

Charlotte PowerBuilder Conference

Moving at the Speed of Change

May 2015

Revitalizing PowerBuilder Applications by Enhancing the User Experience

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- Introduction
- Enhancement Object
 - Basic structure
 - Type Ahead Search
 - Treeview like Tooltips
 - Pointer Effects
 - Universal Search Object
- Questions

Agenda

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- Matthew Balent
 - Began with PB 5 at Computer Sciences Corporation
 - Senior Software Engineer with McKesson Enterprise Information Systems
 - Healthcare, Insurance, Manufacturing, Logistics, and Public Utility software
 - SQL Server, Sybase, Oracle database development
 - Founding member of North Carolina PowerBuilder Users Group (NCPBUG.ORG)
 - PowerBuilder MVP

Curriculum vitae

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- Single User Object approach - inherited from datawindow
 - Parent window handles creation and registration of datawindow controls with the EO
 - Wire events on datawindow controls to methods on the EO
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- Centralizes code in single place
 - Less effort to expand functionality
 - Easy Implementation
 - Single instance to add to existing code
 - Training is simplified
 - Can incorporate into ancestry

Toolkit
'Enhancement Object (EO)'



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- Type ahead searches for DDDW columns
- ‘Treeview’ like tooltip text for partially hidden columns
- Pointer indicator techniques
- ‘Universal’ searcher visual object

Object Functionality

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- Type Ahead for drop down datawindow columns (aka 'Quicken style')
 - - On window declare instance variable of type: `matt_uo_search`
 - - In 'Post Open' type event register the datawindow(s) and parent window
 - - Register the specific drop down datawindow columns in each dw
 - Note: Registering the columns switches them to 'Allow Edit' which means you should validate the user entry in `itemchanged/ itemerror` events. Any `getchild` references to the dddw columns will have to be re-done if performed prior to this.
 - - Map the 'getfocus', 'itemfocuschanged' and 'editchanged' events to the corresponding events on the user object.
 - - If the first column in the datawindow object getting focus is the dddw column, need to trigger `itemfocuschanged` event when control gets focus

Demo

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- Treeview Tooltips for datawindow columns
- - In the datawindow objects using this, add a text column to use for tracking pointer movement
- - On window declare instance variable of type: `matt_uo_search`
- - In 'Post Open' type event register the datawindow(s) and parent window
- - Register the tracking column with the UO
- - Wire a user event on the datawindow to the 'pbm_dwnmousemove' event and map it to the `ue_nv_mousemove` event on the UO
- - Map the 'losefocus' and 'resize' events to the corresponding events on the user object.

Demo

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- Pointer Indicator ('mouseover') Effects
- - In the datawindow objects using this, add a text column to use for tracking pointer movement - On window declare instance variable of type: `matt_uo_search`
- -In 'Post Open' type event create the UO
- -In each datawindow 'getfocus' register the datawindow(s) and parent window and the tracking column with the UO - Wire a user event on the datawindow to the 'pbm_dwnmousemove' event and map it to the `ue_nv_mousemove` event on the UO
- -Map the 'losefocus' and 'resize' events to the corresponding events on the user object. Note: modifies the background color of the row. If the background of the fields are not transparent the effect will not show through.

Demo

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- 'Universal' Search Object
- - On window declare instance variable of type: `matt_uo_search`
- ☐ - For Datawindow Contols
 1. Map the clicked event to the `ue_obj_clicked` event
 2. In the `rbuttondown` event open the UO, register the control, and set parameters (columns to search in and event to post after search)
- ☐ - For Treeview, MultiLineEdit, RichTextEdit Controls
 - - In the `rbuttondown` event open the UO, register the control, and set parameters (event to post after search)
 - Notes: Search is case insensitive and is top downward. In DW Search, if nothing is found, the search string has the last character removed for a more generic search. Normally `<Ctl> + Rt Click` on the searchable control activates the UO and a `<Ctl> + Rt Click` on the UO closes it.

Demo



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