

Dashboard Setup and Customization

PxPlus 2017 (v14) & PxPlus 2018 (v15)

Agenda

PxPlus Dashboard

- What is a Dashboard?
- History
- Operation
- 2017 Enhancements
- Limitations
- Setup and Configuration

- Create a Demonstration Dashboard



WHAT IS A DASHBOARD?



No, not THAT dashboard ...

but it is the same idea

Dashboard Definition


From Dictionary.com


- Computer
 - *A user interface or web page that gives a current summary, usually in graphic, easy-to-read form, of key information relating to progress and performance, especially of a business or website.*

- *A web page or portal that provides links to key information and useful tools on a website*



Sample PxPlus Dashboard






DireXions 2017 Demo Dashboard


Imagine what you could do!


Twitter

Tweets by @RoyalCaribbean


Royal Caribbean
 @RoyalCaribbean
 No timecards required.




Royal Caribbean
 @RoyalCaribbean
 Live Monday like this will be Friday. #MondayMotivation




Weather Widget

Fort Lauderdale, FL

72°

10:30 am EDT
Thundershower

Conference Agenda



DireXions 2017

PVX Plus Home

Technical Conference at Sea

[Home](#)
[Overview](#)
[Registration](#)
[Ship](#)
[Itinerary](#)
[Agenda](#)

Conference Agenda

Having more time allows for more options and the agenda for DireXions 2017 is no different. With over 16 hours of training, presentations, and technical sessions, this conference is sure to offer something for everyone. We are taking full advantage of both the venue and the time we have together to provide 35% more presentation time than prior DireXions conferences and an exclusive One-on-One meeting with each company.

Check out the schedule below, to start planning your week on board the ship.
(Click on session titles in the grid below for additional details.)

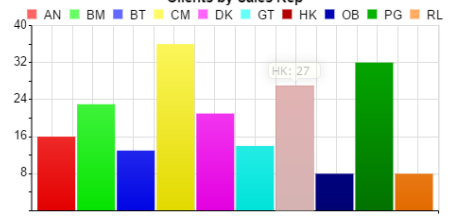
Note that afternoon sessions are repeated, one time on a sea day and one time on a port day allowing you to chose which sessions best fit your schedule and to avoid any conflict with assigned one-on-one afternoon sessions.

[All Events](#)
[Presentations](#)
[Discussions](#)
[One-on-One](#)
[Social/Networking](#)
[Registration](#)
[Boarding](#)

	Sunday Ft. Lauderdale	Monday Cruising	Tuesday Labadee	Wednesday Falmouth	Thursday Cruising	Friday Cozumel	Saturday Cruising
08:30		Registration					
08:45		08:30					
09:00		What's new in PxPlus	One-on-One	One-on-One	What's new in iNomads	One-on-One	Excel / Word Object Interface
09:15		09:00	09:00	09:00	09:00	09:00	09:00
09:30		09:00	Reservation Required	Reservation Required	09:00	Reservation Required	09:00
09:45							PxPlus License Management
10:00			One-on-One	One-on-One		One-on-One	09:45

Chart

Clients by Sales Rep



06/06/17 10:30 AM

Client Query

Client ID	Name	Sales Rep
024363	Falls Theatre Changed	RL
032475	Brewster Lighting	CM
033994	Jackson Formal Rentals	PG
034538	Grayson Nursery	BT

Client Maintenance

Client ID: ◀ ▶ 🔍

Name:

Address:

Address:

City:

State /

Province:

Country:

DireXions 2018

PxPlus Dashboard

Overview

- Allows you to provide your end users with a simple means to display multiple sources of updated information from your application
- Virtually any web site or web-based display

HISTORY OF THE PXPLUS DASHBOARD

DireXions 2014 and 2016

Orlando and Toronto

The screenshot shows the 'DireXions 2014 - Dashboard' in a web browser. The dashboard is powered by the PxPlus Dashboard and features several widgets:

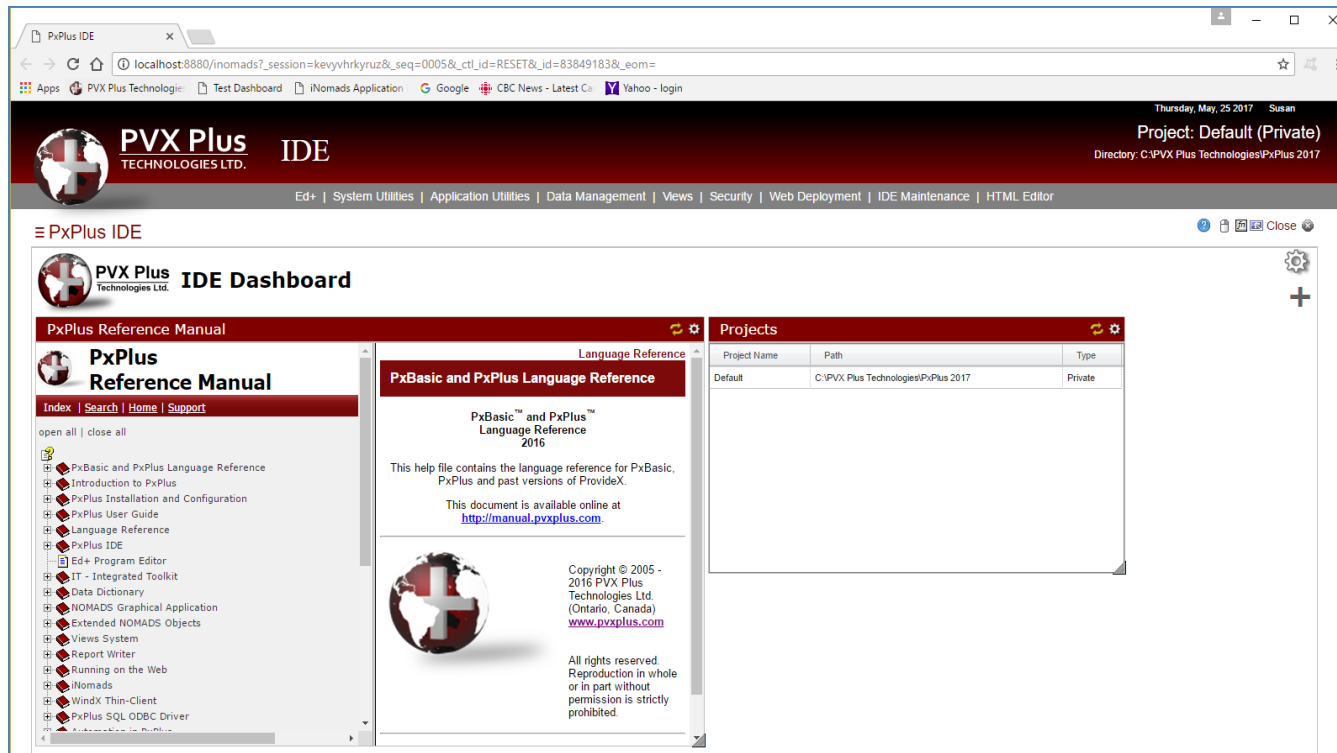
- Tweets:** A list of tweets from PVX Plus Technologies and MarkhamStouffHosp.
- What's Happening at DireXions:** A video player showing a presentation slide titled 'Where to go from here?' with a road sign graphic.
- Attendees:** A pie chart showing the distribution of attendees by region, with the United States at 62.07%.
- Schedule at a Glance:** A table showing the event schedule for 2014/08/25 and 2014/08/26.
- Weather:** A weather forecast widget for Sunny Orlando, Florida, showing a high of 83°F.

Date:	Time:	Event
2014/08/25	16:30 - 18:00	Welcome Presentation
2014/08/26	07:30 - 08:30	Breakfast & Conference Check-in
2014/08/26	08:30 - 10:00	Exploring what's new in PxPlus
2014/08/26	10:00 - 10:30	Break
2014/08/26	10:30 - 12:00	What's new in Nomads
2014/08/26	12:00 - 13:30	Networking Lunch
2014/08/26	13:30 - 15:00	Improving Data Storage
2014/08/26	15:00 - 15:30	Break
2014/08/26	15:30 - 17:00	Application Framework
2014/08/26	18:00 - 21:30	Dinner & Fireworks Extravaganza
2014/08/27	08:30 - 10:00	Discover the Redesigned IDE
2014/08/27	10:00 - 10:30	Break
2014/08/27	10:30 - 12:00	Data Visualization Aids
2014/08/27	12:00 - 13:30	Networking Lunch
2014/08/27	13:30 - 15:00	Web Services
2014/08/27	15:00 - 15:30	Break
2014/08/27	15:30 - 17:00	Futures & Round Table

- Dashboard introduced in 2014
 - Used to demonstrate Web Services
 - Workshop
- Updated for DireXions 2016

DireXions 2018

PxPlus 2016



- Incorporated Dashboard concept into the new PxPlus Web IDE

Web Services

- In PxPlus 2014 we introduced three types of Web Services:
 - Query
 - Chart
 - Report
- In PxPlus 2016 we added one more type:
 - Maintenance

Web Services - Query

PxPlus 2014

Standard Syntax: <http://..site../services/qry.pxp?qry=query&lib=library>

http://site../services/qry.pxp?qry=salesrep_qry&type=html&lib=*demo/2017/scrnlib.en&dir=*demo/2017

- Standard Arguments
 - Directory (dir)
 - Library (lib)
 - Query (qry)
 - Type (type)
 - CSV
 - JSON
 - XML
 - PDF
 - HTML (default)
 - TABLE

Department Code	Department Name
EAST	Eastern Canada Sales
LRGE	Large Account Sales
ONT	Ontario Sales
QUE	Quebec Sales
WEST	Western Canada Sales

Web Services - Chart

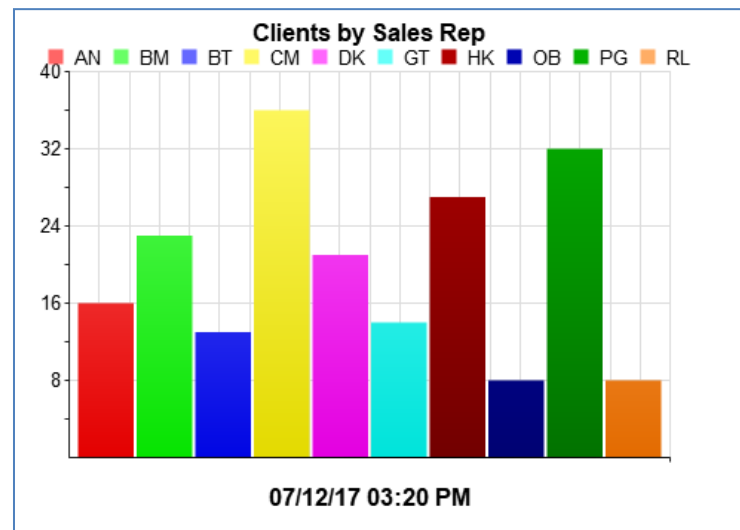
Introduced in PxPlus 2014

Standard Syntax: <http://..site../services/chart.pxp?qry=query&lib=library&chart=name>

http://site../services/chart.pxp?qry=client_qry&type=png&lib=*demo/2017/scrnlib.en&dir=*demo/2017&chart=balances

- Standard Arguments

- Directory (dir)
- Library (lib)
- Query (qry)
- Chart (chart)
- Type (type)
 - PNG
 - HTML (default)



Web Services - Report

PxPlus 2014

Standard Syntax: <http://..site../services/rpt.pxp?rpt=reportname>

http://site../services/rpt.pxp?rpt=*demo/2017/reports/clientlist.pvr&type=html&dir=*demo/2017

- Standard Arguments
 - Directory (dir)
 - Library (lib)
 - Report (rpt)
 - Type (type)
 - CSV
 - HTML
 - PDF (default)

12/07/17 Client List 1

Client#	Client Name	Address	Phone Number
302119	Andrews Plumbing jennifer.morris@andrewsplumbing.com	141 Bright Treasure Farms Denfield ON, Canada N5F 4A5	(647) 555-3086 x700 Contact: Jennifer Morris
145684	Bandera Landscaping	8189 Round Expressway Concord ON, Canada P2T 5D4	(416) 555-6401 Contact:
970883	Bandera Nursery timothy.kelly@banderanursery.com	8198 Dewy Wagon Maze Caribou MB, Canada R8F 0A2	(204) 555-2323 Contact: Timothy Kelly
859267	Bandera Securities angela.hayes@banderasecurities.com	8445 Pleasant Panda Grove P.O. Box 36 Quesnel BC, Canada V7M 1U9	(250) 555-1360 Contact: Angela Hayes
505590	Bastrop Oxygen Rentals anthony.gray@bastropoxygen.ca	8038 Colonial Path Perth ON, Canada L6J 3B2	(807) 555-9087 x712 Contact: Anthony Gray
834320	Rea Fish and China	4180 Lost Mount	(905) 555-0152

Web Services - Maintenance

PxPlus 2016

Standard Syntax:

`http://..site../services/maint.pxp?dir=directory&dict=dictionary&table=tablename&key_field=keyfield`

`http://site../services/maint.pxp?dir=*demo/2017&dict=providex.ddf&table=product&key_field=product_code$`

- Standard Arguments
 - Directory (dir)
 - Dictionary (dict)
 - Table (table)
 - Key_Field (key_field)

The screenshot shows a web application interface for Source Journal maintenance. It includes the following elements:

- Source Journal:** A text input field followed by a "Find" button and four navigation icons (back, forward, double back, double forward).
- Source Journal Description:** A text input field.
- Next Journal No:** A text input field.
- Next Register No:** A text input field.
- Date Last Changed :** A text input field.
- Last Changed User:** A text input field.
- Buttons:** "Submit", "Apply", "Delete", and "Reset" buttons are located at the bottom right of the form.

Web Service Maintenance

Also in PxPlus 2016

Standard Syntax: http://..site../services/service.pxp?id=service_id

- Simplified syntax
 - id=service_id when defining widget URL

The screenshot shows the 'Web Services Maintenance' window in PVX Plus. The 'Service ID' is set to 'CHART' and the 'Service Type' is 'Chart'. A table lists parameters for the service, including Title, Dir, Lib, Qry, Chart, Width, Height, and Type, with checkboxes for 'Allow Override?'. The 'Add as an Option in JSON file' checkbox is checked, and the file path is 'C:\PVX Plus Technologies\PxPlus\Lib_web\services\dashboard\demo.json'. Buttons for 'Test', 'Write', 'Delete', 'Clear', and 'Exit' are at the bottom.

Parameter	Value	Allow Override?
Title	Clients by Sales Rep.	
Dir	c:\demo	<input checked="" type="checkbox"/>
Lib	demo.en	<input checked="" type="checkbox"/>
Qry	CLIENTS.QRY	<input checked="" type="checkbox"/>
Chart	Sales Rep	<input checked="" type="checkbox"/>
Width	500	<input checked="" type="checkbox"/>
Height	350	<input checked="" type="checkbox"/>
Type	PNG	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

USING THE PXPLUS DASHBOARD

Running the Dashboard

- Requires a web server
 - EZWeb
 - Apache
 - IIS
- Navigate to the Dashboard URL which defaults to:
<http://your.website.com/services/dashboard>
- First time in (or after clearing browser history or resetting dashboard) the default configuration displays

Default Layout

Determined by .JSON file

```
{
  "title": "PVX Plus Dashboard",
  "autoArrange": true,
  "restrict": false,
  "icon": "logo.png",
  "header2": "PxPlus Dashboard",
  "div": [
    {
      "ttl": "Our web site",
      "url": "http://www.pvxplus.com",
      "timer": 0,
      "color": "",
      "bgcolor": "",
      "top": 0,
      "left": 0,
      "hi": 700,
      "wd": 1060
    }
  ],
  "options": [
    {
      "ttl": "Dashboard Info",
      "url": "dashboard_info.html"
    },
    {
      "ttl": "PVX Plus Technologies",
      "url": "http://www.pvxplus.com"
    }
  ]
}
```

- `*web/services/dashboard/dashboard.json`

One Widget

PxPlus Website

Two Options

- **Dashboard Info**
- **PxPlus Website**

PxPlus Dashboard Screen

The screenshot shows a web browser window with the address bar displaying `127.0.0.1:8080/services/dashboard/`. The browser's address bar and tabs are highlighted with an orange box. The dashboard header includes the PVX Plus Technologies Ltd. logo and the text "PxPlus Dashboard". Below the header, a widget titled "Our web site" is displayed, which is also highlighted with an orange box. The widget content includes a navigation menu with links for "Release Info", "Downloads", "Documentation", "Support", "Partners", and "Newsletters". The main content area features the PVX Plus logo, a navigation menu with links for "Home", "Products", "Sales", "Company", "Contact", "Resellers", "Careers", and "Search", and a "REGISTER NOW" button. The main heading reads "Cross-Platform Development Tools Designed for Business Applications". Below the heading, there is a paragraph of text: "Choosing the right tools for the job is important. Choose the platform tailored to handle the requirements of your business. Choose PxPlus. It's **Built for Business**." A "Learn More" button is located below the text. At the bottom of the widget, there is a photograph of a woman in a business suit standing in front of a group of people in various professional and industrial attire.

Our web site

Release Info Downloads Documentation Support Partners Newsletters

PVX Plus TECHNOLOGIES LTD. Keeping IT Simple

Home Products Sales Company Contact Resellers Careers Search

REGISTER NOW DireXions 2017 Registration Open

Cross-Platform Development Tools Designed for Business Applications

Choosing the right tools for the job is important.
Choose the platform tailored to handle the requirements of your business.
Choose PxPlus. It's **Built for Business**.

Learn More

DireXions 2018

PxPlus Dashboard - Options

Two Options

Our web site

PVX Plus Technologies Ltd. PxPlus Dashboard

Release Info

PVX Plus TECHNOLOGIES LTD.

Home Products Sales Company Contact

Contents: PVX Plus Technologies

Title: Custom

URL: PVX Plus Technologies

Timer: Refresh Every 0 minute(s)

Title Color: Default

Background: Default

Save

NOW Registration Open

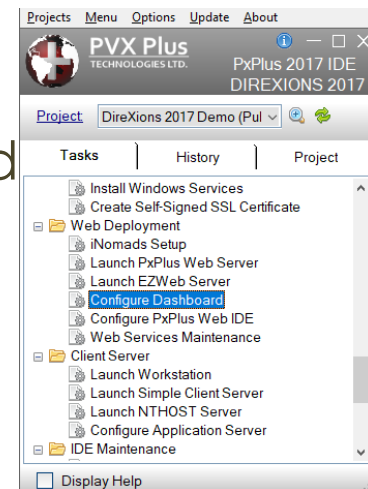
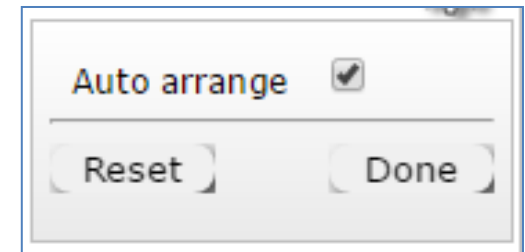
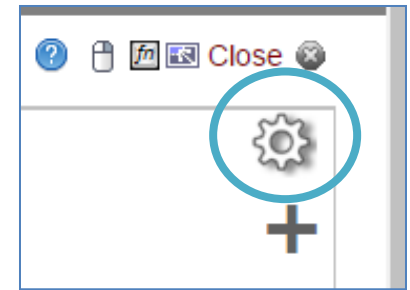
Cross-Platform Development Tools Designed for Business Applications

Changes to Layout

- Widgets (panels) may be added, moved, resized or removed
- Changes automatically maintained by the browser by user
 - will persist when user exits and re-enters
 - Can be reset to defaults with 'Reset' button or by clearing browser history settings
- Changes will **not** be saved if running the browser in 'incognito' mode

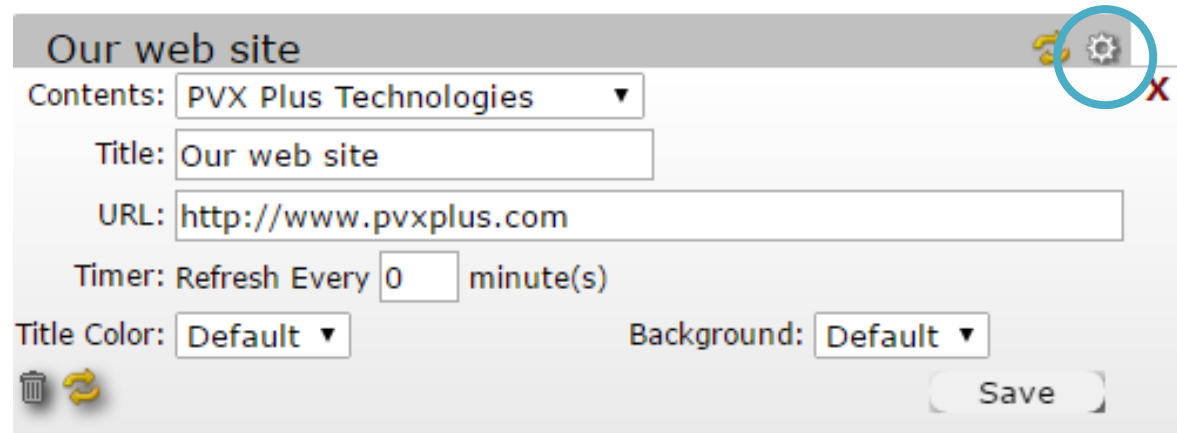
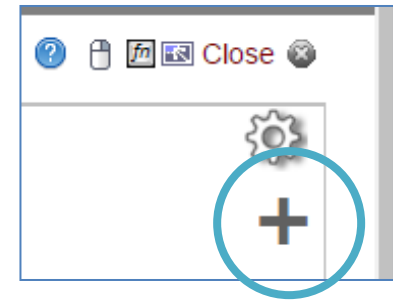
Dashboard Settings

- **Gear** button
 - General Dashboard Settings
 - Auto arrange checkbox
 - Reset button
 - Done button
- **Ctrl-Shift-Gear** button
 - Displays .JSON file corresponding to current dashboard settings
 - Default settings can be displayed and edited via the Web Deployment/Configure Dashboard option on the I.D.E.



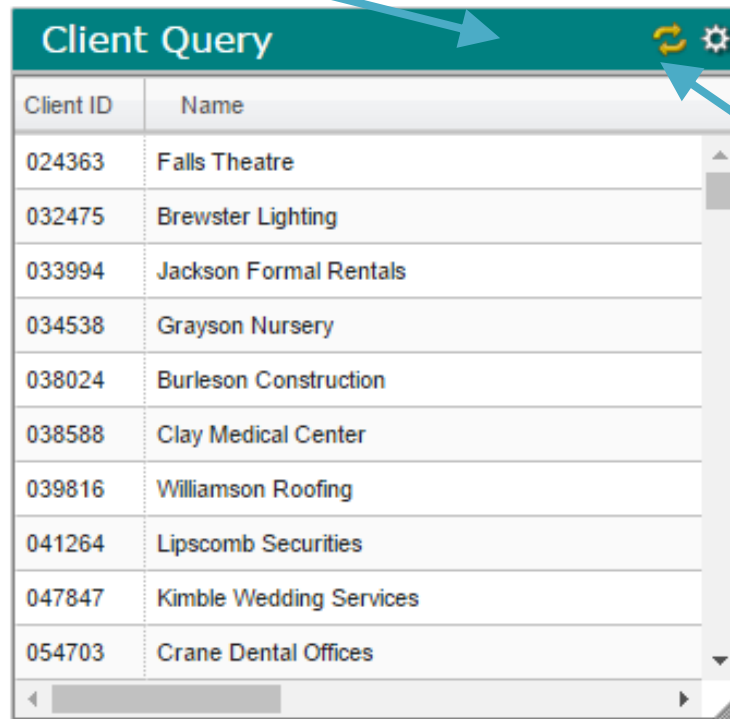
Add a Widget

- **Plus** button
 - Adds a New Widget
- **Widget Settings** button
 - Gear button on Title Bar of New Widget



Other Panel Functions

Drag Panel to new location



The screenshot shows a 'Client Query' panel with a teal header and a table of client data. Annotations with blue arrows point to the header, the refresh and settings icons, and the bottom-right corner of the table.

Client ID	Name
024363	Falls Theatre
032475	Brewster Lighting
033994	Jackson Formal Rentals
034538	Grayson Nursery
038024	Burleson Construction
038588	Clay Medical Center
039816	Williamson Roofing
041264	Lipscomb Securities
047847	Kimble Wedding Services
054703	Crane Dental Offices

Widget Settings

Refresh

Resize

PXPLUS 2017 DASHBOARD ENHANCEMENTS

Modernized Appearance

- Changes to style sheet file
`*web/services/dashboard/style.css`
- 'Flatter' look
- Increased size of Header, used larger font
- Title no longer in Bold font



Maintenance Web Services

- PxPlus 2016



- Replaced Browse buttons with more familiar icon buttons

2017

Maintenance Web Services

2017

- Optionally define a style sheet for use with Maintenance Web Services
 - `*web/services/maint_style.css`

Maintenance Example

Product Code: Find

Product Description:

Maintenance Example - using Style Sheet

Product Code: Find

Product Description:

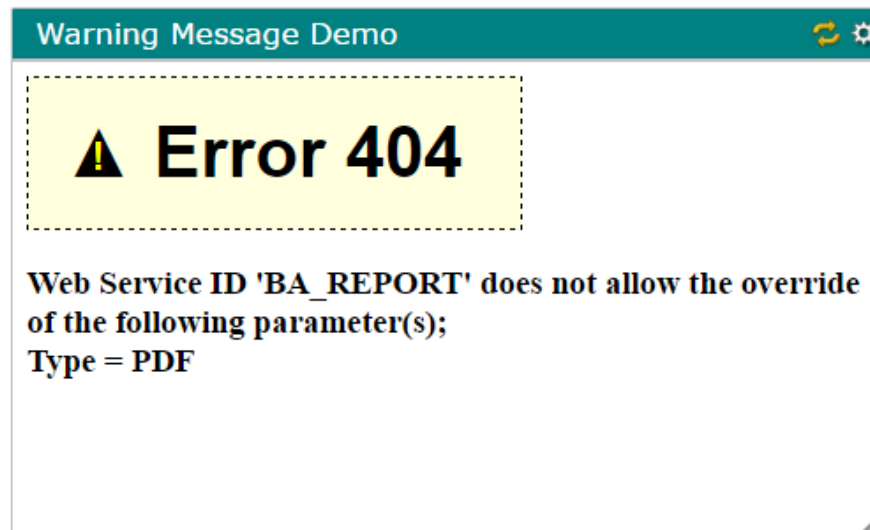
Maintenance Example - using another Style Sheet

Product Code: Find

Product Description:

Improved Messaging

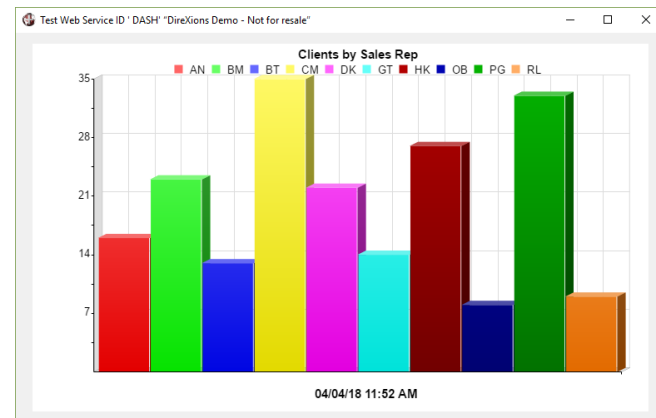
- Warning message now displayed on Dashboard if parameter over-ridden when not allowed



Test Button

2017

- Test button added to Web Service Maintenance
 - Launches EZWeb server on default port (if not already running)
 - Displays results on the same panel used for displaying Web Service tasks from the IDE
 - Able to quickly determine if the Web Service has been properly defined – before adding it as a panel on the Dashboard



DASHBOARD LIMITATIONS

Things to Avoid

- Some websites (such as google.com or facebook.com) do not allow their site to be displayed inside an iframe for security reasons
 - Cross-Site Scripting (XSS)
- So far, File Maintenance works only with single segment keys
- Refresh button when using an *i*Nomads URL
 - Relaunches the task rather than simply refreshing the page

DASHBOARD SETUP AND CONFIGURATION

Widget Ideas

- 4 types of PxPlus web services
 - Query, Chart, Report, Maintenance
- *i*Nomads URL
 - Example: `/inomads?txid=TRANS`
- Others
 - Web Site
 - Html page
 - Weather widget
 - Example: AccuWeather.com (free)
 - Twitter feed
 - Twitter Help Center – How to embed a timeline

Web Services Maintenance

PxPlus 2016

- Simplifies the process of defining a PxPlus Web Service

Settings

PVX Plus
TECHNOLOGIES LTD.

Web Services Maintenance

Service ID: REPORT

Service Type: Report

Parameter	Value	Allow Override?
Title	Windows Services	
Dir	*plus/winutl	<input checked="" type="checkbox"/>
Rpt	windows_services.pvr	<input checked="" type="checkbox"/>
Type	HTML	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

Add as an Option in JSON file

Test Write Delete Clear Exit

Ability to add as an option in .JSON file

Test button

Advantages of Web Services

Maintenance

- No need to memorize complicated syntax for web services
- The parameters required for each type of web service are shown
- Can be added as option to JSON file for users to add to their personalized dashboards
- Provides Security
 - Force ID in URL (Settings option on menu bar)
 - Define what parameters may be over-ridden
- New **Test** button



Edit JSON file

- Reside in `*web/services/dashboard` directory
- Simple text files
- Can be edited from the IDE by selecting Web Deployment / Configure Dashboard task

.JSON File Contents

*optional

Element	Value	Description
"title"	"text"	Title for the Dashboard page itself
"autoArrange"	true false	Default Setting for Auto-Arrange
"restrict"	true false	Only select URLs from provided list Any URL
"icon"	"url"	* URL for an icon to display top-left
"header1" – "header3"	"text"	* Headers to display with <h1> to <h3> tags following the icon
"subheader"	"text"	* Text to insert following any headers
"css"	"text"	* CSS file to be applied to the page
"div"	Array	Array of panels to be displayed
"options"	Array	Array of URLs that user can select

Array Elements

"div"	Value	Description
"ttl"	"text"	Caption line title
"url"	"url"	URL to use for the panel
"timer"	nnn	Minutes between auto-refresh (0=none)
"color"	"color"	Color for title text
"bgcolor"	"color"	Color for title background
"top"	nnn	Topmost pixel of the panel
"left"	nnn	Leftmost pixel of the panel
"wd"	nnn	Width in pixels
"hi"	nnn	Height in pixels
"options"	Value	Description
"ttl"	"text"	Caption line title
"url"	"url"	URL to use for the panel

Create your own Dashboard

Steps

1. Decide whether to use the default `dashboard.json` file or create your own
2. Define Web Services
 - Allows Web Services to be added as options to JSON file
3. Edit `.JSON` file as required
 - Decide which panels should display by default and edit the JSON file accordingly
4. Start Web Server
5. Launch Dashboard
6. Check results and edit default settings as required


Dashboard Demo

Steps

1. Create `demo.json` by copying `dashboard.json`
2. Examine Web Services and add some as options to the `demo.json` file
3. Configure Dashboard task on the IDE
 - Examine `demo.json`
 - Configure `demo2.json` file (to save typing)
 - Changed headers, added `css` file, edited default widgets, edited options
4. Start Web Server on port 8888
5. Launch Dashboard
<http://localhost:8888/services/dashboard/?json=demo2.json>
6. Add Optional widgets and arrange
7. Exit and re-enter

Dashboard Demo


PVX Plus Technologies Ltd.



DireXions 2017 Demo Dashboard

Imagine what you could do!

Twitter

Tweets by @RoyalCaribbean




Royal Caribbean @RoyalCaribbean
No timecards required.



Royal Caribbean @RoyalCaribbean
Live Monday like this will be Friday. #MondayMotivation

Conference Agenda


PVX Plus Home

DireXions 2017

Technical Conference at Sea

Home Overview Registration Ship Itinerary Agenda

Conference Agenda

Having more time allows for more options and the agenda for DireXions 2017 is no different. With over 16 hours of training, presentations, and technical sessions, this conference is sure to offer something for everyone. We are taking full advantage of both the venue and the time we have together to provide 35% more presentation time than prior DireXions conferences and an exclusive One-on-One meeting with each company.

Check out the schedule below, to start planning your week on board the ship.
(Click on session titles in the grid below for additional details.)

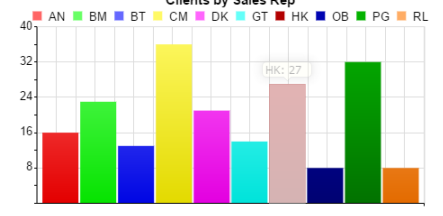
Note that afternoon sessions are repeated, one time on a sea day and one time on a port day allowing you to chose which sessions best fit your schedule and to avoid any conflict with assigned one-on-one afternoon sessions.

All Events Presentations Discussions One-on-One Social/Networking Registration Boarding

	Sunday Ft. Lauderdale	Monday Cruising	Tuesday Labadee	Wednesday Falmouth	Thursday Cruising	Friday Cozumel	Saturday Cruising
08:30		Registration					
08:45		08:30					
09:00		What's new in PxPlus	One-on-One	One-on-One	What's new in iNomads	One-on-One	Excel / Word Object Interface
09:15		09:00	09:00	09:00	09:00	09:00	09:00
09:30			Reservation Required	Reservation Required		Reservation Required	
09:45							PxPlus License Management
10:00			One-on-One	One-on-One		One-on-One	09:45

Chart

Clients by Sales Rep



06/06/17 10:30 AM

Client Query

Client ID	Name	Sales Rep
024363	Falls Theatre Changed	RL
032475	Brewster Lighting	CM
033994	Jackson Formal Rentals	PG
034538	Grayson Nursery	BT

Client Maintenance

Client ID: Find ⏪ ⏩

Name:

Address:

Address:

City:

State /

Province:

Country:

DireXions 2018

© Copyright 2018 - PVX Plus Technologies Ltd.

Dashboard Availability

- Dashboard itself is available in all PxPlus bundles (Base, Professional and e-Commerce bundles)
 - PxPlus Web Services (Query, Chart, Report and Maintenance) require e-Commerce
- WebServer considerations
 - EZWeb works with Base

Dashboard Review

A dashboard can display websites, widgets, html pages, charts, query data, reports written with Report Writer, as well as, simple File Maintenance panels

A powerful and efficient way for users to access your application's information



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

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