

Web Services

PxPlus 2017 (v14) & PxPlus 2018 (v15)

Web Services

2017

Enhancements

- Error reporting added to Web Services at run time
- Added Cascading Style Sheet (CSS) capability for Maintenance Web Services
- Ability to test Web Services when created
- Web Services can be added as a task to the IDE Menu
- New callable utility
- Dashboard Setup and Customization
 - Session after lunch today

2018

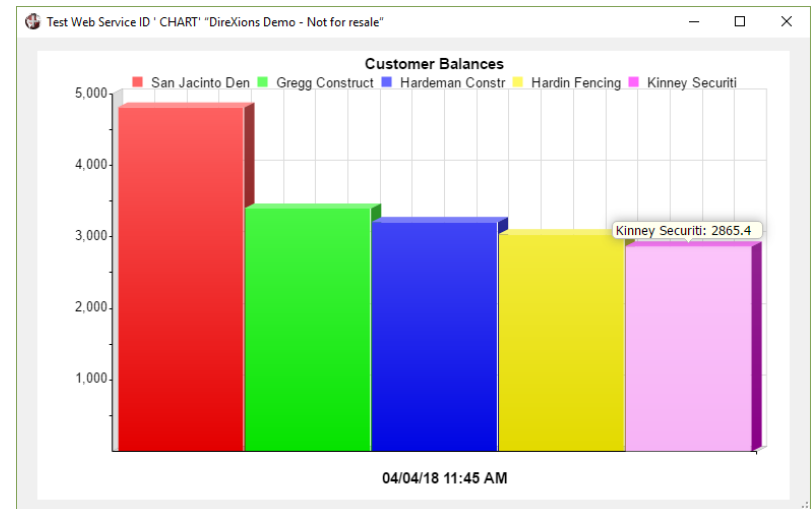
Testing a Web Service

Web Services Maintenance (PxPlus 2016)

The screenshot shows the 'Web Services Maintenance' window in PVX Plus. The 'Service ID' is 'BALANCES' and the 'Service Type' is 'Chart'. A table lists parameters for the service, including Title, Dir, Lib, Qry, Chart, Width, Height, and Type. The 'Test' button is highlighted.

Parameter	Value	Allow Override?
Title	Customer Balances	
Dir	C:\PVX Plus Technologies\Workshop 2016\Cats2\	<input type="checkbox"/>
Lib	C:\PVX Plus Technologies\Workshop 2016\Cats2\	<input type="checkbox"/>
Qry	CLIENT_QRY	<input type="checkbox"/>
Chart	balances	<input type="checkbox"/>
Width		<input type="checkbox"/>
Height		<input type="checkbox"/>
Type	HTML	<input type="checkbox"/>

- Test button 2017
 - Starts EZWeb server
 - Launches panel containing a *browser control – passing URL



Adding Web Service Task to IDE

Steps

1. Task Definition Maintenance

- Create the task

2. Menu Maintenance

- Add task to menu
- These 2 tasks are accessible from:
 - Menu on IDE menu bar
 - IDE Maintenance menu

Adding a Web Service Task

Task Definition Maintenance

PVX Plus TECHNOLOGIES LTD. Task Definition

Task Name: DEMO

Description: Invoice Query

Logic

Task type: Web Service

Project Related? Windows Only? PxPlus Task?

Display

Task for: Both Desktop and Web

Panel/Program id=QUERY


Parameter 1:

Parameter 2:

Parameter 3:

Parameter 4:

Save Delete Clear Exit

- New task type 
 - Web Service
- Panel/program
 - Web Service ID (same syntax as adding a widget on PxPlus Dashboard)
 - Full URL (http:// ...)

- Parameter 1 
 - Used with **id=** syntax to specify a Web Server other than localhost in format:
http://servername:port#

Adding a Web Service Task

IDE Menu Maintenance

Menu Entry: *MAIN* - Main Menu

System Transactions

TrxId	Description
APPL_CONF...	Configure Application
AUTO_CHA...	AutoChart File Mainte
AUTO_COMP	Auto Complete
CALENDAR	Calendar
CHART_SC...	Chart Image Schemul
COLORS	User Defined Colors
COMPARE	Compare
CS	Client Server
CVS_IMPORT	CSV Import
DASHBOARD	Dashboard Demo
DASH_CON...	Configure Dashboard
DATA_CLASS	Data Class Definition:
DATA_DICT	Data Dictionary Maint
DATA_FILE_...	Data File Password L
DATA_MGNT	Data Management
DATA_SOU...	Data Source Mainten...
DEMO	Invoice Query
EXPORT_I_M...	Export Menu Structur
EZWEB_LA...	Launch EZWeb Serv
FM	File Update Utility
GFB	Test Get File Box
GROUPS	Group Assignment

Transactions in Selected Menu

TrxId	Description
IT	Program Editor (*IT)
WEB_EDIT	Ed+
SYSTEM	System Utilities
NOMADS	Graphical Application B
DATA_MGNT	Data Management
VIEWS	Views
RW	Report Writer
SEC	Security
INSTALL_SE...	Installation and Setup
WEB	Web Deployment
CS	Client Server
IDE_MAINT	IDE Maintenance
SVN_SETUP	Tortoise SVN Setup
HTML_ED	HTML Editor
ONLINE_UP...	Online Update
MAINTAIN_P...	Project Maintenance
PXPLUS	PxPlus Command Line
DEMO	Invoice Query

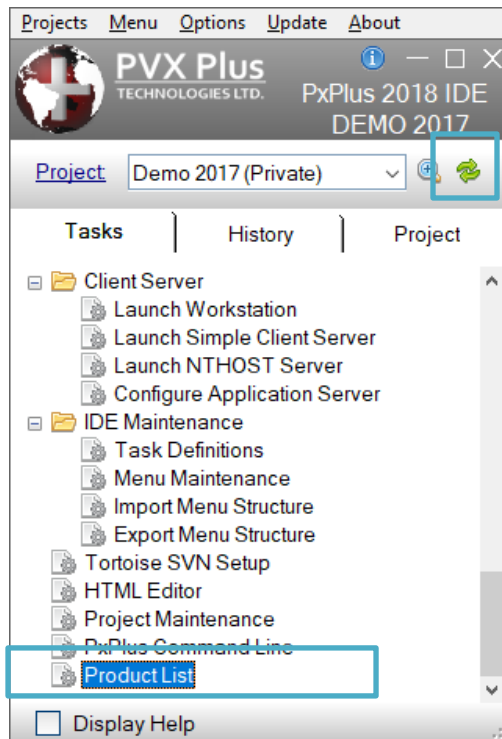
Buttons: Delete, Up, Down, Reset, Save, Close

- Select Transaction
- Select Menu
- Double-click or Drag to selected menu
 - Save

Adding a Web Service Task

IDE Menu

- Refresh Menu



The screenshot shows the output of the 'Product List' task. The title bar reads 'Product List'. The main content area displays a table with the following data:

Product Code	Description	Price	Std Cost
BUS-3110-VLW	Bus - Yellow	8.75	7.31
BUS-3111-CYN	Bus - Cyan	8.50	6.38
BUS-3112-VIO	Bus - Violet	10.00	7.50
BUS-3113-GRN	Bus - Green	8.25	6.19
BUS-3114-RED	Bus - Red	10.25	7.69
BUS-3115-BLU	Bus - Blue	8.25	6.19
CAR-1320-GLD	Safari Jeep - Gold	9.25	6.94
CAR-1321-CYN	Safari Jeep - Cyan	9.25	6.94
CAR-1322-VIO	Safari Jeep - Violet	9.50	7.13
CAR-1323-GRN	Safari Jeep - Green	8.75	6.56
CAR-1324-RED	Safari Jeep - Red	9.75	7.31
CAR-1325-BLU	Safari Jeep - Blue	9.00	6.75
CAR-1410-SLV	Bug - Silver	9.25	6.94
CAR-1411-ROS	Bug - Pale Rose	8.25	6.19
CAR-1412-SEA	Bug - Seagreen	8.00	6.00
CAR-1413-VIO	Bug - Violet	8.75	6.56
CAR-1414-PRL	Bug - Pearl	8.50	6.38
CAR-1415-WHT	Bug - White	9.00	6.75
CAR-2220-PNK	Cabriolet - Fuschia	9.00	6.75
CAR-2221-LME	Cabriolet - Lime	8.50	6.38
CAR-2222-CYN	Cabriolet - Cyan	8.25	6.19
CAR-2223-RST	Cabriolet - Rust	8.50	6.38
CAR-2224-VIO	Cabriolet - Violet	9.50	7.13
CAR-2225-SEA	Cabriolet - Seagreen	10.00	7.50
CAR-3120-RED	Camino - Red	9.25	6.94
CAR-3121-GRN	Camino - Green	8.25	6.19
CAR-3122-BLU	Camino - Blue	8.50	6.38
CAR-3123-YLW	Camino - Yellow	9.25	6.94

- Title from Task Definition
- Also works in the Web IDE

*web/webservice

Callable Utility for displaying Web Services

- Allows Web Services to be displayed from within your application

```
CALL "*web/webservice",url$,title$,server$,errmsg$
```

Argument	Description
url\$	URL for web service
title\$	Title for dialog (if not from Web Service)
server\$	web server name in format http://servername:port# (only if using id=)
errmsg\$	returned error message

Some Examples

*web/webservice

- Display a web service locally

```
CALL "*web/webservice,"id=WEBID"
```

- On another web server

```
CALL "*web/webservice,"id=WEBID","title","http://server:8888"
```

- Display a web page

```
CALL "*web/webservice,"http://www.pvxplus.com","Web Page","",e$
```

- Display a dashboard

```
CALL "*web/webservice,"http://server:port#/services/dashboard"
```

Recap

- Web Services
 - New Test button
 - Can be added as tasks to the IDE Menu and/or the Web IDE Menu
 - *web/webservice

Additional Resources

The help link(s) below refer to the current on-line help pages. The functionality may have been further updated since the PxPlus 2018 (version 15) release.

- [Web Services](#)
- [Web Services Maintenance](#)