Introducing the BASIS Custom Installer

R elying on a third party software product is generally very helpful and efficient, at least until the time when the product is no longer supported. We experienced this dilemma several months ago when we learned that our InstallShield installation product has reached its 'end of life.' We could have ported our InstallShield project to a new product, but since we had already ported to two different installers that had both quickly became unsupported, we decided to take the opportunity to create a homegrown installer using our own in-house Java expertise. The result – an installer that precisely meets our needs and growing wish list, and has no risk of being discontinued.

Meet the BASIS Custom Installer, fondly referred to as the BCI, now available in the BBj 10.0 release.

What's New

The BCI retains all the bells and whistles of the previous installer. It was important to still allow users to choose the language, select an installation directory, identify which Java version to use, and to customize the product components to install. Like its

predecessor, the new BCI also runs with a Graphical User Interface (GUI) or in a Character User Interface (CUI) for those server machines that lack GUI support. This rewrite opportunity gave us the chance to make some important changes, improve performance, and add new features, all in a smaller footprint.

Start the Installation

The first change was to simplify the "start the installation" process. We combined the setup.exe for Windows, install script for UNIX, and command for Macs into one executable jar for all platforms. On most systems where jars are correctly associated with Java, simply double clicking the jar or selecting "Run" when downloading from the BASIS Web site starts the installation. On systems that do not have this association setup, just run the installable jar as follows:

```
java -jar <BASISInstallable.jar>
```

For example,

```
java -jar BBjBaristaAddon000_10-04-2010_0859.jar
java -jar BBjBaristaAddonIDE1002_09-25-2010_1546.jar
```

Silent Installation

Another enhancement in the BCI is in the silent installation process. While it still supports recording and playing back from a response file, it does so using a slightly changed format. The response file is no longer in proprietary InstallShield format, but a standard Java properties file as shown in **Figure 1**.

If you are currently using a silent install, you will need to re-record your response file into the new format. The process is the same and pain-free, so no need to fret. Just record the response file, edit the specific settings in the file using the editor in the BASIS IDE to edit key-value pair property files, then playback the response file. To facilitate the recording and playback of a response file, the first installation screen has a check box for recording and playing back for a specified response file. See **Figure 2**.

Specify the response settings on the command line as follows:

```
java -jar <BASISInstallable.jar> [-rpl] <InstallResponse.properties>
-r record
-p playback
-l lock response file settings, so that a user can not change them
```

For example,

```
java -jar BBjBaristaAddonIDE1000.jar
java -jar BBjBaristaAddonIDE1000.jar -r /tmp/InstallResponse.properties
java -jar BBjBaristaAddonIDE1000.jar -p /tmp/InstallResponse.properties
java -jar BBjBaristaAddonIDE1000.jar -lp /tmp/InstallResponse.properties
```
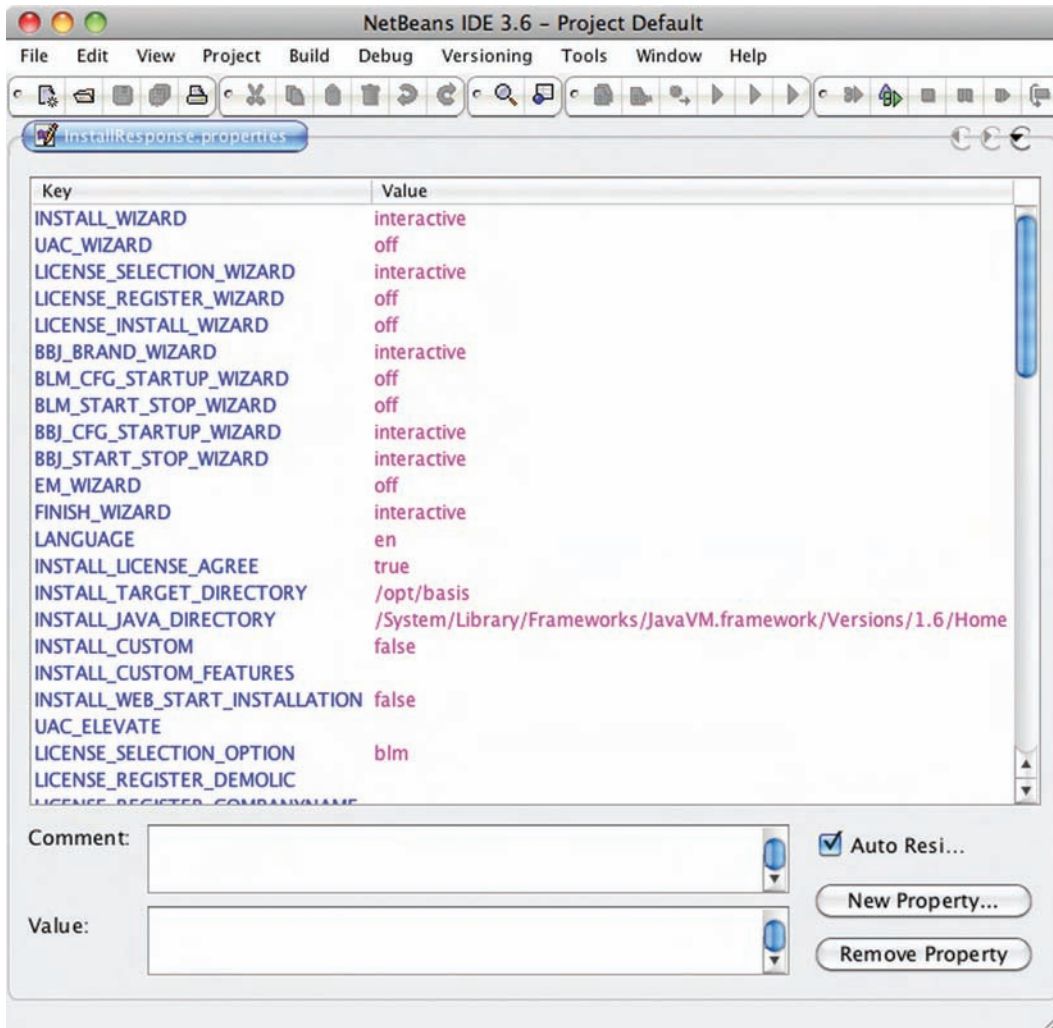
By Brian Hipple
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Figure 1. Example of a response file

Figure 2. The installer's initial screen displaying response file options

Size and Performance

We also made huge strides in improving both footprint size and performance. The installer is now almost a third smaller, depending on the selected components. This is especially advantageous when downloading the installation package via the Internet from the BASIS Web site. Also, the installation time can be up to five times faster than the previous installation, depending on the amount of memory and the I/O speed of the installation machine.

Web Start

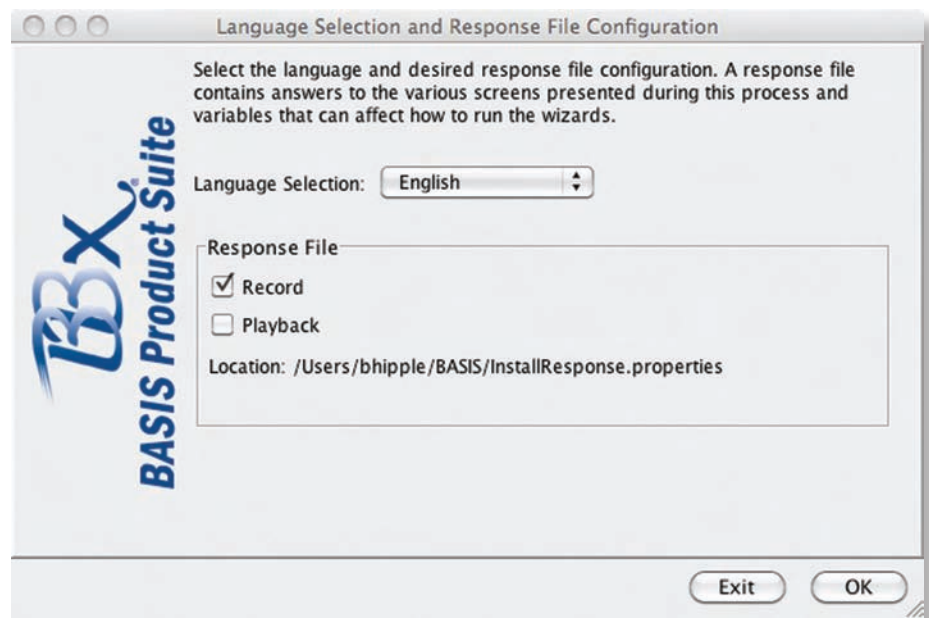One of the exciting new features in the BCI is the ability to serve the installation

via Web start. This new option (see **Figure 3**) provides the ability to keep the server and clients updated to the same version.

Clients can upgrade themselves by simply clicking on a URL inside an e-mail or on a Web page. For example, if you just upgraded a server, you can easily update all client BBj ODBC drivers by sending an e-mail to your users, instructing them to click the link to start the installation (perhaps silently?). Imagine the potential time savings... and time is money!

How exactly does this work? The installer copies the installable jar into the target installation directory, where the Jetty Web Server portion of BBj Services serves up the Web Start version of the installer. You can specify an optional response file and customize the link. To configure the Web Start installation, select the JNLP configuration and install node in the Enterprise Manager as shown in **Figure 4**.

Summary

BASIS designed the BCI to be a very generic installer using an instructional XML file that tells the installer what files to install by component, including overwrite instructions, defaults, and much much more. This instruction file is easily manipulated, therefore, it's possible to open up the installer to install any application, even yours. Take a few minutes to check out the utilitarian functionality of the new BCI and see how it can help you and your company work smarter, not harder. ■
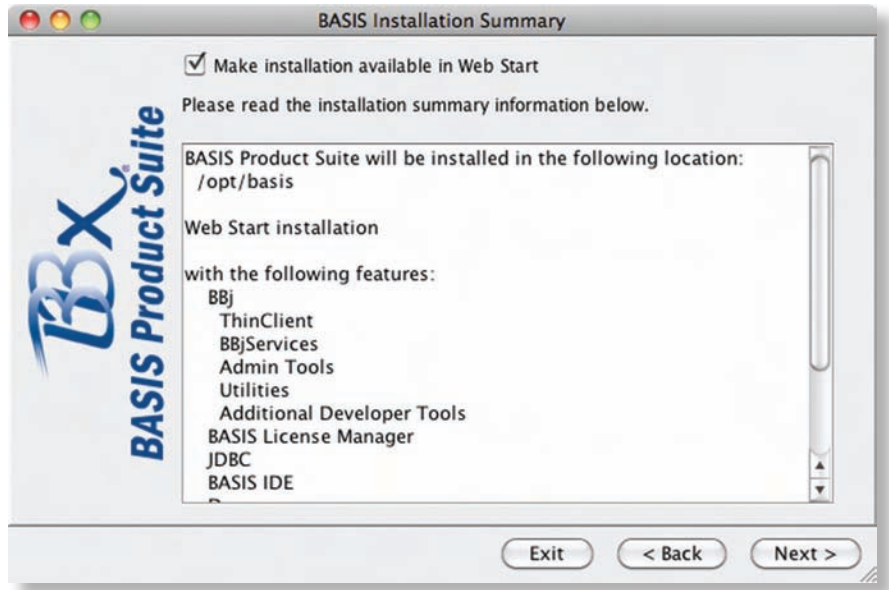

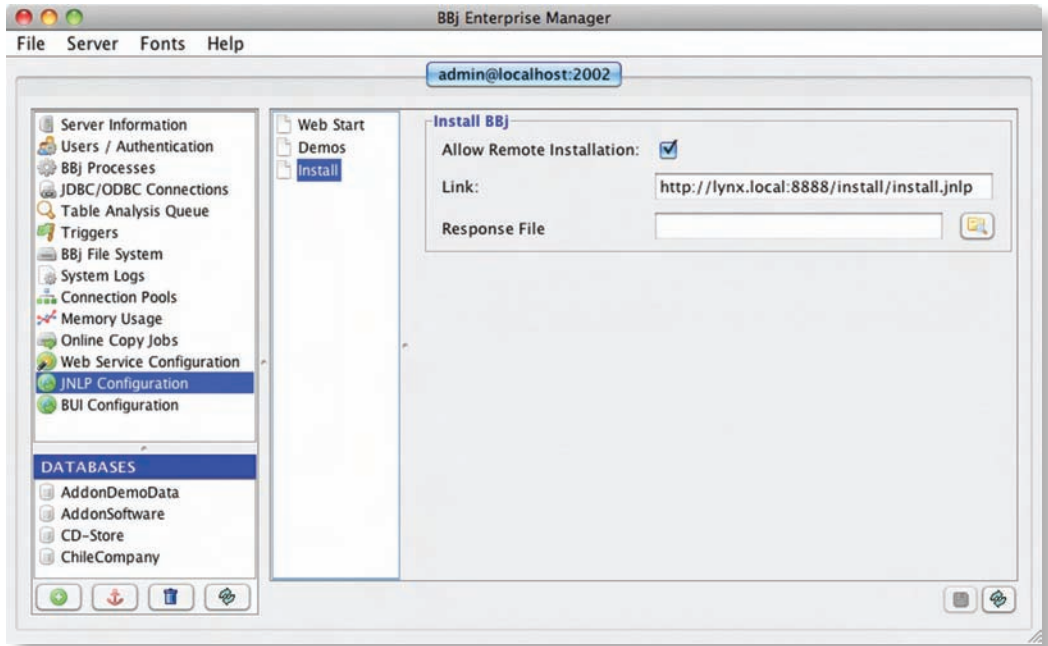**Figure 3.** The summary screen displaying the Web Start Installation option

Figure 4. Enterprise Manager's Web Start Installation configuration