

POWERBUILDER CHANGE MANAGEMENT[®]

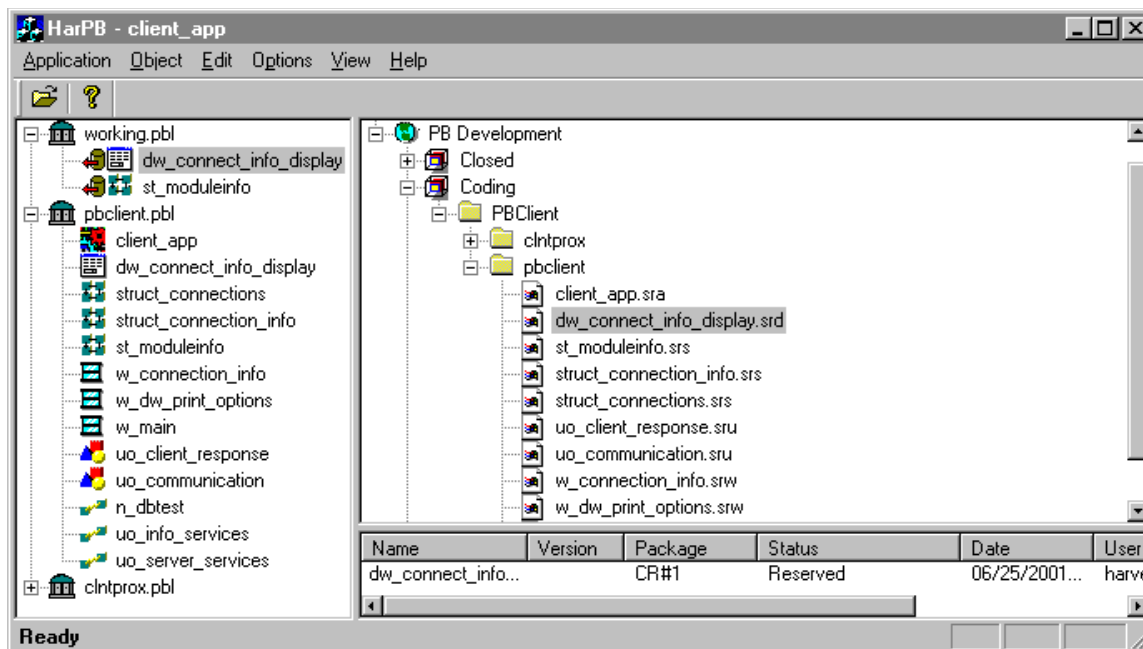
with **HarPB** and **CA Harvest**

Overview

Although Powersoft implemented a SCC-compliant integration in PowerBuilder 5, the functionality provided is very basic and does not play well in multi-user scenarios, or with CM tools providing a software development lifecycle.

The PowerBuilder Change Management Solution Kit provides the process and the tool to protect the integrity, stability, security, and availability of business systems developed in a PowerBuilder environment. The change control 'engine' is provided by CA Technologies Harvest Software Change Manager, which is used to initiate, document, notify, track, approve, and promote a change request through its lifecycle. **HarPB** is used to provide robust version control of Powerbuilder objects.

Check-In/Out of PowerBuilder source with CA SCM



- DIRECT CHECK-IN/OUT OF PB OBJECTS IN CA SCM

Avoids reliability problems of PB's SCC interface, by supplying a direct connection between CA SCM and your PB application. Eliminates the common error condition where PB indicates an object is checked out and your source control system indicates it's checked in (or vice versa).

- Robust Multi-user Architecture for PB Version Control

All source control activities take place between your own development PBLs and CA SCM. Removes unreliable shared "Registered" PBLs from the source control architecture. You have no access problems due to "locked" PBLs.

- Handles Object Dependencies during Check-Out

prevents errors, importing source objects into PBLs, caused by object dependencies. When checking out multiple objects, the order of import is determined automatically. Even circular dependencies are handled error-free.

- Multiple Views

See your PB application in one view, your CA SCM repository in another view and the version history of the selected repository item in a third view.

- Drag-drop Operation

Perform all Check-in/Out operations with drag and drop.

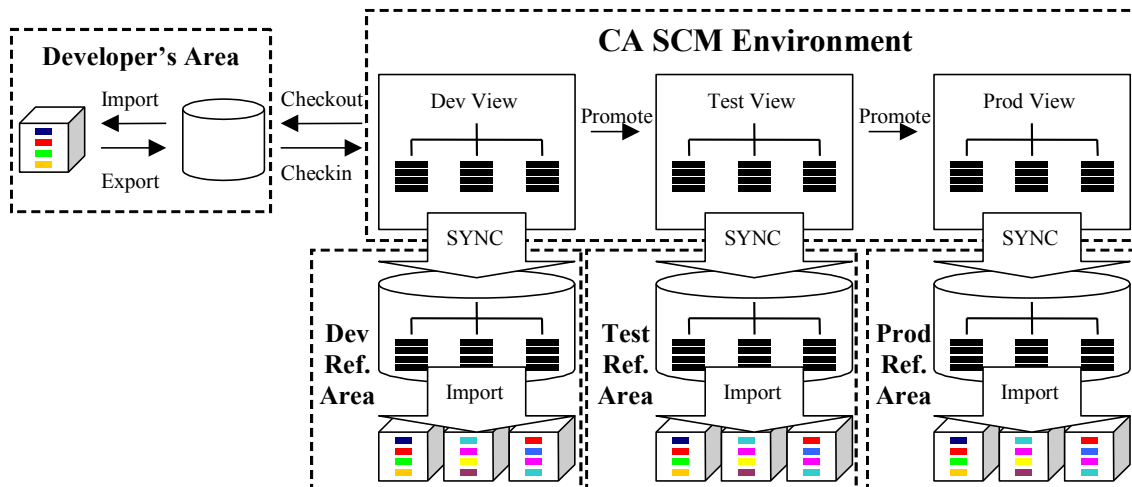
- Consolidated Error Reporting

All CA SCM and PB messages appear in a single window, which can be copied to the clipboard.

- Context Preserved between sessions

All CA SCM and PB settings saved to eliminate repetitive setup activities.

This interface is flexible – it was designed to support the various ways in which CA SCM can be used. A typical development life cycle is shown in the figure.



The environment has three views – Dev, Test, and Prod. It has at least three states (one per view), although these are not shown. Unlike the PowerBuilder/MCSCC mechanism, this solution does not use the concept of registered objects, or the object checkout/checkin functions within PowerBuilder. Instead, the developers use **HarPB** to perform the checkouts and checkins. Once updated objects have been checked into Harvest, they can be synchronized

out to one or more reference copies. Each reference area consists of a copy of the application libraries, a PowerGen project file associated with them, and an export tree containing the corresponding application object files. As changed objects get promoted and demoted in the life cycle, the associated reference areas can be easily and efficiently updated.

One of the great features of this interface is its ability to update changed objects through a set of reference PBLs that make up a life cycle. In the example shown in the overview, the implementation consists of three reference areas that correlate to three CA SCM views. The Dev area is used as a reference copy for the users doing development, and it is updated on a frequent basis. The Test area is used for building and testing and gets updated as sets of changes are promoted to Test. The Prod area is used as reference copy for approved, released objects and can be used for building as well. It gets updated as sets of changes are promoted from Test to Prod.

Automate your Build process

PowerGen allows you to automate the building of PowerBuilder® applications. Based on a proven process for producing PowerBuilder deliverables, PowerGen can perform high-integrity object regeneration, PBL optimization and creation of PowerBuilder dynamic libraries and executables for large applications spanning multiple interdependent executables and PBD's.

PowerGen lets you exclude third party and common libraries, when appropriate, to conserve build resources. Further, PowerGen offers an "Incremental Regeneration" capability that reduces the time for build/debug cycles without compromising build integrity.

Pricing & Availability

For pricing and availability on **PowerGen** and **HarPB**, please contact E. Crane Computing at 603-226-4041 or email at sales@ecrane.com.

Requirements

Microsoft Windows Server 2003/XP or higher
CA Harvest SCM 7.1 or newer
PowerBuilder 5.0 or newer
PowerGen 3.1 or newer

About E. Crane Computing

E. Crane Computing was founded in 1995 with a mission to advance the tools needed in the configuration management and maintenance stages of development. These stages account for 80% of the life cycle costs associated with software development, and yet have been ignored by existing tool vendors.

The company was founded by Philip B. Wallingford, previously founder and chief technical officer of SQA, Inc. (now IBM). E. Crane Computing is an authorized Sybase code partner.