



BladeNET Scores With Borland Enterprise Tools

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Contributors

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Version History

1.0	April 1, 2003	Initial Release
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Amateur sports administration is an application that appears to have been waiting for the Internet. Administrators, usually dedicated volunteers working out of their homes, manage players, coaches, volunteers, referees, and venues spread out across a large area. Timely access to registration information, schedules, standings, and league news are critical to the smooth operation of any sports association.

For years, amateur sports leagues have been managed using paper, pen, and large filing cabinets. With the advent of the personal computer 25 years ago, many leagues began developing software to manage their two primary functions: player registration and game scheduling. These initial systems varied in scope from simple spreadsheet solutions to complex database applications with data published over a bulletin board system or BBS.

One of the latter program types emerged from the Mississauga Hockey League in Ontario, Canada. Bob Fletcher, a coach who has served in various positions in the league including registrar and president, developed and refined his program over the course of 20 years. Bob saw the Internet as an opportunity to open his application up to the world, and [BladeNET](#) was born.

“One of the major challenges in minor hockey that BladeNET addressed was reducing the volunteer workload and providing instant information to the participants. This new hosted model now allowed the leagues to manage their Schedules, scores, and standings without the need for local systems and dependence on local amateur technology solutions.” commented Bob Fletcher.

BladeNET engaged [Dolphin Data Development Ltd.](#), based in nearby Georgetown, to rewrite the application for the Internet. Kevin Dean, Application Services Manager for Dolphin, immediately decided on a Java-based solution. Having worked with Borland products for a number of years and comfortable with their consistent quality and developer-friendly features, Kevin settled on JBuilder as the primary development tool.



The first prototype for the Internet-enabled BladeNET application was developed in Java using Swing-based applets, VisiBroker CORBA server objects with hand-coded SQL, and servlets for HTML presentation. Today, the BladeNET AllPlayers application is a robust, multi-tier application running on the Borland Enterprise Server 5.

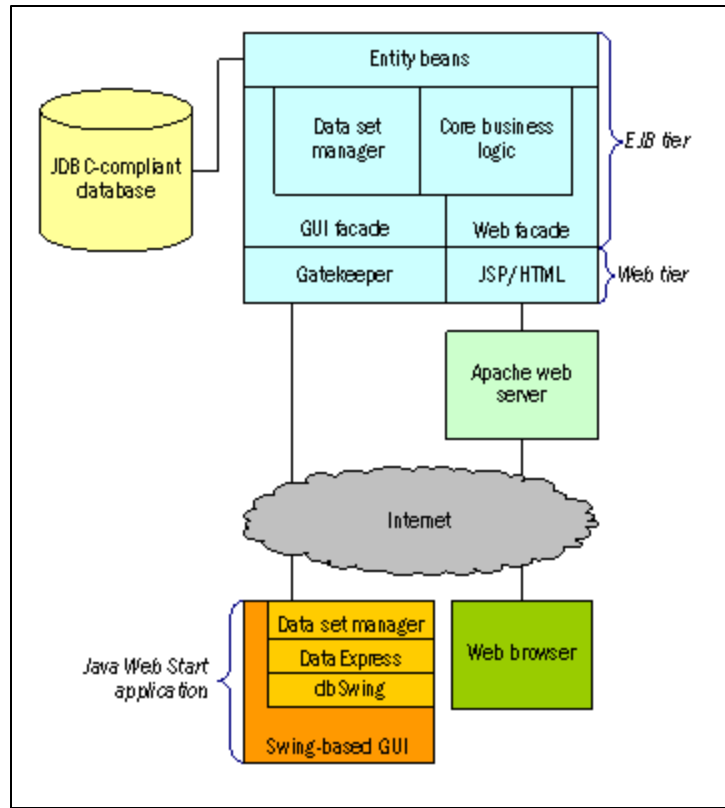


Figure 1 - Application Architecture

JBuilder

JBuilder was a natural choice as a development platform. In a single environment, the development team could write the application, build the JAR files, and run all the components while seldom leaving the IDE.

Just as important as the IDE were the additional libraries provided by Borland, most notably the DataExpress and dbSwing components for database management. The power and extensibility of these components enabled Dolphin to develop a robust GUI with integration all the way back to the entity beans in the EJB tier.



With the introduction of Ant support in JBuilder 7, many of the external tasks used in the build process were integrated into the project, simplifying the development and ensuring that all required tasks were completed in the correct order. Project group support in JBuilder 8 allowed the application development to be further broken up into its logical components, giving developers only the project subsets required for the components they were working on.

“As the application has grown in complexity, so too has JBuilder’s support for developing complex applications,” observed Kevin, adding “The introduction of application frameworks support in JBuilder 8 came as we made the decision to rework the JSP tier to use Apache Struts. The earlier support for Sun’s JNLP (Java Network Launching Protocol) was also a welcome addition as we had adopted that architecture early on to distribute the rich GUI client that our users required to manage the large volumes of data.”

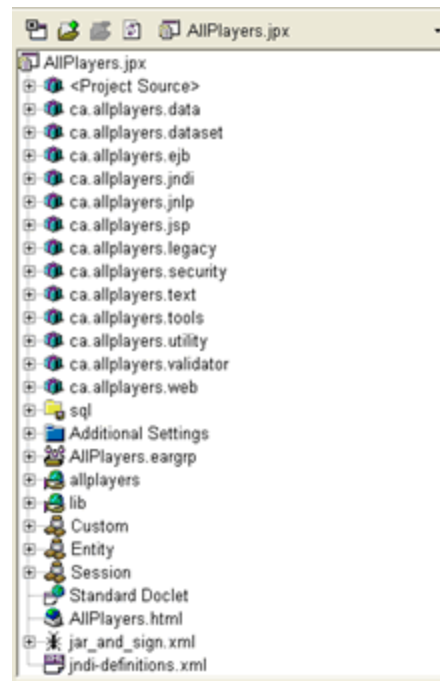


Figure 2 -JBuilder project view with Ant and directory view support

Borland Enterprise Server

With approximately fifty session beans and over a hundred entity beans, the BladeNET AllPlayers application is in the medium to high range of J2EE application sizes.

Dolphin selected the Borland Enterprise Server as the deployment platform for a number of important reasons. From the development team’s perspective, the tight integration with JBuilder made it easy to develop and test the application in an environment similar to the production environment. The BES console view into the individual bean states allowed the deployment team to monitor the application in real time and work with the developers to reconfigure caching options to improve performance.

Ed Wiseman, Dolphin’s Network Services Manager, is responsible for maintaining the servers that host the BladeNET application. According to Ed, “The BES Management Console gives us complete control over the application environment from anywhere on our network. Whether we are configuring the Apache web server or tuning a partition, it’s all there in one easy-to-use interface. The Borland Enterprise Server is also very easy on the servers: we see very little load on the BES server and almost none at all on the database server thanks to Borland’s optimized SQL.”



The small footprint and high speed of the Borland Enterprise Server, coupled with caching built into the application itself, allows BladeNET to run on what many would consider low-end hardware: a dual 1GHz Pentium processor Linux system with 1GB of RAM runs BES while a single 800MHz Celeron processor Linux system with 512MB of RAM hosts the database. Together, these two machines serve an average of 12,000 visitors and 250,000 hits per day. For BladeNET, the Borland Enterprise Server has delivered an incredibly low total cost of ownership without compromising the quality of the service to their clients.

Summary

As BladeNET continues the development of its application suite, they can do so with the confidence that Borland's enterprise tools will continue to meet their needs and deliver the highest quality demanded by the amateur sports community.

About BladeNET Amateur Hockey Council

The BladeNET Amateur Hockey Council is a not for profit service that provides free online team administration, scoring, and automatic schedule generation to every member of the Amateur Hockey Community in Canada.

About Dolphin Data Development Ltd.

Dolphin Data Development Ltd. has been building solutions for the logistics and manufacturing sectors since 1994, either directly or in partnership with other solutions providers. We provide solutions for the Internet, Handheld Programming, Network Management, and Documentation.

About Borland Corporation

Borland Software Corporation (Nasdaq NM: BORL) is the leading provider of technology that helps Global 1000 companies develop, deploy, and integrate software applications. Delivering best-in-class solutions dedicated to interoperability, Borland allows enterprises of all sizes to move into Web-based computing while continuing to leverage the benefits of legacy systems.

Founded in 1983, Borland is headquartered in Scotts Valley, California, with operations worldwide.

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