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

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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).
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Ease of use: browsing
Content can be presented to users based on their role in the organization. The support team may log in to see 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 see, 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
Introduction

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>Code</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="light-bulb.png" alt="Note" /></td>
<td>This is a note. It is used to bring special attention to information.</td>
</tr>
<tr>
<td><img src="gear.png" 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="bulb-exclamation.png" 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="exclamation-cross.png" 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 (WebSphere, WebLogic, Plumtree, and SunONE) 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**

- **Library portlet**: Content can be presented to users based on their role in the organization.
- **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.
- **Saved Search portlet**: Allows the user to save frequently used queries.
- **Contribution portlet**: Allows the user to contribute content to the Content Server.
- **Workflow Queue portlet**: The workflow portlet notifies users of their workflow tasks.
- **Authenticated Library portlet**: Presents content to users based on their role in the organization, and provides read/write access to the returned content.
- **Authenticated 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.
- **Metadata Admin portlet**: Allows the user to modify the properties of custom metadata.

**Image Server**

- **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**

- **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., 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.

**Note**: See the CIS Developer Guide for more information (cis-developer-guide.pdf in the /docs directory of the unbundled 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 (LWDataBinder) 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.
INSTALLING THE CONTENT PORTLET SUITE

OVERVIEW

This chapter provides information required for the installation of the Content Portlet Suite for WebSphere Portal Server.

This section covers the following topics:

- Installation Prerequisites (page 3-1)
- Installation Steps (page 3-2)
- Defining the Federated Search Portlet Mapping (page 3-4)
- Recommended Access Settings (page 3-6)

INSTALLATION PREREQUISITES

Ensure that you have the required servers and components and follow the preliminary setup steps before beginning installation of the Content Portlet Suite.

Required Servers and Components

These servers and components are required for the installation of CPS for WebSphere:

- WebSphere Portal Server 5.0.2 or 6.0.
Content Server 7.5.2 or later
or Image Server 7.5 or later (or both).

Content Portlet Suite (CPS) distribution file.

**Preliminary Setup**

The following must be completed before installing the Content Portlet Suite for WebSphere:

- Configure the Content Server for Verity search.
- Install WebSphere Portal Server or choose an existing installation for CPS Portlet deployment. This guide refers to the WebSphere Portal Server installation directory as `WPS_HOME`.
  
  For example:
  `/Program Files/WebSphere/PortalServer/

**Important:** UserIDs on the Content Server must correspond with UserIDs on the portal server.

- Install or enable Embedded Messaging / JMS Server for servlet deployment.

Follow these steps if you do not have Embedded Messaging / JMS Server installed on your WebSphere Application Server instance:

1. Stop WebSphere Application Server.
2. Install the WebSphere MQ embedded messaging component.

**Tech Tip:** The WebSphere MQ Install.exe executable is located in the `/was/win/` directory (for Windows) of the WebSphere Portal Server CD: DISC 1-1.

3. Select **Add options to my existing Application Server Installation**.
4. Select **Custom**.
5. Select the **Embedded Messaging** option and enable both **Client** and **Server**.

**INSTALLATION STEPS**

You must have completed the preliminary setup described above before installing and configuring the Content Portlet Suite.
Important: The Content Server must be configured for Verity search.

This section covers the following topics:

- Installing CPS for WebSphere (page 3-3)
- Displaying the CPS Portlets (page 3-4)

## Installing CPS for WebSphere

1. Unpackage the CPS distribution file and save to a location on your local server.
2. Start WebSphere Application Server and WebSphere Portal Server.
3. Log in as a valid WebSphere Portal Server administrator.
   For example:
   - User ID: wpsadmin
   - Password: wpsadmin
4. Click Administration.
   The Portal Administration page is displayed.
5. For WebSphere 5, click Portlets.
   For WebSphere 6, click Portlet Management and then Web Modules.
6. Click Install and wait for the new page to load.
7. Click Browse and navigate to the websphere directory of the unpackaged CPS distribution file.
   Example:
   /cps/portlets/websphere/
8. Select the StellentPortlets.war file.
9. Click Open.
10. Click Next.
11. Click Install. It may take several minutes for WebSphere Portal Server to load the WAR file. When complete, a confirmation message is displayed.
Displaying the CPS Portlets

1. On the Portal Administration page, click **Portal User Interface**.
   
   To access the Portal Administration page, navigate from the default portal page by clicking Administration and then Portlets.

2. Click **Manage Pages**.

3. Select **My Portal** and then **Welcome** (or another portal page you wish to modify).

4. Click the **Edit Page Layout** icon.

5. On the Edit Layout page, click **Add Portlets**.

6. Click **Search** and search for the CPS Portlets.

7. Select all of the portlets. Also select the Image Server Search portlet and the Federated Search portlet if you are connecting to an Image Server instance.

8. Click **OK**.

9. Arrange the portlets as desired on the page and then click **Done**.

**DEFINING THE FEDERATED SEARCH PORTLET MAPPING**

The Federated Server 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 /StellentPortlets/WEB-INF/config directory and is called ucpmcommonmetamap.xml.

This example illustrates a common metadata map:

```
<!--
```
Default metadata map for the different adapter types. These values will be used if a metadata map is not specified. The name attribute corresponds to the adapter type (i.e. "scsadapter" is a Content Server Adapter and "sisadapter" is an Image Server adapter).

```xml
<metamap>
  <adapter name="scsadapter">
    <common>
      <map name="Title" native="dDocTitle" />
      <map name="Author" native="dDocAuthor" />
      <map name="Date" native="dInDate" />
      <map name="ID" native="dID" />
    </common>
    <contribution>
      <!-- native fields are used only for contribution -->
      <native name="comments" default="" override="true" />
      <!-- common fields refer back to common map, can also be tagged with default and override attributes -->
      <common name="title" />
      <common name="author" />
    </contribution>
  </adapter>
  <adapter name="sisadapter">
    <common>
      <map name="Title" native="DocType" objectClass="SImageHRAppIndex" />
      <map name="Author" native="EmployeeName" objectClass="SImageHRAppIndex" />
      <map name="Date" native="DocDate" objectClass="SImageHRAppIndex" />
      <map name="ID" native="SSN" objectClass="SImageHRAppIndex" />
    </common>
  </adapter>
</metamap>
```

This metadata map defines both a Content Server ('scsadapter') and an Image Server ('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 adapter config 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 one that you will define on each adapter you configure which you expect to make common calls on. The native name is the name of the metadata field as seen by the specific repository. For example, in the above example, we have mapped the common name “title” to dDocTitle on a Content Server instance.
The default entries are “scsadapter” and “sisadapter”. To change the default entries simply edit the XML file. For example, this defines “contentserver7”:

```xml
<adapter name="contentserver7">
</adapter>
```

There is one more piece of information to make a similar mapping on an Image Server. 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 unbundled CIS distribution file).

---

**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.

- Library: edit
Installing the Content Portlet Suite

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

**Anonymous Users**

These security settings are recommend for anonymous users:

- Library Portlet: view
- 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 tutorial and instructions on how to customize the Library and Authenticated Library portlets.

This section covers the following topics:

- Using the CPS Portlets (page 4-1)
- Customizing the Library and Authenticated Library Portlets (page 4-23)

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:

- Library Portlet (page 4-2)
- Search Portlet (page 4-3)
- Saved Search Portlet (page 4-4)
- Contribution Portlet (page 4-6)
- Workflow Queue Portlet (page 4-8)
- Authenticated Library Portlet (page 4-9)
- Authenticated Search Portlet (page 4-11)
Library Portlet

The Library portlet enables your 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 administrator.

The Library portlet displays the queries pre-defined by the portal administrator.

Using the Library Portlet

1. On the Library portlet, click the Edit icon.

   The user personalization functionality allows user to modify the displayed results from a search:

   - **Results per Page**: Enter the number of results to display per page.
   - **Sort Field**: Select the field to sort on (title, author, status, etc.)
   - **Sort Order**: Options are Ascending or Descending.
2. Modify the settings as desired.
3. Click **Save** when edits are complete.
4. Select a search query (for example, “What’s New”).
5. Click **Back**.

**Search Portlet**

The Search portlet enables your 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.
CPS Portlet Functionality

**Using the Search Portlet**

1. On the Search portlet, click the **Edit** icon.

   The user personalization functionality allows user to modify the displayed results from a search:
   
   - **Results per Page**: Enter the number of results to display per page.
   - **Sort Field**: Select the field to sort on (title, author, status, etc.)
   - **Sort Order**: Options are *Ascending* or *Descending*.

2. Modify the settings as desired.

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

4. Enter a subject or keyword and click **Search** (e.g., “test”).

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

5. 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**.

6. Click **Back** to return to the search results page.

**Saved Search Portlet**

The Saved Search portlet enables your 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. On the Saved Search portlet, click Edit.
   
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.

   **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.

   ![Create New Query Form]

2. 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`)

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

3. Click Add New Query.

   This example includes the Query Titles “Sales Images,” “Accounting Forms,” and “Ravena Hosting.”
4. Click a saved search title.

The saved search results are displayed.

5. Click Back.

**Contribution Portlet**

The Contribution portlet enables your 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.
Using the Contribution Portlet

1. On the Contribution portlet, enter any 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.

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

2. In the File field, enter the complete path or click **Browse** to select the business content for check in.

3. Click **Check In** to submit the business content.
Workflow Queue Portlet

The Workflow Queue portlet enables your 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>Workflow Inbox</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Workflow Info</td>
<td>Last Action</td>
<td>Actions</td>
<td>Info</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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.

4. Click the *Workflow Queue* step name to view the workflow step information.

5. Click **Back**.

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

### Authenticated Library Portlet

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

- Admin's Thoughts
- Notes and tips from the system administrator
- What's New
- Content from the past 30 days
- Accounting Forms
- All accounting policies and related info
Using the Authenticated Library Portlet

1. On the Authenticated Library portlet, click the **Edit** icon.

   The user personalization functionality allows user to modify the displayed results from a search:
   - **Results per Page**: Enter the number of results to display per page.
   - **Sort Field**: Select the field to sort on (title, author, status, etc.)
   - **Sort Order**: Options are *Ascending* or *Descending*.

   ![Authenticated Library Portlet](image)

2. Modify the settings as desired.
3. Click **Save** when edits are complete.
4. Select a search query (e.g., “What’s New”).
   The search results are displayed.
5. In the Info column, click the **Actions** icon.
   These Action options are displayed:
   - **Content Information**
   - **Check Out**
   - **Check in Similar**
   - **Send Link by Email**
   - **HTML Rendition**

6. Click **Back**.
Authenticated Search Portlet

The Authenticated Search portlet enables your 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 Authenticated Library Portlet

1. On the Authenticated Library portlet, enter a search query (for example, “sample”).

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

   The search query is returned.
2. In the Info column, click the **Actions** icon.

   These Action options are displayed:
   - Content Information
   - Check Out
   - Check in Similar
   - Send Link by Email
   - HTML Rendition

3. Click the **Info** icon

   The Content Info page is displayed.
Note: Actions can also be selected from the drop-down list on this page.

4. Click **Back**.

**Metadata Admin Portlet**

The Metadata Admin portlet enables the user to modify the properties of custom metadata.
Using the Metadata Admin Portlet

1. On the Metadata Admin portlet, click Information Fields.

Note: Information Fields are defined by the Content Server administrator.

The Information Fields list is displayed.

2. Select an Information Field (e.g., “Read Only”).
The Edit Field page is displayed.

<table>
<thead>
<tr>
<th>Metadata Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Edit field</strong></td>
</tr>
<tr>
<td><strong>ID</strong></td>
</tr>
<tr>
<td><strong>Name</strong></td>
</tr>
<tr>
<td><strong>Type</strong></td>
</tr>
<tr>
<td><strong>Required</strong></td>
</tr>
<tr>
<td><strong>Display</strong></td>
</tr>
<tr>
<td><strong>Default</strong></td>
</tr>
<tr>
<td><strong>Searchable</strong></td>
</tr>
<tr>
<td><strong>Order</strong></td>
</tr>
</tbody>
</table>

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 the user 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 your 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.
CPS Portlet Functionality

Using the Image Server Search Portlet

1. Click the Image Server Search portlet, click the **Edit** icon.

   This functionality allows the user to edit parameters that 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. Modify the settings as desired.

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

4. On the search form, select a choice from the drop-down list. In this example, the ‘HR Search by All Fields’ query is selected.
Note: The search form shows the list of predefined queries. This predefined criteria is defined in the Image Server. See your Image Server Installation Guide for more information.

5. Click **Submit**.

A list of options associated with your selected choice from the drop-down list is displayed.
6. Enter a query and click **Submit**.

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

The search results page is displayed.

7. Click **Back**.

8. Click the **Info** icon.
The information page is displayed. This shows the content data and thumbnail of a specific document.

9. Click Back.

**Federated Search Portlet**

The Federated Server 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 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.
Using the Federated Search Portlet

1. On the Federated Search portlet, click the **Edit** icon. The Edit page shows the list of configured adapters, authentication status, and some display properties.

   **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 to query and modify the Search Options as desired.

3. Click **Submit**.

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

4. Enter a search query. This example uses the search query of “Farley” as author.

5. 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.

6. Click the **Info** icon.

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

7. Click **Ok**.
CUSTOMIZING THE LIBRARY AND AUTHENTICATED LIBRARY PORTLETS

This section provides information on customizing the Library portlet and the Authenticated Library portlet. These portlets display the 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 the content portlet by editing the portlet.xml file (in the WEB-INF directory). A query string defines the parameters to search on, and any metadata field can be used to define the search query.

1. Locate the StellentPortlets.war file in the WEB-INF directory.
2. Unpackage the StellentPortlets.war file (any utility such as WinZip may be used).
3. Open the portlet.xml file in a text-only editor.
4. Locate the <portlet> entries for the Library and Authenticated Library portlets.

   <portlet>
   <description>CPS Library Portlet</description>
   <portlet-name>stellentLibrary</portlet-name>

   <portlet>
   <description>CPS Authenticated Library Portlet</description>
   <portlet-name>stellentAuthLibrary</portlet-name>

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

   <preference>
   <name>query1.title</name>
   <value>What’s New</value>
   </preference>

   <preference>
   <name>query1.description</name>
   <value>Content from the past 30 days</value>
   </preference>

   <preference>
   <name>query1.query</name>
   <value>dInDate &gt; `&lt;$dateCurrent(-30)$&gt;`</value>
   </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 (the date the content item was released to the web).
   - **dDocAuthor**: the content item author such as ‘user1’ or ‘sysadmin’.
   - **dDocType**: the content item type such as ‘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
   - starts

8. When your edits are complete, save the portlets.xml file.
10. Remove the currently installed portlet (if applicable).
11. Install 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).
CPS Portlet Functionality
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* zlib.h -- interface of the 'zlib' general purpose compression library

version 1.2.3, July 18th, 2005

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