Ozone Widget Framework

User's Guide

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1 Introduction

1.1 Objectives

The purpose of this guide is to explain how to use the Ozone Widget Framework (OWF). This is including, but not limited to, the use of widgets, dashboards and their configuration settings.

1.2 Document Scope

This guide is written for users of the OWF application.

1.3 OWF Overview

1.3.1 Widgets

A widget is a lightweight, single-purpose application that offers a summary or limited view of a larger application. In OWF, a widget is a global description for a piece of Web content that can be configured by the user and displayed within a dashboard. Additional information on widgets is available in section 3: Widgets.

1.3.2 Dashboards

A dashboard is a user-defined template where widgets are added, arranged and used by the user. Dashboards have a customized layout that serves to organize loaded widgets, helping the overall function of a user's workflow. Once saved, a dashboard will load with the same interface and widget layout as the last time it was accessed by a specific user.

Also available in OWF are group dashboards. The group dashboard feature provides identical dashboards for each member of a group. Each group member can customize their instance of a pre-configured dashboard. All dashboards and their respective configurations are limitless; a user can have any number of dashboards, all of which render and function independently. More information on adding, deleting and customizing dashboards is found in section 4: Dashboards.

1.3.3 Stacks

Stacks are simply a collection of dashboards. Users and groups are assigned to a stack by an administrator. Once assigned, users are able access, share and restore the associated widgets and dashboards.

1.4 Related Documents

Table 1: Related Documents

Document	Purpose
User's Guide	Understanding the OWF user interface ; adding, deleting, modifying widgets and using widget intents ; accessing and using Marketplace ; creating, deleting, adding, switching, modifying dashboards ; using stacks ; defining accessibility features such as high-contrast themes and keyboard navigation
Administrator's Guide	Understanding administrative tools : adding, deleting, and editing widgets, users, groups, stacks and group dashboards; creating default content for users, groups, stacks and group dashboards
Developer's Guide	Creating Widget applications and integrating existing applications into OWF; widget upgrade instructions; walkthroughs for creating widgets; adding the following components to widgets: intents, descriptor URLs, preference API; 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 widgets, dashboards and stacks; instructions for setting up a local instance of OWF , unpacking the OWF Bundle and installing security certificates ; Truststore/Keystore changes

2 Toolbar Elements

2.1 Overview

From the OWF Toolbar, users can open widgets, change dashboards or stacks, connect to a Marketplace (if configured), adjust settings and open a Help menu. The drop-down User Menu, located on the right, displays the last sign-in date, profile information, sign-out option and about OWF information.



Toolbar

2.2



Figure 2: Toolbar

The following buttons comprise the toolbar:

- **Favorites Menu:** Opens the Favorites Menu which is used to find, start and manage widgets. Use the Favorites Menu to search for widgets by title. Widget displays can toggle between icon and list views. For more information about the Favorites Menu see section 3.2: Widgets and the Favorites Menu.

Note: There is a memory-based issue with opening JavaScript heavy widgets in some versions of Internet Explorer. Please see Appendix <u>B.1: Browser Issues</u> for more details.

- **Switcher:** Displays available dashboards and stacks. For more information see section 4: Dashboards.

- Marketplace: Connects to Marketplace(s). When launched, a user can search from an assortment of available widgets and add any of those widgets to their Favorites Menu. See section 3.4: Accessing Marketplace for more details.

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

- **Metrics**: Opens the Metrics Switcher where widgets designated as Metric Widgets reside.

Note: The Metrics button will only appear if Metrics widgets are available.

- **Settings**: Controls themes and widget settings. Use this button to change widget settings including title and visibility in the Favorites Menu.
- Administration: Use it to approve widgets, create group dashboards and edit users, groups and widgets.

Note: The button will only appear if the user signs in to OWF as an administrator.

Online Help: Repository of OWF Guides and video tutorials.

2.3 Toolbar - Drop-down User Menu



Figure 3: Toolbar - Drop-down User Menu

The following elements reside under the drop-down User Menu:

- **Last Sign In** Text displaying the approximate time the user last entered OWF.
- **Profile information** User identification including the username, full name, e-mail, and list of groups of which the user is a member.
- **About** Displays the OWF build information.
- **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 individual versions of OWF.

3 Widgets

3.1 Overview

A widget is a lightweight, single-purpose application that offers a summary or limited view of a larger application. In OWF, a widget is a global description for a piece of Web content that can be configured by the user and displayed within a dashboard.

3.1.1 Singleton Widgets

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

3.1.2 Background Widgets

Background widgets run but do not appear on a user's dashboards. They often serve as caching and logging tools that do not have a user interface. Background widgets can be obtained from a Marketplace server or configured by an OWF administrator. Most users will not be aware that Background widgets are running in their instance of OWF. However, Background widgets will appear on the Widget Switcher. Closing them may interrupt data transfer from other widgets. Use the Widget Switcher (Alt + Shift + Q) to close Background widgets. After selecting a Background widget, a warning message will appear. To close the widget, select OK. If the Background widget is visible (an administrator has not hidden it from the Favorites Menu), a user can restart it by dragging it from the Favorites Menu to the dashboard.

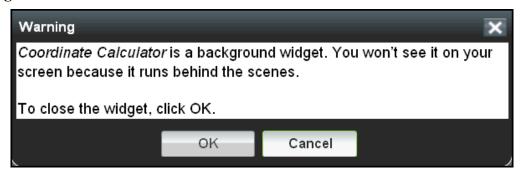


Figure 4: Background Widget Warning Message

3.2 Widgets and the Favorites Menu

Widgets are activated from the Favorites Menu. To start a widget:

- 1) Open the Favorites Menu by clicking on the toolbar.
- 2) Start a widget using any of the following methods:
 - a) Double-click the widget.
 - b) Select a widget and click the Start button at the bottom of the menu.
 - c) Highlight the widget and press the Enter key.
 - d) Drag the widget from the Favorites Menu into the current dashboard.
- 3) Starting a widget will automatically open the Switcher. Select a dashboard where the widget will open by either double clicking the dashboard icon or by highlighting the dashboard and pressing Enter.

Note: The Switcher will not open for widgets dragged and dropped from the Favorites Menu into the current dashboard. In this case, the widget will automatically open in the current dashboard.

4) The widget will automatically open in the selected dashboard.

Note: If the targeted dashboard contains multiple panes, the user will have to select the pane where the widget will open.

Repeat this action for each widget. Users can start multiple instances of a widget unless the widget is a singleton, as described in section <u>3.1.1: Singleton Widgets</u>.

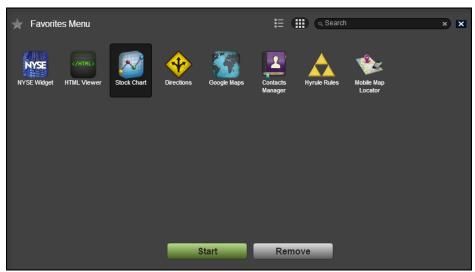


Figure 5: Favorites Menu

3.2.1 Searching for Widgets

OWF provides a search option. From the Favorites Menu, users can search using the widget title search. Located in the upper-right portion of the Favorites Menu, this field allows users to filter the list of widgets by title. Widget displays and search listings can toggle between icon and list views using the buttons.

3.2.2 Widgets Intents (Widgets Launching Widgets)

Widget Intents are the instructions for carrying out a widget's intentions. One widget requests an action (Think of actions as verbs like view, share, edit, etc.) then another widget receives that request and performs the action. Intents build on OWF's publish/subscribe feature by allowing users to choose the widget(s) that will use data. This binding capability enables two widgets to share data in a way that improves their function.

For example, the NYSE Widget charts data about the stock exchange. Some users may want to view that data as a Web page. This is possible if the NYSE Widget has an intent that tells it to send data to widgets that display data in a Web format.

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

How to use intents:

If a widget requests an intent, the Favorites Menu will pop up and display only widgets that can use the requesting widget's data for an intended purpose (graphing, displaying, etc.).



Figure 6: Selecting Widget Intents from the Favorites Menu

The intent receiving widgets will appear under the heading "Current Instances" or "Open a new Instance" as seen in Figure 6. "Current Instances" widgets are open in the current dashboard and when clicked, are used to accept the intent. Clicking on a widget under "Open a new Instance" opens a new instance of the widget that accepts the intent data.

Select a widget to accept the requested intent:

- 1) Choose a widget from the pop up Favorites Menu.
- 2) Open the selected widget by either clicking the Start button or double-clicking the widget.
- 3) The widget will automatically open in the current dashboard.
- 4) Optional: Checking the "Remember this decision" box will allow the selected widget to automatically open the requesting widget's data. This function will continue until the user breaks the connection by closing either the widget sending the intent or the widget receiving it.

When both the sending and receiving widgets are open, the data from the sending widget will appear in the receiving widget.

Note: Unlike a widget opened from the Favorites Menu (see section 3.2: Widgets and the Favorites Menu), the Switcher will not open when a widget is launched via intents. Instead, widgets launched via intents will open in the user's current dashboard. This is because OWF does not supporting cross-dashboard eventing.

3.2.3 Widget Visibility

3.2.3.1 Deleting Widgets

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

To delete a widget from a user's instance of OWF:

- 1) Click the button on the toolbar. Then click Widgets to open the Widget Settings window.
- 2) From the Widget Settings window, select a widget and check the Delete checkmark. Click OK. This removes a widget from a user's Favorites Menu and their instance of OWF. If a deleted widget is needed at a later date, it can only be restored by an administrator or added from Marketplace (if the widget is available there).

Note: Widgets which are pending approval cannot be deleted from the widget settings window. Users cannot delete widgets that have been given to them through a group assignment.

Users can also delete a widget directly from the Favorites Menu. To delete a widget in the Favorites Menu:

- 1) Open the Favorites Menu by clicking on the toolbar.
- 2) Select the widget to delete by clicking or highlighting the widget's icon.
- 3) Click the Remove button to delete the widget.

3.2.3.2 Hiding/Showing Widgets in the Favorites Menu

By default, all widgets that are assigned to a user are visible in that user's Favorites Menu unless an administrator hid the widget from view. Users can also hide widgets from appearing on the Favorites Menu. This feature is meant to reduce clutter; hiding widgets from the Favorites Menu will NOT remove them from a user's instance of OWF.

To hide a widget from the Favorites Menu:

- 1) From the toolbar, click the button then choose Widgets to open the Widget Settings window.
- 2) From the Widget Settings window under the Show column, click the widget's checkbox to mark the box is empty and click OK. After closing the Widget Setting window, the widget will not be visible in the Favorites Menu.

To show a widget in the Favorites Menu:

1) From the toolbar, click the button then choose Widgets to open the Widget Settings window.

2) From the Widget Settings window under the Show column, click the widget's checkbox to make a check mark appear and click OK. After closing the Widget Setting window, the widget will be visible in the Favorites Menu.

3.2.3.3 Reordering Widgets in the Favorites Menu

To reorder widgets in the Favorites Menu's main panel:

- 1) Open the Favorites Menu by clicking the button on the toolbar.
- 2) Switch to the icon view using the button in the upper-right corner of the Favorites Menu.
- 3) Click a widget, then drag it left, right, up or down. Release the mouse to complete the move.

3.3 Renaming Widgets

To change the name of a widget:

- 1) From the toolbar, click the button, then choose Widgets to open the Widget Settings window.
- 2) Click on the title of a widget, which will open an editable field.
- 3) Type a new title for that widget.
- 4) To save the change, press Enter on the keyboard and click OK.

 Note: If a user clicks OK while the editable field is active, changes in that field may not be saved.

Until the change is saved and applied to the Favorites Menu, a red triangle will appear in the upper-left corner of the widget title:



Figure 7: Unsaved Title Change Indicator

The custom widget titles only appear for the authenticated user's instance of OWF (The title will not change system-wide). Also, the new title will only apply on widgets opened after the title change. To rename widgets open on a dashboard, the user must close the widget and reopen it.

3.3.1 Renaming a Widget Instance on a Dashboard

It is possible for a dashboard to have multiple instances of the same widget open at the same time (unless the widget is a Singleton, see section <u>3.1.1: Singleton Widgets</u>). Accordingly, a user may want to rename one or more instances of that widget. The title for each instance of an open widget on a dashboard is customizable per instance.

The widget title can be edited by double-clicking the widget title in the widget header. The title will change to an input field where the user can modify it. Pressing Enter on the keyboard or clicking anywhere on the dashboard will save the new title for the current instance. Regardless of the number of times the widget appears on the dashboard, the change will only impact that single widget.



Figure 8: Renaming a Widget

3.3.2 Reverting to Default Name of Widgets

To restore the default name of a widget, open the Widget Settings window by clicking the Settings button in the toolbar and then choosing Widgets. Then, right-click a widget and choose Reset Title. The widget will return to its default name.



Figure 9: Restoring Default Widget Name

To revert *all* custom named widgets (this does not apply to widgets that are open on the dashboard) to their default names, right-click on any widget on the Widget Settings screen, select Reset All Titles and click OK.

3.4 Accessing Marketplace

Marketplace, similar to a commercial application store, operates as a thin-client registry of applications and services. From the Marketplace widget in OWF, users can browse, add and run a variety of applications.

Provided that OWF has been configured to recognize an instance (or instances) of Marketplace, clicking the on the toolbar opens the Marketplace Switcher and connects users to multiple Marketplaces. Unlike dashboards and stacks listed in the Switcher, Marketplace is only accessible through the Marketplace Switcher.

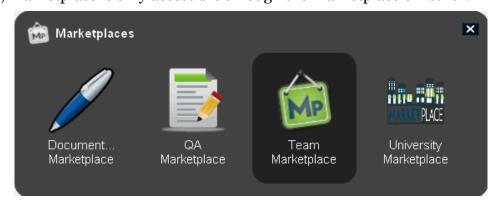


Figure 10: Marketplace Switcher

Opening a single Marketplace:

In the Marketplace Switcher, a user must click on a Marketplace to open it. If only one Marketplace is available, it will open automatically when the is clicked. To close the Marketplace and return to the previous dashboard, click the on the toolbar.

Following proper authentication, the user can browse Marketplace listings and add any of the listings that have been designated OWF aware. For listings to be added to OWF, they must be approved and enabled in Marketplace.

Opening more than one Marketplace:

- 1) Click the on the toolbar to open the Marketplace Switcher.
- 2) Select a Marketplace to open. This Marketplace will open in a tab in a new dashboard.

- 3) Double-click the on the toolbar. This action closes the Marketplace dashboard, brings the user back to the previous dashboard and then re-opens the Marketplace Switcher.
- 4) Select a second, different Marketplace to open. This Marketplace will automatically open in a new tab on the Marketplace dashboard.
- 5) Repeat steps 3 and 4 to open additional Marketplaces.

Note: Only one instance of each Marketplace will open in OWF. If a user attempts to re-start an opened Marketplace, the user will be taken to the open Marketplace's tab on the Marketplace dashboard.

To close or delete a Marketplace:

To close the Marketplace dashboard, click the on the toolbar. To delete an opened Marketplace, click the on the corresponding Marketplace's tab. When there is only one Marketplace tab open in the dashboard, clicking the will delete the dashboard. This action does not permanently delete Marketplace from OWF. The Marketplace dashboard will appear again once the user clicks on the on the toolbar.

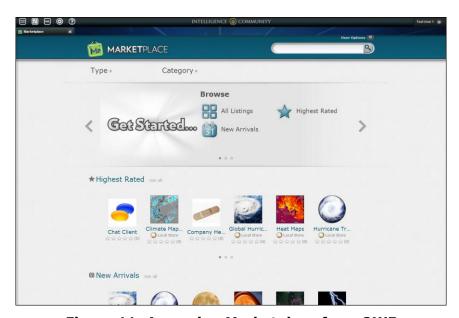


Figure 11: Accessing Marketplace from OWF

3.4.1 Adding Listings from Marketplace

3.4.1.1 Adding Widgets from Marketplace

Users can add a Marketplace listing to their instance of OWF by selecting the listing and clicking the Add button. Once clicked, the user will receive a notification, by either an

animation or a pop-up message, indicating the Marketplace listing was added successfully to the user's Favorites Menu.

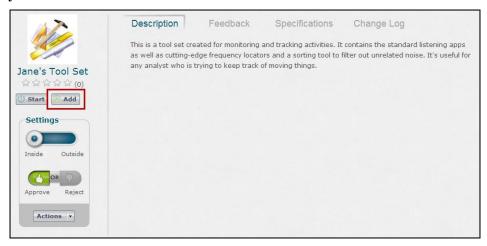


Figure 12: Adding Widgets to OWF from Marketplace

3.4.1.2 Starting WebApps from Marketplace

Webapps are programs that cannot interact with other OWF widgets. Thus, they automatically open in their own dashboard. When a user adds a Webapp from Marketplace, it will appear in the Switcher.

To open a webapp from Marketplace, click the webapp listing and then click the Start button. This causes the webapp to automatically open in a new fit pane and adds it to the OWF Switcher.

3.4.1.3 Adding Stacks from Marketplace

In addition to widgets, webapps and other listings, users can add stacks from Marketplace to OWF. Stacks are an organized collection of dashboards and widgets. More information on stacks is found in section <u>5</u>: <u>Stacks</u>.

To add a stack, select the stack listing and click the Add button. Once clicked, the user will receive a notification, either by an animation or a pop-up message, indicating the Stack was added to the user's Switcher.

3.4.2 Pending Approval Widgets

When a user adds a widget from Marketplace, it is automatically added to the user's Favorites Menu, unless the system requires the widget to receive administrator approval before use. If administrator approval is required, the widget will be visible in the Favorites Menu. If the widget has not received approval, it will appear grayed out in the Favorites Menu, as shown in the following figure. Once approved, the gradient will be removed and the user can start the widget.

Note: If a user tries to start a pending widget, an error message will appear.



Figure 13: Favorites Menu Displaying a Pending Listing

3.4.3 Required Widgets

Some widgets will not function (or will have limited functionality) if they open without other widgets. OWF automatically adds Required widgets when a user adds a widget that is dependent on them. For example: A user adds the Jane's Tool Set widget. Jane's Tool Set widget requires the Search Filtering Tool, the Chat Client and the Traffic Monitoring widgets to be added. The user has not requested the additional widgets, but these widgets are automatically added because the Jane's Tool Set widget requires them.

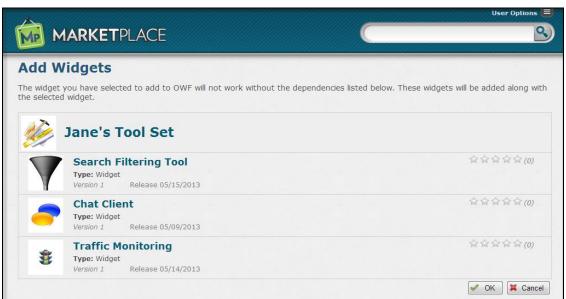


Figure 14: Adding Required Widgets

Some things to consider:

- A user must add all Required widgets from Marketplace. Users do not have the option to deselect any of the Required widgets.
- A widget's Required widgets will appear in the Favorites Menu if its Visible menu field is set to true.

3.4.3.1 Deleting Required Widgets

Like any other widget, required widgets can be deleted from the Widget Settings window which is located by clicking the Settings button on the toolbar and then choosing Widgets. However, if a user or administrator deletes a Required widget, any widgets that require that widget will automatically be deleted after the system displays a warning notification. Other widgets that are related to the dependent widgets will remain. For example, Jane's Tool Set requires the Search Filtering Tool, the Chat Client and the Traffic Monitoring widgets. If the Chat Client is deleted, the Navigating Widget will be deleted but the Satellite Widget will remain because it does not require the Coordinate Widget.

4 Dashboards

4.1 Overview

In simple terms, a dashboard is a screen where a user can dictate (for the most part) which widgets to load, which layouts to use, and the arrangement of the widgets within the specified layouts. Users can include multiple layouts on one dashboard using the Dashboard Designer.

Once saved, each time a specific dashboard loads, the screen and widget layout maintain the same look and feel as the last time the dashboard was accessed by a specific user. Dashboards and their respective configurations are limitless; a user can have any number of dashboards, all of which render and function independently.

The Group Dashboard feature provides identical dashboards for each member of a group. Each group member can customize their instance of a pre-configured dashboard. Stack Dashboards also provide identical dashboards for each person who receives a stack. Those dashboards can also be customized. Both group dashboards and stack dashboards can be restored to their default states.

4.2 Dashboard Layouts and Configurations

OWF provides a set of standard layout options for organizing and displaying widgets in a browser window. Descriptions and instructions for adding widgets to the five layouts are explained in the following sections. If a dashboard has more than one layout, users can resize the sections by dragging the divider between them.

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

4.2.1 Accordion Dashboard Layouts

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

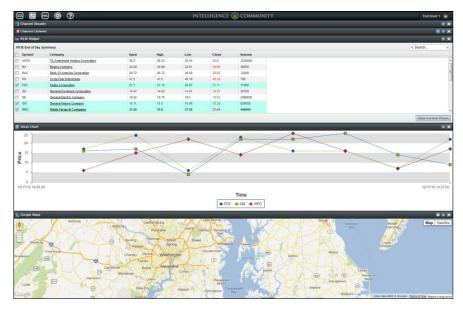


Figure 15: Accordion Dashboard Layout

4.2.2 Desktop Dashboard Layouts

Desktop dashboard layouts, similar to the desktop on most personal computers, allow the user to open widgets from the Favorites Menu and place widgets freely in the window and minimize them on a taskbar.

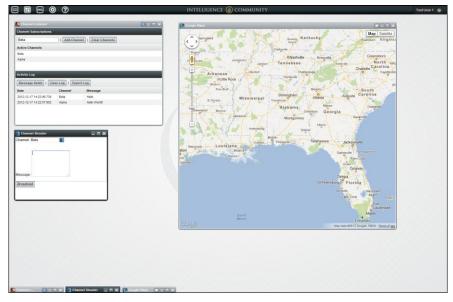


Figure 16: Desktop Dashboard Layout

4.2.3 Portal Dashboard Layouts

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

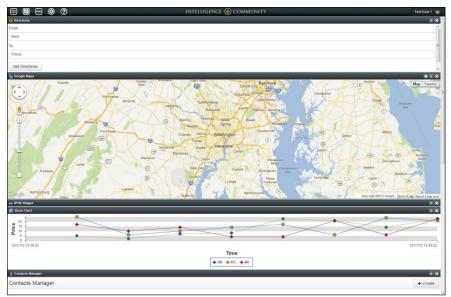


Figure 17: Portal Dashboard Layout

4.2.4 Tabbed Dashboard Layouts

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

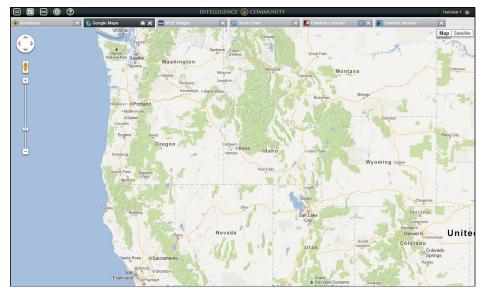


Figure 18: Tabbed Dashboard

4.2.5 Fit Dashboard Layouts

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

Note: Some widgets are automatically opened by other widgets. In these cases, the widgets will "float" on top of the dashboard.



Figure 19: Fit Dashboard

4.2.6 Group Dashboards

Group Dashboards allow members of a group to have identical copies of a dashboard. These dashboards are assigned to a group by an administrator. A user can customize their instance of the Group Dashboard. Those changes will ONLY affect that user's instance of the dashboard. For information about restoring a dashboard to the current default Group Dashboard see section <u>4.7.2: Restoring a Dashboard</u>.

Note: If a Group Dashboard is deleted by an administrator, the users' copies of that dashboard will remain available to each user. However, the ability to restore that dashboard will be removed because it will no longer be a Group Dashboard.

4.2.7 Stack Dashboards

A stack is a collection of dashboards and widgets. Users who receive a stack receive identical copies of the dashboards that are included in the stack. The dashboards are

assigned to the stack by an administrator. A user can customize or delete their instance of the stack's dashboards. Those changes will ONLY affect that user's instance of the dashboards. For information about restoring a dashboard to the current default Group Dashboard see section 4.7.2: Restoring a Dashboard.

Note: If a Stack or its dashboard are deleted by an administrator, the users' copies of the stack, including its dashboards and widgets, will disappear.

4.3 Opening/Switching Dashboards

4.3.1 Opening a Saved Dashboard

After a user creates and saves a dashboard, a link to that dashboard will appear as one of the choices under the button on the toolbar.

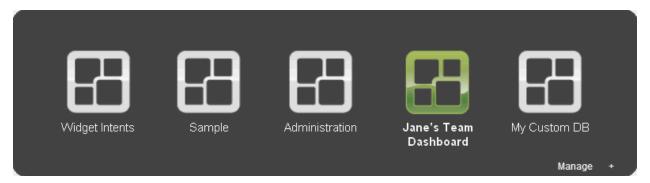


Figure 20: Switcher

To open a saved dashboard:

- 1) Click the button in the toolbar.
- 2) Select the desired dashboard. It will automatically open.

4.4 Creating Dashboards

To create a new dashboard:

- 1) Click the button on the toolbar to open the Switcher.
- 2) Click the to open the Create Dashboard window.
- 3) Give the dashboard a Title.

Note: The Dashboard cannot be saved until it is named.

- 4) Provide an optional Description.
- 5) Optionally, a user can select from the following radio buttons:

- Create from existing and select the dashboard layout from the drop-down selector.
- Import a dashboard by browsing to and importing a saved JSON configuration file.
- 6) Click OK.

This will load the Dashboard Designer, see Section <u>4.4.1: Dashboard Designer</u> for instructions.

- 7) In the Dashboard Designer, select layouts and divisions for the dashboard.
- 8) Click Save, the new dashboard will open. To add widgets, open the Favorites Menu and Start widgets.

4.4.1 Dashboard Designer

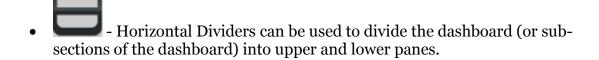


Figure 21: Dashboard Designer

From the Dashboard Designer, the following tools can be used:

4.4.1.1 Dividers

When using the Dashboard Designer, there are two ways to divide the dashboard into sections:



• Vertical Dividers can be used to divide the dashboard (Or sub-sections of the dashboard) into left and right-side panes

4.4.1.2 Dashboard Layout Types

There are currently five types of dashboard layouts. During the design process, any of the dashboard layouts can comprise a whole dashboard or a section of a dashboard:

- Accordion Layout. See section <u>4.2.1: Accordion Dashboard</u> Layouts for more details.
- Desktop Layout. See section <u>4.2.2: Desktop Dashboard</u> Layouts for more details.
- Portal Layout. See section <u>4.2.3: Portal Dashboard</u> Layouts for more details.
- Tabbed Layout. See section <u>4.2.4: Tabbed Dashboard</u> Layouts for more details.
- Fit Layout. See section 4.2.5: Fit Dashboard for more details

4.5 Using the Dashboard Designer

The following walkthrough will explain how to build a new dashboard with Accordion, Desktop and Tabbed Dashboard Layout sections:

- 1) Click the button on the toolbar to open the Switcher.
- 2) Click the button to open the Create Dashboard window.
- 3) Give the dashboard a Title:

Note: The Dashboard cannot be saved until it has been named.

- a) Provide an optional Description.
- b) Optionally, a user can select from the following radio buttons:
 - i) Create from existing and select the dashboard layout from the dropdown selector.
 - ii) Import a dashboard by browsing to and importing a saved JSON configuration file.
- 4) Click OK. This will open the Dashboard Designer.
- 5) Divide the screen horizontally by:
 - a) Dragging the button to the Dashboard Designer grid.
 - b) Clicking the button.
- 6) Divide the upper grid section vertically by:
 - a) Dragging the button to the upper level of the designer.
 - b) Clicking the upper portion of the Dashboard Designer to highlight the top section. Click the to divide the highlighted section vertically.

Following the direction above, the screen should mirror the image below:

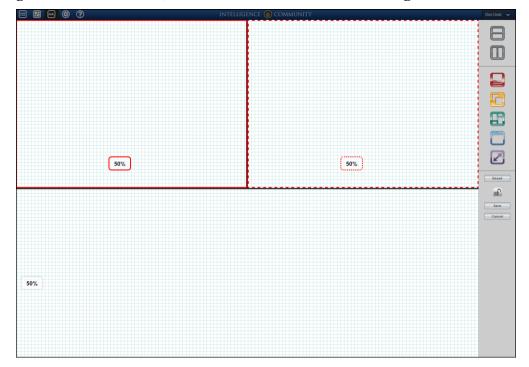


Figure 22: Divided Dashboard Designer

The dashboard 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.
- Select a section and then click a layout.

When a section of the dashboard is clicked, it will be surrounded in a solid border. Its partner sections of the dashboard will highlight in a broken line; 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 dashboard.

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 dashboard 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 dashboard 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 dashboard layout type icons to assign layout types to each section.

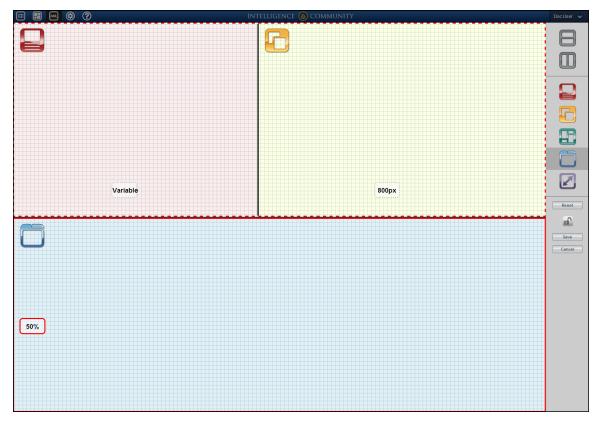


Figure 23: Dashboard Designer with Layout Icons

In the image above, each section of the dashboard 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 widgets in accordance with the properties of the layout icon. Once the layout icons are in place, the user can save the dashboard. After saving the dashboard, it will open automatically. It can also be opened

from the Switcher by using the button. Individual dashboard sections can now be populated from the Favorites Menu.

- Reset
 Clears the modifications to the dashboard.
- Lock/Unlock dashboard Use this button to restrict changes to the dashboard layout and the widgets displayed on it. When the dashboard is locked, widgets cannot be added or removed and sections cannot be edited, however, the layout of a locked dashboard is still editable.
- Saves the dashboard, closes the Designer and then opens the dashboard.

• Cancel - Cancels changes made since the last Save or since entering the designer.

4.5.1 Importing a Dashboard

To import a dashboard:

- 1) Click the button on the toolbar to open the Switcher.
- 2) Select the button to open the Create Dashboard window.
- 3) From the radio buttons, select: Import.
- 4) Browse to and select a saved JSON dashboard file.
- 5) Click OK.

Note: Due to the dashboard redesign in OWF 6, OWF 7 will only accept imported dashboard files from OWF 6 or 7.

4.6 Customizing a Dashboard

Use the Dashboard Designer to assign layouts to sections of a dashboard. To add widgets to the dashboard:

- 1) Click the button on the toolbar to open the Switcher, select a dashboard to modify.
- 2) Open the Favorites Menu and add widgets from the menu to the dashboard. To add widgets to a dashboard using keyboard navigation, see <u>7.2.2: Favorites Menu Navigation</u>.

4.6.1 Changing a Dashboard Layout

If a user has set up a specific dashboard with all the widgets they need, but they would like to see the widgets displayed in a different layout, they can easily switch layouts.

To change a dashboard layout:

- 1) Click the button on the toolbar to open the Switcher, click the Manage button.
- 2) Select a Dashboard and then click the button below the dashboard.
- 3) The Edit Dashboard window will open. After reviewing or modifying the Title and Description fields, click OK.

- 4) The Dashboard Designer window will open. From there, the layout can be changed.
- 5) Click Save.

Note: While all widgets will be present in the new dashboards, specific ordering of widgets will differ based on the dashboard layout(s).

4.6.2 Renaming a Dashboard

To rename a dashboard:

- 1) Click the button on the toolbar to open the Switcher, click the Manage button.
- 2) Select a dashboard and click the button below the dashboard.
- 3) Change the dashboard Title.
- 4) Click OK.
- 5) The Dashboard Designer window will open. From the right-navigation panel, click Save.

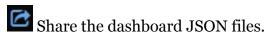
4.7 Managing a Dashboard

Starting with OWF 7, users can Create, Edit, Delete and Share dashboards from the Switcher. To Edit, Delete or Share dashboards, open the Switcher (Alt + Shift + C), tab to the Manage button and press Enter. This activates editing capabilities for each dashboard as shown below in the Administration Dashboard:



Figure 24: Manage Settings in the Switcher

The Manage button allows users to:



- Restore a dashboard to its default state.
- Edit existing dashboards (Edits include adding panels and layout types on a dashboard as well as changing the dashboard title and description).
- Nelete dashboards.

4.7.1 Sharing a Dashboard

The share feature allows a user to send their dashboard configuration (this includes the dashboard layout and the widgets that are on it) to another user.

To share a dashboard:

- 1) Click the button on the toolbar to open the Switcher, click the Manage button.
- 2) Select a dashboard. The editing options will appear below the dashboard.
- 3) Select the button. This action saves a JSON copy of the dashboard to the location where the user's downloads are stored (frequently the computer desktop or a downloads folder in My Documents).
- 4) Send the JSON file to another user. They can find instructions for adding the file to their instance of OWF in section <u>4.5.1: Importing a Dashboard</u>.

Note: Due to updates, OWF will not accept imported files created in versions earlier than OWF 6.

4.7.2 Restoring a Dashboard

Every member of a group receives an identical copy of a Group Dashboard. Similarly, dashboards nested within stacks are identical copies of the dashboards associated with the stack. From their instance of OWF, a user can customize their version of the dashboards. The restore feature allows the user to cancel their customizations and returns the dashboard to its *current default state*. If the default group or stack dashboard changed after it was added to a user's instance of OWF, the current default state of the dashboard may be different than the one that originally appeared in the user's Switcher.

Note: If a group dashboard is deleted by an administrator, a user's copy of that dashboard will NOT be deleted. However, the restore feature will no longer be available for the dashboard. If a stack or its dashboard is deleted by an administrator, a user's copy of that stack, including its widgets and dashboards, will be deleted.

To restore a dashboard to its *current default state*:

- 1) Click the button on the toolbar to open the Switcher, click the Manage button.
- 2) Select the dashboard and click the button below the dashboard.
- 3) The dashboard will return to its current default state.

4.7.3 Editing a Dashboard

The edit dashboard option allows users to change a dashboard's name, layout, description and position within the Edit Dashboard window.

To edit a dashboard:

- 1) Click the button on the toolbar to open the Switcher, click the Manage button.
- 2) Select a Dashboard and then click the button below it.
- 3) The Edit Dashboard will open.
 - a. Update the Title or Description
 - b. Click OK, this will load the Dashboard Designer, see Section <u>4.4.1</u> Dashboard Designer for instructions.
- 4) Make changes then click the Save button.

4.7.4 Deleting a Dashboard

To delete a dashboard:

- 1) Click the button on the toolbar to open the Switcher, click the Manage button.
- 2) Select a Dashboard and then click the button below it.
- 3) A warning message will appear.
- 4) Click OK.

Note: Users cannot delete group dashboards or individual stack dashboards from their OWF instance.

5 Stacks

5.1 Overview

A stack is a collection of dashboards and widgets. Stacks compile OWF resources and make them easy to access and restore. Stacks and their dashboards appear in the Switcher. Administrators can use stacks to separate and categorize widgets and dashboards for specific users, groups or projects. For example, an administrator for a disaster recovery organization might create a stack that relates to a specific disaster. A stack for a specific hurricane could include dashboards relating to the region's road access, local and federal relief centers and cell phone coverage.

- Users assigned to a stack can customize the stack's dashboards and widgets. Those changes will only affect their instance of the stack.
- If an administrator updates a stack, users will receive the change(s) when they restore their instance of the stack.

Restoring a stack returns the stack to its *current* default state. If an administrator updated the stack after it was added to a user's instance of OWF, the restored version may look different than the one the user originally received.

5.2 Using Stacks

A user's list of stacks appears intermingled with dashboards under the button on the toolbar. When a user selects a stack, a list of dashboards associated with that stack appears below it. If an administrator removes a user from a stack or deletes it, the stack including its dashboards and widgets will disappear from the user's instance of OWF. If a user deletes the stack from their instance of OWF, its dashboards and widgets will be removed unless the stack is assigned to one of the user's groups. In that case, the user cannot remove the stack.

5.2.1 Switching Stacks

When a user selects a stack, a list of dashboards associated with the stack appear below it, as shown in the following figure:

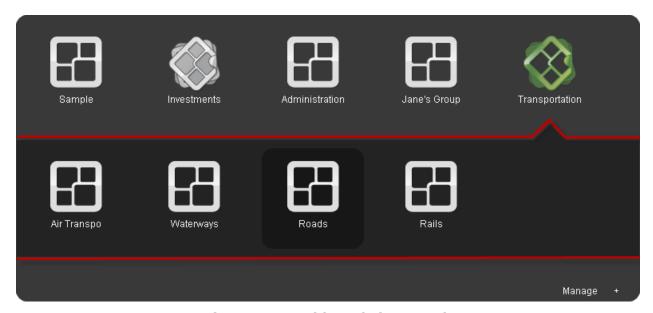


Figure 25: Dashboards in a Stack

- 1) To switch to a different stack, open the Switcher by clicking the button on the toolbar.
- 2) Click a stack to select it.
- 3) Click one of the dashboards from the stack.

5.2.2 Reordering Stacks

To reorder stacks in the Switcher, select the stack and drag it to the new location on the Switcher.

5.2.3 Restoring Stacks

When a user receives a stack, they receive copies of the dashboards and widgets that are associated with the stack. From their instance of OWF, a user can customize their version of the stack's dashboards and widgets. The restore feature allows the user to cancel those customizations and returns the dashboards and widgets to the *current default state* in the stack. If any of the dashboards or widgets associated with the stack changed after they were added to the user's instance of OWF, the current default state may differ from the one that originally appeared in the user's Switcher.

To restore a stack to its *current default state*:

- 1) Click the button in the toolbar to open the Switcher, click the Manage button.
- 2) Select the stack, editing buttons will appear under it. Click the Restore button.

3) The stack (including all of its dashboards and widgets) will return to its *current* default state.

5.2.4 Deleting Stacks

Users cannot add stacks. They have to ask administrators for access to them. Users can, however, delete their copies of stacks. To delete a stack:

- 1) Click the button in the toolbar to open the Switcher, click the Manage button.
- 2) Select the stack, editing buttons will appear under it. Click the Delete button.
- 3) After a warning, the stack (including all of its dashboards and widgets) will be removed from the user's instance of OWF.

6 Themes: High Contrast and Large Text

In addition to the default Theme, OWF provides three accessibility themes to accommodate users with vision challenges.

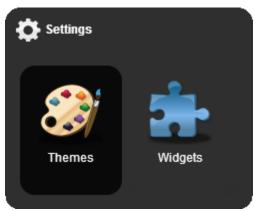


Figure 26: Settings Controls with Themes Selected

6.1 Selecting a Theme

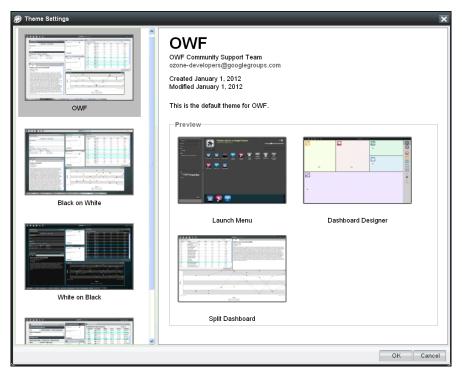


Figure 27: Theme Settings Window

To select a theme:

- 1) Click the button in the toolbar, and then click the Themes button.

 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 Accessible Themes

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

- **Black on White** A high contrast theme with white backgrounds and dark text.
- **Large Text** A large text theme that includes 24px font size, which is the largest size supported by OWF.
- White on Black A high contrast theme with dark backgrounds and light text.

7 Keyboard Navigation

7.1 Overview

7.1.1 508 Compliance

The OWF team is striving toward creating an accessible product for people with disabilities. To meet federal accessibility standards the OWF team added two high-contrast background themes and one large text theme. OWF also provides keyboard navigation that enables users to navigate the framework without a mouse. The OWF Bundle includes supporting documentation that is provided in Adobe Acrobat PDF file format. All changes are done in accordance with Section 508 of the U.S. Rehabilitation Act. For accessibility issues that cannot be remedied by a system administrator, contact the OWF Community Support Team.

Note: While OWF created an accessible framework, it is the responsibility of each organization's widget developers (not the OWF team) to create and maintain widgets that meet accessibility requirements.

7.1.2 Keyboard Navigation

Keyboard navigation – the users' ability to interact with an application using only a keyboard for input (no mouse).

OWF supports keyboard navigation in the toolbar, all dashboard layouts and content fields in widgets.

This section explains:

- Global Keyboard Combination and Navigation
- **Widget Switcher** The widget switcher (accessed by Alt + Shift + Q) lists active widgets on a dashboard.
- **Dashboard Layout Specific Navigation** Special key combinations that support OWF specific dashboard layouts (Tabs, Accordion, Desktop, Portal and Fit).
- Widget Focus An overview about focusing widgets and the tools used to do it.

7.2 Global Key Combinations and Navigation

OWF's global key mapping feature is based on key sequences Alt + Shift + any predetermined hot key. The OWF team purposely chose this key sequence to avoid combinations that are commonly used in well-known operating systems and browsers.

7.2.1 List of OWF Global Hot Keys

Table 2: Global Hot Keys

Key combination	Action
Alt + Shift + A	Open/Close the Administration window
Alt + Shift + C	Open/Close the Switcher
Alt + Shift + H	Open/Close the Help window
Alt + Shift + F	Open/Close the Favorites Menu
Alt + Shift + M	Open/Close the Marketplace connection
Alt + Shift + O	Signs out the user
Alt + Shift + Q	Open/Close the Widget Switcher
Alt + Shift + R	Open/Close the Metrics Manager
Alt + Shift + S	Open/Close the Settings window
Alt + Shift + W	Closes the active widget and moves focus to the last widget that was used.
Tab I i →	Toggle to the next element
Shift + Tab	Toggle to the previous element
Enter	Activate the selected element
Esc	Return to the widget or window header (when inside a widget or window). Esc returns to the OWF Toolbar header from anywhere else. To move to the toolbar from a widget header, press Esc.

7.2.2 Favorites Menu Navigation

The OWF Favorites Menu consists of a few standard buttons, text boxes and contains widget icons. To navigate through the Favorites Menu, use the conventional navigation system of the arrow keys and tab keys identified below:

Table 3: Favorites Menu Keyboard Navigation

Key combination	Action
Alt + Shift + F	Toggles the Favorites Menu
Tab OR OR	Select next widget
Shift → Tab OR ← OR ↑	Select previous widget
}	Move selected widget right one position
<u>{</u>	Move selected widget left one position
Enter	Start the selected widget

7.2.3 Widget Navigation

The Widget Switcher allows users to navigate between open widgets on their dashboards. To activate the Widget Switcher, press the global hot keys: Alt + Shift + Q. It displays in the center of the screen as shown in <u>Figure 28: Widget Switcher</u>.



Figure 28: Widget Switcher

7.2.3.1 The Widget Switcher

The Widget Switcher lists widgets that are open on the dashboard. Use the arrow keys or the Tab key to navigate through the widgets. To add a widget to the Widget Switcher, navigate to the Favorites Menu (Alt + Shift + L) and open a widget. After the widget opens, it will appear as a choice in the Widget Switcher.

Table 4: Widget Switcher Keyboard Navigation

Key combination	Action
Alt + Shift + Q	Toggle Open/Close the Widget Switcher
Tab or	Select the next active widget
Shift ↑ Tab or •	Select the previous active widget
Enter	Switch to the selected widget
Esc	Close the Widget Switcher (without making a selection)

After selecting a widget, the Widget Switcher disappears and the selected widget moves to the foreground in the dashboard.

7.2.3.2 Closing widgets

To close a widget:

1) Focus the widget.

2) The widget will close and focus will move to the last widget that was used.

7.3 Dashboard Layout Specific Controls

The following table lists keyboard combinations for each dashboard layout. To change the screen display from one dashboard to another, use the Switcher (Alt + Shift + C).

Note: For the keyboard combinations to register, a field in the widget must be focused.

Applicable Keyboard Action Dashboard(s) combination Accordion/Portal Shift Expands the focused widget Alt 1 Accordion/Portal Collapses the focused widget Alt Shift † Desktop Shift Maximize the focused widget Alt † Minimize the focused widget Desktop Alt Shift *Note: If the current widget is* maximized, this action will restore the widget to the previous size. Pressing this combination again will perform the minimized action. Desktop, Portal Move the focused widget up 1 Desktop, Portal Move the current focused widget down Move the focused widget left Desktop, Portal Desktop, Portal Move the focused widget right

Table 5: Dashboard Keyboard Navigation

7.4 Widget Focus

7.4.1 Defining Widget Focus

Focus refers to the element on the screen that is active. In a word processing document, the blinking cursor cues the user as to where the document is focused. To focus using a mouse, the user clicks. This section explains how focus passes from one element to the next in a widget using keyboard navigation via the Tab key.

^{*}In the Portal Layout, $Ctrl + the \downarrow or \uparrow arrow$ key only moves the widget above or below the adjacent widget. To continue moving the widget, refocus it.

7.4.1.1 Focus Frame Visibility

Through keyboard navigation, OWF identifies focused elements while hiding unnecessary focus borders. Generally, focus will move clockwise through the window. However, some components in the interface use other methods of focusing, as denoted in the following sections.

7.4.1.2 Grids

When working in grids, focus is denoted by showing the active style on the selected row of the grid. If a row was NOT previously selected, the first row will be selected by default.

7.4.1.3 Widget Icons

In all places in the OWF user interface where widgets are referenced by their icon, the "selected" style also functions as the focus style shown below:

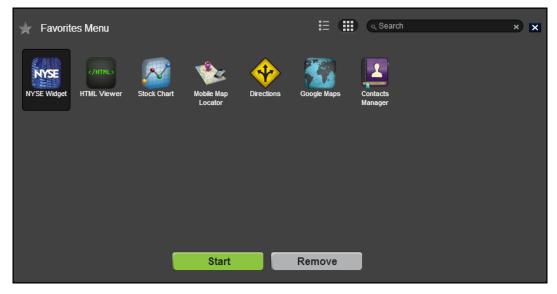


Figure 29: NYSE Widget Focused in Favorites Menu

7.4.2 Widget Focus Instructions

In OWF, a user can focus several parts of a widget. Generally, users can use standard navigate (Shift + Tab or Tab) to navigate to the different parts. Elements in a widget usually focus in this order:

- 1) Widget Title
- 2) Widget Chrome Buttons (close, maximize, minimize, etc). This includes buttons and menus added using the Widget Chrome API
- 3) Any other elements within the widget that are focusable
- 4) Widget Body (as shown below)

5) Return to the Widget Title



Figure 30: Focus on Widget Body

7.4.2.1 Widget Focus Tips

- To activate elements within the widget header (the title and chrome buttons): Focus on the element and then press the Enter key.
- Use the Tab key to quickly navigate in a clockwise direction through the widget body.
- To switch from the widget body to the widget title, press Esc.
- To leave the widget: Press Alt + Shift + W or Press Esc twice or select a different widget from the Widget Switcher (Alt + Shift + Q) or the Favorites Menu (Alt + Shift + F).
- To return to the toolbar: Press Esc twice.

7.4.2.2 Expanding a Minimized or Collapsed Widget

To expand a widget after it has been minimized to the taskbar or collapsed in a dashboard; select it using the Widget Switcher (Alt + Shift + Q). When a widget is restored from a minimized or collapsed state, the widget body focuses.

7.5 Toolbar Focus

7.5.1 Toolbar buttons

The OWF Toolbar spans the length of the browser window. The left portion of it is detachable. From there, users can open widgets, switch dashboards, connect to Marketplace (if one is configured), change their settings, access help, and detach/reattach the toolbar. The right portion of the toolbar consists of the drop-down

User Menu which includes the last sign in time, user profile information and OWF product information and the sign out feature.

Important things to remember about the toolbar:

- Pressing Esc from anywhere in the application will return the user to the toolbar. (If a widget or window is in focus, the user may have to press Esc twice to return focus to the toolbar.)
- The toolbar focuses in a circular repetition. After cycling through the last choice on the drop-down User Menu, focus returns to the Favorites Menu.
- The following table lists keyboard combinations for the detachable toolbar elements (including administration controls that are only visible to an administrator) and Sign Out. Other toolbar elements (the profile and about windows) are only accessed by tabbing through the attached OWF Toolbar.

Location **Keyboard Combination Icon** Shift Favorites Menu Alt F Shift Switcher Alt C Marketplace(s) Alt Shift AML М Shift Settings Alt S Administration Alt Metric Switcher Alt R ? Shift Help Alt Н Shift Sign out n/a Alt 0

Table 6: Toolbar Keyboard Combinations

Note: While not part of the toolbar, the Widget Switcher (Alt + Shift + Q) is an important tool that should be referenced near these other keyboard elements.

7.6 Dashboards Settings

Users can Create, Edit, Delete and Share dashboards from the Switcher. To Edit, Delete or Share dashboards, open the Switcher (Alt + Shift + C), tab to the Manage button and press Enter. Navigate using the tab button. When the intended function (share, restore, edit or delete) is selected, press Enter.

7.6.1 Creating a Dashboard

To create a dashboard:

- 1) Tab to the button on the toolbar to open the Switcher.
- 2) Tab to select the button and press Enter to open the Create Dashboard window.
- 3) Populate the dashboard Title and Description.
 - To use an existing dashboard as a template, tab to the Create from existing radio button, press Enter and use the arrow keys to select an existing dashboard to copy.
 - To import a dashboard JSON file, tab to the Import radio button, press Enter, tab to the browse button, press Enter and navigate to the file.
 - To create a new dashboard, tab directly to the OK button.
- 4) Tab to the OK button, press Enter and the Dashboard Designer will open.
- 5) Use tab and the arrow keys to navigate the Dashboard Designer.
- 6) When modifications are complete, tab to Save and press Enter. The new dashboard will open. Use the Favorites Menu to add widgets.

7.6.2 Editing a Dashboard

The edit feature allows a user to change the dashboard title, description and layout. Users can also share the dashboard JSON.

To edit a dashboard:

- 1) Tab to the button on the toolbar to open the Switcher.
- 2) Tab to the Manage button and press Enter. This activates editing capabilities for each dashboard.
- 3) Tab to a dashboard, highlight the button below it and press Enter.
- 4) The Edit Dashboard window will open. Tab to change or review the dashboard Title or Description in the Edit Dashboard window, then select OK and press Enter.
- 5) The Dashboard Designer will open. The Horizontal Divider, the first tool in the right-side panel, will be selected. Use tab to move through the panel. To add a divider or layout to the dashboard:
 - a) Select a Divider or Layout.
 - b) Press Enter, this will move focus to the grid. If the selected Divider or Layout is the first element on the page, it will automatically divide the screen or become the layout. If the dashboard is already divided, tab through the sections to focus them.

- c) Press Enter to add the Divider or Layout to the dashboard.
- 6) After completing edits, tab to the Save button and press Enter.
- 7) To add widgets to the dashboard:
 - a) Select the dashboard from the Switcher (Alt + Shift + C).
 - b) Use the Favorites Menu (Alt + Shift + F) to add widgets to the dashboard. See section <u>7.2.2: Favorites Menu Navigation</u> for keyboard instructions.

7.6.3 Deleting a Dashboard

To delete a dashboard:

- 1) Tab to the button on the toolbar to open the Switcher.
- 2) Tab to the Manage button and press Enter. This activates editing capabilities for each dashboard.
- 3) Tab to a dashboard, highlight the button below it and press Enter.
- 4) A warning message will appear, tab to the OK button. Pressing Enter will permanently delete the dashboard.

7.7 Widget Settings Window

The Widget Settings Window lists all the widgets that are assigned to the user. From there, users can edit the names of their copies of widgets, show or hide them in the Favorites Menu, and delete them from their instance of OWF. Again standard navigation shortcuts apply. Specific functionality is listed in the table below:

To open the Widget Settings window:

- 1) Select the Settings button on the toolbar (Alt + Shift + S).
- 2) Tab to the Widgets button and press Enter to open the Widget Settings window.
- 3) To enter the grid, press tab.

Table 7: Widget Settings Keyboard Navigation

Key combination	Action	
Enter	Activates an editor box in which the widget Title can be changed. Pressing Enter again saves and closes this box.	
Esc	Closes the editor box without saving the change.	

Key combination	Action
Tab I±—i	When the Title editor is open and focused, pressing tab closes the editor.
D	Toggles the Delete checkbox for the row.
S	Toggles the Show checkbox for the row.
R	Opens the Reset buttons for a widget, allowing an administrator to revert any or all widget Titles to their original Titles.

7.8 Changing Themes

OWF ships with four themes: OWF (default), Black on White, Large Text, and White on Black). To change themes:

- 1) Select the Settings button on the toolbar (Alt + Shift + S).
- 2) Tab to the Themes button and press Enter. The Theme Settings window will open with the theme selection menu already in focus.
- 3) Use the up and down arrow keys to navigate to a theme. After focusing on the theme, tab to OK or Cancel.
- 4) Press OK to change the theme and close the window.

7.9 About Window

To open the About window, press Esc to move focus to the OWF Toolbar. (If the toolbar is detached, reattach it.) Use the arrow keys or tab to the drop-down User Menu. Tab to the About selection in the drop-down. Press Enter to open it.

After opening the About window, its only interaction is that it can be closed. This can be accomplished using the keyboard by pressing Esc while the window is in focus.

Appendix A Supported Browsers

OWF supports Internet Explorer 7 and higher and Firefox 3.6 and higher. OWF is tested against the following browsers:

Table 8: Tested Browsers

Browsers	Versions
Internet Explorer	7 & 9
Firefox	17
Chrome	25

Appendix B Known Issues

B.1 Browser Issues

Launching JavaScript-heavy widgets 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.

B.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 application. 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 widgets unviewable.

The positioning of the Widgets 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 a Widget and re-adding it (from the Favorites Menu) will reset their position and, therefore, render it viewable again.

Internet Explorer users may experience degraded performance.

The latest release of Sencha's ExtJS 4 JavaScript framework is known to have performance issues in Internet Explorer browsers. The Sencha team is actively working to release a patch to address these issues. Once the patch is released, the OWF team will integrate it into the codebase.

Dashboard Configuration Manager windows may not populate.

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

B.3 Widget Technology Issues

Java Applet Widgets always sit on top of other widgets (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:

http://bugs.sun.com/bugdatabase/view_bug.do;jsessionid=6a434ce1408465fffffff87e84af5d233a32?bug_id=6646289

Flex Widgets always sit on top of other widgets (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 widgets to adhere to the proper z-index ordering the wmode must be set to something other than the default.

Silverlight Widgets always sit on top of other widgets (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 widgets to adhere to the proper z-index ordering the windowless mode must be set to true.

Google Earth Plugin Widgets always sit on top of other widgets (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.

Appendix C Contact Information

C.1 Discussion Group

The Ozone Developers Discussion Group is hosted through Google Groups at http://groups.google.com/group/ozone-developers. This forum is for the distribution of release announcements, Q&A related to OWF and for additional inquiries about widgets and features being developed across the user base. To access the group, request an invitation at http://groups.google.com/group/ozone-developers or contact the Community Support Team at google.com/group/ozone-developers or contact the

C.2 Additional POCs

For information about the Ozone Widget Framework or access to its resources, please email goss-support@owfgoss.org. Additional resources can be found at http://owfgoss.org.