OZONE

OWF User's Guide

June 3, 2015

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Note: This revision history addresses the Marketplace project which served as the predecessor to the OZONE Store. The terms Store and Marketplace can be used interchangeably.

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1 Introduction

1.1 Objectives

This guide provides an introduction and instructions for using the OZONE Widget Framework (OWF) general features and functions. Separate guides explain administrative features and configuration settings.

OWF can operate with the Store or independently. This document will explain both behaviors if OWF operates differently when used independently or as an integrated program with the Store.

The following figures display the two potential sign in experiences:

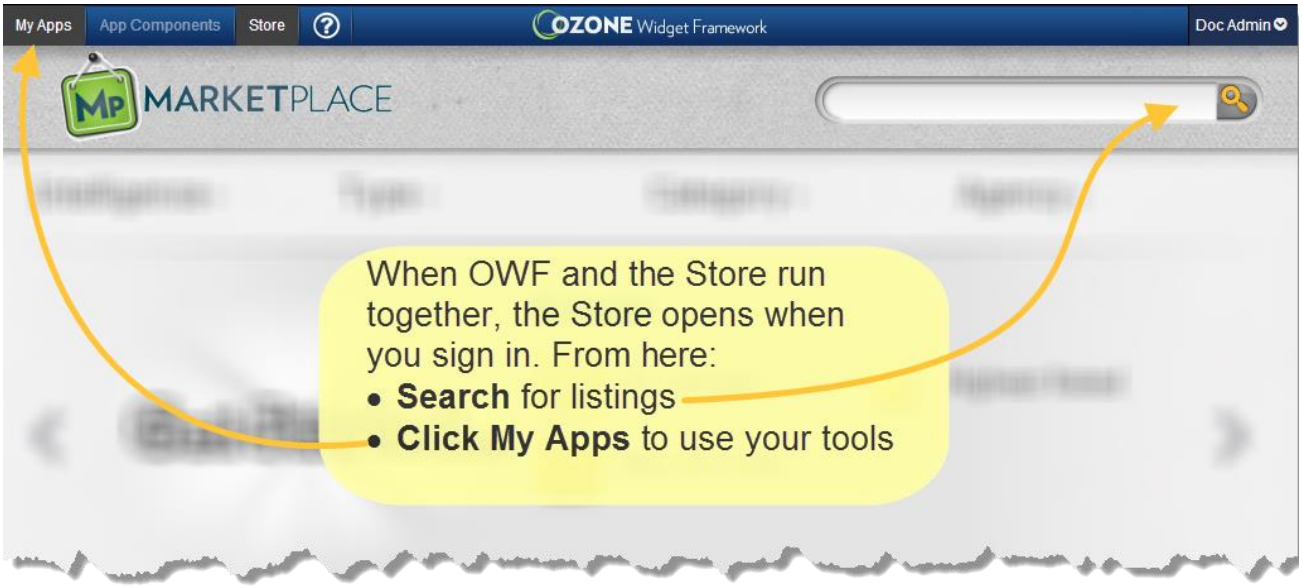


Figure 1: OZONE—the Store running in OWF

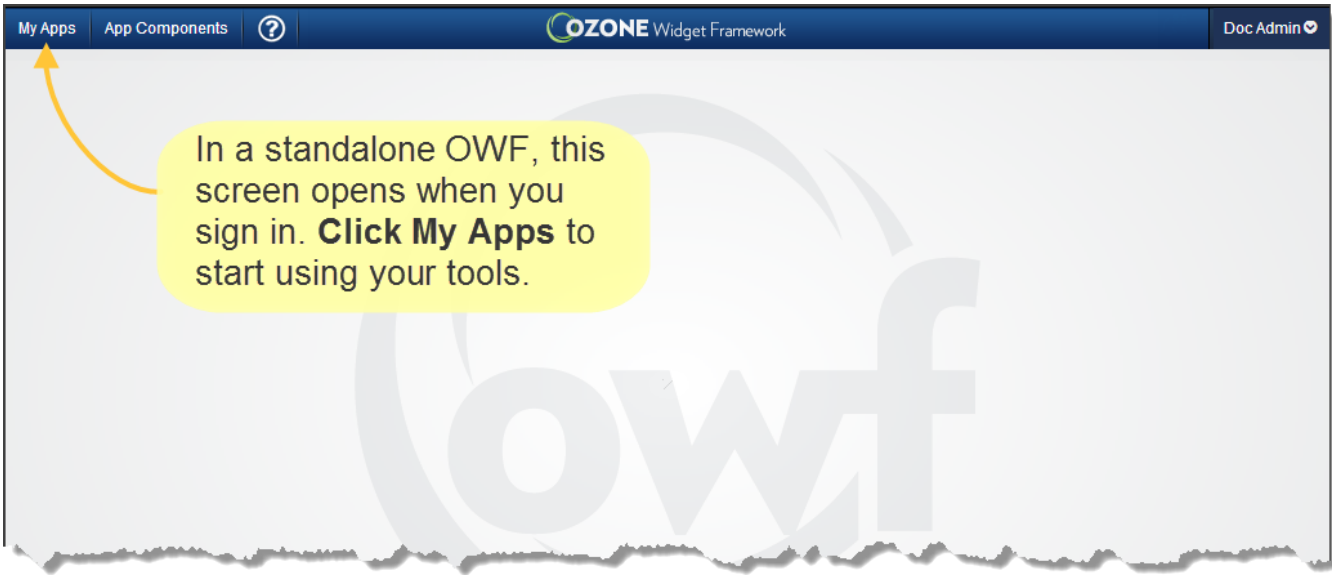


Figure 2: OWF running without a Store

1.2 Objectives

OWF operates as a framework that allows users to create custom layouts and workflows for the listings that they acquire from the Store or an administrator. The framework allows information from different agencies and servers to communicate inside a browser window without sending information back to the respective systems.

While the Store can operate independently, using it with OWF provides users with one location for everything they need to do their jobs, from searching and discovering new tools, to starting and managing those tools or building their own workflows.

1.3 Document Scope

This guide is intended for OWF users with basic user privileges. It describes Apps, App Components and the App Builder, as basic users can do this action.

Note: Administrative tools and features are described in the Administrators' Guides.

1.4 Related Documents

Table 1: Related Documents

Document	Purpose
User's Guide	Understanding the **OWF user interface**; adding, deleting, modifying **app components** and using **intents**; accessing and using the **Store**; creating, deleting, adding, switching, modifying **app pages**; using **apps**; defining accessibility features such as **high-contrast themes**

Document	Purpose
Administrator's Guide	Understanding **administrative tools**: adding, deleting, and editing app components, users, groups, apps; **creating default content** for users, groups and group dashboards
Developer's Guide	**Creating app components and descriptor files; integrating app components into OWF**; app component upgrade instructions; walkthroughs for creating app components; adding intents, descriptor URLs, preference API to app components; logging and launching API
Configuration Guide	Overview of **basic architecture and security**; OWF **installation** instructions; instructions for modifying default settings; **database** set up and logging guidance; **framework and theme** customization instructions; OWF **upgrade instructions**; directions for adding and deleting **help** content
Quick Start Guide	Walkthrough of **basic OWF functions** such as using apps; instructions for **setting up a local instance of OWF**, unpacking the OWF Bundle and installing **security certificates**; Truststore/Keystore

1.5 Basic Architecture

The Store and OWF consists of a number of components that were designed to be independently deployed or located on the same server. The simplest deployment scenario places them all on the same physical machine. These components are shown in detail in Figure 3: Basic System Architecture Diagram.

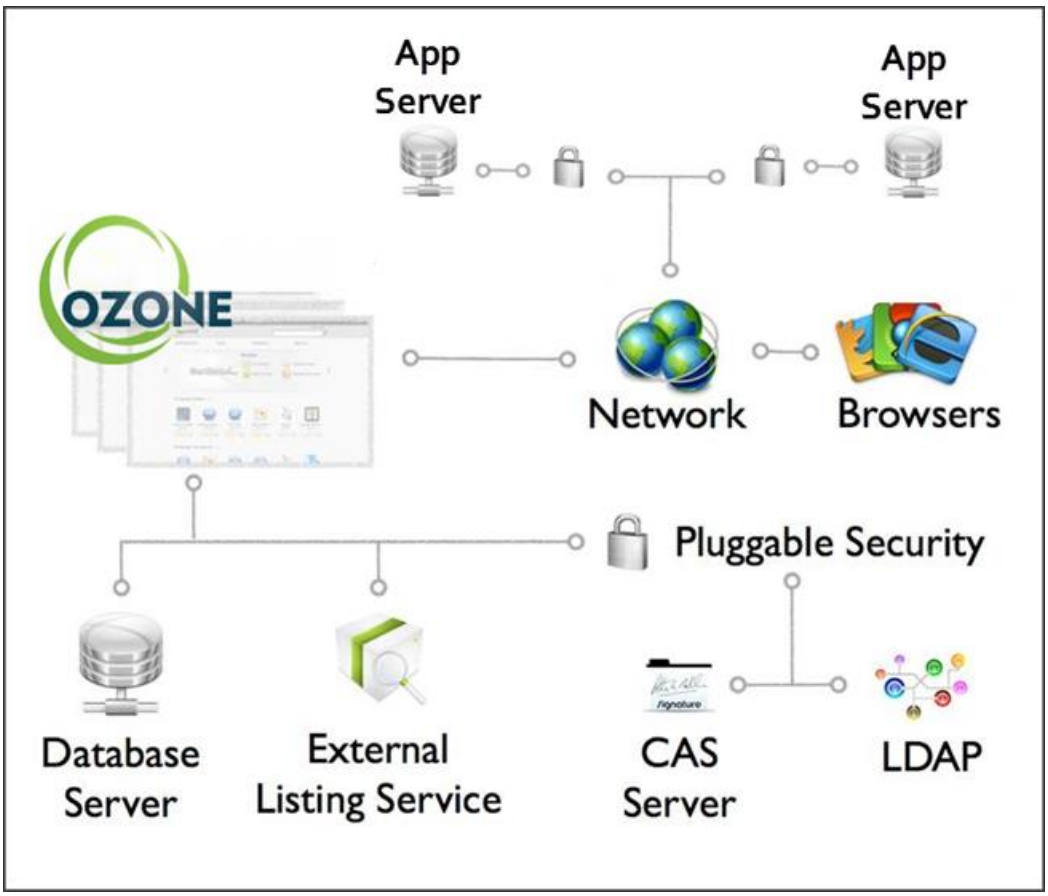


Figure 3: Basic System Architecture Diagram

Note: Any Java Servlet-compliant app server can host the app. Additionally, the CAS Server and LDAP component are examples of possible security integrations - the Marketplace Pluggable Security' component acts as an adapter to integrate with many different enterprise security solutions.

1.6 Dependencies

The OZONE Store Toolkit bundle requires JRE 1.6 or higher. The Store supports Internet Explorer 7 and higher, Firefox 17 and higher and Chrome. It is tested against the following browsers:

Table 2: Tested Browsers

Browsers	Versions
Internet Explorer	7 & 9
Firefox	17
Chrome	33

2 Getting Started

This section provides a brief overview of the main features and functions in the Store. You can find more details about each topic in later sections, use this section to obtain a basic understanding of the software.

2.1 Use OWF and the Store

When the Store is used inside OWF the product is called OZONE. Both products can be used independently. The following section explains how each product functions. When used together, use the Store button on the OWF Toolbar to toggle between them.

2.1.1 OWF Overview

A framework that allows information from different agencies and servers to communicate inside a browser window without sending information back to the respective servers.

Figure 4: OWF at a Glance

2.2 Product Components

2.2.1 OZONE Banner

From the OZONE Toolbar, users can open app components and apps, connect to a Store (if configured), adjust settings and open Online Help. The OWF drop-down User Menu, located on the right, displays the last sign-in date, profile information, theme options, sign-out option and About OWF window. If you're in the Store, its drop-down menu will appear right of the OWF menu. From there, Store users can edit their profiles, change themes, view their listings and create a new listing.

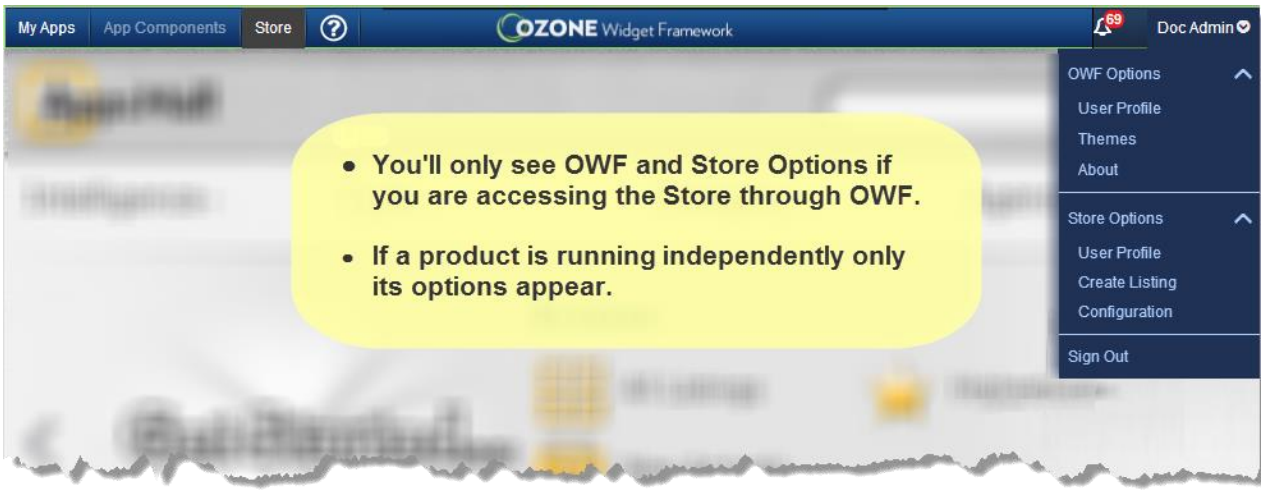


Figure 5: OZONE Banner

2.2.1.1 Toolbar

Figure 6: Toolbar

The following buttons are found on the toolbar:

- **My Apps:** Opens the My Apps Menu used to find, start and manage apps. Use the menu to get details about an app and app pages, discover new apps in the Store and access the App Builder. For more information My Apps Menu, see section 3.2: My Apps Menu.

- **App Components:** The App Components window displays all available app components. Use this feature to start or add components to an app. For more information see section 5.2: App Component Menu.

Note: There is a memory-based issue with opening JavaScript heavy app components in some versions of Internet Explorer. Please see 10: Known Issues for more details.

- **Store:** Connects the user to a Store or Stores. When launched, a user can search from an assortment of available listings and add any of those listings to their App Components Menu see section 3.2: My Apps Menu. See the Store User's Guide for more details about finding listings in the Store.

Note: The Store button will only appear in the toolbar if it has been configured by a system administrator.

- **Online Help**: Repository of instructional guides and video tutorials.

2.2.1.2 Drop-down User Menu

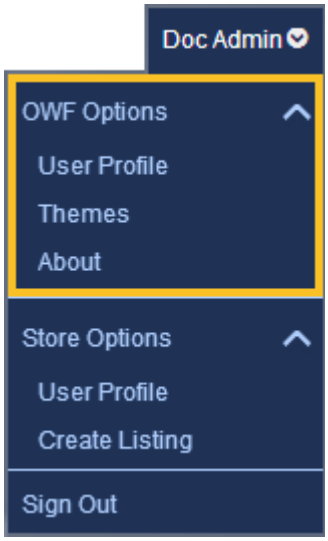


Figure 7: OWF Drop-down User Menu Options

Access the drop-down User Menu by clicking on the username in the upper-right of the page. The following elements reside in the OWF User Menu:

User Profile – User identification including the username, full name, e-mail and list of groups of which the user is a member. Under the User Preferences heading, the user can also enable OWF animations by clicking the "Enable animations" checkbox.
Note: Enabling animations may cause issues with third-party plug-ins like Google Earth.

Themes – Opens the Theme Settings window. Find more information about themes in section 6.2: Change Themes.

About – Displays customizable information about the product.

Sign out – Used to sign out of the framework in accordance with the security protocols that were used for the initial sign-in.
Note: This feature is configurable by an administrator and may not appear on some versions of OWF.

3 Apps: Start, Edit, Delete, Share

3.1 App Overview

An app is a screen where you organize your tools. To include multiple layouts on one app, use the App Builder (section 4: Create an App.)

Each time a saved app loads, the screen and app component layout will maintain the same look as the last time you accessed the app. App and their respective configurations are limitless; you can and probably will have a variety of different apps, all of which render and function independently.

You'll receive apps in one of the following ways:

Create your own

- Add one from the Store
- Assigned by an administrator
- Assigned to a group that has access to the app

Group assigned apps provide identical apps for each member of a group. Each group member can customize their instance of a pre-configured app. If you change your copy of an app that someone else owns, you can restore it to its default states.

3.1.1 App Pages Overview

App pages are individual layouts associated with an app. App pages can be created, added, restored and deleted by the user. Users can customize app pages to include user preferred layouts and app components.

Figure 8: Differentiating Apps from Pages

Apps can have multiple pages. Use the feature to compile resources and make similar things easy to access. Apps and their associated pages appear in the My Apps menu.

Consider using pages to divide an app into specific sub-tasks. For example, the Disaster Recovery app has pages filled with useful tools related to disaster recovery. A user who needs this app to do their job might need the data from the following pages:

- Fire and Rescue Units
- Water and Food Supplies and Distribution Centers
- Traffic and Road Monitoring Services

To save time searching for individual apps, a user can create one app that contains those pages of related or useful tools. This provides an access point for all of your tools relating to a task.

You'll receive apps with pages one of the following ways:

- Create your own
- Add it from the Store
- Receive it through administrator assignment

You can **Restore**, **Edit** and **Delete** your personal copies of a page. For more information on managing apps and pages see 3.3.4: Edit an App or Page.

- An administrator can assign an app to you. If you customize the layout and add or remove associated app components, those changes will only affect your app page (Everyone else in the system won't see the changes. If you want to share your changes, see 3.2.2: Reorder Apps and Pages.

- If you add a copy of an app from the Store and then its owner updates it and pushed the updated app to the Store, you'll automatically receive the change(s). *Note: Sync between OWF and the Store must be enabled.*
- Restoring an app page returns it to its *current* default state. If the app owner updated the app after it was added to your instance of OWF, the restored version may look different than the one that you originally received.

3.2 My Apps Menu

The My Apps Menu lists all of the user's apps. Apps included here are OZONE Apps, either created in OWF or obtained from the Store, and Web Apps. From the My Apps Menu, users can start an app, create new ones or search for apps in the Store. Apps can be shared, restored, edited or deleted through the manager buttons in the My Apps Menu.

To open the My Apps menu, click **My Apps** in the OZONE Toolbar.

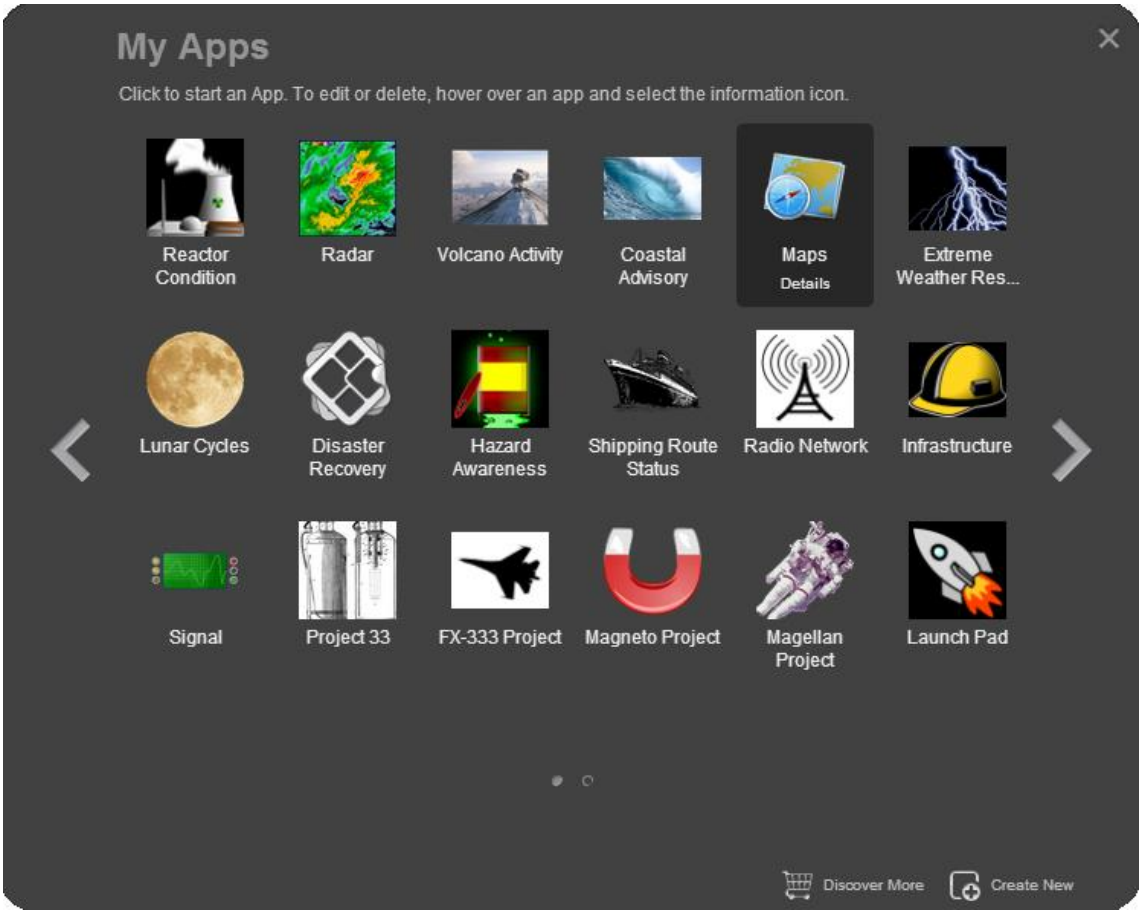
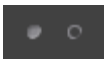
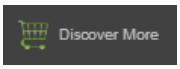


Figure 9: My Apps Menu

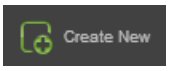
The My Apps Menu contains the following features:

- **Pagination Arrows**: Is used to navigate through more than one page of apps.

 - **Pagination Dots**: Displays the number of pages of app available. The highlighted dot indicates the page currently displayed in the carousel. Navigate to a page of app by clicking on the corresponding dot.



- **Discovery More**: Takes the user to the Store. Users can search for new OZONE Apps and Add them to their OWF. More information about adding app from the Store to OWF is in Store User's Guide.



- **Create New**: Enables the user to create a new app. More information about creating an app is found in section 4: Create an App.

- **Information**: On hover, this link appears below an app's title and icon. Clicking the link opens a details window and displays the manager buttons.

Figure 10: App Details Window

Each app page has its own details window (Figure 10). This window includes a description of the app and five manager buttons: Add Page, Push to Store, Restore, Edit and Delete. More information on managing an app is found in section 3: Apps: Start.

3.2.1 Start Apps and Pages

To open an app:

1. Click the **My Apps** button in the toolbar to open the My Apps Menu.
2. Click an app, if it has only one page, it will automatically start.

   This step only applies to Apps with more than one page. If the app has more than one page, then clicking the app's icon will open a carousel displaying all the app's pages. Click a page to automatically start a page.

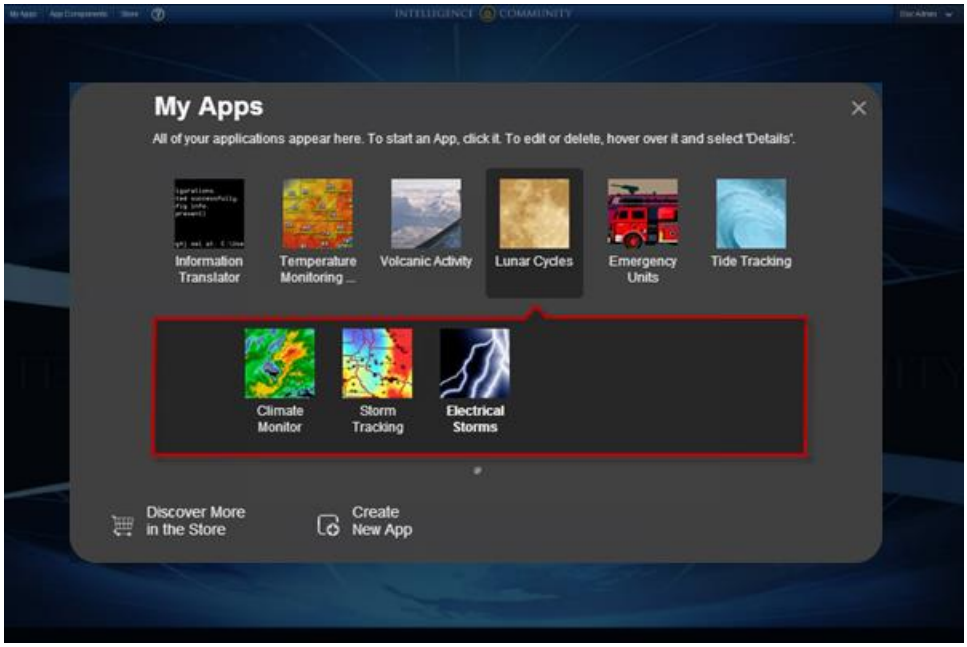


Figure 11: An App with three pages

To add a page to an app:

1. Click the button on the toolbar to open the My Apps Menu.
2. Hover over the app and click the Details link.
3. Click the Add a Page button. A dialog window will open.
4. Give the page a title (required), icon URL (optional) and a description (optional) and choose a layout.
   Note: If you choose a custom layout, see section 4: Create an App.
5. When finished, click OK. OWF will open the page automatically. To add app components to the page, you have to start them on the page, see section 0:

   Start Apps and Pages.

When the My Apps Menu is re-opened, the page will appear in a carousel below the parent app's icon. To access this carousel, click once on the parent app.

3.2.2 Reorder Apps and Pages

To reorder apps in the My Apps Menu, select an app icon and drag it to the new location within the carousel. A green line appears in the My Apps Menu to indicate where the app is placed on drop. This feature also applies to pages in an app's page carousel, select the page icon and drag it to a new location. If the My Apps Menu or a page carousel contains more than one page of items, click and drag the intended item over the left and right arrows on either side of the carousel to place the item on the next page.

3.3 App Information Window

You'll probably use the My Apps Menu most frequently to start apps, as described in 3.2.1: Start Apps and Pages. However, you can access a number of other useful features from there including the App Information Window, accessed by clicking the that appears beside each app on hover.

Figure 12: App Information Window

App Information Window: The window that displays the app's description and the following features that are described in detail in the following sections:

- **Add** a page see 3.3.1: Add a Page to an App
- **Share** using the Push feature see 3.3.2: Push/Share Apps
- **Restore** to *current* default state see 3.3.3: Restore an App or Page
- **Edit** see 3.3.4: Edit an App or Page
- **Delete** see 3.3.5: Delete an App or Page

3.3.1 Add a Page to an App

All apps created in OWF start as one-page apps. The Add a Page feature allows users to add another layout which can contain the same app components in a different layout or different app components. This gives you a means to associate tools without trying to cram them all on one screen. The following sections explain how to add pages to an existing app:

To add a page to an app:

1. Click the

button on the toolbar to open the My Apps Menu.
2. Hover over the app and click the Details link.

3. Click the Add a Page button. A dialog window will open identical to the Create New App dialog described in section 4: Create an App .
4. Give the page a title (required), icon URL (optional) and a description (optional) and choose a layout.
5. When finished, click OK. OWF will open the page automatically.

When the My Apps Menu is re-opened, the page will appear in a carousel below the parent app's icon. To access this carousel, click once on the parent app.

3.3.2 Push/Share Apps

Apps are frameworks that allow information from different places to communicate in a customizable environment. Good apps will bring together the tools you need to accomplish a task. They'll be arranged in a way that makes them easy to use and understand. If you make something that does this, you can share it with other users in one of two ways depending on the way your system is configured:

3.3.2.1 Push Apps to the Store

The Push to Store feature sends app data from OWF to a connected Store. The data is sent as a JSON file and contains the following app information:

- App and Page title, icon and description
- Page layout data
- App component(s) definition(s)

In order to push to the Store, OWF must be connected to a Store and the user must be the owner of the app. If the user is not the owner, the "Push to Store" button will not appear as one of the App Manager Tools because users can only push apps to the Store that they own.

Note: Administrators can change ownership using the App Editor. For more information, see the OWF Administrators Guide.

Note: To use this feature, sync with the Store must be enabled. This should be enabled by default. If it is not, see instructions in the OWF Configuration Guide.

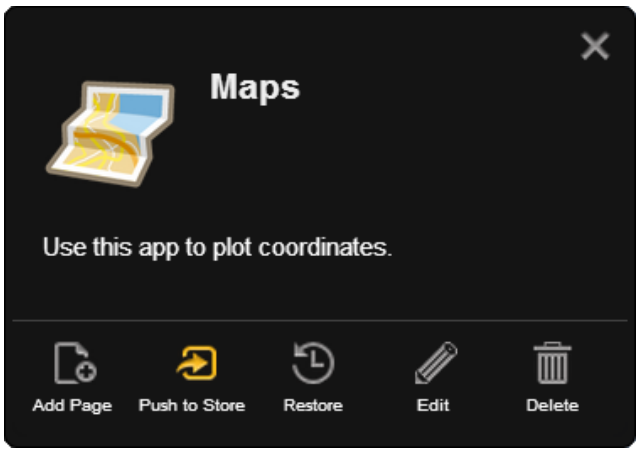


Figure 13: The Push to Store Button on an App

To push an app to the Store:

1. Click the My Apps button on the toolbar to open the My Apps Menu.
2. Hover over an app and click the Information link.
3. Click the Push to Store button. This action sends the app data to the Store.

Note: If OWF is connected to more than one store, the user must click on the Store where they intend to send the app.

If the app is successfully added to the Store, the screen will switch to the app's listing page in the Store and one of the following messages will appear:

- You added a new App to the Store.
- The App is already in the Store (i.e. no change).
- The App is already in the Store and has been updated.

Note: If an error occurs, ask an administrator to checks the app components' URLs first. The Store requires that app components use fully qualified URLs (i.e. ***`https://myserver.com:8443/ozone/path-to-appcomponent/appcomponent`****).*

4. Click the Submit button to send the App listing and any of its required app component listings to a Store administrator for approval.
5. After a Store administrator approves the app, it will be available in search results for Store users.

3.3.2.2 Push Updates to the Store

If you're the owner of an App and you update it after adding it to the Store, you should push the update to the Store to provide users with the latest of the app. To replace the

outdated store version, follow the steps in 3.3.2.1: Push Apps to the Store to send the update to the Store. As a best practice, App Components should have a universal name defined. If they do not, then every time they are pushed to the store, the App Components with no universal name are added to the store as new App Components. Thus, the same app component may clutter the store with multiple copies.

3.3.2.3 Share Apps in OWF

If your instance of OWF is not connected to a Store, you won't see the Push to Store button. Instead, you'll have a Share button on the App's information screen:

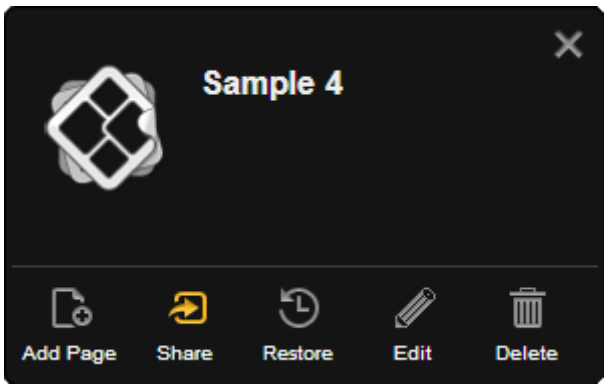


Figure 14: The Share Button on an App

When you share an App in OWF, you're allowing administrators to add it to other users' instances of OWF. You must be the app's owner to share it.

3.3.3 Restore an App or Page

A user can receive an app through administrator assignment or through the Store. Once added, the user can modify their personal copy of the app in OWF. The Restore feature reverses these changes and returns the app to the *current default state*. If the app's owner made changes after the user received the app, then the restored version of the app will differ from the one that originally appeared in the user's My Apps Menu.

If a user restores an app with multiple pages, then all of the pages in the app are restored. Pages in an app can be individually restored.

To restore an app or a page to its *current default state*:

1. Click the

button on the toolbar to open the My Apps Menu.
2. Hover over an app (or page) and click the Details link.
3. Click the Restore button.
4. The app and all associated pages will return to its *current default state*.

3.3.4 Edit an App or Page

The edit app feature allows users to change an app's title, icon and description. Layouts are only editable for pages in an app; single page app layouts are not editable. If a single page app added a page, then the layout for either page (the original and the added page) are editable.

To edit an app:

1. Click the

button on the toolbar to open the My Apps Menu.
2. Hover over an app (or page) and click the Details link.
3. Click the Edit button.
4. A Dialog window will open:
    a. Update the Title, icon URL or description
5. Click OK. If editing a page, this will load the App Builder. See section 4: Create an App for instructions.
6. Make changes to the page's layout, then click the Save button.

Changes made to an app or page only affect the user's personal copy of the app or page. If the user is the app's owner and makes changes to the app or its pages, then the next time they push the app to the Store the changes are sent to the Store. Users who have this app will see these changes applied to their personal copies of the app and pages.

Note: An error message will appear if the user attempts to save the app with an unauthorized layout assignment. An example of an unauthorized layout assignment is if the user has a Tabbed layout pane with multiple app components and then attempts to assign a Fit layout to that pane. The multiple app components cannot fit into one Fit pane and the user will receive an error when attempting to Save the layout.

3.3.4.1 Rename an App

To rename an app:

1. Click the

button on the toolbar to open the My Apps menu.
2. Hover over the app to modify, click the Details button below the app title.
3. Click the Edit button.
4. This opens the App details window. Modifying the Title field, click OK.
5. The App Builder window will open. Click Save.

3.3.5 Delete an App or Page

To delete an app or a page:

1. Click the

button on the toolbar to open the My Apps Menu.
2. Hover over an app (or page) and click the Details link.
3. Click the Delete button.
4. A warning message will appear.
5. Click OK to confirm the deletion.

If the app is used by only the owner, the app will be deleted from the system along with all associated pages. If the app has more than one user (i.e. other OWF users received this app through the Store) the user deleting the app is deleted from the list of the app's users and the app remains in the OWF system.

If the app owner deletes a page, other users of this app will not be affected by this change until the owner pushes the app to the Store. When an app with deleted pages is pushed to the Store, all the app's users will see the pages disappear from their copies of the app.

4 Create an App

OWF includes an App Builder where you can design and customize apps. This can be useful to create your own workflows.

To create a new app:

1. Click

in the toolbar to open the My Apps.
2. Click "Create New" at the bottom of the screen to open the Create New App window.
3. Give the app:
    a. A title (required)
    b. An image URL (optional) that appears in the My Apps window.
    c. A description (optional)

    Note: The app cannot be saved without a title.
4. Choose a layout for the app. Click the radio button beside the selected layout method. Layout options include:
    a. **Choose a template** – Choose one of twelve premade layouts.
    b. **Copy the layout of an existing App** –Clicking this causes a drop-down menu to appear below the selection title. Choose an app from this menu. The new app will adopt the layout of the selected app. However, it will not copy the app components associated with that layout.
    c. **Create a new layout** – Opens the App Builder allowing the user to create a new layout. More information on creating a new layout is found in section 4.2: Use the App Builder.
5. Click OK. The app will automatically open unless you selected "Create a new layout," if that is the case proceed to section 4.2: Use the App Builder.
6. To add app components to the App, click the App Component button on the OZONE Toolbar and select components by clicking them. If the App has more than one pane, click the pane where the component will open.

Next time the My Apps menu is opened, it will contain this app. This app belongs to the user who created it and it cannot be shared with other OWF users until it is shared with the Store. To do this, open My Apps and click the Details button on the App, then, select Push to Store.

Note: Creating a new app, in effect, creates a one-page app. The app and the single page share the same title, description and icon. The layout assigned to this app applies to the single page rather than the app. Users can add additional pages, and therefore additional layouts, to this app. When more than one page is added to an app, the user

has the ability to change the single page's properties. Also each page is edited independent from other pages or the parent App.

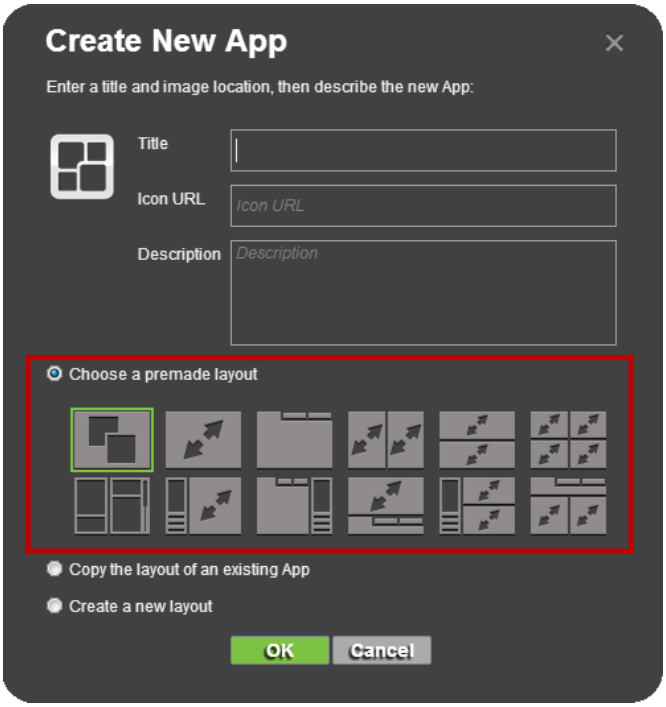


Figure 15: Premade Layout Templates

Descriptions and instructions for adding app components to the five layouts are explained in the following sections. Information on customizing app layouts can be found in section 4.2: Use the App Builder.

4.1 App Builder Components

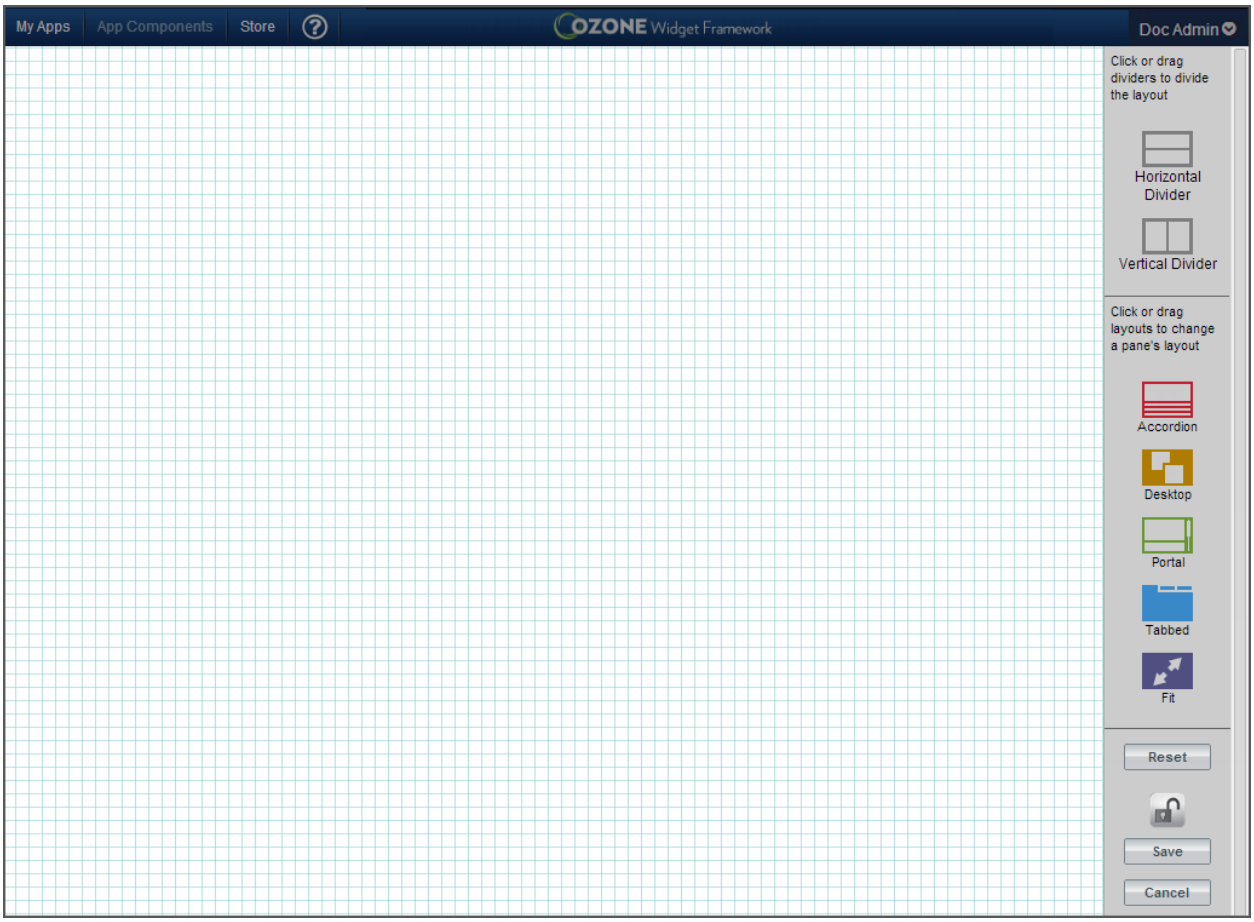


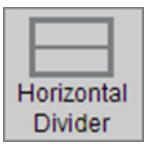
Figure 16: App Builder

The App Builder allows users to create custom layouts for their app.

When you opens an App, it has the potential to display a variety of information. What the user sees depends on the app layout. There are five layout types. Each type can be used as the only layout for the App or used as a portion of the app configuration. The five types are included in a list of app layout templates users can select from when creating their own Apps. The types along with other App Builder tools are described in the following sections.

4.1.1 App Layout Dividers

When using the App Builder, there are two ways to divide the app into sections:

- 

- Horizontal Dividers are used to divide the app (or sub-sections of app) into upper and lower panes.

-

- Vertical Dividers are used to divide the app (Or sub-sections of the app) into left and right-side panes

4.1.2 App Layout Types

OWF supports five different layout types and any conglomeration of those types. Each type is described in this section. During the design process, any of the layouts can comprise a whole app or a pane within app:

- Accordion Layout. See section 4.1.2.1: Accordion Layout for more details.

- Desktop Layout. See section 4.1.2.2: Desktop Layout for more details.

- Portal Layout. See section 4.1.2.3: Portal Layout for more details.

- Tabbed Layout. See section 4.1.2.4:

Tabbed Layout for more details.

- Fit Layout. See section 4.1.2.5: Fit for more details.

4.1.2.1 Accordion Layout

Accordion layouts display app components in equal, horizontal panes. When an app component is added to the app, all the app components are resized to display equally in the OWF window. The OWF window does not scroll. Each individual app component (as shown below) will scroll using its own scroll bar.

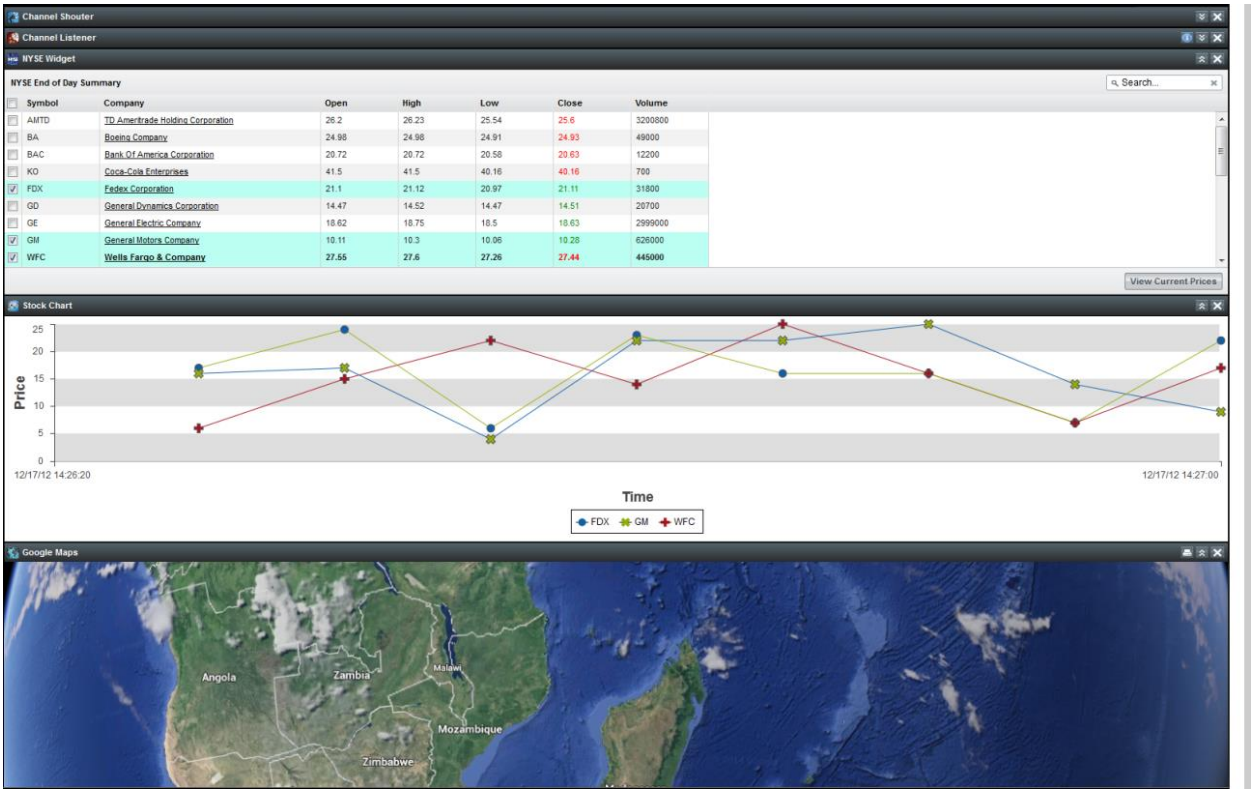


Figure 17: Accordion Layout

4.1.2.2 Desktop Layout

Desktop layouts, similar to the desktop on most personal computers, allow the user to open app components from the My Apps menu and place app components freely in the window and minimize them on a taskbar.

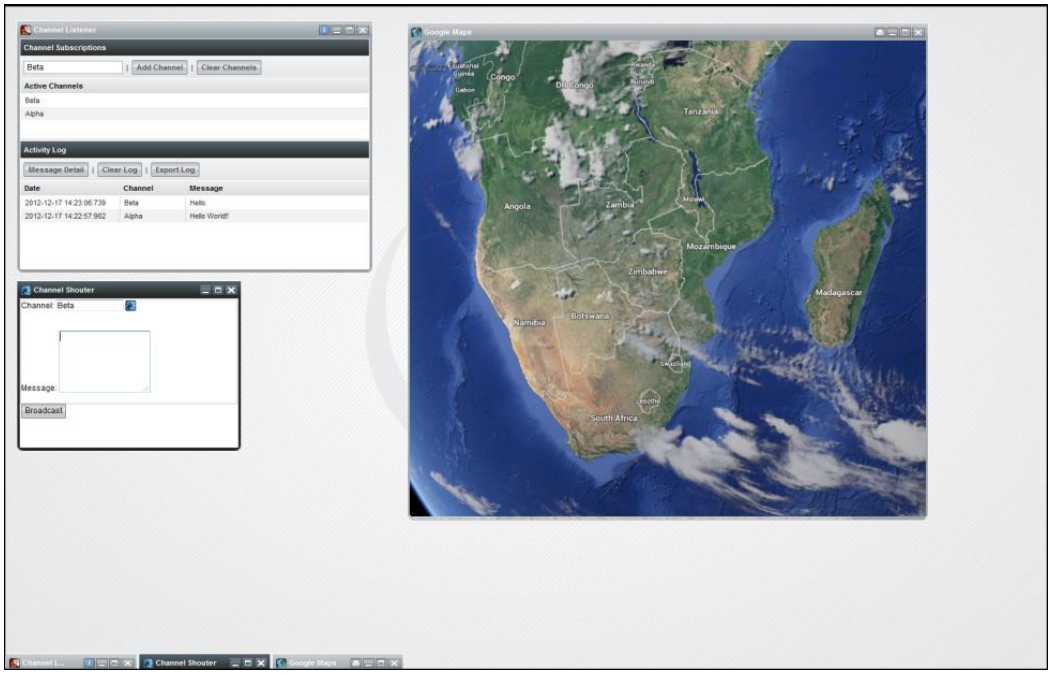


Figure 18: Desktop Layout

4.1.2.3 Portal Layout

Portal layouts comprise a column-oriented layout that organizes app components of varying heights. Each new app component loads above the first one on the screen. The user drags a dividing bar to specify app component's height. The app components and the OWF window scroll.

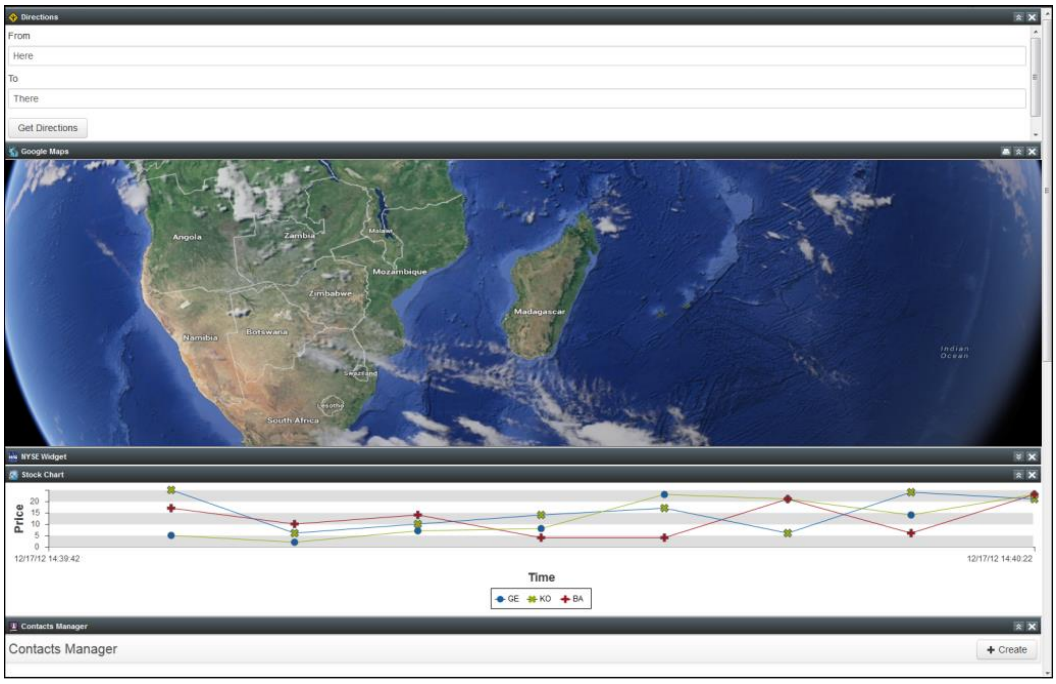


Figure 19: Portal Layout

4.1.2.4 Tabbed Layout

Tabbed layouts display one app component per screen. Like browser tabs, the tabs at the top of the screen switch from one app component to another.

Figure 20: Tabbed Layout

4.1.2.5 Fit Layout

Fit layouts allow a user to place a single app component on the screen. An open app component shows no border or chrome and will occupy the full size of the available framework. Think of it like making a PowerPoint presentation full-screen within the designated OWF window. If a user wishes to open an additional app component, they will be notified that the initial app component will be replaced by the new one.

Note: Some app component s are opened automatically by other app components. In these cases, the app component s will "float" on top of the app.

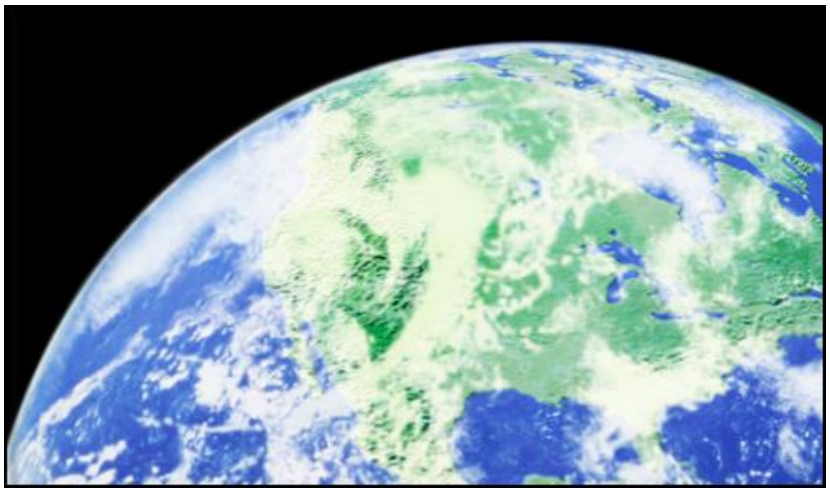


Figure 21: Fit Layout

4.2 Use the App Builder

The following walkthrough will explain how to build a new app with Accordion, Desktop and Tabbed layout sections:

1. Click

on the toolbar to open the My Apps menu.
2. Click "Create New App" button to open the Create New App window.
3. Enter a title (required), image location (optional) and description (optional) for the new app.
4. Select a layout from the three layout choices. For this walkthrough, click the radio button next to the "Create a new layout" link.
5. Click OK. This will open the App Builder.
6. Divide the screen horizontally by dragging the Horizontal Divider button to the App Builder grid or clicking the Horizontal Divider button.
7. Divide the upper grid section vertically by:
8. Dragging the Vertical Divider button to the upper level of the designer.
9. Clicking the upper portion of the App Builder to highlight the top section. Click the Vertical Divider to divide the highlighted section vertically.

Following steps 1 through 7 correctly, the screen should mirror the image below:

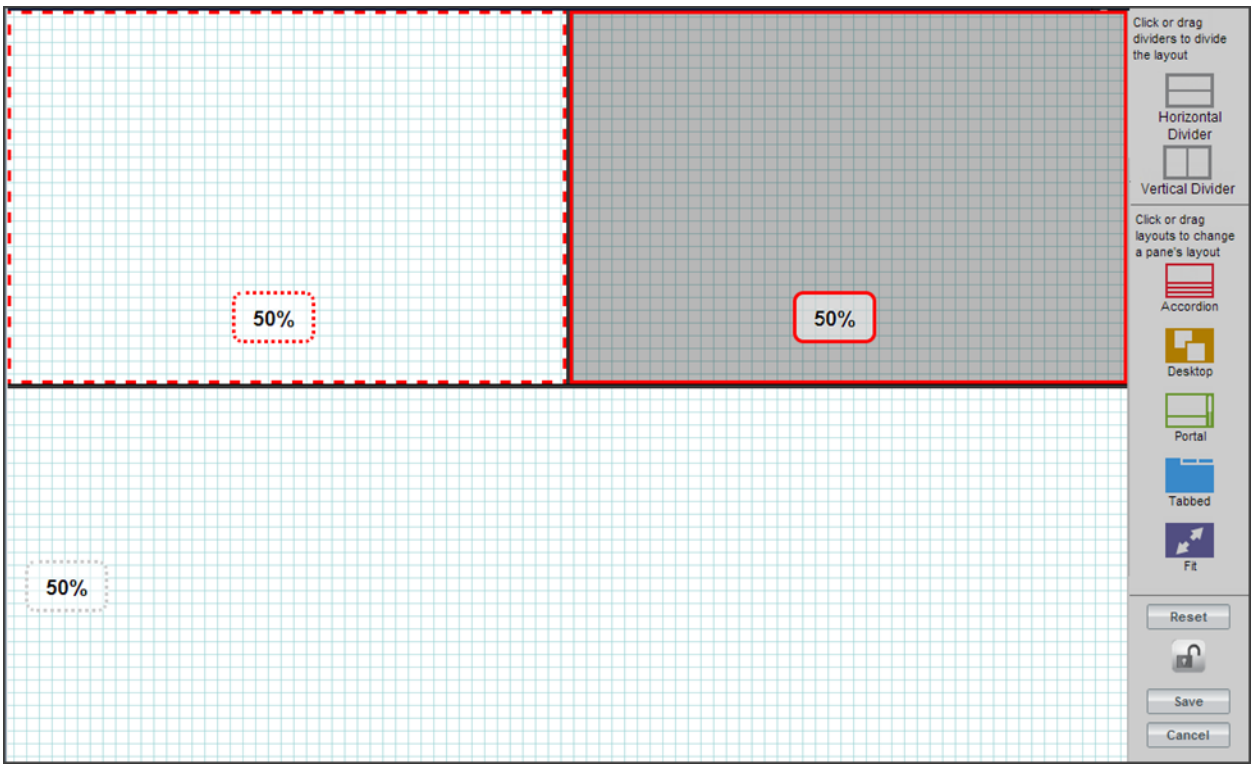


Figure 22: Creating an App Layout

The app's layout is now divided into multiple sections. Each section can be divided further or assigned a layout.

To divide a section:

- Drag the Vertical or Horizontal Divider into the section.
- Select a section and then click the Vertical or Horizontal Divider.

Note: Clicking the Vertical or Horizontal Divider to split a pane leaves the top/left pane in focus as indicated by a solid red border. If a user then clicks on a layout type, the layout would be assigned to this pane because it is in focus. To change focus to another pane, click on the pane or use the Tab keyboard navigation to first select a pane and then press Enter to focus on it.

To assign a layout to a section:

- Drag a layout type icon from the sidebar into the section.
- Click the section and then click a layout type.

When a section of the app is clicked, it is in focus indicated by solid red border. Its partner section of the app is highlighted with a broken red border; the combined sections (solid red border and broken red border) equal 100 percent of a viewing area. For example in Figure 22, the top right portion is surrounded by a solid red line. The top left portion is surrounded by a broken red border. Together, they equal 100 percent of the upper pane of the app.

To resize sections, drag the Divider between them or type a different value into one of the section's screen percentage box. The related pane will automatically adjust. At any point during the app creation, it can be saved, reset or cancelled.

Note: A user can also use pixels values instead of a percentage value when they need to make a more precise cell size. In the image above, a user would be able to make either of the app sections an exact number, 250px, for example. When this happens, its partner presents the label "Variable". Entering a number and using a P or a PX will designate pixels.

Continuing the walkthrough, the user can drag in or click on the layout type icons to assign layout types to a section.

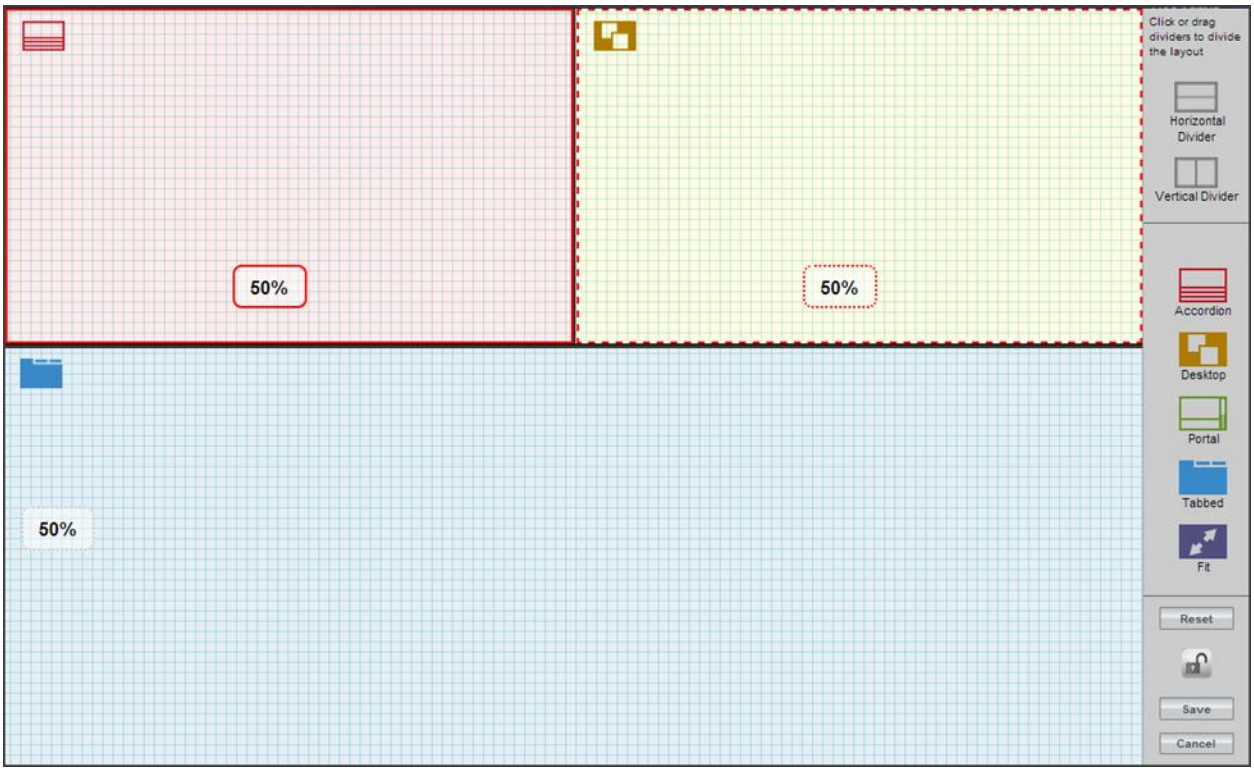


Figure 23: App Builder with Layout Icons

In the image above, each section of the app has a layout type icon in place.

The upper-left section contains the Accordion layout icon and has changed to a red background. The upper-right section contains the Desktop layout icon and has changed to a yellow background. The lower section is a Tabbed layout and has changed to a blue background. Each individual section allows for the layout of app components in accordance with the properties of the layout icon. Once the layout icons are in place, the user can save the app. After saving the app, it will open automatically. It can also be opened from the My Apps Menu by clicking the My Apps button. You can now populate the app panes with app components from the App Components carousel. For more information about adding app components to an app, see section 5.3: Start App Components.

Additional App Builder tools are:

-

- Clears layout modifications to the app.
- - Lock/Unlock app – Use this button to restrict changes to the app layout and the app components displayed on it. When the app is locked, app components cannot be added or removed and sections cannot be edited, however, the layout of a locked app is still editable.
-

- Saves the app, closes the App Builder and then opens the app.
-

- Cancels changes made since the last Save or since entering the App Builder.

After the app opens, you'll want to add app components. See section 5.3: Start App Components.

5 App Components

5.1 Definitions

5.1.1 App Components

An app (app) component is a lightweight, single-purpose app that offers a summary or limited view of a larger app. In OWF, an app component is a global description for a piece of Web content that can be configured by the user and displayed within an app.

5.1.1.1 Singleton App Components

Singleton app components allow only one instance of the app component to open in an app. (Users can open multiple instances of regular app components on each app.) If a Singleton app component is open on an app and a user tries to open another instance of the app component, the open instance will move to the forefront of the screen. Administrators may make an app component a Singleton for numerous reasons. For example, preventing users from opening multiple instances per app may reduce confusion, increase performance (if the app component uses a substantial amount of memory), or address another need.

5.1.1.2 Background App Components

Background app components run but do not appear on a user's app. They often serve as caching and logging tools that do not have a user interface. Background app components can be obtained from a Store server or configured by an OWF administrator. Most users will not be aware that Background app components are running in their instance of OWF. However, Background app components will appear on the App Component Switcher. Closing them may interrupt data transfer from other app components. Use the App Component Switcher to close Background app components. After selecting a Background app component, a warning message will appear. To close the app component, select OK. If the Background app component is visible (an administrator has not hidden it from the App Components menu), a user can restart it by dragging it from the App Component menu to an app.

Note: Background app components do not appear on OWF app. These app components will often interact with other app components and can be used for caching and logging.

5.1.1.3 Required App Components

In the Store, listings can designate that specific listings are required by other listings. For example, the Store Tracking listing may require the Compass Listing. This is how the relationship works when you add those listings to your OWF as app components:

- When you **add** Store Tracking to your OWF, you will also add Compass.
- If you **delete** Store Tracking, you'll keep Compass.
- If you **delete** Compass, Store Tracking will delete too.

You must create the "required relationships" in the Store. OWF supports the relationships but it does not have a means to create them.

5.2 App Component Menu

Users access their app components from the App Components Menu by clicking the App Components button in the toolbar. Once open, the App Components Menu appears as a carousel.

Figure 24: App Components Carousel

The App Components carousel contains the following features:

- **Expander Tool** – Click the expander and drag down to increase the size of the App Component display window.

- **Search** - Type an app component title to search for it. This search is **not** case sensitive.

- **Pinning Tool** – Click the pinning tool to make the carousel remain open on the screen. To allow the carousel to close after selecting an app component, click the pinning tool again.

- **Close Menu** - Exits the App Component window.

The App Components Menu displays the app component's title and icon. For more information about the app component, hover over the app component icon to reveal the Information link. Clicking the opens the Information Window (Figure 25) which provides a description of the app component and a Remove link. Clicking the Remove link will delete the app components from the user's OWF and it is no longer displayed in the App Components menu. More information on deleting app components is in section 5.5: Delete App Components.

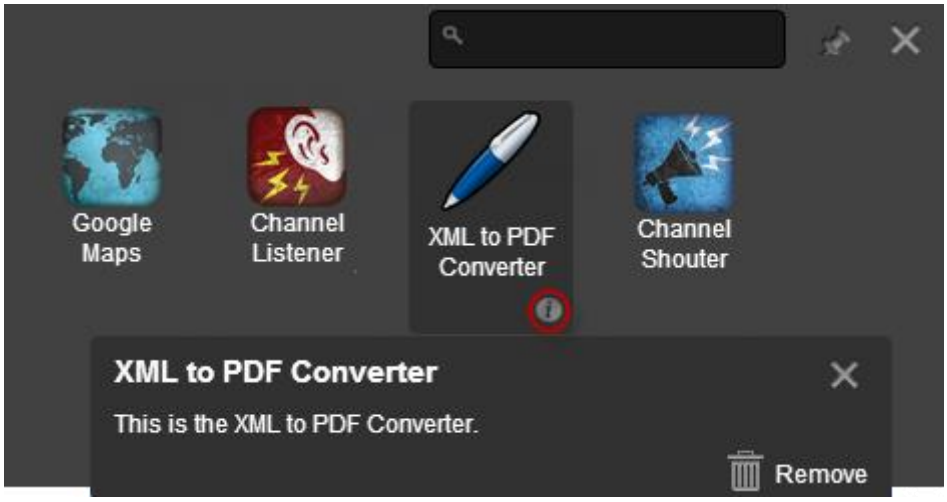


Figure 25: App Components Menu Information Window

5.2.1 Search for App Components

OWF provides a search feature allowing users to search for app components in the App Components Menu. Located in the upper-right portion, this field filters the list of app components by title. Users can search the app components title or description; the search feature is case insensitive. The App Components Menu will refresh and display all app components that meet the search criteria.

5.2.2 Reorder App Components in the App Component Menu

To reorder app components in the App Components Menu's:

1. Open the App Components Menu by clicking the App Components button on the toolbar.
2. Click an app component, then drag it left or right in the carousel. Release the mouse to complete the move.

Note: Users can reorder the App Components Menu in carousel and expanded view.

5.3 Start App Components

App Components will automatically start when you add them to an app or start an app where the component was already added. Thus, you must add components to an app to start them. To do that:

1. Click the My Apps button on the toolbar to open the My Apps Menu, select the app where the component will run.
2. Next, click the App Components button on the toolbar to open the App Component Menu.

3. Click to place or drag app components from the menu into the app. The app components will start in the highlighted app pane.
4. Repeat steps 2 and 3 to add more components to the app.
5. If the App Component Menu is pinned, click the X in the upper-right corner to close it when you're finished.

5.3.1.1 Intents: Start App Components that use them

When an app component sends an intent request, a pop up window appears displaying all of the open app components that can receive the requested intent action and data for an intended purpose (graphing, displaying, etc.).

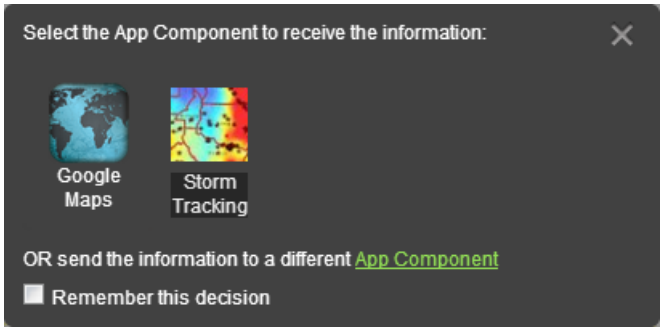


Figure 26: Instructional Window for Intent

Select an app component to accept the requested intent:

- Click one of the app components displayed on the window OR
- OR click the App Component link to send the information to an App Component that is not open on the screen:

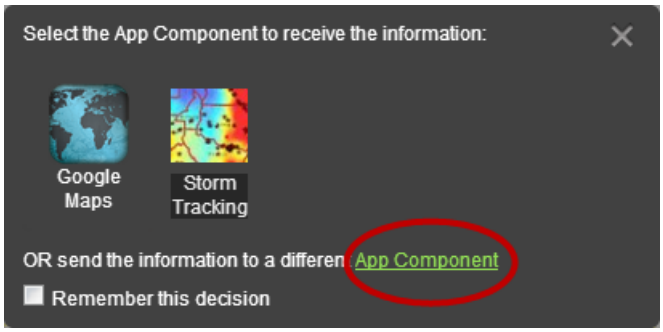


Figure 27: Send information to a different App Component

Note: Checking the "Remember" box will allow the selected app component to automatically open the requesting app component's data. This function will continue until the user breaks the connection by closing either the sending app component or the receiving app component.

After a user selects a receiving app component, the intent data is automatically sent to and processed by the receiving app component. To place the app component on the App, click or

drag it from the menu into the app. If every pane in the app is occupied by other app components, then selecting a pane to place this app component will replace the app component currently there. Once the receiving app component is in place and open in the app, it will receive the sending app components intent request.

5.4 Send Apps to the Store

The Push to Store feature sends app data from OWF to a connected Store. The data is sent as a JSON and contains the following app information:

- App and Page title, icon and description
- Page layout data
- App component(s) definition(s)

In order to push to the Store, OWF must be connected to a Store and the user must be the owner of the app. If the user is not the owner, the "Push to Store" button will not appear as one of the App Manager Tools because users can only push app to the Store that they own.
Note: Administrators can change ownership using the App Editor. For more information, see the OWF Administrators Guide.

Note: To use this feature, sync with the Store must be enabled. This should be enabled by default. If it is not, see instructions in the OWF Configuration Guide.

To push an app to the Store:

1. Click the

button on the toolbar to open the My Apps Menu.
2. Hover over an app and click the Details link.
3. Click the Push to Store button. This action sends the app data to the Store.
   Note: If OWF is connected to more than one store, the user must click on the Store where they intend to send the app.

   If the app is successfully added to the Store, the screen will switch to the app's listing page in the Store and one of the following messages will appear:

   - You added a new App to the Store.
   - The App is already in the Store (i.e. no change).
   - The App is already in the Store and has been updated.

   Note: If an error occurs, ask an administrator to check its app components' URLs first. The Store requires that app components use fully qualified URLs (i.e. ***`https://myserver.com:8443/owf/path-to-appcomponent/appcomponent`****).*
4. Click the Submit button to send the App listing and any of its required app component listings to a Store administrator for approval.

a. After a Store administrator approves the app, it will be available in search results for Store users.

b. For more information about editing the App in the store, see section 3.3.4: Edit an App or Page.

5.5 Delete App Components

Users can remove any directly assigned app components from their instance of OWF. This action will not delete the app component from OWF, it only deletes the app component for that user. Only administrators can delete app components from the system.

To delete an app component from a user's instance of OWF:

1) Open the App Components Menu by clicking the

button in the toolbar.
2) Hover over the app component to reveal the , then click it.
3) Click Remove in the Information Window.
4) Click OK on the warning pop-up.

Note: Users cannot delete app components that have been given to them through a group assignment.

5.5.1 Deleting Required App Components

Like any other app component, required app components can be deleted from the App Components Menu. If a user deletes a Required app component, any app components that require the deleted app component will automatically be deleted after the system displays a warning notification (Figure 28). Other app components that are related to the dependent app components will remain. For example, Jane's Tool Set requires the Search Filtering Tool, the Chat Client and the Traffic Monitoring app components. If the Search Filtering is deleted, the Jane's Tool Set will be deleted.

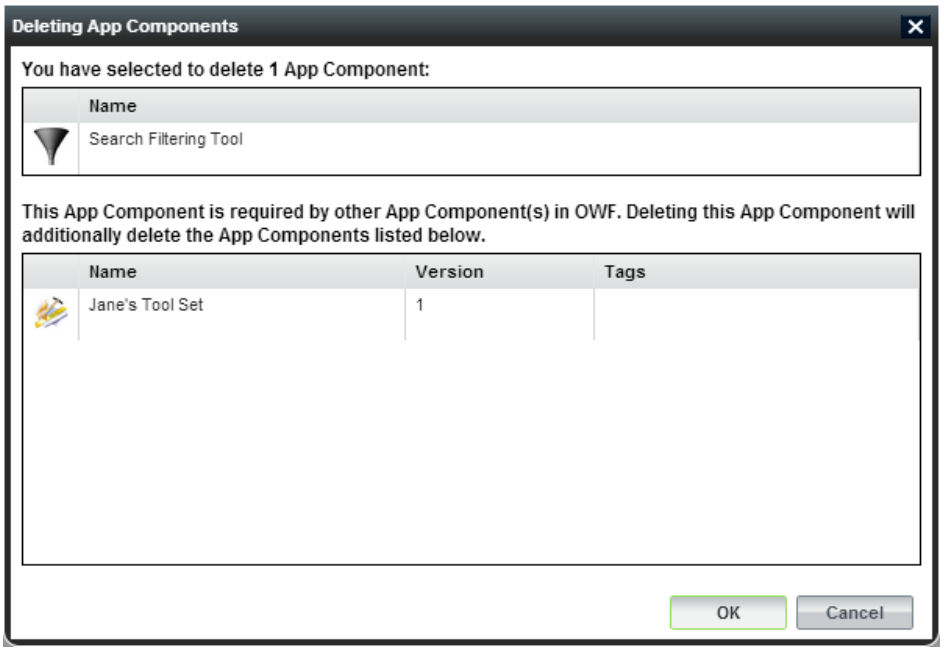


Figure 28: Delete App Component Warning

6 Customize your experience

6.1 User Profile

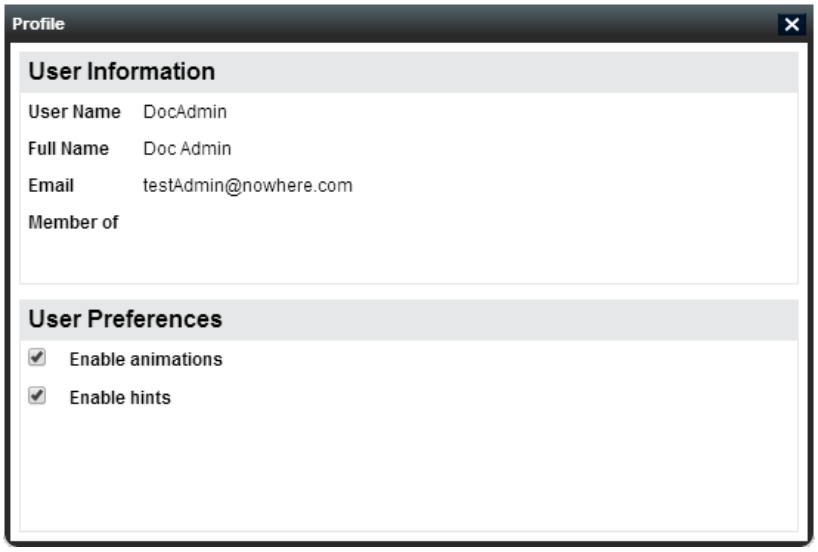


Figure 29: OWF Profile Information

In OWF, users cannot customize their User Information.

They can view it:

To access the profile in OWF, click the Profile tab from the drop-down user menu. The OWF Profile page shows User identification including:

- username
- full name
- e-mail
- a list of the user's groups

Note: Enabling animations may cause issues with third-party plug-ins like Google Earth.

6.2Change Themes

6.2.1 Themes

In addition to the default Cobalt theme, OWF provides two accessibility themes to accommodate users with vision challenges.

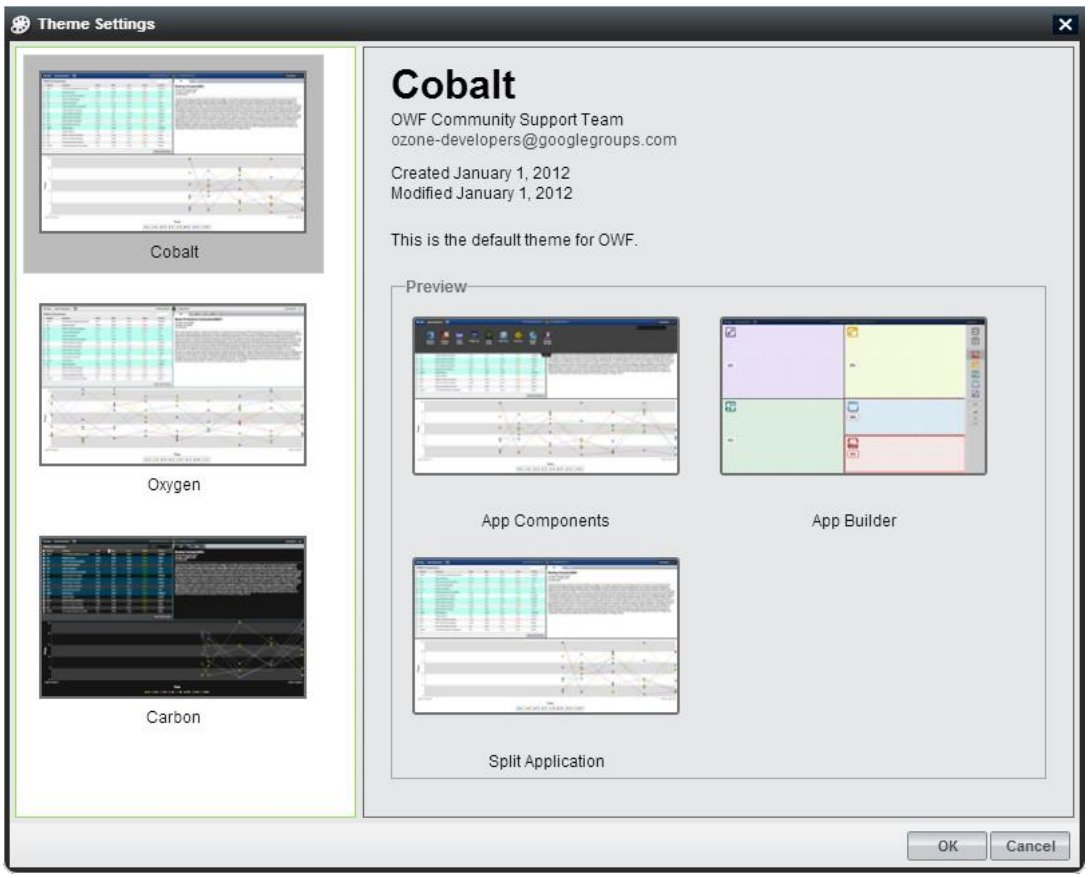


Figure 30: Theme Settings Window

To select a theme:

1. Open the drop-down User Menu in the toolbar, and then click the Themes button.
    a. The Theme Settings window will open. Theme options will appear in the left column. The current theme will display in the right column.
2. Select a theme in the left column, then click OK. The theme will automatically change to the new selection.

6.2.1.1 Accessible Themes

OWF ships with the following themes that were specifically designed for accessibility:

- **Oxygen** - A high contrast theme with white backgrounds and dark text.
- **Carbon** - A high contrast theme with dark backgrounds and light text.

6.3 Enable/Disable Animations or Hints

6.3.1 Enable/Disable Animations or Hints

To improve lag on slower systems, you may want disable animations or hint text.

To do this:

1. Click Profile on the drop-down user menu.
2. Uncheck the Enable Animations box.

To enable OWF animations, click the Enable Animations checkbox.

7 About window

Assessed by clicking the drop-down user menu on the right-side of the screen, the About window displays information that can be customized by an administrator:

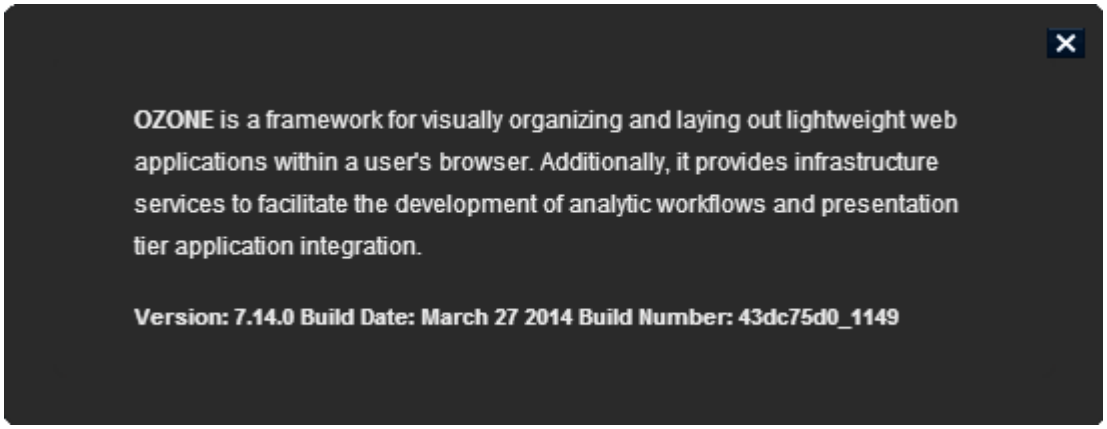


Figure 31: OWF About Window

8 Glossary

Table 3: Glossary

Term	Definitions
Accordion Layout	Accordion layouts display app components in equal, horizontal panes. When an app component is added to the app, all the app components are resized to display equally in the OWF window. The OWF window does not scroll. Each individual app component (as shown below) will scroll using its own scroll bar.
Affiliated Store	An Affiliated Store is a store that another organization uses for their system. When a local store is connected to an affiliated store, users in the local store can search for and add listings from the affiliated store (assuming the user has proper authentication for the affiliated store).
Applications/Apps	Apps can compile resources and make them easy to access. They allow administrators and users to group App Pages into folder-like collections that allow for easy transition from one page to another.
App Builder	A tool in OWF where users can create or edit their own customized App.
App Component	A lightweight, single-purpose Web app that offers a summary or limited view of a larger Web app. Formally referred to as a widget, an app component is a global description for a piece of Web content that can be configured by the user and displayed within an app.
App Component Menu	The App Components Menu displays all available app components. Use this feature to start or add components to an app.
App Divider	The horizontal or vertical lines that separate panes in an app layout.
App Layout	The outline of each section of an App.
App Layout Type	There are five standard types (accordion, desktop, portal, tabbed, fit). You can use them as a section of the app layout or the whole layout.

Term	Definitions
App Page	App Pages have customizable layouts that organize app components and improve users' workflows.
Dashboard Designer	This is the retired name for the App Builder.
Desktop Layout	Similar to the desktop on most personal computers, allow the user to open app components from the My Apps menu and place app components freely in the window and minimize them on a taskbar.
Detailed Listing View	Only listing owners and administrators will see the Detailed Listing View. It is accessible by clicking "Admin" on the Quick Listing view. This action automatically opens a new page displaying all the listing's detailed information.
Dividers	(see App Dividers)
Favorites Flag	After a user adds a listing from the Store to OWF, a green flag appears over the left corner of the listing icon on its Quick View, the Discovery Page and in search results.
Filters	A feature used to reduce the number of search results by type or category.
Fit Layout	Fit layouts allow a user to place a single app component on the screen. An open app component shows no border or chrome and will occupy the full size of the available framework. Think of it like making a PowerPoint presentation full screen within the designated OWF window. If a user wishes to open an additional app component, they will be notified that the initial app component will be replaced by the new one.
Help	Repository of instructional guides and video tutorials.
Intent	Intents are the instructions for carrying out an app component's intentions.
Listing	Any software app or component that a user enters into the Store is called a "Listing." Listings can be a various types of Web content.
List View	By default, the Store returns search results in a grid view. To view the Search Results page listings in List view, click the icon in the upper-right corner of the Search Result

Term	Definitions
	page.
Marketplace	Proper name for the Store, this guide uses Store as a generic term because some users may customize their systems and remove the term Marketplace.
My Apps Menu	Opens the My Apps Menu used to find, start and manage app. Use the menu to get details about an app and app pages, discover new app in the Store and access the App Builder.
My Listings Page	Accessible from the drop-down User Menu, the My Listings Page shows recent activity, non-approved listings and approved listings.
Notifications	When configured, an administrator can see alerts from a pre-defined system. Alerts can be configured to announce when listings are created, updated and deleted.
OZONE	The name of the whole system which comprises OWF and the Store.
OZONE App	The name used for Apps or Apps in the Store, see App for a complete definition.
OWF	A framework that allows information from different agencies and servers to communicate inside a browser window without sending information back to the respective servers.
Owner (Listing)	Pre-populated by the authenticated username at the time the listing is created. Ownership can be reassigned by typing a new owner's name in the owner field on the listing page. To add more than one listing owner, click the + button below the Owners field.
Panes	(see App Panes)
Pending Listing	After a listing is submitted to (or rejected by) an administrator it is pending until an administrator approves it.
Portal Layout	Portal layouts comprise a column-oriented layout that organizes app components of varying heights. Each new app component loads above the first one on the screen. The user drags a dividing bar to specify app component's height.

Term	Definitions
	The app components and the OWF window scroll.
Quick View (Listing)	When a user clicks on a listing from the Store's Discovery Page or Search Results, the Quick View appears providing basic information about the listing.
Rejection Message	The message that appears when an administrator rejects a listing.
Required Listings	An association between listings. Ex. If Listing A needs Listing B to function, Listing B is a Required Listing.
Short View	The short listing view provides users with basic information about the listing. Listing details included in the short listing view are the listing's name, icon, originating store and ratings which are described below.
Store	Hosts an assortment of available listings; users can search and add any of those listings to their App Components menu.
Tabbed Layout	Tabbed layouts display one app component per screen. Like browser tabs, the tabs at the top of the screen switch from one app component to another.
Toolbar	The navigation bar at the top of the app. It links to a user's apps, app components, the Store, online Help and a host of options from the drop-down user menu.
User	A person signed in to the OZONE app without administrative privileges
Web App	A program that cannot interact with other App Components. Web Apps automatically open as their own OZONE App or in a new browser tab.
Widget	The name App Components used to be called.

9 Intents: Create & Edit Dynamic Listings

Intents are the instructions for carrying out an app component's intentions.
Note: This information is only metadata used as a placeholder. For any intents to function in OWF, a developer has to code the actual function into an app component. Instructions for doing this are found in the OWF Developer's Guide.

There are three main aspects to intent:

- **Action** – The app components action, think of actions as verbs like view, share, edit, etc.).
- **Data Type** – The type of data that is requested or sent.
- **Send/Receive** – The direction of the intent request. An app component can send, receive or send and receive an intent request.

Intents allow users to determine how app component(s) use and share data. This binding capability enables an app component that collects data to easily send that data to an app component that displays data in an understandable way.

Example: The NYSE app component records daily stock exchange rates. It stores the data as a giant file that is difficult to read and understand. To make the data useful, the NYSE app component has a "send" intent that allows it to identify app components that can graph data. Any app component that has can "receive" graphing intents will appear. Then, the user decides which graphing app component they want to send the NYSE app component's data.

Note: App Component s may have multiple intents associated with them. Users cannot create app component intents. Administrators and developers (logged in as administrators) add app component intents through the OWF interface. Developers also add the intents through app component descriptor URLs. OWF follows standard Web Intent specifications documented at Webintents.org.

9.1 Add Intents to Listings

When an OZONE App Component is created in the Store, there are no intents associated with it. Users/listing owners can create, edit and delete intents for OZONE App Components using the Create/Edit Listing page in the Store. The following instructions reference using the Store to create an intent.

To add an intent:

1. Open the Create/Edit Listing Page.
2. On the Create/Edit Listing page, select listing type: App Component
3. Click the

button, This opens the "Add Intent" window.

4. Select the intent's action and data type from the drop-down menus, select the direction(s) of the intent, then click OK. The following sections will describe each of these actions:

   The Store ships with the following **Actions**:

   - **Edit** - Allows app components the ability to edit a specified data type.
   - **Pick** - Allows app components the ability to pick files from their service to use in a client app component.
   - **Save** - Allows app components the ability to save data.
   - **Share** - Allows app components the ability to share a specified data type.
   - **Subscribe** - Allows app components the ability to subscribe to a specified data type.
   - **View** – Allows app components the ability to view a specified data type.
   - The Store ships with the following **Data Types**:
   - **Audio** - Audio files
   - **Image** - Image files
   - **JSON** - JSON documents
   - **Text** - Textual information
   - **URI** - URI - Uniform Resource Identifier
   - **Video** - Video files

App Components can **send** and **receive** intents:

- **Send** – Allows app component to send information to other app components
- **Receive** – Allows app component to receive information to from other app components

Users cannot create new intents, however administrators can, see the Store Administrator's Guide for details.

9.2 Edit & Delete Intents

To edit or delete a listing's Intent, start by editing the listing:

1. Open the Edit Listing Page in the Store.
2. On the Edit Listing page, scroll to the Intents section.
3. Hover over the Intent to see the editing and deleting functions.
4. Click the pencil to edit or the minus sign to delete.

10 Known Issues

10.1 Browser Issues

Launching JavaScript-heavy app components in certain versions of Internet Explorer consumes system memory that won't be flushed or released until Internet Explorer is exited and restarted. Again, this is currently only an Internet Explorer issue.

10.2 User Interface Issues

Importing Invalid .JSON forces a browser restart

Importing invalid **.JSON** information into OWF will cause a dialog window to launch and block the app. Closing the browser and re-launching the session will remedy this situation. To ensure that valid **.JSON** is being imported, only import **.JSON** which has been exported from an OWF instance.

Note: Due to updates, the most recent version of OWF may not accept imported file from earlier versions.

Changes in screen resolution may render app components unviewable.

The positioning of the app component is absolute. This means that when changing from a larger monitor to a smaller monitor, or when changing from a higher screen resolution to a lower screen resolution, some floating windows may be either partially or fully off the viewable region of the screen. Currently there is no remedy for this issue; however, closing an app component and re-adding it (from the App Component Menu) will reset their position and, therefore, render it viewable again.

Dashboard Configuration Manager windows may not populate.

Occasionally, Dashboard Configuration Managers may not populate with app components or regions. This can be easily remedied by changing the Layout Type within the Dashboard Configuration Manager.

10.3 Technology Issues

Java Applet App Components always sit on top of other app components (z-index issue).

There is a documented Java/Sun/Oracle bug where Java applets not obeying proper z-indexing, the effect being that an applet will appear over everything else in OWF:

False error in Oracle

When running the Oracle create script, two errors will be reported about triggers that could not be dropped because they do not exist. The script will still produce a correct schema despite these errors and the application will function normally.

Flex App Components always sit on top of other app components (z-index issue).

Flex has a known issue with DHTML and z-index ordering. The default wmode for flex is window with two other options; transparent and opaque. In order for flex app components to adhere to the proper z-index ordering the wmode must be set to something other than the default.

Silverlight App Components always sit on top of other app components (z-index issue).

Silverlight has a known issue with DHTML and z-index ordering. The default windowless mode for Silverlight is false. In order for Silverlight app components to adhere to the proper z-index ordering the windowless mode must be set to true.

Google Earth Plugin App Components always sit on top of other app components (z-index issue).

The Google Earth browser plugin currently does not conform to the normal z-index rules of html. This will cause the plugin to remain on top of any other floating windows that may be on the screen. If you are using this plugin, it is recommended not to use it in the desktop layout. It can be used in any of the other static layouts but windows launched from the toolbars may be rendered unreachable by the plugin.

11 Index

The following index lists every place in the document that the respective term appears. Be mindful that the index (which is generated automatically) includes every occurrence of the term. This may misrepresent some terms, for example, references to the App Component Menu will also appear in App Component column.

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