

ASNA Case Study

Penhall breaks the Internet barrier with ASNA Visual

RPG

Imagine this: right now, someone, somewhere in the U.S. wants a bridge torn down or a concrete stoop removed. And the Penhall Company, based in Anaheim, California, is ready for the call.

Since 1957, the Penhall Company has been at the ready to perform jobs that most of us never think about. The Penhall Company has 45 divisions with offices in 17 states. Across the country, Penhall dispatchers schedule and organize work like tearing down old bridges, demolishing old concrete structures, grinding (rehabilitating) old highways, cutting concrete, and putting rain grooves in existing roads. Romantic? Nope. Necessary? You bet.

To organize its national network of dispatchers, the IT staff at Penhall used ASNA Visual RPG (AVR) to create a world-class Web-based scheduling and dispatching application. This application connects to the home-office IBM i to synchronize, in real time, all scheduling and dispatching.

Windows first

As a first pass at rejuvenating its traditional, IBM i green screen applications, the Penhall IT team first envisioned a networked, Windows-based replacement. They knew the rich Windows user interface would let them substantially improve their applications. Wanting to leverage its existing RPG skills, the Penhall team first looked at IBM's VisualAge for RPG—but quickly dismissed it because it was hard to find anyone using the product, making learning and additional resources very hard to acquire.

With a trial copy of AVR in hand, Penhall's Jerry Humble went through the tutorial and quickly deemed AVR Penhall's application development environment of choice. Still on the Windows track, Jerry attended one of ASNA's five-day Windows programming classes.

AT A GLANCE

Customer Profile

For almost 50 years the Penhall Company has been at the ready to perform jobs that most of us never think about. Penhall Company has the resources, skill and know how to service all concrete cutting and breaking needs.

Situation

Penhall needed to organize its national network of dispatchers comprised of 45 divisions with offices in 17 states.

Solution

The IT staff at Penhall used ASNA Visual RPG to create a world-class Web-based scheduling and dispatching application.

Benefits

This central application provides Penhall's users with quick and timely information about equipment and employee availability.

The new integrated application has dramatically increased the efficiency of Penhall's dispatch and accounting personnel while providing much more timely and accurate information.

Products

AVR.NET, DataGate, IBM i, OS/400, DB2/400, Visual Studio .NET

recalls Jerry Humble.

With training under his belt, Jerry spent a few months off and on writing a portion of their new application with AVR. However, in pretty short order, the inherent limitations of wide-area access to a traditional fat Windows client became apparent.

Says Jerry, "We have 45 divisions, in 34 locations, in 17 states. Penhall is licensed to do business in all 50 states. Our scheduling and dispatching application needed to be easily accessible to anyone within our organization. I quickly realized that the allure of Windows, with its very cool user interface components, was overshadowed by deployment and remote access issues for our users across the country."

Jerry knew the answer was out there—the Internet. "We stopped our Windows development and took a long, hard look at how best to get our application to the Web. Luckily for us, AVR is as good at building browser-based Web applications as it is for writing Windows apps."

"In short order, I got up to speed with how to write AVR Windows programs. These programs connected effectively to our IBM i. It was very exciting,"

Jerry Humble

The Web is a bigger challenge

Having learned how to write AVR applications for Windows very quickly, Jerry and his team knew they'd have to work a little harder to build the Internet-enabled version of their application. Given the broad array of technologies required for building a great Web application, Jerry and his team brought in a consultant to help keep them on the straight and narrow as the Web version of the app came to life.

Explains Jerry, "Our Windows experience with AVR helped pave the way for building Web apps with AVR. With a solid knowledge of AVR under our belts, and with our consultant on board to help us over the rough spots, we rolled up our sleeves and got busy building the Web app." The Penhall Company had pretty substantial expectations for its AVR-powered Web application.

"Our Web app had to directly integrate into our existing IBM i/400 data and interface to several third-party IBM i applications. AVR's built-in support for connecting to the IBM i database, even over the Web, made this a snap. Effective response time was important to us because our Web app is a heads-down data entry app with several panels and highly-tailored data validation. AVR came through in every case to help us build a terrific browser-based Web application," says Jerry.

The Web app was built in approximately six months. The programming team consisted of the consultant and two Penhall programmers. The green-screen programmers on the team had no prior experience with Web programming—yet AVR leveraged their skills and they were quickly productive building AVR Web apps.

XML and beyond

The Penhall team architected their Web app to help Penhall move seamlessly into the future. The Web app generates XML to feed its many browser-based panels. Today, this XML feeds HTML for the browser panels, but ultimately it will also feed WML (wireless markup language) to power hand-held wireless devices.



Jerry proudly proclaims, "Our AVR-powered Web application is a huge success and it not only eases the hassles of managing a national business, but it saves us money, too. Where Penhall once thought about installing an independent dispatch system in each of the 34 offices, we now have a single system serving all of our users and it is integrated with our accounting and operating systems. This central application provides any of our users, quick and timely information about equipment and employee availability. In addition, the new integrated application has dramatically increased the efficiency of our dispatch and accounting personnel while providing much more timely and accurate information."

Penhall's Web project is an unqualified success. Next up for the Penhall programming team is to add modules that will let customers place orders and check account status over the Internet.

"We're very happy we chose AVR to build our Web application. AVR connects effectively with our IBM i/400 and leverages the RPG skills of our existing programming team," says Jerry.

About ASNA

ASNA, provides comprehensive and flexible solutions for modernizing IBM i applications to the Microsoft .NET platform. ASNA enables companies to integrate and extend their solutions to .NET, the Web and beyond, while preserving investments in IT and human resources. ASNA solutions are distributed worldwide and used by more than a million end users.

ASNA is a Gold Level partner of Microsoft's Partner Network, Microsoft Visual Studio Industry Partner, and an Advanced Tier Member of IBM's PartnerWorld for Developers. ASNA is also a gold level partner of Microsoft's Platform Modernization Alliance.

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