

gomembers

A Progress® OpenEdge™ 10 Case Study

Problem

gomembers wanted to offer their customers an upgrade migration path that takes advantage of technological advances such as Web services, that could be accomplished with reasonable development time and effort, that supports interoperability with multiple platforms for diverse customer base, and is open to future growth.

Decision

The development team decided to replace three enterprise-level products with a single integrated solution that maintains their existing complex and time-tested business logic and supports a choice of platform by rearchitecting the basic components of their system and integrating Progress® with Microsoft .NET components.

Solution

Progress OpenEdge™ 10 provides interoperability with Microsoft technologies, such as .NET, ADO.NET, C#, and interfaces with all standard enterprise databases. OpenEdge 10's ProDataSets form the basis of their new architecture by allowing core business logic to share data across various systems.

Result

gomembers can offer their customers new technology, increased functionality, minimize customization, all while maintaining fixed price and time commitments.



Rearchitecting the application

When it came time for Progress application partner gomembers to update its enterprise applications to offer the benefits of new technologies to its membership-based customers, the development team began by carefully analyzing its customers' requirements. As the leading provider of comprehensive software and technology solutions to member-based organizations, gomembers has a diverse customer base, which includes not-for-profit and fund-raising organizations, trade and professional associations, and cultural institutions. Some of their customers have limited technical resources and rely on gomembers for comprehensive services, while others with programming expertise act as development partners. gomembers' suite of products allows its customers to manage every aspect of their organization by integrating over 50 financial management, back-office, relationship management, transaction processing and member communications applications.

What customers wanted was more open access to the applications, better integration options, and their choice of platform. Many customers had already standardized on Microsoft, and others wanted to move in that direction. At the same time, gomembers' Progress-based customers wanted to continue with Progress while taking advantage of new development, and the Oracle customers had similar needs.

It was also crucial to gomembers to retain the ability to offer complete solutions at a fixed price and to uphold their reputation for comprehensive and responsive service. Finally, they wanted to maintain their strategic edge as the technology leader in their vertical market, which they had established by being the first to offer browser-based applications.

“The OpenEdge 10 offering was the best possible path to get from where we were with our legacy products to the future.”

The development team concluded that the scope of the project required a rearchitecting of their system in order to make use of new technologies, such as Web services, to build a robust infrastructure for future growth, and to support their legacy applications during the migration. Time to market was also critical. With this in mind, they evaluated the platforms available from Sun, IBM, and Microsoft. In the end, they decided to retain their Progress investment, which included complex and time-tested business logic, while building applications in .NET to satisfy customer demands for a Microsoft solution. Open Edge 10 offered the interoperability they needed with the bonus of new dataset functionality to support the increased customization options that gomembers wanted to provide. According to Jay Dennis, gomembers’ Vice President of Technology, “The OpenEdge 10 offering was the best possible path to get from where we were with our legacy products to the future.”

The result of this process is gomembers’ new Q product line, which combines the functionality of three legacy applications into a single enterprise application, integrating .NET and Progress code, and offers users a customizable work environment.

Planning for interoperability

In planning their next development phase, gomembers’ team considered complete solutions from other providers, such as Sun’s Java™, IBM’s WebSphere solution, and Microsoft .NET. Their customers’ demands for an exclusively Microsoft solution moved them in the direction of the .NET offerings. But they were also eager to preserve their extensive Progress-based business logic. As an Application Partner, gomembers was already taking advantage of some of the interoperability features in Progress Version 9, and they were kept apprised of the improvements in Open Edge 10 that would make their task easier. Because Open Edge 10 provides tools to integrate seamlessly with .NET technologies, they could leverage their Progress investment while developing applications in .NET.

Open Edge 10 also allows them to continue to support their customers’ choice of database, as Jay Dennis explained. “Part of us choosing the OpenEdge solution is that we were able to keep our Progress database open to our Progress customers, and there are a number of them who have told us they want to stay on that track. ... At the same time, for those customers that were either already on SQL Server or looking to move to SQL Server, we were able to be confident that the OpenEdge product would give us the bridge we needed to get more people moved onto SQL Server if they chose to do that. We also do have a few Oracle customers and we are comfortable that our OpenEdge solution will continue to allow us the option of supporting them.”

Progress’ commitment to working closely with its partners was a major influence on the decision to go with Open Edge 10, according to Dennis. “I think it is important to note the trip we made to Boston to meet with the Progress executives. We were able to get a clearer picture of where Progress was going with this interoperability with Microsoft and some of the other tools that are out there.” As development proceeded, Progress software engineers shared pre-release code and worked closely with gomembers developers to solve any problems that occurred.

Building the core with OpenEdge 10

gomembers began their development effort by redesigning the common processes that make up the core of their system. They developed two basic building blocks, written in Progress code, to support the Q architecture: Q-retrieve manages database searches and works in conjunction with a metadata layer to present the desired information to the user; Q-commit manages database inserts, updates, and deletes in a similar manner. Both are based on ProDataSets.

Using the ProDataSet functionality in OpenEdge 10, the gomembers developers created business objects that draw information from many different database tables. These objects are defined in a metadata layer, abstracted from the actual physical storage. If a Q user needed all the information belonging to an association member, the Q-retrieve process would use the metadata definition of a “member” to return all the necessary data, which might consist of a constituent record, an address record, demographic information, and financial records, all stored in different physical tables. This means that users do not have to understand the database schema or a query language to carry out their tasks. As Mr. Dennis commented, “With the Open Edge ProDataSet definitions, we’re able to define which records are returned in the search, and we greatly narrow the overhead of having to deal with the whole database. We then have the proper subset of tables and fields that we use for presenting information to the user.” With Q-commit, the updating of a member’s information would be just as straightforward.

The business objects created as ProDataSets can also be shared seamlessly with .NET applications, using the new .NET support in the OpenEdge 10 Open Client. A ProDataSet can be passed as a single object to a .NET application, which receives it as an ADO.NET dataset with no loss of either data or definitional information. The same object can then be passed back to the Progress business logic, which can process changes and write them to the database.

Once the core processes were functional, gomembers can now continue development by replacing one module at a time, instead of waiting to deploy until the complete enterprise suite was available. To facilitate the transition, the developers created bridging software that allowed the new Q applications with their open architecture to coexist with a customer’s legacy client-server applications.

gomembers’ Jay Dennis sums up the results of their decision to go with OpenEdge 10. “Using OpenEdge 10, we were able to keep our business logic in Progress and use the proxy process to create the C# proxies of the existing Progress code. This allowed us to preserve the very complex and well-tested business logic and couple it together with some of the brand-new things that were part of OpenEdge 10 like the ProDataSet concept. The bridging to ADO.NET on the data side made it possible for us to connect what we wanted to do in terms of .NET-centric objects with our existing Progress objects.”



Meeting customer needs: flexibility and value

In response to user requests for increased customization, gomembers designed the Q User Interface Builder (QUIB). QUIB gives customers on tight budgets an enterprise-level application experience that rivals more costly alternatives. Based on the core components built in OpenEdge 10, QUIB allows customers to easily create their own personalized interfaces, designing and modifying their own forms and customizing labels to fit their workflow and business terminology. Users can also define their own searches, filters and result sets.

With Web services and the XML interfaces, the new Q product offers customers more comprehensive options for integration and reusability than their current applications. To illustrate the power of this approach to automating common tasks, gomembers produced some sample Web services including one that retrieves customer information from the database and attaches it to Word and Excel documents using VBA. As Jay Dennis noted, “Customers with no development expertise at all are going to be able to reuse these things in a nice fashion.” The sample Web services are also thoroughly documented so that gomembers’ own development partners can integrate them into their specific development processes. gomembers plans on leveraging even more of its Progress business logic as Web services as time goes on.

About gomembers, Inc.

gomembers is the leading provider of comprehensive software and technology solutions designed to meet the needs of member-based organizations and the needs of the meetings and convention industries. Over the twenty-five years that gomembers has been in business, its direct customer base has included thousands of the most prominent organizations and companies. gomembers' software and technology solutions enables its customers to automate a number of enterprise resource planning, member relationship management, transaction processing and member-to-member communications functions in a single software platform with seamless inter-processing of data across all applications.

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gomembers' customers use the company's solutions to improve operating efficiencies, enhance services offered to their members and enable interaction with and between their members. gomembers' software integrates over 50 financial management, back-office, relationship management, transaction processing and member communications applications specific to member-based organizations. gomembers sells its solutions through a direct sales force and provides a wide range of customizations, training and support service to their customers.

gomembers offers a thin-client software solution that resides on a network server and can be accessed by the user through any standard Internet browser. gomembers' browser-based solution can be deployed locally on an organization's own server or can be hosted remotely and accessed over the Internet. gomembers also offers enterprise resource planning and member relationship management software for use in a client/server environment that can be integrated with their transaction processing and member-to-member communications functions.

Because many of gomembers' customers organize meetings and conventions on a regular basis, they also offer industry leading prepackaged software products that enable its customers to coordinate virtually all of the required functions relating to meeting and convention planning. Please visit www.gomembers.com.

About Progress Software

Progress simplifies the development, deployment, integration, and management of the world's best business applications. Progress and its 2,000 global Application Partners offer more than 5,000 Progress-based business applications that precisely fit customer needs and deliver competitive advantage. Customers purchase more than \$5 billion annually in cost-effective software and services from Progress and its partners.

Progress' OpenEdge platform enables its partners to deliver lowest cost-of-ownership applications that are rapidly implemented and easily integrated within and across the extended enterprise. Progress Software Corporation (Nasdaq: PRGS) can be reached at www.progress.com.

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