Content Portlet Suite (CPS) for Oracle Portal Server
10g Release 3 (10.1.3.3.1)

July 2007
The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software--Restricted Rights (June 1987). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licen's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs.

Oracle, JD Edwards, PeopleSoft, and Siebel are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites. You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for: (a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.
Table of Contents

Chapter 1: Introduction
Overview ......................................................... 1-1
About This Guide ............................................. 1-1
Product Overview ............................................ 1-2
Conventions Used in This Guide ........................... 1-4

Chapter 2: General Information
Overview ......................................................... 2-1
Portlet Descriptions .......................................... 2-2
Request-Handling ............................................ 2-3
Internationalization ......................................... 2-5

Chapter 3: Installing the Content Portlet Suite
Overview ......................................................... 3-1
Installation Requirements .................................. 3-2
Preliminary Setup ............................................. 3-2
Installation Steps .............................................. 3-3
  Deploying CPS for Oracle ................................ 3-3
  Configuring the Portal .................................... 3-3
  Registering a Provider .................................... 3-4
  Creating an Instant Portal ................................. 3-4
  Adding the CPS Portlets .................................. 3-4
Recommended Access Settings ............................ 3-5

Chapter 4: CPS Portlet Functionality
Overview ......................................................... 4-1
Using the CPS Portlets ...................................... 4-1
Table of Contents

Guest Library Portlet ................................................. 4-2
Guest Search Portlet .................................................. 4-3
Saved Search Portlet ................................................. 4-4
Contribution Portlet .................................................. 4-5
Workflow Queue Portlet .............................................. 4-7
Library Portlet .......................................................... 4-8
Search Portlet ........................................................... 4-9
Metadata Admin Portlet ............................................... 4-10
Image Server Search Portlet ......................................... 4-11
Federated Search Portlet .............................................. 4-13
Customizing the Portlets ............................................. 4-15
Defining the Federated Search Portlet Mapping ................. 4-17

Appendix A: Third Party Licenses

Overview ................................................................. A-1
Apache Software License ............................................. A-1
W3C® Software Notice and License ................................. A-2
Zlib License .............................................................. A-4
General BSD License .................................................. A-5
General MIT License .................................................. A-5
Unicode License ........................................................ A-6
Miscellaneous Attributions .......................................... A-7

Index
Chapter 1

INTRODUCTION

OVERVIEW

This chapter provides introductory information about this guide, a product overview, and a description of the conventions used in this guide. The information contained in this guide is subject to change as the product technology evolves and as hardware and operating systems are created and modified.

This section contains the following topics:

- **About This Guide** (page 1-1)
- **Product Overview** (page 1-2)
- **Conventions Used in This Guide** (page 1-4)

ABOUT THIS GUIDE

This guide documents the steps required to deploy and configure the Content Portlet Suite (CPS). The guide assumes the reader is familiar with the administration console of your portal server.

This guide is intended for application developers and integrators who wish to access the Content Server and/or Image Server via the Content Portlet Suite deployed on your portal server instance.
PRODUCT OVERVIEW

As organizations search for ways to improve their efficiency, access to corporate knowledge has become crucial. A key area is implementing a corporate portal to provide a secure, personalized way to aggregate data for consumption and processing.

The Content Portlet Suite provides access to the Content Server, enabling users to update, search, and view portal content in a way that is efficient and easy to use. CPS provides the ability to manage content creation and the distribution process through a set of easy-to-use portlets. These portlets can be enabled for different users based on their roles and permissions within the organization, and they can be easily customized for specific uses. Users can browse or search content based on their permissions, contribute new content (with the appropriate level of access), and view the progress of their content through workflow.

Content Portlet Suite: keeping portals up to date

Because of the ease of use of the Content Portlet Suite, a key issue is addressed with corporate portals—how to keep their content up to date. By driving content updates and additions through the portal interface, the process of updating the portal becomes part of using the portal, as opposed to a separate task performed outside of the portal.

Ease of use: contribution

With CPS, content contribution is simple. Users can contribute content by checking in a document. CPS takes care of normalizing the data with its ability to convert files through templates to your specified markup for viewing in the portal.

Ease of use: workflow

After checking in or updating content, users can track the content status through the portal. Users are notified right in the portal of their workflow status—to review, edit, and approve content—with links right to the content from the workflow item. They can click on the item, view it, and approve or edit it, and then send it on its way for further workflow or publishing. When content is approved, it is published and made available for viewing. Approved content can be published at a predetermined time as well, and expired at a predetermined time (e.g., in the case of a promotional offer or classified ad).
Ease of use: browsing

Content can be presented to users based on their role in the organization. The support team may log in to a portlet that shows new updates and fixes, with another portlet that shows current cases. These are automatically updated and appear to the users as titles with a link to the content; they may also have a short summary of the content.

Ease of use: searching

Content can be easily searched based on metadata categories or full text content, or both, through a provided CPS Portlet. For instance, users may search for a “support note” content type containing the word “policy,” which removes the need to search through all other occurrences of the word “policy” in other content types. CPS provides separate portlets for basic or authenticated search. CPS even provides a portlet that allows users to save searches that they use regularly.

Easy to administer

The Content Server and Content Portlet Suite are easy to administer. They can be set up and left to run indefinitely. Once you have decided your metadata model and workflow paths, CPS can be installed and users can begin contributing and viewing content.

Metadata Admin portlet

The Content Portlet Suite comes with a Metadata Admin portlet that allows you to modify properties of the Content Server metadata fields, which affects the behavior of the Contribution Portlet. With the Metadata Admin portlet, an administrator can define which metadata fields users, as well as the default metadata value for each field. Administrators can even hide metadata fields and specify what values should be set for those items.

High performance

Content Portlet Suite is built on top of the Content Integration Suite. This powerful integration layer offers speedy asynchronous access to content.

Easy to customize

The portlets in the Content Portlet Suite are written to be easily customized. If you want to create a new portlet to show content of a certain metadata value, copy the existing Browse portlet, tweak one simple parameter, and publish the portlet. Written in JSP, they are standards-based and easily customizable, even by business users. Customizing the portlets will help you make the most of your portal investment.
By integrating Content Server and a portal server with the Content Portlet Suite, you provide an easier way to keep your portal up to date, increase efficiency, lower costs, and increase your return on your portal investment.

**CONVENTIONS USED IN THIS GUIDE**

This guide uses the forward-slash ( / ) to separate directories. Depending on your operating system, you may need to change the separation markers when defining directories. Other conventions are:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bold</strong></td>
<td>Indicates an item that you select in the interface, such as a button or menu, in order to perform a specific task, for example, “Click <strong>OK</strong>.”</td>
</tr>
<tr>
<td>&gt;</td>
<td>Indicates a menu choice. For example, “<strong>Choose File &gt; Open</strong>” means “Click the <strong>File</strong> menu, and then click <strong>Open</strong>.”</td>
</tr>
<tr>
<td><strong>Code</strong></td>
<td>Indicates the actual code used.</td>
</tr>
</tbody>
</table>

Notes, technical tips, important notices, and cautions use these conventions:

<table>
<thead>
<tr>
<th>Symbols</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="note" /></td>
<td>This is a note. It is used to bring special attention to information.</td>
</tr>
<tr>
<td><img src="image" alt="tip" /></td>
<td>This is a technical tip. It is used to identify information that can be used to make your tasks easier.</td>
</tr>
<tr>
<td><img src="image" alt="notice" /></td>
<td>This is an important notice. It is used to identify a required step or required information.</td>
</tr>
<tr>
<td><img src="image" alt="caution" /></td>
<td>This is a caution. It is used to identify information that might cause loss of data or serious system problems.</td>
</tr>
</tbody>
</table>
Chapter 2

GENERAL INFORMATION

OVERVIEW

This chapter provides general information on the Content Portlet Suite (CPS) including an overview of the portlets, the high-level sequence of events for portlet request-handling, and notes on internationalization (cross-locale implementations).

This section covers the following topics:

- Portlet Descriptions (page 2-2)
- Request-Handling (page 2-3)
- Internationalization (page 2-5)

See also:

PORTLET DESCRIPTIONS

The CPS Portlets use the Universal Content and Process Management API (UCPM API) within the CIS distribution to communicate back to the Content Server and/or Image Server. The Portlet API facade abstracts the common operations within portlet containers so our framework will work on a variety of platforms (Oracle, WebSphere, WebLogic, Plumtree, Oracle, and Sun ONE) using the same handler code. Portlet Actions are mapped to a custom MVC framework that uses the UCPM API to perform the desired task.

The Content Portlet Suite implements the following set of portlets that interact with Content Server and/or Image Server:

**Content Server**

- **Oracle Guest Library portlet**: Content can be presented to users based on their role in the organization.
- **Oracle Guest Search portlet**: Allows the user to perform a keyword or full-text search on the Content Server and permits read-only access to the returned content.
- **Oracle Saved Search portlet**: Allows the user to save frequently used queries.
- **Oracle Contribution portlet**: Allows the user to contribute content to the Content Server.
- **Oracle Workflow Queue portlet**: The workflow portlet notifies users of their workflow tasks.
- **Oracle Library portlet**: Presents content to users based on their role in the organization, and provides read/write access to the returned content.
- **Oracle Search portlet**: Allows the user to perform a selected metadata and keyword search on the Content Server and provides read/write access to the returned content.
- **Oracle Metadata Admin portlet**: Allows the administrator to modify the properties of custom metadata.

**Image Server**

- **Oracle Image Server Search Portlet**: This search portlet queries the Image Server. Allows the user to perform a search on the Image Server and permits read-only access to the returned content.
**Content Server & Image Server**

- **Oracle Federated Search Portlet:** This search portlet queries both the Content Server and the Image Server repositories. This portlet provides an integration between an Image Server and a Content Server or multiple Content Servers, etc.

Each of these portlets requires that the Content Integration Suite (CIS) is installed and available. The Content Integration Suite provides a Java API into the Content Server and/or Image Server and is capable of running inside a J2EE application server environment (e.g., Oracle, WebSphere or WebLogic) or a servlet container environment (e.g., Tomcat).

The portlets are consumers of standard Content Server services (IdcCommand services), such as CHECKIN_UNIVERSAL and GET_SEARCH_RESULTS. However, these services are not called directly by the dispatch handlers from the portlet controller. Rather, the UCPM API abstracts the portlets from the details of talking to the server. The UCPM API allows for rigid parameter validation, dynamic command selection, and standardized integration with a J2EE environment.

Nota: See the CIS Developer Guide for more information (cis-developer-guide.pdf in the /docs directory of the CIS distribution file).

**REQUEST-HANDLING**

This is the high-level sequence of events for portlet request-handling (based on the Search portlet):

1. A user enters a query and clicks the Search button.
2. An ‘action’ URL is built and routed to the portlet container, which, in turn, routes the command to the appropriate portlet (in this case, the search portlet).
3. A processAction’ is called on the Search portlet.
4. The Search portlet retrieves the search parameters (they are part of the URL that was built), and calls the ‘search’ method on the Content Integration Suite API.
5. The Content Integration Suite queries the Content Server via the Resource Pool (a pool of socket connections), retrieves the data, and passes the data object to the Search portlet.
6. The portlet container calls render on each of the portlets on the page (including the Search portlet), and each portlet uses the received data, or refreshes the data, and displays HTML fragments to the user.
Note A: The action request must finish before the render requests begin.

Note B: The render requests are not triggered in any specific order. They may be executed sequentially or simultaneously.

Portlet API Facade

Not every portal vendor supports the standard completely or in exactly the same way, so each action handler has access to a facade object that provides an interface that protects the user of the facade from code incompatibilities between various portal vendors.

Note: See the CPS Portlet Developer Guide for a presentation of the portlet dispatch framework and information on using the Portlet SDK (cps-developer-guide.pdf).
INTERNATIONALIZATION

The portlets will only support the locale of the Java Virtual Machine that is running the portal server. There is currently no support for managing cross-locale implementations on the same portal server.
General Information
Chapter 3

INSTALLING THE CONTENT PORTLET SUITE

OVERVIEW

This chapter provides information required for the installation of the Content Portlet Suite for Oracle Application Server Portal. Content Portlet Suite (CPS) is supported in Oracle Application Server Portal and WebCenter as remote services using Web Services for Remote Portlets (WSRP). Both CIS Server and the CPS portlets need to be deployed to WebCenter Preconfigured OC4J which serves as the provider. Oracle Application Server Portal serves as the consumer and needs to register the provider to access the portlets. The portlets are delivered to users through the portal server which communicates with the portlet provider using WSRP.

Important: Content Portlet Suite (CPS) requires that Content Integration Suite (CIS) be installed and available. When deploying CIS Server and CIS Administration Application to your provider you must Configure Class Loading by de-selecting the Import option for the apache.commons.logging library. This is done on the Deployment Settings step. You must de-select the Import option for the apache.commons.logging library for both the CIS Server and CIS Administration Application deployment. See the CIS Installation Guide for more information.

This section covers the following topics:

- Installation Requirements (page 3-2)
- Preliminary Setup (page 3-2)
- Installation Steps (page 3-3)
INSTALLATION REQUIREMENTS

Oracle Application and Portal Servers
A supported version of Oracle Application Server as provider and Oracle Application Server Portal as consumer is required:
- WebCenter Preconfigured OC4J
  (OC4J 10.1.3.1.1 Preconfigured for Oracle WebCenter 10.1.3.2.0)
- Consumer: Oracle Application Server Portal 10.1.4 with patch p4640471. Oracle Portal 10.1.4 is an upgrade from 10.1.2.

Content Server and Image Server
A supported version of Content Server or Image Server (or both) is required:
- Content Server 7.5.2 or later
- Image Server 7.5 or later

JVM
A supported JVM is required:
- J2SE 1.4 or later

PRELIMINARY SETUP

The following must be completed before installing Content Portlet Suite:
- Configure the Content Server for Verity search.
- Unbundle the CPS distribution file and save it to a location on your local server.
- Start Oracle OC4J Provider (Enterprise Manager / Application Server Control).
- Start Oracle Application Server Portal.

Important: User IDs on the Content Server must correspond with user IDs on the portal server.
**INSTALLATION STEPS**

You must have met the installation requirements and completed the preliminary setup described above before installing and configuring Content Portlet Suite (CPS). Also, CPS requires that Content Integration Suite (CIS) be installed and available. See Overview (page 3-1) and the CIS Installation Guide for more information.

This section covers the following topics:

- Deploying CPS for Oracle (page 3-3)
- Configuring the Portal (page 3-3)

---

**Deploying CPS for Oracle**

1. Launch the Oracle Application Server Control.
2. Select the **Applications** tab.
3. Click **Deploy**.
4. Browse to the /portlets directory of the unbundled CPS distribution file and select the Portlets EAR file.
5. Enable the **Automatically create a new deployment plan** option.
6. Click **Next**.
7. Provide an application name (e.g., CPS Portlets) and context root (e.g., /cps).
8. Click **Next**.
9. For the **Configure Class Loading** task, click the Go To Task icon.
10. De-select the **Import** option for the *apache.commons.logging* library.
11. Click **OK**.
12. Click **Deploy**.

---

**Configuring the Portal**

Launch the Oracle Application Server Portal — Portal Builder. To configure your portal you must register a Provider, create an Instant Portal, and adding the CPS portlets to the Portal.
Registering a Provider
1. Select the Administer tab.
2. Select the Portlets tab.
3. In the section Remote Providers, click Register a Provider.
4. Enter a Name (e.g., CPS_Provider).
5. From the Implementation Style drop-down list select WSRP.
6. Click Next.
7. Enter WSDL URL.
   Example: http://testserver7:8888/cps/portlets/wsrp1?WSDL

Tech Tip: Access the WSRP Producer Page (e.g., http://testserver7:8888/cps/info), select the WSDL URL link (e.g., WSRP v1 WSDL) to generate a WSDL definition XML file, and copy the URL from the browser window. This is the WSDL URL to enter in this field.
8. Click Next. If this provider requires registration properties that must be provided during registration, enter the appropriate values.
9. Click Finish.
10. Click OK.

Creating an Instant Portal
These steps are only required for the initial deployment:
1. Select the Build tab.
2. In the section Oracle Instant Portal, enter a name (e.g., CPS_Portal).
3. Click Create.

Adding the CPS Portlets
1. On the created Oracle Instant Portal (e.g., CPS_Portal), switch to Edit mode.
2. Select a region to add the CPS portlets and click the Add Portlet icon ( ).
3. In the section Portlet Repository, click Portlet Staging Area.
4. Select the provider you registered (e.g., CPS_Provider).
5. Select the CPS portlets you want to add to this region of you Portal.
6. Click **OK**.
7. Select **View Page** to display the portlets.

**RECOMMENDED ACCESS SETTINGS**

By default, portlet security is set to allow access by only the system administrator. You must also configure security to allow other users to access the portlets and assign permissions based on the access requirements you establish for users. However, some security settings are recommend for authenticated users and for anonymous users:

**Authenticated Users**

These security settings are recommend for authenticated users. The Metadata Admin portlet is an administration portlet and should be restricted to admin-level users:

- Guest Library: **edit**
- Guest Search: **edit**
- Saved Search: **edit**
- Contribution: **edit**
- Workflow Queue: **view**
- Library: **edit**
- Search: **edit**
- Metadata Admin: **view**
- Image Server Search Portlet: **edit**
- Federated Search Portlet: **edit**

**Anonymous Users**

These security settings are recommend for anonymous users:

- Guest Library Portlet: **view**
- Guest Search Portlet: **view**
- Image Server Search Portlet: **view**
- Federated Search Portlet: **view**
Installing the Content Portlet Suite
OVERVIEW

This chapter provides information on the CPS portlets, including a short tutorial on using the CPS portlets, instructions on how to customize the Library and Guest Library portlets, and instructions on defining the Federated Search portlet mapping.

This section covers the following topics:

- Using the CPS Portlets (page 4-1)
- Customizing the Portlets (page 4-15)
- Defining the Federated Search Portlet Mapping (page 4-17)

Important: It is assumed that all of the installation steps have been performed and that all of the CPS Portlets are accessible to the home page.

USING THE CPS PORTLETS

This section provides a brief tutorial of each of the CPS Portlets:

- Guest Library Portlet (page 4-2)
- Guest Search Portlet (page 4-3)
- Saved Search Portlet (page 4-4)
- Contribution Portlet (page 4-5)
- Workflow Queue Portlet (page 4-7)
Guest Library Portlet

The Guest Library portlet enables portal users to view content that matches criteria pre-defined by the portlet administrator. The results of the pre-defined search are delivered to the user in a list format. By selecting a hyperlink item in the list, the user can view the content. The user can also view the content item information page. The content displayed to the user is defined by the portal administrator.

Using the Guest Library Portlet

1. Click Personalize.

   Personalization allows users to modify the displayed results from a search.
   - **Results Per Page**: Enter the number of results to display per page. Default is 20.
   - **Sort By**: Select the field to sort by. Options are Date or Title.
   - **Sort Order**: Select the sort order. Options are Ascending or Descending.

2. Click Save when edits are complete.

3. Select a search query (e.g., What’s New).

   The results are displayed in a list format.
4. Click Back.

**Guest Search Portlet**

The Guest Search portlet enables portal users to search the Content Server for business content. Users can search by subject and/or keyword. The results of the search are delivered to the user in a list format. By selecting a hyperlink item in the list, the user can view the content. This portlet also enables users to save queries for display in the Saved Search portlet.

![Oracle Guest Search](image)

**Using the Guest Search Portlet**

1. Click **Personalize**.

   Personalization allows users to modify the displayed results from a search.
   - **Results Per Page**: Enter the number of results to display per page. Default is 20.
   - **Sort By**: Select the field to sort by. Options are **Date** or **Title**.
   - **Sort Order**: Select the sort order. Options are **Ascending** or **Descending**.

2. Click **Save** when edits are complete.

3. Enter a subject or keyword and click **Search**.

   **Note**: There must be content checked into your Content Server that contains the specified subject or keyword for items to be retrieved.

4. On the search results screen, click **Save**.

   The save search query screen is displayed. This functionality saves a search to the saved searches list of the Saved Search portlet.
   
   The keyword used to perform the search is displayed in the **Keywords** field. To save a search, enter a title for the query, the content item title and click **Add New Query**.

5. Click **Back** to return to the search results page.
Saved Search Portlet

The Saved Search portlet enables portal users to view previously saved searches. Saved searches are delivered to the user in a list format. By selecting a hyperlink item in the list, the user can view the content of the saved search. Saved searches can be saved to the list by performing a search using the Search portlet and saving that search or by directly defining search parameters on the Saved Search portlet.

Using the Saved Search Portlet

Searches can be saved to the Saved Searches list by performing a search using the Search portlet and saving that search, or by directly defining search parameters on the Saved Search portlet.

1. Click Personalize.

   The search criteria page is displayed. On this page you can edit your standard search parameters, view or delete items from your saved search list, and create a new query.

2. In the section Standard Search Parameters, users can modify the displayed results from a search.
   - **Results Per Page**: Enter the number of results to display per page. Default is 20.
   - **Sort By**: Select the field to sort by. Options are Date or Title.
   - **Sort Order**: Select the sort order. Options are Ascending or Descending.

3. In the section Create New Query, enter the information for the new query:
   - **Query Title** (e.g., Sales Images).
   - **Query Description** (e.g., Sales Department Images).
   - **Query Text** (e.g., dDocTitle <substring> 'salesimage').

   **Note**: Rather than entering a query string, you can perform a standard search using the Search portlet, click Save, and then click Add New Query.

4. Click Add New Query.
5. Click **Close**.
   The saved query is displayed.

<table>
<thead>
<tr>
<th>Oracle Saved Search</th>
<th>Personalize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saved searches</td>
<td></td>
</tr>
<tr>
<td>- <strong>Sales Images</strong></td>
<td></td>
</tr>
<tr>
<td>- Sales Department Images</td>
<td></td>
</tr>
</tbody>
</table>

6. Click a saved search title.
   The saved search results are displayed in a list format.

7. Click **Back**.

**Contribution Portlet**

The Contribution portlet enables portal users to submit native business content for management and publishing purposes. The content submission can trigger automatic indexing, workflow routing, subscription services, and security. When the required add-on modules are used with the Content Server, content categorization and publishing in multiple formats (HTML, XML, WML, cHTML, and PDF) can be performed.
CPS Portlet Functionality

Using the Contribution Portlet

1. On the Contribution portlet, enter required metadata and any desired optional metadata. The Contribution portlet enables users to submit business content created in native applications for publishing and revision control.

   ![Content Contribution Form]

   **Content Check In Form**
   The Content Check In Form page is used by contributors to check files into the Content Server. Please note that some fields are optional.

   - **Content ID**
   - **Type**  
     - ADACCT - Acme Accounting D
   - **Title**
   - **Author**  
     - PORTAL
   - **Security Group**  
     - Public
   - **Primary File**
   - **Alternate File**
   - **Revision**
   - **Comments**
   - **Check In**  
   - **Clear**

   **Note:** Metadata fields are defined by the Content Server administrator.

2. In the Primary File field, enter the complete path to the business content or click **Browse** to select the content for check in.
3. Click **Check In** to submit the content.
Workflow Queue Portlet

The Workflow Queue portlet enables portal users to quickly access content that is waiting for their review. This portlet provides users direct access to their workflow in-boxes for the review and approval of business content. A workflow must be defined for this portlet to provide functionality. The portlet lists the content item title, workflow step information, the last action performed, and the actions allowed, and provides a link to content item information.

<table>
<thead>
<tr>
<th>Oracle Workflow Queue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
</tr>
</tbody>
</table>

A workflow must be defined for this portlet to provide functionality. See the Content Server online Help for instructions on defining a workflow.

This example assumes a criteria workflow with these properties:

- Name: WorkflowTest
- Security Group: Public
- Has Criteria Definition: ENABLED
- Field: Type
- Operator: Matches
- Value: ADSALES

And it assumes a workflow step with these properties:

- Name: StepOne
- Type: Reviewer
- User: User1

Using the Workflow Queue Portlet

1. Locate the Workflow Queue portlet.
2. After creating a workflow, log in as a workflow reviewer (e.g. user1) and check in a content item matching the specified criteria.
3. Review the workflow item.
The Workflow Queue portlet provides this functionality:

- **Title**: Lists the content item. Click to download file.
- **Workflow Info**: Lists the active step. Click to view workflow step information.
- **Last Action**: Lists the last action the user performed on the workflow.
- **Action**: Users defined as Reviewers can Approve or Reject content. Users defined as Reviewer/Contributor can Approve, Reject, or Contribute content.
- **Info**: Provides content item information.

<table>
<thead>
<tr>
<th>Title</th>
<th>Workflow Info</th>
<th>Last Action</th>
<th>Actions</th>
<th>Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>WorkflowTest</td>
<td>StepOne</td>
<td></td>
<td>Approve / Reject</td>
<td></td>
</tr>
</tbody>
</table>

4. Click **Workflow Info** to view the workflow step information.

5. Click **Back**.

6. Click **Approve** or **Reject**.

**Library Portlet**

The Library portlet enables portal users to perform a selected metadata and keyword search on the Content Server, and provides read/write access to the returned content.

**Using the Library Portlet**

1. Click **Personalize**.

   Personalization allows users to modify the displayed results from a search.

   - **Results Per Page**: Enter the number of results to display per page. Default is 20.
   - **Sort By**: Select the field to sort by. Options are *Date* or *Title*. 
Sort Order: Select the sort order. Options are Ascending or Descending.

2. Click Save when edits are complete.

3. Select a search query (e.g., What’s New).
   The search results are displayed.

4. Click the Info icon.

5. On the Content Info page, these options can be selected from the drop-down list:
   - Content Information
   - Check Out
   - Check in Similar
   - Send Link by Email

6. Click Back.

Search Portlet

The Search portlet enables portal users to perform a selected metadata and keyword search on the Content Server and provides read/write access to the returned content.

<table>
<thead>
<tr>
<th><strong>Oracle Search</strong></th>
<th>Personalize</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Search Criteria</strong></td>
<td></td>
</tr>
</tbody>
</table>

This page enables you to perform a metadata, full-text, or combination search.

- Title
- Content ID
- Author
- Text

[Submit] [Clear]
Using the Search Portlet

1. Enter a search query (for example, Sample or Test).
   The search query is returned.

   Note: Metadata fields are defined by the Content Server administrator.

2. Click the Info icon.

3. On the Content Info page, these options can be selected from the drop-down list:
   - Content Information
   - Check Out
   - Check in Similar
   - Send Link by Email

4. Click Back.

Metadata Admin Portlet

The Metadata Admin portlet enables the administrator to modify the properties of custom metadata.

Using the Metadata Admin Portlet

1. Click Information Fields.
   The Information Fields list is displayed.

   Note: Information Fields are defined by the Content Server administrator.
2. Select an Information Field (e.g., Comments).
   
   The Edit Field page is displayed.

3. Make changes as desired and click **Apply** or **Cancel**.

### Image Server Search Portlet

The Image Server Search portlet queries the Image Server database and returns matching results. This allows users to perform a search on the Image Server and permits read-only access to the returned content.

**Note:** An Image Server instance must be installed and configured (for example, the IP address of the application server must be enabled on the Image Server). See the CIS Installation Guide for more information.

This portlet enables portal users to search the Image Server for business content. Users can search by pre-defined criteria. The results of the search are delivered to the user in a list format.
Using the Image Server Search Portlet

1. Click **Personalize**.

   Personalization allows users to modify the displayed results from a search:
   - **Results per page**: Enter the number of results to display per page.
   - **Thumbnail Size**: Enter the HEIGHT and WIDTH in pixels.
   - **Cache Results**: Enable the check-box if you want images to be cached.

2. Click **Submit** to change your settings or **Reset** to return to the default settings.

3. On the search form, select a choice from the drop-down list.

4. Click **Submit**.

   A list of options associated with your selected choice from the drop-down list is displayed.

5. Enter a query and click **Submit**.

   The search results page is displayed.

   **Note**: There must be content checked into your Image Server that matches the query for items to be retrieved.

6. Click **Back**.

7. Click the **Info** icon.

   The information page is displayed. This page displays the content data and thumbnail of a specific document.

8. Click **Back**.
Federated Search Portlet

The Federated Search portlet queries both the Image Server and the Content Server databases (or multiple Content Servers, etc.). This portlet provides an integration between an Image Server and a Content Server or multiple Content Servers.

**Note:** Each Image Server or Content Server instance must be running and properly configured (for example, the IP address of the application server must be enabled on the Image Server). See the CIS Installation Guide for more information.

This portlet enables portal users to search both the Content Server and the Image Server for business content. Users can search by subject and/or keyword. The results of the search are delivered to the user in a list format.

### Oracle Federated Search

#### Common Search Fields

- **Date**
- **Author**
- **Title**
- **ID**

![Submit] ![Clear]

### Using the Federated Search Portlet

1. Click **Personalize**.

1. The configured adapters and search options are provided.

   **Adapters / Type:** This allows the user to select the Content Servers and/or Image Servers to query:
   - **Active Adapter:** Each Content Server instance is listed as an “active” adapter.
   - **Fixed Adapter:** Each Image Server instance is listed as an “fixed” adapter.

   **Search Options:** This allows the user to edit parameters that modify the displayed results from a search:
   - **Sort By:** Select the sort criteria from the drop-down list. For example, Title, Author, Date, etc.
Results per adapter: The number of results returned from each enabled adapter.

Results per page: The number of results returned on each page. If more results are returned than the number defined, those results will be displayed on additional pages.

Note: The “Sort By” options are configured by the administrator in the Common Metadata Map. See the CIS Developer Guide for more information (cis-developer-guide.pdf in the /docs directory of the unbundled CIS distribution file).

2. Enable the desired adapters for this query.

Important: Each selected adapter must reference a Content Server or Image Server instance that is both running and properly configured. If any instance is not running or is not properly configured the search query will fail for all instances.

3. Modify the Search Options as desired.

4. Click Submit.

The search page is displayed. This page shows a list of common metadata fields defined between adapters.

5. Enter a search query. For example, a search query by author.

6. Click Submit.

Note: There must be content checked into your selected Content Servers and/or Image Servers that matches the specified query for items to be retrieved.

The search results page is displayed. This page shows the result list, the columns are defined by the common metadata fields.
7. Click the **Info** icon.

   The content information page is displayed. This page displays metadata and provides access to content streams of a specific piece of content.

8. Click **Ok**.

---

**CUSTOMIZING THE PORTLETS**

This section provides information on customizing the portlets including customizing the Library and Guest Library portlets that display queries pre-defined by the administrator.

**Note:** These procedures are performed by an administrator and are not user configurable.

Administrators can define the business content displayed to users in portlets by editing the `portlet.xml` file. A query string defines the parameters to search on, and any metadata field can be used to define the search query.

1. Unbundle the CPS distribution file or locate the deployed portlet EAR file on your Portal Server instance.

2. Unbundle the WAR file (e.g., `cps-oracle-war-<version>.war`).

3. In the WEB-INF directory, open the `portlet.xml` file in a text-only editor.

4. Locate the `<portlet>` entries for the Library and Guest Library portlets.

   ```xml
   <portlet>
     <description>Oracle Library Portlet</description>
     <portlet-name>stellentLibrary</portlet-name>
   </portlet>

   <portlet>
     <description>Oracle Guest Library Portlet</description>
     <portlet-name>stellentGuestLibrary</portlet-name>
   </portlet>
   ``

5. For either the Library or the Guest Library portlet, locate the `<preference>` entries that provide the query definitions. To customize the portlet, you must edit the `<value>` entries.

   ```xml
   <preference>
     <name>query1.title</name>
     <value>What's New</value>
   </preference>
   <preference>
     <name>query1.description</name>
   </preference>
   ```
6. Edit the **title** and **description** entries: **title** is the search title displayed to the user; **description** is the short search description displayed to the user.

For example: “Important Notices” and “Important messages from the president.”

   <name>query3.title</name>
   <value>Important Notices</value>

   <name>query3.description</name>
   <value>Important messages from the company president.</value>

7. Edit the **query** entry defined by a query string using standard XML notation. To code a query string, use a pre-defined metadata parameter, a query string modifier, and an appropriate metadata value.

For example, define a query string that returns content items checked in by author **president** (dDocAuthor matches **president**):

   <name>query3.query</name>
   <value>dDocAuthor &lt;matches&gt; &apos;president&apos;</value>

Any predefined metadata parameter can be used to create commands, for example:

- **dInDate**: The content item release date (i.e., the date the content item was released to the web).
- **dDocAuthor**: The content item author (e.g., *user1* or *sysadmin*).
- **dDocType**: The content item type (e.g., *ADACCT* or *FILES*).

**Note**: You must use the metadata parameter, not the field title (e.g., *dDocAuthor* not *Author*).

These query string modifiers can be used:

- contains
- matches
- starts
- ends
- substring
8. When your edits are complete, save the portlets.xml file.

9. Rebundle the WAR file.

10. Deploy the updated version of the edited portlet.

**Note:** See the CPS Portlets Developer Guide for a presentation of the portlet dispatch framework and information on using the Portlet SDK (cps-developer-guide.pdf).

## DEFINING THE FEDERATED SEARCH PORTLET MAPPING

The Federated Search portlet queries both the Image Server and the Content Server databases (or multiple Content Servers, etc.). This portlet provides an integration between an Image Server and a Content Server or multiple Content Servers.

**Note:** Each Content Server and/or Image Server instance must be configured (for example, the IP address of the application server must be enabled on the Image Server). See the CIS Installation Guide for more information.

This portlet enables your portal users to search both the Content Server and the Image Server for business content. Users can search by subject and/or keyword. The results of the search are delivered to the user in a list format.

The common metadata map defines the Federated Search portlet mapping. This XML file is located in the /WEB-INF/config directory and is called `ucpcommon-metamap.xml`.

1. Unbundle the CPS distribution file or locate the deployed portlet EAR file on your Portal Server instance.

2. Unbundle the WAR file (e.g., `cps-oracle-war-<version>.war`).

3. In the /WEB-INF/config directory, open the `ucpcommon-metamap.xml` file in a text-only editor.

This example illustrates a common metadata map:

```xml
<metamap>
  <adapter name="scsadapter">
    <common>
```

**Note:** See the CPS Portlets Developer Guide for a presentation of the portlet dispatch framework and information on using the Portlet SDK (cps-developer-guide.pdf).
This metadata map defines both a Content Server (e.g., scsadapter or myadapter) and an Image Server (e.g., sisadapter). The <metamap> node can contain any number of <adapter> nodes.

The <adapter> node takes a name attribute, this name should correspond to the adapter configured in the adapterconfig.xml for the repository you want to define. Each <adapter> node can tag in two sub nodes, <common> and <contribution>. The <common> node indicates that you are going to create some metadata field mappings. To create one, you need only to create a sub node <map> and provide a common name attribute name and a native attribute.

The common name should be defined on each configured adapter which you expect to make common calls on. The native name is the name of the metadata field as known by the specific repository. For example, the common name title is mapped to dDocTitle on a Content Server instance. To change default entries (e.g., scsadapter and sisadapter) simply edit the XML file. For example, this defines contentserver7 as the new adapter name.

<adapter name="contentserver7">

An Image Server repository allows different metadata models to be present in the same repository and separates them by Application type. The objectClass attribute to the <map>
node corresponds to this Application type. For example, the same common name title is mapped to the native DocType of the application SImageHRAppIndex in the Image Server repository defined by the adapter name sisadapter.

To add or edit the adapter entry for the Image Server simply edit the <adapter> node and the objectClass attribute of the <map> node.

For example, this defines imageserver7 and the SImageDevIndex objectClass:

```xml
<adapter name="imageserver7">
  <common>
    <map name="Title" native="DocType" objectClass="SImageDevIndex" />
    <map name="Author" native="EmployeeName" objectClass="SImageDevIndex" />
    <map name="Date" native="DocDate" objectClass="SImageDevIndex" />
    <map name="ID" native="SSN" objectClass="SImageDevIndex" />
  </common>
</adapter>
```

**Note:** See “Common metadata maps” in the CIS Developer Guide for more information (cis-developer-guide.pdf in the /docs directory of the CIS distribution file).
CPS Portlet Functionality
THIRD PARTY LICENSES

OVERVIEW

This appendix includes a description of the Third Party Licenses for all the third party products included with this product.

- Apache Software License (page A-1)
- W3C® Software Notice and License (page A-2)
- Zlib License (page A-4)
- General BSD License (page A-5)
- General MIT License (page A-5)
- Unicode License (page A-6)
- Miscellaneous Attributions (page A-7)

APACHE SOFTWARE LICENSE

* Copyright 1999-2004 The Apache Software Foundation.
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
  * http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
  * distributed under the License is distributed on an "AS IS" BASIS,
  * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  * the License for the specific language governing permissions and
  * limitations under the License.

**W3C® SOFTWARE NOTICE AND LICENSE**

* Copyright © 1994-2000 World Wide Web Consortium,
  * (Massachusetts Institute of Technology, Institut National de
  * Recherche en Informatique et en Automatique, Keio University).
  * All Rights Reserved. http://www.w3.org/Consortium/Legal/

* This W3C work (including software, documents, or other related items) is
  * being provided by the copyright holders under the following license. By
  * obtaining, using and/or copying this work, you (the licen) agree that
  * you have read, understood, and will comply with the following terms and
  * conditions:

* Permission to use, copy, modify, and distribute this software and its
  * documentation, with or without modification, for any purpose and without
  * fee or royalty is hereby granted, provided that you include the following
  * on ALL copies of the software and documentation or portions thereof,
  * including modifications, that you make:

* 1. The full text of this NOTICE in a location viewable to users of the
   * redistributed or derivative work.

* 2. Any pre-existing intellectual property disclaimers, notices, or terms
and conditions. If none exist, a short notice of the following form
(hypertext is preferred, text is permitted) should be used within the
body of any redistributed or derivative code: "Copyright ©
Institute of Technology, Institut National de Recherche en
Informatique et en Automatique, Keio University). All Rights
Reserved. http://www.w3.org/Consortium/Legal/

3. Notice of any changes or modifications to the W3C files, including the
date changes were made. (We recommend you provide URIs to the location
from which the code is derived.)

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS
MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT
NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR
PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE
ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR
CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR
DOCUMENTATION.

The name and trademarks of copyright holders may NOT be used in advertising
or publicity pertaining to the software without specific, written prior
permission. Title to copyright in this software and any associated
documentation will at all times remain with copyright holders.
**ZLIB LICENSE**

* zlib.h -- interface of the 'zlib' general purpose compression library

version 1.2.3, July 18th, 2005

Copyright (C) 1995-2005 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied
warranty. In no event will the authors be held liable for any damages
arising from the use of this software.

Permission is granted to anyone to use this software for any purpose,
including commercial applications, and to alter it and redistribute it
freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not
claim that you wrote the original software. If you use this software
in a product, an acknowledgment in the product documentation would be
appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be
misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly jloup@gzip.org

Mark Adler madler@alumni.caltech.edu
GENERAL BSD LICENSE

Copyright (c) 1998, Regents of the University of California
All rights reserved.
Redistribution and use in source and binary forms, with or without modification,
are permitted provided that the following conditions are met:

"Redistributions of source code must retain the above copyright notice, this
list of conditions and the following disclaimer.

"Redistributions in binary form must reproduce the above copyright notice, this
list of conditions and the following disclaimer in the documentation and/or other
materials provided with the distribution.

"Neither the name of the <ORGANIZATION> nor the names of its contributors may be
used to endorse or promote products derived from this software without specific
prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY
EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED
WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.
IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT,
INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR
PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,
WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE
POSSIBILITY OF SUCH DAMAGE.

GENERAL MIT LICENSE

Copyright (c) 1998, Regents of the Massachusetts Institute of Technology
Permission is hereby granted, free of charge, to any person obtaining a copy of this
software and associated documentation files (the "Software"), to deal in the
Software without restriction, including without limitation the rights to use, copy,
modify, merge, publish, distribute, sublicense, and/or sell copies of the Software,
and to permit persons to whom the Software is furnished to do so, subject to the
following conditions:
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

UNICODE LICENSE

UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE


NOTICE TO USER: Carefully read the following legal agreement. BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"), YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

COPYRIGHT AND PERMISSION NOTICE

Copyright © 1991-2006 Unicode, Inc. All rights reserved. Distributed under the Terms of Use in http://www.unicode.org/copyright.html.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.
THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

Unicode and the Unicode logo are trademarks of Unicode, Inc., and may be registered in some jurisdictions. All other trademarks and registered trademarks mentioned herein are the property of their respective owners.

**MISCELLANEOUS ATTRIBUTIONS**

Adobe, Acrobat, and the Acrobat Logo are registered trademarks of Adobe Systems Incorporated.

FAST Instream is a trademark of Fast Search and Transfer ASA.

HP-UX is a registered trademark of Hewlett-Packard Company.

IBM, Informix, and DB2 are registered trademarks of IBM Corporation.

Jaws PDF Library is a registered trademark of Global Graphics Software Ltd.

Kofax is a registered trademark, and Ascent and Ascent Capture are trademarks of Kofax Image Products.

Linux is a registered trademark of Linus Torvalds.

Mac is a registered trademark, and Safari is a trademark of Apple Computer, Inc.

Microsoft, Windows, and Internet Explorer are registered trademarks of Microsoft Corporation.

MrSID is property of LizardTech, Inc. It is protected by U.S. Patent No. 5,710,835. Foreign Patents Pending.

Oracle is a registered trademark of Oracle Corporation.

Portions Copyright © 1994-1997 LEAD Technologies, Inc. All rights reserved.

Portions Copyright © 1990-1998 Handmade Software, Inc. All rights reserved.

Portions Copyright © 1988, 1997 Aladdin Enterprises. All rights reserved.
Third Party Licenses

Portions Copyright © 1997 Soft Horizons. All rights reserved.

Portions Copyright © 1995-1999 LizardTech, Inc. All rights reserved.

Red Hat is a registered trademark of Red Hat, Inc.

Sun is a registered trademark, and Sun ONE, Solaris, iPlanet and Java are trademarks of Sun Microsystems, Inc.

Sybase is a registered trademark of Sybase, Inc.

UNIX is a registered trademark of The Open Group.

Verity is a registered trademark of Autonomy Corporation plc
A
access requirements, 3-5
adapter node, 4-18
anonymous users, 3-5
application server environment, 2-3
Authenticated Search portlet, 4-9
authenticated users, 3-5

C
common node, 4-18
Conceptual Overview, 2-2
contains (query modifier), 4-16
Contribution portlet, 4-5
Customize portlets, 4-15

D
data object, 2-3
dDocAuthor, 4-16
dDocType, 4-16
dlnDate, 4-16

E
ends (query modifier), 4-16

F
Federated Search portlet, 4-13

I
IdcCommand services, 2-3
Image Server Search portlet, 4-11
Installation Prerequisites, 3-2
integration architecture, 2-2

J
J2EE application server environment, 2-3

L
Library portlet, 4-2

M
matches (query modifier), 4-16
metadata, 4-16
Metadata Admin portlet, 4-10

O
Overview
Audience, 1-1

P
Portlet API facade, 2-2
predefined metadata parameter, 4-16
processAction, 2-3

Q
query modifiers, 4-16
query string modifiers
contains, 4-16
ends, 4-16
matches, 4-16
starts, 4-16
substring, 4-16

R
Resource Pool, 2-3
Index

S
Saved Search portlet, 4-4
Search portlet, 4-3
security settings, 3-5
socket connection, 2-3
starts (query modifier), 4-16
substring (query modifier), 4-16

U
user guide
conventions, 1-4

W
Workflow Queue portlet, 4-7