Built on NetBeans, BBjIDE Offers Exciting New Functionality

By Michael Phelps

When it's time to sit down and write some brilliant code, everything has to be just right. You need seclusion, a comfortable chair, a fast computer, some inspiring music, your favorite wake-me-up drink, and most important of all, powerful software development tools that don't get in your way.

We are proud of BBj® and the things it can do. We also realize that you need quality tools to help you take advantage of all its features and reduce your time to market. We've studied source code editors and integrated development environments (IDEs). We've dissected and argued features and user interfaces, speed, size, customization and every other obscure little thing dear to a programmer's heart. We've made some hard decisions. And now, with BBj version 2.0, we give you the most impressive Business BASIC development environment ever released.

NetBeans Foundation

The new BBjIDE is built on top of the NetBeans environment, an open-source Java IDE. NetBeans began in 1996 as a Czech student project, the goal of which was to write an IDE in Java. A company was formed, and two commercial versions of NetBeans were released. In October 1999, the company was acquired by Sun Microsystems, the developers of Java itself, and NetBeans became the foundation of Sun's Forte for Java development environment. A few months later in March of 2000, Sun decided to release the source code under a slightly modified version of the Mozilla public license model. What is so special about NetBeans, and why did we decide to hitch our wagon to it?

- NetBeans is an open-source IDE written in Java.

"Open-source" means more than simply going to the NetBeans Web site and checking out the NetBeans source code. It means the participation and backing of a huge development community. It also means NetBeans will remain on the leading edge of modern software development tools. And because it is written in Java, like BBj, it will run just about anywhere.

- NetBeans contains an application core that can be used as a generic framework to build any kind of application.

We decided, as many other companies have, that we could use NetBeans as a framework for new functionality.

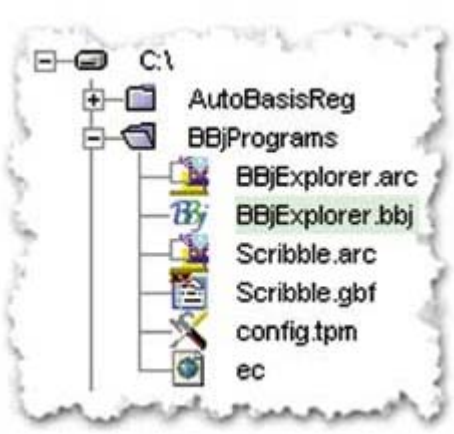
- NetBeans is also a tools platform into which other tools and functionality can be seamlessly integrated by writing and incorporating modules.

The new BBjIDE is a set of plug-in modules that does not alter any NetBeans source and allows development in Java, BBj or BBx® with all the wonderful bells and whistles NetBeans provides.

Check out the NetBeans Web site for more information:

You can customize the BBjIDE, to the point where no two developers' tools will appear to be the same IDE. You can alter, add, subtract, resize and reposition the menus and toolbars at will. You can change the entire look and feel of the IDE by applying custom skins. You can choose to run the IDE in MDI mode, in which all its components appear in a single window, or in SDI mode, in which each component is contained in its own free-floating window. Even in the default MDI mode, you can create, destroy, customize, resize, reposition or attach components to other components in just about any fashion you desire. Selecting the Tools/Options menu will bring up a new window with a tremendous array of customized settings.

Figure 1



BBj Explorer And Editor

The first BBjIDE component to grab your attention will probably be the Explorer. A screen shot of this is shown in Figure 1. The Explorer is a graphical, hierarchical display of all the files available in your current development project or any mounted directory. Different file types are represented by different icons. Explorer lets you get a handle on exactly what you have and where it is located. Think of it as an easy way to navigate through the project or as a tool to help organize the myriad pieces of your application.

Figure 2

Selecting and opening a BBj file in the Explorer brings up the new BBj source code editor, shown in Figure 2.

For the first time in Business BASIC history, you will see color-syntax highlighting applied to code. Verbs, functions, mnemonics, strings, numbers, operators, comments, object and method names and several other items can be assigned their own unique colors and text styles. You can change the default background/foreground colors of the edit window and have all your custom settings preserved from session to session.

Besides the standard cut, copy and paste options, the editor provides outstanding search, search and replace, file system search, un-do and re-do, page setup and printing capabilities. To make typing easier, you can define a list of custom abbreviation shortcuts. Type only the letters of the abbreviation and then hit the spacebar to see the abbreviation instantly replaced by the fully-expanded word or even sentence. Typing the first letters of any word and then pressing CTRL K or CTRL L will find and insert the previous or next occurrence of a word beginning with the same letters. Literally dozens of keyboard shortcuts exist to accomplish every conceivable editing task without resorting to the mouse. If that isn't enough, you can

also record and execute your own macros to get things done. When you are through massaging a source code file, save it as text or as BBj tokens.

Debugging

Debugging a BBj application puts you into a new workspace window, which groups all the components associated with debugging. See Figure 3.

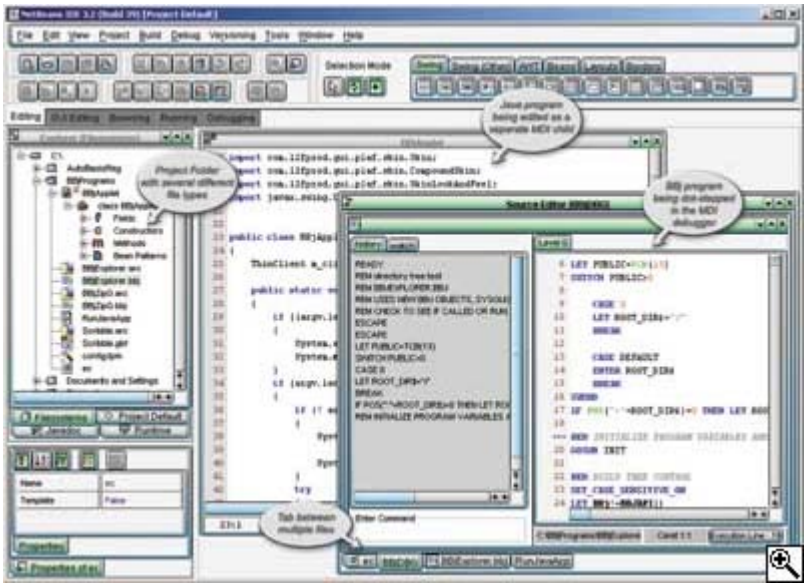
Figure 3

Here, we have repackaged and enhanced some of BBj's existing tools to work in the NetBeans environment. You will find the history and watch windows, as well as the familiar command line. The debugger's source code display window now has the same appearance and features as the regular source code editor in the editing workspace. Unlike the source code editor, however, the debugger is connected with a BBj interpreter and is able to check statement syntax, set breakpoints and highlight the current line when you step through the executing code.

Our vision for the BBjIDE is to create a one-stop shopping center for developing graphical applications. For the initial release of the NetBeans-based BBjIDE, this means you will be able to launch our current ResBuilder®, GUIBuilder® and DDBuilder® tools from within the IDE and use them as you always have. In future releases, this vision means integrating and combining these separate tools into the IDE itself. Moving between BBj visual form design and automatic boilerplate code generation, testing and debugging will be as smooth and seamless as Java GUI development is in NetBeans.

While we continue improving the BBjIDE, the NetBeans juggernaut will also roll on. Would you be interested in a fully integrated source code versioning and control system? XML editing? UML modeling? You'll have all these things and more as the NetBeans library of plug-in modules keeps growing.

Screen capture of NetBeans IDE showing the BBj Source Editor and Debugger



Providing powerful, reliable, customizable and even fun-to-use development tools is our responsibility. By taking advantage of the NetBeans open-source project, we move far beyond anything you have seen in Business BASIC tools, and do it right now, with BBj version 2.0.