



BEA WebLogic Portal[®]

Content Management Guide

Version 8.1 with Service Pack 4
WebLogic Portal 8.1 Content Management Guide
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About This Document

This document explains how to use content management with WebLogic Portal. It covers the following topics:

- [Understanding Content Management with WebLogic Portal](#) provides an introduction to content management concepts for WebLogic Portal.

Product Documentation on the dev2dev Web Site

BEA product documentation, along with other information about BEA software, is available from the BEA dev2dev Web site:

<http://dev2dev.bea.com>

To view the documentation for a particular product, select that product from the list on the dev2dev page; the home page for the specified product is displayed. From the menu on the left side of the screen, select Documentation for the appropriate release. The home page displays the complete documentation set for the product and release that you select.

Related Information

Remember that WebLogic Portal uses many components from the WebLogic Platform. See the following documentation for more information about using content management with WebLogic Portal:

- [WebLogic Portal 8.1 Repository Guide](#)
- [WebLogic Portal 8.1 Bulkloader Guide](#)

- [Whitepaper: Integrating Content into the BEA Virtual Content Repository](#)

Contact Us!

Your feedback on the BEA WebLogic Portal documentation is important to us. Send us e-mail at **docsupport@bea.com** if you have questions or comments. Your comments are reviewed directly by the BEA professionals who create and update the WebLogic Portal documentation.

In your e-mail message, please indicate that you are using the documentation for BEA WebLogic Portal 8.1.

If you have any questions about this version of BEA WebLogic Portal, or if you have problems installing and running BEA WebLogic Portal, contact BEA Customer Support at <http://support.bea.com>. You can also contact Customer Support by using the contact information provided on the quick reference sheet titled “BEA Customer Support,” which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number
- Your company name and company address
- Your machine type and authorization codes
- The name and version of the product you are using
- A description of the problem and the content of pertinent error messages

Documentation Conventions

The following documentation conventions are used throughout this document.

| Convention | Item |
|--|---|
| Ctrl+Tab | Indicates that you must press two or more keys simultaneously. |
| <i>italics</i> | Indicates emphasis or book titles. |
| monospace text | <p>Indicates <i>user input</i>, as shown in the following examples:</p> <ul style="list-style-type: none"> • Filenames: <code>config.xml</code> • Pathnames: <code>BEA_HOME/config/examples</code> • Commands: <code>java -Dbea.home=BEA_HOME</code> • Code: <code>public TextMsg createTextMsg(</code> <hr/> <p>Indicates <i>computer output</i>, such as error messages, as shown in the following example:</p> <pre>Exception occurred during event dispatching:java.lang.ArrayIndexOutOfBoundsException: No such child: 0</pre> |
| monospace boldface text | <p>Identifies significant words in code.</p> <p><i>Example:</i></p> <pre>void commit ()</pre> |
| <i>monospace italic text</i> | <p>Identifies variables in code.</p> <p><i>Example:</i></p> <pre>String <i>expr</i></pre> |
| { } | Indicates a set of choices in a syntax line. The braces themselves should never be typed. |
| [] | <p>Indicates optional items in a syntax line. The brackets themselves should never be typed.</p> <p><i>Example:</i></p> <pre>java utils.MulticastTest -n <i>name</i> [-p <i>portnumber</i>]</pre> |
| | <p>Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.</p> <p><i>Example:</i></p> <pre>java weblogic.deploy [list deploy update]</pre> |

| Convention | Item |
|------------|--|
| . . . | <p>Indicates one of the following in a command line:</p> <ul style="list-style-type: none">• That an argument can be repeated several times in a command line• That the statement omits additional optional arguments• That you can enter additional parameters, values, or other information <p>The ellipsis itself should never be typed.</p> <p><i>Example:</i></p> <pre>buildobjclient [-v] [-o name] [-f "file1.cpp file2.cpp file3.cpp . . ."]</pre> |
| . | <p>Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.</p> |

Understanding Content Management with WebLogic Portal

The content you want to show users, whether it is a single line of text, an HTML file, a graphic, or an animation file can be stored in a content repository. This overview provides information on the following subjects:

- [Storing Content](#)
- [Organizing Content](#)
- [Managing Content](#)
- [Using Delegated Administration to Control Access](#)
- [Enabling WebLogic Portal Library Services](#)
- [Creating and Modifying Content](#)
- [Using Content in Personalized Applications](#)

Storing Content

WebLogic Portal uses the Virtual Content Repository to access content repositories. The Virtual Content Repository can contain multiple content repositories, whether third-party or BEA repositories. Because the Virtual Content Repository maintains connections with all associated content repositories (according to parameters you set), it can provide services such as a single search (a search that returns a result set from all the relevant content across the plugged in repositories), Delegated Administration and content type management.

Many Portal subsystems interact with the Virtual Content Repository. Content Management tags execute queries to deliver dynamic content to end users. Content Selectors and Campaigns deliver dynamic, personalized content to user based upon personalization rules or conditions.

Before using a third-party repository with WebLogic portal, you must add it to WebLogic Portal's Virtual Content Repository.

Organizing Content

Within your content management system, you must decide how to logically organize your content to ensure that it is easily managed. You can set up a hierarchy of nodes (folders) and also create content types that offer more granularity when differentiating between different content files.

Creating a Hierarchy

When you first start using your BEA Repository, you need to create content nodes (folders) to help you organize your content items. Although you can create folders and subfolders, there is no inherent relationship between the two, other than an organizational function.

However, parent/child relationships between content items are possible. Parent/child relationships are created implicitly, according to where you create the content.

Defining Content Types

BEA repositories use Content Types to define content items. A content type is a named set of properties that defines a content item or content folder (node). WebLogic Portal provides several out-of-the-box content types that can be used and/or modified. You can also create your own custom content types.

The following content types are included with WebLogic Portal:

- ad
- ad_shockwave
- article
- book
- image
- message

Managing Content

Before starting to use the Virtual Content Repository, you may want to set up the users, roles, and privileges you want to use in order to dictate who can add, edit, or delete content within the repository. If you are using a BEA Repository for your content management needs, you need to choose whether or not you want to enable library services.

Using Delegated Administration to Control Access

You can control how users and groups interact with the repository by associating Delegated Administration roles that are used to determine whether to grant or deny access to resources, and to determine which capabilities on those resources are available to the administrator.

Before you can assign Content Management resources to a Delegated Administration role, you must make sure the role exists. If no role exists, you must create it, then you can add users and content resources to it. For detailed information about setting up administrators, see *How Do I Set Up a New Administrator?*

Note: If you are using a BEA repository with library services-enabled, the capabilities you give to a role determine how a user role participates in the content lifecycle. For example, if a role is not granted Publish capabilities they cannot transition content to the Published or Retired status.

Enabling WebLogic Portal Library Services

When you store your content in BEA Repository, you have the option of enabling library services. Library services provide additional content management tools, including the ability to version content and to use a Content Workspace that automatically tracks content that is in progress.

Note: Library Services is not supported on multiple applications in a single domain.

Table 1 Library Services

| Library Service | What it provides: |
|------------------------|--|
| Content Workspace | The Content Workspace provides a simplified user-based view of content that is currently in progress. It contains two folders: My Checked Out Items and My Assigned Items. My Checked Out Items contains all content items that the current user has checked out for edit. My Assigned Items contains all items that are assigned to that user and require further action, such as approval. |
| Content Versioning | Content Versioning allows you to keep track of multiple versions of a content item. Versioning provides a more powerful alternative to keeping backup files. With content versioning, you can easily view previous versions of a content item if needed, as well as keep a detailed record of when and why changes were made. |
| Content Lifecycle | The Content Lifecycle allows you to move content through a workflow process that can be further managed through WebLogic Portal's Delegated Administration. WebLogic Portal's content management lifecycle includes the following statuses: Draft, Ready for Review, Rejected, Published and Retired. |

Creating and Modifying Content

After you connect a BEA-compatible content management system to the Virtual Content Repository, you can continue to add and modify content directly in your BEA-compatible content management system. Changes appear automatically in the Virtual Content Repository. You can create and manage content in the Administration Portal, in the My Content Portlet, or with the Bulkloader.

WebLogic Administration Portal

BEA's Virtual Content Repository, available in the WebLogic Administration Portal under "Content Management," lets you add and modify content and assign types (metadata) to content. Through these tools, you can manage content in all repositories plugged into the Virtual Content Repository that support management functions.

Bulkloader

The BulkLoader is a command-line application that is capable of loading content and metadata into a configured virtual content repository. The BulkLoader scans the user defined file system hierarchy and loads all of the folders and files, along with their defined metadata into the specified repository. The BulkLoader supports all content types, such as HTML, .jpg, or .gif.

Content Management Portlet

The Content Management Portlet allows you to access content management capabilities through your portal.

Using Content in Personalized Applications

WebLogic Workshop extensions support development of personalized applications, while the WebLogic Administration Portal enables portal administrators to adapt site interaction to fit the needs of the audience. The core of the Personalization system is the underlying rules engine that matches users with appropriate content. Content Selectors, Placeholders and Campaigns are the aspects of content management visible to administrators. Also, User Segments contain the criteria that define the target visitor, such as gender or browser type.

If you are using a library services-enabled BEA repository, there are additional considerations when using content selectors.

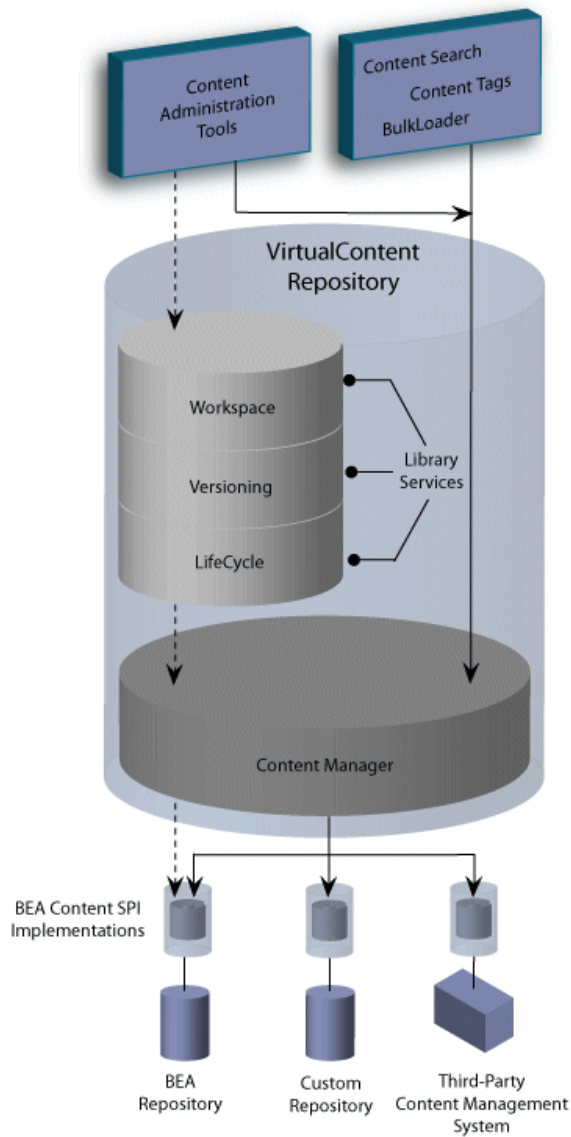
The Content Management component provides the run-time API by which content is queried and retrieved. The functionality of this component is accessible via tags. The content retrieval functionality is provided using either the provided reference implementation or third-party content retrieval products.

Working with a Library Services Repository

When you enable library services for a repository, you change the way content is stored and enable new features within the Portal Administration Tool. These features affect how you work with your BEA repository and provide a common lifecycle.

Note: Library Services is not supported on multiple applications in a single domain.

Figure 0-2 Library Services Architecture



The following table details the library services features. WebLogic Portal Library Services are only available to BEA repositories. You cannot use library services with a third-party repository.

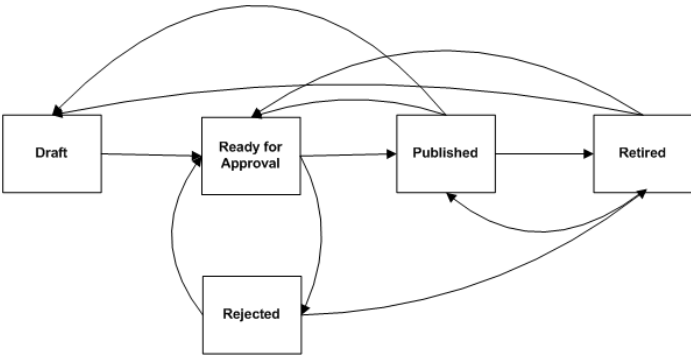
| Library Service Feature | What it provides: |
|------------------------------|---|
| Content Workspace | <p>The Content Workspace provides a simplified user-based view of content that is currently in progress. It contains two folders: My Checked Out Items and My Assigned Items. My Checked Out Items contains all content items that the current user has checked out for edit. My Assigned Items contains all items that are assigned to that user and require further action, such as approval.</p> <p>Use the Content Workspace to:</p> <ul style="list-style-type: none"> • View items that are currently assigned to your role. All users within a particular role view/modify items assigned to that role. • View items that you currently have checked out. This folder displays only those items checked out by the current user. |
| Content Repository | <p>The Content Repository tab allows you to view all content within the repository, and allows you to show and hide content according to lifecycle status.</p> <p>Use the Content Repository tab to:</p> <ul style="list-style-type: none"> • Create new content. • View entire repository. • Filter on published items. • Hide Retired content items from view. |
| Content Management Lifecycle | <p>The Content Management Lifecycle allows you to move content through a set of statuses that can be further managed through WebLogic Portal's Delegated Administration. WebLogic Portal's content management lifecycle includes the following statuses: Draft, Ready for Review, Rejected, Published and Retired..</p> |
| Content Versioning | <p>Content Versioning allows you to keep track of multiple versions of a content item. Versioning provides a more powerful alternative to keeping backup files. With content versioning, you can easily view previous versions of a content item if needed, as well as keep a detailed record of when and why changes were made.</p> |

Understanding the Content Lifecycle

The Content Management Lifecycle allows you to move content through a WebLogic Portal's defined content lifecycle. WebLogic Portal's content management lifecycle includes the following statuses: Draft, Ready for Review, Rejected, Published and Retired. Through Delegated Administration, you can assign content management rights (publish, edit, and delete) to different users and groups. The different DA rights have access to different content status transitions within the lifecycle.

The content lifecycle is shown in the following diagram:

Table 3 Content Lifecycle



To fully take advantage of the content lifecycle, you should set up Delegated Administration roles that assign different capabilities to the users and groups on your content management team.

For example, you may to create a separate role to manage the publishing of content, as well as an editor role which can modify content yet not publish. Optionally, if you have a small content management team, you may choose to have one role for all capabilities.

The following table describes the content lifecycle statuses and the Delegated Administration capabilities needed for each.

| Status | Usage Notes | Delegated Administration Capabilities Needed |
|--------------------|--|---|
| Draft | <p>The initial status for all content items.</p> <p>This status is also used to indicate a content item that is a work in progress and not ready for review.</p> <p>Items in Draft status display in the My Assigned Items folder for all users whose role includes Edit capabilities.</p> | Edit |
| Ready for Approval | <p>Marks a content item for ready for review and/or publication to the site.</p> <p>Content items that have the status Ready for Approval can only be modified by content administrators who have publish rights.</p> <p>Items in Draft status display in the My Assigned Items folder for all users whose role includes Publish capabilities.</p> | Edit Publish |
| Published | Content items that have this status can be accessed by portal content selectors or placeholders according to their content type property values. | Publish |
| Rejected | The Rejected status is used to re-route a content item to the last known user or group to which it was assigned. | Edit |
| Retired | <p>The final status of a content item.</p> <p>This status indicates that a content item is no longer in use.</p> <p>When a content item has a retired status, it cannot be retrieved by a content selector or a placeholder.</p> | Edit |
| Deleted | <p>When you delete a content item, you delete all versions of that content item. Only administrators with Delete capabilities can delete content.</p> <p>Content cannot be retrieved by placeholders or content selectors after it is has been deleted.</p> | Delete |

Using Content Selectors and Placeholders with Library Services

When library services are enabled for a BEA Repository, it affects which content properties can be used when retrieving content. For each content item, there are effectively two property sets available to retrieve that item: system properties and type-defined properties. Within a library services-enabled repository, these properties are stored differently.

System properties, such as creation date, etc., do not participate in the content lifecycle, and therefore are always retrievable from a content selector.

Type-defined properties participate in the content lifecycle and thus can be "retired". The BEA repository considers all type-defined properties to be retrievable unless an item has a Retired status.