



Oracle Knowledge Information Manager Administration Guide

Configuring and Administering Information Manager Applications

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About This Guide

This guide is intended for technical staff who are responsible for administration and configuration of Oracle Knowledge Information Manager.

This preface includes information on:

- **In This Guide**
- **Examples of Product Screens and Text**
- **Operating System Variations in Examples and Procedures**
- **References to Web Content**

In This Guide

The *Oracle Knowledge Information Manager Administration Guide* is divided into the following sections:

<i>Chapter 1, Introduction to Oracle Knowledge Information Manager</i>	This chapter provides an overview of the Information Manager application and discusses how the components integrate.
<i>Chapter 2, Getting Started with Information Manager</i>	This chapter is a quick start to administering Information Manager content.
<i>Chapter 3, Working with Repositories</i>	This chapter discusses content repositories and describes how to create and maintain repositories.
<i>Chapter 4, Working with Content Channels</i>	This chapter discusses content channels and describes how to create and use channels.
<i>Chapter 5, Working with Content Categories</i>	This chapter discusses content categories and describes how to create and apply categories
<i>Chapter 6, Managing Users</i>	This chapter discusses Information Manager users and describes how to add and maintain users.
<i>Chapter 7, Creating and Managing Workflows</i>	This chapter discusses workflow processes and concepts and describes how to create and apply workflows.
<i>Chapter 8, Working with Feedback and Collaboration</i>	This chapter discusses various feedback and collaboration features provided in Information Manager and describes how to activate and maintain features best suited for customer needs.
<i>Chapter 9, Working with Advanced Administration Features</i>	This chapter discusses the various options available through the Tools menu in the Management Console and describes how to apply the options.
<i>Chapter 10, Importing and Exporting Data</i>	This chapter discusses importing and exporting data in Information Manager and describes various options available for a variety of tasks.
<i>Chapter 11, Managing Applications in Multiple Languages</i>	This chapter discusses how to manage applications in multiple languages and describes the necessary tasks to maintain applications in multiple languages.

Chapter 12, Configuring Content for Display on a Web Client This chapter describes how to configure content for web client display.

Examples of Product Screens and Text

The product screens, screen text, and file contents depicted in the documentation are examples. We attempt to convey the product's appearance and functionality as accurately as possible; however, the actual product contents and displays may differ from the published examples.

Operating System Variations in Examples and Procedures

We generally use Linux screen displays and naming conventions in our examples and procedures. We include other operating system-specific procedures or steps as noted in section headings, or within topics, as appropriate.

We present command syntax, program output, and screen displays:

- in Linux format first
- in other Unix-specific variants only when necessary for proper operation or to clarify functional differences
- in Windows format only when necessary for clarity

References to Web Content

For your convenience, this guide refers to Uniform Resource Locators (URLs) for resources published on the World Wide Web, when appropriate. We attempt to provide accurate information; however, these resources are controlled by their respective owners and are therefore subject to change at any time.

Introduction to Oracle Knowledge Information Manager

Oracle Knowledge Information Manager is a full-featured content management system that provides a workflow-driven content authoring, editing, review, and publishing environment to support the entire knowledge lifecycle. It integrates easily with existing Oracle Knowledge applications to enable organizing and sharing of any type of enterprise information among contact center agents, partners, and customers.

Information Manager provides a central point of control for web content publishing that includes:

- A powerful document management framework to capture the business requirements of your document, including support for any document types, as well as feedback from end users
- Workflow processes that generate tasks and email notices to track the creation, management, and deployment of documents by various functional team members
- Role-based user security to control access to administrative and document management functions, and published web content
- Flexibility in document deployment and re-use, so that a single repository can publish to any number of sites, using many different presentation styles

Information Manager Content Management Components

Information Manager is designed to separate the logical requirements of creating and managing content from the physical requirements of formatting and presenting the information for end users.

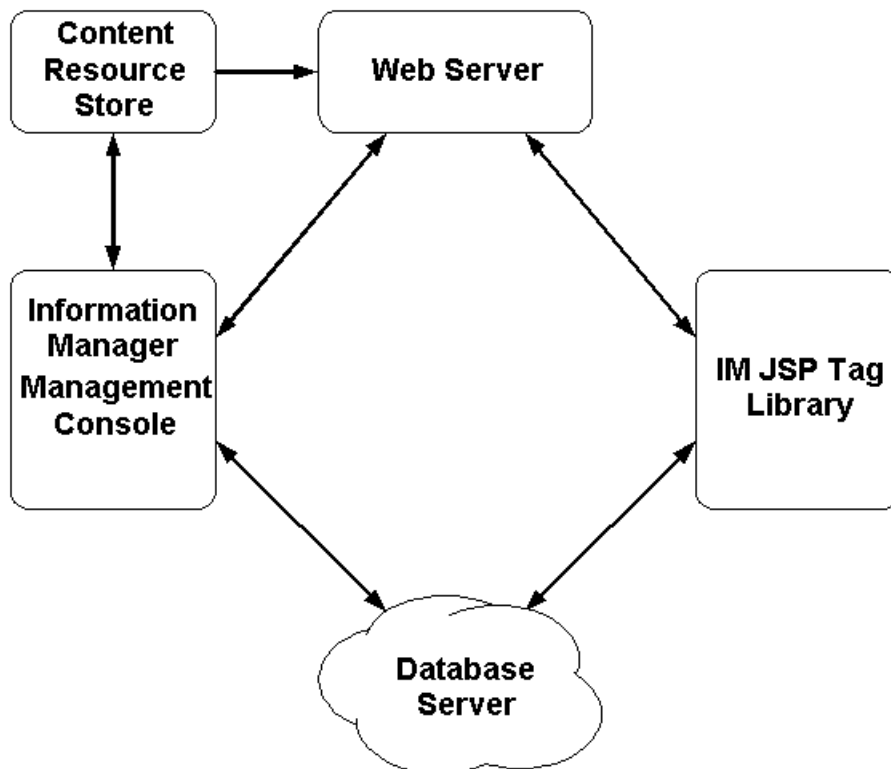
Information Manager's content management framework consists of a set of flexible objects and relations to address a wide variety of business publishing requirements:

Content Repositories	Repositories contain the content records (including translations), user and security information, workflow processes, and other information objects that you create for your application, as described in Chapter 3, Working with Repositories .
Content Channels	Channels describe the various types of content (document types) used within the application, as described in Chapter 4, Working with Content Channels .
Content Categories	Categories enable you to organize application content by any characteristic or business requirement, such as product and model, as described in Chapter 5, Working with Content Categories .
Content Records	Content records are the individual documents that you publish. Each content record is of a particular type, for example customer support case or press release, which is defined by the channel in which it is created.
Users, Security Roles, and User Groups	Users, security roles, and user groups enable you to control access to administrative and content management functions as described in Chapter 6, Managing Users .

Workflow Processes	Workflow processes are sequences of steps, such as create, edit, translate, review, and approve, that you can define to enforce specific content management procedures for your organization as described in Chapter 7, Creating and Managing Workflows .
Tasks and Notifications	Information Manager's task management facility creates tasks based on workflow processes and other application events, and notifies authorized users of available tasks based on security role definitions. Authorized users can also assign tasks to other users.

Information Manager Application Components

An Information Manager application uses the following components, which are installed and configured in the standard installation process. You can configure Information Manager components on a single server or distribute them throughout a network. The following diagram illustrates the relationships between the logical application components:



Component	Description
Information Manager Tag Library Web Applications	Information Manager uses a J2EE servlet container supporting Java 1.4.x JSP tag libraries to distribute Information Manager application content.
Web Server	You can integrate the web server for an Information Manager application into the servlet container or configure it as a standalone server. The web server is the only component that must be exposed to end users. The web server supports most servlet containers including Tomcat, WebLogic, WebSphere, Jboss, and JRun.

Information Manager Content Resource Store	<p>The Information Manager Content Resource Store stores resources (files) that are attached to content records in the application.</p> <p>The content resource store is a directory on a file system that is accessible to the Management Console and the application web server. It can be located on the same server as the Management Console, or on a network file system.</p> <p>You can configure Information Manager to maintain separate staging and production resource stores. Resources can be served by separate web servers or configured to use resource caching services (such as Akamai).</p> <p>The content resource store stores XML versions of content records used for search indexing, and tracks all versions of content records and attached resources.</p>
Management Console	<p>The Management Console is a web-based user interface to all content creation and management functions. The Management Console can be replicated on multiple servers. Management Consoles publish changes to the JMS.</p>
Database Server	<p>The Information Manager database stores the Information Manager content management objects. The installation process automatically creates the required tables in a specified database.</p>
Information Manager Web Services	<p>Information Manager provides an open set of web services to support adding and modifying content, content categories, and user information from external applications.</p>

Getting Started with Information Manager

Oracle Knowledge Information Manager is a full-featured content management system that provides a workflow-driven content authoring, editing, review, and publishing environment to support the entire knowledge lifecycle. It integrates easily with existing Oracle Knowledge applications to enable organizing and sharing of any type of enterprise information among contact center agents, partners, and customers.

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- A powerful document management framework to capture the business requirements of your document, including support for any document types, as well as feedback from end users
- Workflow processes that generate tasks and email notices to track the creation, management, and deployment of documents by various functional team members
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- Flexibility in document deployment and re-use, so that a single repository can publish to any number of sites, using many different presentation styles

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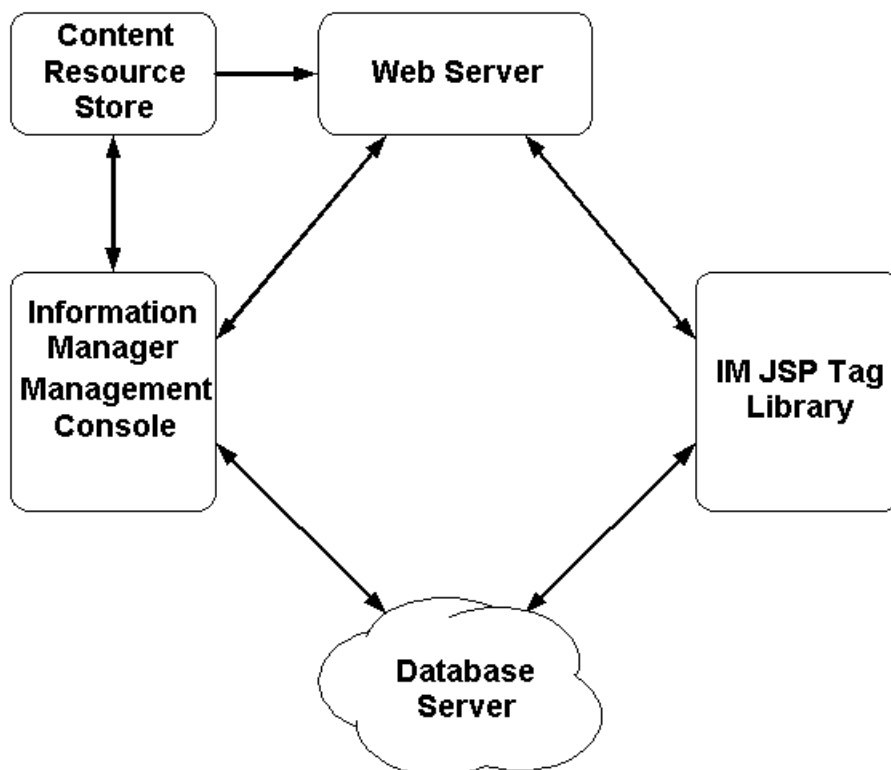
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Content Categories	Categories enable you to organize application content by any characteristic or business requirement, such as product and model, as described in Chapter 5, Working with Content Categories .
Content Records	Content records are the individual documents that you publish. Each content record is of a particular type, for example customer support case or press release, which is defined by the channel in which it is created. See Chapter 2, Working with Information Manager Content in the <i>Oracle Knowledge Information Manager Content Authoring Guide</i> for more information.

Users, Security Roles, and User Groups	Users, security roles, and user groups enable you to control access to administrative and content management functions as described in Chapter 6, Managing Users .
Workflow Processes	Workflow processes are sequences of steps, such as create, edit, translate, review, and approve, that you can define to enforce specific content management procedures for your organization as described in Chapter 7, Creating and Managing Workflows .
Tasks and Notifications	Information Manager's task management facility creates tasks based on workflow processes and other application events, and notifies authorized users of available tasks based on security role definitions. Authorized users can also assign tasks to other users. See Chapter 3, Working with Tasks in the <i>Oracle Knowledge Information Manager Content Authoring Guide</i> for more information.

Information Manager Application Components

An Information Manager application uses the following components, which are installed and configured in the standard installation process. You can configure Information Manager components on a single server or distribute them throughout a network. The following diagram illustrates the relationships between the logical application components:



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Database Server	<p>The Information Manager database stores the Information Manager content management objects. The installation process automatically creates the required tables in a specified database.</p>
Information Manager Web Services	<p>Information Manager provides an open set of web services to support adding and modifying content, content categories, and user information from external applications.</p>

The initial tasks performed by an administrator to install and configure Information Manager include:

- Install and configure the Information Manager, as described in the *Installing Oracle Knowledge Information Manager* chapter in the *Installing and Configuring Oracle Knowledge Guide*.
- Log into the management console, as described in “Starting the Management Console” on page 19.
- Configure a repository, as described in “Configuring a Demo Repository” on page 29.

The Management Console

The Information Manager installation and configuration process described in the *xref tbd* installs and configures the Management Console web application. The Management Console is the primary tool used to create and manage content and perform administrative tasks.

The Management Console provides facilities for administrative tasks such as:

- Creating repositories
- Defining and managing content channels and content categories
- Defining and managing workflow processes
- Specifying user roles and privileges

The Management Console also provides facilities for creating and managing the content pages, FAQs, forms, surveys, and other information that you publish on your site.

You can access the Management Console as an administrator, or as a general user, depending on your role within the organization. Initial access to the Management Console must be performed by an administrator as described in “Starting the Management Console” on page 19.

Important! The Management Console does not automatically save data as you edit fields. You must save your work by completing the edit process for the page. If you select a different task or navigate to another page prior to saving your work, you will lose any unsaved data.

Starting the Management Console

The standard Information Manager installation process installs and configures an application server and starts the Information Manager application as a service. You can start the Management Console using the shortcut created by the standard installation process:

- Select **Start -> Oracle -> Knowledge -> Information Manager**

The Management Console opens in the local system's default browser. The default URL for the Management Console is:

```
http://<host_name>:<port>/InfoManager/WebObjects/InfoManager.woa
```

where:

host_name	specifies the hostname for the system on which the application is installed, for example <code>localhost</code> , if applicable
port	specifies the port designated for the Management Console application during the installation process. The default is <code>8226</code> .

The Management Console login page displays.

You can log onto the Management Console as the system-defined super user, or as a user defined within the application.

Logging on as the Super User

To log onto the Management Console as the system-defined super user, specify the following:

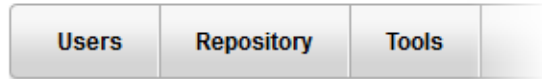
Important! The login page fields are case-sensitive.

Field	Value
User Name:	Specify <code>SUPER</code> to log on as the system-defined super user, which has authority to access and execute all Management Console functions.
Password:	Specify the system-defined password for the super user, <code>admin</code> .
Repository:	Specify the system-defined master repository, <code>SYSTEM</code> .

The SYSTEM Repository

When you are logged onto the `SYSTEM` repository as the `SUPER` user, the Management Console displays a navigation bar containing the following options:

ORACLE Knowledge



Welcome

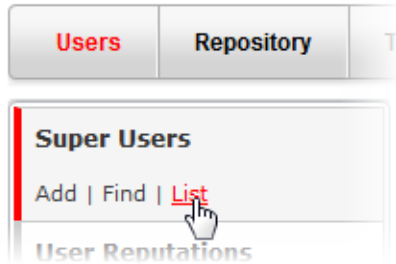
Option	Description
Users	This option displays the User and Security Management page, which provides access to user management, user group, and security role functions. See Chapter 6, Managing Users for more information.
Repository	This option displays the Repository Management page, which provides access to repository and web site properties. See Chapter 3, Working with Repositories for more information.
Tools	This option displays the Administration page, which provides access to advanced administrative functions and resources, including the full text search index, application log files, advanced configuration, and data import and export functions. See Chapter 9, Working with Advanced Administration Features for more information.

Note: The Management Console displays additional options when you are logged onto the repository created specifically for your organization as described in “An Administrator's View of a Content Repository” on page 22.

Changing the Super User Password

To change the Super User account password:

- Select the Users tab, then select the List option under Super Users.



The Management Console displays the Management Console Users page.

- Select the Super Admin user:

Management Console Users

Users (2)

		User Name	User ID	Status
1.		Admin, Super	super	Active
2.		Support, Support	support	Active

The Management Console displays the current Super Admin account settings on the Management Console User Properties page. You can edit or retain the current settings as appropriate.

Important! The Information Manager password policy as described in “Password Policy Scope” on page 267 determines the character length and strength requirements for valid passwords. The default password policy is described in “The Default Password Policy” on page 267.

- Enter and verify the new password () and save your changes by selecting **Save User Properties**

Management Console User Properties

Account Information

First Name*

Last Name*

User ID*

Password*

Verify Password*

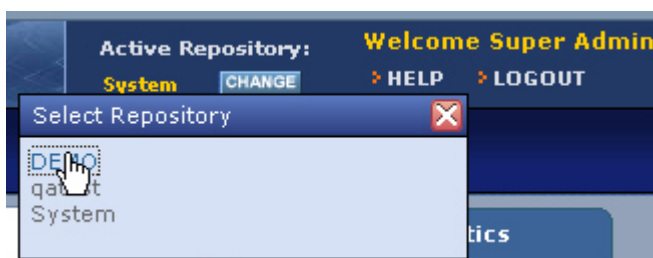
Email*

Alias

Note: See “Managing Users” on page 106 for more information on user account management functions.

An Administrator's View of a Content Repository

After you have created a content repository, as described in *Creating Content Repositories*, you can make the content repository the active repository by selecting **Change** in the upper right hand corner of the Information Manager page and then selecting the content repository:



When you have changed your active repository to a content repository, the Management Console display looks like that shown below for the Demo repository. The INBOX, SEARCH, CONTENT, and FEEDBACK pages are described in “An Author's View of the Management Console” in the *Oracle Knowledge Information Manager Content Authoring Guide*. The focus of this guide is on the USERS, REPOSITORY, and TOOLS

pages. This section provides a brief summary of the features on each page and directs you to the sections that describe how to use the features.

ORACLE Knowledge



Welcome

You are logged into the Oracle Knowledge console where you

Option	Description
Inbox	This option displays the Tasks page, which displays available and assigned tasks, which are generated by the application in response to content creation, management, and delivery activities. See Chapter 3, Working with Tasks in the <i>Oracle Knowledge Information Manager Content Authoring Guide</i> for more information.
Search	This option provides access to an optional configured Intelligent Search application that you can use to locate Information Manager content, as well as content from any other data sources configured for the Intelligent Search application. See "Searching for Content" in the <i>Oracle Knowledge Information Manager Content Authoring Guide</i> for more information.
Content	This option displays the Content page, which provides access to content records, which are the units of content that you create, edit, approve, and publish. See Chapter 2, Working with Information Manager Content in the <i>Oracle Knowledge Information Manager Content Authoring Guide</i> for more information.
Feedback	This option displays the Collaboration and e-Marketing page, which provides access to discussion forums, content ratings, FAQs and other collaborative and marketing features that you can create for your application as described in Chapter 8, Working with Feedback and Collaboration .
Users	This option displays the User and Security Management page, which provides access to user management, user group, and security role functions. See " The User and Security Management Page " on page 23 for more information.
Repository	This option displays the Repository Management page, which provides access to repository and web site properties. See " REPOSITORY Page " on page 25 for more information.
Tools	This option displays the Administration page, which provides access to advanced administrative functions and resources, including the full text search index, application log files, advanced configuration, and data import and export functions. See " TOOLS Page " on page 27 for more information.

The User and Security Management Page

The User and Security Management page enables you to control which users can access which content and perform which tasks in the repository. Repository users are discussed in Information Manager Users and User Groups, Security Roles and Views describes how the various user configuration parameters impact user access to content and tasks.

Below is a view of the USERS page for the Demo repository:

User & Security Management

Provide access to information by managing users and roles.

What do you want to do?

Users can have access to your web site if they are assigned.

- To add a new user, simply click **Add**.
- To update a user profile, including their name, click **Edit**.
- To list out all users click **List**.

Users can belong to one or more User Groups.

- To add a new user group, click **Add**.
- To update an existing user group, click **Edit**.

Roles enable you to define the areas of the web site that users can access. Roles can be created and user can be assigned to them.

- To add a new role, click **Add**.
- To update an existing role click **Edit**.

The USERS page displays the following information:

Console Users	Enables you to add, find, and list users who can view Information Manager documents in an Information Manager client; view, create and modify documents in the Information Manager repository; participate in workflows, and configure the Information Manager environment. Console users are assigned one or more console roles and views. See "Defining Management Console Users" on page 124 for more information.
Console Roles	Enables you to add, find, and list security roles for console users. Console roles assign document access through the Information Manager client for console users in the same manner a web role assigns document access for web users. A console role also assigns permissions to a console user for viewing, creating and modifying content in the Information Manager repository; participating in workflows, and configuring the Information Manager environment. See "About Console Roles" on page 111 for more information.
Web Users	Enables you to add, find, and list users who can view Information Manager documents in an Information Manager client. Web users are assigned one or more of web roles. See "Defining Web Users" on page 128 for more information.

Web Roles	Enables you to add, find, and list security roles for web users. A web role is basically a container for one or more user groups. A web user is assigned one or more web roles to control the content that can be viewed by that user through the Information Manager client. See "About Web Roles" on page 108 for more information.
User Groups	Enables you to add, find, and list user groups that control what documents can be viewed by either a web or console user from the Information Manager client. When an Information Manager document is created, it is assigned to one or more user groups to control which groups of users can view the document in an Information Manager client. See "About Web Roles" on page 108 for examples.
Work Teams	Enables you to add, find, and list work teams to group task assignment and reporting by users organized into teams. See "Defining Work Teams" on page 135 for more information.
User Reputations	Enables you to add, find, and list user reputation models for the current repository. See "Configuring User Reputation Levels" on page 139 for more information.

REPOSITORY Page

The REPOSITORY page enables you to create and manage views, categories, channels, tokens, workflows, metrics and data lists for the active repository. See Content Repositories for more information.

Below is a view of the REPOSITORY page for the Demo repository:

Repository Management

Configure your Repository and web site(s) properties.

What do you want to do?

Repositories encapsulate sites, users, content, and other information.

- To create a new Repository, click **Add**.
- To manage an existing Repository, click **List**.

Users can manage information for the View(s) they are assigned to. You can manage one or more Views.

- To create a new View, click **Add**.
- To manage an existing View, click **List** to view the list of Views.

Repository Channels provide access to dynamic content.

- To add a new channel, click **Add**.
- To manage an existing channel, click **List**.

You can send a custom email to a user triggered by an event.

- To add a new email event, click **Add**.
- To edit an existing email event click **List**.

The REPOSITORY page displays the following information:

Repository	Enables you to modify the user and repository schemas, and edit the properties of the active repository. See Chapter 3, Working with Repositories for more information.
Views	Enables you to add and list the console views that can be assigned to a console user. See "About Views" on page 109 for more information.
Categories	Enables you to add and list the categories that can be assigned to content and users. See Chapter 5, Working with Content Categories for more information.
Channels	Enables you to add new channels to the repository and list the existing channels. See Chapter 4, Working with Content Channels for more information.
Tokens	Enables you to add and list replacement tokens that represent a standard term or other reusable content. See "Defining Replacement Tokens" on page 60 for more information.

Workflows	Enables you to add and list workflow processes that manage publishing life-cycles for records in this content channel. See Chapter 7, Creating and Managing Workflows for more information.
Custom Metrics	Enables you to add and list custom metrics within a repository to track specific activity associated with content records. See “Defining Custom Metrics for a Repository” on page 63 for more information.
Data Lists	Enables you to add and list data lists of consistent data items for common user choices. See “Defining Data Lists” on page 64 for more information.

TOOLS Page

The TOOLS page allows you to configure system parameters, tasks and notifications, batch jobs, search parameters; view system and log information, and export, import and merge repository data. See Tools Menu for more information.

Below is a view of the TOOLS page for the Demo repository:

The TOOLS page displays the following information:

System

Enables you to configure:

- The default methods and locations for storing and accessing Information Manager content.
- LDAP (external security) integration as described in Integrating Information Manager with External LDAP Security
- The default email settings as described in Managing Email Settings
- The location of a Oracle Knowledge application to use for search within your Information Manager application as described in Integrating an Intelligent Search Application

Tasks & Notifications	Enables you to view, enable or disable, and edit notifications for the tasks that Information Manager can generate as described in “Configuring Tasks and Task Notifications” on page 237.
Batch Jobs	Enables you to define, modify, and view batch jobs for the application repository, as described in “Scheduling Batch Jobs” on page 243.
Full Text Search	Enables you to index the content channel or forms data within an application repository to rebuild damaged or corrupted indexes, if necessary. See “Indexing Data for Full Text Search” on page 185 for more information.
System Information	Enables you to view detailed information about the Information Manager system.
System Log Files	Enables you to locate, view, and download application log files for use in diagnosing problems. See “Viewing and Downloading Log Files” on page 187 for more information.
Repository Data	Enables you to import and export data to and from the repository, as described in Chapter 10, Importing and Exporting Data .
Repository Replication	Enables you to back up and restore the repository data while maintaining its data relationships from the same or another instance of Information Manager. See “Backing Up and Restoring Information Manager Data” on page 296 for more information.

Configuring a Demo Repository

This section walks through the basic steps for creating a repository and populating it with a channel, categories, users, and a workflow. The procedures in this section step you through the basic Information Manager configuration procedures to help you gain hands-on experience setting up the Information Manager environment. The following chapters in this guide provide more detail on each configuration procedure.

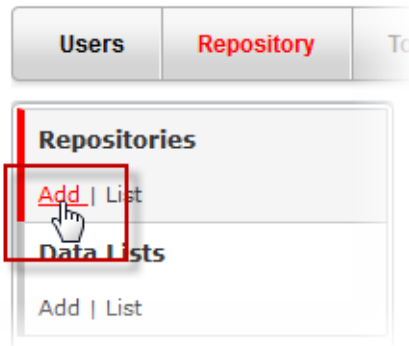
The procedures described in this section are:

- “Create a Repository” on page 29
- “Create a Channel” on page 31
- “Configure the Channel Schema” on page 33
- “Create Categories” on page 36
- “Define a Workflow” on page 38
- “Define a Console Role” on page 41
- “Add a Console User” on page 44
- “Restart the Information Manager Service” on page 46
- “Enable InfoCenter Search” on page 46

Create a Repository

While logged into the System repository as Super, create a new content repository called Demo:

- 1 Select **Repository** from the navigation area. The Management Console displays the Repository Management page.
- 2 Select the **Add** option under Repositories:



The Management Console displays the Create Repository page. Specify the Demo repository properties in a manner similar to that shown below:

Create Repository

Repository Name*
Demo

Reference Key*
DEMO

Task ID Prefix D

Filter tasks so users are only made aware of tasks matching their skill category

Require at least one matching skill category from every top-level category branch

Default Locale*

English United States ▼

Select Supported Locales

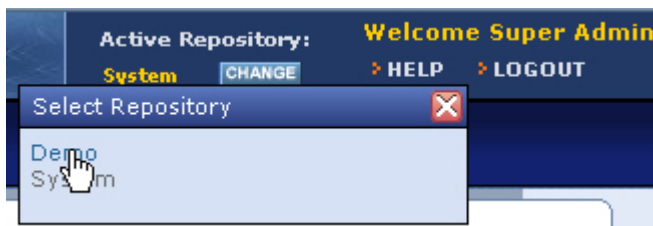
- Arabic Saudi Arabia
- English Canada
- French Canada
- English Australia
- English United States
- Deutsch Deutschland
- Français France
- Español España
- 日本語 日本
- Italiano Italia
- 中文 中国
- 中文 台湾
- Português Brasil
- 한국어 한국
- Hebrew Israel
- русский Россия

See [Chapter 3, Working with Repositories](#) for more information on creating repositories.

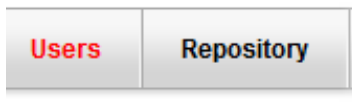
Create a Channel

After creating the Demo repository, create a content channel, named Solutions, in the Demo repository.

- 1 Select Active Repository **Change** in the upper right-hand portion of the screen and pick **Demo** from the drop-down menu:



- 2 Select **Repository** from the navigation area:



- 3 Select the **Add** option under Channels:



The Management Console displays the Repository Channel Properties page. Specify the Solutions channel properties in a manner similar to that shown below:

Repository Channel Properties

General Properties

Channel Name*
Solutions

Reference Key*
SOLUTIONS

Default Lifespan (days)

Review Date (days)

Maximum Number of Versions to Maintain

Document ID Prefix*
SO

Document ID Current Value

Warning: Resetting the current document ID value may result in multiple documents with the same Document ID.

- Remove minor versions after publishing
- Provide event start and end date attributes
- Enable Priority/Order
- Enable related content
- Enable Check Out/In
- Enable user activity logging
- Enable Content Recommendations
- Enable HTML Validation

Maintain the default settings for the rest of the fields until you get to the **Security Role Privileges** and configure as shown below:

Security Role Privileges

Default Administration Role

Default User Role

- 4 Select **Save Channel Properties** to create the channel.

See [Chapter 4, Working with Content Channels](#) for more information on creating content channels.

Configure the Channel Schema

After creating the Solutions channel, configure the channel's schema to define the look and feel of the channels authoring page.

- 1 Select the Solutions channel **Schema** option:

Repository Channels

Repository Channels (1)

Channel				
1. Solutions		Schema >>	Preview >>	Rebuild XML >>

[Delete](#) >> [Add Repository Channel](#) >>

- 2 Select **Add Attribute** in the Schema Properties page:

Solutions Schema Properties

Attributes		
<u>Solutions (Root)</u> (Node)	Add Attribute >>	Add Node >>
	Create Meta Schema >>	Done >>

* - Required Field
 M - Master Identifier
 T - Included in full text search
 A - Available in attribute search

- 3 Define a new attribute, named 'Problem Description,' set the attribute type to Text Field, and select the **Include in master record identifier** option:

Solutions Attribute Properties

Attribute Name ***Reference Key****Description****Select Attribute Type*****Width****Select Attribute Options**

- Include in master record identifier**
- Enable full text searching**
- Enable attribute level searching**
- Attribute requires workflow approval if workflow is enabled**
- Make attribute a required field**
- Restrict attribute to selected user groups**

- 4 Select **Save Attribute Properties** to save the attribute.

- Define another attribute, named 'Solution,' and set the attribute type to **Rich Text Area** with **Full** features:

Solutions Attribute Properties

Attribute Name ⁺

Reference Key
//SOLUTIONS/SOLUTION

Description

Select Attribute Type ⁺

Rich Text Area ▾

Rich Text Area Features

The **Basic** feature set includes basic formatting tools.
The **Medium** feature set includes all the Basic functionality plus the ability to add links, images and tables.
The **Full** feature set includes all the features available. It includes all the Medium functionality plus the ability to add styles and font formats.

Full ▾

Height (in pixels)

40

Select Attribute Options

- Include in master record identifier
- Enable full text searching
- Enable attribute level searching
- Attribute requires workflow approval if workflow is enabled
- Make attribute a required field
- Restrict attribute to selected user groups

- Select **Save Attribute Properties** to save the attribute.
When you are done, the schema definition will look like:

Solutions Schema Properties

Attributes

- [-] Solutions (Root) (Node)
 - [-] Problem Description (Text Area) **T**
 - [-] Solution (Rich Text Area) **T**

Add Attribute Add Node
 Up Down Delete
 Up Down Delete
 Create Meta Schema
 Done

⁺ - Required Field
M - Master Identifier
T - Included in full text search
A - Available in attribute search

You can check the results of your schema configuration by navigating to the **Content** tab and selecting **Add** under the Solutions channel:

The authoring page will look like:

Add Solutions Select Locale: English

Content Entry Fields

Problem Description

Solution

Remove styles definitions

Publishing Options

Display On

Date	Time	Date	Time
10/31/2007	04:19 PM		AM

Remove After

Date	Time
	AM

Review Date

Date	Time
	AM

Spell Check
 Save and Publish Document
 Save Document
 Cancel

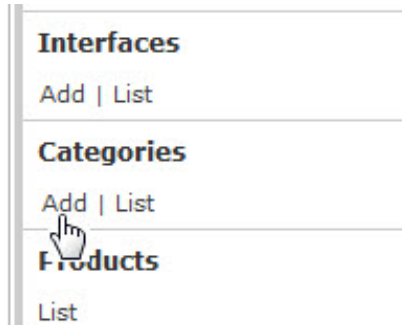
* Required field

See “Specifying a Channel Schema” on page 88 for more information on configuring a channel schema.

Create Categories

This section describes how to create a main category, named Products, that contains three subcategories, named Wood, Glass, and Bricks.

- 1 Select the **Repository** tab and select the **Add** option under Categories:



The Information Manager console displays the content category screen:

Category Properties

Current Location

Branches

Edit Fields

Category Name*

Reference Key*

Category Description

- 2 Select **Save Category Properties**.
- 3 Add subcategories by selecting the Products **Add Sub Category** option:

Repository Category Branch Management

Repository Category Branch List (1)

Sort By Name Ascending

	Name	Category Description	Actions
1.	<input type="checkbox"/> Products		Add Sub Category >>

Select All Unselect All

[Add Repository Category Branch](#) >>
[Delete Selected Repository Category Branches](#) >>

- 4 Define the Wood subcategory:

Category Properties

Current Location
Branches → Products

Edit Fields

Category Name*
Wood

Reference Key*
WOOD

Category Description

- 5 Select **Save and Add Another** and add the 'Glass' and 'Bricks' subcategories:

[Save and Add Another](#) >>
[Save Category Properties](#) >>
[Cancel](#) >>

When all of the subcategories have been added, the Repository Category Management page will display:

Repository Category Management

[Branches](#) → [Products](#)

Categories (3)

		Category Name	Category Description
1.	<input type="checkbox"/>	Bricks	
2.	<input type="checkbox"/>	Glass	
3.	<input type="checkbox"/>	Wood	

[Select All](#) [Unselect All](#)

See [Chapter 5, Working with Content Categories](#) for more information on creating categories.

Define a Workflow

Create a workflow called Publish.

- 1 Select **Repository** from the navigation area:



- 2 Select **Add Workflow**:



- 3 Fill in the fields as shown:

Add Workflow

Name*
Publish

Reference Key*
PUBLISH

Manually publish documents after workflow completion.

[Save Workflow](#) >> [Cancel](#) >>

- 4 Select **Save Workflow**.

- 5 In the Workflow Management page, select **Steps** next to the Publish workflow:

Workflows

Workflow Name	
1. Publish	Steps >> Delete >>

[Add Workflow](#) >>

- 6 Select **Add Workflow Step** and define an Author step, as shown below:

Workflow Step Properties

Define Step Properties

Step Name*

- Enable document editing
 Enable properties editing

Default queue time for first notification

 days

Second Notification

 days

- 7 Select **Save Workflow Step** and add two more steps, 'Review' and 'Publish' in the same manner as the 'Author' step. When complete, your workflow steps will look like:

Publish Workflow Steps

Workflow Steps (3)

Step Name	
1. Author	Conditions ☰ Delete ☰
2. Review	Conditions ☰ Delete ☰
3. Publish	Delete ☰

[Add Workflow Step](#) ☰ [Done](#) ☰

Edit the Solutions channel, created in “Create a Channel” on page 31, and select **Publish** under **Select Workflow**:

Workflow Options

Select Workflow

Publish ▼
 None
 Publish

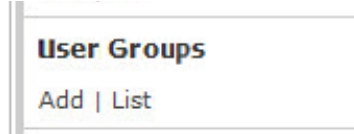
- Views requires workflow approval if workflow is enabled
 User Groups requires workflow approval if workflow is enabled
 Display dates requires workflow approval if workflow is enabled
 Event dates requires workflow approval if workflow is enabled
 Geospatial requires workflow approval if workflow is enabled
 Restrict content editing to users that can perform the workflow step

See [Chapter 7, Creating and Managing Workflows](#) for more information on creating workflows.

Define User Groups

Define two user groups, named Internal and Customer.

- 1 In the Users Tab, select **Add** User Groups:



- 2 In the User Group Properties page, define an Internal user group:

 A screenshot of the "User Group Properties" form. The form has a title "User Group Properties" in blue. There are two required fields, both marked with a red asterisk. The first field is "Group Name*" and contains the text "Internal". The second field is "Reference Key*" and contains the text "INTERNAL".

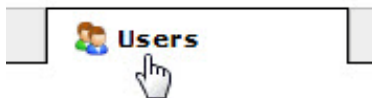
* Required field

- 3 Create another user group, named Customer. See Defining User Groups for more detail on creating user groups.

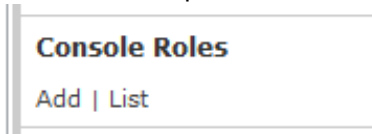
Define a Console Role

Define a Console Role, named 'Author':

- 1 Select **Users** from the navigation area:



- 2 Select the **Add** option under Console Roles:



The Management Console displays the Security Roles Properties page. Fill in the fields as shown below to create a security role, called Author, that is part of the Internal user group and provides permissions to view

and manage tasks; view, modify, and import records in the Solutions channel, and approve the Author step in the Publish workflow:

Role Information

Role Name*

Reference Key*

Select Information Manager Administration Activities

- Manage Application Parameters
- Manage Data

Select Repository Management Activities

- Manage Categories
- Manage Channels
- Manage Counters
- Manage Data Lists
- Manage Tasks
- Manage Tokens
- Manage Workflow
- Manage Work Teams
- Manage Repositories
- Manage Views

Select User & Security Management Activities

- Manage Roles
- Manage User Groups
- Manage Users

Select User Groups

Top Level

Available User Groups

Customer
Internal

Add >>

<< Remove

Selected User Groups

Internal

Matches 2/2

Select Content Management Activities

- Manage Content
 - Delete Content Discussion
 - Modify Content Discussion
 - View Content
 - View Content Discussion

Select Repository Channel Privileges

Solutions

- View
- Translate
- Modify
- Master Publish
- Manage Rating Analysis Tasks
- Manage Content Review Tasks
- Import
- Delete History
- Delete
- Batch View Update
- Batch Category Update

Select Repository Workflow Approval Steps

Publish

Author Review Publish

Select Collaboration & e-Marketing Activities

- Manage Channel Alerts
- Manage Discussion Boards
- Manage Forms
- Manage Newsletters
- Manage Ratings
- Manage Recommendations

See “Managing Security Roles” on page 113 for more information on creating security roles.

Add a Console User

- 1 Under Console Users, select **Add**.
- 2 Fill in the fields as shown below to add a new Console User, named Joe Writer, and provide him with the Author security role defined in “Defining Security Roles” on page 114:

Management Console User Properties

Account Information

First Name*

Last Name*

User ID*

Password*

Verify Password*

Email*

Alias

Public Profile Options

Display Name

Display Email

User Image

Default Locale*

English

Default View

Demo

Account Status

- Active
 Inactive

Reputation Points **Views ***

- Demo

Categories

Top Level

Available Categories

Products

Add >>

<< Remove

Selected Categories

-- No records selected at this time --

Matches 1/4

Security Roles

- Author
 Default Administration Role
 Default User Role

Tasks Notifications

- Enable email notifications for tasks I can perform
 Enable email notifications for tasks assigned to me

Auto-subscribe options

- Subscribe to topics I create.
 Subscribe to topics I reply to.

Send subscription notifications

- Don't send emails
 Immediately (default)
 Once per day
 Every other day
 Once per week

See “Defining Management Console Users” on page 124 for more information on creating users.

Restart the Information Manager Service

You must restart the Information Manager service to apply your configuration changes to the Information Manager web applications.

When you install and configure Oracle Knowledge and Information Manager, the installation program places Installation Configuration Environment items in the Microsoft Windows Start menu for each defined instance.

To restart the Information Manager service:

- Select the Installation Configuration Environment item for the desired instance:
Start => Programs => InQuira <release_number> => <application_name> development=>Indexing Environments => <application_name> Environment



- Enter the following command from the Installation Configuration Environment prompt:
inquiraim restart

Enable InfoCenter Search

In order to enable the InfoCenter search feature, a repository needs to be configured to connect to an Oracle Knowledge search instance.

Important! Before you enable search, make sure you have created a runtime instance of your application, as described in “Creating the Remote Request Processing (Runtime) Instance” in the “Oracle Knowledge Intelligent Search Installation Guide” and have successfully crawled your content, as described in Chapter 2, Configuring Content Acquisition in the *Oracle Knowledge Intelligent Search Administration Guide*.

You can enable search at the SYSTEM level for all repositories or at the repository level. This section describes how to enable search at the repository level for the Demo repository.

- 1 In the Demo repository, select **Tools** from the navigation bar:

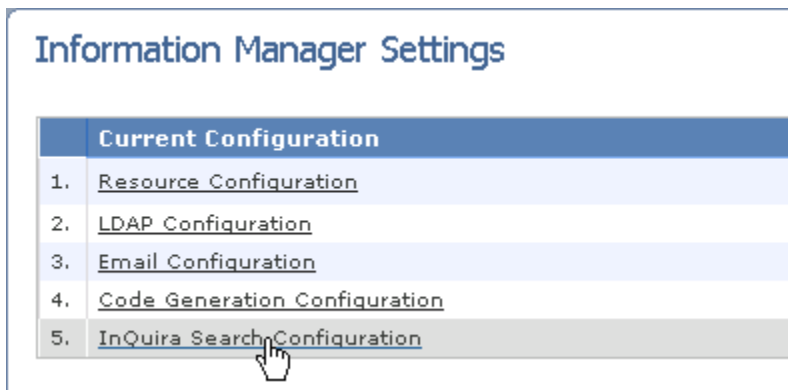


The Management Console displays the Administration page for the Demo repository.

- 2 Select **Configure** under System:



3 Select InQuira Search Configuration:



The Management Console displays the InQuira Search Configuration page:

The Oracle Knowledge Search Configuration page indicates whether the configuration is inherited from the SYSTEM repository (default), or is specific to the current repository.

4 Select **Override default configuration**

5 Enter the URL of the servlet for the Oracle Knowledge search application. For example, if Information Manager is running on a server named iqdocs2, then the Search URL would be:

`http://iqdocs2:8222/inquiragw/servlet/rpccrouter`

InQuira Search Configuration

Edit InQuira Search URL

Custom configuration for repository Demo

InQuira Search URL*

Example: `http://localhost:8223/inquiragw/servlet/rpccrouter`

Enable Highlighting for Search Results

Enable Searching for Similar Results

Restrict Search to IM content by default

Provide criteria for "Best Answer" filter when a Feature Content result is returned

Minimum Score	<input type="text" value="0.90"/>
Minimum Difference	<input type="text" value="0.01"/>
Maximum Results Display	<input type="text" value="3"/>

6 Select **Save**.

- 7 In your InfoCenter web client, log out and back in and confirm the search box appears:



The screenshot displays the INQUIRA Information Center web client interface. The header includes the INQUIRA logo and "Information Center" text, with a "Font Size" control (A A A) in the top right. A navigation bar contains "Home", "solutions", and "Discussions" links. The main content area features a "Welcome" message, an "Ask a Question" section with a search input field and an "Ask" button, and radio buttons for "All Content", "Discussions Only", and "Articles Only". Below this are two tables: "Recent Articles" and "Popular Articles", each with columns for "ID" and "Title", and a single row containing "S01". A right-hand sidebar contains a "Welcome gordon furbush" section with links for "Logout", "My Settings", "My Profile", "My Topics", "My Subscriptions", "My Contributions", "My Recommendations", and "Find Users". At the bottom of the sidebar is an "Additional Assistance" section with links for "Submit a Case Online" and "Give us Your Feedback".

See “Integrating an Intelligent Search Application” on page 216 for more information on enabling search.

Working with Repositories

■ A *repository* is a logical container for the content records, user and security information, workflow processes, and other information objects that you create for your application. A single repository can contain data for multiple applications, and can serve content concurrently to any number of publishing domains (web sites).

You can create multiple repositories within a single Information Manager installation. In most organizations, the privilege of creating repositories is restricted to administrators.

■ **Note:** Information Manager stores repository data in a database that you configure as part of the installation process described in *Installing and Configuring Oracle Knowledge*, Chapter 5: Installing Oracle Knowledge Information Manager, “Creating a Repository”.

Information Manager is installed with a system-defined repository, named System. The System repository provides access to the repositories and data lists used by your content management applications, as well as administrative user data and tools as described in System Repository.

Managing Content Repositories from the SYSTEM Repository

You can perform most repository management tasks within the content repository; however, you can perform the following tasks from the SYSTEM repository:

- View the list of all content repositories.
- Add and delete content repositories, as described in “Creating and Configuring Content Repositories” on page 49.
- View and modify custom repository schema properties for a selected repository as described in “Defining Custom Properties for Repository Information” on page 53.
- View and modify custom user profile properties for a selected repository as described in “Defining Custom User Information Properties” on page 69.

Creating and Configuring Content Repositories

You create Information Manager repositories using the Repositories section of the Management Console to:

- Specify basic repository properties as described in “Specifying Repository Properties” on page 51.
- Define custom properties to store specific user and repository information for your application as described in “Defining Custom User Information Properties” on page 69 and “Defining Custom Properties for Repository Information” on page 53.
- Define optional views as described in “Defining Repository Views” on page 58
- Associate the repository with one or more web applications.

Creating a Repository

You can create an application repository while logged in as Super to the System repository.

To create a repository for your application:

- 1 Select **Repository** from the navigation area. The Management Console displays the Repository Management page.
- 2 Select the **Add** option under Repositories:



The Management Console displays the Create Repository page.

- 3 Specify repository properties as described in “Specifying Repository Properties” on page 51

Specifying Repository Properties

You create a repository by specifying the following properties:

Note: If you are creating a repository as part of the initial Information Manager configuration, you may find it convenient to complete only the required fields, then specify additional properties as needed.

Create Repository

Repository Name*

Reference Key*

Task ID Prefix

Filter tasks so users are only made aware of tasks matching their skill category

Requires at least one matching skill category from every top-level category branch

Default Locale*

Select Supported Locales

English

Deutsch

Français

Español

Italiano

한국어

Default Administrator

First Name*

Last Name*

Email*

Default Administrator Username*

Password*

Retype Password*

Tasks Auto-assignment

Workflow Tasks

Assign initial workflow task to content author when possible.

Assign workflow task to user who previously performed the workflow step for the specific record.

Only apply to rejected workflow steps.

Translation Tasks

Assign translation tasks to user who previously performed the translation step for the specific record.

Self Administration

Allow Users to self-administer categories.

Allow Users to self-administer locales.

Allow Users to self-administer beams.

Property	Description
Repository Name	Specify a name for the repository.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See "A Note On Reference Keys" on page 52 for more information on reference keys and how they are used in Information Manager.
Task ID Prefix	Enter a value (character string) to be used to preface task IDs in the inbox. This prefix is used only for consistency for document IDs in the channel and has no other system meaning.
Filter tasks so users are only made aware of tasks matching their skill category	Specify whether to filter tasks based on the presence of category expertise information specified in user profiles. See "Specifying Management Console User Properties" on page 125.
Require at least one matching skill category from every top-level category branch	Specify whether a task should be assigned to a user based on their skills. Note: If there are two branches (for example, "Products" and "Departments"), the user must have a user skill in both branches for the task to be assigned to them.
Default Locale	Specify the locale (language) that will be used as the default. The default locale is considered to be the base language for the repository. See Chapter 11, Managing Applications in Multiple Languages for more information.
Supported Locales	Specify optional supported locales for the repository. The default list of supported locales is defined in the System repository. You can modify the list of supported locales using the Locale Management facility as described in "Managing Supported Locales" on page 254.
Default Administrator	Define a default administrator for this repository. The Information Manager will add this user as a console user having the pre-defined Default Administrator security role. See Chapter 6, Managing Users for more information on users and security roles.
Workflow Tasks	Specify whether to auto-assign tasks based on workflow attributes to help manage the task list and prevent tasks from being left unassigned.
Translation Tasks	Specify whether to auto-assign tasks based on the previous translator of the record for the task for any new changes or modifications to the master document.
Self Administration	Check these options to allow console users to join work teams, change their own skills (categories), and change the locales they can translate records for. This would normally be managed by the repository administrator.

Select **Save Repository Properties**

The Management Console displays the new repository on the Manage Repositories page.

A Note On Reference Keys

The Information Manager uses arbitrary text strings, called Reference Keys, as internal identifiers for the various objects in the system. Many of the tags in the JSP tag library use reference keys to retrieve data.

Reference keys are locale independent; the reference key name does not change for an object supported in multiple languages (locales).

When you create a new object, the Management Console automatically assigns the name of the new object as the default reference key. You can accept the default, or change the value. When you save the object, the Management Console will display an error message if the specified reference key is already in use.

Important! You must specify a unique reference key for each object in the Information Manager instance; for example, if you have multiple repositories defined for your organization, reference keys must be unique within the scope of a repository.

Defining Custom Properties for Repository Information

You can define custom properties to store additional repository information, such as meta-tags, keywords, headers, footers, copyright notices, or any other information that you want to use throughout your application. Once defined, you can use supplied JSP tags to access the custom properties for use in your application's page templates.

For example, you could define a copyright property text field and use the field to specify a copyright statement for your application. You could then use JSP tags to access the copyright statement for use within your application's display templates. You could also define custom repository properties to create meta-tags to improve search engine results placement.

Note: You can also define similar custom user properties to capture attributes such as user address, phone number, or other personal information as described in “Defining Custom User Information Properties” on page 69.

Custom repository properties also extend to any defined repository views; each view inherits the extended properties of the base repository. You could define custom properties for internal department information, such as department name, contact information, manager name. (Attributes for these fields are available in the JSP tag library.) If you define a View for each department, each view would then contain department-specific values for these custom properties.

Custom Repository Property Nodes and Attributes

You define custom repository properties by specifying nodes and attributes. An attribute is an individual item, such as a copyright statement. A node is a heading for one or more attributes that share some common characteristic; for example, a Copyright node might group together attribute fields to store copyright statements, reproduction restrictions, and trademark and service mark information. (In database terms, attributes are columns in a database table, whereas nodes are 1-M related tables.)

Note: Information Manager supports complex schema to reflect virtually any type of data structure; however, we recommend using simple data schema to simplify the process for content providers.

When you define custom repository properties, the nodes and attributes display on the Repository Preview page.

You can access custom repository properties:

- From the application repository, using the Manage option under Repository
or
- From the SYSTEM repository using the List option under Repository

Defining Custom Repository Properties

To define custom properties for an application repository:

- 1 Log onto the application repository, and select the **Repository** tab



- 2 Select the **Manage** option under Repositories:



- 3 Select the **Repository Schema** item from the Properties section of the repository preview page:



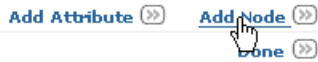
The Management Console displays the Custom Site Properties Schema Properties page.

- 4 Select **Add Attribute** to specify schema attributes as described in "Specifying Custom User Property Attributes" on page 72, or select **Add Node** to specify schema nodes as described in "Specifying Custom User Property Nodes" on page 71.

Specifying Custom Site Property Nodes

To specify custom site property nodes:

- 1 Select **Add Node** from the Custom Site Properties Schema Properties page:



The Management Console displays the Custom Site Properties Node Properties page:

 A screenshot of the 'Custom Site Properties Node Properties' form. It includes three input fields: 'Node Name' (required), 'Reference Key' (required), and 'Description'. Below the fields is a checkbox labeled 'Allow multiple copies of this node'. At the bottom right are 'Save Node Properties' and 'Cancel' buttons. A red asterisk indicates required fields.

- 2 Specify the following node properties:

Property	Description
Node Name	Specify the name for the node, which will display on the repository definition page.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.
Description	Specify an optional description for the node which will display on the repository definition page.
Allow multiple copies of this node	Specify to allow multiple copies of this node. For example, you could define a node to accept information about multiple contributors to an article.

Specifying Custom Site Property Attributes

To specify attributes for custom site properties:

- 1 Select **Add Attribute** from the Custom Site Properties Schema Properties page:



The Management Console displays the Custom Site Properties Attribute Properties page:

 A screenshot of the 'Custom Site Properties Attribute Properties' form. It includes:


- 'Attribute Name *' with a text input field.
- 'Reference Key *' with a text input field.
- 'Description' with a large text area.
- 'Select Attribute Type *' with a dropdown menu showing '-- Select One --'.
- A blue bar labeled 'Select Attribute Options' containing a checkbox for 'Make attribute a required field'.
- 'Save Attribute Properties' and 'Cancel' buttons at the bottom right.
- A red asterisk legend for '* Required field' at the bottom left.

- 2 Specify the following attribute properties:

Property	Description
Attribute Name	Specify the name for the attribute, which will display on the repository definition page.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.
Description	Specify an optional description for the attribute, which will display on the repository definition page.
Attribute Type	Select an attribute type from the drop-down menu, as described in “Specifying Attribute Types” on page 73. The attribute type determines the type of field (such as radio buttons or text area) for the attribute.
Make attribute a required field	Specify whether this attribute will be required for the repository definition.

Specifying Attribute Types

You can specify the following types of attributes for custom repository, custom user, and content channel document properties. The Management Console uses the attribute name and description to label the resulting attribute field:

Attribute Type	Description
Check Box	Use this type to add a checkbox. For example, you could create a Subject Matter Expert node with checkbox attributes for each subject matter area, and select those that are relevant when you define a new user.
Counter	Use this type to increment a value for each instance of the attribute that you define, based on a specified prefix and start number. This is most commonly used for user and channel schema. For example, you could define a user attribute to assign an incremental value to each defined user based on the prefix IQ and the starting number 1000. As users are defined, the application will automatically increment and assign the values IQ1001, IQ1002, and so on.
Date	Use this type to add a date field and calendar selector.
DateTime	Use this type to add a combined date and time field.
File	Use this type to add a file input field and a file browser that you can use to locate files. When you select the File option, the Management Console displays the Secure Resource field, as described in “Securing Documents that are Attached to Content Records” on page 58: 
Float	Use this type to add an input field to accept floating point values of a specified number of places.
Integer	Use this type to add an input field to accept integer values of a specified number of places.
List	Use this type to add one of the following types of data lists: <ul style="list-style-type: none"> • check box • drop-down • multiselect browser • radio button <p>Note: You must specify an existing data list. See “Defining Data Lists” on page 64 for more information.</p>
Rich Text Area	Use this type to add a text input field of a specified height having either basic, medium, or full sets of text editing functionality as described in “Working with Rich Text Area Fields” on page 75.
Text Area	Use this type to add a file input field with a browse function to locate files.
Text Field	Use this type to add a text input field having a specified number of characters.
Time	Use this type to add date and time fields labeled with the attribute name and optional description.

Securing Documents that are Attached to Content Records

You can secure access to documents that are attached to content records and stored in the Information Manager Content Resource Store. Securing these attributes ensures that requests for an attached document will only be satisfied when made from an authorized IP address.

You specify secured attributes within the file attribute schema as described in “Specifying Attribute Types” on page 73.

The Information Manager Content Resource Store stores secured files in separate secure directories. When a user requests access to a secured document, Information Manager performs a set of security checks to ensure that the request is from an authorized session.

Defining Repository Views

Repository views provide a means of segregating repository records into discrete groups that correspond to various aspects of an organization, such as departments or business units. You can define groups of users so that they have access only to specific repository views.

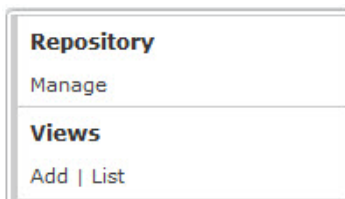
You can define multiple levels of sub-views within repository views to represent any organizational structure. The multiple levels of views form a hierarchy, such that higher-level views have access to lower level views, and lower-level views inherit properties from parent views.

See “About Views” on page 109 for details.

Creating Repository Views

To create a repository view:

- 1 Select **Repository** tab from the navigation area
- 2 Select the **Add** option under Views:



The Management Console displays the Repository View Properties page:

ORACLE Knowledge Help

Repository View Properties

Current Location
demo

Edit Fields

Repository View Name*

Reference Key*

User Groups
Top Level

Available User Groups

- A Level
- B Level
- C Level
- DemoUserGroup

Add

Remove

Selected User Groups

-- No records selected at this time --

Select Categories
Top Level

Available Categories

- JONCAT1
- Laptops
- Year

Add

Remove

Selected Categories

-- No records selected at this time --

Select Products
Top Level

Available Products

- GPS
- Phones
- Tablets

Add

Remove

Selected Products

-- No records selected at this time --

Save View Properties
Cancel

* Required field

3 Specify the following repository view properties:

Property	Description
Reference View Name	Specify the name of the repository view.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.
Available User Groups	Select which user groups are to be associated with this view. Content associated with user groups not listed under Selected User Groups cannot be seen by users with this view. Another way to assign user groups to a console user is by means of a console role, as described in “Defining Management Console Users” on page 124. The user groups available to a console user is the combination of those specified in both the views and console roles that are assigned to the console user.
Select Categories	Select currently defined content categories to include in the repository view. See Chapter 5, Working with Content Categories for more information on content categories. Note: The categories shown above are examples, not default settings.

Defining Replacement Tokens

You can define replacement tokens for use in content within Information Manager objects. When you publish content that contains a defined token, Information Manager replaces the token (a short, manageable string) with the specified content, such as a word or phrase of standardized terminology, or a larger block of reusable content.

Important! Information Manager stores token values in its database; when you update the value of a token, you must restart each Information Manager instance to update the token values that it will display.

Replacement tokens enable you to:

- Re-use content, such as product names, in a standardized form
- Create complex content, such as integrated text and images, once and store it for re-use in multiple documents
- Manage standardize content from a single resource

You use replacement tokens by:

- Defining a replacement token using the Replacement Tokens option of the Repository Management page, as described in “Defining a Replacement Token” on page 60.
- Referring to the variable within content record text fields, as described in “Using Replacement Tokens” on page 62.

Replacement tokens are available for use in all content channels defined within the repository.

Defining a Replacement Token

You define replacement tokens using the Tokens option of the Repository Management page. Replacement tokens consist of:

- A string or token
- The associated text and/or images that will replace the token when the content is published

To define a replacement token:

- 1 Select the **Add** option under Tokens on the Repository Management page:

Channels Add List
Tokens Add List
Workflows Add List

The Management Console displays the Add Replacement Token page

- 2 Specify the following replacement token parameters:

Field	Description
Replacement Token	Specify an alpha-numeric string having no spaces or special characters. Note: The Management Console capitalizes the token, however, references to tokens will resolve regardless of case.
Select Type	Specify the type of field. The available field types are: <ul style="list-style-type: none"> • Richtext Field • Text Field
Replacement Text	Specify text and/or images that you want to be displayed when this variable (token) is used in content records. Note: You can use the complete set of rich text editing features to format the replacement content. See “Working with Rich Text Area Fields” on page 75 for more information on the available rich text editing features.

Using Replacement Tokens

You can use replacement tokens that you have defined within any content record text fields. Replacement tokens defined in your repository are valid in all content channels.

To use a replacement token:

- 1 Edit a content record by any of the usual means
You can view the available replacement tokens using the **View Replacement Tokens** option in the upper right portion of the Edit content page:

View Replacement Tokens | English United States Version: 0.1

The Management Console displays the currently defined replacement tokens in a separate window:

Token	Replacement Text	Token Type	Date Added	Date Modified	Last Modified By
{COPYRIGHT}		Rich Text	03/14/2014		demo demo
{SS_TOKEN}		Rich Text	08/11/2014		demo demo
{TEST_TOKEN_JON_1}		Rich Text	10/08/2014		demo demo
{TEST1}		Rich Text	08/05/2014		demo demo

- 2 Specify the variable name in any field that accepts text. You specify a replacement tokens in the following format:

{TOKEN}

where the defined variable name is enclosed within curved braces.

You can view the resolved variable in the content preview page. The Management Console displays the replacement content within dashed lines; for example:

Content Entry Fields
<p>title demo topic</p> <p>body Here is some topic text, with a replacement token to resolve, <u>{resolved token}</u>, surrounded by additional text.</p>

Important! Information Manager stores token values in its database; when you update the value of a token, you must restart each Information Manager instance to update the token values that it will display.

Defining Custom Metrics for a Repository

You can define custom metrics within a repository to track specific activity associated with content records. For example, you could define a custom metric to record the number of times end-users selected the "print-friendly" version of a content display, indicating that they wanted to print the content.

Information Manager contains a default metric that counts the total number of times that a record is accessed on a detail page (by the `get.channel.data` tag or by the document ID or guide).

You use custom metrics by:

- Defining the custom metric as described in "Defining a Custom Metric" on page 63
- Assigning the custom metric to a channel as described in "Specifying Feedback Options for a Channel" on page 86
- Implementing the `update.content.metric` jsp tag to update the value of the custom metric, for example, within the jsp page that presents the "print-friendly" version of the content

The Management Console displays custom metric information for content records on the Feedback tab of the document preview page.

Defining a Custom Metric

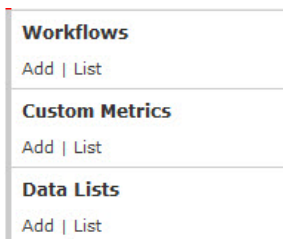
You define custom metrics on the Custom Metrics Properties page in the Repository Management area.

To define a custom metric:

- 1 Select **Repository** from the navigation area



- 2 Select **Add** under Custom Metrics:



The Management Console displays the Custom Metric Properties page:

Custom Metric Properties

Name*

Reference Key*

Save custom metric

Cancel

* Required field

3 Specify the following custom metric properties:

Property	Description
Name	Specify the name of the metric.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys and how they are used within the Information Manager.

Defining Data Lists

Data lists provide a method to re-use common lists of items that you want to present as choices, such as lines of business or geographic locations. Data lists provide a mechanism to ensure consistent data for common user choices. You can use data lists within objects that contain properties defined as attributes, such as content channels, user schema, repository schema, and data forms.

You can create data lists as:

- Static lists of items that change infrequently, such as lists of U.S. states as described in “Creating Static Data Lists” on page 65
- Dynamic lists generated from content channel attributes as described in “Creating Channel Data Lists” on page 68

You use data lists by defining an attribute as a List, and specifying its presentation format.

Creating Static Data Lists

You create static data lists on the Data List Properties page of the Repository area.

Note: The Information Manager stores the list information as strings; however, you can store any primitive type of data as the value attribute of a list item.

To create a static data list:

- 1 Select **Repository** from the navigation area



- 2 Select the **Add** option under Data Lists:



The Management Console displays the Data List Properties page.

Data List Properties

Data List name*

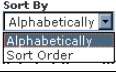

Reference Key*

Data List Type*

[Save Data List Properties >>](#)
[Cancel >>](#)

- 3 Specify the following parameters:

Parameter	Description
Data List name	Specify a name for the data list.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See "Specifying Repository Properties" on page 51 for more information on reference keys.
Data List Type	Select Static from the drop-down list. The Management Console displays the Sort by and Data List Items fields.

Sort by	Specify to sort list items alphabetically, or in the order they are that they are listed on the Data List Properties page. 
Data List Items	Select Manage Data List Items to add items to the list as described in “Defining Static Data List Items” on page 66. 

Defining Static Data List Items

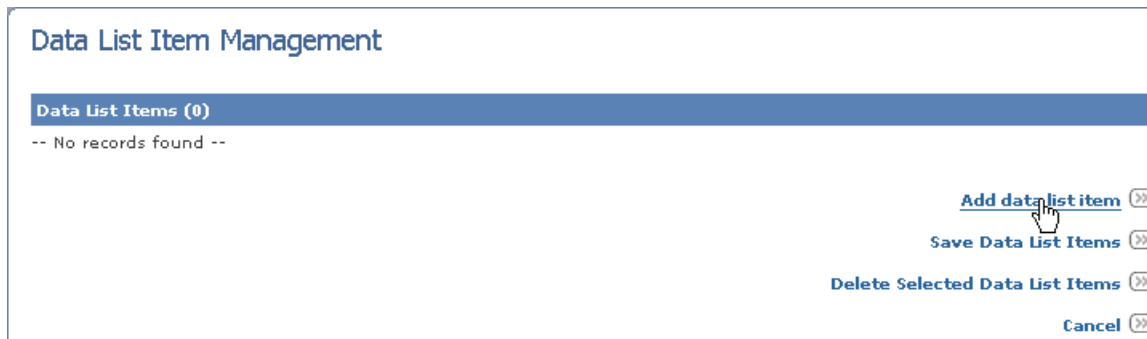
To create list items for a static data list:

- 1 Select **Manage Data List Items** on the Data List Item Management page



The Management Console displays the Data List Item Management page

- 2 Select **Add Data List Item**



The Management Console displays the Data List Item Management page:

Data List Item Management

Data List Items (1)

Sel	Display String	Value	Is Default
1. <input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

[Add data list item](#)

[Save Data List Items](#)

[Delete Selected Data List Items](#)

[Cancel](#)

3 Specify the following properties to define each list item:

Property	Description
Display String	Specify the string to display to end users.
Value	Specify the value of this string; which can be literal, or any primitive type of data.
Is Default	Specify whether this item will be pre-selected by default.

Note: You can use the **Sel** field to select items for other operations, such as Delete, and the Up and Down controls to change the order of list items.

Creating Channel Data Lists

You can create dynamic data lists based on channel attributes. Dynamic data lists provide the means to link data from one channel to another channel.

For example, you may have a channel that contains employee demographic data, which includes postal zip code information for each employee. You can create a dynamic data list of the zip codes in which employees live by referencing the zip code attribute of the employee data channel. The dynamic list will automatically update with additional zip codes (attribute values) as more employee data is added to the channel.

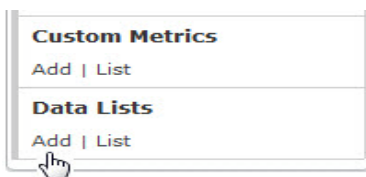
You can define channel lists to display as checkbox lists, radio button lists, and multi- and single-select list boxes within content channels and data forms.

To create a channel data list:

- 1 Select **Repository** from the navigation area



- 2 Select the **Add** option under Data Lists:



The Management Console displays the Data List Properties page.

Data List Properties

Data List name*

Reference Key*

Data List Type*

[Save Data List Properties >>](#)
[Cancel >>](#)

- 3 Specify the following parameters:

Parameter	Description
Data List name	Specify a name for the data list.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See "A Note On Reference Keys" on page 52 for more information on reference keys.

Data List Type	Select Channel from the drop-down list. The Management Console displays the Content Channel, Display Source, Value Source, Sort Source, and Default Values Source fields.
Content Channel	Select the channel that contains the attribute you want to reference.
Display Source	Select the display value of the desired attribute from the list of attributes defined for the selected channel.
Value Source	Select the associated code for the selected display value from the list of attributes defined for the selected channel.
Sort Source	Select the attribute that you want to sort by from the list of attributes defined for the selected channel.
Default values source	Specify the attribute value to use as the default value for the list. For example, specify <pre>//ADDRESS/ST=CA</pre> to specify that CA will be pre-selected as the default value.

Defining Custom User Information Properties

You can define custom properties to record additional user information for your application, such as contact information, department, picture, or other personal information to be included in the user profile. The custom properties will display on the user properties pages when you define Management Console and web users as described in [Chapter 6, Managing Users](#). You can then use the supplied JSP tags to access custom user properties for use in your application's page templates.

Custom user properties also extend to any defined repository views; each view inherits the extended properties of the base repository.

Note: You can also define custom properties to capture additional repository information, such as meta-tags, keywords, headers, footers, or copyright notices for use throughout your application as described in “Defining Custom Repository Properties” on page 54.

Custom User Property Nodes and Attributes

You define custom user properties by specifying nodes and attributes. An attribute is an individual item, such as an email address. A node is a heading for one or more attributes. (In database terms, attributes are columns in a database table, whereas nodes are 1-M related tables.)

Nodes provide a convenient method of grouping together attributes that have:

- Multiple instances of an attribute; a user may have multiple email addresses
- A common characteristic; a phone number node might group together attribute fields to store business, home, and mobile phone numbers

For example, you could create standalone attributes to store:

- An email address
- A phone number

for each user.

However, you may find that you need to store multiple email addresses and phone numbers. You could then create:

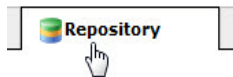
- An email address node containing a repeatable email address attribute
- A phone number node containing:
 - A business phone number attribute
 - A mobile phone number attribute
 - A home phone number attribute

See “Example Custom User Properties Schema” on page 74 for an example of schema that captures this information.

Defining Custom User Properties

To define custom user properties:

- 1 Log onto your application repository, or the System repository, and select **Repository** from the tool bar:



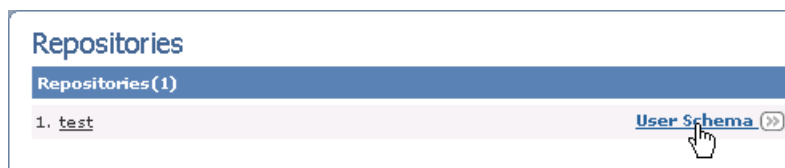
The Management Console displays the Repository Management page.

- 2 Select the **Manage** option for the application repository, or the **List** option for the SYSTEM repository:

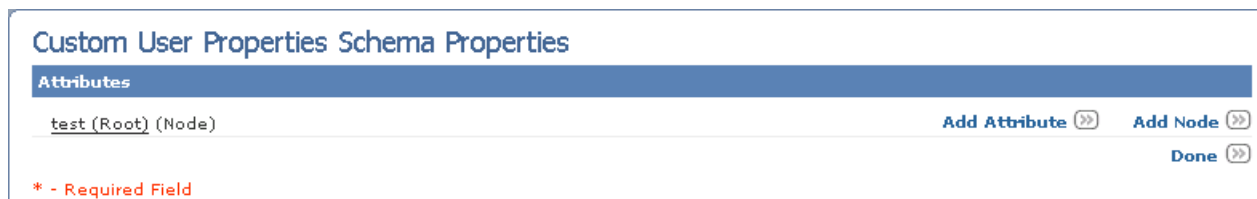


In the application repository, the Management Console displays the Repository Preview page.

- 3 Select the **User Schema** item from the Properties area:
In the SYSTEM repository, the Management Console lists the available repositories.
- 4 Select the **User Schema** item for the repository to which you want to add a custom property:



The Management Console displays the Custom User Properties Schema Properties page:



- 5 Select **Add Node** to specify user property nodes as described in “Specifying Custom User Property Nodes” on page 71, or select **Add Attribute** to specify user property attributes as described in “Specifying Custom User Property Attributes” on page 72.

Specifying Custom User Property Nodes

User property nodes are headings for groups of attributes (or a single attribute). User property nodes provide a convenient method of creating a collection of attributes that have some common characteristic, or multiple instances of a single attribute.

To specify custom user property nodes:

- 1 Select **Add Node** from the Custom User Properties Schema Properties page:



The Management Console displays the Custom User Properties Node Properties page:

- 2 Specify the following node properties:

Property	Description
Node Name	Specify the name for the node, which will display on the console or web user properties definition pages described in “Specifying Management Console User Properties” on page 125 and “Specifying Web User Properties” on page 129.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.
Description	Specify an optional description for the node, which will display on the console or web user properties definition pages described in “Specifying Management Console User Properties” on page 125 and “Specifying Web User Properties” on page 129.
Allow multiple copies of this node	Specify whether to allow multiple copies of this node within a single user definition. For example, you could allow multiple copies of a Certification node to record multiple certifications as appropriate for each support agent that you add as a user.

Specifying Custom User Property Attributes

To specify custom user attributes:

- 1 Select **Add Attribute** from the Custom User Properties Schema Properties page:


The Management Console displays the Custom User Properties Attribute Properties page:

- 2 Specify the following attribute properties:

Property	Description
Attribute Name	Specify the name for the attribute, which will display on the console or and web user properties definition pages described in “Specifying Management Console User Properties” on page 125 and “Specifying Web User Properties” on page 129.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.
Description	Specify an optional description for the attribute, which will display on the console or and web user properties definition pages described in “Specifying Management Console User Properties” on page 125 and “Specifying Web User Properties” on page 129.
Attribute Type	Select an attribute type from the drop-down menu, as described in “Specifying Attribute Types” on page 73.
Make attribute a required field	Specify that this attribute will be required for repository user definitions. Administrators will be required to specify a value for this attribute for each user.

Specifying Attribute Types

You can specify the following types of attributes for custom repository, custom user, and content channel document properties. The Management Console uses the attribute name and description to label the resulting attribute field:

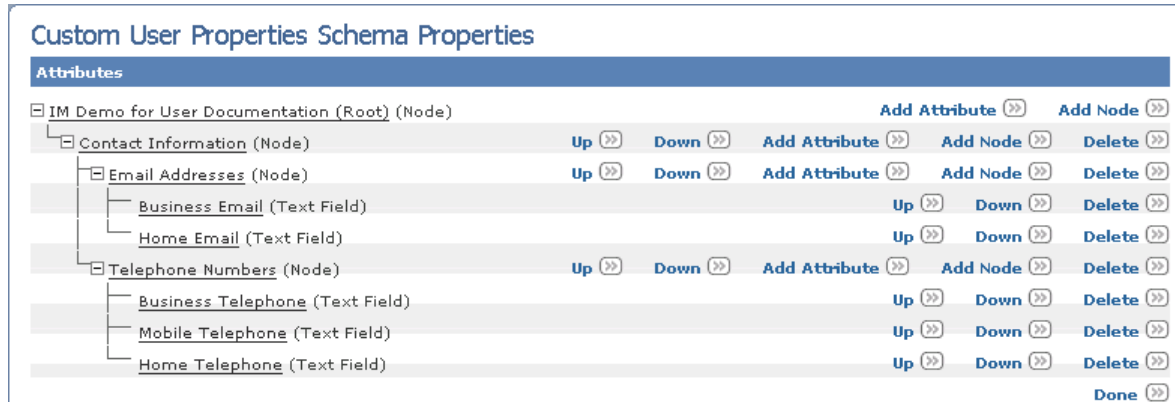
Attribute Type	Description
Check Box	Use this type to add a checkbox. For example, you could create a Subject Matter Expert node with checkbox attributes for each subject matter area, and select those that are relevant when you define a new user.
Counter	Use this type to increment a value for each instance of the attribute that you define, based on a specified prefix and start number. This is most commonly used for user and channel schema. For example, you could define a user attribute to assign an incremental value to each defined user based on the prefix IQ and the starting number 1000. As users are defined, the application will automatically increment and assign the values IQ1001, IQ1002, and so on.
Date	Use this type to add a date field and calendar selector.
DateTime	Use this type to add a combined date and time field.
File	Use this type to add a file input field and a file browser that you can use to locate files. When you select the File option, the Management Console displays the Secure Resource field, as described in “Securing Documents that are Attached to Content Records” on page 58: 
Float	Use this type to add an input field to accept floating point values of a specified number of places.
Integer	Use this type to add an input field to accept integer values of a specified number of places.
List	Use this type to add one of the following types of data lists: <ul style="list-style-type: none"> • check box • drop-down • multiselect browser • radio button <p>Note: You must specify an existing data list. See “Defining Data Lists” on page 64 for more information.</p>
Rich Text Area	Use this type to add a text input field of a specified height having either basic, medium, or full sets of text editing functionality as described in “Working with Rich Text Area Fields” on page 75.
Text Area	Use this type to add a file input field with a browse function to locate files.
Text Field	Use this type to add a text input field having a specified number of characters.

Time	Use this type to add date and time fields labeled with the attribute name and optional description.
-------------	---

Example Custom User Properties Schema

The following examples display a schema of email address and telephone number nodes and attributes organized under a high-level Contact Information node.

The Custom User Properties Schema Properties page displays the node and attribute items that define the schema:



You can add, modify, and delete schema properties using the functions of the Custom User Properties Schema Properties page. The following Custom User Properties Attribute Properties page shows the properties of the Business Email attribute:

The screenshot shows the 'Custom User Properties Attribute Properties' page for the 'Business Email' attribute. It includes the following fields and options:

- Attribute Name ***: Business Email
- Reference Key**: //IM_DEMO_FOR_USER_DOCUMENTATION/CONTACT_INFORMATION/EMAIL_ADDRESSES/BUSINESS_EMAIL
- Description**: attribute to capture users' business email address
- Select Attribute Type***: Text Field
- Width**: 60
- Select Attribute Options**:
 - Make attribute a required field
- Save Attribute Properties** and **Cancel** buttons.
- * Required field** legend.

The custom schema nodes and attributes that you define display as input fields on the Management Console User Properties page when you define users for your application.

The following excerpt from the Management Console User Properties page displays the input fields defined by the attributes and nodes shown above:

[-] **Contact Information** (high level node to capture users' email and telephone info)

- [-] **Email Addresses** (sub-node to capture users' email addresses)
 - Business Email** (attribute to capture users' business email address)
 - Home Email** (attribute to capture users' home email address)
- [-] **Telephone Numbers** (sub-node to capture users' telephone numbers)
 - Business Telephone** (attribute to capture users' business phone number)
 - Mobile Telephone** (attribute to capture users' mobile telephone number)
 - Home Telephone** (attribute to capture users' home telephone number)

Working with Rich Text Area Fields

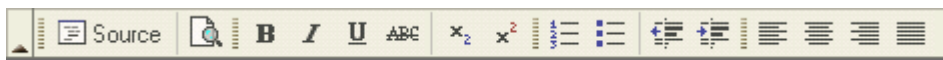
You can specify input fields that accept rich text. The rich text editor provides content authors or editors with the ability to format text as they input. Information Manager preserves the text formatting when the content is displayed to end users.

You define a rich text area by specifying:

- The text editing feature set (basic, medium, or full)
- The height of the input field:

Basic Rich Text Editing Features

The following text editing features are included in the Basic Rich Text Editor feature set:



Feature	Description
Source	Toggles the field between source (for example, html tags) and rendered (wysiwyg) display
Preview	Displays the field contents in a separate browser window

Character Effects	Applies an effect to the selected characters: <ul style="list-style-type: none">• Bold• Italic• Underline• Strike Through• Subscript• Superscript
List	Adds or applies a numbered or bulleted list
Indent	Increases or decreases the level of indent
Justify	Justifies selected text to: <ul style="list-style-type: none">• left margin• right margin• center (ragged edges at margin)• block (straight edges at margin)

Medium Rich Text Editor Features

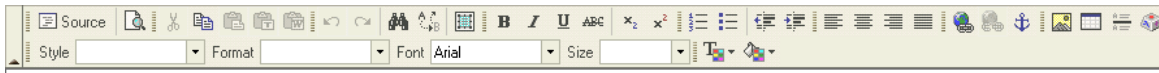
The following text editing features are included in the Medium Rich Text Editor feature set:



Feature	Description
Source	Toggles the field between source (for example, html tags) and rendered (wysiwyg) display
Preview	Displays the field contents in a separate browser window
Cut	Removes selected text and enables pasting
Copy	Retains selected text and enables pasting
Paste	Places cut or copied text at the current cursor position. You can paste as plain text or retain formatting from a Word document.
Find	Finds text within the field
Find and Replace	Finds and replaces text within the field
Select All	Selects all contents of the field for an edit action
Character Effects	Applies an effect to the selected characters: <ul style="list-style-type: none"> • Bold • Italic • Underline • Strike Through • Subscript • Superscript
List	Adds or applies a numbered or bulleted list
Indent	Increases or decreases the level of indent
Justify	Justifies selected text to: <ul style="list-style-type: none"> • left margin • right margin • center (ragged edges at margin) • block (straight edges at margin)
Link	Insert or remove a hypertext link
Anchor	Insert or edit an anchor
Image	Insert or edit an image
Table	Insert or edit a table
Horizontal Line	Insert a horizontal line
Text Color	Change the color of selected text
Fill Color	Change the background color of a selected region

Full Rich Text Editing Features

The following text editing features are included in the Full Rich Text Editor feature set:



Feature	Description
Source	Toggles the field between source (for example, html tags) and rendered (wysiwyg) display
Preview	Displays the field contents in a separate browser window
Cut	Removes selected text and enables pasting
Copy	Retains selected text and enables pasting
Paste	Places cut or copied text at the current cursor position. You can paste as plain text or retain formatting from a Word document.
Undo	Removes the most recent edit and restores the contents to their previous state
Redo	Re-applies the most recent edit after an Undo action
Find	Finds text within the field
Find and Replace	Finds and replaces text within the field
Select All	Selects all contents of the field for an edit action
Character Effects	Applies an effect to the selected characters: <ul style="list-style-type: none"> • Bold • Italic • Underline • Strike Through • Subscript • Superscript
List	Adds or applies a numbered or bulleted list
Indent	Increases or decreases the level of indent
Justify	Justifies selected text to: <ul style="list-style-type: none"> • left margin • right margin • center (ragged edges at margin) • block (straight edges at margin)
Link	Insert or remove a hypertext link
Anchor	Insert or edit an anchor
Image	Insert or edit an image
Table	Insert or edit a table
Horizontal Line	Insert a horizontal line
Special Characters	Insert special characters
Style	Apply styles to selected text
Format	Apply formatting to selected text

Font	Change the font of selected text
Size	Change the size of selected text
Text Color	Change the color of selected text
Fill Color	Change the background color of a selected region

Working with Content Channels

Content channels correspond to the various types of content (document types) that you need to support within your organization. A channel definition serves as a template for a particular type of document. You can define content channels for any number of document types (including digital media) having different requirements for:

- Content attributes (document structure), such as titles, customer and case IDs, and product categories
- Workflow processes to enforce a managed sequence of authoring, editing, and approval steps
- Publishing lifecycle, such as revision tracking, review, and publish dates
- Display features, such as layout and color schemes

Before you define content channels, you should determine the content attributes (structure), publishing process (workflow and lifecycle), and appearance (presentation) requirements for the types of documents you will use in the application. Once you have identified your content requirements, you can then:

- Define content channels for each type of content that you will support
- Add content to the application using the defined channels, as described in [xref to Working with Information Manager Content](#)

Channel Definition Overview

You define content channels in the Repository section of the Management Console. You create a channel by specifying:

- General properties as described in “Specifying General Channel Properties” on page 82
- The workflow process required for content in this channel as described in “Specifying Workflow Options for a Channel” on page 84
- The types of feedback that users will be able to provide as described in “Specifying Feedback Options for a Channel” on page 86
- The content categories that documents can be assigned to as described in “Specifying Content Categories for a Channel” on page 86
- Which user groups will have access to the document as described in “Specifying User Group Options for a Channel” on page 87
- Which privileges users of each security role will possess as described in “Specifying Security Roles and Privileges for a Channel” on page 88

When the basic definition is complete, you can define:

- The fields within the content template, such as title and text areas, for the document type as described in “Specifying a Channel Schema” on page 88
- An optional URL to preview documents belonging to this channel

Note: You can modify channel definitions after content has been added; see “Modifying Existing Document Types” on page 81 for more information.

Modifying Existing Document Types

You can modify channel definitions after content has been added, if necessary, without affecting the content assigned to the channel; however, it is usually more efficient to analyze your content requirements and define the channel properties as thoroughly as possible.

If you add a field to a channel, existing records in the channel will then contain an empty field. You can edit existing records to add content to a new field.

If you remove a field from a channel, existing records in the channel will still contain the field and data; however, users will not be able to modify data within deleted fields. New records added after the change will not contain the deleted field.

Note: If you need to modify data associated with a deleted field, you must add the attribute to the channel definition again using the original reference key.

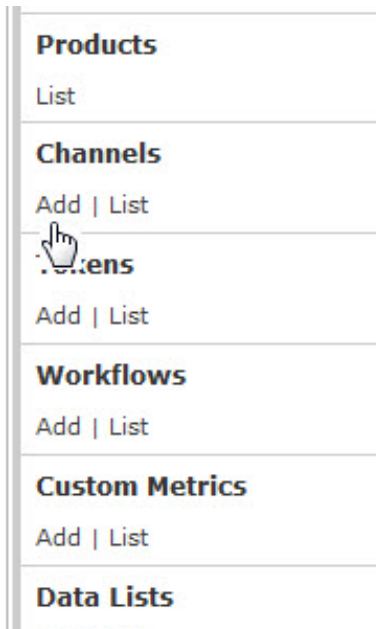
Defining Content Channels

To define a content channel:

- 1 Select **Repository** from the navigation area:



- 2 Select the **Add** option under Repository Channels:



The Management Console displays the Repository Channel Properties page.

Repository Channel Properties

General Properties

Channel Name*

Reference Key*

Default Lifespan (days)

Review Date (days)

Maximum Number of Versions to Maintain

Document ID Prefix*

Document ID Current Value

- 3 Specify general channel properties as described in “Specifying General Channel Properties” on page 82
- 4 Specify fields, such as title and content areas, to define the structure of the documents for the channel, as described in “Specifying a Channel Schema” on page 88
- 5 Specify optional meta-data fields to record internal, life cycle-independent information about the content as described in “Specifying Content Meta Data” on page 96
- 6 Specify additional collaboration, content category and security properties as described in:
 - “Specifying Workflow Options for a Channel” on page 84
 - “Specifying Feedback Options for a Channel” on page 86
 - “Specifying Content Categories for a Channel” on page 86
 - “Specifying User Group Options for a Channel” on page 87
 - “Specifying Security Roles and Privileges for a Channel” on page 88

Specifying General Channel Properties

The Repository Channel Properties page contains properties that you use to define basic properties and behavior, such as the name of the document type, and whether documents in the channel will be removed from publication at a specified time.

- Specify the following general channel properties:

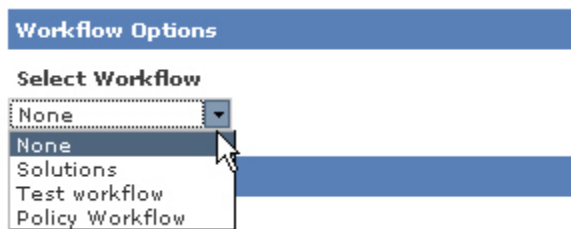
Property	Description
Channel Name	Specify the name of the content channel, for example, News or FAQ.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.
Default Lifespan (days)	Specify an optional default number of days from the initial publishing date that new content records will remain available on the target web site. Content creators and editors can override this value for individual content records. Leave empty to specify that records will not be automatically removed from publishing.
Review Date (days)	Specify the number of days after creation that the system will create a content review task. You must configure a Content Review scheduled job to create the content review tasks and notification as described in “Identifying Content to be Reviewed” on page 249. Leave empty to specify that documents will not be automatically scheduled for review.
Maximum Number of Versions to Maintain	Specify the maximum number of versions of content records that the Information Manager will maintain. The Information Manager records all changes to each content record, and maintains all versions by default. You can limit the number of versions to maintain in order to conserve disk space. Enter the number of versions to maintain, or leave blank to maintain all versions.
Document ID prefix	Specify an optional prefix for the ID number that the Information Manager automatically assigns to each content record. The document ID prefix helps identify documents belonging to a specific channel.
Document ID Current Value	Specify a starting value for the incremental ID number that the Information Manager automatically assigns to each content record. For example, specify 1000 to begin the document ID numbering sequence for the channel at 1001.
Remove minor versions after publishing	Specify whether the Information Manager will remove minor revisions of content records, which are created to track individual workflow steps, when the record is published.
Provide event start and end date attributes	Specify whether content records in this channel will contain start and end date fields. This is useful for creating automatically updated event calendars.
Enable Priority/Order	Specify whether content records in this channel can be assigned a numeric value to help influence the position of content records within lists that IM generates.
Enable related content	Enable additional content association features during the editing process.
Enable Check Out/In	Enable a check-out and check-in process for content records in this channel. When check in/out is enabled, multiple users can edit records without creating conflicts.
Enable user activity logging	Enable logging of end-user access information.
Enable Content Recommendations	Enable content recommendations for this channel. Content recommendations are special content items that end users can create to enter request for specific content. See “Creating and Managing Content Recommendations” on page 177 for more information.

Property (Continued)	Description (Continued)
Enable HTML Validation	Specify this option to allow the channel designer to turn off the HTML validation (Tidy) that is performed prior to saving the content record. Important: Leave this enabled if possible or the generated XML data may be corrupted. This can easily happen if, for example, a user cuts and pastes from another application that allows characters or other objects not allowed in HTML.
Custom Content Entry Fields Section Name	Specify an optional heading for the section of the Content and Content Preview pages that display the document structure fields defined in the channel schema. You can also use the adjacent checkbox to omit the section heading from display. See “Specifying a Channel Schema” on page 88 for more information on content channel schema.
Custom Meta Data Entry Fields Section Name	Specify an optional heading for the section of the Content and Content Preview pages that display the content meta data fields defined in the channel schema. You can also use the adjacent checkbox to omit the section heading from display. See “Specifying Content Meta Data” on page 96 for more information on content meta data schema.
Select locales for automatic translation requests	Specify the locales for the channel to be sent out for translation for any new master documents that are created. In the event of an edit to a master document, the previous author of a translation can be notified (based on settings in the repository properties).

Specifying Workflow Options for a Channel

The Repository Channel Properties page contains properties to specify a workflow process to be used for a channel. You must first define the workflow process as described in [Chapter 7, Creating and Managing Workflows](#).

- 1 Select the desired workflow (the options shown are examples)



2 Specify the following workflow options:

Workflow Options

Select Workflow

Publish

- Categories requires workflow approval if workflow is enabled
- Views requires workflow approval if workflow is enabled
- User Groups requires workflow approval if workflow is enabled
- Display dates requires workflow approval if workflow is enabled
- Event dates requires workflow approval if workflow is enabled
- Geospatial requires workflow approval if workflow is enabled
- Restrict content editing to users that can perform the workflow step

Property	Description
<Item> requires workflow approval if workflow is enabled	<p>Specify whether editing the selected attribute within a content record is subject to workflow permissions and version incrementing, or whether such changes can occur without requiring progression through the workflow.</p> <p>For example, changing an initial display date might be an important decision that requires oversight and approval for some channels and relatively unimportant for others.</p>

Specifying Feedback Options for a Channel

The Repository Channel Properties page contains collaboration properties that define the use of ratings forms and discussion boards within the channel. You must have defined the rating form as described in [Chapter 8, Working with Feedback and Collaboration](#)

Feedback Options

Ratings

-- No Rating --

Enable Threaded Discussions

Moderate Discussions

- Specify the following collaboration properties:

Property	Description
Ratings	Select a defined rating form to include in channel documents. The rating form shown above is an example.
Enable Threaded Discussions	Enable threaded discussion forums in the channel.
Moderate Discussions	Enable moderated discussions in the channel.

Specifying Content Categories for a Channel

The Repository Channel Properties page contains category properties that associate one or more content categories with a content channel. See [Chapter 5, Working with Content Categories](#) for more information.

Category Options

Top Level

Available Categories

+ Products Add

+ Topic Add

Selected Categories

-- No records selected at this time --

Require authors to select at least one category in addition to the categories marked as "required"

- Select one or more content categories or sub-categories.

Note: If there are more than 100 categories, you will see a search box you can use to locate a subset of the categories.

The categories shown above are examples. Categories that contain sub-categories display as links preceded by a plus sign (+). Select the **Add** option to add the category and all sub-categories. Select the category to display the sub-categories, which can then be selected individually. Information Manager will associate content records in this channel with the selected categories.

- Specify that content creators will be required to associate content records with at least one category using the **Require authors to select at least one category in addition to the categories marked as "required"** option

Specifying User Group Options for a Channel

The Repository Channel Properties page enables you to associate one or more user groups with a content channel. See “Defining User Groups” on page 123 for more information.

The screenshot shows the 'User Group Options' interface. At the top, there is a blue header with the text 'User Group Options'. Below the header, the text 'Top Level' is displayed. The interface is divided into two main sections: 'Available User Groups' on the left and 'Selected User Groups' on the right. In the 'Available User Groups' section, a list contains three items: 'Customer', 'Internal', and 'Partner'. In the 'Selected User Groups' section, the same three items are listed. Between the two sections, there are two buttons: 'Add' with a right-pointing arrow and 'Remove' with a left-pointing arrow. Below the 'Available User Groups' list, the text 'Matches 3/3' is displayed.

- Select any appropriate user groups. Content created in this channel can only be made available to the selected user groups.

Note: If there are more than 100 user groups, you will see a search box you can use to locate a subset of the user groups.

- Specify that content creators can associate content records with on group only using the **Restrict User Group selection to one group only** option.
- Specify that content creators will be required to associate content records with at least one user group using the **Require at least one user group to be selected** option.

Specifying Security Roles and Privileges for a Channel

The Repository Channel Properties page contains security properties that associate one or more defined user roles and privileges with a content channel. See [Chapter 6, Managing Users](#) for more information.

Security Role Privileges

Author

- Batch Category Update
- Batch View Update
- Manage Content Review Tasks
- Import
- Manage Rating Analysis Tasks
- Master Publish
- Translate
- Delete
- Modify
- View
- Delete History

Default Administration Role

- Batch Category Update
- Batch View Update
- Manage Content Review Tasks
- Import
- Manage Rating Analysis Tasks
- Master Publish
- Translate
- Delete
- Modify
- View
- Delete History

Default User Role

- Batch Category Update
- Batch View Update
- Manage Content Review Tasks
- Import
- Manage Rating Analysis Tasks
- Master Publish
- Translate
- Delete
- Modify
- View
- Delete History

- Specify the appropriate security roles and privileges for the channel

Specifying a Channel Schema

You define the structure of the documents within a channel by defining and applying content channel schema. You can specify whether the various content fields that you define are required or optional for content authors.

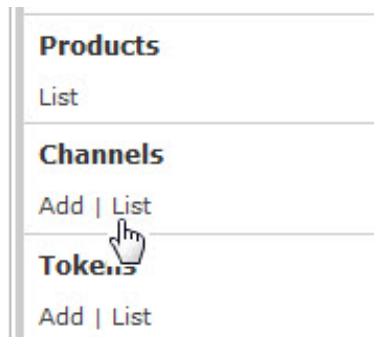
Note: You can also define content metadata fields to store information about the content record that is independent of its subject matter as described in “Specifying Content Meta Data” on page 96.

To specify the channel schema:

- 1 Select **Repository** from the navigation area



- 2 Select the **List** option under Repository Channels



The Management Console displays the Repository page.

- 3 Select the **Schema** option for the desired channel

Repository Channels

Repository Channels (4)

	Channel		
1.	Alerts	Schema >>	Preview >>
2.	FAQs	Schema >>	Preview >>
3.	News	Schema >>	Preview >>
4.	Solutions	Schema >>	Preview >>

The Management Console displays the <channel> Schema Properties page.

Channel Schema Nodes and Attributes

You define the content structure of your documents by specifying nodes and attributes. The nodes and attributes define the content fields within the document template for the channel.

An attribute is an individual item, such as a document title. A node is a heading for one or more attributes, such as author's name, user ID, and department. (In database terms, attributes are columns in a database table, whereas nodes are 1-M related tables.)

Nodes provide a convenient method of grouping together attributes that have some common characteristic. For example, a Contributors node might group together attribute fields to store information about various authors and editors who contributed to an article. Each node might contain attributes for the name, user ID,

and department of a contributor. You can allow multiple copies of a node to store information about multiple contributors to documents.

Important! You can define a complex hierarchy of nodes and attributes to reflect virtually any type of data structure; however, we recommend using simple data schema to make it easier for content providers to manage information.

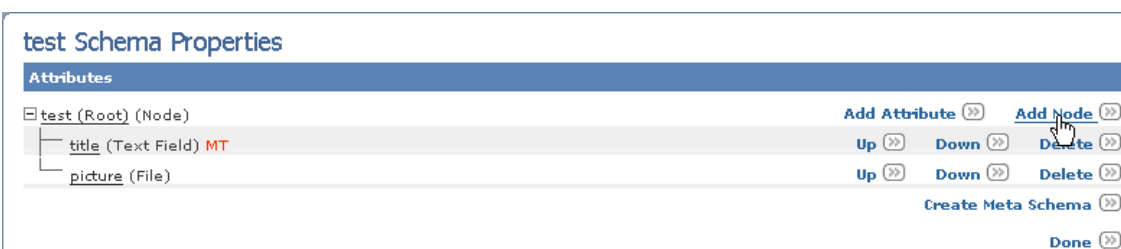
Specify channel schema nodes as described in “Specifying Channel Schema Nodes” on page 90.

Specify channel schema attributes as described in “Specifying Channel Schema Attributes” on page 91.

Specifying Channel Schema Nodes

To define a channel schema node:

- 1 Select the **Add Node** option on the <Channel> Schema Properties page



The <Channel> Node Properties page displays:

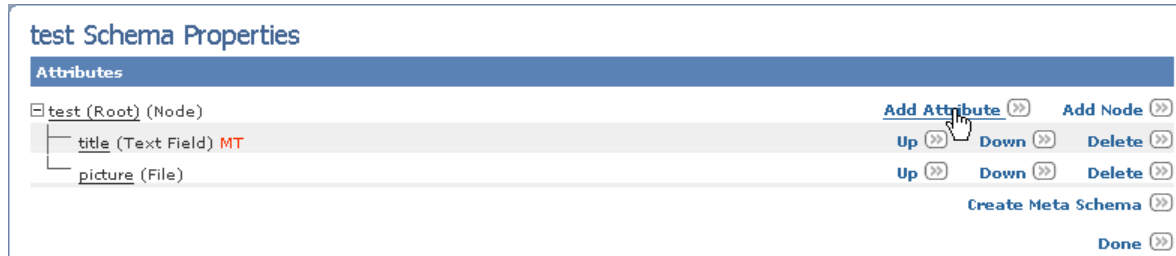
- 2 Specify the following properties:

Property	Description
Node Name	Specify a name for the node.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.
Description	Specify a description, which will display as a label on the Channel Properties page.
Allow multiple copies of this node	Specify to allow this node to be added multiple times within a single record. For example, you could define a node that allows multiple contributors to a single news article.

Specifying Channel Schema Attributes

To define a channel schema attribute:

- 1 Select the **Add Attribute** option on the <Channel> Schema Properties page.



The <Channel> Attribute Properties page displays:


- 2 Specify the following properties:

Property	Description
Attribute Name	Specify a name for the attribute.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.
Description	Specify a description, which will display as a label for the field when displayed on the Channel Properties page.

Attribute Type	Specify the type of field for this attribute as described in Specifying the Schema Attribute Type.
Security Regex	Specify a regular expressions (regex) pattern for the selected attribute type. This is applicable only for the following attribute types: <ul style="list-style-type: none"> • Text Field • Text Area • Rich Text Area
Attribute Options	Specify additional attributes as described in “Specifying Schema Attribute Options” on page 94.

SPECIFYING ATTRIBUTE TYPES

You can specify the following types of attributes for custom repository, custom user, and content channel document properties. The Management Console uses the attribute name and description to label the resulting attribute field:

Attribute Type	Description
Check Box	Use this type to add a check box. For example, you could create a Subject Matter Expert node with check box attributes for each subject matter area, and select those that are relevant when you define a new user.
Counter	Use this type to increment a value for each instance of the attribute that you define, based on a specified prefix and start number. This is most commonly used for user and channel schema. For example, you could define a user attribute to assign an incremental value to each defined user based on the prefix IQ and the starting number 1000. As users are defined, the application will automatically increment and assign the values IQ1001, IQ1002, and so on.
Date	Use this type to add a date field and calendar selector.
DateTime	Use this type to add a combined date and time field.
File	Use this type to add a file input field and a file browser that you can use to locate files. When you select the File option, the Management Console displays the Secure Resource field, as described in “Securing Documents that are Attached to Content Records” on page 58: 
Float	Use this type to add an input field to accept floating point values of a specified number of places.
Integer	Use this type to add an input field to accept integer values of a specified number of places.

List	<p>Use this type to add one of the following types of data lists:</p> <ul style="list-style-type: none"> • Check box • Drop-down • Multiselect browser • Radio button <p>This attribute can be a master identifier.</p> <p>Note: You must specify an existing data list. See “Defining Data Lists” on page 64 for more information.</p>
Rich Text Area	Use this type to add a text input field of a specified height having either basic, medium, or full sets of text editing functionality as described in “Working with Rich Text Area Fields” on page 75.
Text Area	Use this type to add a file input field with a browse function to locate files.
Text Field	Use this type to add a text input field having a specified number of characters. This attribute can be a master identifier.
Time	Use this type to add date and time fields labeled with the attribute name and optional description.

SPECIFYING SECURITY REGEX PATTERNS

Security Regex option specifies the regex pattern for each text field, text area, or rich text area of a Channel attribute. This enables the application to restrict the content that users can add when creating or modifying Information Manager articles.

Security Regex*

```
^[\\p{L}\\p{P}\\p{N}\\p{So}\\p{Sc}]ε
```

- Specify the security regex patterns:

Attribute Type	Description
Rich Text Area	Specify the regex pattern to validate the input data for a rich text area. The default regex pattern is <code>"^[\\p{L}\\p{P}\\p{N}\\p{So}\\p{Sc}]s+%26&=&amp%\\ <>/]+ \$"</code> .
Text Area	Specify the regex pattern to validate the input data for a rich text area. The default regex pattern is <code>"^[\\p{L}\\p{P}\\p{N}\\p{So}\\p{Sc}]s+=]+ \$"</code> .
Text Field	Specify the regex pattern to validate the input data for a rich text area. The default regex pattern is <code>"^[\\p{L}\\p{P}\\p{N}\\p{So}\\p{Sc}]s+=]+ \$"</code> .

Note: The administrator can modify the regex pattern with valid regex pattern characters for each text field, text area, or rich text area of a Channel attribute.

SPECIFYING SCHEMA ATTRIBUTE OPTIONS

Schema attribute options specify information to include in the record title, how the Management Console search facility will search the content fields, and whether fields are required.

Select Attribute Options

- Include in master record identifier
- Enable full text searching
- Enable attribute level searching
- Attribute requires workflow approval if workflow is enabled
- Make attribute a required field
- Restrict attribute to selected user groups

- Specify the following properties:

Property	Description
Include in master record identifier	Specify whether the value of the attribute will be used as an element of the title of a record within the Management Console. Note: Only attributes of type “List” and “Text Field” can be master identifiers.. You must specify at least one master identifier for each channel definition. The master identifier is the attribute that the Information Manager uses as the title of the record for internal reference.
Enable full text searching	Specify whether the contents of the attribute will be searchable by full text. Full-text search matches your search query against the contents of any content record attributes that are available for searching. See “Specifying Search Options for Channel Attributes” on page 95.
Enable attribute level searching	Specify whether the contents of the attribute will be searchable by attribute. Attribute-based search restricts matching to only the specified attribute. See “Specifying Search Options for Channel Attributes” on page 95.
Attribute requires workflow approval if workflow is enabled	Specify whether editing the value of this attribute is subject to workflow permissions and version incrementing when a workflow is assigned to this channel.
Make attribute a required field	Specifies that the attribute will be required for all records in the channel.
Restrict attribute to selected user groups	Specify to display this attribute only to members of selected user groups as described in “Restricting Channel Schema Attributes to Selected User Groups” on page 94.

RESTRICTING CHANNEL SCHEMA ATTRIBUTES TO SELECTED USER GROUPS

You can specify to display the contents of a channel schema attribute only to members of selected user groups by selecting the Restrict attribute to selected user groups option on the <Channel> Attribute Properties page.

For example, you could specify that an attribute will display only to members of the Management user group.

When you integrate Information Manager with an Oracle Knowledge Intelligent Search application, you can enable the same restriction for Information Manager content that is returned within search results.

To restrict a channel schema attribute:

- 1 Select **Restrict attribute to selected user groups** on the <Channel> Attribute Properties page:

Select Attribute Options

Include in master record identifier

Enable full text searching

Enable attribute level searching

Attribute requires workflow approval if workflow is enabled

Make attribute a required field

Restrict attribute to selected user groups

The Management Console displays additional attribute restriction options and options for the defined user groups.

User groups are required for attribute

Enable editors to modify preselected user group restrictions

Restrict this attribute to selected user groups

User Group
Top Level

Available User Groups

Internal Only

Partner

Public

Matches 3/3

Add >>

<< Remove

Selected User Groups

Internal Only Default

- 2 Specify the following restriction options:

Option	Description
User groups are required for attribute	Specify that a user group must be associated with the content record.
Allow editors to change default user groups	Specify that authorized editors can override the default user groups.
Restrict	Specify that the attribute will display only to members of this user group.
Default	Specify that the selected user group will be associated by default.

SPECIFYING SEARCH OPTIONS FOR CHANNEL ATTRIBUTES

You can specify that an attribute will be available for:

- Full text searching
- Attribute-level searching

The Information Manager includes an internal search facility that you can use to search for content in the current repository using the Find option.

Attribute level searching provides enhanced full text searching within specific attributes, for example, find all people where First Name = "Mary".

Note: Not all data is appropriate for full text searching. File names and hyperlinks are examples of attributes that are generally not good candidates.

Specifying Content Meta Data

You can define content metadata fields within a channel definition to store information about the content record that is independent of version or locale. These attributes will not change based on version of the document or the locale associated with the document. This is useful for large attachments that would normally take up lots of disk space if they needed to be copied for every version or locale of a document.

The Management Console maintains content metadata independently of workflow steps and revision numbering, so that editors can modify this information without affecting the content record's version or progress within the publishing cycle.

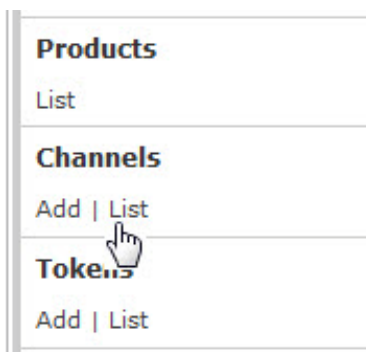
Note: You can also make content category and user groups available as metadata so that editors can change this information independently of the content workflow.

To define content metadata:

- 1 Select **Repository** from the navigation area



- 2 Select the **List** option under Channels



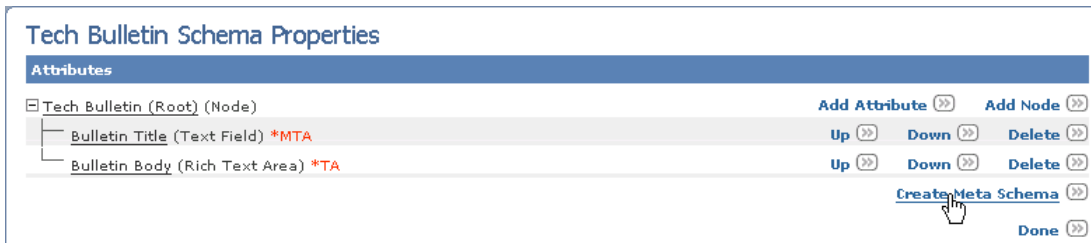
The Management Console displays the Repository page.

- 3 Select the **Schema** option for the desired channel

	Channel	
1.	Release Note	Schema >>
2.	Tech Bulletin	Schema >>
3.	Tech Glossary	Schema >>

The Management Console displays the <channel> Schema Properties page.

- 4 Select the desired channel, then select **Create Meta Schema** on the <Channel> Schema Properties page:



The Management Console displays an empty metadata schema hierarchy:



- 5 Specify nodes and attributes as described in “Specifying a Channel Schema” on page 88.

Associating Content Records with CRM Cases

You can assign an incident or case identifier to a content record so that the content is associated with the incident for future reference. The association enables agents or other staff to enter content into the application and specify the relevant issue. You can assign incidents to content records using the configured web application or the Management Console.

Important! The primary interface for creating and maintaining case links to IM documents is thru the iConnect CRM integration adaptor. Case link data should be managed thru iConnect in most cases. The interface in the IM Management Console is for convenience only and may cause issues in iConnect for display linking.

To link an incident to a content record from the console:

- Select the content record

The Management Console displays the Content Preview page.

- 1 Select the **Feedback** tab
- 2 Select the **Manage Case Links** option:
The External Case Links page displays:
- 3 A list of all cases currently associated with the document

4 Fields to specify an additional case

External Case Links

Enter a case number to assign below

<input type="checkbox"/>	2468	sample CRM case	Unassign >>
--------------------------	------	-----------------	--------------------

Unassign Selected Case:

Add New Case

Case Number

Description

Assign New Case
Done

5 Enter the following case information:

Case Number	The identifier of the case that this document will be associated with
Description	A description of the case, which can be the summary description from the CRM application

The Management Console displays case link information on the Feedback tab of the document information area on the Preview page.

You can remove case assignments by:

- Selecting the **Unassign** option for a case
- Selecting multiple cases, then selecting the **Unassign Selected Cases** option

in the summary table on the External Case Links page

You can delete case links that are no longer associated with content records using the Unused Case Links batch job as described in “Deleting Unused Case Links” on page 253.

Comparing Documents with Previous Versions

You can compare different versions of a document to view:

- Highlighted content changes from a previous version of the document as described in “Highlighting Differences from Previous Versions” on page 99.
- A side-by-side comparison of two versions of a document, as described in “Comparing Documents Side by Side” on page 100.

The Management Console displays comparison information about:

- Document content fields

- Document properties, including:
 - Views
 - Categories
 - User Groups

Highlighting Differences from Previous Versions

You can highlight the differences between a current document and its previous versions using the Compare Versions option of the Info tab on the Content Preview page. The Management Console compares documents by displaying:

- Deleted content as highlighted and strikethrough text, and added content as highlighted text:

I have updated it by adding this ~~paragraph~~ sentence.

To compare the current document with a previous version:

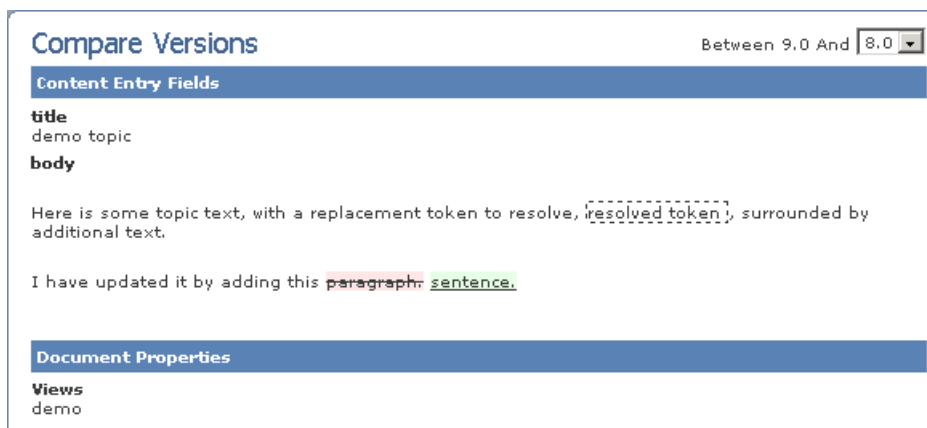
- Select the content record of interest

The Management Console displays the content preview page.

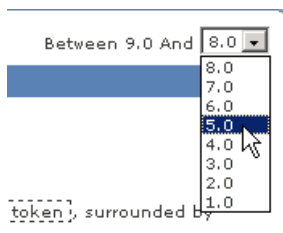
- Select the Info tab in the document information area, then select **Compare Versions**:



The Management Console displays the Compare Versions page, which highlights the differences between the current document and the previous version:



You can select additional versions for comparison using the dropdown list in the upper right portion of the content area:



Comparing Documents Side by Side

You can view a document and its previous versions on the same page using the Side by Side View option of the Info tab on the Content Preview page.

To compare the current document with a previous version:

- Select the content record of interest

The Management Console displays the content preview page.

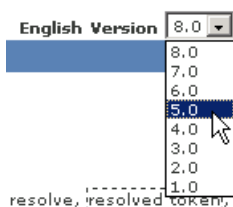
- Select the Info tab in the document information area, then select **Side by Side View**:



The Management Console displays the document contents compared with the previous version:



You can select additional versions for comparison using the dropdown list in the upper right portion of the content area:



Updating Content in Bulk

You can perform administrative operations on multiple documents. For example, authorized users can find all documents having a specific owner and change the owner of those documents in one action.

To perform bulk operations, use the list and filtering functionality to generate a list of documents, then select all or some individual documents from the list. The following operations are available:

- Publish
- Unpublish
- Change Owner
- Request Translation
- Change Start Date
- Change End Date
- Delete

Filtering Display Lists

Oracle Knowledge includes several Information Manager usability enhancements, including personalized lists, work teams, and automated translation requests.

Personalized list filters enable users to filter lists to quickly identify documents that meet common criteria. For example, a user can quickly see all documents they last modified, or their documents at a specified point in a workflow.

Working with Content Categories

Content categories provide the mechanism to organize application content by any characteristic or business requirement, such as product and model, so that related content can be managed and presented in similar fashion.

Note: Content categories differ from content channels. Content channels provide the mechanism to organize your content by document type, such as FAQ or news article. See [Chapter 4, Working with Content Channels](#) for more information.

You can create hierarchies of content categories to reflect the organizational structure of any aspect of your content as described in “Content Category Hierarchies” on page 102.

You use content categories within Information Manager by:

- Enabling content categories for a channel by assigning categories within content channel definitions as described in “Adding a Content Category” on page 103. Content creators will then be able to associate content records with one or more content categories that you have enabled for the channel.
- Identifying users' skill sets by assigning content categories to individual user profiles. You can then specify that content tasks will be available for assignment based on skill, which is when the categories associated with the content match those associated with the user. See “Filtering the Task List” in the *Oracle Knowledge Information Manager Content Authoring Guide* for more information.

Content Category Hierarchies

You can define multiple levels of categories and sub-categories to represent any content structure within your organization. The multiple category levels that you define form a hierarchy, such that higher-level categories include lower level categories, and lower-level categories inherit properties from their parents.

The highest level categories are referred to as branch categories. Each branch category can have a complete tree defined below it. The trees are hierarchical; if you search for content within a specified category, the search will automatically extend to the children of the specified category.

For example, a branch category named Technology might include sub-categories called Hardware and Software. In this scheme, any content in the Hardware category also belongs to the parent category, Technology; a request for Technology content will also return any content assigned to Hardware and Software.

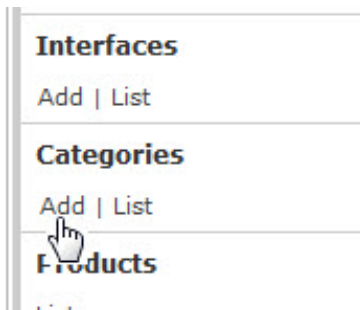
You can add new branch categories at any time; you may find it useful to create a branch category for each functional area of your site.

Adding a Content Category

You create content categories using the Repository Categories option of the Repository Menu.

To add a content category:

- 1 Select the **Add** option under Repository Categories:



The Information Manager console displays the Category Properties screen:

A screenshot of the 'Category Properties' form in the Information Manager console. The form has a title 'Category Properties' and a blue header bar. Below the header, there are three sections: 'Current Location' with a sub-section 'Branches', 'Edit Fields' with a sub-section 'Category Name*', 'Reference Key*', and 'Category Description'. Each section has a corresponding text input field. At the bottom right, there are three buttons: 'Save and Add Another', 'Save Category Properties', and 'Cancel'. A red asterisk indicates a required field.

- 2 Specify the category name
- 3 Specify the reference key (see “A Note On Reference Keys” on page 52 for more information)
- 4 Add an optional description for the category
- 5 Select **Save Category Properties**

Adding a Content Sub-Category

To add a content category as a child of an existing category:

- 1 Select the **List** option under Repository Categories

The Repository Category Branch Management page lists the currently defined categories:

Repository Category Branch Management

Repository Category Branch List (2) Sort By Name Ascending

	Name	Category Description	Actions
1.	<input type="checkbox"/> Products		View Sub Categories >> Add Sub Category >>
2.	<input type="checkbox"/> Topic		View Sub Categories >> Add Sub Category >>

Select All Unselect All

Add Repository Category Branch >>
Delete Selected Repository Category Branches >>

- 2 Select **Add Sub Category** for the desired category

The Category Properties page displays fields to define a category under the current location (selected category). The Categories at Current Level area displays any currently defined sibling categories.

Category Properties

Current Location

Branches

Edit Fields

Category Name*

Reference Key*

Category Description

Save and Add Another >>
Save Category Properties >>
Cancel >>

* Required field

- 3 Specify the category name
- 4 Accept or specify the reference key
- 5 Add an optional description for the category
- 6 Select **Save Category Properties** or **Save and Add Another**, if appropriate

The Repository Category Branch Management page displays the new sub-category:

Repository Category Management

Branches - Products

Categories (9) Sort By Name Ascending

	Category Name	Category Description	Actions
1.	<input type="checkbox"/> Accessories		Add Sub Category (2)
2.	<input type="checkbox"/> Applications		Add Sub Category (2)
3.	<input type="checkbox"/> Computing Hardware		Add Sub Category (2)
4.	<input type="checkbox"/> Equipment		Add Sub Category (2)
5.	<input type="checkbox"/> iPod+iTunes		View Sub Categories (2) Add Sub Category (2)
6.	<input type="checkbox"/> Memory		Add Sub Category (2)
7.	<input type="checkbox"/> Phones		Add Sub Category (2)
8.	<input type="checkbox"/> Servers		Add Sub Category (2)
9.	<input type="checkbox"/> Special Interest Areas		Add Sub Category (2)

Select All Unselect All

Add Category to Current Level (2)
 Delete Selected Categories (2)
 Go To Parent Category (2)
 Done (2)

Note: The navigation path below the page title indicates the position of the category within the hierarchy. You can navigate up the hierarchy by selecting an item in the navigation path.

Using Information Manager Response Channel Schema

Information Manager Intent Response content records are based on content channel schema that you define in the Information Manager repository.

Response Schema are the basis for formatting Responses in the User Interface. Every Response must conform to the requirements of the Response schema, and every Answer Purpose used in the User Interface must be associated with a specific Response schema.

Response Schema specify the layout and content type for the parts of a Response. For example, the schema for a Response that will appear in a Promotions User Interface portlet might contain fields that define:

- A title
- An image
- A link
- Some descriptive text

You can create and configure a Response channel schema that specifies these fields, so that any Response based on the schema will conform to the desired format.

Creating and Modifying Response Schema

You can create and modify Response schema using the same process as you would for any Information Manager content channel schema. See the Chapter , “Working with Content Channels,” on page 80 for more information on creating and modifying content channel schema.

When you have defined the schema, you must then configure it for use by the Intelligent Search application by associating the schema with the desired Answer Purpose as described in “Configuring Answer Purposes” in the *Oracle Knowledge Intelligent Search Application Development Guide*.

Managing Users

You can use the user management facility to define users, security roles, and user groups to control user access to:

- Management Console administration and content functions
- Information Manager content published within web applications

Information Manager users are defined for your application by a set of basic user properties, such as user name, password, and email address, as well as optional properties that you can define for your repository as described in “Defining Custom User Information Properties” on page 69. You can define custom user properties to collect required and optional user profile information for your application.

You can define separate sets of users for the Management Console and for the web applications that Information Manager supports.

Information Manager users are assigned one or more security roles. Security roles are groups of content management and content access privileges that you define for classes of users who have similar access requirements. Security roles specify how these users can access and interact with information objects in the Management Console, and with published content. You can define any number of security roles, and you can assign multiple roles to a single user.

You manage content access for your application by:

- Defining security roles as described in “Managing Security Roles” on page 113
- Defining Management Console users (based on the optional schema defined for your repository) as described in “Defining Management Console Users” on page 124 and optional web users as described in “Defining Web Users” on page 128.
- Assigning security roles to the users that you have defined as described in “Specifying Management Console User Properties” on page 125 and “Specifying Web User Properties” on page 129.

You can also assign users to defined User Groups and Work Teams as described in “Defining User Groups” on page 123 and “Defining Work Teams” on page 135.

User groups restrict access to specified content. For example, you could define a management (MGMT) user group, and designate sensitive content at the content record level so that it can be accessed only by members of the MGMT user group.

Work teams associate designated content with a specified set of Management Console users, enabling you to segregate content management functions without creating a separate repository view.

Important! You cannot delete Information Manager users; however, you can configure user’s security to disable access to Information Manager content and administrative functions.

User Groups, Security Roles and Views

Each Information Manager user can belong to one or more user groups and have one or more security roles.

There are two types of Information Manager users:

- **Web Users** -- Users who can view Information Manager documents in an Information Manager client. Web users are assigned one or more of web roles.
- **Console Users** -- Users who can view Information Manager documents in an Information Manager client; view, create and modify documents in the Information Manager repository; participate in workflows, and configure the Information Manager environment. Console users are assigned one or more console roles and views.

Each user is assigned one or more security roles. To understand how security roles impact access to the documents on the Information Manager client, you must first understand that user groups control what documents can be viewed by either a web or console user from the Information Manager client. When an Information Manager document is created, it is assigned to one or more user groups to control which groups of users can view the document in an Information Manager client. See “About Web Roles” on page 108 for examples.

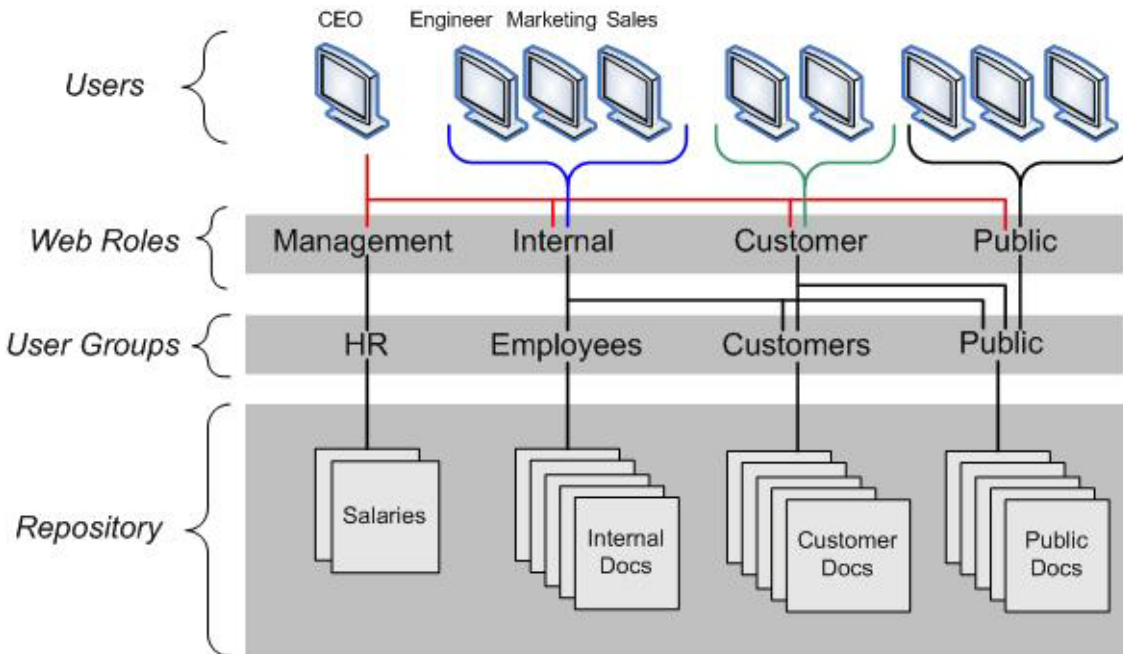
There are two types of Information Manager security roles:

- **Web Roles** -- These are containers for one or more user groups. A web user is assigned one or more web roles to control the content that can be viewed by that user through the Information Manager client.
- **Console Roles** -- Assigns document access through the Information Manager client for console users in the same manner a web role assigns document access for web users. A console role also assigns permissions to a console user for viewing, creating and modifying content in the Information Manager repository; participating in workflows, and configuring the Information Manager environment.

Each channel in the repository lists which user groups can view the content in that channel from an Information Manager client. Additionally, the channel specifies security role privileges that define what permissions (view, modify, publish, etc.) are given to which console and web roles.

About Web Roles

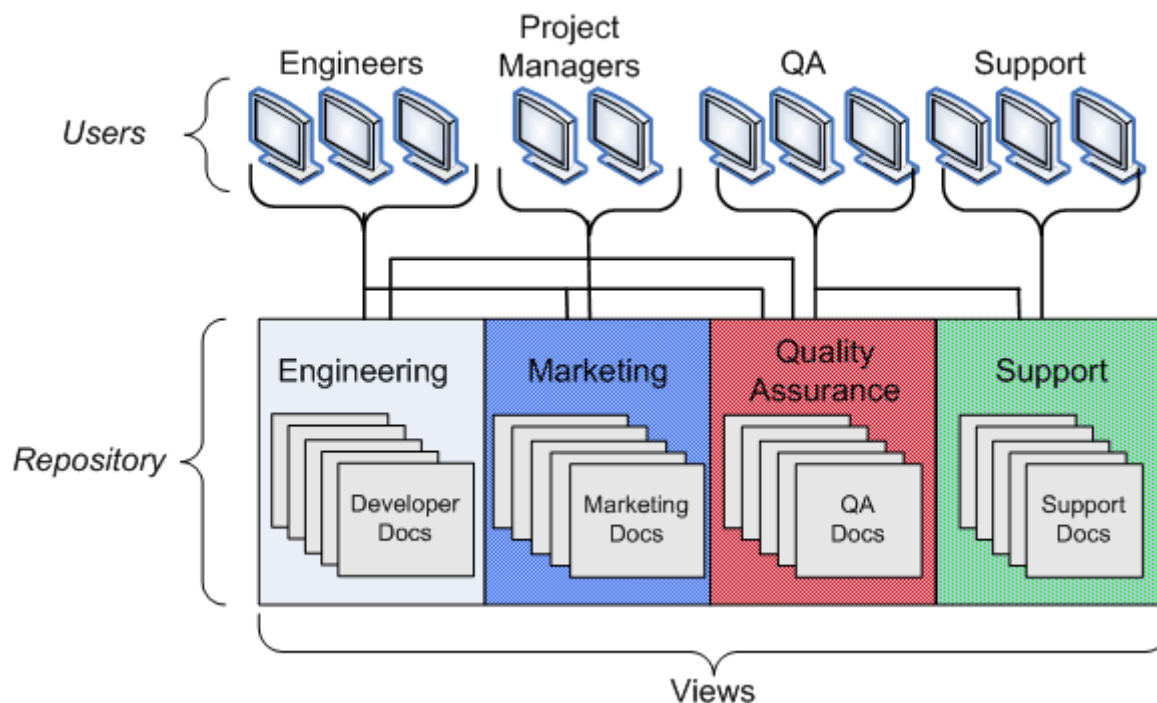
The diagram below illustrates how user groups and web roles control which users can view which documents from an Information Manager client. In this example, the Information Manager repository contains documents that are made available to employees, customers, and the general public. Employees can access all of the documents; customer access is restricted to the customer and public documents, and public access is restricted to public documents. Note that the majority of users are assigned a single web role, but you can also assign multiple web roles to a user, as shown for the CEO.



About Views

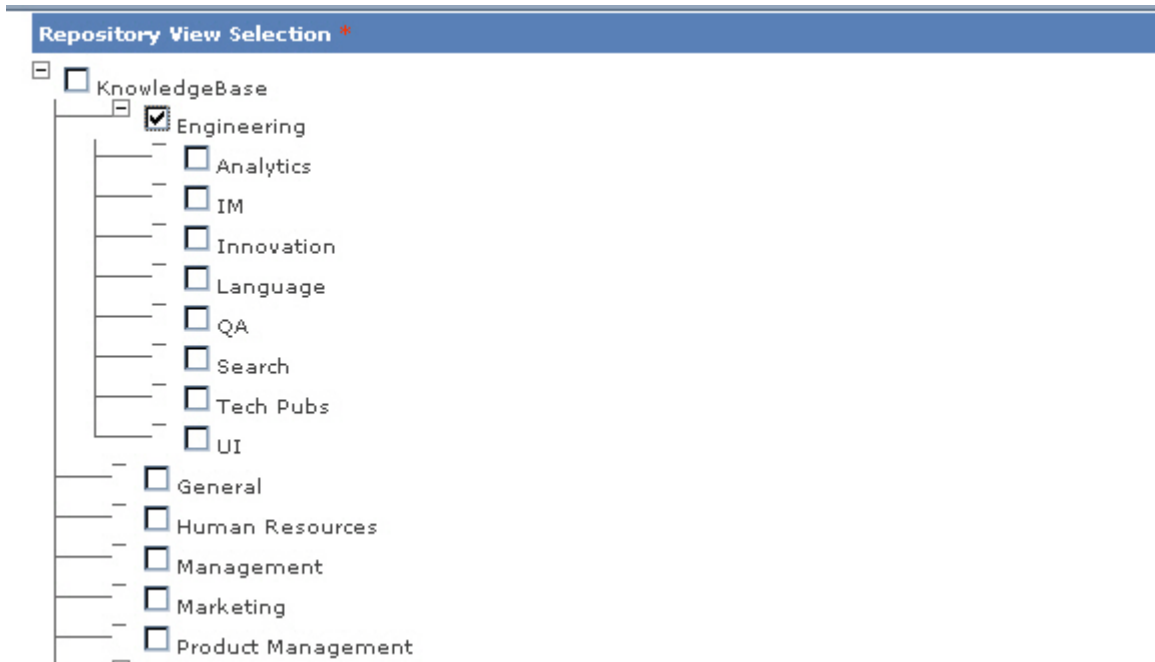
Views control the *types* of documents a console user can view, create, and modify in the Information Manager console. (Note that views control console user access to documents on the console and do not impact the console user's view of documents on the Information Manager client). Views also control the documents that can be assigned to a console user in a workflow and which user groups the console user can select when creating a content record.

The diagram below illustrates how views control which users can view which documents on an Information Manager console. In this example, the Information Manager repository contains documents that are made available to Development Engineers, QA engineers, and marketing. Project Managers can view and modify all of the documents; Development Engineer access is restricted to the developer and QA documents, and QA Engineer access is restricted to QA documents. As for workflows, a marketing document cannot be assigned to a QA or development engineer in a workflow.



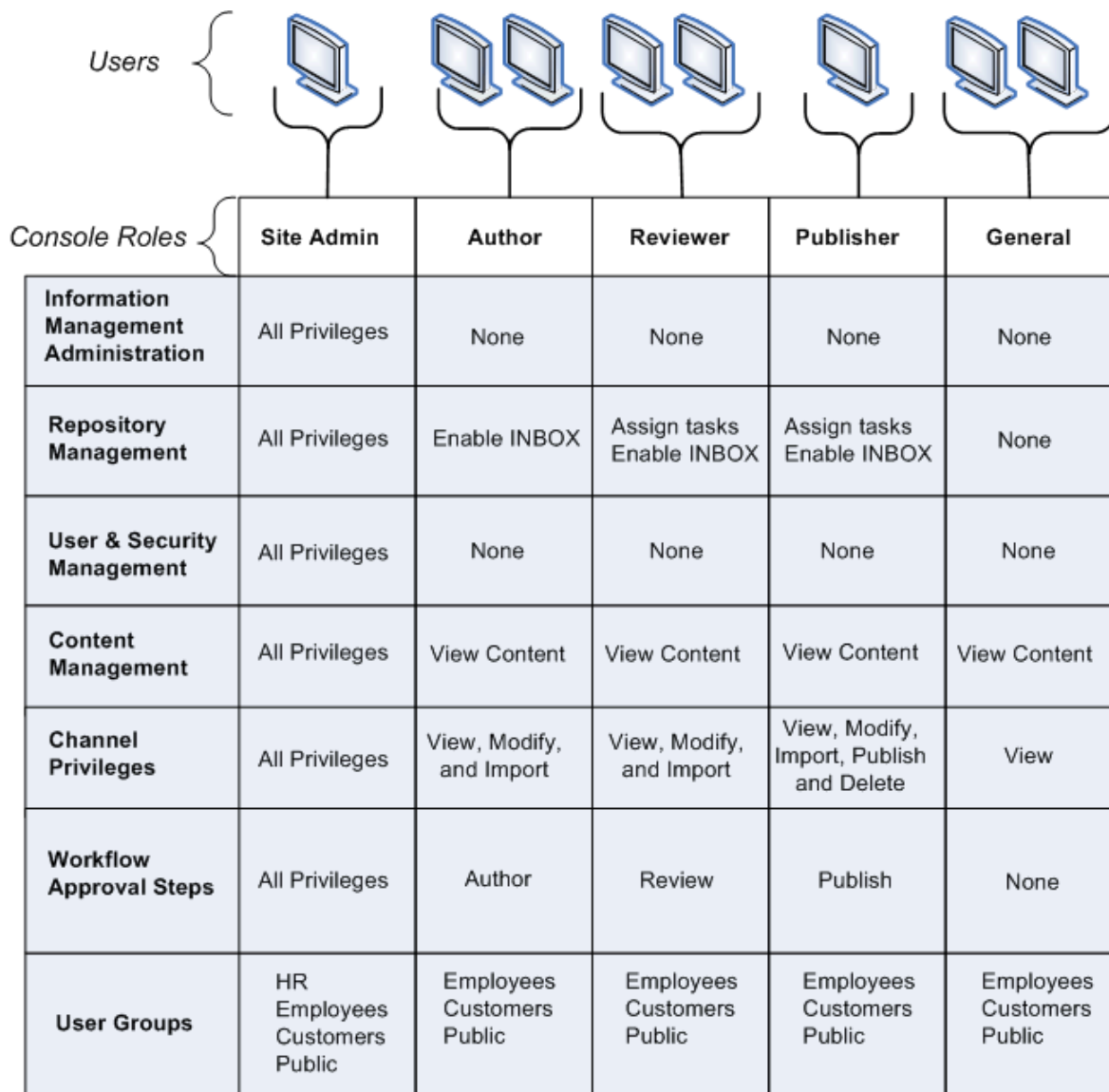
Subviews

Views can be organized hierarchically. The example shown below has one main view, *Knowledgebase*, with subviews, and each subview has subviews of its own. In this example, documents assigned to the Information Manager view can be accessed only by console users who have been given either an *IM*, *Engineering*, or *Knowledgebase* view. Documents assigned to an *Engineering* view can be accessed only by console users who have been given either an *Engineering* or *Knowledgebase* view. And documents assigned to a *Knowledgebase* view are the most restricted in that they can be accessed only by console users who have been given a *Knowledgebase* view.



About Console Roles

Console roles control the level of management access a user has to Information Manager; the general authoring abilities the user has on a particular channel, and what tasks the user can perform in a workflow. Console roles also list one or more user groups to determine what the console user can see in the web client in the same manner as web roles provide web client access to web users. (Again, user groups only impact access to documents through the Information Manager client. Document access through the Information Manager console is controlled by views.)



Example: Widgets Inc. Users

This section walks through some examples on how you might configure the security roles and views for some different types of users. In this example, we have six users of the Widgets Inc. knowledgebase:

- **John Garson** is a Senior Mechanical Engineer who needs permission to search the knowledgebase for all technical documents, both internal and public. John also needs to be able to author, edit, and review documents related to technical and support topics.
- **Jane Seymore** is a Support Engineer who needs permission to search the knowledgebase for all technical documents, both internal and public. Jane needs to be able to author and edit documents related to support. She also serves as the editor of the knowledgebase and is responsible for reviewing and publishing content.
- **Bob Bruger** is the Information Technology manager and is responsible for installing, configuring, and maintaining all systems, including the Oracle Knowledge Information Manager.
- **Tammy Temble** is the Product Manager who needs permission to search the knowledgebase for marketing and sales documents, as well as technical engineering and QA documents.
- **Ron Fruberg** is an existing customer who needs permission to search the knowledgebase for documents made visible to both customers and the general public.
- **Sara Beeman** is a prospective customer who needs permission to search the knowledgebase for documents made visible to the general public.

Using the Console Roles, Web Roles, and Views described above, the users of the Widgets Inc. knowledgebase would be assigned the following permissions.

	John Garson	Jane Seymore	Bob Bruger	Tammy Temble	Ron Fruberg	Sara Beeman
Console Roles	Author Reviewer	Author Reviewer Publisher	Site Admin	Author	NA	NA
Web Role	NA	NA	NA	NA	Customer Public	Public
Views	Development Quality Assurance Support	Support	Knowledgebase	Development Quality Assurance Marketing	NA	NA

Default Security Roles and Users

When you install and configure Information Manager, the installation process creates a base administrative repository, named SYSTEM. The SYSTEM repository includes the following user definitions:

User Name	Name (First, Last)	Security Role
SUPER	Super Admin	Super Admin
SUPPORT	Super Support	Super Support

The Super Admin and Super Support roles can view multiple repositories. The Super Admin role can create Super Support users. The Super Support role cannot create Super Support users.

Information Manager also creates a Default Administration Role in each application repository as part of the application repository definition process.

Managing Security Roles

As described in “User Groups, Security Roles and Views” on page 107, Information Manager provides security for the various administration and content management functions based on defined security roles. Information Manager is installed with default security roles as described in “Default Security Roles and Users” on page 112; users having the appropriate privileges can create additional security roles as required.

You define a security role as a set of privileges that apply to the various Information Manager-related functions, including:

- Application and repository management
- User and security management
- Content management
- Workflow steps
- Collaboration and e-Marketing management
- Business process management

For each functional area, you specify the level of access, such as view, add, and modify.

For example, in order to work with user accounts, a user must be assigned to a security role that has the collected user account privileges (Manage Users) or one or more individual user account privileges (Delete, Modify, Restore, or View).

Note: All users can view their own user information using the My Account option in the upper right portion of the navigation area.

You can define any number of security roles, and you can assign users to multiple roles.

You implement Management Console security roles by:

- Defining security roles as described in “Managing Security Roles” on page 113.
- Assigning users to the roles that you define as described in “Defining Management Console Users” on page 124.

Defining Security Roles

To define a security role:

- 1 Select **Users** from the navigation area



The Management Console displays the User and Security Management page:

- 2 Select **Add** under Console

The Management Console displays the Security Roles Properties page.

Security Role Properties

Role Information

Role Name*

 Reference Key*

Select Information Manager Administration Activities

Manage Application Parameters
 Manage Data

The Security Role Properties page is divided into the following sets of security properties:

- Basic role and repository properties as described in “Specifying Basic Role Properties” on page 114.
- Server administration privileges as described in “Specifying Information Manager Server Administration Privileges” on page 115.
- Repository management privileges as described in “Specifying Repository Management Privileges” on page 115.
- User and security privileges as described in “Specifying User and Security Privileges” on page 118.
- Content management privileges as described in “Specifying Content Management Privileges” on page 120.
- Collaboration privileges as described in “Specifying Feedback Privileges” on page 123.

Specifying Basic Role Properties

You specify basic role properties using the settings in the Role Information section of the Security Roles Properties page:

Role Information

Role Name*

 Reference Key*

- Specify the following properties:

Property	Description
Role Name	Specify the name of the security role, for example Content Editor.

Reference Key

Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.

Specifying Information Manager Server Administration Privileges

You specify administration privileges for the Information Manager server and application using the following settings on the Security Roles Properties page:

Select Information Manager Administration Activities

- Manage Analytics Configuration Settings
- Manage Application Parameters
 - Delete Configuration Parameter
 - Modify Configuration Parameter
 - View Configuration Parameters
- Manage Data
 - Delete Channel Data
 - Delete Form Data
 - Delete User Data
 - Import Channel Data
 - Import Form Data
 - Import User Data

- Select the **Manage Analytics Configuration Settings** option to grant all Analytics configuration privileges that allow users to configure, modify, and delete Analytics settings.
- Select the **Manage Application Parameters** option to grant all application privileges, or to specify individual privileges that allow users to delete, modify, and view configuration parameters.
- Select the **Manage Data** option to grant all channel data privileges, or specify individual privileges to allow users to:
 - delete channel, form, and user data
 - import channel, editor group, form, and user data

Specifying Repository Management Privileges

The Repository Management area of the Security Role Properties page provides parameters to:

- Manage repositories, as described in “Specifying Application Repository Management Privileges” on page 116.
- Manage content categories, as described in “Specifying Content Category Management Privileges” on page 116.
- Manage views, as described in “Specifying View Management Privileges” on page 117.
- Manage tasks, as described in “Specifying Task Management Privileges” on page 117
- Manage channels, as described in “Specifying Channel Management Privileges” on page 117.
- Manage counters, as described in “Specifying Counter Management Privileges” on page 118

- Manage workflows, as described in “Specifying Workflow Management Privileges” on page 118
- Manage data lists, as described in “Specifying Data List Management Privileges” on page 118.

Specifying Application Repository Management Privileges

You specify application repository management privileges using the following settings on the Security Roles Properties page:

Select Repository Management Activities

- Manage Categories
- Manage Channels
- Manage Counters
- Manage Data Lists
- Manage Tasks
- Manage Tokens
- Manage Workflow
- Manage Repositories
 - Modify Repository
 - View Repositories
- Manage Views

- Select the **Manage Repositories** option to grant all repository privileges, or specify individual privileges to allow users to create, delete, modify, and view repositories.

Specifying Content Category Management Privileges

You specify content category management privileges using the following settings on the Security Roles Properties page:

Select Repository Management Activities

- Manage Categories
 - Delete Repository Category
 - Modify Repository Category
 - View Repository Category

- Select the **Manage Categories** option to grant all content category privileges, or specify individual privileges to allow users to delete, modify, and view category definitions.

Specifying View Management Privileges

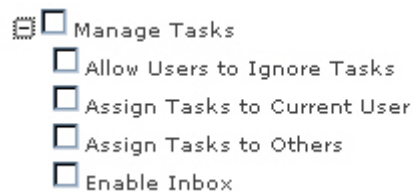
You specify repository view management privileges using the settings on the Security Roles Properties page:



- Select the **Manage Views** option to grant all view privileges, or specify individual privileges to allow users to add, delete, modify, and view repository view definitions.

Specifying Task Management Privileges

You specify task management privileges using the following settings on the Security Roles Properties page:



- Select the **Manage Tasks** option to grant all task privileges, or specify individual privileges to allow users to view the task Inbox and ignore and assign tasks.

Specifying Channel Management Privileges

You specify channel management privileges using the following settings on the Security Roles Properties page:



- Select the **Manage Channels** option to grant all channel privileges, or specify individual privileges to allow users to delete, modify, and view channels, channel queries, channel schema, and associated XSL stylesheets. See [Chapter 4, Working with Content Channels](#) for more information.

Specifying Counter Management Privileges

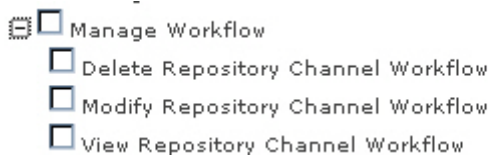
You specify custom repository metrics privileges using the following settings on the Security Roles Properties page:



- Select the **Manage Counters** option to grant all counter privileges, or specify individual privileges to allow users to view, modify, and delete counters to record custom repository metrics as described in “Defining Custom Metrics for a Repository” on page 63.

Specifying Workflow Management Privileges

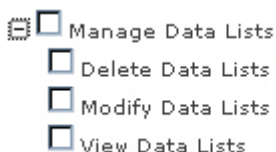
You specify workflow process management privileges using the following settings on the Security Roles Properties page:



- Select the **Manage Workflow** option to grant all workflow privileges, or specify individual privileges to allow users to delete, modify, and view workflow process definitions

Specifying Data List Management Privileges

You specify data list management privileges using the following settings on the Security Roles Properties page:



- Select the **Manage Data Lists** option to specify that all data list privileges are available to users having this role, or specify individual privileges to allow users to delete, modify, and view data list definitions. See “Defining Data Lists” on page 64 for more information.

Specifying User and Security Privileges

You specify user and security privileges using the following settings on the Security Roles Properties page:

- Manage user groups as described in “Specifying User Group Privileges” on page 119
- Manage user roles as described in “Specifying Role Privileges” on page 119
- Manage users as described in “Specifying User Privileges” on page 120

Specifying User Group Privileges

You specify user group management privileges using the following settings on the Security Roles Properties page:

Select User & Security Management Activities

- Manage Roles
- Manage User Groups
 - Delete User Groups
 - Modify User Groups
 - View User Groups
- Manage Users

- Select the **Manage User Groups** option to specify that all user group management privileges are available to users having this role, or specify individual privileges to allow users to delete, modify, and view user group definitions. See “Defining User Groups” on page 123 for more information.

Specifying Role Privileges

You specify web and security role privileges using the following settings on the Security Roles Properties page:

Select User & Security Management Activities

- Manage Roles
 - Delete Security Roles
 - Delete Web Roles
 - Modify Security Roles
 - Modify Web Roles
 - View Security Roles
 - View Web Roles
- Manage User Groups
- Manage Users

- Select the **Manage Roles** option to specify that all role privileges are available to users having this role, or specify individual privileges to allow users to delete, modify, and view security and web role definitions. See “Defining Management Console Users” on page 124 and “Defining Web Users” on page 128 for more information.

Specifying User Privileges

You specify web and security role privileges using the following settings on the Security Roles Properties page:

Select User & Security Management Activities

- Manage Roles
- Manage User Groups
- Manage Users
 - Delete Users
 - Delete Web Users
 - Modify Users
 - Modify Web Users
 - View Users
 - View Web Users

- Select the **Manage Users** option to specify that all user management privileges are available to users having this role, or specify individual privileges to allow users to delete, modify, restore, and view web and console user definitions.

Assigning User Groups to Security Roles

You assign user groups to a security role using the Select User Groups section of the Security Roles Properties page, which lists all defined user groups.

When you assign user groups to a security role, all users assigned having that role will be members of the assigned user groups. See “Defining User Groups” on page 123 for more information.

Select User Groups

- Manager
- Technical Staff

- Select the desired user groups for the security role

Specifying Content Management Privileges

You specify access to content using the Content Management section of the Security Role Properties page. The content management activities specified for a role determine which content menu options will be displayed.

To make the top-level Content menu available to a role, specify the Manage Content and View Content Menu properties.

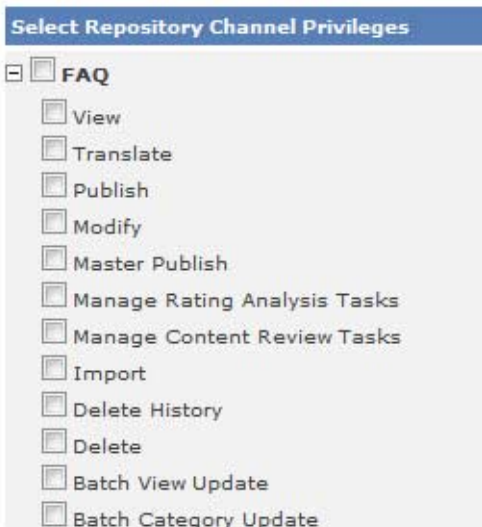
Select Content Management Activities

- Manage Content
 - Delete Content Discussion
 - Global Search and Replace
 - Modify Content Discussion
 - View Content
 - View Content Discussion

- Select the **Manage Content** option to specify that all content management privileges are available to users having this role, or specify individual privileges to allow users to delete, modify, translate, view content records, view content discussion (message board) records, and use the Global Find and Replace feature.

Specifying Channel Privileges

You specify channel privileges using the Repository Channel Privileges section of the Security Role Properties page. The channel privileges section lists each channel currently defined within the repository.



- Select the appropriate options for each channel:

Privilege	Description
View	Allows the user to view the channel in the Content menu.
Translate	Allows the user to create translated versions of content records in this channel for the locales specified in their user profiles. Note: The Translate option of the Content Preview page will display only to authorized users.
Publish	Allows a user to publish or unpublish a document for locales available to the user.
Modify	Allows the user to access the Add option in the Content menu.
Master Publish	Allows a user to publish or unpublish all locales of a document.

Privilege (Continued)	Description (Continued)
Manage Rating Analysis Tasks	Allows the user to create and manage rating forms, as described in “Creating Rating Forms” on page 170.
Manage Content Review Tasks	Allows the user to create and manage content review tasks.
Import	Allows the user to import data into the channel. You must also specify the View Data Menu privilege for users having the Import privilege.
Delete History	Allows the user to remove content history records.
Delete	Allows the user to delete content records from the channel.
Batch View Update	Allows the user to update the views associated with multiple content records, as described in “Batch Operations on Multiple Records” in the <i>Oracle Knowledge Information Manager Content Authoring Guide</i> .
Batch Category Update	Allows the user to update the categories associated with multiple content records, as described in “Batch Operations on Multiple Records” in the <i>Oracle Knowledge Information Manager Content Authoring Guide</i> .

Specifying Workflow Step Privileges

You specify workflow step privileges using the Workflow Approval Step section of the Security Role Properties page. The workflow approval section lists each channel within the repository that has defined workflow steps.

You can assign each step to one or more security roles. The repository view determines if the user is authorized to perform the workflow step for the selected repository view.

Select Repository Workflow Approval Steps

Glossary WF
 Glossary Edit Glossary Approval

Release Note WF
 Rel Note Edit Rel Note Approval

Tech Bulletin WF
 Tech Bul Edit Tech Bul SME Review Tech Bul Publication Review Tech Bul Approval

Important! When you add a workflow process or a step within a process to a channel definition, you must manually update all security roles that will use the new step.

Specifying Feedback Privileges

You specify feedback and collaboration privileges using the Collaboration and Feedback section of the Security Role Properties page.

Select Collaboration & e-Marketing Activities

- Manage Channel Alerts
- Manage Discussion Boards
- Manage Forms
- Manage Newsletters
- Manage Ratings
- Manage Recommendations

- Select the **Manage Channel Alerts** option to specify that all channel alert management privileges are available to users having this role, or specify individual privileges to allow users to delete, modify, send, and view channel alerts
- Select the **Manage Discussion Boards** option to specify that all discussion board record management privileges are available to users having this role, or specify individual privileges to allow users to delete, moderate, modify, and view discussion board topics and messages
- Select the **Manage Forms** option to specify that all management privileges for forms are available to users having this role, or specify individual privileges to allow users to delete, modify, and view form definitions
- Select the **Manage Newsletters** option to specify that all newsletter management privileges are available to users having this role, or specify individual privileges to allow users to delete, modify, send, and view newsletters
- Select the **Manage Ratings** option to specify that all management privileges for user ratings are available to users having this role, or specify individual privileges to allow users to delete, modify, publish, and view ratings definitions
- Select the **Manage Recommendations** option to specify that all management privileges for content recommendations are available to users having this role, or specify individual privileges to allow users to delete, modify, and view content recommendations

Defining User Groups

You can define user groups within the Information Manager to restrict access to specified content to members of the user group.

For example, you could define a Management (MGMT) user group, and designate sensitive content at the content record level so that it can be accessed only by members of the MGMT user group.

Note: User groups are primarily intended to restrict end-user access to content, for example, by defining "members only" content; however, you can define user groups to restrict access to content within the Management Console as well.

You implement user groups by:

- Defining one or more user groups as described below

- Specifying one or more user groups within security role and web role definitions as described in “Managing Security Roles” on page 113.

To define a user group:

- Select **Add** under User Groups:

Note: You can use the **List** option to list existing user groups. |

The Management Console displays the User Group Properties page:

User Group Properties

Group Name*

Reference Key*

Save User Group Properties

Cancel

* Required field

- Specify the following parameters to define a user group

Group Name	Specify a name for the user group.
Reference Key	Specify a reference key. See “A Note On Reference Keys” on page 52 for more information.

Defining Management Console Users

You define Management Console users by specifying:

- User identification properties, such as name, ID, password, and email
- One or more security roles

for each user. See “Managing Security Roles” on page 113 for information on security roles.

To define a Management Console user:

- 1 Select **Users** from the Management Console navigation area



The Management Console displays the User and Security Management page:

- 2 Select **Add** under Console Users
The Management Console displays the Management Console User Properties page.
- 3 Specify the user properties as described in “Specifying Management Console User Properties” on page 125.

Specifying Management Console User Properties

You define Management Console users by specifying the following properties:

Management Console User Properties

Account Information

First Name*

Last Name*

User ID*

Password*

Verify Password*

Email*

Alias

Public Profile Options

Display Name

Display Email

User Image

Default Locale*

 ▼

Select Content Locales *

Arabic Saudi Arabia

Čeština Česká republika

Dansk Danmark

Deutsch Deutschland

Default View

-- Select -- ▾

Reporting Group

-- Select -- ▾

Account Status

- Active
- Inactive

Reputation Points **Security Roles**

- CR1
- Default Administration Role
- Default User Role

Tasks Notifications

- Enable email notifications for tasks I can perform
- Enable email notifications for tasks assigned to me

Auto-subscribe options

- Subscribe to topics I create.
- Subscribe to topics I reply to.

Send subscription notifications

- Don't send emails
- Immediately (default)
- Once per day
- Every other day
- Once per week

Field	Description
First Name	Enter the user's first name, for example John.
Last Name	Enter the user's last name, for example Smith.
User ID	Specify a user ID, for example JSmith. Note: The Management Console lists the user in the format <code>last_name, first_name (user_ID)</code> , for example: <code>Smith, John (JSmith)</code>
Password	Specify a password for the user ID. Note: The Information Manager password policy as described in “Setting the Password Policy” on page 266 determines the character length and strength requirements for valid passwords. The default password policy is described in “The Default Password Policy” on page 267.

Field	Description
Verify Password	Re-enter the specified password for verification purposes.
Email	Enter the user's email address.
Alias	Enter a "nickname" for the user to be used in discussion boards instead of the user's full name (default is the user's username).
Public Profile Options	Specify whether to hide the user's email and name in InfoCenter or other places where user information is displayed.
User Image	Provide an image to represent the user in InfoCenter or the Management Console. Note: InfoCenter provides its own set of images the users can choose from.
Default Locale	Select the default locale for this user. The list of supported locales is determined by the repository definition.
Select Content Locales	Select the locales in which this user is authorized to create and edit content. Note: Users can view documents in any locale; however, they can create and edit documents only in the locales defined in their user profile.
Default View	Select the default view. Available views include the base repository and any other views defined within the base repository. The default view is used when there are multiple views in a repository. If the user is assigned to one of more views, the default view is the view that is used if one is not specified in the IM tag library. See "Defining Repository Views" on page 58 for more information.
Account Status	Specify whether this user will be active or inactive. See "Viewing and Managing User Status" on page 134 for more information.
Reputation Points	Enter the base number of points assigned to a user. Usually these points are initially established by the administrator when the user is created, and the reputation model then updates the user totals. Users can only view their own points.
Views	Select the views to enable for this user. See "About Views" on page 109 for more information.
Categories	Select all content categories that this user should be considered knowledgeable about or eligible for. Note: If there are more than 100 categories, you will see a search box you can use to locate a subset of the categories. When category task filtering is active for the repository as described in "Specifying Repository Properties" on page 51, the Inbox will display content tasks on the basis of the user's specified categories. The user must have all of the same (or parent) categories as the document.
Teams	Specify any work teams to which the user belongs. Assigning a user to a work team simplifies task assignment by limiting the list of available people to those belonging to a selected work team. You cannot assign tasks directly to a work team. Note: If there are more than 100 work teams, you will see a search box you can use to locate a subset of the work teams.
Reporting Group	Specify an optional reporting group for use within Analytics reports. You define Reporting Groups to group users having similar roles and responsibilities, such as Call Center Agent, Web Self Service User, etc. Analytics uses reporting groups to filter users within reports; reporting groups do not control users' access to content.
Security Roles	Select all applicable security roles to which you want to assign this user. See "Managing Security Roles" on page 113 for more information. Note: When assigning security roles, you can assign only the roles to which you (the current user) have access.

Field	Description
Select Forms for Email Notifications	Select any forms for which the user should receive email notifications with the form data any time a form is completed on the web application.
Task Notifications	Select the appropriate notification options for tasks generated by the application. Specify to notify this user: <ul style="list-style-type: none"> • about all tasks that the user has privileges to perform • about tasks explicitly assigned to this user
Auto-subscribe options	Select these options to automatically generate subscriptions to discussion board topics and postings that the user creates or responds to.
Send subscription notifications	Use these options to specify how often the user receives email notifications for their subscriptions.

Defining Web Users

You define web application users by specifying:

- User identification properties, such as name, ID, password, and email
- One or more security roles

for each user. See “Managing Security Roles” on page 113 for information on defining security roles.

To define a web user:

- 1 Select **Users** from the Management Console navigation area:



The Management Console displays the User and Security Management page:

- 2 Select the **Add** option under Web Users
The Management Console displays the Web User Properties page.
- 3 Specify the user properties as described in “Specifying Web User Properties” on page 129.

Specifying Web User Properties

To define a web user, specify the following user properties:

Web User Properties

Account Information

First Name*

Last Name*

User ID*

Password*

Verify Password*

Email*

Alias

Public Profile Options

Display Name

Display Email

User Image

Default Locale*

Default View

Reporting Group

Reputation Points
Security Roles
 Default User Role
Auto-subscribe options

- Subscribe to topics I create.
- Subscribe to topics I reply to.

Send subscription notifications

- Don't send emails
- Immediately (default)
- Once per day
- Every other day
- Once per week

Note: If your Information Manager administrator has defined additional custom user properties, the Management Console displays those properties as fields on the Management Console User Properties page. See “Defining Custom User Information Properties” on page 69 for more information.

Property	Description
First Name	Enter the user's first name, for example John.
Last Name	Enter the user's last name, for example Smith.
User ID	Specify a user ID, for example JSmith. Note: The Management Console will list the user in the format <code>last_name, first_name (user_ID)</code> , for example: Smith, John (JSmith)
Password	Specify a password for the user ID. Note: The Information Manager password policy as described in “Setting the Password Policy” on page 266 determines the character length and strength requirements for valid passwords. The default password policy is described in “The Default Password Policy” on page 267.
Verify Password	Re-enter the specified password for verification purposes.
Email	Enter the user's email address.

Alias	Enter a “nickname” for the user to be used in discussion boards instead of the user's full name (default is the user's username).
Public Profile Options	Specify whether to hide the user's email and name in InfoCenter or other places where user information is displayed.
User Image	Provide an image to represent the user in InfoCenter or the Management Console. Note: InfoCenter also provides its own set of images that users can choose from.
Default Locale	Select the default locale for this user. The list of available locales is determined by the repository definition.
Default View	Select the default view. Available views include the base repository and any other views defined within the repository.
Reporting Group	Specify an optional reporting group for use within Analytics reports. You define Reporting Groups to group users having similar roles and responsibilities, such as Call Center Agent, Web Self Service User, etc. Analytics uses reporting groups to filter users within reports; reporting groups do not control users' access to content.
Reputation Points	Specify whether this user will be active or inactive. See “Viewing and Managing User Status” on page 134 for more information.
Security Roles	Select a defined security role to which you want to assign this user. See “Managing Security Roles” on page 113 for more information. Note: You can assign only the security roles to which you have access.
Auto-subscribe options	Select these options to automatically generate subscriptions to discussion board topics and postings that the user creates or responds to.
Send subscription notifications	Use these options to specify how often the user receives email notifications for their subscriptions.

Defining Web Roles

Information Manager enables you to specify security roles that apply to the end-users of the web site. Web roles restrict the content that site users have access to. You can define any number of web roles, and you can assign users to multiple roles.

Note: Defined web roles will also display in the Security Roles heading when you define or modify user profiles on the Management Console User Properties page.

You implement Management Console web roles by:

- Defining web roles as described below
- Assigning web users to the roles that you define as described in “Defining Web Users” on page 128.

To define a web role:

1 Select **Add** under Web Roles

The Management Console displays the Web Role Properties page:

2 Specify the following parameters:

Parameter	Description
Role Name	Specify a name for this web role.
Reference Key	Specify a reference key as described in “A Note On Reference Keys” on page 52.
User Groups	<p>Select the desired user groups (as defined for your installation) for the web role.</p> <p>Note: If there are more than 100 user groups, you will see a search box you can use to locate a subset of the user groups.</p> <p>When you assign user groups to a web role, all users assigned having that role will be members of the assigned user groups. See “Defining User Groups” on page 123 for more information.</p> <p>Another way to assign user groups to a console user is by means of a view, as described in “Defining Repository Views” on page 58. The user groups available to a console user is the combination of those specified in both the views and console roles that are assigned to the console user.</p>

Displaying User Information

You can display information about Management Console or web users by:

- Using the List option to locate users
- Selecting individual users from the list to display details

Note: You can also use the Find function to locate users as described in “Finding Users” on page 134.






To display a list of users:

- 1 Select **List** under the Console Users or Web Users menu item, for example:

The Management Console displays the Management Console Users page, which lists all of the Management Console users defined in the current repository. The Management Console creates multiple pages if necessary to accommodate as many users as are defined in the system.

Management Console Users

Users (5)

	User Name	User ID	Status		
1.	 Administrator, IMDoc	Docadmin	Active	Change Status	Delete
2.	 Brown, Beckv	BBrown	Active	Change Status	Delete
3.	 Cohen, Cynthia	CCohen	Active	Change Status	Delete
4.	 Fontmeister, Frida	FFontmeister	Active	Change Status	Delete
5.	 Smith, Sam	SSmith	Active	Change Status	Delete

[Add Management Console User](#)

- 2 Select a user from the list to display detailed information. The User Properties page displays as described in “Specifying Management Console User Properties” on page 125.

or

Select the **Change Status** option to change a user's status as described in “Viewing and Managing User Status” on page 134.

Note: The Information Manager maintains detailed information about deleted users in the content history and version history pages.

Viewing and Managing User Status

You can view and change the status of individual users defined for your repository. The Management Console indicates whether users are currently active or inactive.



Active	Active status indicates that the user is able to log in and perform all of their allowed functions.
Inactive	<p>Inactive status indicates that:</p> <ul style="list-style-type: none"> • an administrator has suspended the user for some reason, or • the user tried to log in in error more than three times <p>Inactive users are not able to log onto the Management Console until a system administrator resets their status. The Information Manager notifies a system administrator when a user becomes inactive.</p>

To change the status for a user:

- Select the **Change Status** option for a selected user

BBrown	Active	Change Status ⌵
CCohen	Active	Change Status ⌵

The Management Console changes the user's status:

2.	 Brown, Becky	BBrown	Inactive
3.	 Cohen, Cynthia	CCohen	Active

Finding Users

You can locate individual users or groups of users by name and user ID using the Find option.

To locate users:

- 1 Select the **Find** option under Web Users or Management Console Users

The Management Console displays the Find Users page:

Find Users

Search Specific Criteria

First Name

Last Name

User ID

Email Address

2 Enter one or more of the following search parameters:

Search Field	Description
First Name	Enter a complete first name or an abbreviation, such as the first one or two characters.
Last Name	Enter a complete first name or an abbreviation, such as the first one or two characters.
User ID	Enter a User ID or an abbreviation, such as the first one or two characters.
Email Address	Enter a complete email address.

You can restrict the search results by specifying:

- The users' default locale
- Additional locales for which the users are authorized
- That the users are assigned to any or all of the selected security roles

Defining Work Teams

You can create and manage Work Teams to group task assignment and reporting by teams. Work Teams are hierarchical, which lets you roll up reporting from teams to entire organizations. Users can be members of multiple work teams.

When you define a team hierarchy, users can assign tasks only to members of the work teams to which they belong, which simplifies the task assignment process (users will not see a drop down list of all users in the system when they assign tasks).

You implement work teams by:

- Logging into Information Manager as a super user and select the SYSTEM repository, as described in Logging on as the Super User.
- Switching from the **System** repository to the application repository to contain the work team
- Defining one or more work teams as described below
- Adding team members, as described in "Managing Work Team Members" on page 137.
- Specifying one or more work teams within security role and web role definitions, as described in "Managing Security Roles" on page 113.

To define a work team:

1 Select **Add** under Work Teams :

Note: You can use the List option to list existing work teams.

The Management Console displays the Add Team page

- Specify the following parameters to define an editor group

Team Name	Specify a name for the work team.
Reference Key	Specify a reference key. See “A Note On Reference Keys” on page 52 for more information.

Defining Work Team Sub-teams

You can define work team sub-teams to further refine task assignment and reporting by teams within your organization. Work team sub-teams are branches that you can define as children of an existing work teams to sort users within the team. You can assign users and content channels to any branch of a work team; any branches below the assigned team will also be assigned.

To define work team sub-teams:

- Select **List** under Work Teams:

The Management Console displays the Team Management page.

	Team Name	Members	Actions
1.	<input type="checkbox"/> Email Support	3	Add Sub-teams Members
2.	<input type="checkbox"/> Mentor Team	4	View Sub-teams Add Sub-teams Members
3.	<input type="checkbox"/> Phone Support	7	Add Sub-teams Members
4.	<input type="checkbox"/> Super User	0	Add Sub-teams Members

[Select All](#) [Unselect All](#)

[Add Team](#)
[Delete Selected Teams](#)
[Done](#)

- Select the check box for the teams to which you want to add sub-teams, then select the Add Sub-teams option:

The Management Console displays the Add Team page:

3 Specify the properties for the sub-group, or branch as follows:

Team Name	Specify a name for the sub-team.
Reference Key	Specify a reference key. See “A Note On Reference Keys” on page 52 for more information.

Managing Work Team Members

The Team Members page lists team members for the current work team. Use the Team Members page to view details for a team member, edit member user properties, add team members, or remove members from a team.

	Member Name	Email	User Level
1.	<input type="checkbox"/> Joe Admin	sean.a.linght@inquir.com	Level 1
2.	<input type="checkbox"/> Joe Contributor	contributor@inquir.com	Level 1
3.	<input type="checkbox"/> Joe Legal	legal@inquir.com	Level 0

To view or edit properties for a team member:

- Click on the member name in the list

The User Properties page (either the Management Console or Web User Properties) is displayed, from where you can view or edit user properties. Refer to the sections on “Specifying Management Console User Properties” on page 125 or “Specifying Web User Properties” on page 129 for information on editing user properties.

To add members to a team:

- Select the Add Members option

The Find Users Page is displayed, from where you can locate the users to add to the team. refer to the section on “Finding Users” on page 134 for more information on using the Find Users page.

To remove members from a team:

- Select the members to remove using the checkbox next to their names.

- Select the Remove Selected Members option and confirm the deletion at the prompt.

Creating and Managing Subscriptions

You can create and manage content subscriptions to enable end-users to subscribe to content by:

- Channel
- One or more categories within a subscribed channel
- Specific documents
- Forums
- Specific topics within forums

Subscriptions are objects within the repository, with properties, such as a name, allowing administrators to create, manage, and provide subscriptions to the user community. Subscriptions also expire automatically, and users can renew or cancel subscriptions. By default, the expiration period is 90 days. See “Subscription Expirations” on page 139 for information on how to change the expiration value.

To add a new subscription for a user:

- 1 Select **Subscriptions** from the User Properties area:
The Add Subscription page is displayed.
- 2 Select the type of subscription from the drop-down menu:



The fields displayed depend on whether the subscription is for channel or document.

Subscription Name	Specify the name of the subscription
Select Channel to Subscribe to (Channel Subscriptions)	Select the channel to which you wish to subscribe.
Available Categories (Channel Subscriptions)	Restrict a channel subscription to only documents marked with specific categories.
Select Channel For Content (Document Subscriptions)	Select the channel containing the document to which you wish to subscribe.
Document ID (Document Subscriptions)	Specify the document ID of the document to which you wish to subscribe.

In order to receive subscription notifications, the user must have a subscription notification option selected in their User Properties page and a **Send Subscription Emails** batch job must be running, as described in “Subscription Batch Jobs” on page 253. You can set the notification frequency in both the user property and in the batch job description. The user setting overrides the batch job settings. The batch job settings may say to send out emails immediately, but the user may elect to receive their notifications only once per day.

Note: The option to run batch jobs is determined during installation of the IM Management Console. If the instance is not configured to run batch jobs, the ability to modify batch jobs is not available.

Send subscription notifications

- Don't send emails
- Immediately (default)
- Once per day
- Every other day
- Once per week

Subscription Expirations

Subscriptions expire after 90 days, by default. You can reset the subscription expiration period by navigating to **Tools > System Configure > Go to Expert Mode > SUBSCRIPTION_END_DAYS** and resetting the Parameter Value to another time period:

Application Setting Properties

Parameter Name SUBSCRIPTION_END_DAYS

Parameter Value*

90

Description

Number of days until a subscription's end

- Allow administrators to edit value
- Encrypt Value
- Save to default value
- Save to current repository value

Configuring User Reputation Levels

Use the User Reputations page to edit the user reputation model for the current repository. You can assign users different User Reputation levels based on the number of points a user accumulates. You can specify the number of points required for each level, and provide user friendly names for those levels. Points are awarded to the user for:

- Content that the user has authored
- The number of times that content that the user has authored has been viewed
- The ratings for content that the user has authored
- The number of case links for content that the user has authored

Answering discussion threads, authoring highly rated content, or having postings flagged as helpful are all ways in which users can accumulate points. Some activities provide a multiplier, so that you can reward points based on the weighting of a specific activity. Points can also be awarded separately for console users and web users.

Note: Editing SYSTEM level defaults can only be done from the SYSTEM repository with system administrator privileges. Changes made to the reputation model from any other hierarchy affects only that hierarchy.

To edit the User Reputation model for the current hierarchy:

1 Select the **Edit Reputation Model** option

The Edit Reputation page is displayed. Use the Edit Reputation page to edit the User Reputation Levels, Content Rewards, and Discussion Board Rewards settings.

Edit Reputation

User Reputation Levels

Level	Range	Description
Level 0	25	Reputation Level 0
Level 1	199	Reputation Level 1
Level 2	999	Reputation Level 2
Level 3	9999	Reputation Level 3
Level 4	49999	Reputation Level 4
Level 5	99999	Reputation Level 5

Content Rewards



Activity	Console Users	Web Users
Level 5	99999	Reputation Level 5

Content Rewards

Activity	Console Users	Web Users
Case Links	x 10	x 10

Discussion Board Rewards

Activity	Console Users	Web Users
Message Solved	30	30
Message Helpful	20	20
Discussion Board Rating	x 1	x 1
Message Created	0	0
Topic Created	1	1

Save Reputation Properties 
Cancel 

2 Assign values for each level for the following User Reputation Level fields:

Field	Description
Title	A user-friendly name for the level
Range	The number of points a user must have to belong to this level
Description	A description for the level

3 Assign values for Console Users and Web Users for the following Content Reward fields:

Field	Description
Content Authored	The number of points to award for each content item the user has contributed
Content Viewed	The number of points to award each time a user's content is viewed
Content Rated	The multiplier to use to weight user feedback ratings for content a user has authored
Case Links	The multiplier to use to weight content a user has authored where a case link exists

4 Assign values for each level for the following Discussion Board Rewards fields:

Field	Description
Message Solved	The number of points to award each time a user's message provides a solution to an issue
Message Helpful	The number of points to award each time a user's message is helpful in providing a solution to an issue
Discussion Board Rating	The multiplier to use to weight user feedback ratings for messages a user has authored
Message Created	The number of points to award each time a user adds a message to a topic
Topic Created	The number of points to award each time a user starts a new topic

5 Select the **Save Reputation Properties** option to save your changes

Specifying Self-Administration for Users

You can specify which aspects of their profiles end-users will be able to manage; for example, you can specify that certain users will be able to manage their own skills, languages, and work teams.

Creating and Managing Workflows

You can create multi-step workflow processes to manage publishing lifecycles for each content channel in your application. Workflow processes are sequences of steps, such as creating, editing, translating, reviewing, and approving, that you can define to enforce specific content management procedures for your organization.

You create workflow processes by:

- Defining a workflow as described in “Creating a new workflow” on page 144
- Defining steps within the workflow as described in “Defining Workflow Steps” on page 145
- Adding workflow step permissions to appropriate user security roles as described in “Specifying Workflow Step Privileges” on page 122.

You implement workflow processes by assigning a workflow process to a content channel definition as described in “Specifying Workflow Options for a Channel” on page 84.

Workflow steps and processes are stored independently of content channels; you can re-use workflow processes by assigning the same processes to multiple channels.

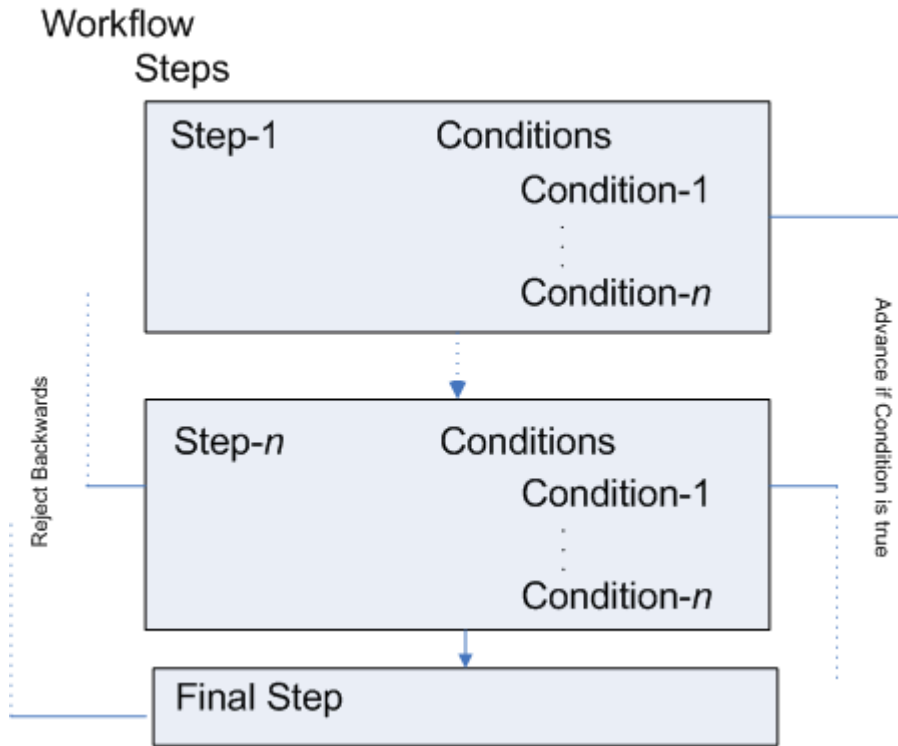
Anatomy of a workflow

A workflow consists of one or more steps. Each step defines a task that is assigned to a user or team of users. Task assignments appear in the user's Inbox in Information Manager. After the assigned user performs a task on a document, the user can either:

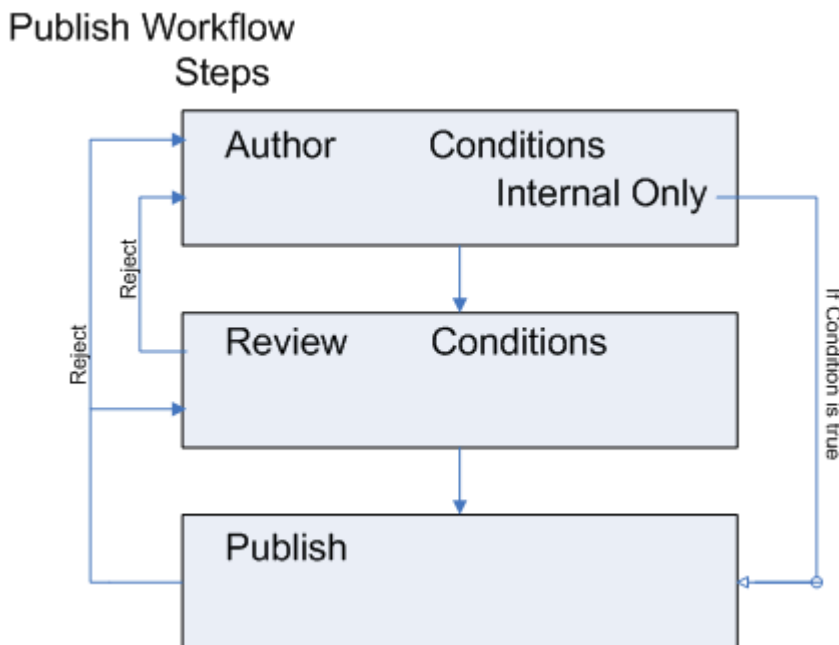
- Approve the document for advancement to the next step in the workflow
- Reject the document back to the previous step
- Reassigned the task to another user or team

Each step can optionally include one or more conditions that define a particular criteria and what step to advance to if the document meets that criteria.

The illustration below outlines the components in a workflow.



For example, the illustration below shows a workflow with three steps: author, review, and publish. The author step includes a condition that will bypass the review step if the document is for internal use only. For documents that make it to the review or publish step, the user assigned to the task can reject the document back to the review or author steps.



Creating a new workflow

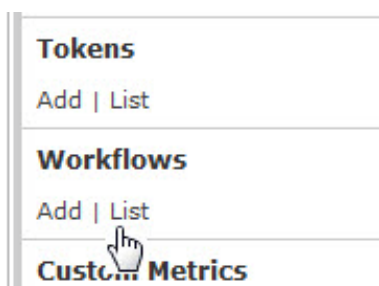
Plan your workflow in advance. Think about the steps each document is to follow from creation to published.

To create a workflow:

- 1 Select **Repository** from the navigation area:



- 2 Select **List Workflow** to see if any existing workflow can be used:



This brings up the Workflow Management page:

If no existing workflow can be used, select **Add Workflow**. This brings up the Add Workflow page, where you name the workflow (reference key is automatically created from the name).

- 3 Specify the following properties to define the workflow:

Property	Description
Name	Specify the name of the workflow process.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See "A Note On Reference Keys" on page 52 for more information on reference keys and how they are used within the Information Manager.
Manually publish documents after workflow completion	Select this checkbox to specify that documents will require a manual publishing step when the workflow completes. The default is to publish automatically as the final workflow step.

- 4 Select **Save Workflow**.

The Management Console displays the new workflow on the Workflow Management page:

- You can now add steps to the workflow, as described in "Defining Workflow Steps" on page 145.

Defining Workflow Steps

You can define workflow steps for any type of content management activity. You can also define rejection options and conditional steps as described in “Defining Conditional Workflow Steps” on page 146 and “Defining Rejection Steps” on page 149.

To define a workflow step:

- 1 Select **Steps** on the Workflow Management page:

5. Publish Workflow	Steps >> Delete >>
6. Review by Functional Expert	Steps >> Delete >>

The Workflow Steps page displays any currently defined steps for the selected workflow.

Publish Workflow Workflow Steps

Workflow Steps (2)

Step Name	
1. Author	Conditions >> Delete >>
2. Review	Delete >>
Add Workflow Step >>	
Done >>	

- 2 Select **Add Workflow Step**

The Workflow Step Properties page displays:

Workflow Step Properties

Define Step Properties

Step Name*

Enable document editing

Enable properties editing

Default queue time for first notification

 days

Second Notification

 days

Reject Steps

Select workflow steps that this step can reject back to.

Author

Review

[Save Workflow Step](#) >>

[Cancel](#) >>

- Specify the following workflow step properties:

Property	Description

Step Name	Specify the name of the step.
Enable document editing	Specify whether to allow authorized users to edit the content of the document when performing this step.
Enable properties editing	Specify whether to allow authorized users to edit the document properties when performing this step.
Default queue time for first notification	Specify the time that will elapse between a record entering this step and the initial notification being sent. See “Enabling Notifications of Workflow Tasks” on page 151 for more information on setting up task notification.
Second Notification	Specify the time that will elapse between the initial notification that a record has entered this step and the second notification.
Reject Steps	Specify one or more optional workflow steps that content can be returned to in the event that content is rejected by an authorized user as described in “Defining Rejection Steps” on page 149.

The steps in our Publish Workflow example might look like:

Publish Workflow Workflow Steps

Workflow Steps (3)

Step Name	Conditions	Delete
1. Author	Conditions	Delete
2. Review	Conditions	Delete
3. Publish		Delete

Add Workflow Step Done

Note: All new steps are added to the end of the workflow and their relative locations cannot be reset.

Defining Conditional Workflow Steps

For each workflow step, you can specify one or more conditions and what step the document is to advance to if it meets or does not meet the specified conditions. These conditions map directly to the attributes you can set when creating or editing a document in Information Manager.

To set conditions for a step, select **Conditions** to the right of the step listed in the Workflow Steps page.

Condition Name -- Provide the name of the condition.

Advance to -- When the condition is triggered, the workflow advances the document to this step

if the record -- This defines the criteria under which the condition is triggered. You can trigger the condition under one or more of the following conditions:

- **Contains Any** -- Document must meet a least one of the specified criterion.
- **Contains All** -- Document must meet all of the specified criteria.
- **Does not contain Any** -- Document cannot meet any of the specified criteria.
- **Does not contain All** -- Document cannot meet all of the specified criteria.

For example, to advance to the Publish step if the document meets all of the specified conditions, set:

Add Conditions

Select conditions to be true to advance to step indicated

Condition Name*
My Condition

Advance to **Publish** if the record **Contains** **All** of the following

Locale Conditions -- Defines the criteria related to translation.

Document Type Equals -- The document type can be either:

- **Any:** Doesn't matter
- **Master Document:** The document in its original language
- **Translated Document:** The document has been translated to a language other than its original language

Locale Conditions

Document Type Equals

Any
Any
Master Document
Translated Document
 English

Locales

For Any Of The Selected Locales -- The document is written in the language for the selected locale.

Note: The **Document Type Equals** and **For Any Of The Selected Locales** settings are independent. For example, if **Document Type Equals** is set to **Translated Document** and **For Any Of The Selected Locales** is set to **English**, then the condition is met if the document is either a **Translated Document** or has a locale of **English**.

Repository Views -- Defines a condition based on which views have been established for the document.

For example, to establish a condition for documents set for the Knowledgebase view:

Repository View Selection *

KnowledgeBase

- Engineering
- General
- Human Resources
- Management
- Marketing
- Product Management
- Sales
- Services
- Support

Category Conditions -- Defines a condition based on which categories have been established for the document.

For example, to establish a condition for documents set with a Search category:

Category Conditions

[Top Level](#) > [Product Components](#)

Available Categories	Selected Categories
<ul style="list-style-type: none"> <input type="checkbox"/> Analytics Add >> <input type="checkbox"/> Information Manager Add >> <input type="checkbox"/> ProServ Core Add >> <input type="checkbox"/> Search Add >> 	<ul style="list-style-type: none"> Product Components > Search Remove >>

Teams -- Defines a condition based on a work team:

Teams

[Top Level](#)

Available Teams	Selected Teams
-- No records found --	-- No records selected at this time --

User Group Conditions -- Defines a condition based on which user groups have been established for the document:

User Group Conditions

- Customers
- Internal
- Marketing
- Partners
- Public
- Reviewers
- Test Group

In our Publish Workflow example, we create an Internal Only condition to advance any document to the Publish step if it is only to be accessed by users belonging to the Internal user group. The settings are shown below. No other conditions are set.

Add Conditions

Select conditions to be true to advance to step indicated

Condition Name*
Internal Only

Advance to if the record of the following

User Group Conditions

- Customers
- Internal
- Marketing
- Partners
- Public
- Reviewers
- Test Group

Defining Rejection Steps

You can define rejection steps in workflow processes that contain more than two steps. Rejection steps enable content supervisors to reject a new record or changes to an existing record.

You can specify one or more preceding steps as the rejection destination options. Content supervisors will then have the option to choose the rejection destination from among the specified rejection steps.

You can designate one or more previous workflow steps as the rejection destination. For example, you can specify that users having access to the publish step can reject the work back to either the create step or the review step.

To specify a rejection step:

- 1 Select or add a step that has at least one preceding workflow step:

Publish Workflow Workflow Steps

Workflow Steps (3)

Step Name	Conditions	Delete
1. Author	Conditions >>	Delete >>
2. Review	Conditions >>	Delete >>
3. Publish		Delete >>

Add Workflow Step >>
Done >>

The Workflow Step Properties page displays the Reject Steps heading:

Workflow Step Properties

Define Step Properties

Step Name*

Publish

- Enable document editing
- Enable properties editing

Default queue time for first notification

1 days

Second Notification

2 days

Reject Steps

Select workflow steps that this step can reject back to.

- Author
- Review

- 2 Select one or more preceding workflow steps as potential rejection destinations

Assigning a workflow to a channel

After creating a workflow, you can assign it to a channel by:

- 1 Open the **REPOSITORY** tab
- 2 Select **List Channels**
- 3 Select the channel you wish to assign the workflow to
- 4 Under **Workflow Options**, select the workflow from the pull-down menu

- 5 Set the workflow options to specify attributes within a document are subject to workflow permissions and version incrementing, as described in *Specifying Workflow Options for a Channel*

For example, to select the Publish Workflow for the channel so that user groups require workflow approval:

Workflow Options

Select Workflow

Publish Workflow

- Categories requires workflow approval if workflow is enabled
- Views requires workflow approval if workflow is enabled
- User Groups requires workflow approval if workflow is enabled
- Display dates requires workflow approval if workflow is enabled
- Event dates requires workflow approval if workflow is enabled
- Geospatial requires workflow approval if workflow is enabled

Workflow Automation

When you assign a workflow process to a channel, each content record created in the channel must progress through the workflow process prior to publication.

Information Manager maintains versions for each process step as decimal point values. For example, a content record that is revised in a three-part workflow might enter the workflow process at version 2.0, and be saved as 2.1 and 2.2 before ultimately being published as version 3.0.

As content progresses through the workflow, Information Manager creates tasks and notifies authorized users of its status, as described in *Chapter 3, Working with Tasks* in the *Oracle Knowledge Information Manager Content Authoring Guide*.

Enabling Notifications of Workflow Tasks

You can configure the application to notify users via email that workflow tasks are assigned or available to them.

To enable task notifications:

- 1 Select **Configure** under **Tasks & Notifications** in the **Tools** tab
- 2 Select **Workflow Task** to open the **Tasks & Notifications** page for workflows.
- 3 Check the **Enable this task type option** to populate the assigned user's INBOX with workflow tasks.
- 4 Check the **Enable email notifications for this task** to enable email notifications of newly assigned workflow tasks.

Important! The **Enable this task type** option must be enabled in order to assign a workflow task or to enable any tasks or notifications associated with the workflow task. For example, if this option is not enabled, then the **Enable email notifications for this task option** is disabled, regardless of whether it is selected.

Tasks & Notifications

Task Type Workflow Task

Task Configuration Edit Fields

- Enable this task type.
- Enable email notifications for this task.

See “Configuring Tasks and Task Notifications” on page 237 for more information on configuring and enabling tasks.

Deleting Workflow Processes

You can delete a workflow process provided that there are no content records currently assigned to any of the steps in the workflow. If you attempt to delete a workflow process to which content records are still assigned, the Management Console will display an error message, and the workflow will not be deleted.

Workflow Management

Workflows

	Workflow Name		
1.	Policy Workflow	Steps >>	Delete >>
2.	Solutions	Steps >>	Delete >>
3.	Test workflow	Steps >>	Delete >>

[Add Workflow >>](#)

Working with Feedback and Collaboration

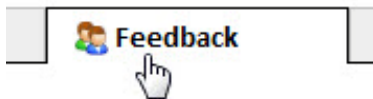
You can use Information Manager feedback and collaboration features to communicate with users and enable users to communicate with your organization and with each other. Feedback and collaboration features include:

- Discussion Forums, or message boards, as described in “Administering Discussion Boards” on page 153
- User information and content rating forms as described in “Creating and Managing User Information and Content Rating Forms” on page 169
- Content Recommendations as described in “Creating and Managing Content Recommendations” on page 177

The Feedback Management Page

You access feedback and collaboration features using the options on the Feedback Management page. To access the Feedback Management page:

- Select **Feedback** from the navigation area:



The Management Console displays the Feedback Management page:

Administering Discussion Boards

You can create discussion boards to enable users to communicate with one another through threaded messages organized under managed topics within forums.

Discussion boards provide a complete set of discussion functionality organized in the following objects:

Discussion Boards

Discussion boards are the highest level object. You can define multiple discussion boards, each having different definitions, and each addressing a distinct business need. For example, a product support discussion board would have different business requirements, and therefore very different property definitions, than an internal portal discussion board. Discussion boards contain one or more forums.

Forums	Forums are containers within Discussion Boards that contain and organize Topics by subject matter area. You can create any number of forums within a discussion board, and you can associate forums with hierarchical categories, such as product lines.
Categories	You can select repository Categories to provide a hierarchy within a discussion board, enabling administrators to assign a specific category to a forum.
Topics	<p>Topics are the individual subjects within forums. Topics have associated types:</p> <ul style="list-style-type: none"> • normal topics, which are simply subject matter areas related to the parent forum • question topics as described in “Creating and Managing Forum Topics” on page 165, which are structured as requests for information that answers a question or resolves an issue <p>Topics have associated metrics, including the number of times users viewed the topic and its messages; you can also define rating mechanisms for topics and related messages, for example to rate proposed solutions to a question topic.</p>
Messages (Posts)	Messages are the individual content items that end users can read and create, either as new messages under a topic, or as responses to existing messages.

You can specify security options to determine who can read, post, and use additional board features as described in “Security Options for Discussion Boards, Forums, and Topics” on page 159. You can also define business rules to handle abuse as described in “Abuse Settings for Discussion Boards” on page 156, and enable users to rate messages as described in “Rating Scales for Discussion Boards” on page 157.

You create and manage discussion boards and related objects as described in:

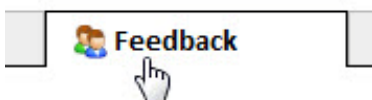
- “Creating and Managing Discussion Boards” on page 154
- “Creating and Managing Discussion Forums” on page 164
- “Creating and Managing Forum Topics” on page 165
- “Creating and Managing Discussion Messages” on page 168

Creating and Managing Discussion Boards

You create discussion boards using the Discussion Board Properties page.

To create a discussion board:

- 1 Select **Feedback** from the navigation area:



The Management Console displays the Feedback Management page.

- 2 Select the **Add** option under Discussion Boards:
or
Select the **Add Discussion Board** option on the Discussion Board Management page:

Discussion Boards

Discussion Boards(3)

	Discussion Board	Forums	Topics	Messages	Last Post	Actions
1.	<input type="checkbox"/> Developer	1	2	3	04/30/2007 04:41 PM	Manage Filters Recompute Statistics Forum Management
2.	<input type="checkbox"/> new test	1	2	0		Manage Filters Recompute Statistics Forum Management
3.	<input type="checkbox"/> Product Support	9	24	18	05/01/2007 09:59 AM	Manage Filters Recompute Statistics Forum Management

Select All Unselect All

Delete Selected Discussions Boards
Add Discussion Board

The Discussion Board Properties page displays.

General Discussion Board Properties

You define the following general properties for a discussion board:

Discussion Board Properties

General Properties

Discussion Board Name*

Reference Key*

Property	Description
Discussion Board Name*	Specify the name of the discussion board.
Reference Key*	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See "A Note On Reference Keys" on page 52 for more information on reference keys.

Abuse Settings for Discussion Boards

You can specify business rules to automate responses to abusive postings on a discussion board. Abuse reporting enables a feedback mechanism within discussion board messages that authorized users can use to report objectionable content.

Specify the following properties:

Abuse Settings

Enable Report Abuse: Enable Disable

Abuse Threshold: Perform abuse action after abuse reports.

Abuse Actions

Unpublish if abuse threshold reached

Moderate if abuse threshold reached

Ban author if abuse threshold reached

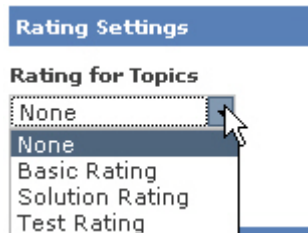
Ban Settings

Ban user for amount of days

Property	Description
Enable Report Abuse	Specify whether users will have the ability to report abusive messages to the board administrator. You can restrict abuse reporting privileges to selected users as described in "Security Options for Discussion Boards, Forums, and Topics" on page 159
Abuse Threshold	Specify the number of reports that must occur in order for the abuse actions to take effect. The default value is 100.
Abuse Actions	<p>Select one or more of the following actions to respond to abuse:</p> <ul style="list-style-type: none"> • Unpublish: specifies that the message associated with the abuse reports will be automatically removed from the published site • Moderate: specifies that the administrator will be notified so that proper actions can be taken • Ban author: specifies that the user account under which the abusive post was created will be automatically set to Inactive for the number of days specified in the Ban Settings field.
Ban Settings	Specify the number of days an banned author is to be made inactive.

Rating Scales for Discussion Boards

You can specify rating scales to enable users to rate topics and messages on a discussion board. Adding ratings enables a feedback mechanism within all topics and messages on a board. You can assign separate rating scales for topics and messages. Information Manager stores ratings data submitted for content items for use in the Information Manager Analytics Content Feedback Report, which displays information about end-user ratings of published content records, and in the user reputation model as described in Working with User Metrics.



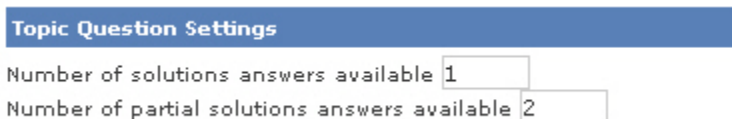
Note: You define rating scales for your application, as described in Creating and Managing Content Rating Scales

- Specify the following properties:

Property	Description
Ratings for Topics	Select a rating scale to be used for rating topics.
Ratings for Messages	Select a rating scale to be used for rating topics.

Topic Question Settings

You can specify the number of messages that will be allowed as responses to a questions topic. Question topics enable the topic owner to identify answers that either solve or help to solve their question.

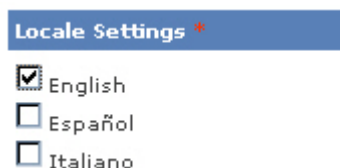


Specify the following properties:

Property	Description
Number of Solutions	Specify the number of messages that a topic owner can identify as the solution.
Number of Partial Solutions	Specify the number of messages that a topic owner can identify as the partial solution.

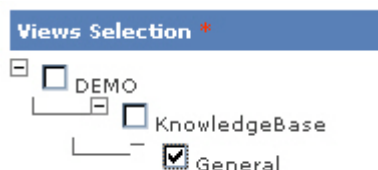
Locale Settings

You can specify the locale of the discussion board by selecting a language in the Locale Settings:



View Selection Settings

The Views Selection determines what view a user has to be a member of to see the board in the console:



Categories for Discussion Boards, Forums, and Topics

You can select repository Categories to provide a hierarchy within a discussion board, enabling administrators to assign specific categories to boards, forums, or topics. Users can then navigate the forums within a discussion board to view only forums and topics specific to a selected category. You can assign a forum to only one category.

Note: See [Chapter 5, Working with Content Categories](#) for more information on defining categories.

To select a category for a Discussion Board, Forum, or Topic:

- 1 Expand the category hierarchy to display the desired category:

- 2 Select the **Add** option for the desired category

Note: Adding a category also includes all of its subcategories.

The Management Console updates the Selected Categories field.

Security Options for Discussion Boards, Forums, and Topics

You can restrict Discussion Board, Forum, and Topic usage, such as the ability to read, post, rate, and recommend content by specifying privileges by:

- Owner
- User Groups
- Reputation Level

Note: See “Configuring User Reputation Levels” on page 139 for more information on using reputation models.

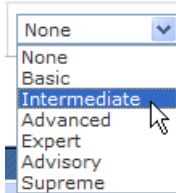
The Security section of the Discussion Board, Forum, and Topic Property pages lists the following privileges that you can permit:

Discussion Board Security												
	Read Forum	Post Message	Post Topic	Edit Message	Edit Topic	Rate Message	Rate Topic	Report Abuse	Manage Solutions	Recommend Content	Post Announcement	Attach Files
Restrict To Owner												
Owner				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Restrict by User Groups												
Customer Service	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Internal Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Public	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Restrict by Reputation Level												
Reputation Level		Level 3	None	None	None	None	None	None	None	Level 3	None	Level 3

To grant permission for an Owner or User Group, select the check box that corresponds to the Owner or User Group.

Privileges can be set on the discussion board or the forum (setting privileges on one overrides any previous privileges settings on the other). Console users are not restricted by privileges when using the Management Console; however, they are restricted when using the web application, InfoCenter.

To restrict permission to users that have achieved a certain reputation level, select the desired level for each activity:



Restricting File Size on Discussion Board Attachments

To place a size restriction on discussion board attachments, add a `max.discussion_board_file.upload.size` property to the `application.properties` file. This behaves similar to `max.file.upload.size`, except `max.file.upload.size` is only enforced in InfoCenter; `max.discussion_board_file.upload.size` is enforced in both InfoCenter and IMConsole. If the `application.properties` file does not contain this property or has a value of -1, no size limit is enforced. The value should be in bytes.

Creating and Managing Discussion Board Filters

Discussion filters are applied when a discussion topic or message is saved. They can be used to screen out unwanted or potentially hazardous content.

Use the Manage Filters page to activate, deactivate, or change the order of filters. From the Manage Filters page you can also:

- Add system filters as described in “Adding System Filters to a Discussion Board” on page 160
- Add custom filters as described in “Adding Custom Filters to a Discussion Board” on page 162

Note: Filters are applied only if they are active and in the order in which they appear on the Manage Filter Page.

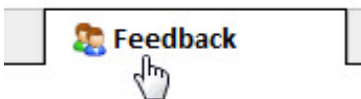
Adding System Filters to a Discussion Board

System Filters are out-of-the-box filters that you can select from the Management Console. The following filters are currently available:

- **IM HTML Filter** – which parses message text and strips out all Javascript and all HTML tags not listed in `InfoManager/config/SYSTEM/allowedHTMLTags.txt`. If a tag is allowed, the tag's attributes are then examined to make sure they are also allowed. For example, if `a:href` appears in `allowedHTMLTags.txt` it means that the anchor tag is allowed and that `href` is an allowed attribute for the anchor tag. Any attribute that is not specifically allowed for a given tag is stripped out.
- **IM Profanity Filter**– which parses message text using regular expressions looking for text listed in `InfoManager/config/SYSTEM/profanitylist.txt`, replaces any it finds with `*****`, and marks the message for moderation.

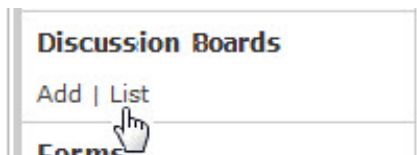
To add a System Filter to a Discussion Board from the Management Console:

- 1 Select **Feedback** from the navigation area:



The Management Console displays the Feedback Management page.

- 2 Select **List** under Discussion Boards:



The Discussion Boards page lists the currently defined discussion boards.

- 3 Select **Manage Filters** for the appropriate discussion board

The Manage Filters page lists the filters defined for the selected discussion board

- 4 Select **Add System Filter**

- 5 Select the filter to apply

The selected filter appears in the list of active filters for the discussion board.

Adding Custom Filters to a Discussion Board

Custom filters are filters you create by implementing the `IMForumFilter` interface (see “`IMForumFilter` Interface” on page 162 for a description of the `IMForumFilter` interface).

To add a Custom Filter to a Discussion Board from the Management Console:

- 1 Select **Feedback** from the navigation area:

The Management Console displays the Feedback Management page.

- 2 Select **List** under Discussion Boards:

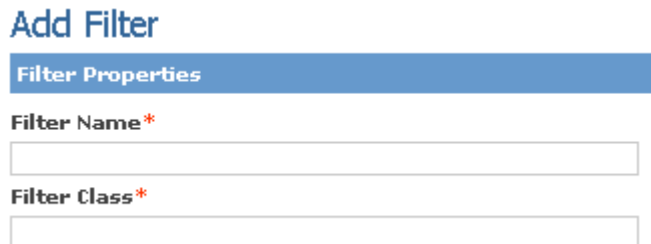
The Discussion Boards page lists the currently defined discussion boards.

- 3 Select **Manage Filters** for the appropriate discussion board

The Manage Filters page lists the filters defined for the selected discussion board.

- 4 Select **Add Custom Filter**

The Add Filter dialog is displayed.



- 5 Enter the new Filter Name and provide the fully qualified Filter Class name that implements `IMForumFilter`

Note: Filter classes must implement the `IMForumFilter` interface and the class must be in the classpath so that the application can see it.

- 6 Select **Save Filter**

The custom filter appears in the list of active filters for the discussion board.

IMFORUMFILTER INTERFACE

Custom filters must implement the `IMForumFilter` interface shown below and the implemented class must be in the classpath so that the application can see it.

```
package com.inquiras.services.discussion;

/**
 * Interface for processing messages and topics. Classes that
 * implement this interface should be in the class path
 * for the management console and tag library application.
 */
public interface IMForumFilter {
/**
 * Process the title and return a modified string
 *
 * @param title
 * @return
 */
public String processTitle(String title);
/**
 * Process the body and return a modify string
 * @param body
 * @return
 */
public String processBody(String body);
/**
 * Set to true to mark the message for moderation
 *
 * @return
 */
public boolean markForModeration();
/**
 * Set to true to unpublish the message or topic
 * @return
 */
public boolean unpublish();
/**
 * Set to true to ban the user performing the action
 * @return
 */
public boolean banUser();
/**
 * Return -1 to use default ban settings, 0 to ban forever, or
 * any number to set the ban to those numbers
 *
 * @return number of days a user will be banned
 */
public int banDays();
/**
 * Set to true to continue with the next filter in the chain, or
 * set to false to stop filter processing and return
 * to saving the message.
 *
 * @return
 */
public boolean continueWithNextFilter();
}
```

Working with Discussion Board Metrics

Information Manager compiles and displays the following metrics associated with discussion board use:

Question Status	Displays the status of the current question. Possible values are: <ul style="list-style-type: none"> • Solved • Partially Solved • Not Answered
Solved Answers	Indicates the number of messages in question topic that have been marked as solved.
Available Solved Answers	Indicates the number of available solved messages. You can specify the total allowed solutions for a topic, as described in <i>“Topic Question Settings” on page 157.</i>
Helpful Answers	Indicates the number of available partially solved messages. You can specify the total allowed partial solutions for a topic, as described in <i>“Topic Question Settings” on page 157.</i>
Ratings	Web application users can rate topics and messages on a scale of 1 - 5, (5 being most valued).

Creating and Managing Discussion Forums

Discussion Forums contain and organize Topics by subject matter area. You can create any number of forums within a discussion board, and you can associate forums with hierarchical categories, such as product lines. You create and manage discussion forums using the Feedback Management page, which lists the currently defined discussion boards.

To manage discussion topics:

- 1 Select **Feedback** from the navigation area:

The Management Console displays the Feedback Management page.

- 2 Select **List** under Discussion Boards:

The Discussion Boards page lists the currently defined discussion boards.

To create and manage forums within a discussion board:

- 1 Select the **Forum Management** option

The Forum Management page displays the currently defined forums for the selected discussion board.

To create a forum:

- 2 Select **Add Forum**

The Management Console displays the Forum Properties page.

- 3 Specify the following properties to define a Forum:

Forum Name	Specify the name of the forum.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See <i>“A Note On Reference Keys” on page 52</i> for more information on reference keys.

Description	Specify a brief description that will display as the subheading for the forum.
Select Category	Select the categories that apply to the discussion board. Use the Add button to move categories in the Available Categories list box to the Selected Categories box. refer to the section on “Categories for Discussion Boards, Forums, and Topics” on page 158 for more information about categories.
Forum Security	<ul style="list-style-type: none"> • Restrict To Owner: Select activities to restrict to content owners • Restrict by User Groups: Select the activities each user group can carry out • Restrict by Reputation Level: Specify the minimum reputation level required to carry out each activity See “Security Options for Discussion Boards, Forums, and Topics” on page 159 for more information on security settings.
Date Properties	Select the Start Date and End Date for the when the forum is available to users (optional).

- 4 Select **Save Forum Properties** to save your entries

Creating and Managing Forum Topics

Forum topics are the individual subjects within forums. Topics have associated types (normal and question), and associated metrics, including the number of times users viewed the topic and its messages. You can also define rating mechanisms for topics and related messages, for example to rate proposed solutions to a question topic. You create and manage forum topics using the Feedback Management page, which lists the currently defined discussion boards.

To manage discussion topics:

- 1 Select **Feedback** from the navigation area:

The Management Console displays the Feedback Management page.

- 2 Select **List** under Discussion Boards:

The Discussion Boards page lists the currently defined discussion boards.

- 3 Select the **Forum Management** option

The Forum Management page displays the currently defined forums for the selected discussion board.

To create and manage topics within a forum:

- 1 Select the **Topics** option

The Topics page displays the currently defined topics within the selected forum. You can filter the topics list as described in “Creating and Managing Discussion Boards” on page 154. You can create and manage messages (responses) for a topic as described in “Creating and Managing Discussion Messages” on page 168.

To add a topic:

- 1 Select the **Add New Topic** option

The Management Console displays the Topic Properties page.

- 2 Specify the following properties to define a Topic:

Forum	Displays the selected Forum in which the topic will be created.
--------------	---

Category	Displays the category configured for the current Forum.
Topic Title	Specify a title for the topic.
Topic Body	Enter the text of the topic.
Topic Type	Select the topic type, as described in “Topic Types” on page 166.

Topic Types

Topics have associated types:

- Normal Topic
- Question Topic
- Announcement

Questions topics enable the topic owner to identify answers that either solve or help to solve their question. Information Manager tracks the number of times that topics are viewed, which contributes to the reputation of the user who posted the solution.

Announcements are topics for which no thread is intended. Note that other users will not be able to reply to an announcement.

Moving Topics

You can move topics to other forums or discussion boards if necessary.

Note: To move topics, the user must have access to the discussion board management pages and the Move Topic privilege.

To move a topic:

- 1 Select **Feedback** from the navigation area.
The Management Console displays the Feedback Management page.
- 2 Select **List** under Discussion Boards:
The Discussion Boards page lists the currently defined discussion boards.
- 3 Select the **Forum Management** option.
The Forum Management page displays the currently defined forums for the selected discussion board.

4 Select the **Topics** option.

Topics

Forum: Accessing Online Accounts
Category: None

Topics Found(4) Select Filter: Select Locale:

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Topic	Author	Replies	Last Post	Actions
1.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Online Brokerage	Super Admin	0		Messages >>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Online Lockbox Features	Super Admin	0		Messages >>
3.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Using Online Investing	Super Admin	0		Messages >>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Navigating Between Online Accounts	Super Admin	0		Messages >>

Select All Unselect All

Answered question
 Unanswered question with answer points still available
 Unanswered question
 Needs Moderation

General Discussion
 Announcement
 Topic is published
 Topic is not published
 Topic is closed

[Move Selected Topics](#) >>
[Delete Selected Topics](#) >>
[Add New Topic](#) >>
[Return to Forums Management](#) >>

The Topics page displays the currently defined topics within the selected forum.

- 5 Select the topic(s) to move.
- 6 Click **Move Selected Topics**.

Move Topics

Destination Forum

Redirect Options

Leave No Redirect
 Leave Permanent Redirect
 Leave Expiring Redirect

Expiration Date

Time:

[Save](#) >>
[Cancel](#) >>

The Move Topics page displays the Destination Forum and Redirect Options.

- 7 Select the target forum from the Destination Forum drop-down list.
- 8 Select re-direct link options:
 - a Leave No Redirect.
 - b Leave Permanent Redirect.
 - c Leave Expiring Redirect. Choose a date for the re-direct link to expire.
- 9 Click **Save**.

The system moves the topic(s) to the target forum as if originally created in the target forum:

- Create Date is the same.
- Reply Dates are the same.
- Metrics (Views and number of replies) are the same.
- Filters work with the newly moved topic in the target forum (e.g. Most Popular in the last 24 hours).

The system returns to the previous Topics page when the operation is complete. The topics moved no longer appear.

The system maintains ratings and abuse reports when moving within the same Discussion Board. Search data updates in the next crawl cycle with the new location of the topic.

The system logs the move operation for use in reports or through an audit history.

Note: The system does not maintain subscriptions to the moved topic.

Creating and Managing Discussion Messages

You can add new messages, reply to existing messages, add attachments, and review, edit, and publish user-submitted messages from within the Management Console or the web application.

Note: In moderated discussions, a moderator must formally publish messages submitted by end users; these messages will not display on the web site until they are published.

You manage messages related to a selected discussion topic using the Messages page.

To view messages for a selected topic:

- Select the **Messages** option for the selected topic on the Discussion Board Management page

The Messages page displays.

The Messages page lists all of the messages associated with the topic. Messages and replies to messages are displayed as parents and children within the list. The character P displayed in red indicates that a message is not published.

You can view details for message and review its contents prior to publishing by selecting the message item. The Message Board Message page displays as described in Publishing Messages.

You can reply to existing messages using the Reply option, and add a message to begin a new thread using the Add New Message option. The Message Board Message Edit page displays as described in Creating Discussion Forum Messages.

To add or manage messages for a topic:

- Select the **Messages** option on the Topics page

The Messages page displays the Messages posted for the selected topic.

To add a Message for a Topic:

- Select the **Reply** option

The Management Console displays the Message Properties page.

To add an attachment to a message in InfoCenter:

- 1 Navigate to a forum discussion topic and either add a new message or reply to an existing message.
- 2 On the Post New Message page, type a description of the file to be attached.

- 3 Click the **Browse** button under **Attached Files**,
- 4 In the File Navigation dialog box, navigate to the file to be attached.
- 5 Select the file and click **Open**.

The Management Console displays the Post New Message page. Use the **Remove** button to delete an attachment.

- 6 Click Post Message to save the new message with the attachment.

Users can include one attachment per topic message. Two database tables, DBTOPICFILE and DBMESSAGEFILE, capture and assign files to topics and messages. Attached files are stored in a resource directory located in:

```
{BASEDIR}/[REPOSITORY_REF_KEY]/discussionboards/[DB_REF_KEY]/forums/[FORUM_REF_KEY]/topics/[TOPIC_GUID]/messages/[MESSAGE_GUID]
```

Where $\{BASEDIR\}$ is the base path URL to resources directory which is set by configuration parameter `CONTENT_RESOURCE_MOUNT_POINT`, `[REPOSITORY_REF_KEY]` is the reference key for current repository, `[DB_REF_KEY]` is the reference key to the discussion board, `[FORUM_REF_KEY]` is the reference key to a forum in the discussion board, `[TOPIC_GUID]` is the unique key id of a topic in forum, and `[MESSAGE_GUID]` is the unique key id of a message in a topic.

There are no file type restrictions on attachments. When a topic is moved to another discussion board, attachments move with the topic.

Creating and Managing User Information and Content Rating Forms

You can create and manage forms that end users can use to submit data to your organization using the Forms and Ratings Management page. You can define forms to collect various types of information as described in “Types of Data Forms” on page 169.

Forms consist of questions and answers, which are labeled fields that you define for the form. You can define form fields to collect any information of interest.

You create forms by:

- Defining the basic form properties as described in “Creating General Forms” on page 171
- Defining the question and answer form fields as described in “Creating Form Questions” on page 174 and “Creating Form Answers” on page 175.

Types of Data Forms

You can define the following types of forms:

- General user information forms, such as a request for contact (Contact Us)
- Content rating forms, which you use to collect user-assigned ratings of accessed content
- Channel alert forms, which are special forms designed to collect subscription information for users to be notified by email of changes to a specified channel

Creating Rating Forms

To define a content rating form:

- 1 Select **Feedback** from the navigation area:

The Management Console displays the Feedback Management page.

To create a rating form:

- 1 Select **Add** under Ratings:

The Rating Properties page displays:

Rating Properties

Rating Properties

Name*

Reference Key*

Rating Type
Five Stars

Reverse order of answers in web application.

Question Properties

Name*
Rate this item

Answers Properties

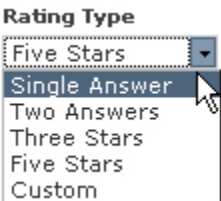
Answers

Value	Text
★☆☆☆☆	1 <input type="text"/>
★★★★☆	2 <input type="text"/>
★★★☆☆	3 <input type="text"/>
★★★★☆	4 <input type="text"/>
★★★★★	5 <input type="text"/>

Save Rating
Cancel

- 2 Specify the following fields:

Name	Specify a name for the form.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See "A Note On Reference Keys" on page 52 for more information on reference keys.

Rating Type	<p>For rating forms, select one of the following rating types:</p>  <p>With the exception of Custom, the rating types use a predefined format. When creating a form with the Custom rating type, add questions and answers in the same way you do for general forms, as described in “Creating Form Questions” on page 174 and “Creating Form Answers” on page 175.</p>
Question Properties	Enter the question.
Answer Properties	Enter the text for the answer value(s).

3 Select the **Save Rating** option

The Form Preview page displays as described in “Managing Forms” on page 173.

You can schedule a batch job to identify content that has received ratings higher than or lower than a specified value using the Rating Analysis batch job, as described in “Identifying Content by Rating Level” on page 252.

Rating Preview

The Rating Preview page displays information about a selected rating form, including:

- An overview section, which displays the name, reference key, and the contents of the question and answer fields defined for the form.
- The Properties section, which displays the form properties and lock status.

You can:

- Add questions and answers to the form by selecting the Questions option. The Rating or Data Form Question page displays.
- Edit the rating properties by selecting the Edit Properties option in the Properties section. The Rating or Data Form Properties page displays.

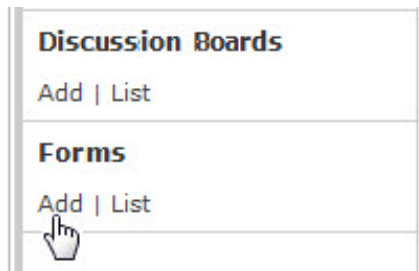
Creating General Forms

To define a general information form:

- 1 Select **Feedback** from the navigation area:

The Management Console displays the Feedback Management page.

2 Select **Add** under Forms:



The Data Form Properties page displays:

Data Form Properties

Name*

Reference Key*

Data Form Type

Include content in email notifications

Repository Views*

DEMO

Form Privileges

Author

Delete Modify View Import [Select All](#) [Unselect All](#)

Contributor

Delete Modify View Import [Select All](#) [Unselect All](#)

Default User Role

Delete Modify View Import [Select All](#) [Unselect All](#)

Internal User

Delete Modify View Import [Select All](#) [Unselect All](#)

Legal Role

Delete Modify View Import [Select All](#) [Unselect All](#)

Public User

Delete Modify View Import [Select All](#) [Unselect All](#)

Technical Reviewer

Delete Modify View Import [Select All](#) [Unselect All](#)

Translator

Delete Modify View Import [Select All](#) [Unselect All](#)

[Save Data Form](#)

[Cancel](#)

3 Specify the following fields:

Name	Specify a name for the form.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.

Data Form Type	For data forms, select one of the following form types: <ul style="list-style-type: none"> • User Form • News Letter Form • Channel Alert Form as described in “Types of Data Forms” on page 169.
Include content in email notifications	Specify whether to include the form content in email responses based on the form.
Repository Views	Specify the base repository or one or more child repositories from the hierarchy for which this form will be available.
Form Privileges	Assign user roles and privileges for the form.

4 Select the **Save Data Form** option

The Data Form Preview page displays, as described in “Managing Forms” on page 173.

Managing Forms

When you create or edit a form, the Information Manager console displays the Rating or Data Form Preview page:

Data Form Preview

Name
Demo Color Survey

Reference Key
UFORM

Questions

1. What is your name?(Text Field)
 1. (Blank)
2. What is your favorite color?(Dropdown List)
 1. Blue
 2. Green
 3. Yellow

Properties

Publish Dates
Start
End

User
Super Admin

Data Form Type
User Forms

Repository Views
Demo

Status
Unlocked

Lock

Questions

Done

Edit Properties

The preview page displays information about the form, including:

- An overview section, which displays the contents of the question and answer fields defined for the form
- The Properties section, which displays the form properties and lock status

You can lock or unlock the form by selecting the Lock/Unlock option. Users cannot make changes to the structure of a locked form.

You can add questions and answers to the form by selecting the Questions option. The Rating or Data Form Question page displays as described in “Managing Form Questions” on page 175.

You can edit the form properties by selecting the Edit Properties option in the Properties section. The Rating or Data Form Properties page displays as described in “Creating General Forms” on page 171.

Creating Form Questions

To create a question within a rating or data form:

- 1 Select the **Questions** option on the Forms Management or Form Preview page

The Form Questions page displays any currently defined questions.

- 2 Select the **Add Question** option from the Form Questions page

The Form Question Properties page displays.

Data Form Question Properties

Question Text*

Reference Key*

Required
 Include in master record identifier

Answer Type*

- Check Box
- Dropdown List
- File
- Multiselect List
- Radio Button
- Text Area
- Text Area Large
- Text Field

[Save Question >>](#)
[Cancel >>](#)

- 3 Specify the following properties

Question Text	Specify the text of the question for the form.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See "A Note On Reference Keys" on page 52 for more information on reference keys.
Required	Specify whether a response to the question will be required in order to submit the form.
Include in master record identifier	Specify whether this question will be included in the master record identifier, which determines the content for this item when it is displayed within a list in the Management Console.
Answer Type	Specify the format of the answer for this question on the form.

Managing Form Questions

You can view, create, and manage questions within a selected rating or data form using the Form Questions page, which lists the currently defined questions for a selected form:

Data Form Questions

Data Form Questions (2)

	Question	Up	Down	Answers
1.	<input type="checkbox"/> Please enter your name:	Up	Down	Answers
2.	<input type="checkbox"/> How did you hear about us?	Up	Down	Answers

Delete Selected Questions

Add Question

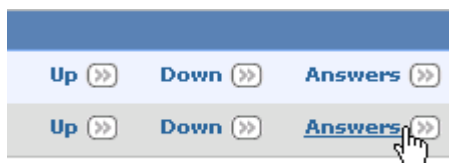
Done

Use the **Up** and **Down** options to change the order of questions on the form. You can add a question to the form by selecting the **Add Question** option, as described in “Creating Form Questions” on page 174. You can view and edit details for a question by selecting the question from the list to display the Question Properties page, as described in “Creating Form Questions” on page 174. You can view, create, and manage answers for a selected question by selecting the corresponding **Answers** option, as described in “Managing Form Answers” on page 176.

Creating Form Answers

To create an answer for a selected form question:

- 1 Select the **Answers** option for a question on the Form Questions page:



The Form Question Answers page displays the currently defined answers for the selected question:

Data Form Question Answers

Question
How did you hear about us?

Data Form Answers (2)

	Answer	Up	Down
1.	<input type="checkbox"/> News Article (web or print)	Up	Down
2.	<input type="checkbox"/> Advertisement (web or print)	Up	Down

Delete Selected Answers

Add Answer

Done

- 2 Select the **Add Answer** option

The Form Answer Properties page displays.

Data Form Answer Properties

Answer Text*

Reference Key*

Number Value*

Default Answer

Save Answer >>
Cancel >>

3 Specify the following properties:

Answer Text	Specify the text of the answer, which will display as a label for the form field.
Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See “A Note On Reference Keys” on page 52 for more information on reference keys.
Number Value	Specify the position of this answer if used in a sequence of choices.
Default Answer	Specify whether this answer will be selected by default.

Managing Form Answers

You can view, create, and manage answers to a selected form question using the Form Question Answers page, which lists the currently defined answers for a selected form question:

Data Form Question Answers

Question
 How did you hear about us?

Data Form Answers (2)

	Answer	
1.	<input type="checkbox"/> News Article (web or print)	Up >> Down >>
2.	<input type="checkbox"/> Advertisement (web or print)	Up >> Down >>

Delete Selected Answers >>
Add Answer >>
Done >>

Use the **Up** and **Down** options to change the order of answers on the form. You can view and edit details for an answer by selecting the answer from the list to display the Answer Properties page. You can add an answer using the **Add Answer** option. The Form Answer Properties page displays as described in “Creating Form Answers” on page 175.

Creating and Managing Content Recommendations

Recommendations provide the means for users to request additional application content. You can create and manage recommendations from within the Management Console, and you can also use the JSP tag library to enable web application users to create and manage content recommendations.

Information Manager creates a task for each content recommendation. Authorized users can manage content recommendations by either accepting or rejecting the recommendation tasks. You can configure Information Manager to notify the requestor when recommendations are accepted or rejected as described in “Configuring Tasks and Task Notifications” on page 237.

You can manage content recommendation tasks on the Manage Content Recommendations page described in this section, or from the Inbox, as described in the *Working with Tasks* section of the *Oracle Knowledge Information Manager Content Authoring Guide*.

Recommending Content

Information Manager allows users to recommend that content should be added to the application.

To recommend content:

- 1 Select **Add Recommendation** from the record preview page:



Alternatively, you can select **Feedback** from the navigation area:

The Management Console displays the Feedback Management page.

- 2 Select **Add** under Recommendations:

The Management Console displays the Manage Content Recommendations page:

3 Specify the following parameters:

Title	Specify a title for the recommendation.
Description	Enter any descriptive information to assist the content author in providing the appropriate content.
Case Number	Specify an incident or case identifier if applicable.
Select Content Channel	Select the relevant content channel for the new content, if applicable. The Management Console will display the available content categories for the selected channel.
Available Categories	Select the categories that this content should be assigned to.
Priority	Specify an optional priority (Low, Medium, or High) for this recommendation.

Locating Content Recommendations

You can locate content recommendations using the Find option under Content Recommendation.

To locate specific content recommendations:

- 1 Select the **Find** option under Content Recommendations

The Management Console displays the Find Content Recommendations page:

Find Content Recommendations

Find Entry Fields

Case Number

Content Channels

- Application
- Content Channel
- CRM
- Document
- Email
- Knowledge Base
- Web Page

Requested by

Completed by

Priority

Recommend Status

Locales

Recommendations created on or after date:

Date  Time AM

Recommendations created before date:

Date  Time AM

2 Specify any combination of the following criteria:

Case Number	Specify a case number (for example, from a CRM application) to locate content recommendations associated with a specific incident. Note: The case number must be an exact match.
Content Channels	Select channels to locate content recommendations associated with one or more content channels.
Requested by	Select a user name to locate content recommendations associated with a specific user.
Completed by	Select a user name to locate completed (having a status of Rejected or Content Created) content recommendations associated with a specific user.
Priority	Select a priority to locate content recommendations assigned as either: <ul style="list-style-type: none"> • Low • Medium • High

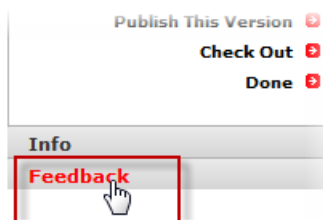
Recommend Status	Select a status to locate content recommendations assigned as either: <ul style="list-style-type: none"> • New • Rejected - Duplicate • Rejected - Not enough information • Rejected - Unsuitable • Rejected - Other • Content Created • Content Modified
Locales	Select a locale (language and region) that the recommendations were created in.
Recommendation creation date	Specify dates on or after which, or before which, the recommendations were created.

Viewing Recommendation History

You can view the history of recommendations associated with a content record. Information Manager displays summary information, including icons that indicate that status of each recommendation. You can select recommendations to displays details and perform any available tasks.

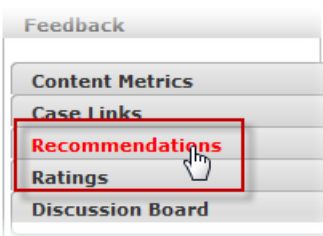
To view recommendation history:

- open any content record, and select **Feedback** from the right navigation:

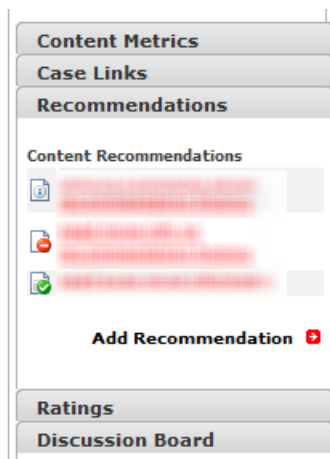


Information Manager displays the various **Feedback** options.




- select **Recommendations** from the list of **Feedback** options:



Information Manager displays the **Recommendations** history for the selected content:



Information Manager lists each recommendation for the selected content, and displays its status:

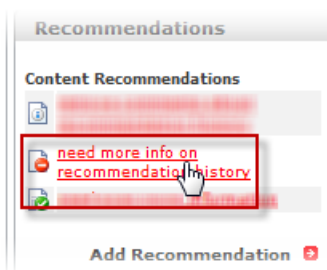
Status	Description
	Indicates that the recommendation is new and has not been acted on.
	Indicates that the recommendation is accepted and that the content has been created or modified as recommended.
	Indicates that the recommendation is rejected.

You can select a recommendation to view history details as described in “Viewing Detailed History for a Recommendation” on page 181.

Viewing Detailed History for a Recommendation

You can view details about the history of a recommendation by selecting it from the list of recommendations for the currently selected content. To view detailed history for a recommendation:

- select the recommendation from the **Content Recommendations** list:



Information Manager displays the **View Content Recommendations** page.

The **View Content Recommendations** page displays:

- the recommendation data fields
- the recommendation properties, which include history information

The recommendation data fields include the following information:

Field	Description
Title	Displays the title of the recommendation.
Description	Displays the requested content change information.
Priority	Displays the requestor's or editor's selection of High, Medium, or Low priority.
Case Number	Displays the optional incident number that supports the request to change the content.

The recommendation properties include the following information:

Field	Description
Requested by	Lists the user who created the recommendation.
On	Lists the date that the user created the recommendation.
Status	Lists the recommendation's status as one of the following: <ul style="list-style-type: none"> • New • Content Modified (recommendation accepted) • Rejected - for one of the following reasons: <ul style="list-style-type: none"> Duplicate Not enough information Unsuitable Other
Case Number	Lists the optional incident number that supports the request to change the content.
Categories	Lists the content categories that the recommendation applies to.

Working with Advanced Administration Features

This chapter describes advanced administration functions that you may need to perform while configuring and maintaining Information Manager.

Note: Some of the functions available in the Administration area, such as importing and exporting data, are discussed in other sections of this guide.

You can perform administrative functions:

- At the System repository level, as described in “System Repository Administration Options” on page 183.
- For a selected content repository, as described in “Application Repository Administration Options” on page 184.

Many administrative functions are available at both system and application repository levels; in general, system-level administration sets default values for all repositories, while content repository-level administration affects only the current repository.

System Repository Administration Options

The following administrative options are available in the SYSTEM repository:

Administrative Option	Administrative Function
System	Configure the settings for both the SYSTEM and content repositories, as described in “Information Manager System Configuration” on page 185.
Tasks & Notifications	View, enable or disable, and edit notifications for the tasks that Information Manager can generate as described in “Configuring Tasks and Task Notifications” on page 237.
Full Text Search	Index the contents of a selected application repository to rebuild a damaged or corrupted index, if necessary. See “Indexing Data for Full Text Search” on page 185 for more information.
System Log Files	Locate, view, and download system log files for use in diagnosing problems. See “Viewing and Downloading Log Files” on page 187 for more information.
System Information	View System, JVM, Statistics, and Information Manager application configuration information.
Locale Management	Manage supported locales as described in “Managing Supported Locales” on page 254.
Repository Data	Export or import Information Manager data as described in Chapter 10, Importing and Exporting Data .

Repository Replication	Merge an exported repository into Information Manager, as described in “Restoring Repository Data” on page 298.
-------------------------------	---

Application Repository Administration Options

You can perform the following administrative tasks while logged onto an application repository:

Administrative Option	Administrative Function
System	Configure the settings for both the SYSTEM and content repositories, as described in “Information Manager System Configuration” on page 185.
Tasks & Notifications	View, enable or disable, and edit notifications for the tasks that Information Manager can generate, as described in “Configuring Tasks and Task Notifications” on page 237.
Batch Jobs	Define, modify, and view batch jobs for the application repository, as described in “Scheduling Batch Jobs” on page 243.
Full Text Search	Index the content channel or forms data within an application repository to rebuild damaged or corrupted indexes, if necessary. See “Indexing Data for Full Text Search” on page 185 for more information.
System Information	View System, JVM, Statistics, and Information Manager application configuration information.
System Log Files	Locate, view, and download application log files for use in diagnosing problems. See “Viewing and Downloading Log Files” on page 187 for more information.
Repository Data	Export and import Information Manager data, as described in Chapter 10, Importing and Exporting Data .
Repository Replication	Export and merge an exported repository into Information Manager, as described in “Backing Up and Restoring Information Manager Data” on page 296.

Performing Advanced Administration Functions

To perform advanced administration functions:

- 1 Log onto the desired repository and select **Tools** from the navigation bar:
The Management Console displays the Administration page for the current repository (the SYSTEM repository page is shown below):
- 2 Select the desired administration task as described in “System Repository Administration Options” on page 183 and “Application Repository Administration Options” on page 184 .

Information Manager System Configuration

You can manage various configuration settings for your Information Manager application at both the SYSTEM repository and application repository level. The Information Manager Settings page lists the following configuration options:

Resource Configuration	Configure the access method and storage location for content resources (files attached to content records and copies of content records), as described in “Configuring Content Resource Access and Storage” on page 189.
LDAP Configuration	Configure Information Manager for use with external LDAP security schema, as described in “LDAP Configuration” on page 200.
Email Configuration	Specify the default administrator email settings for all repositories (SYSTEM) or for the current repository, as described in “Email Configuration” on page 205.
InQuira Search Configuration	Specify an Oracle Knowledge application instance to use for searching within Information Manager, as described in “Search Configuration” on page 217.
Delegate Classes Configuration	Specify Java methods to execute when given events occur, as described in “Delegate Classes Configuration” on page 227.
Delegate Translation	Specify to integrate to an external application to do machine translation of content, as described in “Translation Delegate Class Configuration” on page 229.
Create Analytics Lookup Data	Generate the required analytics "base" data. This is primarily designed for customers upgrading from releases prior to 8.5. It is not necessary to utilize this option unless the analytics schema has been reset.
File Attachment Configuration	Specify to restrict the file types that users can attach to content records. There are no restrictions by default; users can attach any type of file. See “Connecting to an External Web Service” on page 247 for information on restricting attachments by file type.
Password Configuration	<need information>
ESAPI Configuration Customization	See “Customizing ESAPI Configurations” on page 231 for more information on customizing the ESAPI configurations for Oracle Knowledge IM Console.

Indexing Data for Full Text Search

Information Manager automatically maintains the indexes used for full text searches as records are inserted, updated, and deleted; however, you can use the Full Text Search Index function to rebuild a damaged or corrupted index if necessary.

You can create or refresh the full text search index:

- For one or more application repositories, as described in “Indexing Repository Data” on page 186.
- The current application repository, or selected content channels and forms within the repository, as described in “Indexing Application Repository Data” on page 186.

In an application repository, you can index channel data on the staging and production (live) systems separately, or index both systems in a single operation.

Note: The Information Manager full text indexes are stored on the application server's local file system. The index directory must have read/write access to all users of the search function.

Indexing Repository Data

When logged in as SUPER in the SYSTEM repository, you can create or refresh the full text search index using the Index option under Full Text Search on the Administration page.





Note: You can also index the current application repository as described in Indexing Application Repository Data.

To index data for a selected repository:

- 1 Log in as a super user onto the SYSTEM repository and select **Reindex** under Full Text Search on the Administration page:
The Management Console displays the Full Text Search Index Management page, which lists the channels and data forms defined for your installation:

Full Text Search Index Management

Repositories (4)

	Repository Name	
1.	DEMO	Index 
2.	qatest	Index 
3.	System	Index 
4.	Test	Index 

- 2 Select **Index** to index the repository.

The Management Console creates or re-creates the specified full text search indexes.

Indexing Application Repository Data

You can use the Index option under Full Text Search on the Administration page to create or refresh the full text search index for:

- Selected content channels
- Selected data forms
- The current application repository

To index data for content channels and form data:

- 1 Select the repository to reindex:
- 2 Select **Reindex** under Full Text Search on the Administration page:

The Management Console displays the Full Text Search Index Management page:

Full Text Search Index Management

Repository Channels (9)

Channel	Actions
1. Alerts	All Staging Live
2. Downloads	All Staging Live
3. FAQs	All Staging Live
4. Job Aid	All Staging Live
5. Manuals	All Staging Live
6. News	All Staging Live
7. Policy	All Staging Live
8. Solutions	All Staging Live
9. test	All Staging Live

Data Forms (7)

Data Form	Actions
1. Basic Rating	Index
2. Demo Color Survey	Index
3. Feedback	Index
4. Information Center Survey	Index
5. Solution Rating	Index
6. Support Request	Index
7. Test Rating	Index

Index Repository
View Indexer Status

The Full Text Search Index Management page lists the channels and data forms defined within the repository.

To index channel data:

- Select **All** to index the desired channel data in both staging and production environments, or select **Staging** or **Live** to index only the staging or production data for the selected channel

To index form data:

- Select the **Index** item for the desired channel or form

To index the current application repository:

- Select the **Index Repository** item

The Management Console creates or re-creates the specified full text search indexes.

Viewing and Downloading Log Files

You can view and download system and application log files for use in diagnosing problems. Information Manager maintains log files in a directory structure on the local file system as described in “Information Manager Log Directories and Files” on page 189.

Note: Information Manager logs are configured to rollover every hour, on the hour.

Information Manager Log Directories and Files

Information Manager stores log files on the local file system in the directory:

<IM_HOME>\InfoManager\logs

The following table describes the directory structure and log files.

IMADMIN	This directory contains system logs for the Management Console.
audit	This directory contains the system-level audit logs.
system	This directory contains the system runtime logs (management console runtime errors).
<application_ repository>	This directory contains repository-specific logs (only the current repository is visible when browsing the Management Console Log Files Viewer pages)
audit	This directory contains the application repository audit logs.
system	This directory contains system runtime logs (repository tag application runtime errors) named in the format: <machine>_<SITE_REFERENCEKEY>_runtime.log

Configuring Content Resource Access and Storage

The Information Manager Content Resource Store stores resources (files) that are attached to content records (articles and discussion board messages) in the application. Content resources are the various types of files that users upload to the application when using the rich text editor to create articles, discussion messages, and other types of application content. Content resources include attached files, copies of content records, and images.

You can restrict the types of files that users can attach to content using the process described in “Connecting to an External Web Service” on page 247.

The content resource store is a directory on a file system that is accessible to the Management Console and the application Web server. It can be located on the same server as the Management Console, or on a network file system. You can configure Information Manager to maintain separate draft and published resource stores. Resources can be served by separate Web servers or configured to use resource caching services (such as Akamai). The content resource store contains XML versions of content records used for search indexing, and tracks all versions of content records and attached resources.

You can configure the access method and storage location for content resources using the **Resource Configuration** option on the Oracle Knowledge Settings page. You specify the initial content resource access and storage method and location during the installation process. Once Information Manager is installed, you can modify the resource configuration:

- in the SYSTEM repository, to specify the default content resource configuration for all application repositories
- in a specific application repository, to specify the content resource configuration for that application repository

See *Installing Oracle Knowledge Information Manager* in the *Oracle Knowledge Information Manager Administration Guide* for additional information about content resource access and storage settings.

Supported Content Resource Access and Storage Methods

You can configure Information Manager to access and store content resources using:

- direct access to the file system
- a configured FTP server

See “Direct File System Access Requirements” on page 190 for more information.

Direct File System Access Requirements

If you configure direct file system access to content resources, you must specify:

- a shared location that is accessible from all Oracle Knowledge application servers
- READ and WRITE permissions for the Oracle Knowledge application servers in the content resource directories

In addition, you must meet the following operating system-specific requirements:

In Linux environments...	... the mapped drives must be NFS-mounted.
In Windows environments...	... you must map the drive using the UNC naming convention, for example: \\<server_name>\<shared_folder_name> ... you must grant the application user permissions to log in as a service, and any other appropriate network privileges.

Content Resource Access and Storage Configuration Process

You configure content resource access and storage by:

- configuring the resource web applications to access content resources as described in “Updating the Web Application Content Resource Configuration” on page 190
- updating the configuration for the intended SYSTEM and application repositories using the Management Console as described in “Updating the Content Resource Configuration” on page 193

Updating the Web Application Content Resource Configuration

When you update a repository’s content resource access and storage location, you must manually configure the resource web applications and update the resource URL(s) to ensure that all Oracle Knowledge applications can access the new location. You configure the resource web applications by specifying the resource web application context in each resource web application, and on every Oracle Knowledge instance, that references the updated repository.

You specify the initial resource web application context name during the installation process. The default context name is `OKResources`.

Note: The process for specifying the resource web application context name differs among WebLogic Server and Tomcat implementations.

You update the resource web application context in WebLogic Server implementations as described in “Specifying the Resource Web Application Context in WebLogic Server” on page 191, and in Tomcat application server implementations as described in “Specifying the Resource Web Application Context in Tomcat Application Servers” on page 192.

Note: Perform these steps prior to updating the content resource configuration in the Management Console as described in “Updating the Content Resource Configuration” on page 193.

Specifying the Resource Web Application Context in WebLogic Server

You specify the resource web application context as part of updating the content resource access and storage location for applications running on WebLogic Server. You specify the resource web application context by editing the virtual-directory-mapping node in the Administration Server `weblogic.xml` configuration file so that it refers to the new content resource mount point.

Note: Ensure that the WebLogic Administration Server is running when you perform this procedure.

To specify the resource web application context:

- Log onto the WebLogic Administration Console at:

```
http://<admin_server_listen_address>:<admin_server_listen_port>/console
```

- Select **Deployments** in the **Domain Structure** section to manage and control the Information Manager Web Applications.
- Select a resource web application.
- Navigate to the resource web application Path directory.
- Edit the resource web application’s `weblogic.xml` file, located at:

```
$Oracle Knowledge ROOT/instances/<Instance Name>/webapps/<Context Name>/app/  
WEB-INF/weblogic.xml
```

- Edit the virtual-directory-mapping node that corresponds to the content resource mount point path as follows:
 - Set the local-path node to the parent directory of the new content resource mount point location
 - Set the url-pattern node to “/”, followed by the directory name of the new content resource mount point path appended with “/*”

For example, to map the content resource mount point:

```
/home/username/Oracle/Knowledge/IM/instances/InfoManager/webapps/OKResources/  
resources
```

Specify:

```
<virtual-directory-mapping>  
<local-path>/home/username/Oracle/Knowledge/instances/InfoManager/webapps/  
OKResource/</local-path>  
          <url-pattern>/resources/*</url-pattern>  
</virtual-directory-mapping>
```

- Select **Lock & Edit** in the WebLogic Administration Console Change Center to make the domain editable.
- Select the resource web application that you modified, then select **Update**
- Select **Redeploy this application using the following deployment files**, then select **Finish**

- Select **Activate Changes** in the **Change Center** to activate the modifications to the resource web application.

Specifying the Resource Web Application Context in Tomcat Application Servers

You must configure the Tomcat web application so that it can access the resource location; you can configure access by either:

- locating the resources within the web application directory (for example, within the `$Oracle Knowledge ROOT/instances/<Instance Name>/appserverim/webapps/ROOT` directory structure)
- providing an individual context file that represents the web application used to access the content resources

You must configure access for every Oracle Knowledge instance.

Important! This procedure requires that you stop and re-start the application server.

To specify the resource web application context:

- Open a command prompt and navigate to:

```
$Oracle Knowledge ROOT/instances/<instance_name>
```

where `<instance_name>` is the Oracle Knowledge instance name.

- start the ICE environment:

```
setenv.sh (Linux)
```

```
setenv.bat (Windows)
```

- Stop the Oracle Knowledge instance:

```
inquiraim.sh stop (Linux)
```

```
inquiraim stop (Windows)
```

- Navigate to the following directory:

```
$Oracle Knowledge ROOT/instances/<instance_name>/appserverim/conf/Catalina/  
<information_manager_host>
```

- Create a context XML file named `<directory>.xml`, where `<directory>` is the new content resource mount point path directory name.

- Edit the file to include the following:

```
<?xml version='1.0' encoding='utf-8'?>  
<Context docBase="<full_path>" path="/<directory>">  
  <Resources className="org.apache.naming.resources.FileDirContext"  
    allowLinking="true" />  
</Context>
```

where:

`<full_path>` is the fully qualified path to the content resource mount point and `<directory>` is the directory is the content resource mount point

- Save the file
- Delete the Tomcat work directory at:


```
$Oracle Knowledge ROOT/instances/<Instance Name>/appserverim/work
```

- Start the application from the ICE environment:

```
inquiraim.sh start (Linux)
```

```
inquiraim start (Windows)
```

Updating the Content Resource Configuration

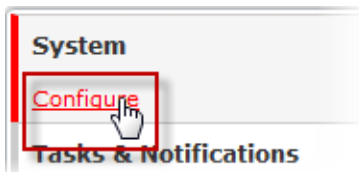
To configure content resource access and storage in the Management Console:

- 1 Log onto the desired repository and select **Tools** from the navigation bar:



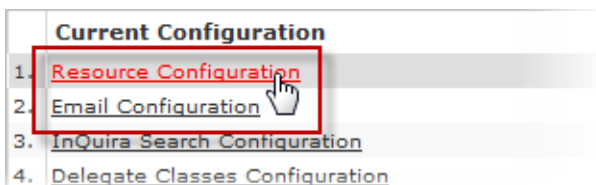
The Management Console displays the **Administration** page for the current repository.

- 2 Select **Configure** under **System**:



The Management Console displays the **Information Manager Settings** page.

- 3 Select the **Resource Configuration** item:



The Management Console displays the **Resource Configuration** page.

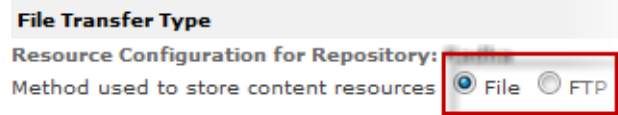
- Select **Override Current Configuration**

You can now specify content resource configuration properties, which include:

- the method of file access and transfer, as described in “Specifying the Content Resource File Transfer Method” on page 194
- the web server prefix for content resource access, as described in “Specifying Web Server Prefixes for Resource Access” on page 195
- the location of the server on which static media is stored, as described in “Specifying Static Resource Properties” on page 196
- the location of the management console, as described in “Specifying Management Console Properties” on page 196
- the location to use for rich text editor image upload and storage, as described in “Specifying Rich Text Editor Image Upload and Storage” on page 196

Specifying the Content Resource File Transfer Method

You can specify either of the following methods to access and store content resources:



:

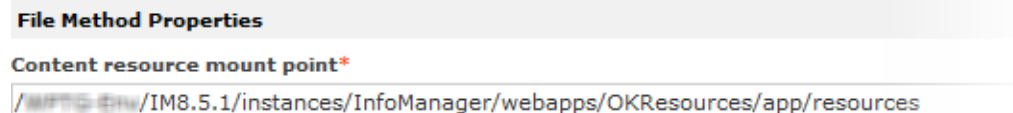
File	Specifies that you will store content resources on a file system and access them using direct file access.
FTP	Specifies that you will store content resources on an FTP server and access them using FTP.

- Select the file transfer method

The Resource Configuration page displays the properties fields for the selected method as described in “Specifying File Method Content Resource Properties” on page 194 and “Specifying FTP Method Resource Access Properties” on page 194.

Specifying File Method Content Resource Properties

If you specify to store and access content on the local file system, the Resource Configuration page prompts you to specify a content resource mount point:



- Specify a local directory for Oracle Knowledge storage of, and access to content resources for the application, and whether to use SSL to control access to the content

Specifying FTP Method Resource Access Properties

If you specify to store and access content on an FTP server, the Resource Configuration page prompts you to specify:

- the information that your application’s production instances will use to access the server

- whether you use a staging server that is separate from your production server

FTP method properties

Published content host name*

Published content user ID*

Published content password*

Do you use a separate staging server? Yes No

- specify the following information:

Published content host name	Specify the FTP server host name. In Linux environments, specify a mount point location. In Windows environments, specify a mapped drive.
Published content user ID	Specify the FTP server user ID.
Published content password	Specify the FTP server password.
Do you use a separate staging server?	Specify whether you use a separate FTP server for draft content prior to publishing. If you select Yes, the Resource Configuration page prompts you to specify additional staging server information.

Staging content host name	Specify the draft content FTP server host name if applicable.
Staging content user ID	Specify the draft content FTP server user ID if applicable.
Staging content password	Specify the draft content FTP server password if applicable.

Specifying Web Server Prefixes for Resource Access

You specify the web server prefix so that the application can access content resources. If you are configuring a separate draft content FTP server, the Resource Configuration page prompts you to specify web server prefixes for both draft content (staging) and published content (production) environments. For FTP access, specify a URL that corresponds to the content resource mapped drive or mount point location. For file system access, specify a the URL of the content resource directory.

- specify the following information:

Published content URL prefix	Specify the URL of the local directory, shared storage area, or physical path of the FTP location where the content resources will be transferred for use by production instances.
Staging content URL prefix	Specify the URL of the local directory, shared storage area, or physical path of the FTP location where the content resources will be transferred for use by staging instances.
SSL for content pages	Specify whether the content pages should be reached via SSL.

Specifying Static Resource Properties

The Resource Configuration page prompts you to specify a relative path from the web application or a fully-qualified path to the server on which static media is stored:

Static Resource Properties

Relative path from web application, or fully qualified path to static media server.

Static Resource URL

- specify the following:

Static Resource URL	Specify the relative path from the web application, or the fully qualified path to the static media server to access the content resources.
---------------------	---

Specifying Management Console Properties

You specify the location of the Management Console so that Oracle Knowledge web applications can access the management console:

Management Console

URL to management console for in-context editing.

Management Console URL

- specify the following:

Management Console URL	Specify the URL to access the Management Console from web applications.
------------------------	---

Specifying Rich Text Editor Image Upload and Storage

We recommend that you use a single shared storage area for all image upload store paths, so that all Oracle Knowledge instances can access the images.

If you change the image upload store paths, you must manually configure each of the resource web applications to access the images from the new locations.

Rich Text Editor Image Upload Store Paths

Fully qualified path to store images uploaded using rich text editor, defaults to \$IM_HOME/library

WYSIWYG Library Path

Fully qualified path to store image thumbnails of images uploaded using rich text editor, defaults to \$IM_HOME/thumbnail

WYSIWYG Thumbnail Path

- specify the following:

WYSIWYG Library Path	Specify the fully qualified path to store images uploaded using rich text editors. Defaults to <code>\$Oracle Knowledge ROOT/InfoManager/library</code> .
WYSIWYG Thumbnail Path	Specify the fully qualified path to store image thumbnails of images uploaded using rich text editors. Defaults to <code>\$Oracle Knowledge ROOT/InfoManager/thumbnail</code> .

Specifying Rich Text Editor Image Upload and Storage on WebLogic Server

The Oracle Knowledge installation process prompts you to specify the resource web application context name. The default name is `OKResources`. You must perform the following steps on each resource web application, and on every Oracle Knowledge instance.

Note: Ensure that the WebLogic Administration Server is running when you perform this procedure.

To specify the resource web application context:

- Log onto the WebLogic Administration Console at:

`http://<admin_server_listen_address>:<admin_server_listen_port>/console`

- Select **Deployments** in the **Domain Structure** section to manage and control the Information Manager Web Applications
- Select a resource web application.
- Navigate to the resource web application `Path` directory
- Edit the resource web application's `weblogic.xml` file, located at:

`$Oracle Knowledge ROOT/instances/<Instance Name>/webapps/<Context Name>/app/WEB-INF/weblogic.xml`

- Specify a new WYSIWYG library path by editing the virtual-directory-mapping node that corresponds to the library path as follows:
 - Set the `local-path` node to the parent directory of the new library path
 - Set the `url-pattern` node to `"/"`, followed by the directory name of the new library path appended with `"/*"`

For example, to specify the WYSIWYG library path:

`/home/username/Oracle/Knowledge/IM/InfoManager/library`

Specify:

```
<virtual-directory-mapping>
<local-path>/home/username/Oracle/Knowledge/IM/InfoManager</local-path>
<url-pattern>/library/*</url-pattern>
</virtual-directory-mapping>
```

- Specify a new WYSIWYG thumbnail path by editing the virtual-directory-mapping node that corresponds to the thumbnail path as follows:
 - Set the `local-path` node to the parent directory of the new thumbnail path
 - Set the `url-pattern` node to `"/"`, followed by the directory name of the new library path appended with `"/*"`

For example, to specify the WYSIWYG thumbnail path:

```
/home/username/Oracle/Knowledge/IM/InfoManager/thumbnail
```

- Specify:

```
<virtual-directory-mapping>
<local-path>/home/username/Oracle/Knowledge/IM/InfoManager</local-path>
<url-pattern>/thumbnail/*</url-pattern>
</virtual-directory-mapping>
```

- Select **Lock & Edit** in the WebLogic Administration Console Change Center to make the domain editable.
- Select the resource web application that you modified, then select **Update**
- Select **Redeploy this application using the following deployment files**, then select **Finish**
- Select **Activate Changes** in the **Change Center** to activate the modifications to the resource web application.

The application server applies the updates to all new web application sessions. To apply the updates to existing sessions, re-start the managed server that hosts the web applications.

Specifying Rich Text Editor Image Upload and Storage on Tomcat Application Servers

When you install and configure Oracle Knowledge to use Tomcat application servers, the installation process configures individual context files that represent the web applications that access the images from the default locations. When you update the image upload and storage configuration for applications running on Tomcat application servers, you must manually modify the context files by performing the steps described in this section on all affected Oracle Knowledge applications and instances.

Important! This procedure requires that you stop and re-start the application server.

To specify the resource web application context files:

- Open a command prompt and navigate to:

```
$Oracle Knowledge ROOT/instances/<instance_name>
```

where <instance_name> is the Oracle Knowledge instance name

- start the ICE environment:

```
setenv.sh (Linux)
```

```
setenv.bat (Windows)
```

- Stop the Oracle Knowledge instance:

```
inquiraim.sh stop (Linux)
```

```
inquiraim stop (Windows)
```

- Navigate to the following directory:

```
$Oracle Knowledge ROOT/instances/<Instance Name>/appserverim/conf/<InfoManager Host>
```

- Specify a new WYSIWG library path by renaming the context file from `library.xml` to `<directory>.xml`

where:

<directory> is the directory name of the new library path.

- Edit the <directory>.xml file and specify:
 - the value of the docBase attribute of the Context element to be the fully qualified path to the new library path
 - the value of the path attribute of the Context element to be "/", followed by the directory name of the new library path

For example, to specify the WYSIWYG library path:

```
/home/username/Oracle/Knowledge/IM/InfoManager/library
```

the context file is named library.xml and it contains the following:

```
<?xml version='1.0' encoding='utf-8'?>
<Context docBase="/home/username/Oracle/Knowledge/IM/InfoManager/library"
path="/library">
  <Resources className="org.apache.naming.resources.FileDirContext"
    allowLinking="true" />
</Context>
```

- Save the file
- Specify a new WYSIWYG thumbnail path by renaming the thumbnail.xml context file to <directory>.xml

where:

<directory> is the directory name of the new library path

- Edit the <directory>.xml file and specify:
 - the value of the docBase attribute of the Context element to be the fully qualified path to the new thumbnail path
 - the value of the path attribute of the Context element to be "/", followed by the directory name of the new library path

For example, to specify the WYSIWYG thumbnail path:

```
/home/username/Oracle/Knowledge/IM/InfoManager/thumbnail
```

the context file is named thumbnail.xml and it contains the following:

```
<?xml version='1.0' encoding='utf-8'?>
<Context docBase="/home/username/Oracle/Knowledge/IM/InfoManager/thumbnail"
path="/thumbnail">
  <Resources className="org.apache.naming.resources.FileDirContext"
    allowLinking="true" />
</Context>
```

- Save the file
- Delete the Tomcat work directory at:


```
$Oracle Knowledge ROOT/instances/<Instance Name>/appserverim/work
```
- Start the application from the ICE environment:

```
inquiraim.sh start (Linux)
```

```
inquiraim start (Windows)
```

LDAP Configuration

You can configure Information Manager for use with an external LDAP security schema using the LDAP configuration item on the Information Manager Settings page.

When LDAP authentication is enabled, Information Manager uses the information in the LDAP repository to create users when they log on, and updates the information for each subsequent session. In order to do this, Information Manager does a bind with the specified credentials. If the bind is successful, then Information Manager uses the configuration to gather additional information needed to configure the security domain within Information Manager. Information Manager stores assigned views, assigned roles, and workteams within external LDAP directories. The definitions of these objects are inside Information Manager, but the association of the Information Manager objects to users is done within LDAP.

Additional attributes that are normally stored in the Information Manager “USERINFORMATION Table” are also updated from LDAP during each authentication. First name, last name, email address are all updated. Roles, views, and workteams are reset during the authentication process as well.

The typical Information Manager LDAP integration utilizes the standard LDAP schemas. Individual projects may require custom changes to the customer LDAP installation but it is not required out-of-the-box. The default configuration settings should be sufficient to cover most implementation requirements.

Important! The information obtained from the LDAP repository will override any user profile information specified directly in the Management Console.

You can configure:

- Default LDAP parameters for all repositories at the SYSTEM repository level
- LDAP parameters for an individual repository at the application repository level

To configure LDAP integration:

- 1 Log onto the desired repository and select **Tools** from the navigation bar:
The Management Console displays the Administration page for the current repository.
- 2 Select **Configure** under System:
The Management Console displays the Information Manager Settings page.
- 3 Select the **LDAP Configuration** item:

Current Configuration	
1.	Resource Configuration
2.	LDAP Configuration
3.	Email Configuration
4.	Code Generation Configuration
5.	InQuira Search Configuration
6.	Delegate Classes Configuration
7.	Delegate Translation

The Management Console displays the LDAP Configuration page.

LDAP Configuration

Repository Info

Default LDAP configuration for all repositories

- | | | |
|--|--------------------------------------|-------------------------------------|
| Enable LDAP Integration for Repository | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Create Oracle Knowledge users if not available | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Obtain Roles from User | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Search roles recursively | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Obtain Views from User | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Search views recursively | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Obtain Work Teams from User | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Obtain Reporting Group from User | <input type="radio"/> Yes | <input checked="" type="radio"/> No |

Depth level for recursive search*

LDAP Server Info

LDAP Server Host*

Use SSL (Typically Port 636) Yes No

Port*

4 Specify the following configuration parameters:

Parameter	Description
Enable LDAP Integration for Repository	Specify to enable LDAP authentication for all repositories by default (SYSTEM), or for the current application repository.
Create Information Manager users if not available	Specify to automatically create Information Manager users based on information in the LDAP repository. Information Manager will automatically create Information Manager users for authenticated users. If this function is disabled, only users that are defined in the Information Manager repository will be able to log in. Note: Information Manager will synchronize its user information with information from the LDAP repository regardless of whether new user creation is enabled.
Obtain Roles from User	Specify to retrieve the role information directly from the user record in the LDAP repository. This saves a second lookup step in the LDAP server to retrieve the role information.
Search roles recursively	Specify to search the roles in the LDAP repository recursively to locate Information Manager roles.
Obtain Views from User	Specify to retrieve the view information directly from the user record in the LDAP repository. This saves a second lookup step in the LDAP server to retrieve the view information.

Search views recursively	Specify to search all views in the LDAP repository recursively to locate Information Manager views.
Obtain Work Teams from User	Specify to retrieve the work team information directly from the user record in the LDAP repository. This saves a second lookup step in the LDAP server to retrieve the work team information.
Obtain Reporting Group from User	This option allows the retrieval of the reporting group directory from the LDAP record without requiring a subsequent LDAP lookup operation.
LDAP Server Info	Specify the host name or IP address and port of the LDAP server for this repository (for SYSTEM, specifies the default for all repositories) and whether to use Secure Sockets Layer (SSL) protocol (usually port 636). Note: SSL security requires some external configuration in the LDAP server.

Single Sign-On info

Enable single sign-on Yes No

HTTP header key for the user name*

LDAP Bind Info

LDAP administrator user DN*

LDAP administrator password*

Parameter	Description
Enable single sign-on	Specify to enable single sign-on; Information Manager will not validate user passwords in this mode, since it is assumed that an external provider has authorized the user. The user will automatically be logged in without having to re-authenticate. The application will still validate role and view information stored in the LDAP repository.
HTTP header key for the user name	Specify the HTTP request key to use for single sign on.
LDAP administrator user DN	Specify the ID of a user that can read the LDAP repository. This user must have permission to bind.
LDAP administrator password	Specify the password for the administrator user.

User Search Info**User search base DN*****User name map key*****User role map key*****User view map key*****User work team map key****User reporting group map key****User First name map key*****User Last name map key*****User email address map key***

Parameter	Description
User search base DN	Specify the LDAP location where user information is stored. This is the starting point for a user search.
User name map key	Specify the LDAP attribute in the user DN that contains the Information Manager UserName.
User role map key	Specify the LDAP attribute in the user DN that refers to an LDAP DN containing IM Role Information, for example, memberOf.
User view map key	Specify the LDAP attribute in the user DN that refers to an LDAP DN containing Information Manager View Information, for example, memberOf.
User First name map key	Specify the LDAP attribute in the user DN that contains the user's first name.
User Last name map key	Specify the LDAP attribute in the user DN that contains the user's last name.
User email address map key	Specify the LDAP attribute in the user DN that contains the user's email address.

Role Search Info

Role Search Base DN*

Role DN Map Key*

Repository role map key*

View Search info

View search base DN*

View DN map key*

View map key*

Work Teams Search Info

Work Teams search base DN

Work Teams DN map key

Work Teams map key

Reporting Group Search Info

User Group search base DN

User Group DN map key

User Group map key

Parameter	Description
Role search base DN	Specify the DN Location in the LDAP hierarchy where role information is stored. This is the starting point for a role search.

Parameter (Continued)	Description (Continued)
Role DN Map Key	Specify the Unique Identifier for the role (the ldap DN). The value of this attribute must match the value of the User role map key attribute.
Repository role map key	Specify the LDAP attribute that contains the Information Manager role reference key.
View search base DN	Specify the DN Location in the LDAP hierarchy where view information is stored. This is the starting point for a view search.
View DN map key	Specify the Unique Identifier for the view (the LDAP DN). The value of this attribute must match the value of the User view map key attribute.
View map key	Specify the LDAP attribute that contains the Information Manager view reference key.
Work Teams search base DN	Specify the DN Location in the LDAP hierarchy where work team information is stored. This is the starting point for a work team search.
Work Teams DN map key	Specify the Unique Identifier for the work team (the LDAP DN). The value of this attribute must match the value of the work team map key attribute.
Work Teams map key	Specify the LDAP attribute that contains the Information Manager work team reference key.
Reporting Group Search Info	
User Group Search Base DN	Specify the DN location in the LDAP hierarchy where the user group information is stored. This is the starting point for the user group search.
User Group DN map key	Specify the LDAP DN for the user group. The value of this attribute must match the value of the user group map key attribute.
User Group map key	Specify the LDAP attribute that contains the User Group reference key.

Email Configuration

You can specify the default administrator email settings for all repositories (SYSTEM) or for the current repository using the Email Configuration item on the Information Manager Settings page.

To specify email settings:

- 1 Log onto the desired repository and select **Configure** under System on the Administration page:
The Management Console displays the Information Manager Settings page.
- 2 Select the **Email Configuration** item:

Current Configuration	
1.	Resource Configuration
2.	LDAP Configuration
3.	Email Configuration
4.	Code Generation Configuration

The Management Console displays the Email Configuration page:

Email Configuration

SMTP Settings

Default settings for all repositories

SMTP Host*

Administrator email address*

Requires SMTP authentication

- 3 Select the **Override default configuration item** and specify the following configuration parameters:

Parameter	Description
SMTP Host	Specify the URL of the email server.
Administrator email address	Specify the Information Manager administrator email address.
Requires SMTP authorization	Specify whether to require SMTP authorization.

External Notification Delegate Class

The ExternalNotificationInterface enables you to intercept certain task notification emails and modify them before transit or stop them from being sent.

The Interface has the following signature:

```
public interface ExternalNotificationInterface {
    public boolean sendLostPasswordNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendContentExpirationNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendContentChangeNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendContentRecommendationNotification(Hashtable objectArray,
        Hashtable mailinfo);
    public boolean sendContentInLimboNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendDBForumModerationNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendInactiveAccountNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendRatingAnalysisNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendReviewDateNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendSurveyAnswerNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendSubscriptionExpirationNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendTranslationTaskNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendWorkflowChangedNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendWorkflowExpirationNotification(Hashtable objectArray, Hashtable mailinfo);
    public boolean sendWorkflowTaskNotification(Hashtable objectArray, Hashtable mailinfo);
}
```

Each method returns a Boolean value that tells Information Manager whether or not to use the modifications from the external class. By default, each method can return a "false" in order to indicate that no changes were

made and it is ok to ignore the external class. If a “true” is returned, the method takes the values out of the mailinfo hashtable and uses them for the email transport.

Here is an example of a method that uses the interface:

```
public boolean sendWorkflowChangedNotification(Hashtable objectArray, Hashtable mailinfo) {
    mailinfo.put("htmlContent", mailinfo.get("htmlContent") + "\n" + print(objectArray) + "\n" +
        print(mailinfo));
    mailinfo.put("textContent", mailinfo.get("textContent") + "\n" + print(objectArray) + "\n" +
        print(mailinfo));
    mailinfo.put("subject", "workflow changed" );
    logger.debug(" " + print(mailinfo));
    return true;
}
```

The print() method above is just a helper method in the implementation to show what all of the values are and it looks like:

```
public String print(Hashtable objectArray) {
    String ret = "";
    Iterator i = objectArray.keySet().iterator();
    while (i.hasNext()) {
        Object key = i.next();
        ret += "Key " + key+ "<br>\n";
        Object o = objectArray.get(key);
        if (o instanceof String){
            ret += "-> " + o+ "<br>\n";
        } else if (o instanceof HashMap){
            HashMap mp = (HashMap)o;
            Iterator p = mp.keySet().iterator();
            while (p.hasNext()) {
                Object pk = p.next();
                ret += "----- key " + pk + " = " + mp.get(pk) +
                    "<br>\n";
            }
        } else {
            logger.debug("-> " + o);
        }
    }
    return ret;
}
```

The objectArray is discarded when the method returns, but not the mailinfo hashtable. The objectArray passes available objects to the external class for its decision making process. The objectArray may not contain all information necessary to the external class, but it should be enough to be used for further database querying should you decide to do so.

The external notification class can be registered in Information Manager by assigning the fully qualified package and class name in the repository’s config.properties file. You can also register the class in Management Console as follows:

- 1 Go to the **Tools** tab.
- 2 Select **System Configuration**.
- 3 Select **Go to Expert Mode**.

4 Scroll down and select **EXTERNAL_NOTIFICATION_CLASS**.

13.	EditProfileAction - Fully qualified java delegate class use VALUE: (Default Value)
14.	EXTERNAL_NOTIFICATION_CLASS - The fully qualified VALUE: (Default Value)
15.	FILE_TRANSFER_TYPE - File Transfer Type. This param VALUE: (Default Value)

5 In the **Parameter Value** area, enter the name of the class that implements the EXTERNAL_NOTIFICATION_CLASS interface. In this example, we name the class com.inquiras.services.integration.ExternalNotificationTest:

Application Setting Properties

Parameter Name EXTERNAL_NOTIFICATION_CLASS

Parameter Value *

Description
The fully qualified Java class that implements the ExternalNotificationInterface interface that

- Allow administrators to edit value
- Encrypt Value
- Save to default value

An example print out of the objectArray and mailinfo for a workflow changed would look like:

```
Key locale<br>
----- key active =3D Y
----- key dateAdded =3D 1192653073000
----- key timeFormat =3D %I:%M %p
----- key dateFormat =3D %m/%d/%Y
----- key localeValue =3D 1033
----- key encoding =3D UTF-8
----- key recordID =3D en_US
----- key dateModified =3D 1192653073000
----- key timeFormatDisplay =3D hh:mm
----- key localeDesc =3D English
----- key localeCode =3D en_US
----- key groupDefault =3D Y
----- key dateFormatDisplay =3D mm/dd/yyyy

Key user<br>
----- key dateAdded =3D 1194541357000
----- key reputationPoints =3D 30
----- key login =3D dan
----- key ownerSite =3D 1047061a3807a01151b8f1d4d00540a
----- key defaultSubsite =3D 1047061a3807a01151b8f1d4d00540a
----- key receivePerform =3D Y
----- key firstName =3D dan
----- key locale =3D en_US
----- key adminUser =3D Y
----- key active =3D Y
----- key passwordHint =3D =20
----- key subscriptionSchedule =3D 1
----- key subscribeOnTopicReply =3D Y
----- key banUser =3D =20
----- key preferredEmail =3D =20
----- key showEmail =3D 0
----- key userReputationLevel =3D =20
----- key alias =3D dan
----- key userImage =3D =20
----- key subscribeOnTopicCreation =3D Y
----- key isDefaultAdministrator =3D =20
----- key receiveAssigned =3D Y
----- key lastName =3D dan
----- key showName =3D 0
----- key banUntilDate =3D =20
----- key dateModified =3D 1195052355000
----- key email =3D djones@inquira.com

Key content<br>
----- key dateAdded =3D 1194626701000
----- key displayEndDate =3D 1301157840000
----- key userID =3D 0076ab1cbf5011620353b20007fed
----- key ownerSite =3D 1047061a3807a01151b8f1d4d00540a
----- key alias =3D =20
----- key locale =3D en_US
----- key displayReviewDate =3D 1301157840000
----- key longitude =3D =20
----- key query =3D =20
----- key userName =3D dan dan
----- key changesPending =3D N
----- key eventStartDate =3D =20
----- key contentChannel =3D 00761714ddaa01161b0abed6007fe8
----- key moderated =3D =20
----- key documentID =3D FD6
----- key displayStartDate =3D 1194626640000
----- key dateModified =3D 1195061510000
----- key latitude =3D =20
```

```

----- key eventEndDate =3D =20
----- key parent =3D =20
Key replacement<br>
----- key OPEN =3D OPEN
----- key dan =3D dan
----- key dan =3D dan
----- key 00763753fe100116254a73fc007fe5 =3D 00763753fe100116254a73fc00=7fe5
----- key djones@inquira.com =3D djones@inquira.com
----- key dan =3D dan
----- key =3D=20
----- key dan =3D dan
----- key FD6 =3D FD6
----- key /Users/djones/InfoManager/logs/test?taskid=3D29 =3D/Users/dj=ones/InfoMan-
ager/logs/test?taskid=3D29
----- key =3D =20
----- key fdsafsadf =3D fdsafsadf
----- key forRating =3D forRating
----- key APPROVED =3D APPROVED
----- key forRating =3D forRating
----- key /Users/djones/InfoManager/logs/
test?ut=3D0076ab1cbf5011620353=b20007fed&ts=3D24 =3D /Users/djones/InfoManager/logs/
test?ut=3D0076ab1cbf50=11620353b20007fed&ts=3D24
----- key 29 =3D 29
----- key =3D=20
----- key =3D=20
----- key =3D=20
Key htmlContent<br>
-> tywywyrtyrety
Key locale<br>
----- key active =3D Y
----- key dateAdded =3D 1192653073000
----- key timeFormat =3D %I:%M %p
----- key dateFormat =3D %m/%d/%Y
----- key localeValue =3D 1033
----- key encoding =3D UTF-8
----- key recordID =3D en_US
----- key dateModified =3D 1192653073000
----- key timeFormatDisplay =3D hh:mm
----- key localeDesc =3D English
----- key localeCode =3D en_US
----- key groupDefault =3D Y
----- key dateFormatDisplay =3D mm/dd/yyyy
Key user<br>
----- key dateAdded =3D 1194541357000
----- key reputationPoints =3D 30
----- key login =3D dan
----- key ownerSite =3D 1047061a3807a01151b8f1d4d00540a
----- key defaultSubsite =3D 1047061a3807a01151b8f1d4d00540a
----- key receivePerform =3D Y
----- key firstName =3D dan
----- key locale =3D en_US
----- key adminUser =3D Y
----- key active =3D Y
----- key passwordHint =3D =20
----- key subscriptionSchedule =3D 1
----- key subscribeOnTopicReply =3D Y
----- key banUser =3D =20
----- key preferredEmail =3D =20
----- key showEmail =3D 0
----- key userReputationLevel =3D =20
----- key alias =3D dan
----- key userImage =3D =20

```

```

----- key subscribeOnTopicCreation =3D Y
----- key isDefaultAdministrator =3D =20
----- key receiveAssigned =3D Y
----- key lastName =3D dan
----- key showName =3D 0
----- key banUntilDate =3D =20
----- key dateModified =3D 1195052355000
----- key email =3D djones@inquira.com
Key content<br>
----- key dateAdded =3D 1194626701000
----- key displayEndDate =3D 1301157840000
----- key userID =3D 0076ab1cbf5011620353b20007fed
----- key ownerSite =3D 1047061a3807a01151b8f1d4d00540a
----- key alias =3D =20
----- key locale =3D en_US
----- key displayReviewDate =3D 1301157840000
----- key longitude =3D =20
----- key query =3D =20
----- key userName =3D dan dan
----- key changesPending =3D N
----- key eventStartDate =3D =20
----- key contentChannel =3D 00761714ddaa01161b0abed6007fe8
----- key moderated =3D =20
----- key documentID =3D FD6
----- key displayStartDate =3D 1194626640000
----- key dateModified =3D 1195061510000
----- key latitude =3D =20
----- key eventEndDate =3D =20
----- key parent =3D =20

Key replacement<br>
----- key OPEN =3D OPEN
----- key dan =3D dan
----- key dan =3D dan
----- key 00763753fe100116254a73fc007fe5 =3D 00763753fe100116254a73fc00=7fe5
----- key djones@inquira.com =3D djones@inquira.com
----- key dan =3D dan
----- key =3D=20
----- key dan =3D dan
----- key FD6 =3D FD6
----- key /Users/djones/InfoManager/logs/test?taskid=3D29 =3D /Users/dj=ones/InfoMan-
ager/logs/test?taskid=3D29
----- key =3D =20
----- key fdsafsadf =3D fdsafsadf
----- key forRating =3D forRating
----- key APPROVED =3D APPROVED
----- key forRating =3D forRating
----- key /Users/djones/InfoManager/logs/
test?ut=3D0076ab1cbf5011620353=b20007fed&ts=3D24 =3D /Users/djones/InfoManager/logs/
test?ut=3D0076ab1cbf50=11620353b20007fed&ts=3D24
----- key 29 =3D 29
----- key =3D=20
----- key =3D=20
----- key =3D=20
Key htmlContent<br>
-> tywwywyrtetyrety<br>
Key useAuth<br>
Key textContent<br>
-> hghfgd<br>
Key tos<br>
Key subject<br>
-> =E6=8D=95=E3=81=BE=E3=82=8B=E3=80=8D=E3=80=8C=E8=8C=B6=E7=95=AA=E6=8D=9C=
=E6=8D=95=E3=81=BE=E3=82=8B=E3=80=8D=E3=80=8C=E8=8C=B6=E7=95=AA=E6=8D=9C=E6=

```

```

=8D=95=E3=81=BE=E3=82=8B=E3=80=8D=E3=80=8C=E8=8C=B6=E7=95=AA=E6=8D=9C<br>Key userName<br>
-> djones@inquira.com<br>
Key authPass<br>
-> temp4u<br>
Key from<br>
-> djones@inquira.com<br>
Key host<br>
-> thecape.inquiracom.com<br>

<br>
Key useAuth<br>
Key textContent<br>
-> hghfgd<br>
Key tos<br>
Key subject<br>
-> =E6=8D=95=E3=81=BE=E3=82=8B=E3=80=8D=E3=80=8C=E8=8C=B6=E7=95=AA=E6=8D=9C=
=E6=8D=95=E3=81=BE=E3=82=8B=E3=80=8D=E3=80=8C=E8=8C=B6=E7=95=AA=E6=8D=9C=E6=
=8D=95=E3=81=BE=E3=82=8B=E3=80=8D=E3=80=8C=E8=8C=B6=E7=95=AA=E6=8D=9C<br>
Key userName<br>
-> djones@inquira.com<br>
Key authPass<br>
-> temp4u<br>
Key from<br>
-> djones@inquira.com<br>
Key host<br>
-> thecape.inquiracom.com<br>

```

```

-----=_Part_1_5796122.1195069681284
Content-Type: text/html; charset=UTF-8
Content-Transfer-Encoding: quoted-printable

```

```

tywwywyrttyrety
Key locale<br>
----- key active =3D Y
----- key dateAdded =3D 1192653073000
----- key timeFormat =3D %I:%M %p
----- key dateFormat =3D %m/%d/%Y
----- key localeValue =3D 1033
----- key encoding =3D UTF-8
----- key recordID =3D en_US
----- key dateModified =3D 1192653073000
----- key timeFormatDisplay =3D hh:mm
----- key localeDesc =3D English
----- key localeCode =3D en_US
----- key groupDefault =3D Y
----- key dateFormatDisplay =3D mm/dd/yyyy
Key user<br>
----- key dateAdded =3D 1194541357000
----- key reputationPoints =3D 30
----- key login =3D dan
----- key ownerSite =3D 1047061a3807a01151b8f1d4d00540a
----- key defaultSubsite =3D 1047061a3807a01151b8f1d4d00540a
----- key receivePerform =3D Y
----- key firstName =3D dan
----- key locale =3D en_US
----- key adminUser =3D Y
----- key active =3D Y
----- key passwordHint =3D =20
----- key subscriptionSchedule =3D 1
----- key subscribeOnTopicReply =3D Y
----- key banUser =3D =20
----- key preferredEmail =3D =20
----- key showEmail =3D 0

```

```

----- key userReputationLevel =3D =20
----- key alias =3D dan
----- key userImage =3D =20
----- key subscribeOnTopicCreation =3D Y
----- key isDefaultAdministrator =3D =20
----- key receiveAssigned =3D Y
----- key lastName =3D dan
----- key showName =3D 0
----- key banUntilDate =3D =20
----- key dateModified =3D 1195052355000
----- key email =3D djones@inquira.com
Key content<br>
----- key dateAdded =3D 1194626701000
----- key displayEndDate =3D 1301157840000
----- key userID =3D 0076ab1cbf5011620353b20007fed
----- key ownerSite =3D 1047061a3807a01151b8f1d4d00540a
----- key alias =3D =20
----- key locale =3D en_US
----- key displayReviewDate =3D 1301157840000
----- key longitude =3D =20
----- key query =3D =20
----- key userName =3D dan dan
----- key changesPending =3D N
----- key eventStartDate =3D =20
----- key contentChannel =3D 00761714ddaa01161b0abed6007fe8
----- key moderated =3D =20
----- key documentID =3D FD6
----- key displayStartDate =3D 1194626640000
----- key dateModified =3D 1195061510000
----- key latitude =3D =20
----- key eventEndDate =3D =20
----- key parent =3D =20

Key replacement<br>
----- key OPEN =3D OPEN
----- key dan =3D dan
----- key dan =3D dan
----- key 00763753fe100116254a73fc007fe5 =3D 00763753fe100116254a73fc00=7fe5
----- key djones@inquira.com =3D djones@inquira.com
----- key dan =3D dan
----- key =3D=20
----- key dan =3D dan
----- key FD6 =3D FD6
----- key /Users/djones/InfoManager/logs/test?taskid=3D29 =3D /Users/dj=ones/InfoMan-
ager/logs/test?taskid=3D29
----- key =3D =20
----- key fdsafsadf =3D fdsafsadf
----- key forRating =3D forRating
----- key APPROVED =3D APPROVED
----- key forRating =3D forRating
----- key /Users/djones/InfoManager/logs/
test?ut=3D0076ab1cbf5011620353=b20007fed&ts=3D24 =3D /Users/djones/InfoManager/logs/
test?ut=3D0076ab1cbf50=11620353b20007fed&ts=3D24
----- key 29 =3D 29
----- key =3D=20
----- key =3D=20
----- key =3D=20

Key htmlContent<br>
-> tywwywrtyrety<br>
Key useAuth<br>
Key textContent<br>
-> hghfgd<br>

```

```

Key tos<br>
Key subject<br>
-> =E6=8D=95=E3=81=BE=E3=82=8B=E3=80=8D=E3=80=8C=E8=8C=B6=E7=95=AA=E6=8D=9C=
E6=8D=95=E3=81=BE=E3=82=8B=E3=80=8D=E3=80=8C=E8=8C=B6=E7=95=AA=E6=8D=9C=
E6=8D=95=E3=81=BE=E3=82=8B=E3=80=8D=E3=80=8C=E8=8C=B6=E7=95=AA=E6=8D=9C<br>
Key userName<br>
-> djones@inquira.com<br>
Key authPass<br>
-> ppppppppppp<br>
Key from<br>
-> djones@inquira.com<br>
Key host<br>
-> thecape.inquiracom.com<br>?

```

In this example, the objects returned would be the locale, user, content, the replacement dictionary. The mailinfo has the keys of htmlContent, useAuth, textContent, tos, ccs, bccs, subject, userName, authPass, from, and host.

The replacement dictionary is a hashmap containing all of the tokens and their assigned values.

The mailinfo's tos, ccs, and bccs (if not null) will come as "ArrayList".

A list of objects for each method, as of this writing, are available below.

```

sendLostPasswordNotification:
    locale
    user
    ownersite
    replacement

sendContentExpirationNotification:
    locale
    user
    content
    ownersite
    replacement

sendContentChangeNotification:
    user
    CurrentTask
    content
    ownersite
    replacement

sendContentRecommendationNotification
    locale
    user
    CurrentTask
    ownersite
    recommendation

sendContentInLimboNotification
    locale
    contentchannel
    user
    content
    contenttext
    ownersite
    replacement

```

```
sendDBForumModerationNotification
  locale
  user
  forum
  CurrentTask
  ownersite
  replacement
sendInactiveAccountNotification
  locale
  user
  ownersite
  replacement
sendRatingAnalysisNotification
  locale
  contentchannel
  user
  content
  ownersite
  replacement
sendReviewDateNotification
  locale
  user
  CurrentTask
  content
  ownersite
  replacement
sendSurveyAnswerNotification
  locale
  user
  surveyresult
  survey
  ownersite
  replacement
sendSubscriptionExpirationNotification
  locale
  user
  ownersite
  replacement
  affectedsubscriptions (ArrayList)
```

```

sendTranslationTaskNotification
  contentLocaleRequest
  locale
user
CurrentTask
content
ownersite
replacement
sendWorkflowChangedNotification
  locale
  user
  content
  replacement
  workflowstep
sendWorkflowExpirationNotification
  locale
  user
  content
  workflowstep
  ownersite
  replacement
sendWorkflowTaskNotification
  locale
  user
  content
  workflowstep
  ownersite
  replacement

```

Integrating an Intelligent Search Application

You can specify an Oracle Knowledge application to use for searching within the Management Console and configured Information Manager web applications. You specify an Oracle Knowledge application to use for internal searching using the InQuira Search Configuration option of the Information Manager Settings page.

Important! You must also configure the Intelligent Search application to acquire and index content from the Information Manager repository, as described in “Configuring Content Acquisition from Information Manager Repositories” in the *Intelligent Search Administrator's Guide and Reference*.

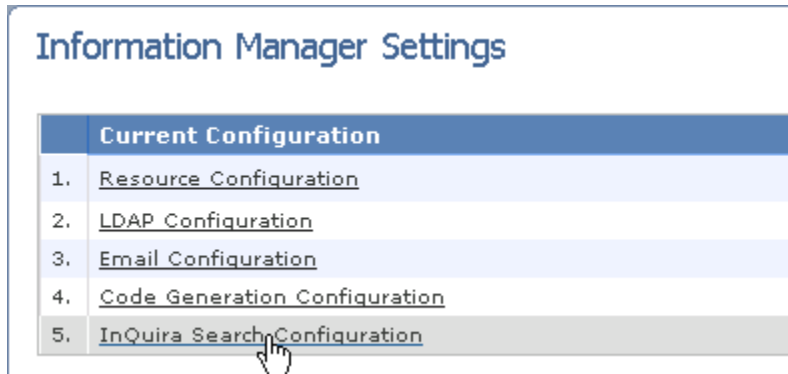
You can specify the Oracle Knowledge application to use as the default for all repositories when logged onto the SYSTEM repository, or for the current application repository when logged onto that repository.

When you configure Oracle Knowledge Search, Information Manager adds a Search tab to the main navigation area. You can then use the Search page to locate Information Manager and other Intelligent Search content.

Search Configuration

To configure the Oracle Knowledge application for internal search:

- 1 Log in as a super user, select the desired repository and then **Tools** from the navigation area:
The Management Console displays the Administration page for the current repository.
- 2 Select **Configure** under the System option
The Management Console displays the Information Manager Settings page.
- 3 Select **InQuira Search Configuration**:



The Management Console displays the InQuira Search Configuration page:

InQuira Search Configuration

Edit InQuira Search URL

Default settings for all repositories

InQuira Search URL*

Example: `http://localhost:8080/inquirawb/servlet/rpcrouter`

Enable Highlighting for Search Results

Enable Searching for Similar Results

Restrict Search to IM content by default

Provide criteria for "Best Answer" filter when a Feature Content result is returned

Minimum Score	<input type="text" value="0.90"/>
Minimum Difference	<input type="text" value="0.01"/>
Maximum Results Display	<input type="text" value="3"/>

The InQuira Search Configuration page indicates whether the current configuration is inherited from the system default, or is specific to the application repository.

Note: In the SYSTEM repository, the InQuira Search Configuration page displays the default Oracle Knowledge internal search application for all repositories.

- 4 Enter the URL of the servlet for the Oracle Knowledge search application, for example:
`http://localhost:8222/inquiragw/servlet/rpcrouter`

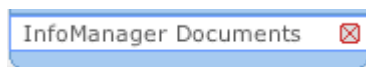
- 5 Select the **Enable Highlighting for Search Results** to highlight the search words in the search result excerpts.
- 6 Select the **Enable Searching for Similar Results** option to display similar results for search results.
- 7 By default, Management Console Search searches all of the content in the Knowledgebase. To change the default to limit the search to Management Console only, select the **Enable Searching for Similar Results** option.
- 8 Change the default criteria for the "Best Answer" filter, if desired. This filter determines the level of relevancy required for content to be displayed in the Featured Content portlet when it is enabled. There are 3 criteria that you can edit to determine what the best answers are. The minimum score, minimum difference and the max results to display. The minimum difference value is stored but not currently used. Up to max results will be displayed provided their score is equal to or greater than the minimum score field.
- 9 Select **Save**

The Management Console adds a Search tab in the navigation area:



Searching External Content

When you click the Search tab, the search page is displayed and an empty request is made to the servlet to get the facets to choose from.

By default, only Oracle Knowledge documents will be searched. To allow external documents to be viewed, click the InfoManager Documents facet:



When you do a search, the search results indicate whether documents are internal or external using two icons:

-  for a content record that belongs to the repository
-  for a content record that is external to the repository

Using Oracle Knowledge Search from the Tag Library

If a user is not logged in, the default user roles will be used as user groups. The current user's views can be passed into the Oracle Knowledge Search request tag through a plus (+) delimited string of Search reference keys.

In order to determine if the Inquire Search is configured and enabled, use the `<IM:is.inquirasearch.enabled>` tag. Set the negate parameter to `negate="true"` to negate.

The main tag for conducting a search is `get.inquirasearch.data`. You pass it an ID for iterating over the results (dataset), and it returns the ResultFacets (filters) and the "answers" as an array of InquireResult objects by calling each with a ".facets" or a ".answers" from the variable passed in.

For example, if dataset was set to `dataset="rsdata"`, you retrieve the facets using:

```
<IM:iterate.dataset dataset="rsdata.facets">
```

and the answers using:

```
<IM:iterate.dataset dataset="rsdata.answers">
```

The type parameter

The `type` parameter specifies the type of request and can be one of the following:

- **empty** – this is the first call to the search in order to get all of the facet filters.
- **search** – perform a search based on the `searchstring` parameter.
- **narrow** – turn a facet on or off by passing in the `facetid` in the `facettoggle` parameter.
- **forward, backward** – for paging: go to the next or previous set of answers.
- **more** – pass in the `facetid` of a facet that has its `isHasMore()` property set to "true". There will be more sub-facets returned for a particular facet.
- **open** – open an external document with the highlighting. In order for this request to work, you will need to pass in the `answerid`, `highlightinfo`, `iqaction`, and `url` of the answer you want to open. All 4 fields are members of the search answer variable (`InquireResult`).
- **wizard** – available, but not used by the TagLibrary. Use the `form.wizardfields` tag instead.
- **link** – used to open a click-thru link in order to log the analytics. Any time a search result link is opened or a portlet link is opened, a link request should be made and then redirect to the link by getting the `id.clickthrough` value.
- **feedback** – record a feedback from the user. The request can send the `feedbackcomments` with a user's text comments, or with a `feedbackrating` with a numeric value rating the question, or both.
- **similar** – you can check if a search result includes similar results using `rsAns.similar_count > 0`. If there are one or more similar results, you can create a link that will set the type to "similar" and pass in the `answerid` and the `relatedIds` so that the page also contains the similar answers.
- **same** – to return to the last search results that were displayed, simply pass in the type of "same". This will obtain the last search objects that were set to the page.
- **InitialContact** – this is an equivalent of the empty request for a Submit A Case Online search request. Before calling `AnswerContact` when the user searches before submitting a case, this needs to be called to initialize the search.
- **AnswerContact** – this search request is used to perform a search in order to satisfy the submit a case request for escalation.

- **RespondContact** – this will inform the search instance of whether or not the user was satisfied. If the `escalate` field is populated with “true”, then a case escalation will be logged in the search instance for analytics to record. If the `escalate` is set to false, then the user was satisfied with one of the search results.
- There are 4 optional parameters to handle the highlighting of the text of a search result. Each snippet of an excerpt is rated in relevancy from 0 – 3. The snippets are put together using `` tags and a corresponding snippet CSS class is used to format the string. The default values are the classes `snippetClass0`, `snippetClass1`, `snippetClass2`, `snippetClass3`. You can override these defaults by passing in the parameters “`classlevel0`” through “`classlevel3`”.
- In order to restrict the results, you can pass in a parameter of “`restrict`” set to the following 3 values:
 - **IM** – InfoManager documents only
 - **IM_DISCUSSION** – InfoManager documents that are discussion board results
 - **IM_CHANNEL** – InfoManager documents that are Content records

The segment Parameter

Another parameter you can pass in the search request is the `segment` parameter, which you can use to pass a string into the SOAP request. Use the following values in conjunction with the `segment` parameter:

- **escalate** – set to true or false for a RespondContact request. Indicates whether there should be an escalation or not for analytics.
- **iqaction** – this parameter indicates the type of click through we want to perform with a “link” type.
 - **5** indicates that the value is a combination of “or’ed” constants.
 - **1** is an HTML highlight. The result of this request contains the highlighted HTML derived from the `id.parsedHTML` scripting variable.
 - **2** indicates that the result is a PDF document that needs highlighting. The resulting `id.parsedHTML` is a small XML node that is used to pass into the PDF document indicating how the PDF should be highlighted, such as:
`http://www.pdf.com/mypdf.pdf#xml=http://pagethatreturnsthexml`
 - **4** means that the search instance should simply record the click-thru. Typically the **4** is added to one of the other values for highlighting.
 - **8** means show similar results. You shouldn’t need to pass this in. When you set the type to “similar”, the action code of 12 automatically gets set with the SOAP request.
 - **1024** means that the answer is is a “Managed Answer” and not an “unstructured” result. In order for the click-thru to work on content that is not of `ansType` “unstructured”, you would normally pass in 1028 (i.e., 1024 + 4). For example:

```
<% if (!rsAns.ansType.equalsIgnoreCase("unstructured"))
{ %><a href="index?page=answerlink&url=<%=rsAns.esurl%>&answerid=
<%=rsAns.answerid%>&iqaction=1028"
...
<% } %>
```

The pageobj Parameter

The pageobj parameter provides a way to get specific information about the result set that was returned. You could, for example, find out if there are more results to navigate to. The pageobj is called using whatever the id parameter is set to as shown in the example below.

```
id="myid"  
....  
myid.pageobj.totalResults
```

The example above would return the total number of results.

The id Parameter

You can get other information from the id parameter, such as:

- **iqxml** – the iqxml that is returned by the SOAP response (helpful for debugging)
- **parsedHTML** – the highlighted HTML that is returned from an “open” call
- **pageobj** – page statistics (see “ResultFacet Objects” on page 222 for more information about the pageobj object)
- **facetcount** – number of facets returned
- **wizardcount** – number of process wizards returned
- **portletcount** – number of portlets returned
- **question** – the question that was asked
- **clickthrough** – in the case of a link request, this will be the link that needs to be redirected to
- **allowhighlight** – Boolean representing the search configuration setting for the repository that specifies whether document highlighting should be used
- **allowsimilar** – Boolean representing the search configuration setting for the repository that specifies whether similar results should be used
- **showingsimilar** – if the search results are returned due to a similar answer link, this will be set to true
- **pagewarp** – if pagewarp is not null after the search call, redirect the user to the pagewarp value (a URL)

Iterating Over Returned ResultFacets

To get the facets call:

```
iterate.dataset dataset="yourvar.facets"
```

and pass in the `dataset` value passed into the request tag. In the iteration, retrieve each facet using the `get.inquirasearch.facet` which returns a `ResultFacet` object with the same name as the `id`. The `ResultFacet` objects and how to use them are explained in the section on “ResultFacet Objects” on page 222.

Since the facets are hierarchical, each `ResultFacet` in the list has a `level` variable to tell you which node the facet is on. If the facet is active, you can get the top level category name by using the following code:

```
if (crFacet.active ) {
  while(crFacet.parent != null){
    crFacet = crFacet.parent;
  }
  out.println("The top level facet is " + crFacet.display + " <BR>");
  crFacet = crFacet.childInEffect;
  %>
```

The active facet is now `<%= crFacet.display %>`.

ResultFacet Objects

The calls to `<IM:iterate.dataset dataset="mydata.facets">` and `<IM:get.search.facet id = "fac">` both return an object of type `ResultFacet`. Use the `ResultFacet` object to determine the following:

- `<%= fac.active %>` – returns "true" if this facet is being used as a filter
- `<%= fac.count %>` – the number of sub-facets in existence (not necessarily the number of facets returned)
- `<%= fac.display %>` – the text description to display
- `<%= fac.referencekey %>` – a unique ID for this facet returned by Inquire Search (for example, CMS-CATEGORY-GILTEST-SPORTS.Football)
- `<%= fac.childInEffect %>` – a sub-facet of type `ResultFacet`, if any, that is being used as a filter
- `<%= fac.parent %>` – a sub-facet's reference to its parent facet
- `<%= fac.subFacets %>` – a list of all sub-facets under the next level on the current facet's tree
- `<%= fac.hasMore %>` – indicates whether or not there are more sub-facets that could be retrieved. If, for example, there are 1000 authors, at first request, maybe only 10 of them are returned
- `<%= fac.level %>` – indicates the level that this facet is in the hierarchy, starting at level 1

The request, `get.inquirasearch.data`, with the `id` parameter set to "myid" (i.e., "id="myid"") will return an object of type `Page` as "pageobj", from which you can retrieve the following properties:

- `<%= myid.pageobj.getPageMore() %>` – how many result pages there are
- `<%= myid.pageobj.getPageNumber() %>` – the index of the current result page
- `<%= myid.pageobj.getPageSize() %>` – number of results per page
- `<%= myid.pageobj.getPageStart() %>` – the first page number
- `<%= myid.pageobj.getTotalResults() %>` – possible number of results

When iterating through the `datasetanswers` from the request, after calling `<IM:get.inquirasearch.answer id="ans">`, an `InquireResult` object is returned with the following information available:

- `<%= ans.display %>` – the text to show for the link (the heading)
- `<%= ans.excerpt %>` – a convenience method to return an html formatted string of all the snippets. It will use the supplied `css class levels` or default to `snippetClassx` where `x` is a value from 0-3.
- `<%= ans.clickThrough() %>` – the click through link that is returned by Inquire Search

The next 3 are for creating a relevancy “progress bar” table:

- `<%= ans.scoretext %>` – determine the "score" html bar's percentage text
- `<%= ans.scorewidth %>` – determine the "score" html bar's width
- `<%= ans.nonscorewidth %>` – determine the "score" html bar's width (the right side of the two-celled table)
- `<%= ans.score %>` (Float) – how closely this answer matches the question
- `<%= ans.uimode %>` – currently must be set to “answer”
- `<%= ans.highlightinfo %>` – used by the Oracle Knowledge engine to highlight relevant text inside an external document – not much use for the tags
- `<%= ans.answerid %>`
- `<%= ans.iqaction %>`
- `<%= ans.url %>` – a URL to get to the actual document
- `<%= ans.cmsstatus %>` – information on the InfoManager document containing if the content record is published or not
- `<%= ans.cmsguid %>` – the GUID for an InfoManager record
- `<%= ans.isExternalContent %>` (Boolean) – an InfoManager content document in an external repository
- `<%= ans.isInternalContent %>` (Boolean) – an InfoManager content document in the current repository
- `<%= ans.isExternalDocument %>` (Boolean) – not an InfoManager document
- `<%= ans.iscontentdeleted %>` (Boolean) – an InfoManager document that has been indexed but has since been deleted (True if the content GUID cannot be found in the database)
- `<%= ans.docType %>` (String) – the document type of this answer
- `<%= ans.snippets %>` (NSMutableArray) – each part of the text is contained in snippets which have various levels as to how closely the search term is qualified. Each snippet is concatenated into the excerpt for convenience into span tags with the appropriate class levels
- `<%= ans.similar_count %>` (Integer) – the number of similar results for the current answer
- `<%= ans.relatedIds %>` (String) – the IDs of related answers (used for a “similar” request)
- `<%= ans.escurl %>` (String) – the HTML-escaped URL that is used to pass in a “link” request

Each snippet is of type `InquireSnippet` and simply contains `getLvl()` and `getText()` methods

- `<%= ans.isWizard %>` (Boolean) – true if the answer is a type Process Wizard (if the answer is a wizard, you can modify the `<a>` to append the `wizardid` and the `wizardstepid` in order to pass the arguments into a `form.wizardfields` tag)
- `<%= ans.wizardLabel %>` (String) – the Process Wizard’s display label

- `<%= ans.wizardDesc %>` (String) – a description of the Process Wizard
- `<%= ans.wizardFirstStep %>` – identifies which step id the Process Wizard should start at
- `<%= ans.wizardId %>` (String) – identifies which Process Wizard to use
- `<%= ans.wizardDefaultStep %>` (String) – not currently used
- `<%= ans.wizard %>` (Wizard) – contains the actual raw Wizard object

The Wizard fields above can be used like this:

```
if (rsAns.isWizard){ %>
<a href="http://10.0.20.76:8080/TagLibrary/index?page=<%=myPage%>&type=wizard&answerid=
<%=rsAns.answerid%>&iqaction=<%=rsAns.iqaction%>&wizardid=<%=rsAns.wizardId%>&wizardstepid
=
<%=rsAns.wizardFirstStep%>&wizardnextstep= "><%=rsAns.wizardLabel%> <br>
</a> <%=rsAns.wizardDesc%><br>
```

Using the Process Wizard

Important! The Process Wizard feature is deprecated and replaced by the AnswerFlow component. See the *AnswerFlow Implementation and User's Guide*, located in the Oracle Knowledge Intelligent Search User Documentation Library, for more information.

The following tags allow the user to use the process wizard:

```
<IM:form.wizardform wizardid="<%=wizid%>" wizardstepid="<%=wizstep%>" id="id2"
success="searchtest" error="http://www.my_company.com/error_page">
```

The `form.wizardform` should be displayed if the parameter “type” is equal to “wizard”.

To display the previous choices that have been made in a Process Wizard, you can use the `iterate.wizard.previous.responses` tag as shown below:

```
<IM:iterate.wizard.previous.responses>
  <IM:get.wizard.previous.response id="wpr">
    <font color=blue size="3"><%= wpr.question %></font><br>
    <font color=blue size="2"><%= wpr.answer %></font> <br><br>
  </IM:get.wizard.previous.response>
</IM:iterate.wizard.previous.responses>
```

There are two properties available to you using the scripting variable: a question and an answer.

After calling the `form.wizardform`, you can iterate over the wizardform fields like this:

```
<IM:iterate.wizardform.fields><br>
  IM:get.wizardfield.record id="wizf">
  <% if (wizf.type.equals("select")) { %>
    <IM:input.wizardfield.record css="dropdown"/>
  <% } else if (wizf.type.equals("checkbox")) { %>
    <IM:input.wizardfield.record css="checkbox"/>
  <% } else if (wizf.type.equals("text")) { %>
    <IM:input.wizardfield.record css="text"/>
  <% } else if (wizf.type.equals("radio")) { %>
    <IM:input.wizardfield.record css="radio"/>
  <% } else { %>
    <br><b><%=wizf.text%></b> <br>
  <% } %>
  </IM:get.wizardfield.record>
```



```
</IM:iterate.wizardform.fields>
```

A `form.wizardform` generates the following hidden fields:

```
<input name="action" value="SearchWizardAction" type="hidden">
<input name="success" value="answers" type="hidden">
<input name="error" value="answers&er=y" type="hidden">
<input name="wizardid" value="WizardOfTime" type="hidden">
<input name="wizardstepid" value="1A" type="hidden">
<input name="wizaction" value="next" type="hidden">
```

(`wizaction` is available starting in version 8.0.1.1)

The `wizaction` hidden field indicates which submit button was pressed. Currently, there are three options; “next”, “back”, and “cancel”. Use a script to set this parameter whenever a button is clicked. The following excerpt uses JavaScript to set each of the three values as in `onclick="javascript:wizaction.value = 'cancel';">`

```
<button value="cancel" name="inqwiz" onclick="javascript:wizaction.value =
'cancel';">Cancel</button>
<% if (id2.showback) { %><button type="submit" value="Back" name="inqwiz"
onclick="javascript:wizaction.value = 'back';">Back</button><% } %>
<button type="submit" class="button-feature" name="inqnext"
onclick="javascript:wizaction.value = 'next';">Next</button>
```

You can give the buttons whatever name you wish as long as the hidden `wizaction` is set to one of the three values listed above.

Portlets

The side panel portlets are answers of either type “custom” or “dictionary”. The field `.name` will contain the name of the box that the answer belongs to. The following names are currently used:

- PROMOTE = Promotions
- ACT = Act Now
- RELATED_TOPIC = Related Topics
- DEFINE = Definitions

Other names may be created on the Search side.

The way to obtain the portlets is to iterate over the new answer property “portlets” and iterating over the portlet’s “items” such as in this example:

```
<Table border=0 align=right width=20%><tr><td>
<IM:iterate.search.portlets dataset="rsData.portlets">
  <IM:get.inquirasearch.portlet id="porter">
    <% if (porter.type.equals("feedback")) { %>
      <form name="feedbackform" action="index" method=get>
        <input type=hidden name=page value="<%=myPage%>">
        <input type=hidden name=type value=feedback>
    <% } %>
  <table border=1 width=100%> <tr><th class="im-lightblue"><%= porter.name %></th> </tr>
  <IM:iterate.dataset dataset="porter.items" id="pitems">
  <IM:get.inquirasearch.portlet.item id="item">
  <TR><td>Answer ID = <%= item.answerid %>
  <% if (porter.type.equals("feedback")) { %>
    <%= item.excerpt %><BR>
```

```

    <% if (pitems.index == 4) { %>
      <input type=submit name=type value=submit>
    </form>
    <% } %>
    <% } else { %>
    <% if (item.ansType.equals("dictionary")) { %>
      <a href="index?page=<%=myPage%>
        &type=search&showdef=true&title=<%=item.getLinkText()%>
        &def=<%=item.excerpt%>
        &answerid=<%=item.answerid%>
        &iqaction=<%=item.iqaction%>">
        <%= item.getLinkText() %>
      </a> <br>
      <%= item.excerpt %>
      <BR><BR>
    <% } else { %>
      <a href="<%=item.titleUrl%>"><%= item.getLinkText() %></a> <br>
      <%= item.excerpt %><BR><BR>
    <% } %>
  <% } %>
</td></tr>
</IM:get.inquirasearch.portlet.item>
</IM:iterate.dataset>

</IM:get.inquirasearch.portlet>
</IM:iterate.search.portlets>

</td><tr></Table>

```

A portlet item has two available properties: `name` and `type`. As you can see, there is a special portlet whose type is `feedback`. This is the feedback form found at the last of the portlets. The item object is of type `InquiryResult` which has the same member fields and methods as the answer object explained above.

In the case of a “dictionary” portlet, I am passing the `type=search` and `showdef=true` back to the page so that I can display its definition title (`item.getLinkText()`) and its definition (`item.excerpt`) as in the example below:

```

<% if (showdef != null) { %>
  <table width=80% border=1><tr><td> <%= deftitle %> <br></td></tr><tr><td>
  <%= defexcerpt %></td></tr></table>
<% }

```

The above variables `deftitle` and `defexcerpt` are simply representing the values passed in as `title=<%=item.getLinkText() %>&def=<%=item.excerpt%>`

You can specify the order of the portlets to be returned by passing an order parameter into the tag such as:

```

<IM:iterate.search.portlets dataset="rsData.portlets"
order="PROMOTE+DEFINE+RELATED_TOPIC+FEEDBACK">

```

Any keys not passed into the order parameter will not be returned. If a parameter is entered into the order that does not return, it is simply ignored. Not supplying an order parameter will result in the returning of all portlets returned by the SOAP call in the order we receive them.

Delegate Classes Configuration

The delegate classes configuration allows you to specify Java methods to execute when given events occur. You can configure custom methods in the SYSTEM repository to specify a default for all repositories, or configure custom methods in an application repository to override the default methods.

To configure delegate classes:

- 1 Log onto the desired repository and select **Tools** from the navigation bar:
The Management Console displays the Administration page for the current repository.
- 2 Select **Configure** under System:
The Management Console displays the Information Manager Settings page.
- 3 Select the **Delegate Classes Configuration** item:

Information Manager Settings

Current Configuration	
1.	Resource Configuration
2.	LDAP Configuration
3.	Email Configuration
4.	Code Generation Configuration
5.	InQira Search Configuration
6.	Delegate Classes Configuration
7.	Delegate Translation

The Management Console displays the Delegate Classes Configuration page. Specify the custom methods to execute for the selected actions:

Delegate Classes Configuration

Edit Delegate Classes

Default settings for all repositories

Add to Cart Action

Change Local Action

Channel Search Action

Contribute Action

Create Faq Action

Edit Profile Action

Full Text Search Action

Generic Form Action

Login Action

Lost Password Action

Newsletter Find Email Action

Newsletter Subscribe Action

Page Email Action

Recommend Action

Shopping Cart Action

Take Survey Action

Talkback Action

Translation Delegate Class Configuration

It is possible to integrate to an external application to do machine translation of content. This is done by specifying a custom method to call an external translation service using the Delegate Translation option under the Task Configuration list in the Tools area.

To configure a translation delegate class:

- 1 Log onto the required repository and select **Tools** from the navigation bar:
The Management Console displays the Administration page for the current repository.
- 2 Select **Configure** under System:
The Management Console displays the Information Manager Settings page.

Information Manager Settings

Current Configuration	
1.	Resource Configuration
2.	LDAP Configuration
3.	Email Configuration
4.	Code Generation Configuration
5.	InQuira Search Configuration
6.	Delegate Classes Configuration
7.	Delegate Translation

- 3 Select the **Delegate Translation** option from the list.
The Management Console displays the Translation Delegate Class Configuration page.

Translation Delegate Class Configuration

Edit Translation Delegate Class

Default settings for all repositories

Translation Delegate Class

- 4 Specify the custom method to handle translation tasks in the **Translation Delegate Class** text field.

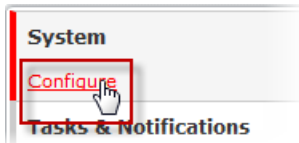
File Attachment Configuration

You can configure your application to accept only specific types of files as attachments. You restrict file attachments using the **Content File Attachment Configuration** option of the **Oracle Knowledge Settings** page under **Tools**.

Note: You can also restrict attachments for discussion boards using the DISCUSSION BOARD FILE UPLOAD FORMAT option, which are available when you select the Go to Expert Mode option on the **Oracle Knowledge Settings** page under **Tools**.

To restrict file attachments:

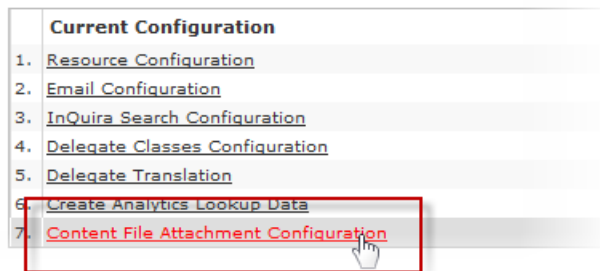
- Select **Tools**, then select **Configure** under **System**:



The Management Console displays the **Oracle Knowledge Settings** page.

- Select **Content File Attachment Configuration**:

Oracle Knowledge Settings



The Management Console displays the **Content File Attachment Configuration** page:

Content File Attachment Configuration

Content File Attachment Type

Parameter Value*

.+

Description

The regular expression for content attachment file name

The **Parameter Value** field of the **Content File Attachment Configuration** page defines the file types that users can attach to content records. The default value is .+, which specifies that users can attach any file types.

- select **Override default configuration**, then specify a regular expression to exclude and include specific file types as desired, and select **Save**

Information Manager will evaluate the regular expression to exclude and include the specified file types as attachments to content records.

Deleting Unused Attached Files

You can schedule a batch job to delete unused files that are stored as content resources (files attached to content records). Information Manager considers a file in the configured file system or FTP location to be unused if the guaranteed unique identifier (guid) associated with the attachment no longer represents a valid content record.

- Define and schedule the job as described in “Specifying Batch Job Details and Schedules” on page 245, and select **Resource File Cleaner** as the Job Action

Customizing ESAPI Configurations

Oracle Knowledge provides the data validation functionality for validating user input and HTTP requests. The application relies on white list parameter validation to filter out invalid values.

The Oracle Knowledge Information Manager Console integrates the Open Web Application Security Project (OWASP) Enterprise Security API (ESAPI) framework. The ESAPI is an industry-tested framework that applies standardized best practices for encoding and escaping untrusted data before it is processed as input by the application.

The administrator can configure a white list for the attributes of a replacement token and category.

To specify the security configurations:

- 1 Log onto the required repository and select **Tools** from the navigation bar. The Management Console displays the Administration page for the current repository.
- 2 Select **Configure** under **System**. The Management Console displays the Information Manager Settings page:


Oracle Knowledge Settings

Current Configuration	
1.	Resource Configuration
2.	LDAP Configuration
3.	Email Configuration
4.	InQira Search Configuration
5.	Delegate Classes Configuration
6.	Delegate Translation
7.	Create Analytics Lookup Data
8.	File Attachment Configuration
9.	Password Configuration
10.	ESAPI Configuration Customization

- 3 Select **ESAPI Configuration Customization** from the list. The Management Console displays the ESAPI Configuration Customization page:

ESAPI Configuration Customization

Oracle Knowledge Specific Configuration Parameters for ESAPI

 Disabling any of these checks could result in cross-site scripting issues!

- Disable XML Element encoding provided by the ESAPI framework.
- Disable LDAP encoding provided by the ESAPI framework.
- Disable SQL encoding provided by the ESAPI framework.
- Disable XML Attribute encoding provided by the ESAPI framework.
- Disable HTMLAttribute encoding provided by the ESAPI framework.
- Disable CSS encoding provided by the ESAPI framework.
- Disable URL encoding provided by the ESAPI framework.
- Disable LDAP distinguished name encoding provided by the ESAPI framework.
- Disable HTML encoding provided by the ESAPI framework.
- Disable XPath encoding provided by the ESAPI framework.
- Disable OS specific encoding provided by the ESAPI framework.
- Disable JavaScript encoding provided by the ESAPI framework.

Oracle Knowledge Whitelist Parameter Validation Configuration

The ESAPI validation settings for rich text Replacement Token replacement text

The description of what data the parameter contains*

URI string containing encoded or UTF characters

The maximum size of the field (must include size in bytes for double byte characters if appropriate)*

1000

The reference to the ESAPI validation regular expression

Rich text replacement text

4 Specify the ESAPI configuration settings in the following sections:

Section	Description
Oracle Knowledge Specific Configuration Parameters for ESAPI	Specify Oracle Knowledge specific configuration parameters provided by the ESAPI framework. See “Specifying Oracle Knowledge Specific Configuration Parameters for ESAPI” on page 232.
Oracle Knowledge Whitelist Parameter Validation Configuration	Specify the Oracle Knowledge whitelist parameter validation configurations for Replacement Token and Category. See “Specifying Oracle Knowledge Whitelist Parameter Validation Configuration” on page 233.
ESAPI Validation Regular Expression Patterns	Customize the ESAPI validation regular expression patterns. See “Specifying ESAPI Validation Regular Expression Patterns” on page 237.

Specifying Oracle Knowledge Specific Configuration Parameters for ESAPI

You can use the section to specify Oracle Knowledge specific ESAPI configuration parameters.

- Specify the following validations:

Field Name	Description
------------	-------------

Disable XML Element encoding provided by the ESAPI framework	Select the option to disable the XML Element encoding provided by the ESAPI framework.
Disable LDAP encoding provided by the ESAPI framework	Select the option to disable the LDAP encoding provided by the ESAPI framework.
Disable SQL encoding provided by the ESAPI framework	Select the option to disable the SQL encoding provided by the ESAPI framework.
Disable XML Attribute encoding provided by the ESAPI framework	Select the option to disable the XML Attribute encoding provided by the ESAPI framework.
Disable HTMLAttribute encoding provided by the ESAPI framework	Select the option to disable the HTMLAttribute encoding provided by the ESAPI framework.
Disable CSS encoding provided by the ESAPI framework	Select the option to disable the CSS encoding provided by the ESAPI framework.
Disable URL encoding provided by the ESAPI framework	Select the option to disable the URL encoding provided by the ESAPI framework.
Disable LDAP distinguished name encoding provided by the ESAPI framework	Select the option to disable the LDAP distinguished name encoding provided by the ESAPI framework.
Disable HTML encoding provided by the ESAPI framework	Select the option to disable the HTML encoding provided by the ESAPI framework.
Disable XPath encoding provided by the ESAPI framework	Select the option to disable the XPath encoding provided by the ESAPI framework.
Disable OS specific encoding provided by the ESAPI framework	Select the option to disable the OS specific encoding provided by the ESAPI framework.
Disable JavaScript encoding provided by the ESAPI framework	Select the option to disable the JavaScript encoding provided by the ESAPI framework.

Note: Oracle does not recommend that you disable any of the above listed parameter, as it might result in cross-site scripting issues. By default, all the options listed above are enabled.

Specifying Oracle Knowledge Whitelist Parameter Validation Configuration

This section provides a list of security configuration options to define allowable characters and strings for Replacement Token and Category. These defined rules prevent attackers from entering invalid characters or scripts into fields that might result in cross-site scripting errors.

You can customize the security configurations for the following:

- Text field of a Replacement Token
- Richtext field of a Replacement Token
- Category name field
- Category description field

Specifying ESAPI Validation Settings for Rich Text Field

You can use this section to specify validation settings for the richtext field of Replacement Token. The following table describes each of the parameter validation.

- Specify the following validations:

Field Name	Description
The description of what data the parameter contains	Specify a description of what kind of data type the Richtext field will accept. The default value is "URI string containing encoded or UTF characters".
The maximum size of the field	Specify a numeric value for the maximum size of the input field. The default value is "1000". Note: You must include size in bytes for double-byte characters.
The reference to the ESAPI validation regular expression	Specify a regex pattern reference for the framework to validate the input data. The available ESAPI validation regex patterns are: <ul style="list-style-type: none"> • Plain text replacement text • Rich text replacement text • Standard text The default value is "Standard text". See "Specifying ESAPI Validation Regular Expression Patterns" on page 237 for more information.
How should validation be handled	Specify how to handle the validation on the input data. The valid values are: <ul style="list-style-type: none"> • Validate — Perform validation on the input data. • Encode — Encode the input data. Returns a null value, if encode fails. • None — Skip the validation on the input data. The default value is "Validate".
The parameter can be null	Indicates that the input field can be null. By default, the check box is selected, setting the parameter to "true".
The parameter value is from user input	Indicates whether the parameter value is from user input. By default, the check box is selected, setting the parameter to "true".
The request parameter original should be changed by ESAPI encoder (encode or decode)	Indicates whether the ESAPI encoder can encode or decode the input data specified with the HTTP request. By default, the check box is selected, setting the parameter to "true".
The parameter should be canonicalized	Indicates that the input data will be canonicalized. By default, the check box is selected, setting the parameter to "true".

Specifying ESAPI Validation Settings for Plain Text Field

You can use this section to specify validation settings for the plain text field of a Replacement Token. The following table describes each of the parameter validation.

- Specify the following validations:

Field Name	Description
The description of what data the parameter contains	Specify a description of what kind of data type the plain text field will accept. The default value is "URI string containing encoded or UTF characters".
The maximum size of the field	Specify a numeric value for the maximum size of the input field. The default value is "1000". Note: You must include size in bytes for double-byte characters.
The reference to the ESAPI validation regular expression	Specify a regex pattern reference for the framework to validate the input data. The available ESAPI validation regex patterns are: <ul style="list-style-type: none"> Plain text replacement text Rich text replacement text Standard text The default value is "Standard text". See "Specifying ESAPI Validation Regular Expression Patterns" on page 237 for more information.
How should validation be handled	Specify how to handle the validation on the input data. The valid values are: <ul style="list-style-type: none"> Validate — Perform validation on the input data. Encode — Encode the input data. Returns a null value, if encode fails. None — Skip the validation on the input data. The default value is "Validate".
The parameter can be null	Indicates that the input field can be null. By default, the check box is selected, setting the parameter to "true".
The parameter value is from user input	Indicates whether the parameter value is from user input. By default, the check box is selected, setting the parameter to "true".
The request parameter original should be changed by ESAPI encoder (encode or decode)	Indicates whether the ESAPI encoder can encode or decode the input data specified with the HTTP request. By default, the check box is selected, setting the parameter to "true".
The parameter should be canonicalized	Indicates that the input data will be canonicalized. By default, the check box is selected, setting the parameter to "true".

Specifying ESAPI Validation Settings for Category Description

You can use this section to specify validation settings for the Category description. The following table describes each of the parameter validation.

- Specify the following validations:

Field Name	Description
The description of what data the parameter contains	Specify a description of what kind of data type the Category description field will accept. The default value is "URI string containing encoded or UTF characters".

The maximum size of the field	Specify a numeric value for the maximum size of the input field. The default value is "1000". Note: You must include size in bytes for double-byte characters.
The reference to the ESAPI validation regular expression	Specify a regex pattern reference for the framework to validate the input data. The available ESAPI validation regex patterns are: <ul style="list-style-type: none"> • Plain text replacement text • Rich text replacement text • Standard text The default value is "Standard text". See "Specifying ESAPI Validation Regular Expression Patterns" on page 237 for more information.
How should validation be handled	Specify how to handle the validation on the input data. The valid values are: <ul style="list-style-type: none"> • Validate — Perform validation on the input data. • Encode — Encode the input data. Returns a null value, if encode fails. • None — Skip the validation on the input data. The default value is "Validate".
The parameter can be null	Indicates that the input field can be null. By default, the check box is selected, setting the parameter to "true".
The parameter value is from user input	Indicates whether the parameter value is from user input. By default, the check box is selected, setting the parameter to "true".
The request parameter original should be changed by ESAPI encoder (encode or decode)	Indicates whether the ESAPI encoder can encode or decode the input data specified with the HTTP request. By default, the check box is selected, setting the parameter to "true".
The parameter should be canonicalized	Indicates that the input data will be canonicalized. By default, the check box is selected, setting the parameter to "true".

Specifying ESAPI Validation Settings for Category Name

You can use this section to specify validation settings for the Category name. The following table describes each of the parameter validation.

- Specify the following validations:

Field Name	Description
The description of what data the parameter contains	Specify a description of what kind of data type the Category name field will accept. The default value is "URI string containing encoded or UTF characters".
The maximum size of the field	Specify a numeric value for the maximum size of the input field. The default value is "1000". Note: You must include size in bytes for double-byte characters.
The reference to the ESAPI validation regular expression	Specify a regex pattern reference for the framework to validate the input data. The available ESAPI validation regex patterns are: <ul style="list-style-type: none"> • Plain text replacement text • Rich text replacement text • Standard text The default value is "Standard text". See "Specifying ESAPI Validation Regular Expression Patterns" on page 237 for more information.

How should validation be handled	Specify how to handle the validation on the input data. The valid values are: <ul style="list-style-type: none"> • Validate — Perform validation on the input data. • Encode — Encode the input data. Returns a null value, if encode fails. • None — Skip the validation on the input data. The default value is "Validate".
The parameter can be null	Indicates that the input field can be null. By default, the check box is selected, setting the parameter to "true".
The parameter value is from user input	Indicates whether the parameter value is from user input. By default, the check box is selected, setting the parameter to "true".
The request parameter original should be changed by ESAPI encoder (encode or decode)	Indicates whether the ESAPI encoder can encode or decode the input data specified with the HTTP request. By default, the check box is selected setting the parameter to "true".
The parameter should be canonicalized	Indicates that the input data will be canonicalized. By default, the check box is selected setting the parameter to "true".

Specifying ESAPI Validation Regular Expression Patterns

This section provides the standard regular expressions (regex) to check input data against a list of allowable characters and strings for each of the following:

- Rich Text Area and Plain Text of Replacement Token
- Description and Name fields of Category

You can modify these regex patterns with valid regular expression characters. The following table lists each of the default regex pattern.

Field Name	Description
The regular expression used to validate rich text Replacement Token replacement text input	Specify the regex pattern to validate the input data for a rich text field. The default regex pattern is " <code>^[\\p{L}\\p{P}\\p{N}\\p{So}\\p{Sc}\\s+%26&=&amp%\\ \\-_ <>/]+</code> ".
The regular expression used to validate standard text field input	Specify the regex pattern to validate the input data for a standard text field. The default regex pattern is " <code>^[\\p{L}\\p{P}\\p{Nd}]+</code> ".
The regular expression used to validate plain text Replacement Token replacement text input	Specify the regex pattern to validate the input data for a plain text field. The default regex pattern is " <code>^[\\p{L}\\p{P}\\p{N}\\p{So}\\p{Sc}+=]+</code> ".

Configuring Tasks and Task Notifications

You can configure and customize the various Information Manager content management tasks to meet the needs of your specific application and business environment. You can:

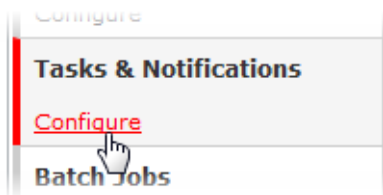
- Enable and disable tasks
- Enable and disable email notifications about tasks
- Customize the content of task notifications

Important! The **Enable this task type** option must be enabled in order to assign a workflow task or to enable any tasks or notifications associated with the workflow task. For example, if this option is not enabled, then the **Enable email notifications for this task** option is disabled, regardless of whether it is selected.

See Action and Notification Tasks for a description of each task.

To enable or disable tasks and notifications:

- Log onto the SYSTEM repository and select **Configure** under Tasks and Notifications in the Tools tab:



The Management Console displays the Task Configuration page:

Tasks & Notifications

Available Tasks

	Task Name
1.	Workflow Task
2.	Translation Task
3.	Expiring Content
4.	Workflow Progress
5.	Delinquent Workflow
6.	Content Review
7.	Rating Analysis
8.	Recommendation
9.	Publish Notification
10.	Password Reset Request
11.	Inactive Account
12.	Survey Answer
13.	Content Subscription
14.	Forum Subscription
15.	Forum Moderation
16.	Expiring Subscriptions Notification
17.	Content edited outside of the workflow process Notification
18.	Content Batch Monitoring
19.	Start Date Publisher Error
20.	Email Failure Notification
21.	Console User Welcome
22.	Web User Welcome

- Select a desired task

The Management Console displays the **Tasks & Notifications** page for the selected task. The default task settings are inherited from the SYSTEM repository.

Tasks & Notifications

Task Type Workflow Task

Task Configuration Edit Fields

<input checked="" type="checkbox"/>	Enable this task type
<input checked="" type="checkbox"/>	Enable email notifications for this task

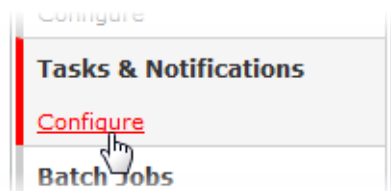
- Use the **Enable this task type** and **Enable notifications for this task** settings to enable or disable tasks or task notifications for the selected task

Editing Notification Templates

You can edit the content of the email notifications that Information Manager sends in response to tasks and other events created within the application.

To customize task notifications:

- Log onto the SYSTEM repository and select **Configure** under Tasks and Notifications in the Tools tab:



The Management Console displays the Task Configuration page:

Tasks & Notifications

Available Tasks

	Task Name
1.	Workflow Task
2.	Translation Task
3.	Expiring Content
4.	Workflow Progress
5.	Delinquent Workflow
6.	Content Review
7.	Rating Analysis
8.	Recommendation
9.	Publish Notification
10.	Password Reset Request
11.	Inactive Account
12.	Survey Answer
13.	Content Subscription
14.	Forum Subscription
15.	Forum Moderation
16.	Expiring Subscriptions Notification
17.	Content edited outside of the workflow process Notification
18.	Content Batch Monitoring
19.	Start Date Publisher Error
20.	Email Failure Notification
21.	Console User Welcome
22.	Web User Welcome

- Select a desired task

The Management Console displays the notification configuration settings for the selected task. The default notification settings are inherited from the SYSTEM repository.

- 5 Select the Override Default Values option to edit the notification content



The Management Console displays the editable task notification page. See “Using Keyword Substitution within Email Notifications” on page 243 for information about the Information Manager-defined keyword variables that you can use within notifications.

Using Keyword Substitution within Email Notifications

Information Manager defines a set of keyword variables that you can use to refer to specific repository, application, task, and user information in notification messages.

When Information Manager sends a notification, it replaces the variables with values obtained from the event context and your specific application. For example, it will replace the variable <TID> with the specific task ID associated with the notification.

Important! You cannot edit the keyword variables, and only a subset of variables are available for use in a given notification template.

The Management Console displays the available keyword variables for a each notification template in the upper right portion of the configuration page, for example:

Template Legend	
Keyword Substitutions:	
<D1>	Repository
<S1>	Repository View
<N1>	First Name
<N2>	Last Name
<U1>	User ID
<E1>	Email
<TS>	Task Status
<TID>	Task ID
<COM>	Task Comments
<TASKURL>	Task URL
<UA>	Unlock account URL
<RECID>	Content ID
<DOCID>	Document ID
<LOCALE>	Document Locale
<MID>	Master Identifier
<CHANNEL>	Channel
<WC>	Workflow Comments
<WS>	Workflow Status
<CWFS>	Current Workflow Step Name
<PWFS>	Previous Workflow Step Name

Scheduling Batch Jobs

You can schedule batch jobs to perform various Information Manager administrative functions. You can schedule batch jobs only within an application repository.

Important! Batch jobs can only be configured or managed from IM Management Console instances that have been installed to support batch scheduling operations. In general, only a single instance should be configured to perform batch operations per environment (staging, QA, production).

You define and schedule batch jobs by:

- Specifying basic job parameters
- Specifying job-specific parameters
- Specifying the job schedule

Available Batch Jobs

Information Manager provides the following batch jobs for scheduling:

Job	Description
Resource File Cleaner	Delete unused files from the configured file system or content resource location via FTP, as described in "Deleting Unused Attached Files" on page 231.
URL Connect	Connect to a URL for the purpose of executing an external web service, as described in "Connecting to an External Web Service" on page 247.
Export All Data	Export the current repository data and compress the file for backup purposes, as described in "Exporting Data for Backup" on page 296.
Expiring Content	Locate content within a selected channel that will expire within a specified number of days, as described in "Identifying Expiring Content" on page 247.
Content Review Scheduler	Locate content within a selected channel that should be reviewed within a specified number of days, as described in "Identifying Content to be Reviewed" on page 249.
Rating Analysis	Locate content that uses a selected rating form and is rated lower than a specified threshold, as described in "Identifying Content by Rating Level" on page 252.
Delinquent workflow steps	Locate content that is delinquent within a selected workflow, as described in "Identifying Delinquent Content" on page 250.
Delete closed and ignored Tasks	Locate and delete tasks that have been closed or ignored for a specified number of days, as described in "Deleting Closed Tasks" on page 250.
Case Link Cleanup	Locate and delete any Case Link objects associated with obsolete content, as described in "Associating Content Records with CRM Cases" on page 97.
Send Subscription Emails	Send content-update notification emails to subscribers.
Expiring Subscriptions Notification	Search for subscriptions that will expire within a certain number of days and send notification emails to subscribers.
Delete Expired Subscriptions	Search for expired subscriptions and delete them.
Indexer Scheduling	Reindex the repository data, as described in "Indexing Data for Full Text Search" on page 185.
Content Batch Monitor	This batch job is used to monitor the directory where translated content files are uploaded to. When a file is detected it is automatically process by the batch translation utility.

SDP	Start date publishing batch job. Used to automatically publish and unpublish documents based on their publication start dates.
XXMetricsMergerJob	This series of batch jobs are used to process the metrics for content views, and discussion board activities so that they are properly recorded into the database.
TrimBatchHistory	This batch job is used to clean up the batch task history so that the database table is not filled with useless data.

Specifying Batch Job Details and Schedules

To schedule Information Manager batch jobs:

- 1 Log into Information Manager as SUPER user and select the SYSTEM repository, as described in Logging on as the Super User.
- 2 Switch from the **SYSTEM** repository to the application repository the batch job is to run on (**DEMO** in this example):
- 3 Select the Tools tab.
- 4 Select **Configure** under Batch Jobs on the Administration page:
- 5 Select **Add Batch Job**:

Batch Jobs List

All Active Jobs

-- There are no scheduled jobs defined --

[Add Batch Job](#) 

6 The Management Console displays the Add Batch Job page:

Add Batch Job

Batch Job Details

Job Name:*

Job Reference Key:

Job Action: Resource File Cleaner

Schedule Details

Once every Last Day of every Month at AM

Recurring every weeks

One Time Only

Start Time

Date: 11/30/2005

Time: 04:11 PM

End Time

Date:

Time: AM

Current Time: 4:11:15 PM (Leave end date blank to run indefinitely)

* Required field

[Save Batch Job](#)

[Cancel](#)

Schedule Results

Run on 11/30/2005 at 04:11 PM, repeating every weeks indefinitely

Job Details

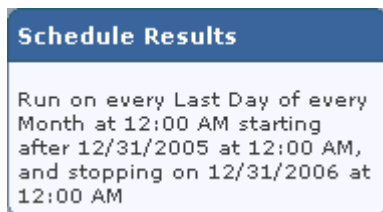
Resource File Cleaner

Used to delete unused files from the server's file system, or through FTP.

7 Specify the following general scheduling parameters:

Parameter	Description
Job Name	Specify a name for the batch job
Job Reference Key	Accept the default value supplied by the Management Console or specify a string to use as an internal identifier. See "A Note On Reference Keys" on page 52 for more information on reference keys and how they are used within the Information Manager.
Job Action	Select the type of job as described in "Available Batch Jobs" on page 244.
Schedule Details	Select one of the following scheduling methods and complete the scheduling fields: <ul style="list-style-type: none"> • Once every... • Recurring every... • One Time Only
Start Date and Time	Specify the date and time after which the scheduling detail logic will apply.
End Date and Time	Specify the date and time up to which the scheduling detail logic will apply. Leave this field blank to specify that the task will run indefinitely.

The **Schedule Results** area displays a narrative summary of the scheduling details. For example, the **Schedule Results** display:



describes the following job schedule details:

Schedule Details

Once every of every at

Recurring every

One Time Only

Start Time		End Time	
Date	Time	Date	Time
<input type="text" value="12/31/2005"/>	<input type="text" value="12:00"/> <input type="text" value="AM"/>	<input type="text" value="12/31/2006"/>	<input type="text" value="12:00"/> <input type="text" value="AM"/>

Current Time: (Leave end date blank to run indefinitely)

Connecting to an External Web Service

You can schedule a batch job to connect to a URL for the purpose of executing an external web service. You can use this job to schedule Information Manager to execute custom code for any purpose.

- Define and schedule the job as described in “Specifying Batch Job Details and Schedules” on page 245, and select **URL Connect** as the Job Action

The Management Console displays an additional Target URL field.

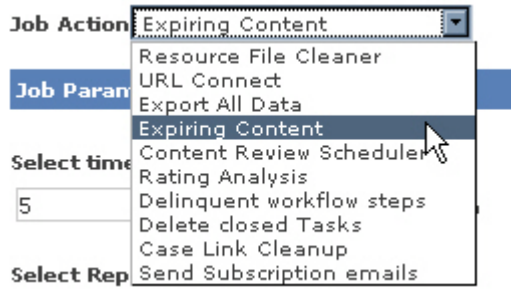
- Specify the URL of the web service to which you want to connect

Identifying Expiring Content

You can schedule a batch job to identify content that is approaching its expiration date. Information Manager will use the results of this job to create tasks and send notifications to the appropriate users.

Note: Regardless of whether the expiring content batch job is run or not, the content will still expire if the expiration date is set. When the content expires, it is not deleted or unpublished, but it will not be loaded (e.g., for an IM click-thru page) and the crawler will not pick it up in the crawl.

- 1 Define and schedule the job as described in “Specifying Batch Job Details and Schedules” on page 245, and select **Expiring Content** as the Job Action:



The Management Console displays additional content expiration criteria fields:

Job Parameters

Select time frame for notification:

5 Days expiration

Select Repository Channels

- Alerts
- Downloads
- FAQs
- Job Aid
- Manuals
- News
- Policy
- Solutions
- test

[Select All](#) [Unselect All](#)

- 2 Specify the following content expiration criteria:

Parameter	Description
Select time frame for notification	Specify the number of days before or after expiration that must elapse to qualify a record for inclusion in the results set.
Select Repository Channels	Specify the content channels in which to search for expiring content.

Identifying Content to be Reviewed

You can schedule a batch job to identify content that have reached the review date specified when the content record was created. Information Manager uses the results of this job to create tasks and send notifications to the appropriate users.

This batch job is configurable to allow notifications to be sent out prior to or after the scheduled review date. It runs on a schedule looking for content records that have specified review dates and applies the rules for the batch job. If the rules match, the notification is sent. The review is independent of the state of the record (i.e., published or in process).

- 1 Define and schedule the job as described in “Specifying Batch Job Details and Schedules” on page 245, and select **Content Review Scheduler** as the Job Action:



The Management Console displays additional content review criteria fields:

Content Review Search

How many days ahead would you like to look for?

Select repository channels to search

- Alerts
- Downloads
- FAQs
- Job Aid
- Manuals
- News
- Policy
- Solutions
- test

[Select All](#) [Unselect All](#)

- 2 Specify the following content expiration criteria:

Parameter	Description
How many days ahead would you like to look for?	Specify the number of days prior to delinquency that you want to locate content for.

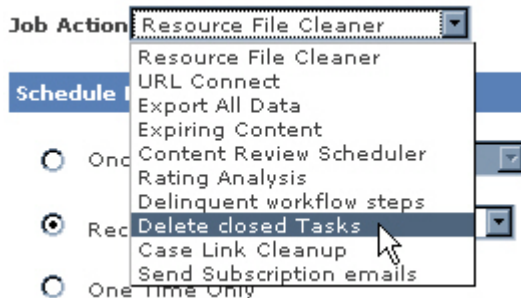
Select Repository Channels

Specify the content channels in which to search for expiring content.

Deleting Closed Tasks

You can schedule a batch job to delete closed tasks from the application. You delete closed tasks by scheduling the Delete Closed Tasks batch job:

- 1 Define and schedule the job as described in “Specifying Batch Job Details and Schedules” on page 245, and select **Delete Closed Tasks** as the Job Action:



The Management Console displays an additional task criteria fields:

Select Tasks to Delete

Closed

Ignored

Minimum number of days in these statuses:*

- 2 Specify the following task criteria:

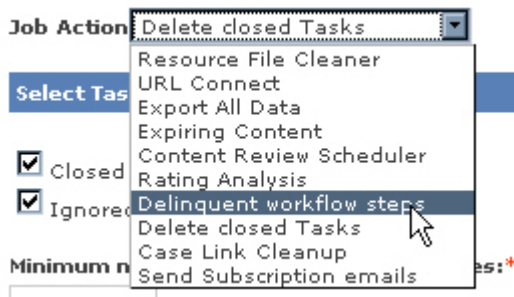
Parameter	Description
Closed	Select this checkbox to delete tasks that have been closed at least as many days as the specified minimum.
Ignored	Select this checkbox to delete tasks that have been ignored at least as many days as the specified minimum.
Minimum number of days in this status	Specify the minimum number of days that a task must be closed or ignored to qualify for deletion.

Identifying Delinquent Content

You can schedule a batch job to identify content that has remained in a workflow step longer than the specified time period. The Management Console will use the results of this job to schedule tasks for and send notices to the appropriate users.

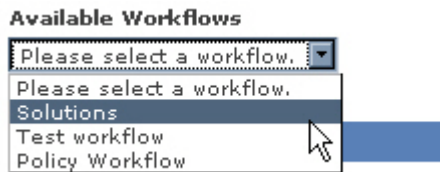
You identify delinquent content by scheduling the Delinquent Workflow Steps batch job:

- 1 Define and schedule the job as described in “Specifying Batch Job Details and Schedules” on page 245, and select **Delinquent Workflow Steps** as the Job Action:



The Management Console displays an additional Available Workflow drop-down menu.

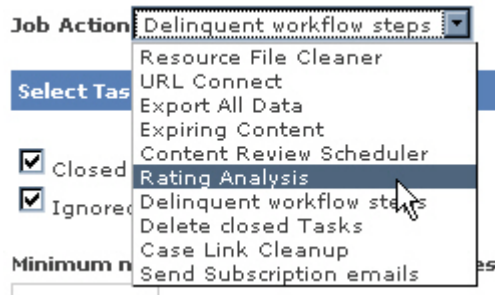
- 2 Select the workflow for which you want to identify delinquent content:



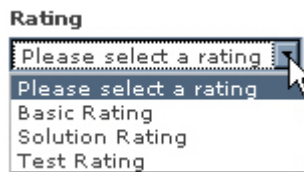
Identifying Content by Rating Level

You can schedule a batch job to identify content that has received ratings higher than or lower than a specified value using the Rating Analysis batch job. Information Manager will use the results of this job to send notifications to the content owners.

- 1 Define and schedule the job as described in “Specifying Batch Job Details and Schedules” on page 245, and select **Rating Analysis** as the Job Action:



- 2 Select the rating form (survey) that you want to identify low-rated content for. These rating forms are created in the Feedback section under Ratings, as described in “Creating Rating Forms” on page 170.



- 3 Specify threshold values, such as the number of responses prior to sending review notifications. For example:

Rating Analysis

Rating

Alerts

Number of responses prior to sending review notifications

Questions

1. Rate this item

1. 3
 Send notification if answer is greater than percent.

2. 5
 Send notification if answer is greater than percent.

3. 1
 Send notification if answer is greater than percent.

4. 2
 Send notification if answer is greater than percent.

5. 4
 Send notification if answer is greater than percent.

Deleting Unused Case Links

You can schedule a batch job to locate and delete any Case Link objects associated with obsolete content.

- Define and schedule the job as described in “Specifying Batch Job Details and Schedules” on page 245, and select **Rating Analysis** as the Job Action

Subscription Batch Jobs

There are three batch jobs related to subscriptions:

Send Subscription Emails	Use this job to send content-update notification emails to subscribers. The frequency setting can be overridden for individual users, as described in “Creating and Managing Subscriptions” on page 138.
Expiring Subscriptions Notification	Use this job to search for subscriptions that will expire within a certain number of days and send notification emails to subscribers. By default, the expiration period is 90 days. See “Subscription Expirations” on page 139 for information on how to change the expiration value.
Delete Expired	Use this job to search for expired subscriptions and delete them.

Managing Supported Locales

You can configure Information Manager to support any recognized locale. The Management Console provides a list of supported locales from which you can select to make active at the system or application repository level. You can also add locales to the list of supported locales at the system and application level as described in “Adding a Locale” on page 254.

When you activate a locale at the system level, it will be available for use within all application repositories. When you activate a locale at the application level, it will be available for use within that repository. See “Activating a Locale” on page 256 for more information.

Important! You cannot edit existing locales, you can only add new locales.

Adding a Locale

To add a locale to the list of supported locales that will be available to application repositories:

- 1 Log in to the Management Console as a SUPER user.
- 2 Navigate to the TOOLS tab.

The Management Console displays the Administration page for the current repository.

- 3 Navigate to the Locale Management | Configure menu.
- 4 Click **Add Locale**. Figure 1 shows the locale edit/add screen.



The Management Console displays the Locale Management page.

- 5 Specify the following information for the supported locale:

Parameter	Description
Locale Active?	Specify whether this locale will be available for application repositories.
Group Default	Specify that the default locale (such as 'en' for English) is to be used. This box should be checked for just one locale associated with a language where multiple locales are used.
Localized Description	Specify the descriptive name for the locale, for example, English Australian.
ISO Code	Specify the standard code for the locale. For example, <code>en_AU</code> identifies English Australian. The format is <code>language_LOCATION</code> using standardized two character codes for language and location.
Locale Code	Specify the locale ID decimal value; for example, 3081 identifies English Australian.
Date Format	Specify the internal data date format. The default is <code>%d/%m/%Y</code> .
Date Display Format	Specify the display date format. The default is <code>dd/mm/yy</code> .
Time Format	Specify the internal data time format. The default is <code>%I:%M:%p</code> .
Time Display Format	Specify the display time format. The default is <code>hh:mm</code> .
Character Encoding	Specify the data character encoding. The default is <code>UTF-8</code> .

- 6 From the drop down menu on the right, choose the locale that you want to add. The drop down selection populates the fields.
- 7 Make note of the ISO code and the numeric locale code. ¹
- 8 Adjust the default time and date formats as required.
- 9 Make sure that the **Locale Active** checkbox is selected. This makes the locale available to be assigned to a repository.
- 10 The **Group Default** checkbox is used to indicate if the current locale/language combination is the default in the event that there are multiple locales for a single language. For example, there might be multiple English locales configured: `en_US` (United States), `en_GB` (Great Britain).
If possible, use a localized string for the locale name.

Adding a New Locale to an Existing Repository

After the locale has been added to the system it can be added to a new or existing IM Repository. In order for a locale to be added to a Repository it **MUST** be active (see step 9 above).

- 1 Switch to the desired repository and click on Repository | Manage.
- 2 Select **Edit Repository** in the Properties box on the right.
- 3 Choose the **Default** and **Supported** locales that are to be added to the repository.

1. Make sure to use a 5 character ISO code in Information Manager, in the format `language_LOCATION` using standardized 2 character codes for language and location. Using only a 2 character locale code will cause problems. The drop down menu may populate the ISO Code as "sk". If this is the case, the full locale code must be manually edited to "sk_SK".

Repository Properties

Repository Name*
Dov

Reference Key DOV

Task ID Prefix

Filter tasks so users are only made aware of tasks matching their skill category
 Require at least one matching skill category from every top-level category branch

Default Locale*
English

Select Supported Locales

Portuguese Standard
 Slovak
 English
 Deutsch
 Français
 Español
 日本語
 Italiano
 中国
 中文
 Portuguese Brasileiro
 English United Kingdom
 Українська
 русский

Activating a Locale

To activate a Locale in the SYSTEM repository:

- 1 Select the **List** option under Locale Management on the Administration page:
The Management Console displays the Locale Management page.

Locale Management

Active Locales

Description	ISO Code	Character Encoding	Date Format	Time Format	Group Default
Deutsch	de_DE	UTF-8	%d/%m/%Y	%I:%M %p	Yes
English	en_US	UTF-8	%m/%d/%Y	%I:%M %p	Yes
Español	es_ES	UTF-8	%d/%m/%Y	%I:%M %p	Yes
Français	fr_FR	UTF-8	%d/%m/%Y	%I:%M %p	Yes
Italiano	it_IT	UTF-8	%d/%m/%Y	%I:%M %p	Yes

Inactive Locales

Description	ISO Code	Character Encoding	Date Format	Time Format
British English	en_GB	UTF-8	%d/%m/%Y	%I:%M %p
日本語	ja_JP	UTF-8	%Y/%m/%d	%I:%M %p
한국어	ko_KR	UTF-8	%d/%m/%Y	%I:%M %p
Portuguese Brasileiro	pt_BR	UTF-8	%d/%m/%Y	%I:%M %p
中国	zh_CN	UTF-8	%d/%m/%Y	%I:%M %p
中文	zh_TW	UTF-8	%d/%m/%Y	%I:%M %p

[Add locale](#)

The Locale Management page display is divided into two sections:

Active Locales

These supported locales are active in the current repository. You can select active locales for use within an application repository.

Inactive Locales

These supported locales are inactive in the current repository. Inactive locales are not available to application repositories.

2 Select a locale from the Inactive Locales list:

Inactive Locales				
Description	ISO Code	Character Encoding	Date Format	Time Format
British English	en_GB	UTF-8	%d/%m/%Y	%I:%M %p
日本語	ja_JP	UTF-8	%Y/%m/%d	%I:%M %p
한국어	ko_KR	UTF-8	%d/%m/%Y	%I:%M %p
Portuguese Brasileiro	pt_BR	UTF-8	%d/%m/%Y	%I:%M %p
中国	zh_CN	UTF-8	%d/%m/%Y	%I:%M %p
中文	zh_TW	UTF-8	%d/%m/%Y	%I:%M %p

[Add locale](#) >>

The Management Console displays details for the selected locale on the Locale Management page:

Locale Management

Locale Active? Group Default

Localized Description*

British English

ISO Code*

en_GB

Locale Code*

2057

Date Format*

%d/%m/%Y

Date Display Format*

dd/mm/yyyy

Time Format*

%I:%M %p

Time Display Format*

hh:mm

Character Encoding*

UTF-8

3 Select the **Locale Active?** checkbox to activate the locale

Note: Edit the locale information if necessary. See “Adding a Locale” on page 254 for more information on the locale definition fields.

Updating the IM Management Console HTML Resources

If the IM Management Console will be used to create or edit content for the new locale, it may be necessary/desirable to update the FCKEditor, pop up calendar/date picker, and spellchecker components. Prior to updating the IM Management Console resources, stop all IM applications. After updating the resources, rebuild the InfoManager WAR using the JDK jar command.

FCKEDITOR

The FCKEditor resources are stored in `$INQUIRA_ROOT/instances/<instance name>/appserverim/webapps/InfoManager/resources/components/fckeditor`. All localizations are stored in the `editor/lang` folder.

SPELLCHECKER DIALOG BOX

The spellchecker dialog box HTML is contained in the `$INQUIRA_ROOT/instances/<instance name>/appserverim/webapps/InfoManager/resources/components/speller` folder. Copy the 1033 (English) folder and rename it to the same numeric locale code that was created when adding the new locale. This folder can be translated to update the UI to match the language.

CALENDAR DATE PICKER

The javascript date picker component is stored in the `$INQUIRA_ROOT/instances/<instance name>/appserverim/webapps/InfoManager/resources/components/calendar` folder. Copy the `calendar_en.html` file and rename it with the language attribute of the new locale.

Updating \$IM_HOME Resources

The `$IM_HOME` location contains some components that should be updated to support the new locale. Make all of the changes on a single system and then copy the changes to the exact same location on each server/installation that has a separate `$IM_HOME` installation.

Email and Task Notification Templates

All email and task notification templates are localized in the file system. The default templates for all repositories are stored under `$IM_HOME/config/SYSTEM/taskconfig`. Copy each template for the `_en` locale and rename it with the 2 character lowercase language code.

If any of the email or task notification templates have been modified for a repository, the customized versions of the templates are stored under `$IM_HOME/config/<REPOSITORY>/taskconfig`. Copy the English version of each template and rename it with the 2 character lowercase language code.

Spellchecker Dictionary Files

Copy all of the `*.tlx` and `*.clx` files from the `$IM_HOME/ssce` folder into a new folder with the complete 5 character ISO code.

Default InfoCenter/New Tag lib Files

When a new web application is registered the files are copied from the `$IM_HOME/install/taglib` folder. Currently this is the location from where the default InfoCenter is created.

Copy and rename the `$IM_HOME/install/taglib /WEB-INF/ApplicationResources_en.properties` and `client.properties` files to the new language.

Copy the changed `resources/application/components/fckeditor`, `resources/application/components/speller`, `resources/application/components/calendar` folders from the IM mgmt console to `$IM_HOME/install/taglib/resources`

Updating Existing Deployed InfoCenter Applications

If there are existing InfoCenter based applications that have already been deployed they can be updated in the same manner as the “Default InfoCenter/New Tag lib Files” from the previous section.

IM Client Library/Web Services

There are no required changes to IMWS if manually adding a new supported locale.

Content Batch Monitor

Access Content Batch Monitor through the Tools menu, Tasks and Notifications menu item.

Tasks & Notifications

Task Type Content Batch Monitoring

Task Configuration Edit Fields

Enable this task type

Enable email notifications for this task

From Email Address*

administrator@mydomain.com

Subject*

IM Notification: <DOCID> - <LOCALE> was successfu

Plain Text Template*

Information Manager Content Batch Monitoring

This email is to notify you that the following document was successfully imported:

Channel: <CHANNEL>
 Doc ID: <DOCID>
 Locale: <LOCALE>
 Master Identifier: <MID>

HTML Template*

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
<style type="text/css">
<!--
    body,td,th {
        font-family: Arial, Helvetica, sans-serif;
        color: #333333;
        font-size: 10px;
    }
    h1 {
        color: #527FBA;
    }
    .header {
        color: #333333;
        font-family: Arial, Helvetica, sans-serif;
        font-size: 12px;
        font-weight: bold;
    }
-->
</style>
```

Override Default Values >>

Cancel >>

Global Find and Replace

Information Manager provides a global find and replace tool that finds all instances of a word or phrase throughout the Information Manager content.

To find and replace a word or phrase:

- 1 Log onto the SYSTEM repository, navigate to the Administration page, and click **Replace** under Global Find and Replace:

The Management Console displays the Global Find and Replace page:

- 2 Enter the following:

- | | |
|------------------------------|---|
| Find | Enter the word or phrase to search for occurrences. |
| Match Case | Select if you want the system to find occurrences that match only text that has the exact capitalization specified in Find . For example, if you enter "START" in Find and select Match Case , Information Manager finds only instances of "START" and does not return any occurrences of "Start" or "start". This is particularly useful when a common abbreviation also happens to be a word, as in the preceding example. |
| Find Whole Words Only | Select to find a specific word, such as "Win", and to ignore the word when it occurs as part of another word, such as "Windows". ¹ |

Locales	Select the locale to run this search.
Repository Channels	Select the repository channel(s) to run this search.
Replace	Enter the word or phrase to replace the Find entry.
Retain the Case of Replaced Text	Select to retain the original case of the word or phrase. For example, you enter “utility” in Find and “tool” in Replace and select Retain the Case of Replaced Text , if Information Manager finds an occurrence where “utility” is the first word of a sentence, it replaces it with “Tool” (unless the Match Case option is also selected, in which case Information Manager would not replace the word but would note it on the report as found).

1. **IMPORTANT!** Whole Word Matching may produce unexpected or inaccurate results. The Global Find/Replace Find Whole Words Only option may incorrectly replace sub-words with mixed formats/styles, except words with mixed case letters and single format/style. Before executing Replace actions, carefully review the expected results. See “Global Find and Replace Reports” on page 265 for more information.

3 Click **Find**.

The Management Console displays the Global Find and Replace Results page.

ORACLE Knowledge Help

Global Find & Replace Results

Documents Found (2) Filter All Documents

	Channel	ID	Master Identifier	Locale	Status	Version	Workflow
<input type="checkbox"/>	chan	CH1	Test	English	Published (1.0)	2.0	
<input type="checkbox"/>	chan	CH2	pending_test	English	Published (1.0)	1.0	

Select All Unselect All

Master Document Translated Document

Continue New Search Cancel

The Global Find and Replace Results page provides the following details for all found documents:

- Channel
- ID
- Master Identifier
- Locale
- Status
- Version
- Workflow

4 Select the individual documents to replace the text, or click **Select All**.

5 Click **Continue**.

The Management Console displays the Global Find and Replace Options page.

ORACLE Knowledge Help

Global Find & Replace Options

You have selected to replace **test** with **TEST** on **1** selected document(s) using the following options:
 Locale(s): English
 Channel(s): chan
 Match Case: No
 Find Whole Word Only: No
 Retain the Case of Replaced Text: No
****Note: Once the text has been replaced you cannot undo changes.****

Processing Options

- If document is published before replace, bypass workflow and publish
- Suppress subscription notifications
- Suppress translation requests, tasks and notifications
- Suppress publish notifications to user

Queue Change Request
 Back to Find Results
 Export document list to Excel
 Cancel

6 Select any of the following options:

If document is published before replace, bypass workflow and publish	Select to bypass any workflow steps for currently published documents and automatically publish a document. Currently unpublished documents are not published.
Suppress subscription notifications	Select to suppress notifications to users subscribed to a published document.
Suppress translation requests, tasks, and notifications	Select to suppress translation requests, tasks, and notifications for the selected document(s).
Suppress publish notifications to user	Select to suppress publish notifications to users if if document is published before replace, bypass workflow and publish is selected.
Queue Change Request	Click to save this request with the selected options and add it to the change request queue.
Back to Find Results	Click to return to the results page without saving options.
Export document list to Excel	Click to export the document list to a Microsoft Excel file.
Cancel	Click to cancel this request.

7 Click **Queue Change Request**.

The Management Console queues the request.

Users *with* permissions to execute GFR requests see the Global Find and Replace Request Queue page where the request can be executed. See “Global Find and Replace Reports” on page 265.

Users *without* permissions to execute GFR requests are returned to the Management Console.

For more information on Global Find and Replace permissions, see “Specifying Content Management Privileges” on page 120.

Global Find and Replace Reports

Through the Management Console, you can view Global Find and Replace reports which provide detailed information on Global Find and Replace operations.

To execute queued requests or to view Global Find and Replace reports:

- 1 Log onto the SYSTEM repository and click **Reports** under Global Find and Replace on the Administration page.

The Management Console displays the Global Find and Replace Request Queue page:

ORACLE Knowledge Help

Global Find and Replace Request Queue

Reports Found (4) Filter All Reports

Requested By	Start Date	Time To Complete	Find Text	Documents Selected	Status	Actions
Super Admin	01/05/2012 06:39 PM		test	1	Stopped	Start
Super Admin	01/05/2012 06:24 PM		test	1	Stopped	Start
Super Admin	01/05/2012 06:11 PM		test	1	Stopped	Start
Super Admin	01/05/2012 05:07 PM	00:00:02 hours	test	1	Completed	

Done

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The Global Find and Replace Request Queue page lists all of the Global Find and Replace operations performed by the system. You use this page to execute requests and to view details about individual requests.

- 2 Click **Start** to execute a request. The status updates and shows *Completed* when finished.
- or -
Click the **Start Date** link to view details about that operation.

The Management Console displays the Global Find and Replace Report Summary page:

ORACLE Knowledge

Global Find and Replace Report Summary

Report Summary

Requested By: Super Admin
 Start Date: 01/05/2012 06:39 PM
 Completion Date: 01/05/2012 06:42 PM
 Total time to complete: 00:00:00 hours
 Status: Completed

Number of documents selected: 1
 Number of documents to process: 0
 Number of documents updated only: 1
 Number of documents updated and published: 0
 Number of documents not updated: 0

Find Criteria

Find Text: test
 Locales
 English
 Repository Channels
 chan
 Match Case
 Find Whole Words Only

Replace Criteria

Replace Text: TEST
 Retain the Case of Replaced Text

Options Selected

If document is published before replace, bypass workflow and publish
 Suppress subscription notifications
 Suppress translation requests, tasks and notifications
 Suppress publish notifications to user

Export details to Excel

Done

In addition to viewing Global Find and Replace Report Summaries through the Management Console, you can click **Export details to Excel**. The resulting Excel spreadsheet can then be archived, distributed, or printed.

The Global Find and Replace operations also appear in the Content History of individual documents.

ORACLE Knowledge

Welcome Super Admin test (Help | Logout) Doc ID

Inbox **Content** Feedback Users Repository Tools

chan Add | Find | List

Content History

Content History Records Found(3) English

Date	User	Ver	Action	Comments	
01/05/2012 06:42 PM	Super Admin	3.0	Edited through GFR		View
01/05/2012 05:07 PM	Super Admin	2.0	Edited through GFR		View
01/05/2012 05:06 PM	Super Admin	1.0	Published		View

Delete Content History
Done

For additional information on viewing content history, see *Information Manager Content Authoring Guide*, Chapter 2: Working with Information Manager Content, Viewing Content History.

Setting the Password Policy

Information Manager uses a policy to govern how passwords work within the application. The password policy is defined by a set of configurations that specify:

- Password Lifecycle
 - whether passwords will expire
 - the length of time that passwords are valid
- Password Length
 - the minimum number of characters for acceptable passwords
- Password Strength
 - whether the application will test passwords for strength
 - whether valid passwords must contain upper case, lower case, decimal digits, or special characters

You can use Information Manager's default password policy as described in "The Default Password Policy" on page 267, or change the password policy to meet your organization's requirements. You configure password policy using the **Password Configuration** page, located under **Tools > System Configure > Password Configuration**.

Password Policy Scope

The Password Policy is in effect when you use the following types of authentication:

- the standard Information Manager authentication implementation
- a remote authentication that implements the IUpdateableAuthenticator as described in the *Oracle Knowledge iAuthenticator API Integration Guide*

The Password Policy is not in effect if you implement single sign-on (SSO) authentication, LDAP authentication, or when you integrate with an external security realm using iAuthenticator.

When the password policy is in effect, users must enter a new password when the policy requires it; users cannot reuse an expired password when they reset their passwords.

The Default Password Policy

Information Manager uses the following default values for Password Lifecycle, Password Length, and Password Strength:

Policy	Parameter	Default Value
Lifecycle	Expiration	Enabled
	Lifetime (Days)	90
Length	Minimum Length (Characters)	6
	Maximum Length (Characters)	20
Note: You cannot configure the Maximum Length parameter.		
Strength	Strength	Enabled
	Upper Case (characters)	Enabled
	Lower Case (characters)	Enabled
	Decimal (numeral)	Enabled
	Special Characters	Disabled

How Changing the Password Lifecycle Affects Existing Passwords

When you enable Password Lifecycle (Expiration) for an application in which it was previously disabled, (passwords never expired) and set the Lifetime value to some number of days, users' existing passwords will expire at next login, and the application will be prompt them to reset their password.

Information Manager does not issue any notices in advance of the expiration.

Important! When you disable the Password Lifecycle, existing passwords will never expire, regardless of the number of days they were in effect when you disabled the Lifecycle.

When you change the Password Length or Strength requirement, the change will affect all users created after the change, and will affect existing users only when they reset their passwords.

Configuring the Password Lifecycle

You can configure whether passwords expire, and the length of time for which they will be valid.

Important! The password policy always requires that a users' new password must be different from the preceding expired password.

To configure the Password Lifecycle:

Navigate to **Tools > System Configure**, then select **Password Configuration**

To set passwords so that they will expire:

- Select **Enable Password Lifecycle** under **Password Expiration Configuration**.

The Password Lifecycle will take effect immediately;

The **Password Configuration** page displays the **Password Lifetime** field.

- Specify the number of days for which passwords will be valid. Valid values range from 1 to 3650.

To set passwords so that they will never expire:

- De-select the **Enable Password Lifecycle** under **Password Expiration Configuration**

Note: A **Password Lifetime** value of -1 specifies that passwords will never expire; this value is automatically populated by the application when the Password Lifecycle is disabled. You cannot specify this value when the Password Lifecycle is enabled. See "Configuring Password Policy in Expert Mode" on page 269 for more information.

Configuring Password Length

You can configure the minimum number of characters for valid passwords. Valid values are from 1 to 20; the default value is 6.

Note: The maximum number of characters is set to 20; you cannot configure the maximum length.

To configure password length:

- Navigate to **Tools > System Configure**, then select **Password Configuration**
- Specify the number of characters in the **Password minimum length field**

Configuring Password Strength

You can configure whether the application will test passwords for strength, and specify that valid passwords must contain one or more of the following characters:

- Upper case
- Lower case
- Decimal digit (0-9)
- Special Character

If you enable password strength, you must also select at least one of the character requirements. The application will then accept passwords that contain at least one of each of the specified character requirements.

To enable password strength:

- Navigate to **Tools > System Configure**, then select **Password Configuration**
- Select **Enable Password Strength**

To specify character requirements:

- Select one or more character types

Note: If you select **Special Character**, you must also specify a list of valid special characters in the input field, for example:

```
!@#%&^*()_+
```

Configuring Password Policy in Expert Mode

You can also configure the password policy using Expert Mode:

- Select **Go to Expert Mode** on the **System** page under **Tools**
- Use the following parameters to configure the password policy:

Parameter	Description	Valid Values
ALLOW_PASSWORD_EDITING	Specifies that users are able to edit and save passwords. You must have this option enabled (true) to set the password policy; if this option is disabled (false), users will not be able to reset their passwords when they expire. This option is enabled by default.	<ul style="list-style-type: none"> • true (enables users to edit and save passwords) • false (prevents users from editing and saving passwords) The default value is true.
OK_PASSWORD_EXPIRY	Specifies the number of days for which passwords will be valid.	<ul style="list-style-type: none"> • -1 (passwords will never expire) • 1 to 3650 (specifies the number of days that passwords are valid) There is no default value.

Parameter	Description	Valid Values
OK_PASSWORD_MIN_LENGTH	Specifies the minimum number of characters for a valid password.	<ul style="list-style-type: none">• 1-20 The default value is 6.
OK_PASSWORD_STRENGTH	Specifies that the application will check for the required characters. You specify whether to require: <ul style="list-style-type: none">• upper case• lower case• decimal digits• special characters as values of 0 (not required) or 1 (required) in the order listed.	<ul style="list-style-type: none">• 0 (characters are not required)• 1 (required)• string of any special characters There are no default values.

Importing and Exporting Data

You can import data into and export data from Information Manager repositories for a variety of purposes, including:

- importing and exporting data for translation, as described in “Importing and Exporting Repository Data for Translation” on page 271
- importing various types of data from an external source (such as content records, forms, and user profiles) as described in “Importing Data into an Application Repository” on page 285

You can also export and import an entire repository, while maintaining its data relationships, as described in “Backing Up and Restoring Information Manager Data” on page 296.

Importing and Exporting Repository Data for Translation

You can import and export repository data to be translated for use in applications that support multiple or non-English locales. You can import and export data in order to translate:

- the resource files that contain repository elements, such as channel, category, and user group names
- application content within a specified channel, such as Solutions or News

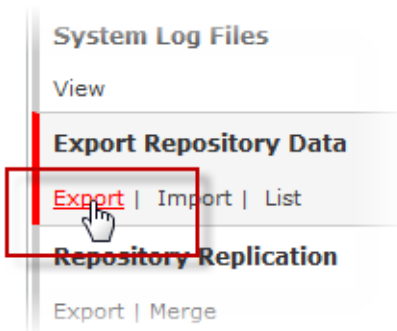
You can also define groups of content records to be exported for translation in a single batch, as described in “Automatically Exporting and Importing Content for Translation” on page 278

Exporting Repository Element Resources for Translation

You can export the resource files that contain the channels, categories, user groups, and other repository elements for translation by an external service using the Resource Translation option of the Administration page.

To export Management Console resource files for translation:

- 1 Select **Tools** from the navigation area, then select **Export** under Export Repository Data:



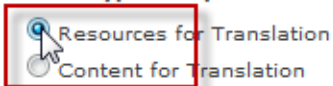
The Management Console displays the Repository Export page.

- 2 Select **Resources for Translation** from the Export Options and select **Next**:

Repository Export

Export Options

Select Type of Export



The Management Console displays the Oracle Knowledge Resources Export page:

Oracle Knowledge Resources Export

Select Parameters

Select Locale to Export*

Target Locale for Localization*

- 3 Specify the following export parameters:

Select Locale to Export	Select the locale of the resources that you want to translate.
Target Locale for Localization	Select the locale that you want to translate to. Information Manager uses this information to set appropriate parameters and directory structures when you import the translated resources.

4 Select **Create Export File**

Information Manager creates the export data archive named:

```
resources_<repository_reference_key><export_locale>_to_<target_locale>.zip
```

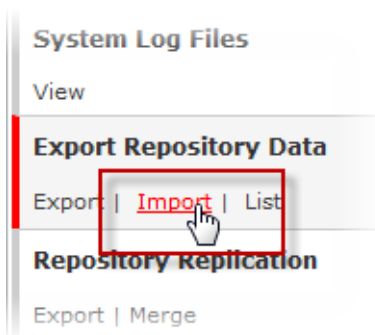
The Management Console displays the Export Summary page, which displays information about the exported repository objects.

Importing Translated Repository Element Resources

You import translated resource files using the Repository Data Import function.

To import translated resource files:

- 1 Select **Tools** from the navigation area, then select **Import** under Export Repository Data:

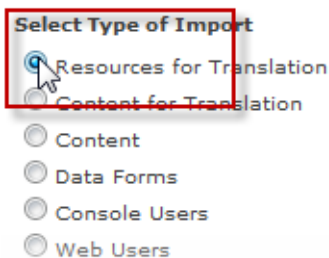


The Management Console displays the Repository Import page.

- 2 Select **Resources for Translation** from the Import Options and select **Next**:

Repository Import

Import Options



The Management Console displays the Oracle Knowledge Resources Import page:

Oracle Knowledge Resources Import

Select Parameters

Select Zip file*

Overwrite existing resources

- 3 Select the archive that contains the translated versions of the previously exported resources.
- 4 Select whether to overwrite any previously translated files.
- 5 Select **Next**.

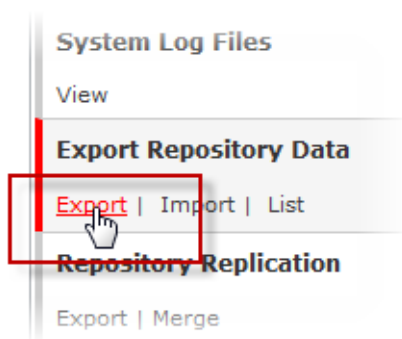
The Management Console displays the Import Summary page, which displays information about the imported repository objects.

Exporting Content for Translation

You can export content from a specified content channel for translation by an external service using the Content Translation option.

To export content for translation:

- 1 Select **Tools** from the navigation area, then select **Export** under Export Repository Data:



The Management Console displays the Repository Export page.

- 2 Select **Content for Translation** from the Export Options and select **Next**:

Repository Export

Export Options

Select Type of Export

Resources for Translation

Content for Translation

The Management Console displays the Content Translation Export page:

Content Translation Export

Select Parameters

Select Channel*

-- Select One --

Select Locale to Export*

-- Select One --

Target Locale for Localization*

-- Select One --

Requested Content Only

All Master Documents

All Records

3 Specify the following export parameters:

Select Channel	Select the content channel to translate.
Select Locale to Export	Select the locale within the channel to translate.
Target Locale for Localization	Select the locale that you want to translate to. Information Manager uses this information to set appropriate parameters and directory structure when you import the translated content.
Requested Content Only	Specify whether to export only content records that have open translation requests.
All Master Documents	Specify whether all master content records (those which were created in the selected export locale) will be exported.
All Records	Specify whether all records (regardless of the locale in which they were created) will be exported.

4 Select **Create Export File**:

Information Manager creates the export data archive named:

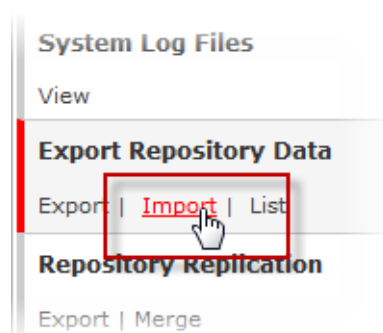
```
<repository_reference_key>_channel_<export_locale>_to_<target_locale>.zip
```

The Management Console displays the Export Summary page, which displays information about the exported repository objects.

Importing Repository Channel Data from Translation

You can import previously exported and translated content into an application repository. To import content records:

- 1 Select **Tools** from the navigation area, then select **Import** under Export Repository Data:



The Management Console displays the Repository Import page.

- 2 Select **Content for Translation** from the Import Options and select **Next**:

Repository Import

Import Options

Select Type of Import

- Resources for Translation
- Content for Translation
- Content
- Data Forms
- Console Users
- Web Users

The Management Console displays the Content Translation Import page:

Content Translation Import

Select Parameters

Select Zip file*

- Overwrite if translation exists for requested version
- Overwrite if translation exists for newer version
- Put record into workflow (if one exists)
- Approve records but do not publish
- Approve and publish records

3 Specify the following import parameters:

Select Zip file	Locate and select the translated content archive to import.
Overwrite if translation exists for requested version	Specify whether to overwrite or preserve existing translated content.
Overwrite if translation exists for newer version	Specify whether to overwrite or preserve existing translated content that has been updated since you exported the content you want to import.
Put record into workflow (if one exists)	Specify to insert translated content into existing workflows as if they had been manually translated.
Approve records but do not publish	Specify to bypass any workflow steps, but do not publish immediately upon import.
Approve and publish records	Specify to bypass any workflow steps, and publish immediately upon import.

4 Select **Next**.

The Management Console displays the Content Translation Import page:

Content Translation Import

Select Parameters

Select translated content owner*

- Current owner of the master record.
- Let me choose an owner.
- Select a user --

5 Specify the owner of the translated content.

6 Select **Next**.

The Management Console imports the specified file and displays the Import Process Complete page.

Automatically Exporting and Importing Content for Translation

You can automate the process of exporting and importing groups of content records for translation by defining and scheduling a Content Batch Monitor job. The Content Batch Monitor job will automatically:

- export the content that you want to translate to a specified directory
- import the translated content from a specified directory

You can create multiple Content Batch Monitor jobs, and multiple groups of content (batches) for processing by a single job. You can schedule the export and import process to occur at any time and frequency.

Note: The Content Batch Monitor job requires that you create additional directories that are accessible to Information Manager, as described in “Creating the Batch Content Export and Import Directories” on page 278.

You automate the batch content export and import processes by:

- creating the required directories to contain the content and related data at various stages of the process as described in “Creating the Batch Content Export and Import Directories” on page 278
- defining and scheduling the Batch Content Monitor job as described in “Defining and Scheduling the Content Batch Monitor Job” on page 279

Creating the Batch Content Export and Import Directories

You must create a set of directories that the Content Batch Monitor job will use to store translation content and related data. You can create the directories:

- on the local file system, or
- on a mapped directory on a remote file system

You must create the following directories:

Directory	Description
Import Directory to Monitor	Contains the translated files. These files will be imported the next time the Content Batch Monitor job runs.
Export Directory	Contains the content to be translated.
Temporary Directory	Contains temporary files created by the Content Batch Monitor job.
Completed Batches Directory	Contains translated files that have already been imported. When the Content Batch Monitor job runs, those files that are successfully imported into Information Manager are moved from the Import directory to this directory.
Error Directory	Contains errors generated by the Content Batch Monitor job.

Defining and Scheduling the Content Batch Monitor Job

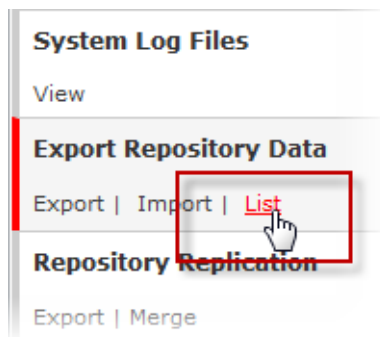
You define and schedule a Content Batch Monitor job by:

- creating the job, as described in “Creating the Content Batch Monitor Job” on page 279
- specifying the directories that the job will use, as described in “Specifying the Export and Import Directories for the Content Batch Monitor Job” on page 280
- specifying how often the job will repeat, as described in “Scheduling the Content Batch Monitor Job” on page 281

Creating the Content Batch Monitor Job

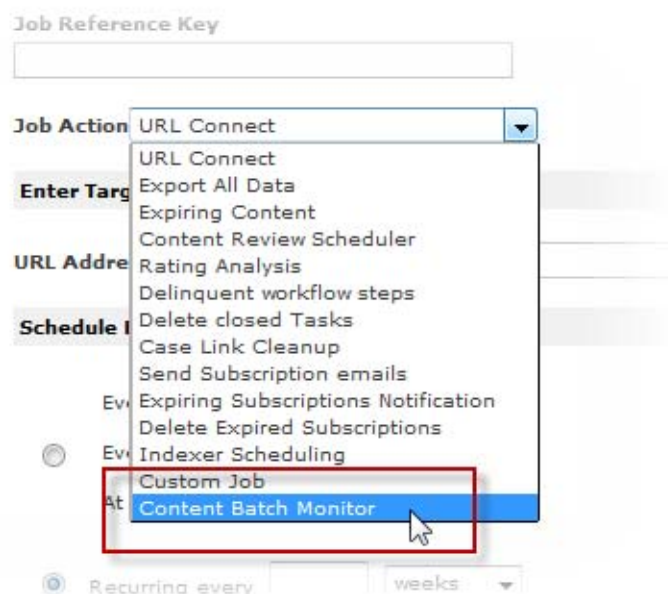
To create the Content Batch Monitor Job:

- Navigate to the Tools tab and select List under Export Repository Data:



The Management Console displays the Add Batch Job page, including an advisory to create the Content Batch Monitor job.

- Select Content Batch Monitor from the Job Action dropdown menu:



The Management Console displays the fields to configure the Content Batch Monitor job.

- Specify a name for the batch job

You can now specify the export and import directories for the job, as described in “Specifying the Export and Import Directories for the Content Batch Monitor Job” on page 280

Specifying the Export and Import Directories for the Content Batch Monitor Job

You specify the export and import directories for the Content Monitor Batch Job using the absolute pathnames of the directories you defined in “Creating the Batch Content Export and Import Directories” on page 278

Important! You must specify absolute pathnames for all directories.

Directories setting**Import Directory to Monitor*****Export Directory*****Temporary Directory*****Completed Batches Directory*****Error Directory***

You can now schedule how often the job will run, as described in “Scheduling the Content Batch Monitor Job” on page 281.

Scheduling the Content Batch Monitor Job

You schedule the Content Batch Monitor job by specifying:

- how often the job will run
- the time of day that it will run
- the number of times that it will run

using the options in the Schedule Details section of the Add Batch Job page:

Schedule Details

Every:

Every:

At this time:

Recurring every

One Time Only

Start Time **End Time**

Date **Time** **Date** **Time**

Current Time **(Leave end date blank to run indefinitely)**

- Specify the frequency of the Content Batch Monitor job

You can now specify history retention and save the job definition as described in “Specifying Content Batch Monitor Job History Retention” on page 282.

Specifying Content Batch Monitor Job History Retention

You can specify the number of days that Information Manager will retain Content Batch Monitor job history up to a maximum value of 90 days. The default is 7 days.

- Specify the history retention
- Select Save New Batch Job

You can now specify the content that this job will export and import as described in “Specifying the Content to Export and Import” on page 282.

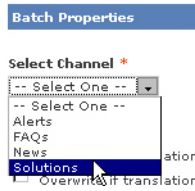
Specifying the Content to Export and Import

You define the logical groups of content (batches) that the Content Batch Monitor job will export and import using the Add Batch options:

- Select Add Batch from the Content Batch List page.

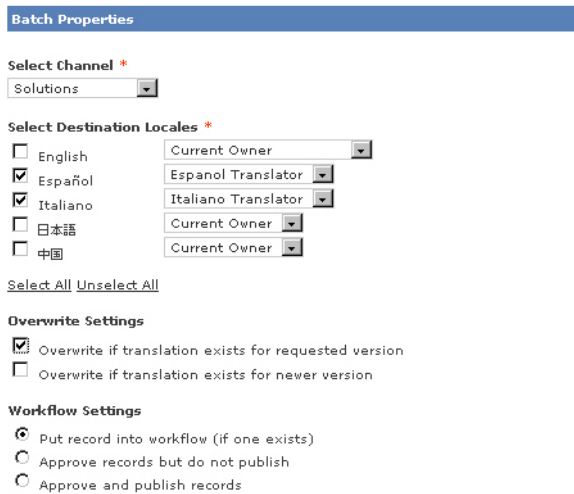


- In the Add Batch page, name the batch and select the channel containing the documents to be translated:



Specifying the Translation Languages

- Specify which language(s) the content is to be translated to; which user is to own the translation task for the content, and how Information Manager is to manage the translated content imported from the import directory:



Parameter	Description
Overwrite if translation exists for requested version	Specifies whether to overwrite content records that have been manually translated since the content was exported for translation. If you have this unchecked, the document will not be imported and Information Manager logs an error.
Overwrite if translation exists for newer version	Specifies whether to overwrite content records that have been manually translated for documents that have been updated since the content was exported for translation. If you have this unchecked, the document will not be imported and Information Manager logs an error.
Put record into workflow (if one exists)	Specifies whether to place the imported content records into a workflow.
Approve records but do not publish	Specifies whether to automatically approve the current workflow step for the imported content record.
Approve and publish records	Specifies whether to automatically publish the imported content record.

- Select Add Documents for the created content batch in the Content Batch List:

Content Batch List

Batches (1)

	Batch Name	Description	Channel	Destination Locales	Status	Batch Size	Progress	Date Modified	Actions
1.	<input checked="" type="checkbox"/> Translation Batch 1		Solutions	Italiano, Español	Pending	0	0%	02/25/2008 12:54 PM	View Documents >> Add Documents >>

[Select All](#) [Unselect All](#)

[Add Batch](#) >>
[Delete Selected Batches](#) >>
[Done](#) >>

The Management Console displays the Find page, as described in “Searching for Content” in the *Information Manager Content Authoring Guide*.

- Select the search criteria to locate the documents to be translated.
- Select the documents to be translated from the returned list.

Documents

Solutions Documents Found (11)

Descending Sort By Date Modified

	ID	Master Identifier	Status	Ver	Workflow	Modified By	Modified Date
<input type="checkbox"/>	S103	iPhones and 3G	Published (1.0)	1.1	Draft	Joe Admin	12/13/2007 10:16 AM
<input type="checkbox"/>	S99	How do I transfer photos from iPhone to PC?	Published (2.0)	2.0		Roger Neel	12/12/2007 12:56 PM
<input checked="" type="checkbox"/>	S95	here is the title	Published (2.0)	0.3	Draft	Joe Admin	11/06/2007 03:31 PM
<input type="checkbox"/>	S93	AH Siebel 7.5 Application Won't Open	Published (1.0)	1.0		Joe Admin	10/17/2007 09:10 PM
<input type="checkbox"/>	S92	Bayer Connect Suite Fiberlink Not Refreshing Dialup Phone Numbers After Country	Published (1.0)	1.0		Joe Admin	10/17/2007 09:08 PM
<input type="checkbox"/>	S78	Customer Has a Large Bill	Expired (2.0)	2.0		Joe Admin	09/27/2007 08:10 PM
<input checked="" type="checkbox"/>	S91	Connecting your iPhone to a GPS Receiver	Published (2.0)	2.0		Ed Editor	09/21/2007 04:30 AM
<input checked="" type="checkbox"/>	S86	GSM roaming across Russia	Published (2.0)	2.1	Draft	Super Admin	09/20/2007 01:04 PM
<input checked="" type="checkbox"/>	S90	Symbian applications	Published (1.0)	1.0		Joe Admin	09/19/2007 06:38 PM
<input type="checkbox"/>	S82	Printer color different from display	Redirected	1.0		Ed Editor	09/19/2007 03:08 PM
<input type="checkbox"/>	S88	Using a bluetooth GPS receiver	Published (1.0)	1.0		Super Admin	09/19/2007 02:02 PM

[Select All](#) [Unselect All](#)

Master Document
 Translated Document
 Locked by you
 Locked by someone else

[New Search](#) >>
[Add to Batch](#) >>
[Done](#) >>

- Select Add to Batch.

The content batch displays the number of documents to be translated (in this case, we picked four content records to be translated into two languages -- eight in total) and the job status (either pending, exported, or cancelled).

You can create additional translation batches by selecting Add Batch in the Content Batch List and repeating the steps described in this section:

Staging the Content to be Translated

- When you are ready to export the documents for translation, select Export:

Content Batch List

Batches (1)

	Batch Name	Description	Channel	Destination Locales	Status	Batch Size	Progress	Date Modified	Actions
1.	<input type="checkbox"/> Translation Batch 1		Solutions	Italiano, Español	Pending	8	0%	02/25/2008 12:54 PM	View Documents >> Add Documents >> Export >>

[Select All](#) [Unselect All](#)

[Add Batch](#) >>
[Delete Selected Batches](#) >>
[Done](#) >>

- Select Done in the Export Summary page:

Export Summary



Summary of items exported

8 record(s) were exported successfully.

After the files have been scheduled for export, you can either view the list of to-be-exported documents or cancel the export.

Content Batch List

Batches (1)

	Batch Name	Description	Channel	Destination Locales	Status	Batch Size	Progress	Date Modified	Actions
1.	<input type="checkbox"/> Translation Batch 1		Solutions	Italiano, Español	Exported	8	0%	02/25/2008 03:20 PM	View Documents  Cancel 

[Select All](#) [Unselect All](#)

[Add Batch](#) 
[Delete Selected Batches](#) 
[Done](#) 

Viewing Import Errors

Information Manager logs details about any errors that the Content Batch Monitor job encountered while importing content. To view the log information:

- 1 Select **System Logs Files** from **Tools**
- 2 Select **View**.
- 3 In View, navigate to <Repository Name> > import > CONTENT BATCH MONITOR > log file.

Importing Data into an Application Repository

You can import externally created content, data forms, and user information created in another system for use in Information Manager using the Repository Import options.

Important! You cannot import data into attributes within a node.

You import data by:

- Creating an input file in a specified format that is compatible with Information Manager, as described in “Creating a Data Import File” on page 285.
- Using the Management Console data import process to import:
 - Content records as described in “Importing Content Data” on page 287.
 - Form data as described in “Importing Forms Data” on page 290.
 - Console and Web User profile information as described in “Importing External User Data into a Repository” on page 292.

Creating a Data Import File

You import content, form, and user data by entering the data in an import file. The import file is a delimited text file that must conform to a specific format. The import file must contain the following sections:

- the header record section, as described in “Creating the Data Import Header Record Section” on page 286

- the data records, as described in “Content Data Import System Attributes” on page 286

The header record section defines the structure of the imported data; the data records contain the actual data to import. The data records must conform to the structure of the header records section. Information Manager maps the data records to the attributes listed in the header record section.

Creating the Data Import Header Record Section

You create the header record section to define the structure of the import data. You define the structure as a simple list of the data attributes.

There are two types of header record attributes:

- schema attributes
- system attributes

Schema attributes specify the location in the content channel schema that the data should be imported into.

System attributes specify which system field data should be imported into, such as a content record's "publish date". System attributes are pre-defined; see “Content Data Import System Attributes” on page 286 for a description of the available system attributes. You specify system attributes in the form:

```
$<attribute_name>$=<attribute_value>
```

where:

\$<attribute_name>\$ is the name of the pre-defined system attribute for which you have included corresponding data in the data record section of the import file

<attribute_value> is the value of the attribute

You can specify any character as a delimiter to separate the attributes from one another. The Management Console import page provides a drop-down menu of the most popular delimiters, as well as the option to specify an alternative character as the delimiter.

The end of a record is indicated by a carriage return. If a record ends before reaching the total number of attributes as indicated by the header record, the Information Manager import facility assumes that the remaining attributes are empty.

Content Data Import System Attributes

Information Manager defines the following system attributes to use when you import content data:

System Attribute	Description
\$ALIASID\$	The ID of the content record to which users accessing this content record are redirected. See Redirecting Content Records in the Information Manager Content Authoring Guide for more information.)
\$DATEADDED\$	The date that the content record was added. The default is the date and time of the import process.
\$DATEMODIFIED\$	The date that the record was last modified.
\$DISPLAYSTARTDATE\$	The first day that the record is eligible for display in the web application. This value must conform to the date and time format that you specify on the Repository Import page during the import process.
\$DISPLAYENDDATE\$	The last day that the record is eligible for display in the web application.

\$DOCUMENTID\$	The Document ID. If you do not specify a Document ID, Information Manager automatically creates the ID based on the channel properties.
\$CATEGORY\$	<p>The reference key of the content category.</p> <p>Information Manager uses an internal process to automatically format the category fields in the data. This procedure will automatically convert:</p> <ul style="list-style-type: none"> any non-alphanumeric characters, including spaces, to underscore characters "_" all alphabetical characters to upper case <p>You can use multiple category system attributes to associate content with more than one category.</p> <p>Information Manager ignores blank category system attribute fields, and does not require records within the import file to have the same number of categories.</p> <p>For example, the following header and records, consisting of four category system attributes would be valid:</p> <pre>\$CATEGORY\$ \$CATEGORY\$ \$CATEGORY\$ \$CATEGORY\$... DOG ... CAT DOG ... BIRD CAT ... PIG ...</pre>
\$CREATEDBY\$	The name of the original content author. This value can be any text and does not need to match a defined Information Manager user.
\$EVENTSTARTDATE\$	The event start date.
\$EVENTENDDATE\$	The event end date.
\$EVENTSTARTTIME\$	The event start time.
\$EVENTENDTIME\$	The event end time.
\$EVENTSTARTDATETIME\$	The event start date and time.
\$EVENTENDDATETIME\$	The event end date and time.
"//META/<attribute ref key>"	This schema manages data that does not affect the workflow or version incrementing processes.
\$OWNER\$	The Information Manager user ID of the Document Owner. You specify the default value on the Repository Import page.

Importing Content Data

You can import content records into an application repository using a properly formatted input file, as described in "Creating a Data Import File" on page 285, and the Content import option in the Management Console. To import content records:

- 1 Select **Tools** from the navigation area
- 2 Select **Import** under Repository Data on the Administration page
- 3 Select **Content** from the Import Options list

The Management Console displays the **Content Import** page:

Content Import

Select Parameters

Select a content channel*

-- Select One --

- Append imported records to existing content list
 Delete existing content list before importing records
 Publish imported records

Select Text File*

Select Delimiter*

-- Select One -- If "Other" is selected, please enter a delimiter.

Select text qualifier

None

Select date mask

-- Select One --

Select time mask

-- Select One --

* Required field

4 Specify the following import parameters:

Parameter	Description
Select a content channel	Select the content channel to import into.
Append imported records to existing content list	Select this option to add content records to the channel and preserve the existing content records.
Delete existing content list before importing records	Select this option to replace the existing content records with the imported content records.
Publish imported records	Specify that all imported content will automatically be published (available to the end-user web application).
Select Text File	Select the prepared import file.

Select Delimiter	Specify the delimiter that you used in the import file. Popular options include: <ul style="list-style-type: none"> • Tab • Space • Semicolon • Comma • Pipe You can also use the Other option to specify an alternate delimiter.
Select text qualifier	Select the qualifier, if applicable, used in the import file to enclose text that should be interpreted literally by the import process. <ul style="list-style-type: none"> • None • ' • "
Select date mask	Select the date format used in the import file.
Select time mask	Select the time format used in the import file.

5 Select Next

The Management Console prompts you to specify publishing, content owner, and locale information:

Content Import

Publishing Options

Display On

Date	Time	Remove After	Date	Time
03/19/2013	08:07 PM			AM

Select Default Owner

Select Locale

6 Specify the following parameters:

Parameter	Description
Display On	Specify a publish date and time for the imported records. The default is the current date and time.
Remove After	Specify an optional date and time to remove the imported records from display in the end user web application, if applicable.
Select Default Owner	Specify a content owner for content status notification purposes.
Select Locale	Specify the Locale for the content.

Content Import

Repository View Selection *

DEMO

Category Selection

Top Level

Available Categories	Add
Accessories	Add
Applications	Add
Computing Hardware	Add
Equipment	Add
IPod/iTunes	Add

Selected Categories

-- No records selected at this time --

User Group Selection *

Internal Only
 Public

Publishing Options

Display On		Remove After	
Date	Time	Date	Time
07/06/2007	09:11 AM		AM

Select Default Owner

Select Locale

7 Select **Next**.

The Management Console imports the specified file and displays the Import Process Complete page.

Importing Forms Data

You can import subscriber or contact data into existing forms definitions using a properly formatted input file, as described in “Creating a Data Import File” on page 285, and the Data Forms import option.

To import form response data, specify the form schema attribute reference key. To import data associated with a multi-select list, specify additional columns with the same schema attribute header. The imported data must match the code value (static or dynamic) of the selected form.

To import forms data:

- 1 Select **Tools** from the navigation area
- 2 Select **Import** under Repository Data Forms

The Management Console displays the Repository Data Import page.

- 3 Select the Data Forms option and select **Next**.

The Management Console displays the Data Form Import page.

	Form Name	
1.	Contact Us	Import >>
2.	Information Manager News Subscribers	Import >>
3.	Tech Bulletin Alert Subscribers	Import >>

- 4 Select **Import** for the form to import.

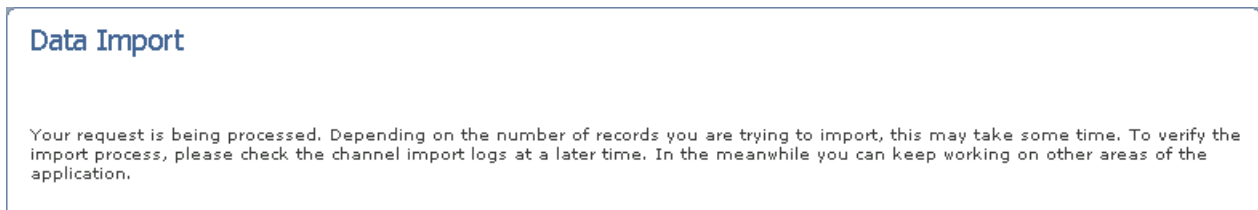
The Management Console displays the Data Form Import page:

- 5 Specify the following data form import parameters:

Parameter	Description
Append responses to existing list	Select this option to add subscriber or contact records to an application repository.
Delete existing responses before importing records	Select this option to replace the existing subscriber records with the imported content records.
Perform validation on data	Specify to validate the imported information against existing subscription information.
Notification email after completion	Specify to send email to this address when the import process completes.
Select Text File	Select the target import file.
Select Delimiter	Select the delimiter used in the import file. Popular options include: <ul style="list-style-type: none"> • Tab • Space • Semicolon • Comma • Pipe You can also use the Other option to specify an alternate delimiter.
Select text qualifier	Select the qualifier, if applicable, used in the import file to enclose text that should be interpreted literally by the import process. <ul style="list-style-type: none"> • None • ' • "
Assign View	Specify to assign the imported records to a specific repository view if applicable.

6 Select **Import responses**.

The Management Console displays the Data Import Progress page:

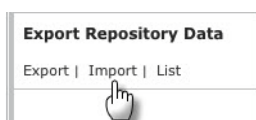


Importing External User Data into a Repository

You can import user data from an external source to define console or web users in your application.

To import user data from a prepared import file:

- 1 Select **Tools** from the navigation area
- 2 Select **Import** under Export Repository Data on the Administration page



The Management Console displays the Repository Import page.

Repository Import

Import Options

Select Type of Import

- Resources for Translation
- Content for Translation
- Content
- Data Forms
- Console Users
- Web Users

3 Select either the **Console Users** or the **Web Users** option.

4 Select **Next**.

The Management Console displays either the Console User Import page or the Web User Import page, depending on the choice made in step 3.

Specifying Web User Import Information

The Web User Import page prompts you for the following information:

Web User Import

User Import Parameters

Overwrite existing users if found in import file

Enter the URL to the landing page where users can reset their passwords *

Notification email after completion:

Select Text File*

Select Delimiter*

-- Select One -- If "Other" is selected, please enter a delimiter.

Select text qualifier

None

User Properties

Security Roles

Default User Role

Default View

-- Select --

Reporting Group

-- Select --

Overwrite existing users if found in import file	Specify whether to overwrite existing user data with imported user data.
Enter the URL to the landing page where users can reset their passwords	Provide the password reset URL that users can use when they log into Information Manager. Note: <td -?> The Information Manager password policy as described in "Password Policy Scope" on page 267 determines the character length and strength requirements for valid passwords. The default password policy is described in "The Default Password Policy" on page 267.
Notification email after completion	Specify an optional email address that Information Manager will notify when the import process completes.
Select Text File	Select the target import file.

Select Delimiter	Specify the delimiter that you used to separate the attributes in the import file. Popular options include: <ul style="list-style-type: none"> • Tab • Space • Semicolon • Comma • Pipe You can also use the Other option if your input file uses a different delimiter.
Select text qualifier	Select the qualifier, if applicable, used in the import file to enclose text that should be interpreted literally by the import process. <ul style="list-style-type: none"> • None • ' • "
Security Roles	Select the security roles to assign to the imported users.
Default View	Specify a default view for the imported users.
Reporting Group	Select an optional Reporting Group to assign to the imported users. Important: This value will override any values that you specified in the input file using the \$REPORTINGGROUP\$ attribute.

Specifying Console User Import Information

You specify the same information for Console Users as for Web Users, as described in “Specifying Web User Import Information” on page 293. In addition, the Console User Import page prompts you for the following information:

Views	Select the views available to the imported users.
Select Content Locales	Select the locales available to the imported users.
Categories	Select the categories available to the imported users. Use the Add button to move categories to include over to the Selected Categories column.

Important! Oracle Knowledge does not support overwriting of **view** and **role** from a csv file to overwrite the original **view** and **role** of users (even if **Overwrite existing users if found in import file** is selected within Management Console import). Currently you must select **view** and **role** manually in the import user page if you wish to do this.

5 Select Import Users.

The Management Console displays the Data Import Progress page.

The system validates that imported console users have views and locales associated with them, whether they be from the import file or the UI. For both web and console users, the system validates whether or not an imported user email already exists within the repository. If any of these validations fail the user is not imported. Review the import log generated when the whole import process completes to see any users failed to pass a validation check.

Backing Up and Restoring Information Manager Data

Use the Repository Replication functions to back up and restore data from an entire repository while maintaining its data relationships from the same or another instance of Information Manager.

Note: Use the Repository Data functions to export and import parts of a repository, such as a content channel or resource files for translation. Using the Repository Data functions does not preserve data relationships and should not be used for backups.

To export data, use the Repository Replication Export function as described in “Exporting Data for Backup” on page 296. To preprocess and merge data, use the Repository Replication Merge function as described in “Restoring Repository Data” on page 298.

Exporting Data for Backup

Use the Repository Replication Export function to back up an entire repository while maintaining its data relationships.

Note: The Repository Replication Export function produces pseudo XML (which may include illegal XML) that is turned into SQL statements when it is imported into a new repository, and should not be used for translation or other purposes. Use the Repository Data Export function to export repository content for a channel for translation, or to export only the content resources for translation.

To back up a repository:

- 1 Select **Tools** from the navigation area
- 2 Select **Export** under Repository Replication on the Administration page:
The Management Console displays the Repository Backup page:

Repository Backup

Backup Options

Backup File Destination

Keep on Information Server

Download to your Computer

Include Content Records

Notification

Enable Email Notification After Completion

Email Address

[Create Backup](#)

- 3 Select the destination for the data archive. You can choose to leave the backup archive on the Information Manager server, or save it to your local hard drive. If you choose to leave the backup archive on the Information Manager server the file is will be saved to:

`$IM_HOME/backups/REPOSITORY/`

where `REPOSITORY` is the reference key assigned to that repository.

- 4 Check **Enable Email Notification After Completion** and supply an email address if you want to be notified when the backup is complete.
- 5 Select **Create Backup** start the backup.

The Export Summary page displays a summary of the items that were exported.

Restoring Repository Data

Use the Repository Replication Merge function to merge a repository that has been previously exported using the Repository Replication Export function. Prior to merging, the repository must first be pre-processed using the **Select Repository Data File on Server** option. The pre-processing compares the repository with the current repository and creates a set of Deltas (content in the pre-processed repository not found in the current repository). Once the repository has been pre-processed, it appears in the **Select a Pre-Processed Repository Merge** dropdown list from where it can be merged.

Important! Use the Repository Replication Merge function only with repositories backed up using the Repository Replication Export function. To import other kinds of content use the Repository Data Import function.

To import an exported repository:

- 1 Select **Tools** from the navigation area
 - 2 Select **Merge** under Repository Replication on the Administration page
- The Management Console displays the Repository Restore page:

To pre-process a repository:

- 1 Select the repository to pre-process using one of the two options:

Option	Description
Select Repository Data File on Server	Select a repository archive from the Information Manager server to pre-process. The repository must have been exported and stored on the Information manager server in order for it to appear in this list.
Upload a Repository Data File from your computer	Select a previously exported repository archive from your computer to pre-process. Use the Browse button to locate and specify the repository file.

- 2 Check **Enable Email Notification After Completion** and supply an email address if you want to be notified when the pre-processing is complete.
- 3 Select **Next** to start the pre-processing.

Note: The pre-processing may take a long time to complete depending on the size of the repository. When the pre-processing is complete the repository will appear in the Select a Pre-Processed Repository Merge dropdown list.

To merge a pre-processed repository:

- 1 Pre-process the repository to merge as shown above.
- 2 Chose the repository to merge from the **Select a Pre-Processed Repository Merge** dropdown list.
- 3 Select **Next**.
The Repository Options page is displayed, showing the New, Modified, and Deleted data that is available to merge.
- 4 Select the data to merge.
- 5 Select **Done** to complete the merge.

Managing Applications in Multiple Languages

Information Manager supports the creation, management and publishing of content in multiple languages, or locales, within a single repository, enabling you to:

- Support web applications in multiple languages from a single repository
- Create and manage content specific to any supported locale
- Manage content translation workflows and publishing processes for all supported locales
- Define and manage user security to support desired content access and translation workflows
- Specify a default repository locale, which determines the master content locale

Locales represent a language and its regional variant (for example, English, United States, or Portuguese, Brazil). You specify the master locale and additional supported locales for a repository as described in “Specifying Repository Properties” on page 51.

Defining Multi-Language Repositories

You can specify an application repository to support content in more than one language by defining the following for the repository:

- A default locale (language and regional variant)
- One or more additional supported locales

The default locale is the base language for the repository. The default locale specifies the base language that will be assumed for articles and notifications.

Supported locales are additional languages in which users can create and manage articles. You can translate and store content translations for each supported locale. Information Manager maintains the translated versions of a content record as separate instances of the same content record.

You define the default and supported locales as described in “Specifying Repository Properties” on page 51.

The default list of supported locales is defined in the System repository. You can modify the list of supported locales using the Locale Management facility as described in “Managing Supported Locales” on page 254.

You control whether Management Console and web application users can view, create, and translate content in each supported locale by defining:

- Default and supported locales for each user as described in “Defining Management Console Users” on page 124 and “Defining Web Users” on page 128.
- Repository and content channel privileges as described in “Managing Security Roles” on page 113.

You define the content creation, translation, and publication processes associated with content for each locale by defining translation workflows as described in [Chapter 7, Creating and Managing Workflows](#).

Managing Document Translation

Authorized users can translate documents into multiple locales using:

- Manual translation within the Management Console, as described in “Manually Translating a Document” on page 302.
- An external translation service on a single-document basis, as described in “Using an External Translation Service” on page 305.
- A batch job to submit content to a configured external translation service, as described in “Importing and Exporting Repository Data for Translation” on page 271.

Note: Users can view documents in any locale; however, they can modify documents only in locales that are defined in their user profile.

You can control the document translation process by defining translation workflow processes to create tasks and notifications, as described in [Chapter 7, Creating and Managing Workflows](#).

Authorized users can request translations of master documents, as described in “Requesting Translation for a Selected Document” on page 301 and monitor their progress through the workflow.

Synchronizing Display Dates for Master Documents and Translations

You can synchronize the display start and end dates a master copy and all of its translations in the Management Console using the Expert Mode content synchronization option. To use this option, navigate to Tools > System Configure > Go to Expert Mode > `AUTO_SYNCHRONIZE_TRANSLATED_DISPLAY_DATE_WITH_MASTER`.

If auto-synchronize is set to **true** when a version of the master copy is published, then the display dates of the published translations (excluding pending-published translations) are changed to match the published master copy.

If auto-synchronize is set to **false**, then the translations can have display dates independent of the master copy.

Requesting Translation for a Selected Document

Authorized users can submit a document into a translation workflow using the Request Translation tab on the translation information area of the Content Preview page.

To request a document translation:

- 1 Locate and select the desired document
The Management Console Content Preview page displays the translation information area.

2 Select the **Request Translate** tab

The Request Translate tab displays the following information:

Request Update to Version n.n	The Management Console displays the current version of the document.
Locale	Select the locale for the request
Comments	Enter an optional comment, which will display in the document history and within the translation task information

3 Select the **Request** option

The Management Console creates a translation request, and the Request Translation tab displays a summary of the request.

Manually Translating a Document

Authorized users can manually translate documents on an ad hoc basis or in response to a translation task.

The translation area of the Content Preview page contains the following sections:

Request Translation

- Request Translation** Use this option to create a translation request for the article as described in “Requesting Translation for a Selected Document” on page 301.
- Translate** Use this option to translate an article

Request tabbed sections that provide access to:

- Translation requests
- Manual translation options

To translate a document for a supported locale:

- 1 Locate and select the document
The Management Console Content Preview page displays the translation information area.
- 2 Select the **Translate** tab

The Translate tab displays information about the current versions of translations for this document as described in Translated Document Version Information:



- 3 Select the **Translate** option for the desired locale

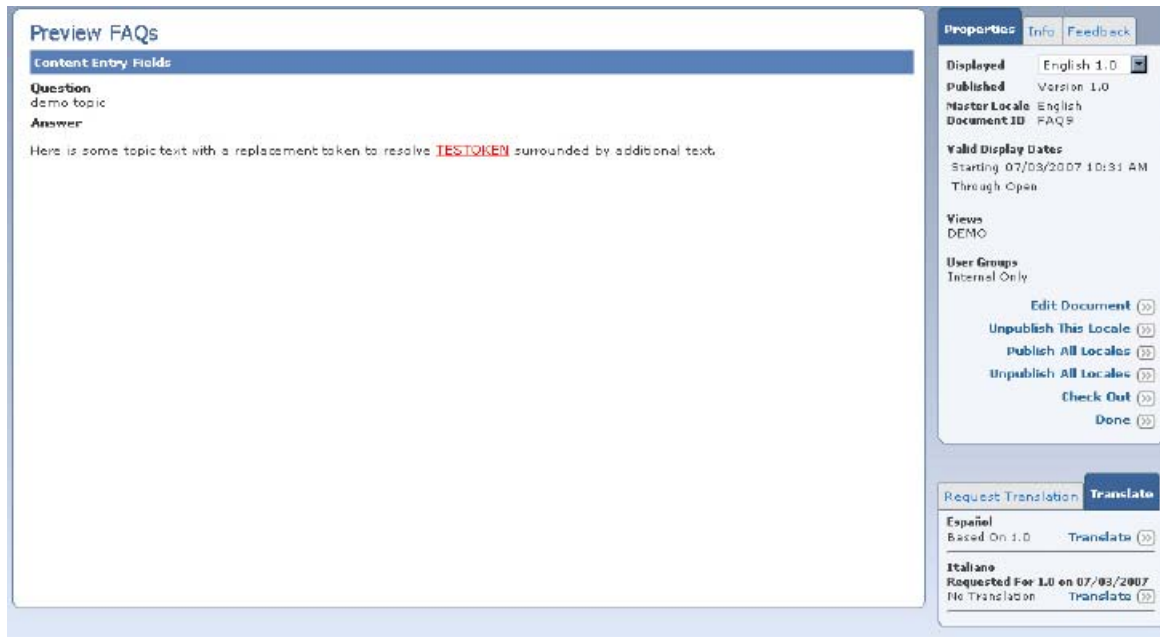
The Management Console displays the Translate page as described in “Content Translation Example” on page 303.

Content Translation Example

This section shows the translation process for a content record created in a channel (Release Note) for which English is the default locale and Spanish is a supported locale.

Note: You can define translation steps within workflow processes to generate translation tasks that will display to qualified users. See [Chapter 7, Creating and Managing Workflows](#) for more information.

When a content record is created in this channel, the Management Console displays the Preview page:



The Preview page displays an item in the Translate area for each supported locale.

To add localized (translated) content for the record:

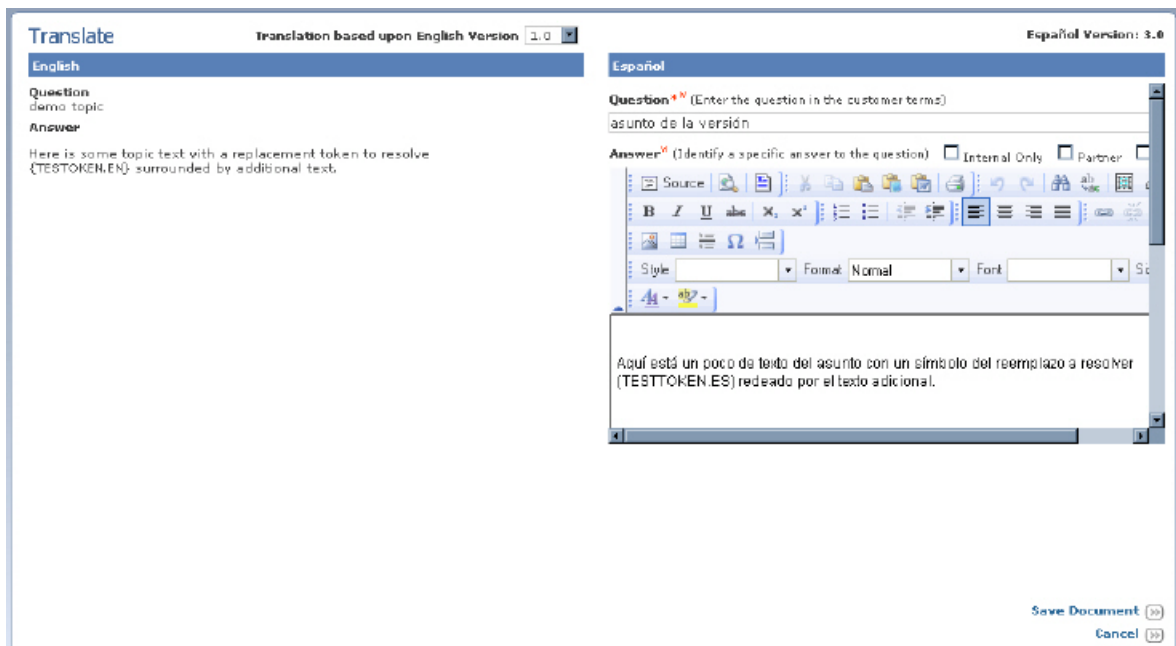
- 1 Select **Translate** for the desired locale:



The Management Console displays the current content for the default locale, and corresponding fields for the selected locale.

Note: You can use the Master Version drop-down menu to select any published version of the document for translation. You can use the Show Differences drop-down menu to highlight differences between the current version and a previous version.

- 2 Enter the localized content as appropriate, and save the content record:



- 3 Select **Save Document** or **Save and Publish Document** as appropriate

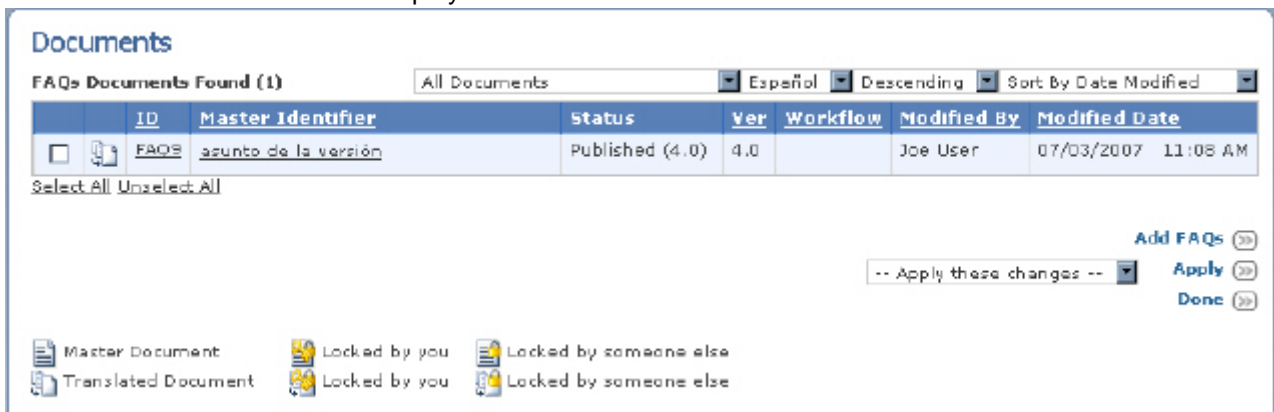
The Management Console displays a preview of the translated document:



The Management Console displays updates the Translate area of the preview page to indicate that the translated version has been created:



The translated document displays lists of content in its locale:



Note: The Translated Document icon in the Type field indicates that this document is translated from a master document in another locale. The localized document has the same ID as the Master.

Using an External Translation Service

You can configure Information Manager to use an external translation service to translate content on a single-document basis.



The Management Console will display an Auto-Translate option in the translation area of the Content Preview page, which will invoke the configured method to send and return translation work.

You specify a custom method to call an external translation service using the Delegate Translation option under the Task Configuration list in the Tools area. You can configure custom translation methods in the SYSTEM repository to specify a default for all repositories, or configure a custom method in an application repository to override the default method.

You can export and import repository data for external translation using the process described in “Importing and Exporting Repository Data for Translation” on page 271.

Working with Master and Translated Documents

Information Manager categorizes original and translated documents as follows:

Master or base document		<p>This is the original document, which can be created in any supported locale, by any authorized user.</p> <p>Authorized users can create or request translations based on this document.</p> <p>You can delete only master documents. Deleting a master document automatically deletes all of its translations.</p>
Translated document		<p>This is one of any number of documents in any supported locale that is based on the master or base document.</p> <p>Authorized users can update, request an update, or edit the current version of the document.</p> <p>Note: Editing a translated document (which is distinct from translation) does not affect the “based on” reference; a localized document can be edited up to any number of versions without affecting the fact it is based on a specified version of the master document.</p> <p>Version numbers between the various localized versions are independent from each other; however, you can determine which version of the original master document a translated document is based on.</p> <p>You cannot delete translated documents; you can remove them from user access by unpublishing.</p>

Localizing the Management Console

You can localize the Management Console so that it displays navigation, operation, and standard field labels in a selected locale (language).

You localize the Management Console by:

- Specifying the desired locale as the default locale for the repository.
- Specifying the desired locale as the default locale for the user.

You can also localize labels for attributes, content channels, and other objects that you defined within the repository by:

- Specifying the desired locale as the default locale for the repository.

- Exporting and importing resource files for translation as described in “Importing and Exporting Repository Data for Translation” on page 271.

Important! The Management Console currently supplies localized resource files for the following locales:

- Arabic
- Dutch
- Hebrew
- Polish
- Swedish
- Chinese (Simplified)
- English
- Italian
- Portuguese
- Thai
- Chinese (Traditional)
- Finnish
- Japanese
- Russian
- Turkish
- Czech
- French
- Korean
- Slovak
- Ukrainian
- Danish
- German
- Norwegian
- Spanish

Configuring Content for Display on a Web Client

You configure Information Manager to display content on your site by creating and deploying custom Java Server pages (JSPs) using the Information Manager TagLibrary.

You deploy the JSPs by placing them in the directory:

```
<Information Manager_HOME>/server/webapps/
```

where:

<Information Manager_HOME> specifies the Information Manager installation directory.

You can use any text editor to create JSPs. This section provides examples of the following JSPs:

- The page template
- The template definition
- The listing page
- The detail page

Note: If you use Dreamweaver (Macromedia/Adobe), you can load the Information Manager Tag Library Descriptor located in the `/WEB-INF/tlds/Information Manager.tld` file where your web application is installed.

The Page Template

Page templates define the overall appearance of the page. Page templates can contain style sheets, static images, constant navigation, copyright information, and any other data that is consistent over many pages.

This template defines:

- The basics of an HTML page
- One named region, `contents`

Most templates would require many named regions, such as title, subnavigation, and footer.

The two unique and important lines of code in the following example are the first, which makes the Information Manager Tag Library available to this page:

```
<%@ taglib uri="/IMtaglib" prefix="IM" %>
```

and the seventh, which defines the named region with the `template.get` tag:

```
<IM:template.get name="contents" />
<%@ taglib uri="/IMtaglib" prefix="IM" %>
<html>
  <head>
    <title>Demo</title>
```

```

</head>
<body>
  <IM:template.get name="contents" />
</body>
</html>

```

The Template Definition

Template definitions contain the definitions for the page elements that make up the general site layout.

```

<%@ taglib uri="/CAStaglib" prefix="CAS" %>
<% String id = request.getParameter("id"); %>
<IM:sitemap pagename="news"/>
<IM:template.definition template="t_template.jsp">
  <% if (id != null) { %>
    <IM:template.put name="contents" content="detail.jsp"/>
  <% } else { %>
    <IM:template.put name="contents" content="list.jsp"/>
  <% } %>
</IM:template.definition>

```

The `sitemap` tag;

```
<IM:sitemap pagename="news"/>
```

defines the name of the page, which is how it will be accessed via navigation; so that the URL of this page would end `index?page=news`.

The `template.definition` statement;

```
<IM:template.definition template="t_template.jsp">
```

selects the template, in this case a file in the root directory named `t_template.jsp`.

The following adds the content into the named region (content, as described in “The Page Template” on page 308):

```

<% if (id != null) { %>
  <IM:template.put name="contents" content="detail.jsp"/>
<% } else { %>
  <IM:template.put name="contents" content="list.jsp"/>
<% } %>

```

The template definition specifies that the news content will contain a detail and a list. A value that is made present in the querystring for accessing the detail determines which jsp will be used.

If the value is present;

```
<% if (id != null) { %>
```

then the rendered detail code is displayed in the named region contents;

```
<IM:template.put name="contents" content="detail.jsp"/>
```

If the value is not present, the rendered list code is used:

```
<IM:template.put name="contents" content="list.jsp"/>
```