Oracle® WebCenter Interaction

Customization and Localization Guide 10g Release 3 (10.3)

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Oracle WebCenter Interaction Customization and Localization Guide, 10g Release 3 (10.3)

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Welcome

This book provides an overview of how to customize and localize Oracle WebCenter.

For an overview of all deployment documentation, see the *Oracle WebCenter Interaction Deployment Overview Guide*. For products and versions covered by this book, see the section in that guide titled "Products Covered by the Deployment Guide."

How to Use This Book

Audience

This guide is written to provide guidance to people responsible for the design and deployment of the Oracle WebCenter system. Access to resources with strong knowledge of the platform operating system, database, web and application servers, and any other third-party software is recommended.

Organization

This guide includes the following chapters:

- This chapter provides information on how to use this guide and describes general resources available to assist in the Oracle WebCenter deployment.
- Chapter 2, "Development Resources" provides an overview of development resources available for customizing Oracle WebCenter.

- Chapter 3, "Customizing the User Interface" summarizes Oracle WebCenter user interface customization techniques.
- Chapter 4, "Localization" provides an overview of localization options for an Oracle WebCenter deployment.

Typographical Conventions

This book uses the following typographical conventions.

Table 1-1 Typographical Conventions

Convention		Typeface	Examples/Notes	
•	Items you need to take action on (such as files or screen elements)	bold	 Upload Procedures.doc to the portal. To save your changes, click Apply Changes. 	
•	User-defined variables New terms Emphasis Object example names	italic	 The migration package file is located in install_dir\serverpackages. Portlets are Web tools embedded in your portal. The URI must be a unique number. The example Knowledge Directory displayed in Figure 5 shows the Human Resources folder. 	
•	Text you enter Computer generated text (such as error messages) Code samples	computer	 Type Marketing as the name of your community. This script may generate the following error: ORA-00942 table or view does not exist Example: <pre></pre>	
•	Environment variables	ALL_CAPS	 ORACLE_HOME specifies the directory where Oracle products are installed. 	

Oracle Documentation and Resources

This section describes other documentation and resources provided by Oracle.

Table 1-2 Oracle Documentation and Resources

Resource	Description		
Installation and Upgrade Guides	These guides describe the prerequisites (such as required software) and procedures for installing or upgrading the various Oracle WebCenter components.		
	These guides are available on the Oracle Technology Network at http://www.oracle.com/technology/documentation/bea.html.		
Release Notes	The release notes provide information about new features, issues addressed, and known issues in the release of various Oracle WebCenter products.		
	They are available on the Oracle Technology Network at http://www.oracle.com/technology/documentation/bea.html.		
Administrator Guides	These guides describe how to manage, maintain, and troubleshoot the various Oracle WebCenter components.		
	These guides are available on the Oracle Technology Network at http://www.oracle.com/technology/documentation/bea.html.		
Online Help	The online help is written for all levels of Oracle WebCenter users. It describes the user interface for Oracle WebCenter components and gives detailed instructions for completing tasks in Oracle WebCenter products.		
	To access online help, click the help icon.		
Oracle Technology Network (OTN)	The Oracle Technology Network is the world's largest community of developers, DBAs, and architects using Oracle products and industry-standard technologies. Every day, members collaborate via OTN to share real-world insight, expertise, and best practices on how to build, deploy, manage, and optimize applications.		
	As a member of the Oracle Technology Network you will enjoy access to software downloads, discussion forums, documentation, wikis, podcasts, blogs, plus much more.		
	Access the Oracle Technology Network at http://www.oracle.com/technology/index.html.		
Oracle Support	The Oracle Support site provides access to all Oracle support resources including online support, software and patches, technical articles, and contact numbers.		
	Access the Oracle Support site at http://www.oracle.com/support/index.html.		

Welcome

Development Resources

This chapter provides an overview of resources available for customizing Oracle WebCenter.

Oracle WebCenter components are designed to allow you to create a personalized experience for organizations, groups, and users. The Oracle WebCenter Interaction Development Kit (IDK) allows you to customize every aspect of the portal.

For a details on the components of the Oracle WebCenter architecture, see the section "Oracle WebCenter Architecture" in the *Oracle WebCenter Interaction Deployment Overview Guide*.

This chapter contains the following sections:

- "Basic Portal Customizations" on page 2-2
- "Portlets" on page 2-2
- "Content Services" on page 2-2
- "Identity Services" on page 2-3

The Oracle Professional Services organization is available to develop these customizations and more. For details on the services available from Oracle, contact your Oracle representative.

Basic Portal Customizations

The Oracle WebCenter Interaction portal provides a framework for applications that allows you to customize the portal look and feel and functionality. These basic customizations require no custom Java or C# code.

For details on how to configure and customize the portal UI, see Chapter 3, "Customizing the User Interface," and the *Oracle WebCenter Interaction UI Customization Guide*.

Portlets

Each portal page is composed of multiple portlets. You can build portlets with any language or technology that can return HTML or XML over HTTP.

Oracle provides the IDK development environment for developing portlets in Java and .NET. For details on the IDK, see the Oracle WebCenter Interaction Development Kit documentation.

For details on developing portlets, see the *Oracle WebCenter Portlet Toolkit for .NET Development Guide*.

Oracle provides support for WSRP 1.0 portlets through the Oracle WebCenter WSRP Consumer. For details on the Oracle WebCenter WSRP Consumer, see its documentation.

Adaptive Portlets allow the creation of a coordinated portal page comprised of cross-platform services that represent multiple applications. Adaptive Tags are a collection of XML tags that you can include in any gatewayed portal page. The portal gateway transforms the tags to include navigation, UI components, data objects, and other dynamic information in the portal page.

For details on Adaptive Portlets and Adaptive Tags see the *Oracle WebCenter Interaction Web Service Development Guide* and the *Oracle WebCenter Interaction UI Customization Guide*.

Content Services

Content services index in the portal content from back-end sources, allowing the back-end sources to be searched using the portal search service. In addition to the content services provided with Oracle WebCenter Interaction, you can create custom content services.

For details on developing content services, see the *Oracle WebCenter Interaction Web Service Development Guide*.

Identity Services

Identity services allow the integration of established repositories of user information into the portal. You can import users, groups, and group membership configuration. In addition to the integration services provided with Oracle WebCenter Interaction, you can create custom identity services.

For details on developing identity services, see the *Oracle WebCenter Interaction Web Service Development Guide*.

Development Resources

Customizing the User Interface

This chapter summarizes Oracle WebCenter user interface customization techniques, most of which do not require special programming skills.

The purpose of this chapter is to help you scope the effort of implementing the user interface for your deployment.

This chapter includes the following sections:

- "About Experience Definitions" on page 3-2
- "Navigation" on page 3-2
- "Style Sheets and Portlets" on page 3-3
- "Branding" on page 3-3
- "Pluggable Event Interfaces (PEIs)" on page 3-4
- "Custom Activity Spaces" on page 3-4

About Experience Definitions

Experience Definitions determine many aspects of the user interface for broad groups of users. Experience Definitions control your start page when you log in, the features available to you, the appearance of your navigation, and what mandatory links are shown in your navigation.

You can create a number of Experience Definitions for different audiences, including unauthenticated or guest users.

For information on configuring Experience Definitions, refer to the *Administrator Guide for Oracle WebCenter Interaction*.

Adaptive Layouts

You may want to change the look and content of a page in ways that CSS changes do not allow. Adaptive page layouts allow you to change the look and feel of the portal user interface using adaptive tags in standard XHTML.

For details on Adaptive Layouts, see the Oracle WebCenter Interaction UI Customization Guide.

Navigation

Portal navigation is customizable; in fact, the portal ships with eight different navigation options out of the box. Navigation controls everything outside the center of the page, not including the header and footer. To change the navigation presented to a user, edit the Navigation Options in the Experience Definition editor.

Navigations are pluggable; that is, you can develop new navigations using programming languages like C++, Visual Basic .NET, Java, or by simply defining them in XML.

Although navigations are associated with Experience Definitions, each navigation can be very dynamic, displaying a completely different look for each page type, each user, or any other settings you like. For example, the support center navigation shows completely different HTML when you are on a support center community, even though it is all done within a single pluggable navigation view. The support center navigation is downloadable from the Oracle Technology Network at http://www.oracle.com/technology/index.html.

Style Sheets and Portlets

If you are happy with the layout of your existing portal and simply want to change things such as fonts, colors, logos, and images, you can override all those settings by changing your style sheet. Oracle WebCenter supports localization of style sheets into many languages, the easiest way to modify a style sheet for a multi-language portal is to use the Style Sheet Mill, which takes values from template files and uses them to generate style sheets in multiple languages using localized text from our translation files.

For details about the Style Sheet Mill, see the Oracle Technology Network at http://www.oracle.com/technology/index.html.

Branding

You can apply different headers and footers to different Experience Definitions and communities. The headers and footer set for the Experience Definition are applied to the entire interface, except for communities that have their own custom headers and footers.

Oracle-BEA AquaLogic Interaction Publisher provides three branding portlet templates that enable you to customize the look and feel of Experience Definitions and communities:

- Header Portlet: enables you to create customized headers. A header portlet appears at the top of the page, in the portal's banner area.
- Footer Portlet: enables you to create customized footers. A footer portlet appears at the bottom of the page.
- Content Canvas: enables you to create a branding portlet that spans the entire space just below the banner and above the page's other portlets.

You can create and configure branding portlets from these portlet templates using the Portlet Editor and Oracle-BEA AquaLogic Interaction Publisher's Configure Portlet Wizard. You can create and customize these branding portlets for your communities and Experience Definitions.

You can also customize the way a header or footer appears in a particular community by using the Community Preferences page from the Community Editor.

For details, see the Administrator Guide for AquaLogic Interaction Publisher.

Pluggable Event Interfaces (PEIs)

Sometimes you want to add new functionality rather than modify existing functionality. Oracle WebCenter Interaction has a large number of event categories you can hook into, each with several different event types. For example, you might change the post login behavior: for users who had not yet filled in their user profiles, you could have them redirected to the user profile form. To accomplish this, you would need to implement not only a PEI, but a custom activity space, model, view, and controller for any special landing pages you wanted to write from scratch. You could also use Dynamic Discovery to override a view class for an existing page.

For details on PEIs, see the Oracle Technology Network at http://www.oracle.com/technology/index.html.

Custom Activity Spaces

You might want to precisely control the exact look of the center of the page, as well. For example, you might want to control how portlets are rendered on the page. The file MyPortalContentView renders portlets into columns based on your page layout style. You might want to redesign that page center so that the portlets are arranged in rows instead of columns. For this, you would need to override the default view with your own, using dynamic discovery, also outlined in the development documentation on the Oracle Technology Network at http://www.oracle.com/technology/index.html.

A more forward-compatible approach involves extending ActivitySpaces, by creating new ActivitySpaces and views that extend existing ones and directing PEIs and other links to those new spaces. Then, as Oracle WebCenter Interaction improves existing activity space components, your code will benefit.

Localization

This chapter provides an overview of localization options for an Oracle WebCenter deployment.

About Localization in Oracle WebCenter

All Oracle WebCenter products are fully Unicode-compliant and use UTF-8 encoding.

For additional details on localization and Oracle WebCenter, see the *Administrator Guide for Oracle WebCenter Interaction*.

For developer documentation on localizing custom Web services and portlets, see the *Oracle WebCenter Interaction Web Service Development Guide*.

Localization and the Oracle WebCenter Interaction User Interface

Out of the box, the Oracle WebCenter Interaction user interface is localized into eleven languages: Dutch, English, French, German, Italian, Portuguese, Spanish, Japanese, Korean, Simplified Chinese, and Traditional Chinese.

Each portal user can choose her preferred language by changing her locale under **My Account** | **Edit Locale Settings**. For example, if a portal user changes her locale setting to any of the German locales (Austria, Germany, Luxembourg, or Switzerland), the user interface language will change to German.

You can create additional languages for the Oracle WebCenter Interaction user interface. For details, see "Adding Custom Languages" on page 4-5.

Localization and Oracle WebCenter Collaboration, Oracle-BEA AquaLogic Interaction Publisher, Oracle-BEA AquaLogic Interaction Studio, and Oracle-BEA AquaLogic Interaction Workflow

Oracle WebCenter Collaboration and Oracle-BEA AquaLogic Interaction Publisher are localized to the same eleven languages as the Oracle WebCenter Interaction user interface. Oracle-BEA AquaLogic Interaction Studio and Oracle-BEA AquaLogic Interaction Workflow are localized to a subset of those languages.

It is possible to add custom languages to these applications; however, these customizations are not recommended unless done by Oracle professional services. To engage Oracle professional services, contact your Oracle representative.

Localization and Search

The Search index is stored in UTF-8 Unicode and supports 62 languages.

The Search engine supports advanced stemming and tokenization for the following 23 languages:

Chinese (Simplified)	Chinese (Traditional)	Czech
Danish	Dutch	English
French	Finnish	German
Greek	Hungarian	Italian
Japanese	Korean	Norwegian (Bokmål)
Norwegian (Nynorsk)	Polish	Portuguese
Romanian	Russian	Spanish
Swedish	Turkish	

In addition to those 23 languages, the Search engine provides basic tokenization support for an additional 39 languages.

The Search engine languages are hard-coded and cannot be customized.

Localizing Portal Objects

You can localize the names and descriptions of portal objects. For example, if you create a portlet with the name "Travel Portlet," it is possible to associate the name "Dienstreise Portlet" with the portlet for display to German locales.

Names and descriptions are added or modified using the administrative user interface for each object. When the object is opened in the administrative editor, the **Properties and Names** page allows you to specify a name and description for any available language.

For details on editing object properties, see the Oracle WebCenter Interaction online help.

The Localization Manager

You can export and import localized names and descriptions in bulk with the **Localization Manager**. Names and descriptions of objects are exported from the Oracle WebCenter Interaction database into an XML file. The XML file contains name and description strings and their translations. Translations are added or edited in the XML file, and then the names and descriptions imported into the Oracle WebCenter Interaction database using the Localization Manager.

This is a small sample of exported names and descriptions:

```
<segment stringid='0' itemid='1' classid='2'>
     <source language='en'>Administrators Group</source>
     <target language='de'>Administratorengruppe</target>
     <target language='en'></target>
     <target language='es'>Grupo Administradores</target>
     <target language='fr'>Groupe d'administrateurs</target>
     <target language='it'>Gruppo Amministratori</target>
     <target language='ja'>管理者グループ</target>
     <target language='ko'>관리자 그룹</target>
     <target language='pt'>Grupo de administradores</target>
     <target language='zh'>管理员用户组</target>
   </segment>
   <segment stringid='1' itemid='1' classid='2'>
     <source language='en'>WCI Administrators Group</source>
     <target language='de'>WCI-Administratorengruppe</target>
     <target language='en'></target>
     <target language='es'>Grupo Administradores de WCI</target>
     <target language='fr'>Groupe d'administrateurs WCI</target>
     <target language='it'>Gruppo Amministratori WCI</target>
     <target language='ja'>ブラムツリー管理者グループ </target>
     <target language='ko'>WCI 관리자 그룹</target>
     <target language='pt'>Grupo de administradores WCI</target>
     <target language='zh'>WCI 管理员用户组</target>
   </segment>
 </segments>
</localizationtable>
```

In the exported XML:

- <languages> contains all of the user interface languages supported in the portal.
- <segments> contains one or more <segment> nodes. The count element shows the total number of name or description strings in the portal.
- <segment> contains a single name or description string and its translations. The contained
 <source> node is the original, to be translated text. The <target> nodes are the
 translations of the <source> node text.

The language element of each node is the ISO 639-1 two letter identifier for the given language.

Adding Custom Languages

This section covers adding custom languages to the Oracle WebCenter Interaction portal user interface. Adding custom languages to other Oracle WebCenter products, such as Oracle WebCenter Collaboration or Oracle-BEA AquaLogic Interaction Publisher must be done by Oracle professional services.

Adding a custom language to the Oracle WebCenter Interaction portal user interface is a four step process:

- 1. Create a directory for the new language. For details, see "Adding the Language Directory" on page 4-6.
- 2. Add style sheets.
- 3. Translate online help
- 4. Translate Javascript language files.

Caution: Customizing OpenFoundation language resources is currently not supported.

Adding the Language Directory

The portal component loads supported languages based on the contents of the directory **PT_HOME/ptportal/***version/***i18n**. This directory contains one subdirectory for each supported language, each named with the ISO-639-1 language code.

The first step in adding a new language to the portal is to add a directory for that language to **PT_HOME/ptportal/***version/***i18n**. To do this:

- 1. Create a new directory under **PT_HOME/ptportal/***version/***i18n**. The directory must be named the ISO-639-1 language code of the language you intend to add.
- 2. Copy the contents of the **i18n/en** directory to the new directory.
- 3. Restart the portal. The new language is now available on the **My Account | Edit Locale Settings** page.

Adding Language Style Sheets

The second step in adding a new language to the portal is to add style sheets for that language. This is done by editing template files that are built into CSS by the Oracle WebCenter Interaction **cssmill** component.

The following steps describe this process, using the Czech language as an example:

Note: Extended characters must be translated into their Unicode escape (\uxxxx), and the leading backslash must be escaped with a second backslash (\\uxxxx).

- 1. On the Image Service, navigate to **ptimages/tools/cssmill/prop-text**. This directory contains the font and text-related properties for each language.
- 2. Copy the **en** file to the same directory, naming it with the ISO-639-1 language code of the language, for example, *cz* for Czech.
- 3. Edit the new file, making any necessary modifications for the new language.
- 4. Navigate to .../prop-color. This directory contains color scheme properties for all languages.
- 5. Add a colorscheme.name.language_code line to each file and setting it equal to the name of the color scheme in the language. For example, in **color.1.properties** the English language color scheme is named with this line:

```
colorscheme.name.en=Plum
```

To create a new name for the Czech locale, add a line:

```
colorscheme.name.cz=Lavendelblauw
```

6. Modify the appropriate Ant script so that the new language builds. The process for doing this is slightly different depending on whether the script is being run by Ant 1.5 or 1.6.

For Ant 1.6

- a. Edit ptimages/tools/cssmill/css-mill-ant-1-6.xml.
- b. Add an entry for the new language under <macrodef name="make_main_css">, in the <sequential> node.

For Czech, the added line would be:

```
<make_main_language_css LANGUAGE="cz" COLOR="@{CIKIR}"/>
```

c. Add an entry for the new language under <macrodef name="make_508colors_css">, in the <sequential> node.

For Czech, the added line would be:

```
<make_508_lang_color_css LANGUAGE="cz" COLOR="@{COLOR}"
CSSPATH="@{CSSPATH}" />
```

d. Add an entry for the new language under <macrodef name="make_comm_color_css">, in the <sequential> node.

For Czech, the added line would be:

```
<make_comm_lang_color_css LANGUAGE="cz" COLOR="@{COLOR}"
CSSPATH="@{CSSPATH}" INDEX="@{CSSPATH}index.properties"/>
```

e. Add an entry for the new language under

```
<macrodef name="append_index_for_color">, in the <sequential> node.
```

For Czech, the added line would be:

```
<concat_color destfile="@{INDEX}" keyprop="mainstyle@{COLOR}-cz.css"
valprop="pre@{COLOR}.colorscheme.name.cz"/>
```

f. Save and close css-mill-ant-1-6.xml.

For Ant 1.5

- a. Edit ptimages/tools/cssmill/css-mill-ant-1-5.xml.
- b. Add an entry for the new language under <target name="make_main_css" depends="make_css_dir">.

For Czech, the added line would be:

```
<antcall target="make_main_language_css"><param name="LANGUAGE"
value="cz"/></antcall>
```

c. Add an entry for the new language under <target name="make_508colors_css">.

For Czech, the added line would be:

```
<antcall target="make_508_lang_color_css"> <param name="LANGUAGE"
value="cz"/><param name="COLOR" value="${COLOR}" /></antcall>
```

d. Add an entry for the new language under <target name="make_comm_color_css">.

For Czech, the added line would be:

```
<antcall target="make_comm_lang_color_css"><param name="LANGUAGE"
value="cz"/></antcall>
```

e. Add an entry for the new language under

```
<target name="append_index_for_color">.
```

For Czech, the added line would be:

```
<concat destfile="${INDEX}"
append="true">mainstyle${COLOR}-cz.css=${colorscheme.name.cz}
</concat>
```

- f. Save and close css-mill-ant-1-5.xml.
- 7. Update the CSS stylesheets by running the **PT_HOME/ptimages/tools/cssmill/make_all** script.
- 8. Verify that the stylesheets have been updated with the new language.
 - a. Verify that there are 20 files with the new language ID in **PT_HOME/ptimages/tools/cssmill/css**.
 - b. Open **PT_HOME/ptimages/tools/cssmill/css/community-themes.txt** and confirm that there is an entry for the newly added language ID.
- 9. Move the updated stylesheets from **cssmill/css** to the Image Service, **PT_HOME/ptimages/imageserver/plumtree/common/public/css**.
- 10. Restart the Image Service.

Adding an Online Help Language

Online help is located on the Image Service under each product's private/help directory. For example, the Oracle WebCenter Interaction online help files are located in **imageserver/plumtree/portal/private/help**. Under this directory are two directories, **std** for standard online help and **508** for Section 508-compliant help. Under those directories are directories for each supported language.

For example, the standard English online help for Oracle WebCenter Interaction is located in **imageserver/plumtree/portal/private/help/std/en**.

Online help is compiled using RoboHelp X5 for European languages and RoboHelp 2002 for Asian languages. RoboHelp projects are made available upon request. Contact Oracle Support at http://www.oracle.com/support/index.html for details.

Adding Javascript Language Files

You must localize string files for various Javascript user interface components when adding a language to the portal. The following Javascript components require you to add a string file with each added language:

- iscontrols
- jsdatepicker
- jsutil

These components are located on the Image Service, under

imageserver/plumtree/common/private/js. The string files are located under each component's directory, in **LATEST/strings**.

To add a string file for the new language:

1. Copy the English file to a file in the strings file suffixed with the ISO-639-1 code of the language to be added. For example, to add a Czech string file to jscontrols, copy

LATEST/strings/PTControls-en.js

to

LATEST/strings/PTControls-cz.js.

2. Translate the copied string file to the language being added.

Localization