



StoneEagle—RPG Application to .NET

450,000-line RPG application converted to .NET in six months.

Quick Take

PROBLEM

To make their solution more marketable, StoneEagle Group needed to move from green-screen applications to a modern browser user interface.

SOLUTION

ASNA Monarch was selected for the project, and StoneEagle ultimately got where it needed to go, in just six months.

RESULTS

- Migrated 450M lines of code in less than six months
- The migrated browser-based UI gives new life to an old application
- Able to retain and advance the skill set of existing RPG programmers
- Offers the future possibility of migration to SQL Server

Customer

StoneEagle Group, located in Richardson, Texas, specializes in providing software solutions and enterprise administration systems. Since 1967, these solutions have been used by industries such as insurance carriers, banks, automotive dealers, dealer service providers, and credit unions.

Challenge

One of StoneEagle's products, SEcureSCS, is a multi-functional suite of applications that create safe and secure connection points between automobile dealers, banks, and credit unions. Using the current technologies, this application suite provides administrators with enterprisewide integration across business boundaries.

SEcureSCS was originally written for the AS/400®, and is a large application with many OS/400® program objects. About six years ago, the StoneEagle team started some investigative efforts into ways to modernize the look and feel of SEcureSCS. Brent Allen, President of the StoneEagle Warranty Division, describes the decision to improve the application suite as a quality issue.

"As more full-featured user interfaces started making their way into enterprise applications, we knew we needed to ramp up the quality of the SEcureSCS user interface. Despite the underlying quality of SEcureSCS, customer perception is very important. We realized that the time was rapidly approaching when browser-based, graphical user interfaces would simply be assumed as a given part of a quality software solution."

"Time to market was very important to us. We need to be able to show our current customer base and new prospects that StoneEagle isn't stuck in a legacy rut... ASNA enabled us to deliver on those expectations—in just six months."

Brent Allen, StoneEagle President, Warranty Division

The programming team at StoneEagle spent quite a bit of time with several application modernization products, including IBM's® WebFacing Tool, trying to modernize SEcureSCS. StoneEagle did not want to, nor did it have the luxury of, rewriting the application. After failing to get the desired result with the WebFacing effort, as well as unsuccessful attempts with other products, StoneEagle was ready for a different approach.

ASNA Solution

The move to .NET: Because StoneEagle had some Microsoft® infrastructure in place, the notion of morphing SEcureSCS into a Microsoft .NET-based solution was appealing. The StoneEagle team turned its attention to ASNA Visual RPG® for .NET ([AVR.NET](#)) and ASNA Monarch®. [AVR.NET](#) is a .NET-based RPG® compiler that connects applications to either the System i™ or Microsoft SQL Server™ databases, and Monarch is a migration suite that transforms green-screen RPG applications into [AVR.NET](#) applications.

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Brent Allen, StoneEagle President, Warranty Division

Says StoneEagle’s Chief Information Officer, Johnny Sides, “With just a little exposure to ASNA’s products, we thought that we had found a winner. However, given the previous modernization mis-starts we’d experienced in the past, we were, as you might guess, more than a little skeptical. Our experience has generally been that when vendor claims sound too good to be true, they generally are too good to be true. ASNA’s claim of being able to modernize our applications with a minimum of fuss and bother, however, turned out to be true.”

It’s still RPG! Because ASNA Monarch converts RPG/400® or ILE RPG programs into ASNA Visual RPG, the existing RPG coding skills of the StoneEagle team could be leveraged. This was a very important consideration for StoneEagle. One of the critical metrics for StoneEagle was the time it would take to modernize its applications. Because the converted code remained RPG, the learning curve to maintain and modify the converted code was minimal. Sides says, “Our time to market was a primary consideration. Not only did we need our application enhanced, but we wanted to be able to do it with an environment that would be comfortable and adoptable by our current staff. We didn’t want to hire a bunch of Visual C#® or Java™ contractors—we needed to do things ourselves.”

The migration/modernization process: A core set of the programs, for demo purposes, were migrated and being used for demos in just two months. In the end, the StoneEagle team migrated 300 RPG program objects, which translates to about 450,000 lines of code, in six months—and that includes work done to cosmetically improve the user interface.

SEcureSCS, as it lives on the System i, is a rich and deep, mature application. It provides substantial functionality. In every possible case, if a program could be left on the System i (batch jobs, for example) they remained there. Many business processes, tasks, and programs continue to run unchanged on the System i. (AVR provides an effective CALL/PARM mechanism so it’s easy to leave OS/400 objects in place if necessary or desired.)

Project Benefits

Full-featured user interface: “ASNA’s technologies let us convert and modernize our application’s user interface in six months; our estimates are that the same effort would have taken two years to rewrite. We were also able to do this and leverage our existing RPG programming staff. ASNA’s RPG-based technologies provide a comfort zone that allowed our existing staff to transition to .NET nicely. Because Monarch generates RPG, it allows our programmers to be productive quickly—not needing to learn a new language.

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Johnny Sides, StoneEagle Chief Information Officer

Short time to market: “The time to market with this modernization project was very important to us. We need to be able to show our current customer base and new prospects that StoneEagle isn’t stuck in a legacy rut. Existing customers and new prospects both expect leading-edge technology from StoneEagle, including applications with modern user interfaces. ASNA technologies enabled us, in just six months, to deliver on those expectations.”