

Oracle® WebCenter Sites

Internationalization Reference

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Oracle® WebCenter Sites Internationalization Reference, 11g Release 1 (11.1.1)

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About This Guide

This guide provides instructions for configuring your Oracle WebCenter Sites environment to support the UTF-8 character encoding used by WebCenter Sites. This guide also provides information about the WebCenter Sites-specific settings you will have to configure to enable multi-language operations in WebCenter Sites. The last chapter of this guide provides information about the WebCenter Sites features that have specific internationalization requirements.

Applications discussed in this guide are former FatWire products. Naming conventions are the following:

- *Oracle WebCenter Sites* is the current name of the application previously known as *FatWire Content Server*. In this guide, *Oracle WebCenter Sites* is also called *WebCenter Sites*.
- *Oracle WebCenter Sites: Explorer* is the current name of the application previously known as *FatWire Content Server Explorer*. In this guide, *Oracle WebCenter Sites: Explorer* is also called *Sites Explorer*.
- *Oracle WebCenter Sites: Desktop* is the current name of the application previously known as *FatWire Content Server Desktop*. In this guide, *Oracle WebCenter Sites: Desktop* is also called *Sites Desktop*.
- *Oracle WebCenter Sites: DocLink* is the current name of the application previously known as *FatWire Content Server DocLink*. In this guide, *Oracle WebCenter Sites: DocLink* is also called *Sites DocLink*.

Audience

This guide is for installation engineers, developers, and administrators of WebCenter Sites systems. Users of this guide must be familiar with databases, application servers, web servers, and browsers; with file system encodings and product-specific property files and tags. For WebCenter Sites-based operations, users of this guide must also be familiar with the WebCenter Sites interfaces, such as the WebCenter Sites Admin interface and Contributor interface, as well as clients, such as Sites Desktop and Sites DocLink.

Conventions

The following text conventions are used in this guide:

- **Boldface** type indicates graphical user interface elements that you select.
- *Italic* type indicates book titles, emphasis, or variables for which you supply particular values.
- `Monospace` type indicates file names, URLs, sample code, or text that appears on the screen.
- **Monospace bold** type indicates a command.

Third-Party Libraries

Oracle WebCenter Sites and its applications include third-party libraries. For additional information, see *Oracle WebCenter Sites 11gR1: Third-Party Licenses*.

Chapter 1

Configuring Your Environment

This chapter describes how to configure your environment to enable multi-language operations in WebCenter Sites.

This chapter contains the following sections:

- [WebCenter Sites-Specific Settings](#)
- [Internet Explorer Settings](#)

WebCenter Sites-Specific Settings

Note

- The settings that you choose for a given WebCenter Sites instance must be reproduced on all cluster members (if any) and across all environments (development, content management, delivery, and so on).
- If none of the properties and variables described below are set, the `cs.contentType` property defaults to `text/html`. The character set of the output now defaults to default system encoding.

cs.contentType Property

The `cs.contentType` property, in `futuretense.ini`, is a system-wide (global) property that defines the outgoing character encoding. By default, the property is set to `text/html; charset=UTF-8`. If you need a specific encoding, change the value. For example, if you want the outgoing encoding to be Shift_JIS, set this property to `text/html; charset=Shift_JIS`. Sites Explorer depends on this setting to display data correctly.

cs.contentType Variable (Set in SiteCatalog resargs1)

The `cs.contentType` variable enables you to control the outgoing encoding on a page-by-page basis. This variable overrides the value defined in `cs.contentType` property. The variable should be set in the same way as the `cs.contentType` property, as shown in “[cs.contentType Property](#).”

Note that pages under WebServices are set to `cs.contentType=application/xml; charset=UTF-8`.

charset hidden Variable in Forms

If you are using an HTML `form` tag to input international data, make sure to set the `_charset_` input type variable at the very beginning, after the `form` declaration. For example:

```
<form action='ContentServer' method='get'>
<input type='hidden' name='_charset_'/>
<input type='hidden' name='pagename'
  value='<%=ics.GetVar("pagename")%>' />
<input type='text' name='name' value='<%=ics.GetVar("name")%>' />
<input type='submit' />
</form>
```

Without a value, the `_charset_` hidden variable works only on the Internet Explorer browser.

Preferred Encoding

When WebCenter Sites needs to consume HTTP requests with certain encodings (Cp943C for example) that are closely related to a more widely used encoding (Shift_JIS), it is not sufficient to rely on the `_charset_` hidden variable alone. Internet Explorer, when it encounters a `_charset_` value set to Cp943C, changes it to Shift_JIS. This forces WebCenter Sites to read all data in Shift_JIS. To overcome this, a special names property syntax is used:

```
cs.contentType.<charset>=<preferred_encoding_for_this_charset>
```

For example, in relation to the scenario described above, this property would be specified as follows to indicate to WebCenter Sites to use Cp943C:

```
cs.contentType.Shift_JIS=Cp943C
```

Note that this property structure is necessary only in special circumstances such as the one described above, where the behavior of Internet Explorer conflicts with and changes the value of `_charset_` value.

Encoding Specified in XML or JSP Elements

The encoding in the `<?xml` line of an XML element specifies the encoding of the `.xml` file on disk. The same is true of JSP. The encoding specified in the page directive specifies two things. The first is the encoding of the `.jsp` file on disk. The second is the outgoing encoding of the evaluated JSP element. This gets converted to the encoding of the enclosing JSP, or in the XML case, the outgoing encoding of the page (content-type). So `cs.contentType` can be used to indicate that the outgoing page will have a specific encoding, such as Shift-JIS, but a JSP can output UTF-8, and the UTF-8 will get converted to Shift-JIS into the output stream of the page response. The following example shows how to specify the encoding:

- XML: `<?xml version="1.0" encoding="UTF-8"?>`
- JSP: `<%@ page contentType="text/html; charset=UTF-8" %>`

Using SetVar Tag

You can also control the outgoing page encoding by using the `SetVar` tag in JSP and XMLs. The `SetVar` tag must be set before anything is streamed out.

In JSPs, you can write:

```
<cs:ftcs>
<ics:setvar name="cs.contentType" value="text/html; charset=UTF-8"
/>
...
</cs:ftcs>
```

In XML, you have the following options:

```
<ftcs>
<setvar name="cs.contentType" value="text/html; charset=utf-8"/>
...
</ftcs>
```

The second option is to use the `ics.streamheader` XML tag, but again this must be done before anything is streamed, and only in XML.

```
<ftcs>
<ics.streamheader name="Content-Type" value="text/html;
  charset=utf-8"/>
...
</ftcs>
```

Using HTTP META tag

If the encoding is specified by any of the methods above, then the META tag has no effect. Otherwise, the browser tries to display the data in the encoding specified by the META tag.

Internet Explorer Settings

Internet Explorer 8 by default has all the languages installed. If you are unable to see text in a particular language, you most probably need to enable it in your browser.

To view content in different languages

1. Go to **Tools > Internet Options > General** tab.
2. Click on **Languages** on the bottom right of the page.
3. Click **Add** to add more languages to the list of languages already displayed in the box.
4. Click **OK**.
5. Close and reopen Internet Explorer. You should now see the content in your specified language if the web page so provides.

Chapter 2

Additional Specifications for Internationalization

The following section lists several features in WebCenter Sites with specific internationalization requirements. The features are:

- [Files Stored on the File System](#)
- [Attribute Editor](#)
- [XML Post](#)
- [Catalog Mover](#)
- [Sites Explorer](#)
- [Sites Desktop and Sites DocLink](#)
- [WebCenter Sites Interfaces](#)

Files Stored on the File System

Many indirect files are stored on the file system because of the `url` column references. The files are identified in this section.

XML and JSP Files

See “[Encoding Specified in XML or JSP Elements](#),” on page 9.

HTML Files

The HTML files are read using the `file.encoding` Java parameter value. The data in the file also depends on the way it was stored initially.

SystemSQL Queries

SystemSQL uses a `url` column to point to a file on the file system that holds a SQL query. When this file is loaded, it is assumed that the encoding of the file is the Java default encoding (`System.getProperty("file.encoding")`). There are several possible ways to create the SystemSQL queries (use Sites Explorer, a text editor, or WebCenter Sites). It is probably best to always use ASCII7 when creating queries, since any data is typically merged using variable replacement at run time.

Page Cache Files Referenced from the SystemPageCache table

For page cache files, we manage the page cache file so that the encoding of the file is UTF-8. Since we write and read this file only through WebCenter Sites, it can be managed this way.

Attribute Editor

You have two ways to specify the text for an attribute editor:

- Type in the text in the text area provided. The form post will determine the encoding.
- Use the **Browse** button to select a text file. The text file encoding should match the encoding specified in `xcelerate.charset.encoding`. (The `xcelerate.charset` property is located in the `futuretense_xcel.ini` file.)

Article Bodies, Flex Assets, User-Defined Assets

The article bodies are stored on the file system using the `file.encoding` Java property value.

XML Post

When non ASCII files are posted via XML Post, the java file encoding must match the encoding of the file. For example, if you are posting a Japanese file (stored as UTF-8) to a UTF-8 system, then one of the following should be set before the XML Post command is run:

- The system locale must be set to UTF-8.
- The option of `-Dfile.encoding=UTF-8` must be specified in the XML Post command.

Similarly, if the file is stored as Shift_JIS, then the corresponding system locale should be set or the `java file.encoding` option must be specified.

WebCenter Sites supports the encoding in the `<?xml` line, as the first line in the posted XML file. This overrides everything else as far as the encoding in which the `.xml` file is read.

Catalog Mover

Open the `CatalogMover.bat` (or `.sh` on UNIX) file and modify the `java` command to include the `file.encoding` parameter with a value that reflects the encoding needed to display the characters stored in the catalogs. This step can be avoided if the default encoding of the file system matches that of the data stored in the catalogs.

Sites Explorer

Sites Explorer requires that the `cs.contentType` property in `futuretense.ini` be set to the correct value. If you are viewing simple ASCII characters, nothing needs to be done. However, for viewing complex characters, such as Japanese, you need to set `cs.contentType` to one of the following:

- `text/html; charset=SJIS`
- `text/html; charset=UTF-8`

Also, users may need to load font support for Japanese and various other character sets in order to have them display correctly. To do this in Windows 2003 for example, go to **Settings > Control Panel > Regional Options**. In the first tab, **General**, select the languages you want to support from the list titled “Language settings for the system.” Click **Apply** then **OK**. At this point you will be required to put in the Windows installation CD.

Sites Desktop and Sites DocLink

The Sites Desktop and Sites DocLink clients support the character sets supported by Windows. To enable a specific character set in Sites Desktop or Sites DocLink, first enable it in Windows. For instructions, see the Microsoft Windows documentation.

WebCenter Sites Interfaces

The user's machine must be able to support the characters that are to be displayed in the WebCenter Sites interfaces. For languages other than English, the user needs to make sure of the following:

- The appropriate fonts to display the characters are installed.

- On a Windows machine, the locale and language settings must support the characters that will be displayed. For example, if Japanese characters are to be displayed in the interfaces, Windows must first be configured to display Japanese characters. (For instructions on configuring Windows to support the target language, see the Windows documentation.)
- For a UNIX machine, the locale (`LANG` and `LC_ALL` environment variables) must be appropriately set.
- The browser's encoding must be correctly set.

Single-Language Restrictions

Although you can configure a content management system to be multi-lingual, certain parts of the user interface can be displayed in one language only.

For example, the names of tables and columns in the WebCenter Sites database as well as individual items such as categories and source codes can have only one name. This means that although much of the text on an individual WebCenter Sites form can be displayed in multiple languages, items such as field names and asset type names can be displayed in one language only.

Following is a list of items in WebCenter Sites that can have one name only, which means that they can be displayed in one language only:

- Asset type names
- Field names
- Asset names
- Categories
- Source codes
- Tree tab names
- Site names
- Names of workflow building blocks (actions, e-mail objects, conditions, states, steps, processes)
- Role names
- Start menu items—both Search and New

On a system that supports two or more languages, you must determine which language is going to be used by the majority of content providers and then use that language to name your sites, tabs, asset types, and so on.

Functional Restrictions

WebCenter Sites has the following functional restrictions for international use:

- The Property Editor supports ASCII only.
- Decimal numbers must be entered in US format (“.” decimal separator).