# Advanced PWS Programming

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Systems

#### **OVERVIEW**

- JavaScript Custom Support (1 hr)
- CGI Support (30 min)
- Browser Popup Windows (30 min)

## JavaScript Custom Support

#### JavaScript

- − C like syntax
- Dynamic typing
- Evaluation not compilation
- JSON best as interchange

#### Html

- Inline in <script > tags
- Included as a file using src attribute in <script> tags
- Always load plbwebuser.js for PL/B programs

## JavaScript Custom Support

#### • PL/B Interaction

- WINAPI invokes existing JavaScript functions
- Can invoke functions in iframes
- JsMakeString used to create JavaScript string
- JsRun used to execute any JavaScript

#### WINAPI using PWS

- Execute JS functions
- PROFILE using same basic syntax
- PROFILE !JS, PlbApiTest, INT1, DIM

# Exercise (1): Evaluate 'DoApi'

- Review DoApi
- Start DBGIFACE in LISTEN mode
- Use Browser URL to execute:
  - 'DoApi' Program using '-dr'
- GUI Debugger Break Points
  - 'DoInnerHtml'
  - 'DoApi'

#### Exercise (1): Continued

Continue Execution To 'DoInnerHtml'

- Start Browser Debugger (F12)
  - Set Panel BG color to Green
  - Evaluate HTML
  - Evaluate JS

## Exercise (2): Plbwebuser.js

Add button to helloworld

- Execute 'testfunctieJS' function
  - Input parameter 'true', 'TRUE', and 'True'

#### CGI Support (30 min)

- CGI (Command Gateway Interface)
  - PWS Support added 9.8A
  - RUNTIME Object Method
    - Method 'cgistring'
    - Static HTTP Request Fields
    - User Get\Post Parameters
  - Keywords for Plbwebsrv.ini
    - PLBWEB\_CGI\_INFODIR=c:\temp (Required)
    - PLBWEB\_CGI\_KEEP=ON

## CGI Support

- Evaluate Program 'DoCgi'
  - See:
    - c:\sunbelt\class2016\sunbelt\docgi
  - DoCgi
    - PLB program to demonstrate PWS CGI
  - DoCgiTest.html
    - Html web page with form to invoke 'DoCgi'

## CGI Support

- Exercise (1)
  - Add Button to HelloWorld
  - Get URL User Parameter
    - Runtime 'cgistring' method
  - 127.0.0.1:8081/x.plc?name=Jane&address=1234
  - Display Parameters in LabelText

## Browser Popup Window (30 min)

- Browser Windows Blocking
  - Avoid
  - Check With Alert
- Special Browser Sequence Required
  - User HTML Button Click
    - User Action
  - OnClick Event Function
    - OnClick Executed
  - window.open
  - Time Sensitive

#### Browser Popup Window

- How about PLB Operations
  - User Click Button
  - Button Click Function
  - CLIENT Object 'Open' method

- Evaluate Program 'DoPopup' (SunIDE)
  - DoPopup
  - popup.js

#### Exercise (1):

- Use Browser URL to execute:
  - 'DoPopup' Program using '-dr'

Evaluate Browser Operations

# Questions?

