

Product Review

JBuilder 9 Enterprise Suite

Reviewed by Dave Neuendorf and Richard Wiener

Here we are again with another new version of JBuilder. It seems as if new versions are being produced at an ever increasing rate. There is no doubt that JBuilder has emerged as the premier integrated development environment for Java software and enterprise development. Since we have done detailed reviews in the recent past it is not our intention to review every aspect of this huge and powerful product. As always, we will focus on the aspects of JBuilder that interest us the most and represent improvements from earlier versions.

Project Management

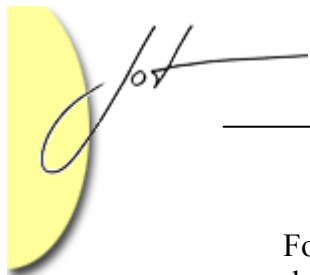
JBuilder has always provided support for project management. This latest incarnation allows you to drag and drop files and sub-directories between and among projects, manage files in the project pane and open TogetherSoft projects within JBuilder.

Build Management

The Borland Make, the default compiler, has been re-engineered to use the standard javac compiler in conjunction with smart dependency checking. Apache Ant has been updated to version 1.5.2. One can export a project to Ant.

Productivity

This release of JBuilder adds new productivity tools and expands on existing ones. The editor's overall design seems to be aimed at keeping workflow continuous by avoiding looking things up in online help or outside references. It has long had a Code Insight feature to help find the right methods to call, parameters to pass, etc. Now the Error Insight tool suggests fixes for code errors in a similar popup format. Not all of the suggestions make sense. For example, if a statement contains a method call on an unknown object reference, the list of suggested references contains objects of types that do not have the method in their interfaces. But chances are that the reference you need will be in the list, and fixing the error is a simple matter of selecting the correct reference from the list.



For those who like to design while coding, it would be possible to use Error Insight as a kind of to-do list to manage complexity. Write your code as if a given class or method already existed, keeping your thoughts flowing until a logical stopping point. Then look at the list of errors that JBuilder maintains for the file, and use Error Insight to fix them one at a time. For example, click on a missing class or method and have JBuilder bring up a dialog to create what you need.

Sync Edit allows you to edit all occurrences of an identifier in a selection by editing just one of them. This feature is automatically invoked when a template inserts code. Javadoc Insight provides a popup list of possible javadoc tags whenever the programmer types “@” in the javadoc context.

Debugger

Objects belonging to a class with a well-defined toString() method can be displayed as a string.

Web Development

One can now access the JSP wizard by right-clicking the Root Directory node of a WebApp in the project pane and selecting New|JSP from the context menu.

Directory inclusion and exclusion rules have been changed with respect to WEB-INF.

The latest version of JBuilder can now detect if the struts-config.xml file supports Apache™ Struts 1.0 or Struts 1.1.

Support for adding a directory JSP file, HTML file or any other file type to the WebApp or its sub-directories has been provided.

The performance of the EJB Designer has been improved and new options provided.

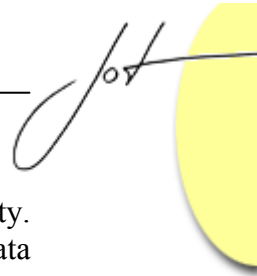
The following J2EE Servers are now supported by JBuilder 9 Enterprise: BEA WebLogic Server 8.1, IBM Webspher Application Server 5.0, Borland Enterprise Server 5.11-5.21, Sybase EAServer 4.2.

Mobile Development

Support for mobile software development, formerly called JBuilder MobileSet, has been incorporated into the core JBuilder Developer and Enterprise editions. It is an optional choice that may be exercised by the user during JBuilder installation.

Together Integration

The integration of Together with JBuilder is a good start, but incomplete. It consists of changes that make the two applications work more smoothly together, running individually or simultaneously. Together Edition for JBuilder has been stripped of some features (such as code editing) that duplicate JBuilder features to reduce Together’s memory footprint. Each application can be started from within the other. Diagrams and



code are kept in sync using Together's legendary reverse engineering capability. JBuilder's interaction with source code control systems can be used to keep Together data under source control.

Even with Together's reduced memory footprint, Borland recommends a minimum of 1 GB of RAM to run JBuilder and Together at the same time. We found that even with fairly large projects, the two programs ran well together with only 512 MB. Certain memory-intensive operations, such as documentation generation in Together, do not run well without more memory. Until Borland comes up with a full integration (assuming that's their plan), it doesn't seem too onerous to have to shut down JBuilder while performing a major memory-intensive task.

JBuilder help contains very little information about Together integration. In fact, the help text refers to Together Control Center, which is the stand-alone version of that software. The Together help does sufficiently cover integration with JBuilder.

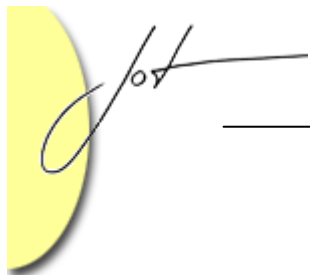
OptimizeIt Integration

OptimizeIt is Borland's excellent profiler suite. It does CPU and memory profiling, thread debugging and code coverage analysis. JBuilder 9 Enterprise contains a fully integrated OptimizeIt installation. The profiler can be run entirely inside JBuilder, or as a separate application.

Running inside JBuilder, the only online help available for OptimizeIt is a set of HTML and PDF files viewable in a browser. While this separate documentation is sufficient, it would be useful to have it integrated into the JBuilder help system.

Summary

This new version of JBuilder continues the evolution of this best-in-class IDE. Overall, we have found JBuilder 9 to be a highly capable and complete development environment for enterprise Java development. We highly recommend this latest version.



About the authors

Dave Neuendorf is a Java consultant and President of NeuSys, Inc. (www.neusysinc.com) of Aurora, Indiana. With degrees in chemistry and materials science, he converted his programming hobby into a second career. A Sun Certified Java Developer, Dave has been working with Java since 1996 and JDK 1.02. He specializes in user interface development using Swing. You may contact him at dwn@neusysinc.com.

Richard Wiener is Associate Professor of Computer Science at the University of Colorado at Colorado Springs. He is also the Editor-in-Chief of JOT and former Editor-in-Chief of the Journal of Object Oriented Programming. In addition to University work, Dr. Wiener has authored or co-authored 21 books and works actively as a consultant and software contractor whenever the possibility arises.