

## ASNA Monarch Case Study:

**Vitec Nice –***Vitec Nice insures its RPG app's future with ASNA Monarch* 

By Roger Pence

# Vitec Nice insures its RPG app's future with ASNA Monarch

Founded in Sandvika, Norway in 1987, Vitec Nice specializes in software for the insurance industry. Vitec Nice's software is dedicated to providing a fully-integrated insurance software system for both personal and commercial insurance. Nice was acquired by Vitec, a large, publicly-traded Nordic company specializing in industry-specific software, in November 2015. Vitec Nice insurance software is used by many insurance companies throughout Denmark, Sweden, and Norway.

For many years, Vitec Nice very successfully sold its RPG, character-based IBM i application. However, as the graphical user interface started making inroads into enterprise software, it became more challenging to acquire new customers with what was perceived as an oldfashioned software product. Never mind that this "old-fashioned" software product was highly reliable and offered resolution for virtually any

#### At a glance...

#### **Customer Profile:**

Vitec Nice specializes in software for the insurance industry. Its software is used by many insurance companies throughout Denmark, Sweden, and Norway.

#### Situation:

Although successful for years a character-based application, the stigma of the green-screen user interface was making it increasingly difficult for Vitec Nice to get new customers. It needed a way to provide a modern user interface for its applications.

#### Solution:

Vitec Nice used ASNA Monarch and ASNA Visual RPG to migrate most of its application to Microsoft's .NET platform. This not provided the modern browser-based user interface needed, but also provided the opportunity to later, if needed, move the application 100% to .NET and Microsoft SQL Server.

#### Benefits:

- Improved UI substantially improves product competiveness.
- The migrated application offers ability to later migrate database to SQL Server if needed.
- .NET offers substantially more powerful features that what is available with native RPG.

#### Products:

ASNA Monarch, ASNA Visual RPG, IBM i, Visual Studio .NET

insurance company challenge, the stigma of the green-screen was challenging to overcome.

Says, Vitec Nice Director of Systems and Projects, Frode Kongsrud, "Although we had a

great reputation in the insurance business, it became quite challenging to compete directly with the lower-quality but attention-getting GUI-based competition with our greenscreens. We simply were not able to sell the character-based version of our software anymore. Being highly confident otherwise of the quality and value of our RPG-based software we set out to modernize our application's user interface."

To resolve its user interface issues and breathe new life into its formidable insurance packages, Vitec Nice turned to ASNA Monarch to migrate its insurance application to .NET.

### Screen scraping no, Monarch yes

Several years ago, Vitec Nice spent just enough time with IBM's WebFacing product to learn that simple screen scraping would not solve the problem. Screen scraping was just too limited in its ability to build the quality UI needed.

ASNA's Icelandic distributor, Ferli, introduced Vitec Nice to ASNA's then COM-based Visual RPG (a Windows-based RPG compiler) many years ago. Several years later, after learning that screen scraping wasn't good enough, Kongsrud remembered his earlier encounter with Ferli and ASNA products. After talking to Ferli again, he learned that since they had last spoken, ASNA had introduced a family of .NET products.

Kongsrud explains, "Bjorne Hilmarsson and Valdimar Valdermarsson at Ferli showed me ASNA Monarch and ASNA Visual RPG. Their enthusiasm impressed me and I wanted to learn more about these ASNA products.

By seeing Ferli's success with ASNA products I trusted them and believed we could have the same results at Vitec Nice. - Frode Kongsrud, Vitec Nice Director of Systems and Projects

"Bjorne and Valdimar were able to quickly explain the high-level concepts of Monarch and Visual RPG to me. With their help I quickly understood the basic processes. By seeing Ferli's success with ASNA products I trusted them and believed we could have the same results at Vitec Nice." (Read details and other information about ASNA Monarch and Visual RPG below in this article.)

## Ready, set, go...

Kongsrud quickly arranged a Monarch proof-of-concept with ASNA's European IBM i migration team. With the pilot app a big success, the Vitec Nice team commited to ASNA Monarch and ASNA Visual RPG to migrate their applicationf. The Vitec Nice insurance application is composed of about 2500 programs (which includes CL, RPG/400, and ILE RPG members) representing about 2.5m lines of code. Because the three primary regions that Vitec Nice serves (Denmark, Norway, Sweden) all have different regulatory compliance schemes, there are essentially three versions of the Vitec Nice application—in other words, there was a lot of work to do!

The migration efforts for Norwegian version of the application began in 2013. The Vitec Nice development team has 16 developers, with 10 or 11 focusing exclusively on the Monarch migration project. The team's skillsets are about half traditional RPG development and the other half .NET development. Initially, Vitec Nice is migrating to ASNA Visual RPG and keeping the database on the IBM i. 100% of the interactive programs (those with a UI) and about 70% of the batch programs have been migrated. The remaining 30% of batch programs remain currently on the IBM i, doing intense server-side calculations and file IO. The first Norwegian customer went live with the migrated application about 18 months after the migration work started. Work is nearly complete for the Danish version of the application and it will roll out to customers this fall with the Swedish version to be done after that. As currently deployed, there are about 300 application users.

The Vitec Nice development is doing its Monarch migration itself—with very little help from ASNA. Monarch migrations are often a highly collaborative affair between ASNA's worldwide application migration specialists and a customer migration team. However, in Vitec Nice's case its team had the skills and determination to do the work itself. That said, Kongsrud is highly complementary of ASNA's tech support, "We certainly ran into many tough spots, especially early in our work, but the ASNA tech support team always quickly delivered the answers we needed to get us back on track."

## **Rough spots and surprises**

You don't migrate 2.5m lines of code without a few rough spots and surprises, and in the Vitec Nice migration project the two were closely related. One of Kongsrud's biggest concerns with the Monarch migrated application was performance—especially as it relates to response times for end users.

He explains, "Nothing is faster than a 5250 device for dedicated data entry. A skilled user can really go fast with the character-based user interface, and I was worried that the browser-based version wouldn't sustain their fast fingertips. That fear turned out to be completely unfounded. It was quite surprising how quickly users adapted to the HTML5-rendered version of our application."

As for rough spots, Kongsrud was quick to name JavaScript. To ensure the appropriate level of user experience necessary, a measure of JavaScript is always necessary in a browserbased application. Monarch has JavaScript built in, but Vitec Nice wanted to add additional features. However, a little hard work and Vitec Nice got through the JavaScript issues—and that work paid off with very happy users.

## Looking ahead

Vitec Nice's ultimate plans are to migrate the application entirely off of the IBM i, moving the IBM i database to SQL Server, and maybe, in a step to better prepare the source code base for a younger generation of programmers, transform the ASNA Visual RPG to Microsoft C#. The stepwise migration path Vitec Nice is taking enables it to get deliverables more quickly to customers, but also allows the option of further application modification in the future to meet Vitec Nice's longer-term strategic goals.

We have been amazed at what Monarch does for us. We couldn't possibly have rewritten our applications to .NET by hand in the time it took to migrate the existing application to .NET with Monarch. We are now able to present a thoroughly modern user interface to new prospects and that is very exciting for us. - Frode Kongsrud, Vitec Nice Director of Systems and Projects

Kongsrud summarizes the project, "We have been amazed at what Monarch does for us. We couldn't possibly have rewritten our applications to .NET by hand in the time it took to migrate the existing application to .NET with Monarch. We are now able to present a thoroughly modern user interface to new prospects and that is very exciting for us. We are also very excited at the 'what can we do now' possibilities ASNA Monarch has provided us with .NET and our new Web user interface." (See the new user interface gallery below.)

#### **ASNA Monarch and Visual RPG**

ASNA Monarch is an analytical/migration suite designed to persist IBM i RPG/CL assets to the Microsoft .NET platform. Monarch migrates RPG and CL as either ASNA Visual RPG or Microsoft C# and display files are converted to an HTML5-based Web user interface. The database provider for Monarch is ASNA DataGate. DataGate enables the migrated code to connect to either the original IBM i DB database or, with Monarch's help, migrate the database to Microsoft SQL Server and connect the migrated app to it. In either case, the target database is transparent to migrated source code—no changes to code are required to move the app from the IBM i to MS SQL Server.

Perhaps as important as its substantial code and database transforming components, Monarch also provides a rich and deep analytical component that, using information minded from the IBM i, helps build a migration roadmap and repository of migrated components. The roadmap is instrumental in guiding the migration of the IBM i application to .NET.

ASNA Visual RPG (AVR) is an RPG compiler for .NET. It enables the creation of Windows, Web, Mobile, and Web services applications for the IBM i. Because AVR is very easy for traditional RPG programmers to learn, it is a good target language for an ASNA Monarch migration when there are experienced RPG coders on the team who will maintain the migrated application.

## Vitec Nice ASNA Monarch Screen Gallery

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## **About ASNA**

In its fourth decade as a market leader and innovator for IBM midrange systems, ASNA provides comprehensive and flexible solutions for modernizing IBM i applications to the Microsoft .NET platform.

ASNA enables companies to integrate and extend their RPG green screen solutions to .NET, the Web and Mobile, while preserving investments in IT and human resources. Our solutions are distributed worldwide and used by more than a million end users.

ASNA holds a Microsoft Gold competency in Application Development, is a Microsoft Visual Studio Industry Partner, an Advanced Tier Member of IBM's PartnerWorld for Developers and a Gold level partner of Microsoft's Platform Modernization Alliance.