	2
Quality Assurance Testers	3

Planning

The five modules the form the mobile community portal can be classified as:

- o The mobile security server that communicates with client services, provides HTTP responses to mobile users and handles user validations, among other functionality.
- o The mobile command center that handles the administrator responsibilities.
- o The client services that are capable of generating and hosting the content.
- o The messaging services module for managing SMS activities.
- o The mobile portal comprising of all the previously mentioned modules.

Architecture

Designed to be a powerful tool for generating and hosting mobile content through the web or PC, the system's Security Server communicated with the Client through a secure channel, validating and storing user registration information. The security server was also responsible for updating the WAN IP's, displaying the login screen to mobile browsers and providing HTTP responses to mobile users. Once installed, the Client efficiently handled services like creating and editing content, content-related categories and user profiles. The administrator tasks for the network were managed by the Command Center. This included management of partner details, templates, plug-in libraries and most importantly, key generation and maintenance for partner & users. The Command Center also maintained the database in the event that the client was unavailable. The Client information for the system was provided with a robust database for storing addresses, phone &

geographical information along with registration details. Client services provided maximum freedom in creating and editing content, content-related categories and user profiles. User experience was enhanced through the implementation of live RSS feeds, ATOM feeds and different content from web as well as the PC.

Development Highlights

The system was designed to play the dual role of generating mobile content as well as hosting it as the server, performing these crucial functions through the desktop itself. This eliminated the hassles posed while executing these functions separately. The framework was designed such that each desktop could act as a mobile content generator as well as a mobile server, capable of hosting dynamic mobile content. Users were provided with the ability to create and spontaneously host intelligent contextual ads based upon user preferences. Numerous services that could be accessed from the system included mail, Yahoo Messenger, Google calendar, iTunes etc. The messaging module was synergized with the client services for greater performance. In the event that the Client was unavailable to provide content or information, the Security Server was equipped with the functionality to redirect the user to the Command Center which maintained a copy of the data. The User experience was enhanced through the implementation of live RSS feeds, ATOM feeds and different content from web as well as the PC, such as files or folders. Together, these services formed the mobile portal which provided a fullfledged community networking experience on handheld devices. The system was developed and fully functional within a span of 8 months.

Client Feedback

“GMI is an excellent off-shore service provider. They have a great stable of programmers who have a wide-range of knowledge. They tackled my project with gusto and delivered several releases to make sure customer satisfaction is 100 %. We had continual input into the process (both at the design stage and the functionality stage) and GMI was quick to incorporate our input. We have already contracted with them for another application and will continue to use them in the future.”