BCD Invigorates Software for Application Development, Portal, and Query

By Dan Burger

A mong the various ways of creating modern applications that support the IBM i operating system, the methodology employed by BCD has been a good match for many midrange shops. BCD's RPG CGI- and PHP-based development options have a 10-year history of continual upgrades that parallel the company's long-term investments in query and report software, document distribution software, and more recently in multi-platform portal and 5250 Web enablement software. Timing for its most recent batch of software upgrades coincided with the COMMON Annual Meeting and Exposition.

BCD has produced software for IBM's midrange computers--including the AS/400, iSeries, System i, and now the Power Systems--for more than 30 years. It's one of only seven vendors that has lined up to support iManifest, an independent (read: non-IBM) initiative to promote the IBM i platform. Each year when the COMMON conference rolls around, you can count on BCD to have some product announcements. Here's what the Chicago-based company has done to enhance its product lineup.

App Development, Report and Query

The WebSmart family of products, which is BCD's software for developing IBM i and multiplatform Web applications and accessing data, is the logical starting point. The just-released versions are known as WebSmart ILE 8.2, WebSmart PHP 3.2, and Clover Query 2.0. These three products share the same integrated development environment (IDE) that provides integration between RPG and PHP and real-time Web-based reports and queries.

Visual presentation has been enhanced in all three products with the addition of a wider array of data-graphing colors and animation capabilities such as pie chart segmentation extraction for increased emphasis and pie chart rotation. A new scroll chart allows users to refresh data within a chart for uses such as viewing sales data by week, month, or quarter.

New XML functions are included in WebSmart ILE and Clover that simplify XML document processing and parsing--functions that are useful when consuming Web services. And support for local variables has been added allowing programmers to write more precise and modular code.

A single-fetch method for code generated by the SQL templates provided with WebSmart ILE is an improvement over previous versions that required programmers to use one fetch to retrieve the first record and a second fetch to retrieve all subsequent records.

Other features available in WebSmart ILE and Clover include a polymorphic SQLEXEC function that accommodates dynamically constructed statements and session ID functions supported by Safari and capable of supporting variable length fields.

Clover gained the capability to create a non-CGI program, which is required to schedule reports in Clover that were previously only possible when using WebSmart or customizing the Clover templates. Users can now create their own programs to automatically distribute reports through a scheduled job. And reports can be scheduled to be e-mailed or saved to the IFS as spreadsheets or as HTML or text files.

WebSmart PHP templates have worked with DB2 and MySQL databases in the past, and now BCD has added new templates to accommodate Oracle database users. The Oracle templates generate the PHP and SQL to access the database and the HTML to display the information. As is the case with DB2 file integration in the WebSmart ILE, Oracle file fields are available in the screen-creation wizard and can be dragged and dropped into the HTML and PHP. These PHP applications must run on platforms such as Linux and Windows that have support for PHP Oracle functions.

In addition to the Oracle templates, BCD has added a simple template to create static HTML pages that do not connect to a database.

WebSmart Change Management (WCM), which is included in the WebSmart and Clover products, has improved its multi-programmer management by allowing two programmers simultaneous access to an existing definition and adding a GoToMeeting session capability that connects with BCD support services.

5250 Web-enabled Screens

BCD's Presto was designed to present RPG and COBOL programs and operating system screens as browser-based Web pages without changing or recompiling any RPG, COBOL, or DDS source code. It requires no HTML skills and takes advantage of 100 percent batch processing.

The enhancements just added begin with a new visual screen editor that allows users to reposition text and fields using the convenient drag-and-drop method. In addition to repositioning these elements from the original green-screen presentation, the editor can also change font sizes and colors, borders, and can modify the Cascading Style Sheet (CSS) attributes behind the scenes.

It also adds the functionality of date pickers, images, drop down boxes, text areas and the capability to customize each element through a properties dialogue box. This is accomplished by specifying attributes such as the date format for the date picker and which items appear in drop down lists.

Presto uses "skins" to control the look and feel of Web-enabled screens, and with this release four new skins have been added. They offer expanded color options and coordinated function key buttons, which were not offered before, and can be customized to provide consistency with an organization's other documents.

BCD also added several other enhancements to make Presto easier to install and use.

Most notable is that after installation Presto can immediately access all 5250 screens as Web pages from a browser with the data and text perfectly aligned. The previous version of Presto sometimes had data alignment issues that stemmed from specific screen designs.

Support for device names is an improvement that BCD customers instigated. Users with applications tied to the workstation name can now specify a device name when accessing Presto Web-enabled screens. Arrow keys, a common way to navigate 5250 screens, are now supported, which more accurately simulates a 5250 session.

Portal Integration

Nexus is BCD's license-free portal for unlimited users that requires a paid annual maintenance contract. It integrates with Presto and all Web applications and provides secured single-point access to Web-enabled applications.

The first of several portal enhancements is the option of including the Google Search Appliance portlet that brings search capabilities to the documents in the Nexus Enterprise Content Management system. The benefit list includes document access from one location, universal search, full-text indexing and searching, and search-result text previews.

An option to the Google Search Appliance portlet is the QNTC feature that makes it possible to use a QNTC mapped drive as the storage location for documents loaded or created in the Nexus content management system. While this will be slower than using the IFS, it allows use of much larger and less expensive drives. Because of the volume of documents stored and accessed and with PC storage generally less expensive than the disk packs offered for IBM Power System servers, this could be a cost-effective option.

Additional enhancements to Nexus include: full support for Firefox browsers, page-load speeds up to 40 percent faster, password e-mail reminders, user log-out page redirect, and support for non-default libraries.

All of the above mentioned product upgrades are available now and can be downloaded without charge for a 30-day evaluation period.