# Oracle® Agile Product Lifecycle Management for Process Sidebar Extensibility Guide

Feature Pack 4.2 **E66825-01** 

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Agile Product Lifecycle Management for Process

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#### **Preface**

#### **Audience**

This guide is intended for client programmers involved with integrating Oracle Agile Product Lifecycle Management for Process. Information about using Oracle Agile PLM for Process resides in application-specific user guides. Information about administering Oracle Agile PLM for Process resides in the *Oracle Agile Product Lifecycle Management for Process Administrator User Guide*.

#### Variability of Installations

Descriptions and illustrations of the Agile PLM for Process user interface included in this manual may not match your installation. The user interface of Agile PLM for Process applications and the features included can vary greatly depending on such variables as:

- Which applications your organization has purchased and installed
- Configuration settings that may turn features off or on
- Customization specific to your organization
- Security settings as they apply to the system and your user account

#### **Documentation Accessibility**

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#### **Software Availability**

Oracle Software Delivery Cloud (OSDC) provides the latest copy of the core software. Note the core software does not include all patches and hot fixes. Access OSDC at:

http://edelivery.oracle.com

## Chapter 1—Overview

The PLM for Process user interface provides an extensible area for customers to include their own UI components, which are displayed alongside application pages. This Sidebar can host various components that can be launched by the user as needed. These components can display useful contextual information, such as a specific BI report based on the current specification, a historical event listing of object, and out-of-the-box Hierarchy Navigator, and more.

The PLM for Process Sidebar also provides helpful features, including easily selecting placement of the sidebar, launching a menu of components to display, and more. A set of helpful JavaScript functions are available to the sidebar components that can act on the sidebar's appearance and behavior.

This document describes the features of the PLM for Process Sidebar, how it can be configured, and the JavaScript library available to the components. An example of a BI Publisher report sidebar component is also presented.

## Chapter 2—Sidebar User Interface

The Sidebar content is displayed inside *panels*. One panel can be displayed at a time. Each panel contains one or more components (called *widgets* in the configuration file) which are displayed at the same time.

The sidebar is hidden by default; to show it, a navigation extension can be added using an onclick event which simply calls the JavaScript to show the sidebar. For instance, the following JavaScript call will open the sidebar in the left content area: NavigatorSidebar.showLeftSidebar();

The following navigation extension example, in the SiteMap-Extensions.xml file, shows how you can add a button to GSM specs screens which will open the sidebar:

```
<MenuItem ID="GSMNavSpec" configChildKey="ID">
    <MenuItem ID="toolbuttons" configChildKey="ID">
        <MenuItem MenuType="icon" DisplayText="Show Sidebar" CssClass="lblHierarchyNavigator"
SortOrder="179" ClientSideCommand="NavigatorSidebar.showSidebar();"></MenuItem>
        ...
```

#### **Expanded Sidebar**

The expanded Sidebar user interface allows you to view a sidebar panel and its component(s), select another available panel to view, and manage the list of panels. In addition, the Sidebar can be minimized, closed, or moved/dragged to the opposite side of the screen.

The following screenshot illustrates the expanded sidebar and the features available:



#### 1. Close Sidebar

Closes the sidebar and any active panels.

#### 2. Panel Manager

Launches the Panel Manager pop-up for users to select which panels they want to have available in their panel listing. See

<u>Panel</u> functions for more information.

#### 3. Drag and Drop

The Sidebar can be placed on the left or right side of the screen. Use the Drag and Drop icon to drag the panel to one side or the other.

#### 4. Minimize

You can minimize the Sidebar by selecting this action. See

<u>Minimized</u> Sidebar for more information about the minimized panel.

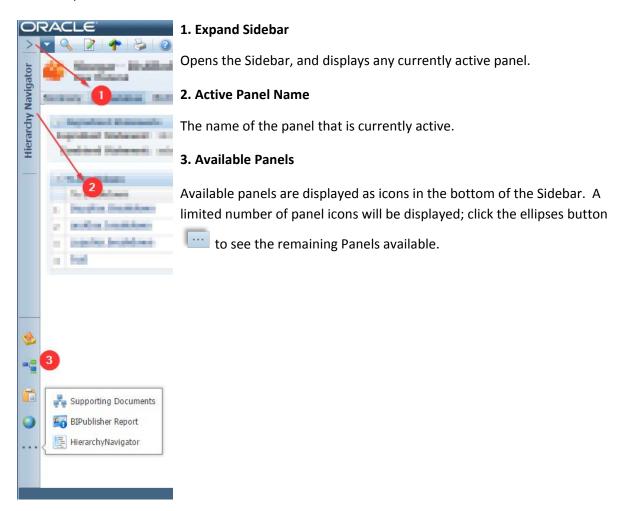
#### 5. Available Panels

Available panels are displayed as icons in the bottom of the Sidebar. A limited number of panel icons will be displayed; click the ellipses

button to see the remaining Panels available.

#### Minimized Sidebar

A minimized Sidebar provides quick access to the currently active panel, as well as links to the other available panels.



#### **Sidebar Content**

The contents and basic properties of the Sidebar are specified through the Sidebar configuration file. Each component is render based on its configuration, which includes icons, titles, control over visibility, and the way it should render its content. The following section describes the configuration details.

# **Chapter 3—Sidebar Configuration**

The Sidebar is configured using the config\Extensions\SidebarConfig.xml file.

#### Common

The common node defines common settings for the Sidebar.

<Common>

<EnableSidebar>true</EnableSidebar>

</Common>

#### **Common Attributes**

Attribute	Description
EnableSidebar	Turns the sidebar tool on or off. The value of the EnableSidebar
	should be true or false

## **Display**

The display node defines some common UI settings for the Sidebar.

#### <Display>

- <SidebarPosition>right</SidebarPosition>
- <DefaultWidth>320</DefaultWidth>
- <MinWidth>320</MinWidth>
- <MaxWidth>1000</MaxWidth>
- </Display>

#### **Display Attributes**

Attribute	Description
SidebarPosition	Defines the default position of the Sidebar on the screen, until the user overrides it by dragging the sidebar to the other side.  Valid values are <i>left</i> or <i>right</i>
DefaultWidth	Defines the default width, in pixels, of the Sidebar, until the user overrides it by dragging the panel wider.
MinWidth	Defines the minimum width, in pixels, of the Sidebar.
MaxWidth	Defines the maximum width, in pixels, of the Sidebar

#### **Panel**

The Panel node defines the panels that are available. Each panel contains one or more components (called widgets in the configuration file) which are displayed at the same time

There are two kinds of panels in the configuration:

- Panel –A panel defines its components/widgets in the configuration file.
- Dynamic Panel A DynamicPanel will load its configuration from an external source, via a URL, rather than from the configuration file. This allows for more widgets that are dynamically controlled. To learn more about Dynamic Panels, see the next section.

Panels contain one or more widgets, which account for the actual panel content. Although a panel can contain multiple widgets, the space available in the Sidebar UI limits the actual amount of information that can be displayed. Therefore, the number of widgets in a single panel will depend on the contents of each widget and should be limited to no more than three.

#### **Panel Attributes**

Attribute	Description	
ID	A unique identifier of the panel.	
TranslationID	The title of the panel will be displayed for the user's current	
	language based on this translation identifier. Translations must	
	be added to the commonXLAExtensionCacheItem table,	
	using the fkParent ID from commonXLAExtensionCacheItem	
	table (select pkid from commonXLAExtensionCache	
	where Name like '%NavigatorSidebar%';)	
Title	The title of the panel to display when not using translations.	
	Note: if you set both TranslationID and Title, then TranslationID	
	will be used for the title.	
Icon	The css class that will used in the Sidebar for this panel's icon.	
	For instance:	
	<panel icon="cssx-demo-bookmark"></panel>	
	And the related css	
	<pre>.cssx-demo-bookmark { background-image: url(/gsm/images/navigatorSidebar/demo/hierarchy.png); }</pre>	

Attribute	Description
DefaultShow	Specifies whether the panel should be available when user
	opens the Sidebar. The value should be true or false. If the
	DefaultShow attribute is not specified, the value will be false.
	If false, the user can still select the panel through the Extension
	Manager.

The Widget configuration determines which components are loaded inside a panel. Each widget has its own icon and title, which can match the panel's values, but should differ when there are multiple widgets inside a panel.

```
<Widget
    ID="WIDGET_ID"
    Title="WIDGET_TITLE"
    TranslationID="TRANSLATION_ID"
    Icon="CSS_CLASS"
    UserControlURL="URL"
    Height="300"
    EnabledObjectType="TYPE_IDS"
    EnabledFactory="FACTORY_CLASS_PATH">
</Widget>
```

## **Widget Attributes**

Attribute	Description
ID	A unique identifier of the widget.
TranslationID	The title of the widget will be displayed for the user's current
	language based on this translation identifier. Translations must
	be added to the commonXLAExtensionCacheItem table, using
	the fkParent ID from commonXLAExtensionCacheItem table
	(select pkid from commonXLAExtensionCache where
	Name like '%NavigatorSidebar%';)
Title	The title of the widget to display when not using translations.
	Note: if you set both TranslationID and Title, then TranslationID
	will be used for the title.
Icon	The css class that will used in the Sidebar for this widget's icon.
	For instance:
	<widget icon="cssx-demo-bookmark"></widget>
	And the related css
	<pre>.cssx-demo-bookmark { background-image: url(/gsm/images/navigatorSidebar/demo/hierarchy.png); }</pre>
Height	The height of the widget, in pixels. Generally should only be specified if needed; otherwise, the container panel will handle the height automatically.
EnabledObjectType	Comma separated list of object types that this widget will be
	enabled for. For instance, "1004,2147" will enable this widget for
	Material and Trade Specifications.
	See the Extensibility Guide Appendix for details about Object
	Types.

Attribute	Description
EnabledFactory	ObjectLoaderURL for the class that controls if the widget should be enabled in current context. Ignored if EnabledObjectType is used.  For example: Class:Xeno.Web.UI.Common.NavigatorSidebar.Demo.HasSpecEnabledFactory,WebCommon To implement this class you must implement the Xeno.Web.UI.Common.NavigatorSidebar.ISidebarEnabled interface from the WebCommon.dll assembly, and implement the following method:
	public bool CheckEnabled(string currentObjectPKID)  See the Extensibility Guide Appendix for details about  ObjectLoaderURL syntax.
The displayed content of th	e widget are specified through <i>one</i> of the following attributes:
RemoteURL	Loads the widget content from the specified URL, such as a BI report. For example: "http://www.oracle.com?get={ObjectPkid}" Supported Parameters: {ObjectPkid} and {ObjectType}
UserControlURL	Load the widget content from a .NET user control. For example:  ~/WebCommon/NavigatorSidebar/HelloWorld.ascx.

## **DynamicPanel**

The DynamicPanel node defines panels that load widgets dynamically. A URL returns a JSON object representing a panel and one or more widgets.

<DynamicPanel ID="MRU" ConfigUrl="http://example.com/panelDefinition.js" DefaultShow="true" />

## **DynamicPanel Attributes**

Attribute	Description
ID	A unique identifier of the panel.
DefaultShow	Specifies whether the panel should be available when user opens the
	Sidebar. The value should be true or false. If the DefaultShow attribute is
	not specified, the value will be false.
	If false, the user can still select the panel through the Extension
	Manager.
ConfigUrl	Url that returns a panel definition via a JSONP format data. The JSON
	object has the most of the same properties and behaviors as the Panel
	and Widget configuration settings defined above. See below for details.
	For example:
	NavigatorSidebarPanel
	({"ID":"RemoteWidget","Icon":"{PanelIconUrl}","Title":"{PanelTitle,
	DynamicPanel doesn't support TranslationID property}","Widgets":[
	{"ID":"{widgetId}",
	"Title":"{widgetTitle}",

Attribute	Description
	"RemoteURL":"{RemoteUrl, this priority is higher than Content.  If user sets RemoteURL and Content at the same time, Content property will be ignored}",  "Content":"{HTMLContent}",  "Icon":"{WidgetIcon}",  "Height":{widgetHeight, this property can be null}}  ]})  Note:  Supported parameters for ConfigUrl: {ObjectPkid} and {ObjectType}. For example:  O < DynamicPanel ID="RemoteWidget"  ConfigUrl="http://example.com/loadpanel.aspx?pkid={ObjectPkid}&type={ObjectType}">  Panel config must wrapped by NavigatorSidebarPanel()  Widget config does not support EnabledFactory attribute, but does support EnabledObjectType.

# Chapter 4—Sidebar JavaScript APIs

A set of JavaScript APIs are available that provide functions to manipulate the Sidebar, along with panels and widgets. Custom widgets can access these functions via the JavaScript object variable

NavigatorSidebar. For example, the NavigatorSidebar.closeSidebar() function will close the sidebar.

#### Sidebar functions

The following functions are available to widgets.

Sidebar Javascript API	List
showSidebar()	Parameter(s): None
	Returns: n/a
	Description: Show the Sidebar if it is closed. The position of the sidebar will be based on user preference (last position that user opened).
showLeftSidebar()	Parameter(s): None
	Returns: n/a
	Description: Show the Sidebar on the left side of the page
showRightSidebar()	Parameter(s): None
	Returns: n/a
	Description: Show the Sidebar on the right side of the page
expandSidebar()	Parameter(s): None
	Returns: n/a
	Description: Expand Sidebar if it is minimized
collapseSidebar()	Parameter(s): None
	Returns: n/a
	Description: Collapse/minimize the Sidebar
closeSidebar()	Parameter(s): None
	Returns: n/a
	Description: Close the Sidebar completely.
addWidget(panelld,widget)	Parameter(s):
	panelld: panel id that hosts widget
	widget: JSON object.
	e.g.
	{"ID":id,"Title":title,"Content":widgetContent,"Height":widgetHeight,"I con":iconclass}
	Note: widgetContent could be YUI object or Jquery object or pure html
	strings
	Returns: Widget object. Refer to Widget API List for more details
	Description: Add widget into specific panel

getWidget(panelld,widgetId	Parameter(s):
)	panelid: id of the panel that hosts widget
,	widgetId: the unique id of the widget to retrieve
	The gentle of the of the mages to remove
	Returns: Widget object. Refer to Widget API List for more details
	Description:
	Get widget by panelld and widgetId
addWidgetPanel(id,title,ico	Parameter(s):
nClass)	id: panel id
	title: panel title
	IconClass: panel icon css class
	Returns: Panel object. Refer to <u>Panel API List</u> for more details
	Description: Add panel to Sidebar
getWidgetPanel(panelId)	Parameter(s):
	panelld: the unique id of the pane to retrieve
	Returns: Panel object. Refer to <u>Panel API List</u> for more details
	Description: Get specific panel
getAllPanelId()	Parameter(s): None
	Returns: List of all panel ids
	Description: Get all panel id list that loaded in Sidebar
on(eventName,callbackFunc	Parameter:
)	eventName: event name that you want to subscribe to
·	callbackFunc: callback function when subscribed event fires
	Refer to <u>Sidebar Event List</u> for available events
	Poturnos n/a
showPanel(panelId)	Returns: n/a Parameter(s):
3HOWP allellpallellu)	• •
	panelid: id of the panel to display
	Returns: n/a
	Description:
	Show specific panel. You can use this api to switch between opened
	panels.

## **Panel functions**

Sidebar Panel API List	
show ()	Parameter(s): None
	Returns: n/a
	Description: Show current panel.
remove()	Parameter(s): None
	Returns: n/a
	Description: Remove current panel.

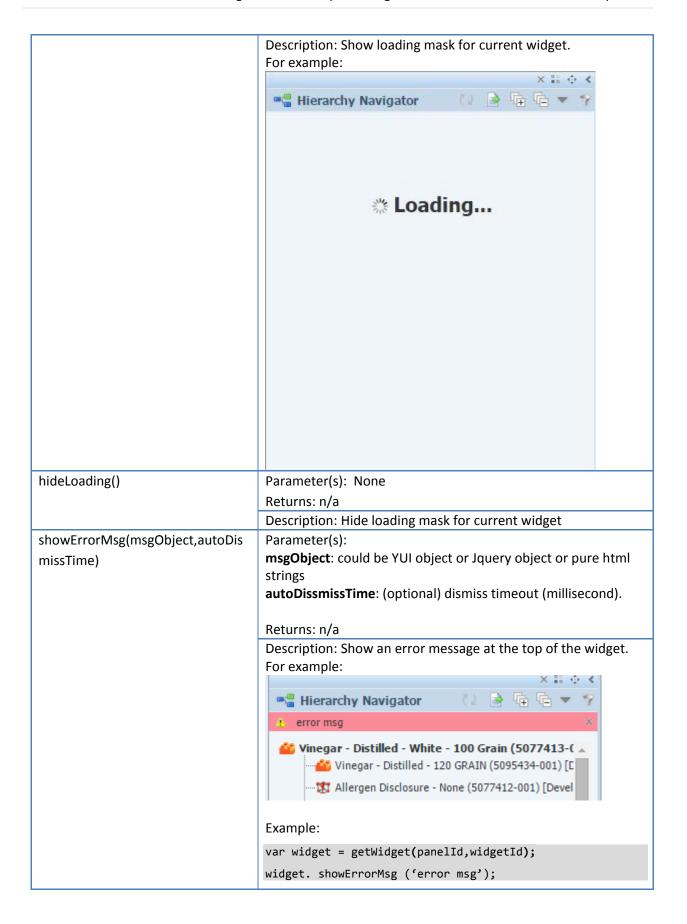
# Widget functions

Sidebar Widget API List	
remove ()	Parameter(s): None
	Returns: n/a
	Description: Remove current widget.
	Example:
	<pre>var widget = getWidget(<panelid>,<widgetid>);</widgetid></panelid></pre>
	<pre>widget.remove();</pre>
updateContent (content)	Parameter(s):
	content: content could be YUI object or Jquery object or pure
	html strings
	Returns: n/a
	Description: Update content of the widget
	Example:
	<pre>var widget = getWidget(panelId,widgetId);</pre>
	<pre>widget. updateContent ("test");</pre>
addButton(button,clickCallback)	Parameter(s):
	<b>button</b> : json object.
	e.g. {"ID":id,"Title":title,"Content":widgetContent}
	Content could be either YUI object or Jquery object or pure
	html strings.
	clickCallback: callback function after clicked the button

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	Returns: n/a
	Description:
	Add button to the right of the widget title, like the following
	screenshot
	Hierarchy Navigator
removeButton(buttonId)	Parameter(s):
	<b>buttonId</b> : id of the button that to remove
	Returns: n/a
	·
Add Mars (magazi Object)	Description: Remove specific widget button
AddMenu(menuObject)	Parameter(s):
	menuObject: json object, for example:
	{"ID":"menuId","Title":"MenuTitle",Icon:"",Menu:
	Г
	{"ID":"subMenuId","Title":"title","Callback":function},
	<pre>{"ID":" subMenuId2","Title":" title 2","Callback":function}</pre>
	]}
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	Returns: n/a
	Description: like the addButton function, this will add a
	structured menu button to the right of the widget title.
removeMenu(menuld)	Parameter(s):
	menuld: id of the menu that you want to remove
	Returns: n/a
	Description:
	Remove specific widget menu
setLabel (txt)	Parameter(s):
SetLaber (txt)	txt: label text
	the label text
	Deturned of le
	Returns: n/a

	Description: Set widget label for the minimized panel  Vinegar Raw Mater  Summary Formul  Tag Spec Na Short Na Spec Sta  Label lateg lateg lateg Gr
setTag(txt)	Parameter(s): txt: tag text (typically a number)  Returns: n/a  Description: Set widget tag, next to the label, for the minimized panel
clearTag()	Parameter(s): None Returns: n/a Description: clear widget tag of a minimized panel
showLoading()	Parameter(s): None Returns: n/a



showSuccessfulMsg (msgObject,autoDismissTime)  showWarningMsg (msgObject,autoDismissTime)	Parameter(s):  msgObject: could be YUI object or Jquery object or pure html strings  autoDissmissTime: (Optional) dismiss timeout (millisecond).  Returns: n/a  Description: Show a successful message at the top of the widget. For example:  Hierarchy Navigator  it works  Vinegar - Distilled - White - 100 Grain (5077413-())  Example:  var widget = getWidget(panelId, widgetId); widget. showSuccessfulMsg ('it works');  Parameter(s):  msgObject: could be YUI object or Jquery object or pure html strings  autoDissmissTime: (Optional) dismiss timeout (millisecond).  Returns: n/a  Description: Show a warning message at the top of the widget. For example:  Hierarchy Navigator  Warning  Vinegar - Distilled - White - 100 Grain (5077413-()  Warning  Vinegar - Distilled - 120 GRAIN (5095434-001) [t]  Example:
	<pre>var widget = getWidget(panelId,widgetId);</pre>
	widget. showWarningMsg ('Warning');
hideMsg()	Parameter(s): None Returns: n/a  Description: Hide widget messages that are displayed at the top of the widget

## Sidebar events

Sidebar Event List	
ready	Triggered when panel has been rendered into DOM
afterHideSidebar	Triggered after hide panel
afterShowSidebar	Triggered when panel showed from minimized status
startResizeSidebar	Triggered when starting to resize panel
afterResizeSidebar	Triggered after resized panel
beforeCloseSidebar	Triggered before close panel
afterCloseSidebar	Triggered after close panel
afterAddPanel	Triggered after adding new panel.
	Callback function parameters: (event,panelId)  Example: NavigatorSidebar.on("afterAddPanel",function(event,panelId){});
afterAddPanelWidget	Triggered after adding new widget.
	Callback function parameters: (event,panelId,widgetId) Example: NavigatorSidebar.on("afterAddPanelWidget",function(event,panelId,widgetId){});
afterShowPanel	Triggered after show specific panel
	Callback function parameters: (event,panelId)  Example: NavigatorSidebar.on("afterShowPanel",function(event,panelId){});

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## Chapter 5—A BI Publisher Report Example

In this chapter, we will take BI Publisher Report widget as an example and show you how to add it.

Step 1: Add config in config\Extensions\SidebarConfig.xml

In order to add BI Publisher Report widget, we need to add a new panel that hosts this widget. Under the Panels node, we add following config:

• You should also define "cssx-demo-report" in Web\css\NavigatorSidebar.css, for example:

```
.cssx-demo-report
{
    background-image: url(/gsm/images/navigatorSidebar/demo/report.png);
}
```

We also make a

"Class:Xeno.Web.UI.Common.NavigatorSidebar.Demo.HasSpecEnabledFactory,WebCommon" for EnabledFactory property, which allows this widget only enabled when current page has spec.

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```
using System;
using Xeno.Prodika.Application;
using Xeno.Prodika.SCRM.Service;
using Xeno.Prodika.Services;
namespace Xeno.Web.UI.Common.NavigatorSidebar.Demo
```

• For the RemoteURL, you need to replace "&" with "amp;", and use {ObjectPkid} as the placeholder for current spec pkid.

#### Step 2: Restart IIS

Restart IIS to make above config work and open Sidebar, you will see a new icon which represents the BI Publisher. Click that icon you should be able see the following screen (based on your report, it may be different with this one). If you can't see the BI publisher icon in the Sidebar, please make sure open extension manager icon and add BI publisher panel to your panel.