Managing Repository Content
10*g* Release 3 (10.1.3.3.0)

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Managing Repository Content, 10*g* Release 3 (10.1.3.3.0)

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Contributing Authors: Deanna Burke, Jean Wilson

Contributors: Sandra Christiansen

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Chapter 3: Native Content Conversion

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INTRODUCTION

OVERVIEW

This section provides an introduction to the information in this guide. It covers the following topics:

ABOUT THIS GUIDE

This guide discusses tasks that affect how the content is displayed or handled, such as creating customized content types, working with schemas and content profiles, working with subscriptions, and managing revisions.

Audience

This guide is intended for people who are responsible for administering how content is managed for Content Server.

Conventions

❖ The notation *<install_dir>/* is used to refer to the location on your system where Content Server is installed.

❖ Forward slashes (*/)* are used to separate the directory levels in a path name. This is true when referring to files on a Windows file system or on a UNIX system. A forward slash will always appear after the end of a directory name.

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

Symbol	Description
	Note: Brings special attention to information.
	Tech Tip: Identifies information that can be used to make your tasks easier.
	Important: Identifies a required step or required information.
	Caution: Identifies information that might cause loss of data or serious system problems.

WHAT'S NEW

❖ **Application fields** are custom fields which you can create to use in custom components, HCSP files and HCSF files. Application fields allow you to use Content Server features, such as dependent choice lists, on forms. By default, these fields do not appear on the standard check in and search forms, but are used by custom templates. New information regarding Application Fields has been added to Chapter 4 (*Managing Content Fields)*. For conceptual information, see About Application Fields (page 4-2).

❖ **Schema changes** have been made to the schema interface. These changes are documented in Chapter 7 (*Using Schemas to Customize Metadata)*.

❖ **Profile changes** have been made to allow for greater flexibility in profile implementation. For example:

- Adjustments have been made to the group header to permit the showing or hiding of an entire group of fields. See Edit Group Header Screen (page 8-39).

- The new Side Effects features allow easy control of page display and rule activation. See Edit Activation Condition: Side Effects Tab (page 8-49) for more information on what can be done, including:

  - Easily override the default label of a metadata field included in a profile by setting a new value in the profile rule. See Edit Activation Condition: Side Effects Tab (page 8-49).

  - Easily add name:value pairs as Idoc Script variables that get pushed to local data using Idoc Script if the activation condition is true. See Add/Edit Rule Field "name" Screen (page 8-54).

  - Add custom Idoc Script to a rule that is only evaluated if the activation condition is true, allowing rules to control the activation of other rules. See Edit Activation Condition: Side Effects Tab (page 8-49).

❖ **Link Manager** is an optional component bundled with Content Server. If installed, it evaluates, filters, and parses the URL links of indexed content items before extracting them for storage in a database table (ManagedLinks). For more information, see Managing Linked Content with Link Manager **(page A-1)**.

OTHER ADMINISTRATOR GUIDES

Administrators set up, maintain, and manage the content server users, content, and system configurations. Common tasks for an administrator include configuring the system to manage and index files, archiving and replicating information, working with content server security, adjusting system properties, reviewing log files, etc.

Documentation for administrators and sub-administrators of the Content Server software includes the following:

❖ *Getting Started (PDF and HTML)*

This document provides an overview of the Oracle suite of products and general guidelines for their setup and implementation.

❖ ***Managing Security and User Access Guide (PDF and HTML)***

This document discusses tasks related to user administration, such as planning and implementing a security model, adding and deleting users, and implementing accounts. Additionally, it explains how to integrate external user bases with Content Server. The most common security integrations—Active Directory and LDAP—are described in detail.

❖ *Managing Repository Content Guide (PDF and HTML)*

This guide discusses tasks that affect how the content is displayed or handled, such as creating customized content types, using schemas, building a web site, or moving content through a workflow.

❖ *Managing System Settings and Processes Guide (PDF and HTML)*

This guide describes tasks that are impact system configuration on an ongoing basis such as managing revisions and indexing, configuring providers, and working with system properties.

❖ *Administration Tutorials (PDF and HTML)*
This document contains administration tutorials for people who need to administer (part of) a Oracle-based content management solution.

❖ *Enterprise Search Administration and User Guide (PDF and HTML)*
This document provides management and administration information for Enterprise Search. This enables multiple content server instances to be searchable as if they were a single instance.

❖ *Troubleshooting Guide (PDF and HTML)*
This document contains general information about troubleshooting a Content Server environment and how to diagnose issues, also provides more in-depth information about troubleshooting in specific areas.

❖ *Release Notes (hardcopy and PDF)*
The Content Server software is shipped with release notes, which list new and enhanced features of each new software release, and also provide special, up-to-the-minute considerations for installing and using the software. The release notes are important documents. Always make sure you read them before installing or updating Oracle software.

Note: The optional add-ons to Content Server generally have their own administration documentation, which is included as PDF files on the add-on distribution media, typically in a /documentation directory.

UNDERSTANDING THE SYSTEM

This section covers these topics:

❖ Purpose (page 1-5)

❖ Users (page 1-5)

Purpose

Use Content Server for sharing, managing, and distributing business information using a web site as a low-cost access point.

Designed for the web, this software is considered the unrivaled solution for medium to large companies for building secure business libraries with check in/check out, revision control, and automated publishing in web-ready formats. Current information is available to authorized users anytime, anywhere. You can link almost any type of file—letters, reports, engineering drawings, spreadsheets, manuals, sales literature, and more—under one powerful system of knowledge distribution.

Users

Content Server is designed for two types of users and two types of administrators:

❖ **Consumers**: Users who just need to find, view, and print files.

❖ **Contributors**: Users who need to create and revise files.

❖ **Administrators**: Administrators who oversee an entire instance.

❖ **Subadministrators**: Administrators who oversee a subset of an instance.

In a typical system, the majority of the users are consumers. These users do not need a user name and password to access the content server system unless security is placed on the files. To safeguard the integrity of the files, the contributors need a user name and password to check files in and out of the system.

Typically, the majority of administrators are subadministrators. They administer portions of the software that correspond to the rights that the system administrator assigns to them.

ADMINISTRATION APPLICATIONS

The system provides administration applications to configure and maintain the Content Server user access.

Note: Oracle recommends using Sun's JDK version 1.4 or 1.5 Java plug-in when opening any Java applets (such as a Content Server administration applet or the multiple-file upload applet) from a browser.

The Administration page provides access to administration applets and configuration tools page. To access this page, log in as an administrator or subadministrator, and click the **Administration** tray in the portal navigation bar. Then, click **Admin Applets** .

Figure 1-1   Admin Applets Menu

Many applications can be started as a stand-alone application at the server, as applets through a browser, or from the Apps menu in each of the tools.

Running Administration Applications as Applets

You can run several of the Content Server administration applications as applets from any browser with access to the content server. Applets are convenient for remote administration.

The Batch Loader, Component Wizard, System Properties, and Content Server Analyzer utilities cannot be run as applets; for security reasons, they must be run in stand-alone

mode from the computer where the content server is installed. See Running Administration Applications in Stand-alone Mode (page 1-7).

Some functions that are available in the stand-alone version of an application are not available from the applet version. See the documentation for each application for more information.

To run an administration application as a Java applet within a Java-enabled browser:

1. Open a browser window.

2. Log in to the content server as an administrator.

3. Click the **Administration** tray link in the portal navigation bar.

4. Click the **Admin Applets** link.

Running Administration Applications in Stand-alone Mode

You can run all Content Server administration applications in stand-alone mode from the computer where the content server is installed. The method required to start these programs differs slightly between Windows and UNIX installations.

Running the stand-alone version of an application offers greater security than browser applets, and enables you to send passwords without having them captured or copied from the web or a network.

On Windows Systems

To run a stand-alone administration application on a Windows operating system:

1. Select the application from the Windows Start menu:

   • To run one of the configuration applications, select **Start—Programs—Content Server**—*instance*—*application*.

   • To run one of the administration Utilities, select **Start—Programs—Content Server**—*instance*—**Utilities**—*utility*.

   For all applications except for Component Wizard and System Properties, a login screen is displayed. For Component Wizard and System Properties, the main screen of the application is displayed.

Tech Tip: It may take several seconds for the login screen or the application screen to appear, and the screen may be hidden by other windows.

2. Enter the administrator login name and password.

3. Click **OK**.

   The main screen of the application is displayed.

On UNIX Systems

To run a stand-alone administration application on a UNIX operating system:

1. Navigate to the *<install_dir>*/bin/ directory.

2. Executable applications are listed. Enter **/application_name**, where
   application_name is the name of one of the executable files. If an application is not
   listed, it can be entered as a parameter to the IntradocApp application, as in this
   example:
   ```
   %<install_dir>%/bin/intradocApp workflow
   ```

3. Press **Enter**.

   For all applications except for Component Wizard and System Properties, a login
   screen is displayed. For Component Wizard and System Properties, the main screen of
   the application is displayed.

4. Enter the administrator login name and password.

5. Click **OK**.

   The main screen of the application is displayed.

CONFIGURATION MANAGER APPLICATION
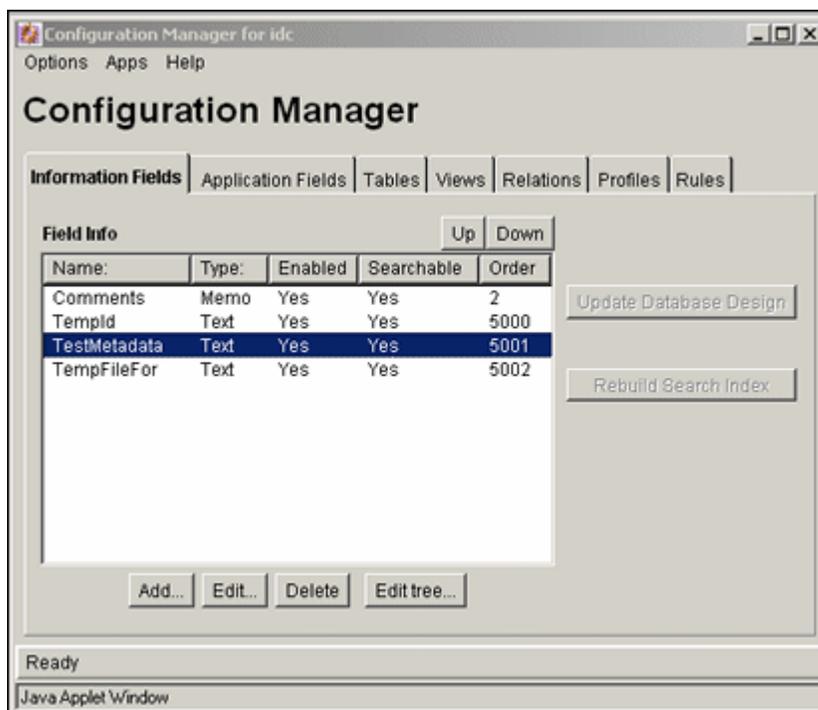
The Configuration Manager application is an administration application used to manage content types, file formats, and custom metadata fields. To access this screen, see Administration Applications (page 1-6).

Note: Only administrators can work with Configuration Manager. Subadministrators do not have access to this application.

Feature	Description
Options menu	Opens additional administrative applications to manage information fields and file format. Also provides options to republish schema, set up trace programs, and exit the Configuration Manager application. Many of these options are also available on the **Actions** shortcut menu under the **Administration** tray link in the portal navigation bar

Feature	Description
Apps menu	Used to open other administration applications. The other applications will open in the same mode (applet or stand-alone) as the current application.
Help menu	**Contents**—Displays the content server online help. **About Content Server**—Displays version, build, and copyright information for the content server.
Information Fields tab	Used to add, edit, and delete custom metadata fields. See Configuration Manager: Information Field Tab (page 4-10) for details.
Application Fields tab	Used to add, edit, and delete fields that are used to customize Content Server forms. See About Application Fields (page 4-2) for details.
Tables tab	Used to add and define tables for schemas. See Configuration Manager: Tables Tab (page 7-14).
Views tab	Used to add and define views to schemas. See Configuration Manager: Views Tab (page 7-19).
Relations tab	Used to add and define relationships between tables and columns. See Configuration Manager: Relations Tab (page 7-30).
Profiles tab	Used to create and define content profiles. See Configuration Manager: Profiles Tab (page 8-73).
Rules tab	Used to create and define the rules to include in profiles. See Configuration Manager: Rules Tab (page 8-36)

MULTI-USE SCREENS

The following screens are used in many administration applications for a variety of detailed purposes; however, their basic use remains the same:

❖ Content Item View Screen (page 1-11)

❖ User View Screen (page 1-12)

❖ Define Filter Screen (page 1-14)

❖ Show Columns Screen (page 1-19)

Content Item View Screen
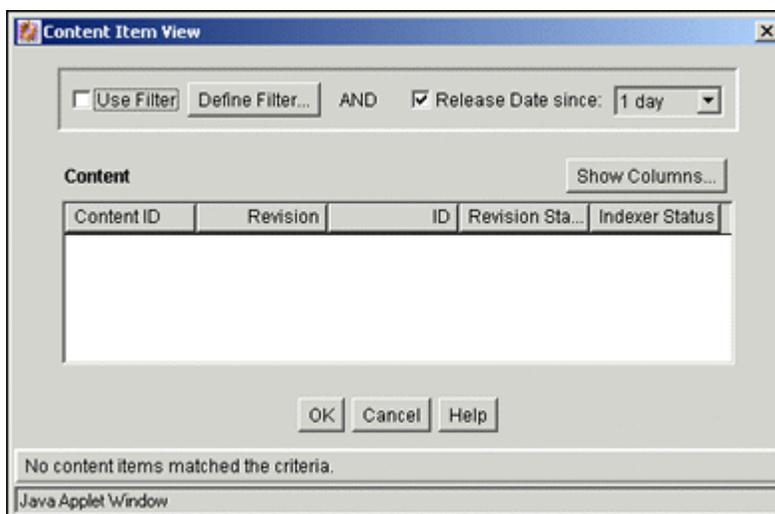
The Content Item View screen is used to select content to use when previewing different content profile scenarios. To access this screen, click the **Select** button that corresponds to the Content ID field on the Preview Profile Screen (page 8-81). The Content Item View screen is also accessed from the following content profile screens:

❖ Edit Activation Condition—see Edit Activation Condition: Conditions Tab (page 8-41)

❖ Edit Default Value—see Edit Default Value: Conditions Tab (page 8-58)

❖ Edit Derived Value—see Edit Derived Value: Conditions Tab (page 8-62)

Feature	Description
Use Filter check box	Used to narrow the list of content items that are included in the Content pane. **Selected**—Enables filtering of content items in the list based on any selected and defined filter fields and release date since filter (if specified). **Clear**—Disables filtering of content items in the list.

Feature	Description
Define Filter button	Displays the Define Filter Screen (page 1-14), from which selections for filters can be made. Selected items activate those filter fields.
Release Date since check box/ date list	**Selected**—Enables filtering of content items in the list based on their respective release date since the specified elapsed time period of 1 day, 1 week, or 4 weeks. **Clear**—Disables filtering of content items in the list.
Show Columns button	Displays the Show Columns Screen (page 1-19). This screen is used to select the property columns that are displayed for each content item included in the Content list. Selected items activate those property columns.
Content pane	Displays the applicable values of the selected display columns for each content item included in the Content items list.

User View Screen
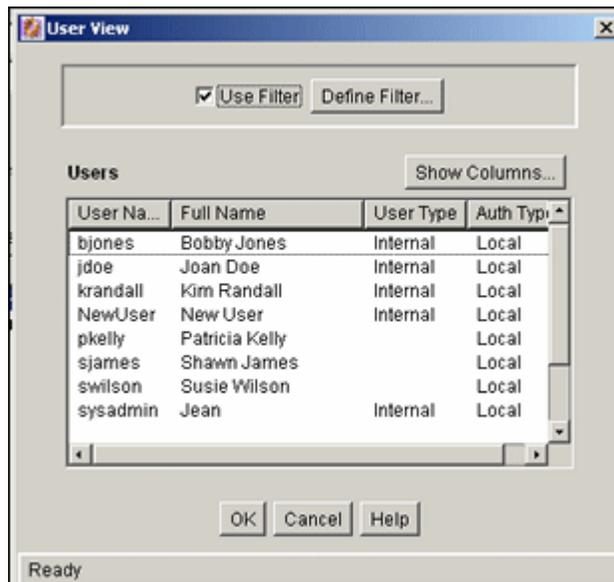
The User View screen is used to select users to include when previewing profile scenarios. To access this screen, click the **Select** button that corresponds to the User Name field on the Preview Profile Screen (page 8-81).

Feature	Description
Use Filter check box	Used to narrow the list of users to be included in the Users pane. **Selected**—Enables filtering of the users in the list based on the criteria selected. **Clear**—Disables filtering of users in the list.
Define Filter button	Displays the Define Filter Screen (page 1-14), from which selections for filters can be made. Selected items activate those filter fields.
Show Columns button	Displays the Show Columns Screen (page 1-19). This screen is used to select the property columns that are displayed for each user included in the Users list. Selected items activate those property columns.
Users pane	Displays the applicable values of the selected display columns for each user included in the Users list.

Define Filter Screen

The Define Filter screen is used to narrow the list of revisions, users, and so forth that is displayed on several administration application screens. Select one or more check boxes to activate the filter fields.

The items displayed will be filtered based on the criteria entered. The following wildcards can be used in these fields:

❖ With MS Access or MSDE, * = one or more characters; ? = single character.

❖ With all other databases, % = one or more characters; _ = single character.

Field	Description
Content ID field	The unique Content ID of the content item.
Title field	The title of the revision.
Author field	The user who checked in the revision.
Type field	The content type of the revision.
Security Group field	The security group assigned to the revision.
Account field	The account assigned to the revision. This field is displayed only if accounts are enabled.
Checked out field	Specifies whether the revision is checked out.
Checked out by field	The user who has the revision checked out.

Field	Description
Revision Status field	The status of the revision: **Done:** The revision is waiting to be released on its specified Release Date. **Edit:** The revision is at the initial contribution step of a workflow. **GenWWW:** The revision is being converted to web-viewable format or is being indexed, or has failed conversion or indexing. **Review:** The revision is in a workflow and is being reviewed. **Pending:** The revision is in a Basic workflow and is waiting for approval of all revisions in the workflow. **Released:** The revision is available in the content server. **Expired:** The revision is no longer available for searching or viewing in the content server. (The revision was not deleted, but it can be accessed only by an administrator unless you use Notification of Expiration. See Automating Notification of Expiration (page 5-11) for more information. **Deleted:** The revision has been deleted and is waiting to be completely removed from the content server during the next indexing cycle.
Indexer Status field	The indexing status of the revision: **New:** The revision is checked in but has not been indexed. **Current:** The revision is the latest revision. **Old:** The revision is not the latest revision. **Workflow:** The revision is in a workflow. **Processing:** The revision is being prepared for indexing. **Update:** The revision's metadata has been updated but the revision has not been indexed. **Indexing:** The revision is being indexed. **Note:** Only one revision of any content item can be in Current, Indexing, or Update status at a time.

Field	Description
Conversion Status field	The conversion status of the revision: **Converted:** The revision was converted successfully and the web-viewable file is available. **Processing:** The revision is being converted by the Inbound Refinery. **Failed:** The revision is deleted, locked, or corrupted, or a Verity error occurred. **MetaData Only:** Full-text indexing was bypassed and only the revision's metadata was indexed. **Refinery PassThru:** Inbound Refinery failed to convert the revision and passed the native file through to the web. **Incomplete Conversion:** An error occurred in the conversion after a valid web-viewable file was produced and the file was full-text indexed.
Indexer Cycle field	State of the revision in an Indexer cycle. Possible values are: **Idle:** The revision is not in an Indexer cycle. **Loading for Active:** The revision is being loaded for an update cycle. **Indexed for Active:** The revision is being indexed during an update cycle. **Loading for Rebuild:** The revision is being loaded for a rebuild cycle. **Indexed for Rebuild:** The revision is being indexed during a rebuild cycle. **Rebuilt:** The revision has been processed by an rebuild cycle. **Updated:** The revision has been processed by an update cycle.

Field	Description
Workflow State field	The workflow state of a revision. Possible values are: **Reviewer/Contributor**: The revision is in a workflow step in which assigned users can both edit or review the revision. **Contributor**: The revision is in a workflow step in which assigned users can only edit the revision. **Reviewer**: The revision is in a workflow step in which the assigned users can only review the revision. **Pending**: The revision is in a basic workflow and has completed all the steps. However, to complete and exit the workflow, all of the content items in the basic workflow must complete all the steps.
Revision Rank >= and <	Used to specify revision greater than/equal to a specific number or less than a specific number.
Publish Type field	The content type for a revision that is used with Content Publisher.
Publish Status field	The publishing status of a revision that is used with Content Publisher: **Content:** The revision is not staged, published, or in a workflow **Published:** The revision is published through Content Publisher. **Staging:** The revision is in the staging process in Content Publisher. **Workflow:** The revision is in a workflow.
Latest Revision field	Display only latest revision of file.
Specified date fields	Used to specify content that is greater than/equal to a specific date or earlier than a specific date. The possible date fields are: **Check In Date**: date the revision was checked in to the content server. **Indexed Date:** date the revision was last indexed. **Release Date:** date the revision was last released. **Expiration Date**: expiration date of the revision
Custom fields	Any custom metadata fields are available as filter fields.

Show Columns Screen

Show Columns

☑ Content ID
☐ Title
☐ Author
☐ Type
☐ Security Group
☐ Account
☑ Revision
☑ ID
☐ Check In Date
☐ Indexed Date
☐ Release Date
☐ Expiration Date
☐ Checked out
☐ Checked out by
☑ Revision Status
☑ Indexer Status
☐ Conversion Status
☐ Indexer Cycle
☐ Workflow State
☐ Publish Type
☐ Publish Status

☐ Folder
☐ Inhibit Metadata Update
☐ Comments
☐ Hidden
☐ Read Only
☐ Trash Delete Date
☐ Trash Delete Location
☐ Trash Delete Old Name
☐ Trash Deleter
☐ DiscussionCount

☐ **Save Settings**

[OK] [Cancel] [Help]

Warning: Applet Window

The Show Columns screen is used to select the columns that are displayed on several administration application screens.

Feature	Description
Check boxes	**Selected**—The field is displayed on the Displaying Revisions with the Filter (page 5-3) or the Content Item Subscribed Screen (page 6-12).
	Cleared—The field is not displayed on the Content tab of the Repository Manager or the Content Item Subscribed screen.
	Note: See Define Filter Screen (page 1-14) for field descriptions.
Save Settings check box	**Selected**—The column settings are applied every time the Content tab of the Repository Manager or Content Item Subscribed screen is displayed.
	Cleared—The column settings apply only until the Content tab of the Repository Manager or Content Item Subscribed screen is closed.

2

CREATING CONTENT TYPES

OVERVIEW

This chapter covers these topics:

Concepts

❖ About Content Types (page 2-2)

Tasks

❖ Creating a New Content Type (page 2-2)

❖ Editing a Content Type (page 2-3)

❖ Deleting a Content Type (page 2-3)

Interface

❖ Content Types Screen (page 2-4)

❖ Add New/Edit Content Type Screen (page 2-5)

ABOUT CONTENT TYPES

Files are grouped in the content server in directories designated by *content types*.

❖ Content types become the names of the subdirectories in which documents are stored in the weblayout and vault directories.

❖ Content types can correspond to departments (such as ENG, MKTG, and HR), document types (such as MEMO, FORM, and SPREADSHEET), or any other model you wish to use.

❖ Several departmental content types are defined in Content Server by default (ADACCT, ADCORP, and so on), but these can be edited or deleted.

❖ Each content type is assigned a GIF image, which helps users identify the content type on search result pages. Several GIF images are provided with Content Server, or you can create and assign your own images.

❖ You should create a manageable number of content types, typically no more than 50. Too many content types increases the amount of effort required to maintain the system, and makes it difficult for contributors to assign the correct content types to their files.

❖ When configuring content types, consider using the same prefix in a content type when grouping similar information. For example, the prefix "MEMO" is used in the following content types: MEMO_INT, MEMO_EXT, MEMO_EXEC.

WORKING WITH CONTENT TYPES

The following are typical tasks used when working with Content Types:

❖ Creating a New Content Type (page 2-2)

❖ Editing a Content Type (page 2-3)

❖ Deleting a Content Type (page 2-3)

Creating a New Content Type

To create a new content type:

1. Select **Content Types** from the Options menu on the Configuration Manager Application (page 1-9).

The Content Types Screen (page 2-4) is displayed.

2. Click **Add**.

    The Add New/Edit Content Type Screen (page 2-5) is displayed.

3. Enter a **Name** and **Description**.

4. Select an image from the **GIF** list.

5. Click **OK**.

Note: Adding a new Content Type may require you to update your schema to see the metadata field or option list value. See About DCLs and Metadata Schemas (page 7-2) for details about schemas.

Editing a Content Type

To edit a content type:

1. Select **Content Types** from the Options menu on the Configuration Manager Application (page 1-9).

    The Content Types Screen (page 2-4) is displayed.

2. Click **Edit**.

    The Add New/Edit Content Type Screen (page 2-5) is displayed.

3. Make changes, and click **OK**.

Deleting a Content Type

To delete a content type:

1. Make sure that no content items are assigned the content type you want to delete. (You cannot delete a content type if content still exists with that type.)

2. In the Content Types Screen (page 2-4), select the content type to delete.

3. Click **Delete**.

    A confirmation screen is displayed.

4. Click **Yes**.

CONTENT TYPE INTERFACE SCREENS

The following screens are used when working with Content Types:

❖ Content Types Screen (page 2-4)

❖ Add New/Edit Content Type Screen (page 2-5)

Content Types Screen
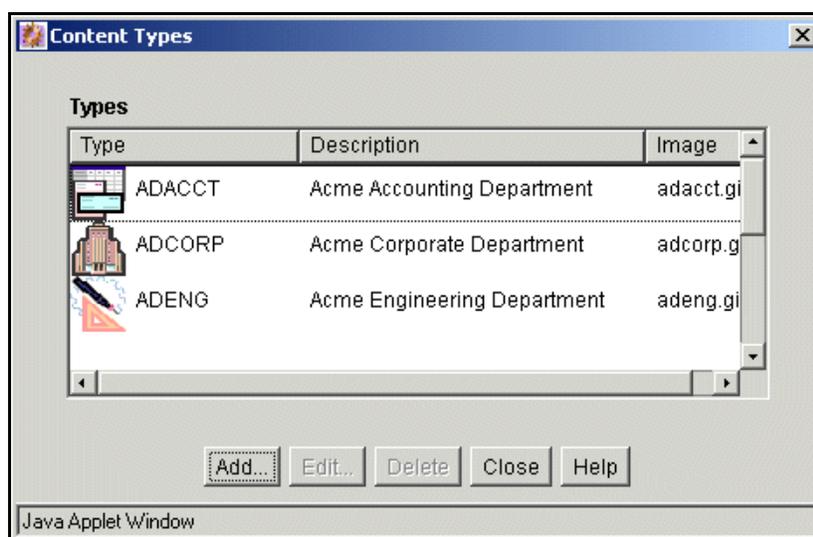
The Content Types screen is used to add, edit, and delete content types. You can also use it to view the name, description, and associated GIF for existing content types and to manage the corresponding images. To access this screen, select **Content Types** from the Options menu of the Configuration Manager Application (page 1-9).

Feature	Description
Type column	Shows the name of each content type and the GIF image associated with that type.
Description column	Shows the description of each content type.
Image column	Shows the file name for the GIF image associated with each content type.

Feature	Description
Add button	Displays the Add New/Edit Content Type Screen (page 2-5).
Edit button	Displays the Add New/Edit Content Type Screen (page 2-5).
Delete button	Enables you to delete the selected content type. (You will not be able to delete a content type if any content has that type.)

Add New/Edit Content Type Screen

The Add New/Edit Content Type screen is used to add or edit a content type. To access this screen, click **Add** or **Edit** on the Content Types Screen (page 2-4).

Feature	Description
Name field	The name of the content type. 30 characters maximum.
Description field	A description for the content type. 80 characters maximum.
GIF list	The image that is displayed to represent the content type on content server pages (such as Search Results pages).

NATIVE CONTENT CONVERSION

OVERVIEW

This chapter covers these topics:

Concepts

Tasks

Interface

Note: If you are using Inbound Refinery, settings there can affect how native file conversion works. See the *Inbound Refinery Administration Guide* for details.

ABOUT NATIVE FILE CONVERSION

Note: If you do not have an add-on conversion module, you do not need to specify how to convert native files. They will all be passed through to the web site in their native format.

The system must know how you want Inbound Refinery, an add-on module, to convert different file formats. You communicate this information by using the File Formats option to map file extensions (.doc, .txt, and so forth) to file formats. The file formats define which native application (Word, Excel, Visio, and so forth) or conversion to use to convert the file to a web-viewable format. File formats are automatically configured during installation; however, you can add or change them as necessary.

When a file is checked in, the Inbound Refinery processes the file with the specified conversion program.

IDENTIFYING MIME TYPES

It is recommended that you name new file formats by the MIME (Multipurpose Internet Mail Extensions) type corresponding to the file extension (for example, the format mapped to the doc file extension would be application/msword).

When a content item is checked in to Content Server, the content item's format is assigned according to the format mapped to the file extension of the native file. If the native file is not converted, Content Server includes this format when delivering the content item to clients. Using the MIME type for the format assists the client in determining what type of data the file is, what helper applications should be used, and so on.

You can identify the MIME type by checking the list of registered MIME types at http://www.iana.org/assignments/media-types/index.html. Other sites that list MIME types include http://filext.com/ and http://www.webmaster-toolkit.com/mime-types.shtml.

Important: IIS 6.0 will not serve a file if its extension is not registered as a MIME type for the web site. Therefore, if you use IIS 6.0, from within the Properties dialog for the server level object you can set the MIME types for the entire server.

NATIVE APPLICATIONS AND CONTENT CONVERSIONS

To ensure that conversion programs operate correctly, perform the following setup steps for the native applications you are using to convert content:

Native Application	Requirements
MS Word MS Project Lotus Freelance MS Excel Lotus 123 Corel WordPerfect MS PowerPoint Lotus WordPro MS Visio iGrafx Designer	1. Verify that the native application is installed. 2. Associate the file type to a conversion process on the File Formats tab. 3. For Word and PowerPoint applications, use the Native Options tab on the Local Inbound Refinery Configuration screen to specify whether to process hyperlinks.
MS Publisher FrameMaker* PhotoShop PageMaker	1. Verify that the native application is installed. 2. Configure the file path in Inbound Refinery. 3. Associate the file type to a conversion process on the File Formats tab.
Other	1. Verify that the native application is installed (if required). 2. Install the custom conversion program in Inbound Refinery. 3. Configure the file path in Inbound Refinery. 4. Associate the file type to a conversion process on the File Formats tab.
*To check in FrameMaker books, use the Upload Multiple Files option, which you must enable in System Properties.	

ASSOCIATING FILE TYPES WITH CONVERSION PROGRAMS

To associate file types with conversion programs:

1. In the File Formats pane of the File Formats Screen (page 3-5), click **Add**.

   The Add New/Edit File Format Screen (page 3-6) is displayed.

2. Enter information to associate a format name with a conversion program. Note the following conversion selections:

   - **Passthru:** Documents with extensions mapped to PASSTHRU are not converted, but are displayed on the web site in their native file format (requires native application on client machine).

   - **Custom:** Mapping an extension to CUSTOM executes a conversion program not included in the set of standard conversions.

3. Click **OK**.

4. In the File Extensions pane of the File Formats Screen (page 3-5) screen, click **Add**.

   The Add/Edit File Extension Screen (page 3-7) is displayed.

5. Enter a new extension, and map it to a format name. Note the following field descriptions:

   - **Extension:** A file with this extension is converted with the conversion program specified by the Map to Format field.

   - **Map to Format:** This list displays the available formats that have specified conversions (defined in the Document Formats pane). Selecting a format directly relates all files with that extension to a specific conversion program.

6. Click **OK**.

NATIVE FILE FORMAT INTERFACE SCREENS

This section covers these screens:

- ❖ File Formats Screen (page 3-5)

- ❖ Add New/Edit File Format Screen (page 3-6)

- ❖ Add/Edit File Extension Screen (page 3-7)

File Formats Screen
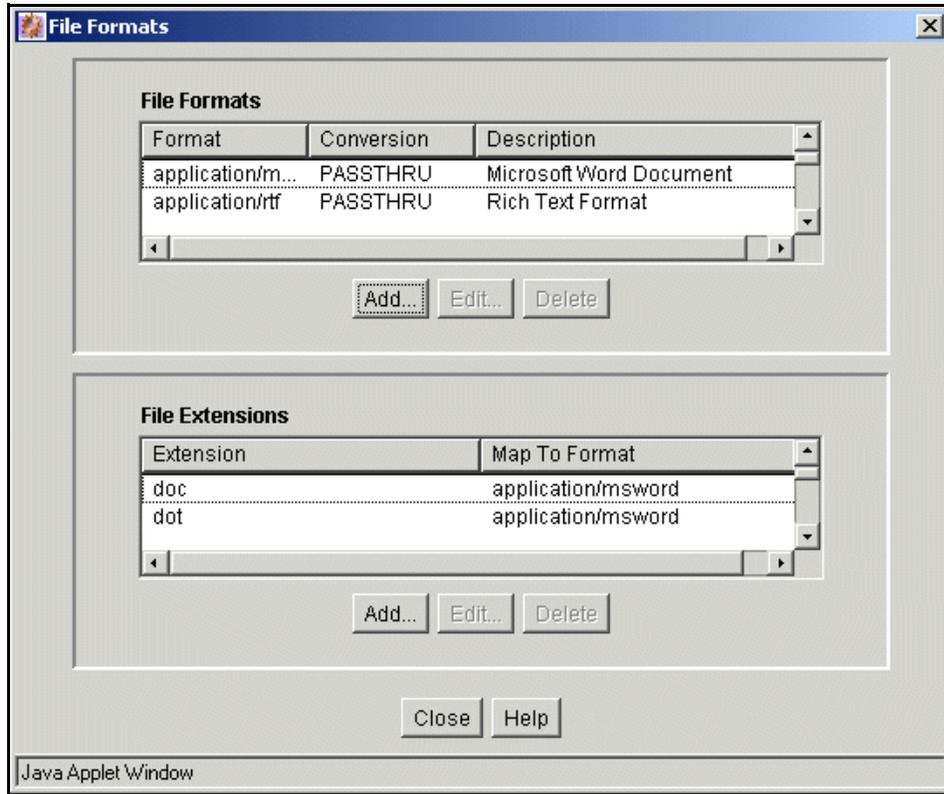
The File Formats screen is part of the Configuration Manager applet, and is used to set the file formats and file extensions for file conversions. To access this option, select **File Formats** from the Options menu.

Feature	Description
File Formats pane	
Format column	This is generally the MIME (Multipurpose Internet Mail Extensions) type.
Conversion column	The method to use to convert the file.
Description column	The description for the file format.
Add button	Displays the Add New/Edit File Format Screen (page 3-6).

Feature	Description
Edit button	Displays the Add New/Edit File Format Screen (page 3-6).
Delete button	Enables you to delete the selected file format.
File Extensions pane	
Extension column	The file extensions that are mapped to file formats.
Map to Format column	The file format that will be referenced to convert files with the specified file extension.
Add button	Displays the Add/Edit File Extension Screen (page 3-7).
Edit button	Displays the Add/Edit File Extension Screen (page 3-7).
Delete button	Enables you to delete the selected file extension.

Add New/Edit File Format Screen
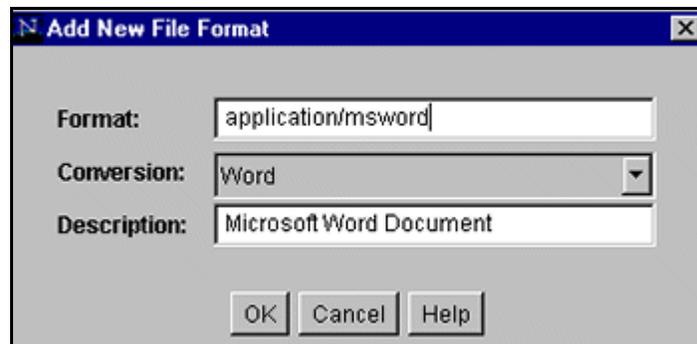
The Add New/Edit File Format screen is used to set up conversion methods for specific file formats. To access this screen, click **Add** or **Edit** in the File Formats pane on the File Formats Screen (page 3-5).

Feature	Description
Format field	This is generally the MIME (Multipurpose Internet Mail Extensions) type.

Feature	Description
Conversion field	The method to use to convert the file. To not convert this file type, select *Passthru.* To use a custom conversion method, select *Custom*.
Description field	The description for the file format.

Add/Edit File Extension Screen
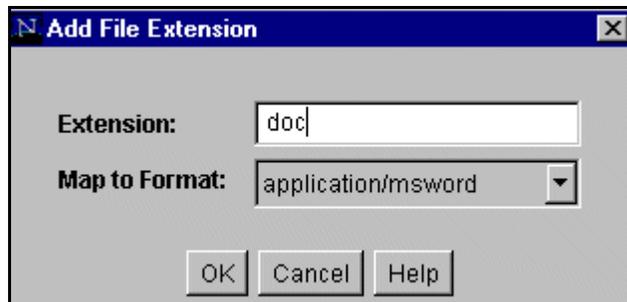
The Add/Edit File Extension screen is used to map file extensions to specific file formats. To access this screen, click **Add** or **Edit** in the File Extensions pane on the File Formats Screen (page 3-5).

Feature	Description
Extension field	The file extension of files to be converted.
Map to Format field	The file format that will be referenced to convert files with the specified file extension.

4

MANAGING CONTENT FIELDS

OVERVIEW

You can create two types of custom fields: metadata fields, which are indexed and searchable and Application Fields, which are used to customize Content Server forms.

This chapter covers these topics:

Concepts

Tasks

Interface

- ❖ Configuration Manager: Information Field Tab (page 4-10)

- ❖ Add Metadata Field Name Screen (page 4-12)

- ❖ Add/Edit Metadata Field Screen (page 4-13)

- ❖ Add/Edit Custom Info Field: Configure Option List Screen (page 4-15)

- ❖ Edit View Values Screen (page 4-18)

- ❖ Option List Screen (page 4-19)

- ❖ Update Database Design Screen (page 4-21)

- ❖ Configuration Manager: Application Fields Tab (page 4-23)

- ❖ Add/Edit Application Field Screen (page 4-24)

ABOUT CUSTOM FIELDS

You can create two types of custom fields for your content server environment:

- ❖ Application fields, which are not indexed but used to customize Content Server forms and screens. See About Application Fields (page 4-2)

- ❖ Metadata fields, which are indexed and searchable. See About Metadata Fields (page 4-3)

About Application Fields

Application fields are custom fields which you can create to use in custom components, HCSP files and HCSF files. Application fields allow you to use Content Server features, such as dependent choice lists, on forms. By default, these fields do not appear on the standard check in and search forms, but are used by custom templates.

Application fields have no stored value and are not indexed. They can be used as placeholders and in conjunction with schema views in order to enable dependent choice lists without creating an associated metadata field. See Chapter 7 (*Using Schemas to Customize Metadata)* for details about schemas.

Note: Application fields can be displayed on the standard check in and search forms if set to do so in a content profile using the Add Rule Field Screen (page 8-52).

About Metadata Fields

For each content item, the system maintains a set of information about the content, or *metadata*. Metadata is similar to a card in a library's card catalog, while the actual files are similar to library books. As with the card catalog, metadata consists of information about a file (title, reference number, author, subject, publishing date, book location, and so forth).

When you perform a metadata search, only the metadata is searched, compared to a *full-text search*, which scans the entire content of the files.

Several standard metadata fields are predefined in the content server, and cannot be changed or deleted. In addition to these predefined fields, you can create new fields to increase functionality and to accommodate a site's design requirements. It is important to create only the required amount of additional metadata fields that are necessary to help locate a file.

As a general rule, set up metadata with the Configuration Manager application, and work with metadata for a specific revision with the Repository Manager application. See Managing Content Revisions (page 5-1) for information about:

❖ Viewing Content Metadata (page 5-10)

❖ Updating Content Metadata (page 5-11)

Predefined Metadata Fields

The following are predefined standard fields that cannot be edited or deleted:

Field Caption	Entry Method	Required?	Definition
Content ID	Text Entry or Automatic Generation	Y	The unique identifier for each content item. • Duplicate names are not allowed. • Maximum field length is 30 characters. • The following cannot be used: spaces, tabs, linefeeds, carriage returns, and ; ^ ? : @ & + " # % < * ~ | [ ] / \ • The Content ID can be automatically generated by the content server. See the General Options tab of the System Properties Utility. **Note:** If you are using an Oracle, DB2, Sybase, or Informix database, all Content IDs are converted to uppercase letters automatically.
Type	Option List	Y	An identifier used to group content. • Types become subdirectories in the *weblayout* directory. See Creating Content Types (page 2-1). • Maximum field length is 30 characters. • The following cannot be used: spaces, tabs, linefeeds, carriage returns, and ; ^ ? : @ & + " # % < * ~ |
Title	Text Entry	Y	A descriptive title for the content item. • Maximum field length is 80 characters.
Author	Option List or Text Entry	Y	The user who checked in the content item.
Security Group	Option List	Y	The security group for which users must have permission to access the content item.

Field Caption	Entry Method	Required?	Definition
Account	Option List or Text Entry	N	The account for which users must have permission to access the content item. This field is available only if accounts are enabled.
Primary File	Text Entry or Browse to File	Y	The complete path to the native file being checked in. Maximum file name length is 80 characters, including the directory path and file extension. Maximum file extension length is eight characters. **Note:** Collaboration Manager and Folders modify this maximum file name length on installation to 255 characters.
Alternate File	Text Entry or Browse to File	N	The pathname to another web-viewable file format of the native document, or one that can be converted to a web-viewable format. For example, if you are checking in a FrameMaker or Quark document that has several files that make up that document, you would check in a zipped file as the native format (or Primary File) and a Postscript, PDF, or viewable file as its Alternate File. You cannot view the zipped file on the web, but the Inbound Refinery will convert the Postscript file to its web-viewable format, PDF. Maximum file name length is 80 characters and the file name extension cannot exceed eight characters.
Revision	Automatic Generation or Text Entry	Y	A label (such as 1, 2, 3,... or A, B, C,...) that represents the number of times the content item has gone through its life cycle (the number of revisions). The Revision label can be customized to meet your revision scheme.
Comments (optional)	User Text Entry	N	A field for additional information about the file. Maximum field length is 255. This field is considered a "custom" field, so it can be deleted.

Field Caption	Entry Method	Required?	Definition
Release Date	Automatic Generation or Text Entry	Y	The date the file is to be released to Content Server so that it is available for searching and viewing. The Release Date defaults to the date and time the file is checked in.
Expiration Date	Text Entry	N	The date the file will no longer be available for searching or viewing in Content Server. All revisions of the content item will expire when the current revision expires. Upon expiration, revisions are not deleted, but they can be accessed only from the Repository Manager by an administrator. unless *Notification of Expiration* is in use.

MANAGING CUSTOM FIELDS

The tasks involved in managing custom metadata fields and application fields are similar. This section describes the following tasks:

Keep in mind that changes to custom metadata fields may affect the database (where information about metadata fields is stored) or the search index (where the metadata values are stored). Changes to application fields do not affect the database or the index.

❖ Adding a Metadata Field (page 4-7)

❖ Editing a Metadata Field (page 4-7)

❖ Adding or Editing an Application Field (page 4-7)

❖ Defining an Option List (page 4-8)

❖ Updating the Database (page 4-8)

❖ Rebuilding the Search Index (page 4-8)

Note: When you add a custom metadata field, the system automatically prefixes the name with an "x" to ensure that it is unique and does not conflict with any reserved names. Similarly, when you define a custom user information (metadata) field, the system automatically prefixes the name with a "u" to ensure that it is also unique and does not conflict with any reserved names. For more information about adding custom user information fields, see the *Managing Security and User Access Guide*.

Adding a Metadata Field

To add a new metadata field:

1. On the Information Fields tab of the Configuration Manager, click **Add**.

   The Add Metadata Field Name Screen (page 4-12) is displayed.

2. Enter a new field name. Duplicate names are not allowed. Maximum field length is 29 characters. The following are not acceptable: spaces, tabs, linefeeds, carriage returns and ; ^ ? : @ & + " # % < * ~ |

3. Click **OK**.

   The Add/Edit Metadata Field Screen (page 4-13) is displayed.

4. Configure the properties for the field, and click **OK**.

5. Click **OK**.

6. Update the database design and rebuild the search index if you are using Verity or FAST as your indexing tool.

Editing a Metadata Field

To edit a metadata field:

1. Double-click the field name, or select the field and click **Edit**.

   The Add/Edit Metadata Field Screen (page 4-13) is displayed.

2. Edit the field and any accompanying option lists or views.

3. Click **OK**.

Adding or Editing an Application Field

To add a new or edit an existing application field, perform these steps:

1. To add a new field, click **Add** on the Application Fields tab of the Configuration Manager. To edit and existing field, select it in the Field Info area and click **Edit**. The Add/Edit Application Field Screen (page 4-24) is displayed.

2. Enter a new field name or select a previously entered field to edit. When entering a new name, duplicate names are not allowed. Maximum field length is 29 characters. The following are not acceptable: spaces, tabs, linefeeds, carriage returns and ; ^ ? : @ & + " # % < * ~ |

3. Click **OK**. The Add/Edit Metadata Field Screen (page 4-13) is displayed.

4. Configure the properties for the field, and click **OK**.

5. Click **OK**.

Defining an Option List

To define an option list:

1. From the Add/Edit Metadata Field Screen (page 4-13) or the Add/Edit Application Field Screen (page 4-24), click the Enable Option List check box. Click **Configure**.

   The Add/Edit Custom Info Field: Configure Option List Screen (page 4-15) is displayed.

2. Choose the type of option list to use from the pulldown menu.

3. Choose how to access the values for the option list. You can create new values for the list, use values from a view, or use values in a tree hierarchy.

4. Determine the dependencies for the option list.

5. Click **OK** when done.

Updating the Database

If you have made changes that need to be saved to the database, the **Update Database Design** button becomes active.

To update the database:

1. On the Add/Edit Metadata Field Screen (page 4-13), click **Update Database Design**.

   The Update Database Design Screen (page 4-21) is displayed:

2. If deleting fields, select the ones to delete, then click **OK**. Added and edited fields are displayed and cannot be selected/deselected.

3. Click **OK**.

Rebuilding the Search Index

If you have made changes that require rebuilding of the search index, the **Rebuild Search Index** button becomes active.

To rebuild the search index:

1. Click **Rebuild Search Index**.

2. If a message asks you to update the database design before rebuilding the search index, click **Update Database Design** to save changes to the database before proceeding.

3. When the message *Rebuild initiated* is displayed, click **OK**.

Caution: Depending on the size of your search index and available system resources, the search index rebuild process can take up to a couple of days. If rebuilding is necessary, rebuild at times of non-peak system usage.

CUSTOM FIELDS INTERFACE SCREENS

The following screens are used to add metadata fields and application fields:

Configuration Manager: Information Field Tab

The Information Fields tab of the Configuration Manager is used to add, edit, and delete custom metadata fields. Other tabs are this screen are used in conjunction with schemas and profiles.

To access this tab, click **Information Fields** on the Configuration Manager Application (page 1-9).

Feature	Description
Name column	Lists the names of custom metadata fields.

Feature	Description
Type column	Shows the type for each field: **Text:** 30 characters. **Long Text:** 100 characters. **Date:** Date format (such as *dd*/*mm*/*yyyy* or *dd/mm/yy* for the English-US locale). **Memo:** 255 characters. **Integer:** -2^{31} to 2^{31} (-2 billion to +2 billion). By definition, an integer is a natural number, so decimal values and commas are not permitted. **Note:** The size indicated is the character input length, not an indication of the actual number of bytes needed to store the field.
Enabled column	Shows whether the field is displayed on content server pages.
Searchable column	Shows whether the field is indexed and available for searches.
Order column	Shows the place the field occupies in the sort order.
Up and Down button	Used to rearrange the order of fields for sorting. To use, highlight a field and click the appropriate button. The field's position in the sort order is changed accordingly.
Update Database Design button	Saves changes to the database tables. This button becomes active when an update is required. See About Metadata Fields (page 4-3) for more information.
Rebuild Search Index button	Rebuilds the search index. This button becomes active when a rebuild is required. See About Metadata Fields (page 4-3) for more information.
Add button	Displays the Add Metadata Field Name Screen (page 4-12) screen.
Edit button	Displays the Add/Edit Metadata Field Screen (page 4-13).
Delete button	Deletes the selected custom metadata field.

Feature	Description
Edit Tree	If a field is associated with a schema relationship, this displays a parent/child ("tree and node") structure for the entries in the selected table. This option becomes active after the field has been added and the database design has been updated. See Edit Tree Screen (page 7-32) for more information.

Add Metadata Field Name Screen

This screen is used to define the name of a new custom metadata field. To access this screen, click **Add** on the Configuration Manager: Information Field Tab (page 4-10).

Feature	Description
Field Name field	Duplicate names are not allowed. Maximum field length is 29 characters. The following are not acceptable: spaces, tabs, linefeeds, carriage returns and ; ^ ? : @ & + " # % < * ~ | **Note:** When you add a custom metadata field, the system automatically prefixes the name with an "x" to ensure that it is unique and does not conflict with any reserved names. Similarly, when you define a custom user information (metadata) field, the system automatically prefixes the name with a "u" to ensure that it is also unique and does not conflict with any reserved names.

Add/Edit Metadata Field Screen

This screen is used to define a custom metadata field. To access this screen, do one of the following:

❖ Enter a field name, and click **OK** on the Add Metadata Field Name Screen (page 4-12).

❖ Select a field, and click **Edit** on the Configuration Manager: Information Field Tab (page 4-10).

Feature	Description
Field Caption field	Label for the field that is displayed on content server pages.
Field Type list	**Text:** 30 characters.
	Long Text: 100 characters.
	Date: Date format (such as *dd*/*mm*/*yyyy* or *dd/mm/yy* for the English-US locale).
	Memo: 255 characters.
	Integer: -2^{31} to 2^{31} (-2 billion to +2 billion). By definition, an integer is a natural number, so decimal values and commas are not permitted.

Feature	Description
Field Order field	Sequence in which the field is displayed on content server pages. Starting at 2, the number automatically increments as new fields are added. However, it is recommended to manually increment the numbers by 5, such as 15, 20, 25, etc. This will accommodate fields added in the future; for example: a field can be inserted between 15 and 20 by giving it a Field Order of 16.
Default Value field	The default value of the metadata field being created.
Require Value check box	Prevents files from being checked in if the field does not contain a value.
Placeholder check box	When selected, makes this a field which is not stored or indexed. Placeholders are often used for the parent level of a dependent choice list.
Enable on User Interface check box	**Selected**—The field is displayed on content server pages (checkin, search, content information, and so forth). **Clear**—The field is not displayed on content server pages.
Enable for Search Index check box	**Selected**—The field will be indexed, so the field can be used as search criteria. **Clear**—The field will not be indexed. Because the field cannot be used as search criteria, it is not displayed on search pages.
Enable Option List check box	Creates a user-selectable option list on content server pages. If you enable this check box then click **Configure**, the Add/Edit Custom Info Field: Configure Option List Screen (page 4-15) screen is displayed.

Add/Edit Custom Info Field: Configure Option List Screen

The Configure Option List screen is used to specify the type of option list, the values for the option list and any dependencies associated with the option list. To access this screen, click Enable Option List then click **Configure** on the Add/Edit Metadata Field Screen (page 4-13) or on the Add/Edit Application Field Screen (page 4-24).

Feature	Description
Option List Type	Specifies the type of option list: • **Select List Validated:** For Batch Load and Archiver, this option ensures that only files whose specified values are current options for this field are checked in. • **Select List Not Validated:** For Batch Load and Archiver purposes, this option permits check in of files whose specified values are not current options. • **Edit and Select List:** Provides both a text field and a combo box. Contributors can enter values that are not in the option list. • **Edit and Multiselect List:** Provides both a text field and a combo box. Contributors can enter values that are not in the option list. Additionally, they can select or enter multiple values. • **Multiselect List**: Contributors can chooses multiple selections from a list.

Feature	Description
Advanced button	Displays the Option List Storage Screen (page 4-17), used to specify how the option list is stored and displayed.
Use option list	Used to create a new option list. The name of the new list is inserted into the field.
Edit button	Displays the Option List Screen (page 4-19), used to add or alter choices on the list associated with the metadata field.
Use view	Used to choose values in a view instead of a created option list.
Edit Values button	Displays the Edit View Values Screen (page 4-18) or the Option List Screen (page 4-19), depending on the type of view selected.
Use tree	Used to choose values in a tree instead of an option list or a view.
Edit Definition button	Displays the Edit Tree Definition Screen (page 4-20), used to alter how the tree is defined and displayed.
Dependent field check box	Determines whether this metadata field will be subordinate to another metadata field. This is only available when using a view. Click the check box to enable the dependency.
Depends on field list	Enter a field name or choose from the list of metadata that can be used to set dependencies.
Relationship	If relationships have previously been defined for the view, they are available from the drop-down list. See Configuration Manager: Relations Tab (page 7-30) for details about relations. If an option list or a view without a defined relationship is selected for use, *<no relationship defined>* is displayed.

Option List Storage Screen
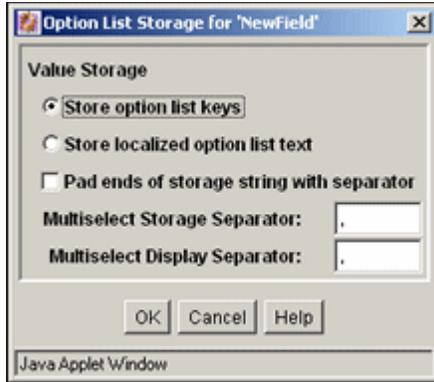
The Option List Storage Screen is used to specify how the option list will be displayed and stored. To access this screen, click the Advanced button next to the option list type pulldown on the Add/Edit Custom Info Field: Configure Option List Screen (page 4-15).

Feature	Description
Store option list keys	Select this option to permanently store option list keys. You can store keys or localized option list text.
Store localized option list text	Select this option to store localized versions of the option list. You can store keys or localized option list text.
Pad ends of storage string with separator	Active only if one of the Multiselect options is chosen on the Add/Edit Custom Info Field: Configure Option List Screen (page 4-15). Use this option to pad the length of the separator used to store multiselect values.
Multiselect Storage Separator	Active only if one of the Multiselect options is chosen on the Add/Edit Custom Info Field: Configure Option List Screen (page 4-15). Use this option to change the separator used to store multiselect values.
Multiselect Display Separator	Active only if one of the Multiselect options is chosen on the Add/Edit Custom Info Field: Configure Option List Screen (page 4-15). Use this option to change the separator used to display multiselect values.

Edit View Values Screen
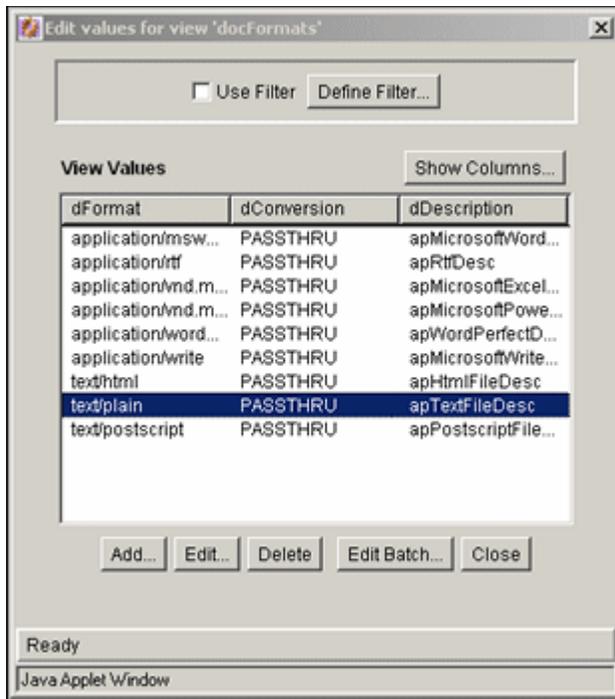
The Edit View Values screen is used to edit the values defined in a view. To access this screen, click **Edit Value** next to Use View on the Add/Edit Metadata Field Screen (page 4-13).

The columns of fields on this screen depend on the type of view selected.

Feature	Description
Use Filter/Define Filter	Used to alter which values are displayed in the selected columns.
Show Columns	Limits the number of columns to show in the view. See Show Columns Screen (page 1-19).
Add	Displays the Add/Edit Value Screen (page 7-28), used to edit values in the view.
Edit	Displays the Add/Edit Value Screen (page 7-28), where you can alter the values in a column.

Feature	Description
Delete	Used to delete a value from the table. You are prompted to confirm the deletion.
Edit Batch	Displays the Edit Values: Edit Batch (page 7-29) screen, used to copy and paste large amounts of information in order to alter values.

Option List Screen
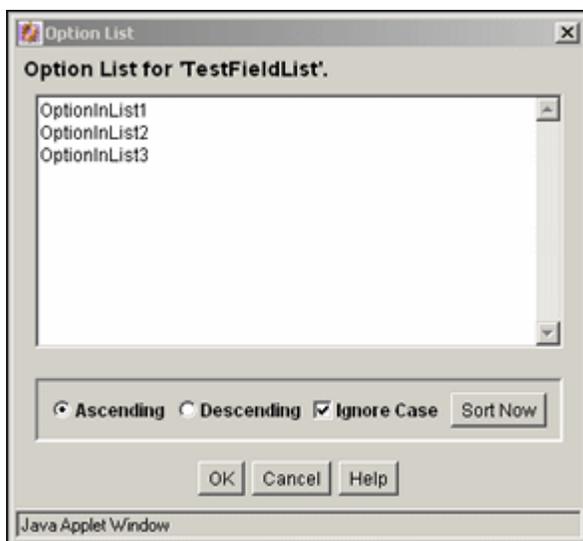
The Option List screen is used to create an option list for a custom field. To access this screen, click the **Edit** button next to Use Option List on the Add/Edit Custom Info Field: Configure Option List Screen (page 4-15).

Feature	Description
Option list	Enter the values that can be selected for the custom metadata field. Each value must be on a separate line, with a carriage return between values.
Ascending option	Sort the list in alpha-numeric order, with capital letters preceding lower-case letters. For example, an Ascending list with Ignore Case disabled will list *ABCDF* before *abcde*.

Feature	Description
Descending option	Sort the list in reverse alpha-numeric order, with lower-case letters preceding capital letters. For example, a descending list with Ignore Case disabled will list *abcde* before *ABCDD*.
Ignore Case check box	Sort the list in either Ascending or Descending order and ignore the case of the list items.
Sort Now button	Sorts the list in the manner specified by the Ascending, Descending, and Ignore Case options.

Edit Tree Definition Screen
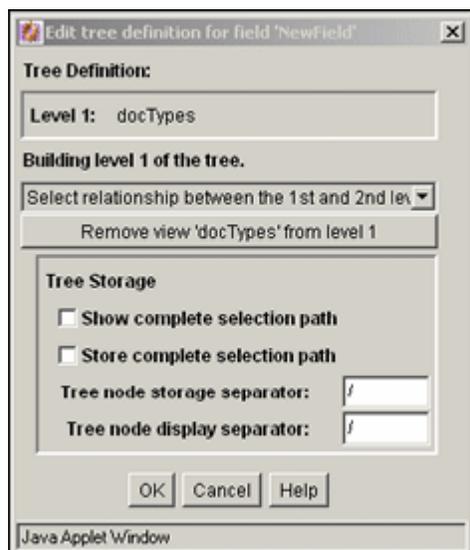
The Edit Tree Definition Screen is used to define how a tree used in an option list is stored and displayed. To access this screen, click the **Edit Definition** button next to Use Tree on the Add/Edit Custom Info Field: Configure Option List Screen (page 4-15).

Feature	Description
Select relationship pulldown menu	Select a relationship between the levels of the option list. See Relationships (page 7-6) for more details.
Remove view option bar	Click on this bar to remove the selected view.

Feature	Description
Show complete selection path	Select this checkbox to display the complete path when the option is selected.
Store complete selection path	Select this checkbox to save the complete path when the option is selected.
Tree node storage separator	Use this option to store a different operator between values.
Tree node display separator	Use this option to change the separator between values.

Update Database Design Screen

The Update Database Design screen is used to add or delete metadata fields in the content server database. To access this screen, add or delete a custom metadata field and click **Update Database Design** on the Configuration Manager: Information Field Tab (page 4-10).

The following table lists the events after which a database update or search index rebuild is required if you are using the Verity or FAST search engine.

Event	Action Required
Add metadata field	Update database
Edit metadata field	Update database*

Event	Action Required
Delete metadata field	Update database
Enable or disable *Enable for Search Index* for metadata field	Rebuild search index
Add metadata field with *Enable for Search Index* selected	Rebuild search index

* Changes to the Require Value, Option List Default Value, Option List Key, and Option List values do not require a database update.

Caution: Depending on the size of your search index and available system resources, the search index rebuild process may take several days. If rebuilding is necessary, rebuild at times of non-peak system usage.

Feature	Description
Info field(s) that will be added	Lists the metadata fields that were added since the last time the database was updated.
Info field(s) to delete check boxes	Lists the metadata fields that were deleted since the last time the database was updated. **Selected**—The metadata field will be deleted from the database. **Clear**—The metadata field will not be deleted from the database. The field remains hidden on the Configuration Manager screen and checkin and search pages, but it still exists in the database.

Configuration Manager: Application Fields Tab
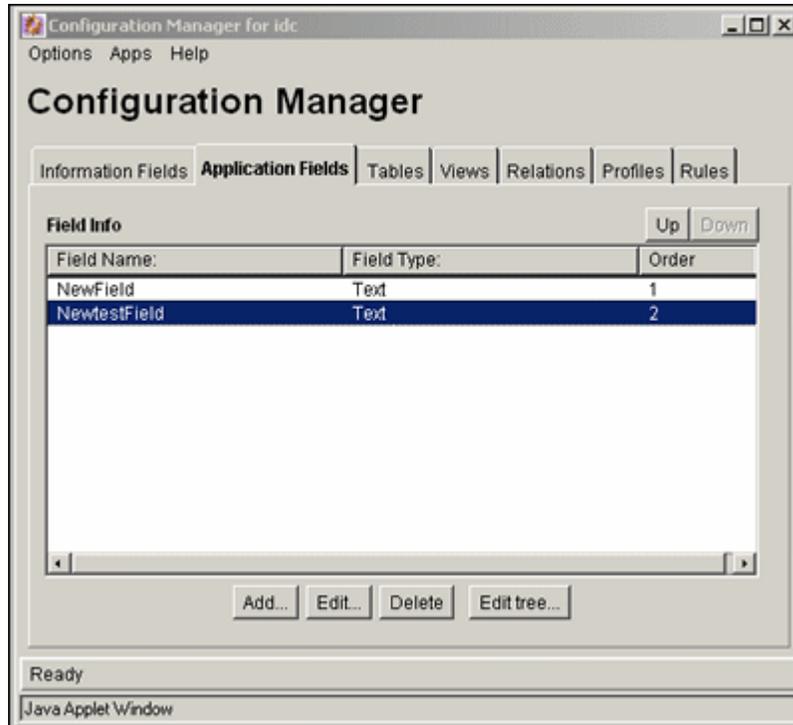
The Application Fields Tab is used to add, edit, and delete custom fields used on Content Server forms. To access this tab, click **Application Fields** on the Configuration Manager Application (page 1-9).

Feature	Description
Field Name column	Lists the names of custom application fields.
Field Type column	Shows the type for each field.
Order column	Shows the place the field occupies in the sort order.
Up and Down button	Used to rearrange the order of fields for sorting. To use, highlight a field and click the appropriate button. The field's position in the sort order is changed accordingly.
Add button	Displays the Add/Edit Metadata Field Screen (page 4-13) screen.

Feature	Description
Edit button	Displays the Add/Edit Metadata Field Screen (page 4-13).
Delete button	Deletes the selected custom metadata field.
Edit Tree	If a field is associated with a schema relationship, this displays a parent/child ("tree and node") structure for the entries in the selected table. This option becomes active after the field has been added and the database design has been updated. See Edit Tree Screen (page 7-32) for more information.

Add/Edit Application Field Screen

This screen is used to add the necessary information for a custom application field. To access this screen, click **Add** or highlight a field and click **Edit** on the Configuration Manager: Application Fields Tab (page 4-23) screen.

Feature	Description
Field Name field	Enter the name of the field. Duplicate names are not allowed. Maximum field length is 29 characters. The following are not acceptable: spaces, tabs, linefeeds, carriage returns and ; ^ ? : @ & + " # % < * ~ |

Feature	Description
Field Type list	**Text:** 30 characters. **Long Text:** 100 characters. **Date:** Date format (such as *dd*/*mm*/*yyyy* or *dd/mm/yy* for the English-US locale). **Memo:** 255 characters. **Integer:** -2^{31} to 2^{31} (-2 billion to +2 billion). By definition, an integer is a natural number, so decimal values and commas are not permitted.
Field Caption field	Label for the field that is displayed on content server pages.
Enable Option List check box	Creates a user-selectable option list on content server pages. If you enable this check box then click **Configure**, the Add/Edit Custom Info Field: Configure Option List Screen (page 4-15) screen is displayed. See Defining an Option List (page 4-8) for more details.
Placeholder check box	When selected, makes this a field which is not stored or indexed. Placeholders are often used for the parent level of a dependent choice list.
View Only check box	When selected, makes this a field which is only used in a schema view. See Chapter 7 (*Using Schemas to Customize Metadata)* for details.

5

MANAGING CONTENT REVISIONS

OVERVIEW

This chapter discusses these topics:

Concepts

Tasks

Interface

ABOUT REPOSITORY MANAGER

The Repository Manager is an administration application used to manage content item revisions, subscriptions, and the Indexer. To access the Repository Manager as an applet, click the **Administration** tray link in the portal navigation bar. Click the **Admin Applets** link. Select **Repository Manager** from the applets displayed.

You can also run Repository Manager in standalone mode. See Running Administration Applications in Stand-alone Mode (page 1-7) for details.

You can use the Functions menu (page 5-7) of the Repository Manager to perform a variety of administrative functions on specific revisions. For example, you can check in,

check out, view and update metadata, approve and reject revisions in a workflow, and delete revisions.

Right-clicking a revision on the Displaying Revisions with the Filter (page 5-3) displays a shortcut menu, which includes all of the options on the Functions menu.

MANAGING REVISIONS

This section covers these topics:

❖ About Displaying Revisions (page 5-3)

❖ Displaying Revisions with the Filter (page 5-3)

❖ Changing the Default Sort Order of the Opening Query (page 5-4)

About Displaying Revisions

Administrators and subadministrators with RepMan rights can display a list of content item revisions in the Repository Manager. Administrators can display all content items; subadministrators with RepMan rights can display only content items for which they have Admin permission to the security group and account (if applicable). The revision list can be "searched" by specifying metadata fields and revision status as filter criteria.

Note: Similar content item display screens are used in several of the content server administration tools. For more specific information, refer to the documentation for the application you are using.

Displaying Revisions with the Filter

Follow these steps to filter the Content list by revision:

1. On the Content tab of the Repository Manager application, select the **Use Filter** check box, then click **Define Filter**.

   The Define Filter Screen (page 1-14) is displayed.

2. Select the check boxes for the filter criteria you want to use.

3. Specify values for all selected fields.

4. Click **OK**.

To filter revisions by Release Date:

1. On the Content tab of the Repository Manager application, select the **Release Date Since** check box.

2. Select one of the predefined date ranges.

3. Click **OK**.

To change the columns displayed on the Content tab:

1. On the Content tab of the Repository Manager application, click **Show Columns**.

   The Show Columns Screen (page 1-19) is displayed.

2. Select the columns you want displayed. (Any user-defined fields are displayed at the bottom of this list.)

3. Click **OK**.

Changing the Default Sort Order of the Opening Query

When the Repository Manager application is started, it runs a default query against the database that returns all content released the previous day. By default, the query sorts the results by the ContentID of the content items.

Ordering by ContentID is advantageous because the order is predictable when the Repository Manager has a long list of content items. However, if there are numerous documents, sorting by ContentID can cause the query to take a long time to return the results. Therefore, you might prefer to have faster query results without the predictable order.

If sorting by ContentID is too time consuming, the ordering can be changed by disabling the DoDocNameOrder configuration setting. When the value is set to true, the default value, content items are sorted by ContentID. When it is set to false, content items are not sorted. Additionally, when you change the sort order to optimize the query, it is helpful to enable the JDBC Query Trace. This will log trace information to the console log where you can view the database queries.

To disable the DoDocNameOrder configuration setting:

1. In a text editor, open the **config.cfg** file:

   <install_dir>/config/config.cfg

2. Add the following configuration setting:

```
DoDocNameOrder=false
```

3. Save and close the config.cfg file.

4. Restart Content Server.

To enable the JDBC Query:

1. In Content Server, click the **System Audit Information** link in the Administration tray.

   The System Audit Information page is displayed.

2. Scroll to the bottom of the **Edit Active Console Output Tracing** part.

3. Select **systemdatabase** from the Active Sections drop-down list.

   The systemdatabase is added to the list of active sections.

4. Click **Update**.

5. Restart Content Server.

REPOSITORY MANAGER INTERFACE SCREENS

The following screens are used to access the Repository Manager:

❖ Repository Manager Main Screen (page 5-6)

❖ Repository Manager: Content Tab Screen (page 5-8)

Repository Manager Main Screen
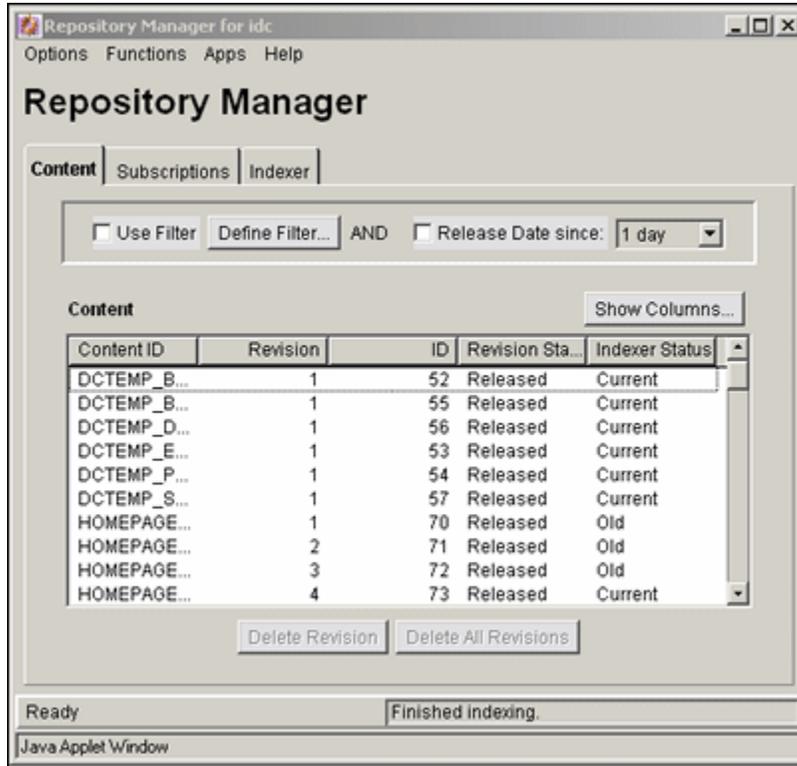
The Repository Manager Main Screen shows the options and tabs available with the Repository Manager. To display this screen, click **Repository Manager** on the Admin Applets screen or start Repository Manager in standalone mode.

Feature	Description
Options menu	Contains options to start tracing or to exit and close the Repository Manager.

Feature	Description
Functions menu	**Info**—Displays the Approve Revision Screen (page 5-27).
	Add Revision—Displays the Managing Workflow Revisions (page 5-25). This option is available only in the stand-alone Repository Manager application.
	Update—Displays the Update Content Info Screen (page 5-16).
	Subscribers—Displays the Managing Workflow Revisions (page 5-25).
	Check Out—Displays the Check Out Item Screen (page 5-21).
	Undo Check Out—Displays the Undo Check Out Screen (page 5-22).
	Approve—Displays the Approve Revision Screen (page 5-27).
	Reject—Displays the Reject Revision Screen (page 5-28).
	Resubmit—Displays the Resubmit Revision Screen (page 5-23).
	Delete Revision—Displays the Delete Revision Screen (page 5-24).
	Delete All Revisions—Displays the Delete All Revisions Screen (page 5-25).
	Note: All of the options on the Functions menu are also available from a shortcut menu, which is accessed by right-clicking a revision in the Content list.
Apps menu	Used to open other administration applications. The other applications will open in the same mode (applet or stand-alone) as the current application.
Help menu	**Contents**—Displays the online help for system administrators.
	About Content Server—Displays version, build, and copyright information for the content server.
Content tab	See Displaying Revisions with the Filter (page 5-3).
Subscriptions tab	See Adding a Criteria Subscription (page 6-3).
Indexer tab	See Repository Manager: Indexer Tab, in the *Managing System Settings and Processes Guide*.

Repository Manager: Content Tab Screen

The Content tab of the Repository Manager is used to display content item revisions. To access this tab, display the Repository Manager Main Screen (page 5-6) and click **Content**.

Feature	Description
Use Filter check box	Select this check box to narrow the Content list as defined by the Show Columns Screen (page 1-19).
Define Filter button	Displays the Define Filter Screen (page 1-14).
Release Date since check box and list	Select this check box to narrow the Content list as defined by the Release Date option list.

Feature	Description
Show Columns button	Displays the Show Columns Screen (page 1-19).
Content list	Shows the revisions in the content server repository that match the filter settings. • The list displays 50 revisions per page. • Double-clicking a revision displays the Approve Revision Screen (page 5-27) for that revision. • Right-clicking a revision displays a shortcut menu, which includes the same options that are available from the Functions menu (page 5-7). • See Managing Content (page 5-9) for column descriptions.
Add New button	Displays the Add New Content Item Screen (page 5-15). This button is available only in the stand-alone Repository Manager application.
Add Revision button	Displays the Add New Revision Screen (page 5-20). This button is available only in the stand-alone Repository Manager application.
Delete Revision button	Displays the Delete Revision Screen (page 5-24).
Delete All Revisions button	Displays the Delete All Revisions Screen (page 5-25).

MANAGING CONTENT

You can use the Functions menu (page 5-7) of the Repository Manager to perform a variety of administrative functions on specific content revisions. For example, you can check in, check out, view and update metadata, approve and reject revisions in a workflow, and delete revisions.

Right-clicking a revision on the Repository Manager: Content Tab Screen (page 5-8) displays a shortcut menu, which includes all of the options on the Functions menu.

These are typical tasks for managing content:

❖ Adding a New Content Item (page 5-10)

❖ Viewing Content Metadata (page 5-10)

❖ Updating Content Metadata (page 5-11)

❖ Reviewing Expired Content from Repository Manager (page 5-11)

❖ Automating Notification of Expiration (page 5-11)

Adding a New Content Item

To add a new content item using the Repository Manager:

Note: You cannot add a new content item using the Repository Manager launched as a Java applet from a browser. You must use the stand-alone application.

1. Display the Repository Manager: Content Tab Screen (page 5-8) in stand-alone mode.

2. Click **Add New**.

   The Add New Content Item Screen (page 5-15) is displayed.

3. Enter the required and optional information for the content item.

4. Click **OK**.

   The specified file is checked into the content server as a new content item.

Viewing Content Metadata

To view the metadata for a revision using the Repository Manager:

1. Display the Repository Manager: Content Tab Screen (page 5-8).

2. Select the revision you want to view the metadata for.

3. Select **Functions—Info**, or right-click and select **Info**.

   The Approve Revision Screen (page 5-27) is displayed.

4. Click **OK** to close the screen.

Updating Content Metadata

To update the metadata for a revision using the Repository Manager:

1. Display the Repository Manager: Content Tab Screen (page 5-8).

2. Select the revision you want to update the metadata for.

3. Select **Functions—Update**, or right-click and select **Update**.

    The Update Content Info Screen (page 5-16) is displayed.

4. Enter new metadata as necessary.

5. Click **OK**.

    The metadata is updated without checking in a new revision.

Reviewing Expired Content from Repository Manager

To review expired content from Repository Manager:

1. Display the Repository Manager Main Screen (page 5-6).

2. From the Content tab, select Define Filter.

    The Define Filter Screen (page 1-14) is displayed.

3. Enable Revision Status, and select Expired.

    A list of expired content is displayed.

Automating Notification of Expiration

Expired content is available for review by users. You can create an automatic notification by email to the author of content and the administrator when the content will be expired in a short period of time.

Follow this procedure to automate e-mail messages:

1. Edit *<install_dir>*/config/config.cfg in a text editor and enter the following:
    ```
    EnableExpirationNotifier=1
    ```

2. Adjust optional configuration entries as described in the following sections. By default, an e-mail message is sent to the administrator at midnight, seven days before a piece of content is set to expire. And, an *Expired Content* link is added for the author and system administrator on their respective Content Management trays.

3. Restart content server.

NotificationQuery

The **NotificationQuery** setting defines the criteria for the automatic query that searches for expired content:

```
NotificationQuery=<query>
```

❖   The *<query>* value can be Idoc script, URL encoded, or plain text:

•   An **Idoc Script query** is built from Idoc script. For example, if you use database indexing, the following query will give you e-mail notifications for all documents that expire in seven days:

```
NotificationQuery=dOutDate < '<$dateCurrent(7)$>'
```

Or, if you use database indexing, the following query will give you e-mail notifications for all documents that have already expired:

```
NotificationQuery=dOutDate<<$formatDateDatabase(toInteger(dateCurrent()))$>
```

Note: If you use Verity or FAST as your search engine, you cannot get e-mail notifications of already expired content. You can only get e-mail notifications for content that will expire shortly.

•   A **URL encoded query** uses the URL that is displayed in the web browser address bar when you perform a search in Content Server. You can run a query and then copy and paste the query text, starting from "QueryText=", to define the Notification query. For example, the following query returns all content expired after August 1, 2006:

```
NotificationQuery=QueryText=dOutDate+%3C+%608%2F1%2F06%60&SearchProviders=
[...]
```

•   A **plain text query** uses plain text to define the search variables. For example, the following query returns all content expired on August 1, 2006:

```
NotificationQuery=dOutDate=8/1/06
```

❖   If the NotificationQuery setting is not defined, the default value is all content that will expire in the next 7 days:

```
NotificationQuery=dOutDate < '<$dateCurrent(7)$>'
```

NotifyExtras

The **NotifyExtras** setting defines users who will receive a list of expired content (in addition to the authors of each content item):

```
NotifyExtras=<user1>,<user2>
```

If the NotifyExtras setting is not in the *config.cfg* file, the default value is *sysadmin*:

```
NotifyExtras=sysadmin
```

If the NotifyExtras setting is in the *config.cfg* file but the value is left blank, no extra notification will be sent.

NotificationIntervalInDays

The **NotificationIntervalInDays** setting defines how often the notification query is run:

```
NotificationIntervalInDays=<number of days>
```

If the NotificationIntervalInDays setting is not defined, the default value is 1 day:

```
NotificationIntervalInDays=1
```

NotifyTime

The **NotifyTime** setting defines the time of day that the notification query is run and is specified in 24-hour notation:

```
NotifyTime=<hh:mm>
```

For example, if the desired time is 11:30 AM, the setting would be:

```
NotifyTime=11:30
```

However, if the desired time is 1:30 PM, the setting would be:

```
NotifyTime=13:30
```

If the NotifyTime setting is not defined, the default value is midnight:

```
NotifyTime=00:01
```

NotificationMaximum

The NotificationMaximum setting defines the maximum number of content items that will be returned by the notification query:

```
NotificationMaximum=<maximum # of documents returned>
```

If the NotificationMaximum setting is not defined, the default value is 1,000:

```
NotificationMaximum=1000
```

Content items are sorted by release date. The most recently released items will be returned.

CONTENT INTERFACE SCREENS

The following screens are used to manage content:

❖ Information Screen (page 5-14)

❖ Add New Content Item Screen (page 5-15)

❖ Update Content Info Screen (page 5-16)

Information Screen
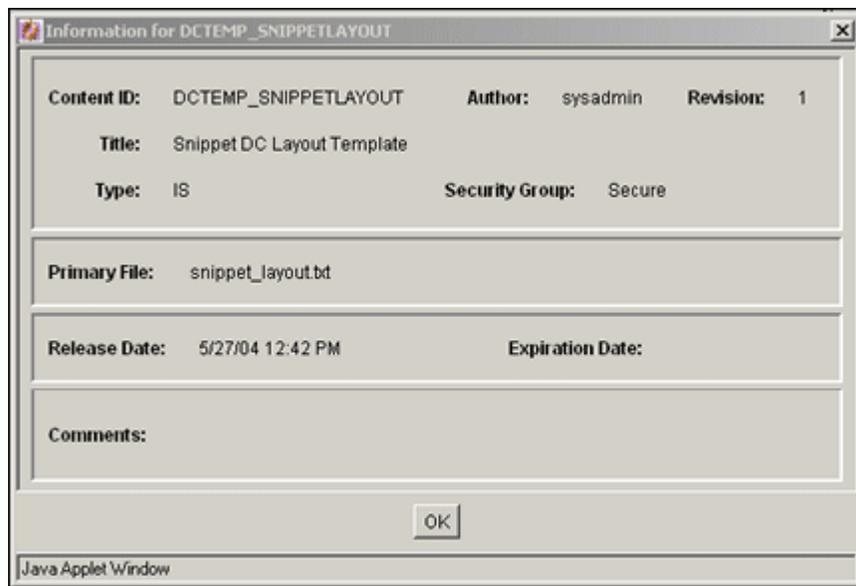
The Information screen is used to view the metadata for a revision. To access this screen, do one of the following:

❖ Select a revision on the Repository Manager: Content Tab Screen (page 5-8), and select **Functions—Info**.

❖ Right-click a revision on the Repository Manager: Content Tab Screen (page 5-8), and select **Info**.

All of the standard metadata fields and any custom metadata fields are displayed on this screen.

Add New Content Item Screen
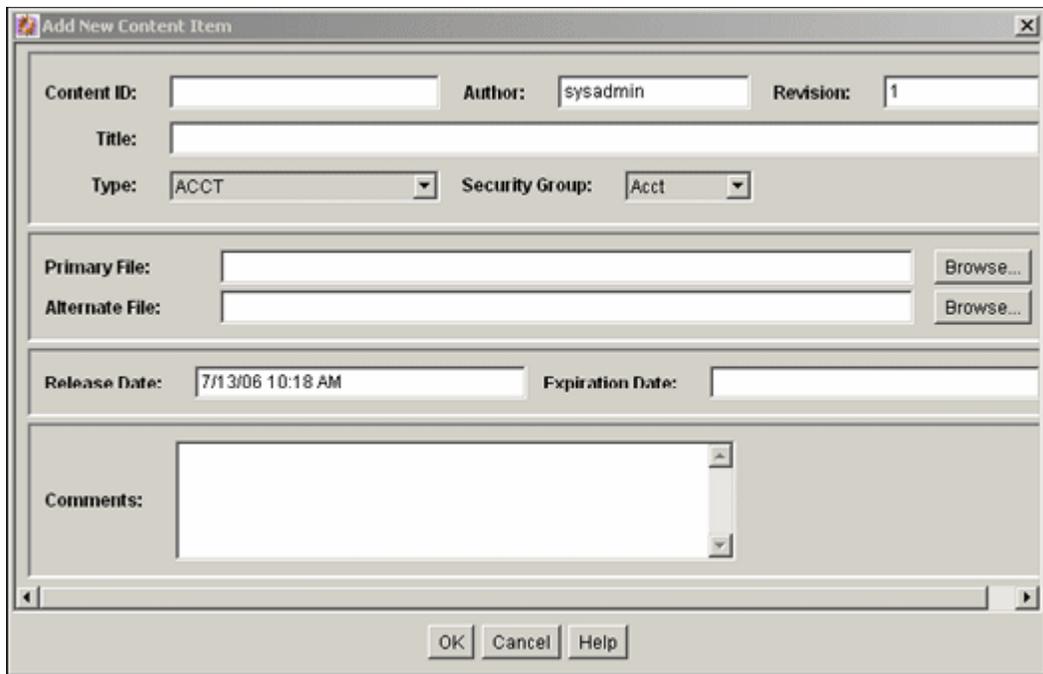
The Add New Content Item screen is used to check a new content item into the system without using a content server check in page. To access this screen, click **Add New** on the stand-alone Repository Manager: Content Tab Screen (page 5-8).

All of the standard metadata fields and any custom metadata fields are displayed on this screen. See Predefined Metadata Fields (page 4-4) for information about the standard metadata fields.

Update Content Info Screen

The Update Content Info screen is used to change the metadata of an existing revision. To access this screen, do one of the following:

❖ Select a revision on the Repository Manager: Content Tab Screen (page 5-8), and select **Functions—Update**.

❖ Right-click a revision on the Repository Manager: Content Tab Screen (page 5-8), and select **Update**.

All of the standard metadata fields and any custom metadata fields are displayed on this screen. See Predefined Metadata Fields (page 4-4) for information about the standard metadata fields.

MANAGING REVISIONS

A revision is a new or revised version of a content item. By default, revisions are numbered sequentially starting with Revision 1, and every time the content item is checked out and checked in again, the revision number is incremented by one. Each time that you check out a file and check it back in, Content Server creates a new revision of that file. The new revision has the same content ID as the previous revision, but the native file and the metadata can be the same or different. The system stores the previous versions of a file, so you can review them as necessary.

These are typical tasks for managing revisions:

❖ Adding a New Revision (page 5-17)

❖ Checking Out a Revision (page 5-17)

❖ Undoing a Revision Checkout (page 5-18)

❖ Resubmitting a Revision for Conversion (page 5-18)

❖ Deleting a Revision (page 5-18)

❖ Deleting All Revisions of a Content Item (page 5-19)

Adding a New Revision

To add a new revision of an existing content item using the Repository Manager:

Note: You cannot add a new revision using the Repository Manager launched as a Java applet from a browser. You must use the stand-alone application.

1. Display the Repository Manager: Content Tab Screen (page 5-8) in stand-alone mode.

2. Select the revision to which you want to add a new revision.

3. Click **Add Revision,** select **Functions—Add Revision**, or right-click and select **Add Revision**.

    The Add New Revision Screen (page 5-20) is displayed.

4. Enter the required and optional information for the revision.

5. Click **OK**.

    The specified file is checked into the content server as a new revision.

Checking Out a Revision

To check out a revision using the Repository Manager:

1. Display the Repository Manager: Content Tab Screen (page 5-8) in stand-alone mode.

2. Select one or more revisions you want to check out.

3. Select **Functions—Check Out**, or right-click and select **Check Out**.

    The Check Out Item Screen (page 5-21) is displayed.

4. To exclude a revision from the list, clear the check box next to the revision.

5. Click **OK**.

The selected revisions are checked out.

Undoing a Revision Checkout

To undo a content item checkout using the Repository Manager:

1. Display the Repository Manager: Content Tab Screen (page 5-8).

2. Select one or more revisions for which you want to undo the checkout.

3. Select **Functions—Undo Check Out**, or right-click and select **Undo Check Out**.

   The Undo Check Out Screen (page 5-22) is displayed.

4. To exclude a revision from the list, clear the check box next to the revision.

5. Click **OK**.

   The checkout is undone for the selected revisions.

Resubmitting a Revision for Conversion

To resubmit a revision to the Inbound Refinery for conversion using the Repository Manager:

1. Display the Repository Manager: Content Tab Screen (page 5-8).

2. Select one or more revisions you want to resubmit for conversion.

3. Select **Functions—Resubmit**, or right-click and select **Resubmit**.

   The Resubmit Revision Screen (page 5-23) is displayed.

4. To exclude a revision from the list, clear the check box next to the revision.

5. Click **OK**.

   The selected revisions are resubmitted to the Inbound Refinery for conversion.

Deleting a Revision

To delete a particular revision using the Repository Manager:

1. Display the Repository Manager: Content Tab Screen (page 5-8).

2. Select one or more revisions you want to delete.

3. Click **Delete Revision**, select **Functions—Delete Revision**, or right-click and select **Delete Revision**.

The Delete Revision Screen (page 5-24) is displayed.

4. To exclude a revision from the list, clear the check box next to the revision.

5. Click **OK**.

The selected revisions are deleted.

Deleting All Revisions of a Content Item

To delete all revisions of a content item using the Repository Manager:

1. Display the Repository Manager: Content Tab Screen (page 5-8).

2. Select one or more revisions of content items you want to delete.

3. Click **Delete All Revisions**, select **Functions—Delete All Revisions**, or right-click and select **Delete All Revisions**.

   The Delete All Revisions Screen (page 5-25) is displayed.

4. To exclude a revision from the list, clear the check box next to the revision.

5. Click **OK**.

   All revisions of selected content items are deleted.

REVISION INTERFACE SCREENS

The following screens are used when working with revisions:

❖ Add New Revision Screen (page 5-20)

❖ Check Out Item Screen (page 5-21)

❖ Undo Check Out Screen (page 5-22)

❖ Resubmit Revision Screen (page 5-23)

❖ Delete Revision Screen (page 5-24)

❖ Delete All Revisions Screen (page 5-25)

Add New Revision Screen

The Add New Revision screen is used to check in a revision of an existing content item. To access this screen, do one of the following on the stand-alone Repository Manager Main Screen (page 5-6):

❖ Select a revision and click **Add Revision**.

❖ Select a revision and select **Functions—Add Revision**.

❖ Right-click a revision and select **Add Revision**.

All of the standard metadata fields and any custom metadata fields are displayed on this screen. See Predefined Metadata Fields (page 4-4) for information about the standard metadata fields.

Check Out Item Screen
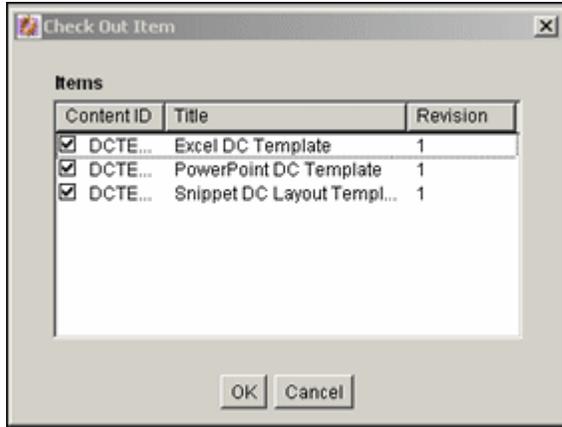
The Check Out Item screen is used to check out revisions. To access this screen, select one or more revisions on the Repository Manager: Content Tab Screen (page 5-8) and do one of the following:

❖ Select **Functions—Check Out**.

❖ Right-click and select **Check Out**.

Feature	Description
Check boxes	**Selected**—The revision will be checked out. **Clear**—The revision will not be checked out.
OK button	Checks out the selected revisions.

Undo Check Out Screen
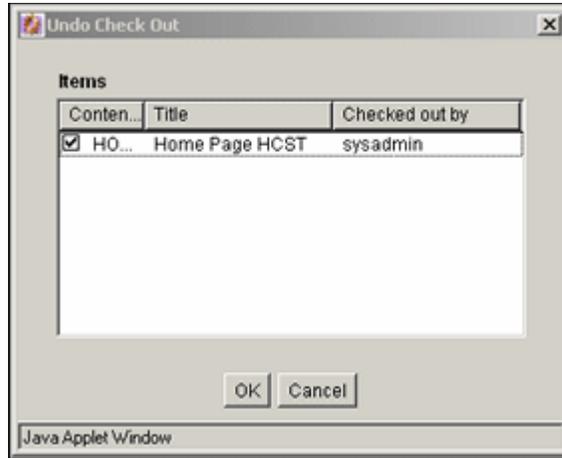
The Undo Check Out screen is used to undo a checkout. To access this screen, select one or more revisions on the Repository Manager: Content Tab Screen (page 5-8), and do one of the following:

❖ Select **Functions—Undo Check Out**.

❖ Right-click and select **Undo Check Out**.

Feature	Description
Check boxes	**Selected**—The checkout will be undone for the revision. **Clear**—The revision will remain checked out.
OK button	Undoes the checkout for the selected revisions.

Resubmit Revision Screen
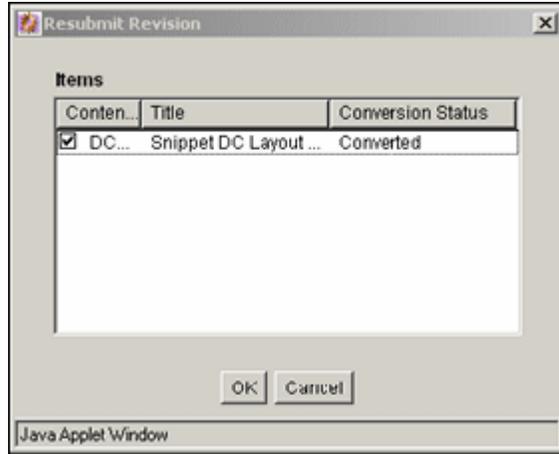
The Resubmit Revision screen is used to submit a file to the Inbound Refinery for conversion. To access this screen, select one or more revisions on the Repository Manager: Content Tab Screen (page 5-8), and do one of the following:

❖ Select **Functions—Resubmit**.

❖ Right-click and select **Resubmit**.

Note: You cannot resubmit files that are in the Inbound Refinery queue.

Feature	Description
Check boxes	**Selected**—The revision will be resubmitted to the Inbound Refinery. **Clear**—The revision will not be resubmitted to the Inbound Refinery.
OK button	Submits the selected revisions to the Inbound Refinery for conversion.

Managing Content Revisions

Delete Revision Screen

The Delete Revision screen is used to delete individual revisions. To access this screen, select one or more revisions on the Repository Manager: Content Tab Screen (page 5-8) and do one of the following:

❖ Click **Delete Revision**.

❖ Click **Functions—Delete Revision**.

❖ Right-click then select **Delete Revision**.

Feature	Description
Check boxes	**Selected**—The revision will be deleted. **Clear**—The revision will not be deleted.
OK button	Deletes the selected revisions.

Managing Repository Content

Delete All Revisions Screen
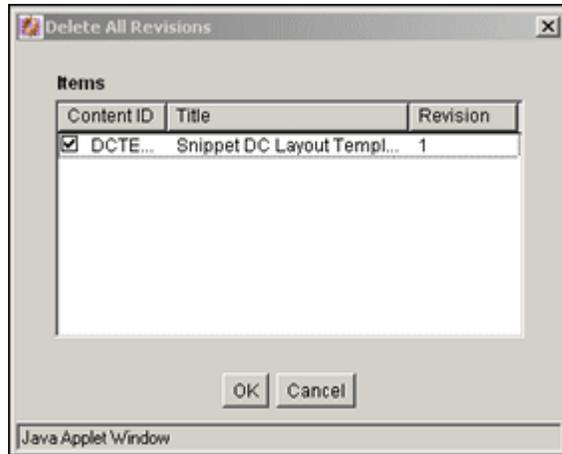
The Delete All Revisions screen is used to delete all revisions of selected content items. To access this screen, select one or more revisions on the Repository Manager: Content Tab Screen (page 5-8) and do one of the following:

❖ Click **Delete All Revisions**.

❖ Select **Functions—Delete All Revision**s.

❖ Right-click then select **Delete All Revisions**.

Feature	Description
Check boxes	**Selected**—All revisions of the content item will be deleted. **Clear**—No revisions of the content item will be deleted.
OK button	Deletes all revisions of the selected content items.

MANAGING WORKFLOW REVISIONS

A workflow specifies how content is routed for review and approval before it is released to the system. Users are notified by e-mail when they have a file to review.

From a workflow participant's point of view, there are two types of workflows:

❖ A **basic** workflow defines the review process for specific content items, and must be initiated manually.

❖ In a **criteria** workflow, a file enters the workflow automatically upon check-in when its metadata matches predefined criteria.

These are typical tasks for managing workflow revisions

❖

❖

Approving a Revision in a Workflow

To approve a revision in a workflow using the Repository Manager:

1. Display the Repository Manager: Content Tab Screen (page 5-8).

2. Select one or more revisions you want to approve.

3. Select **Functions—Approve**, or right-click and select **Approve**.

   The Approve Revision Screen (page 5-27) is displayed.

4. To exclude a revision from the list, clear the check box next to the revision.

5. Click **OK**.

   The selected revisions are approved.

Rejecting a Revision in a Workflow

To reject a revision in a workflow using the Repository Manager:

1. Display the Repository Manager: Content Tab Screen (page 5-8).

2. Select one or more revisions you want to reject.

3. Select **Functions—Reject**, or right-click and select **Reject**.

   The Reject Revision Screen (page 5-28) is displayed.

4. To exclude a revision from the list, clear the check box next to the revision.

5. Enter a message to explain the reason for the rejection.

6. Click **OK**.

   The revision returns to the last reviewer/contributor step, and a rejection notification e-mail is sent to the reviewers for that step.]

WORKFLOW REVISION INTERFACE SCREENS

The following screens are used when handling workflows:

❖ Approve Revision Screen (page 5-27)

❖ Reject Revision Screen (page 5-28)

Approve Revision Screen
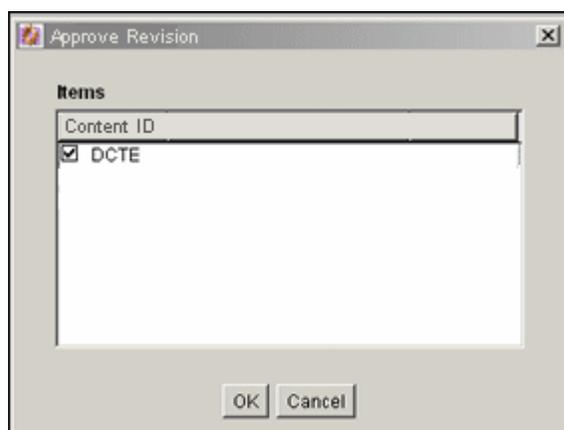
The Approve Revision screen is used to approve revisions that are in a workflow. To access this screen, select one or more revisions in a workflow on the Repository Manager: Content Tab Screen (page 5-8) and do one of the following:
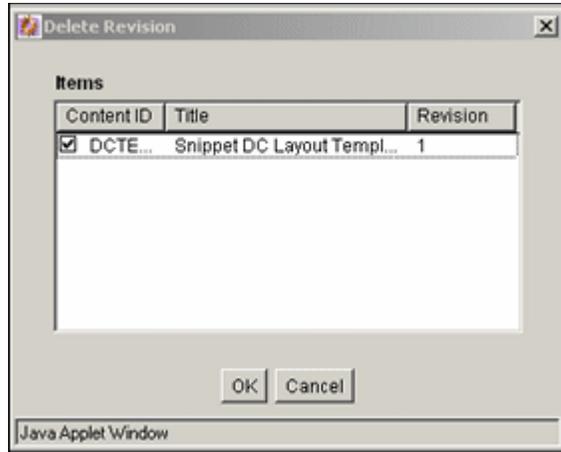
❖ Select **Functions—Approve**.

❖ Right-click, and select **Approve**.

Feature	Description
Check boxes	**Selected**—The revision will be approved. **Clear**—The revision will not be approved.
OK button	Approves the selected revisions.

Note: Only revisions that are in a workflow will be displayed on this screen.

Reject Revision Screen
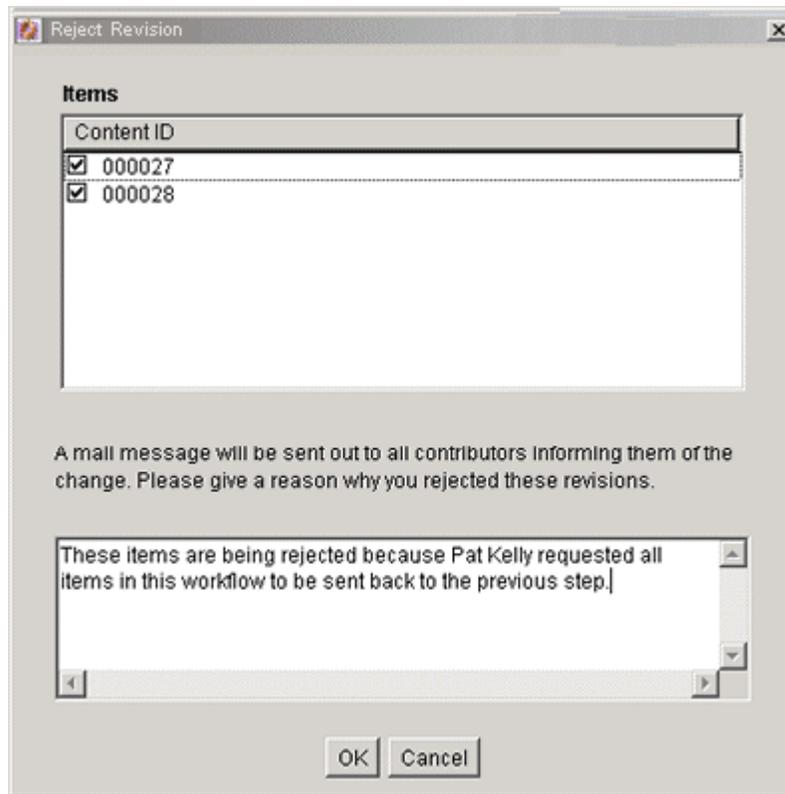
The Reject Revision screen is used to approve revisions that are in a workflow. To access this screen, select one or more revisions on the Repository Manager: Content Tab Screen (page 5-8) and do one of the following:

❖ Select **Functions—Reject**.

❖ Right-click, and select **Reject**.

Feature	Description
Check boxes	**Selected**—The revision will be rejected.
	Clear—The revision will not be rejected.

Feature	Description
Rejection message field	Enter a message that will be included in the rejection notification e-mail. This message will be sent for all rejected revisions.
OK button	Returns the selected revisions to the last reviewer/contributor step, and sends a rejection notification e-mail to the reviewers for that step.

Note: Only revisions that are in a workflow will be displayed on this screen.

6

SUBSCRIBING CONTENT TO USERS

OVERVIEW

This section covers these topics:

Concepts

Tasks

Interface

❖ Add Subscription Screen (page 6-13)

❖ Select User Screen (page 6-14)

❖ Select Alias Screen (page 6-15)

❖ Subscribers Screen (page 6-16)

❖ Subscription Detail Screen (page 6-17)

ABOUT SUBSCRIPTIONS

A subscription is a content server function that notifies users by e-mail when a particular content item has been revised.

Tech Tip: To change the subscription notification message, you can use Component Architecture to customize the following:

• *subscription_mail_subject* include (in *std_page.htm* file)

• *wwSubscriptionMailSubject* string (in *ww_strings.htm* file)

• *subscription_mail.htm* template

Tech Tip: The content server has an e-mail message buffer of 20000 bytes. If a large number of subscription e-mail notices are triggered in a short period of time (for example, 40 content items with 40 subscribers each), the buffer can become overloaded and the e-mail messages will not be sent. The following content server error message indicates that the buffer was overloaded: *"Work queue error: Error while collating work queue (Message to append to queue 'CollatedWorkQueue' was too large.)."*

This section covers the following topics:

❖ Subscription Methods (page 6-2)

❖ Subscription Assignment (page 6-3)

Subscription Methods

There are two ways subscriptions can be created:

❖ **Basic subscription:** Users manually subscribe to individual content items. This type of subscription is predefined in the content server.

❖ **Criteria subscription:** Users can subscribe to a group of content items based on metadata criteria. Administrators can set up a Criteria subscription in two ways: with users or with aliases. If a subscription is set up with users, users can unsubscribe if they wish. If aliases are used, users cannot unsubscribe.

Subscription Assignment

There are two ways that users can subscribe to content items:

❖ **Open subscription:** Users manually subscribe to a content item through a Basic or Criteria subscription.

❖ **Forced subscription:** An administrator assigns users and/or aliases to a particular subscription. If individual users are assigned, each user can unsubscribe if they wish. If an alias is assigned, the users in that alias cannot unsubscribe.

MANAGING SUBSCRIPTIONS

These are common tasks in managing subscriptions.

❖ Adding a Criteria Subscription (page 6-3)

❖ Specifying Subscription Criteria (page 6-4)

❖ Adding Users to a Subscription (page 6-4)

❖ Unsubscribing Users from a Content Revision (page 6-5)

❖ Editing a Criteria Subscription (page 6-5)

❖ Viewing Subscription Information (page 6-6)

❖ Deleting a Criteria Subscription (page 6-6)

Adding a Criteria Subscription

To add a Criteria subscription:

1. Specify the subscription criteria. See Specifying Subscription Criteria (page 6-4).

2. Add users. See Adding Users to a Subscription (page 6-4).

Tech Tip: If any of the users added to subscription do not have a correct e-mail address, notification fails. The system quits after it encounters five errors in the work queue log and does not notify the rest of the subscribers.

Specifying Subscription Criteria

To specify subscription criteria:

1. Display the Repository Manager: Subscriptions Tab (page 6-7).

2. Click **Add**.

    The Add New/Edit Subscription Type Screen (page 6-8) is displayed.

3. Enter a name and description for the subscription.

4. Click **Fields**.

    The Fields Screen (page 6-9) is displayed.

5. Specify which fields you require for this subscription. (You set the values for these fields later, when you add users.)

6. Click **OK**.

7. Specify whether to enable or disable the subscription.

8. Click **OK**.

Adding Users to a Subscription

To add users to a Criteria subscription:

1. Display the Repository Manager: Subscriptions Tab (page 6-7) and select the subscription to which users will be added.

2. Click **Subscribers**.

    The Users Subscribed Screen (page 6-10) is displayed.

3. Click **Add**.

    The Add Subscription Screen (page 6-13) is displayed.

4. Select **User** or **Alias**.

5. Click **Select**.

    The Select User Screen (page 6-14) or Select Alias Screen (page 6-15) is displayed.

6. Select the users or aliases to be subscribed.

7. Click **OK**.

8. Set the values for the criteria fields that you specified earlier.

9. Click **OK**.

Unsubscribing Users from a Content Revision

To unsubscribe a user or alias from a content item using the Repository Manager:

1. Display the Repository Manager: Subscriptions Tab (page 6-7).

2. Select the revision you want to unsubscribe the user or alias from.

3. Select **Functions—Subscribers**, or right-click and select **Subscribers**.

   The Subscribers Screen (page 6-16) is displayed.

4. Select the user alias to unsubscribe.

5. Click **Unsubscribe**.

   A confirmation screen is displayed.

6. Click **OK**.

   The user or alias is removed from the Subscriptions list.

Editing a Criteria Subscription

To edit a Criteria subscription:

1. Display the Repository Manager: Subscriptions Tab (page 6-7).

2. Select a subscription.

3. Click **Edit**.

   The Add New/Edit Subscription Type Screen (page 6-8) is displayed.

4. Change any necessary settings, and click **OK**.

Important: If you change any criteria fields, you delete all current subscriptions. Use care when working with this feature.

5. Click **Subscribers**.

   The Users Subscribed Screen (page 6-10) is displayed.

6. Change any necessary settings, and click **OK**.

Viewing Subscription Information

To view subscription information for a revision using the Repository Manager:

1. Display the Repository Manager: Subscriptions Tab (page 6-7).

2. Select the revision you want to view the subscription information for.

3. Select **Functions—Subscribers**, or right-click and select **Subscribers**.

    The Subscribers Screen (page 6-16) is displayed.

4. To narrow the Subscriptions list:

    a. Select the **Use Filter** check box.

    b. Click **Define Filter**.

        The Subscription Detail Screen (page 6-17) is displayed.

    c. Enter the filter criteria.

    d. Click **OK**.

5. To view all subscription details for a particular user or alias, select the user or alias and click **View Details**.

    The Subscription Detail Screen (page 6-17) is displayed.

Deleting a Criteria Subscription

To delete a Criteria subscription:

1. Display the Repository Manager: Subscriptions Tab (page 6-7).

2. Select a subscription.

3. Click **Delete**.

    A confirmation screen is displayed.

4. Click **Yes**.

SUBSCRIPTION INTERFACE SCREENS

The following screens are used when managing subscriptions:

❖ Repository Manager: Subscriptions Tab (page 6-7)

❖ Add New/Edit Subscription Type Screen (page 6-8)

Repository Manager: Subscriptions Tab
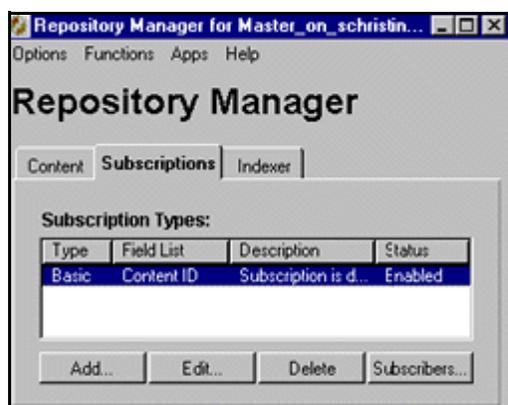
The Subscriptions tab of the Repository Manager is used to create and edit Criteria subscriptions. To access this tab, click the tab on the Repository Manager Main Screen (page 5-6).

Feature	Description
Type column	The name that you give to the subscription.
Field List column	The active criteria fields assigned to the subscription.
Description column	The description that corresponds to the subscription.
Status column	The status: enabled or disabled for the subscription.

Feature	Description
Add button	Displays the Add New/Edit Subscription Type Screen (page 6-8).
Edit button	Displays the Add New/Edit Subscription Type Screen (page 6-8).
Delete button	Removes the subscription from the list.
Subscribers button	Displays the Users Subscribed Screen (page 6-10), on which you add and delete users subscribed to the subscription. Additionally, you can use this screen to view the files in this subscription.

Add New/Edit Subscription Type Screen
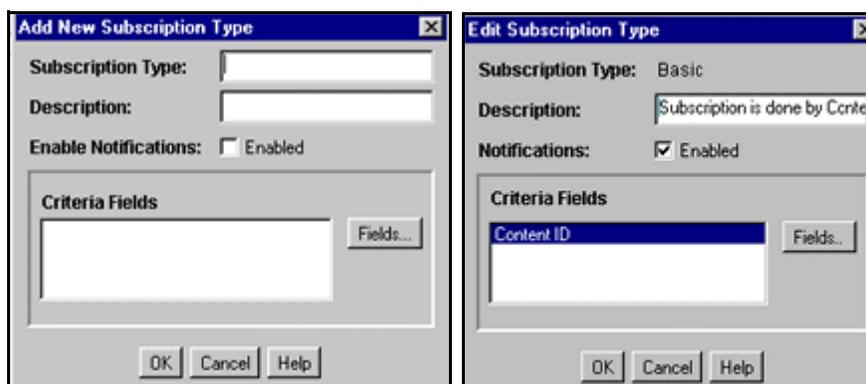
The Add New/Edit Subscription Type screen is used to add or edit a subscription. To access this screen, click **Add** or **Edit** on the Repository Manager: Subscriptions Tab (page 6-7).

Feature	Definition
Subscription Type field	The name that you give to the subscription.
Description field	A description of the subscription.
Notifications check box	**Enabled**—Causes e-mail messages to be sent to subscribers when content meeting the subscription criteria is checked in or updated. **Disabled**—Turns off e-mail notifications to subscribers. This is useful when a mail server is down or overwhelmed.

Feature	Definition
Criteria Fields box	Lists the metadata fields used to define the subscription.
Fields button	Displays the Fields Screen (page 6-9), which you use to define the metadata fields for the subscription.

Fields Screen

The Fields screen is used to define the metadata fields for a subscription. To access this screen, click **Fields** on the Add New/Edit Subscription Type Screen (page 6-8).

Feature	Definition
Check boxes	**Selected**—The metadata field is included in the subscription criteria. **Clear**—The metadata field is not included in the subscription criteria.

Users Subscribed Screen
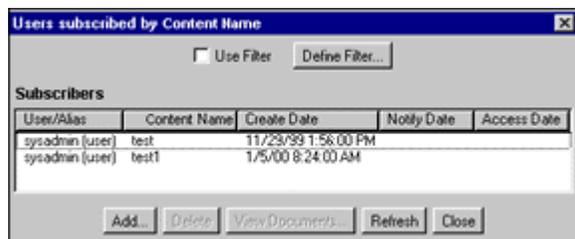
The Users Subscribed screen is used to view, add, and delete specific users and aliases for a subscription. You can also use this screen to view the content items that meet the subscription criteria. To access this screen, select a subscription and click **Subscribers** on the Repository Manager: Subscriptions Tab (page 6-7).

Feature	Description
Use Filter check box	Select this check box to narrow the Subscribers list as defined by the Show Columns Screen (page 1-19).
Define Filter button	Displays the Define Filter Screen (page 6-11).
Subscribers list	Shows the subscribed users and aliases that match the filter settings. **User/Alias column**—The specific user/alias for the subscription. **Criteria columns**—A column is displayed for each metadata field that is included in the subscription criteria. **Create Date column**—The date the user or alias was added to the subscription (regardless of enabled/disabled status). **Notify Date column**—The last date that the user was notified by e-mail about a revision to the subscribed content item. (The notify date is not recorded for an alias.) **Access Date column**—The last date that the user accessed the file defined by the subscription criteria. (The access date is not recorded for an alias.)
Add button	Displays the Add Subscription Screen (page 6-13).
Delete button	Deletes the user or alias from the subscription.

Feature	Description
View Content Items button	Displays the Content Item Subscribed Screen (page 6-12).
Refresh button	Refreshes the screen with the most current data.

Define Filter Screen

The Define Filter screen is used to narrow the list of users and aliases that is displayed on the Users Subscribed screen. To access this screen, click **Define Filter** on the Users Subscribed Screen (page 6-10).

Feature	Description
Check boxes	Select one or more check boxes to activate the filter fields.
Fields	The Users Subscribed Screen (page 6-10) will be filtered based on the criteria entered. The following wildcards can be used in these fields:
	With MS Access or MSDE, * = one or more characters; ? = single character.
	With all other databases, % = one or more characters; _ = single character.

Feature	Description
Alias Type field	**User**—Shows only users. **Alias**—Shows only aliases.
User/Alias field	A specific user or alias name.
Creation Date field	The date the user or alias was added to the subscription (regardless of enabled/disabled status).
Last Notification Date field	The last date that the user was notified by e-mail about a revision to the subscribed content item.
Last User Access Date field	The last date that the user accessed the file defined by the subscription criteria.

Content Item Subscribed Screen
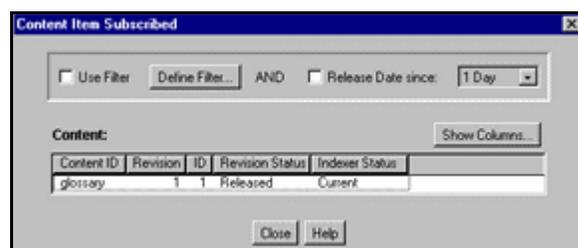
The Content Item Subscribed screen is used to view content items that match the criteria for a subscription. To access this screen, click **View Content Items** on the Users Subscribed Screen (page 6-10).

Feature	Description
Use Filter check box	Select this box to use the filter defined by the Show Columns Screen (page 1-19).
Define Filter button	Displays the Define Filter Screen (page 1-14).
Release Date since check box and list	Select this check box to narrow the Content list as defined by the Release Date option list.

Feature	Description
Show Columns button	Displays the Show Columns Screen.
Content list	Shows the subscribed revisions that match the filter settings. The list displays 50 revisions per page. Double-clicking a revision displays the Information Screen for that revision. See Define Filter Screen (page 1-14) for column descriptions.

Add Subscription Screen

The Add screen is used to add a specific subscription for a user or alias. To access this screen, click **Add** on the Users Subscribed Screen (page 6-10).

Feature	Description
User option	The specified user is to be added to the subscription.
Alias option	The specified alias is to be added to the subscription.
Select (User) button	Displays the Select User Screen (page 6-14).
Select (Alias) button	Displays the Select Alias Screen (page 6-15).

Feature	Description
Criteria fields	The specific metadata values that the selected user or alias will be subscribed to. All criteria fields specified for the subscription are displayed.

Select User Screen
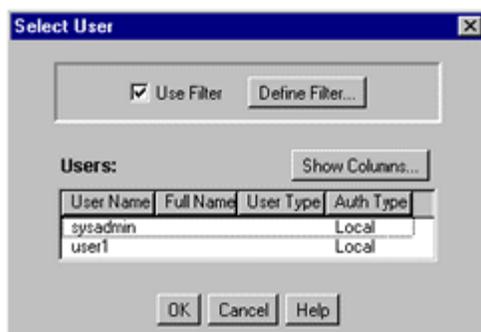
The Select User screen is used to select a user to assign to a subscription. To access this screen, select the **User** option and click **Select** on the Add Subscription Screen (page 6-13).

Feature	Description
Use Filter check box	Select this check box to narrow the Users list as defined by the Define Filter Screen (page 1-14).
Define Filter button	Displays the Define Filter Screen (page 1-14).
Show Columns button	Displays the Show Columns Screen (page 1-19).
Users list	Shows the users that match the filter settings. See Define Filter Screen (page 1-14) for column descriptions.

Select Alias Screen

The Select Alias screen is used to select an alias to assign to a subscription. To access this screen, select the **Alias** option and click **Select** on the Add Subscription Screen (page 6-13).

Feature	Description
Alias column	Lists the available aliases.
Description column	A description of the alias.

Subscribers Screen
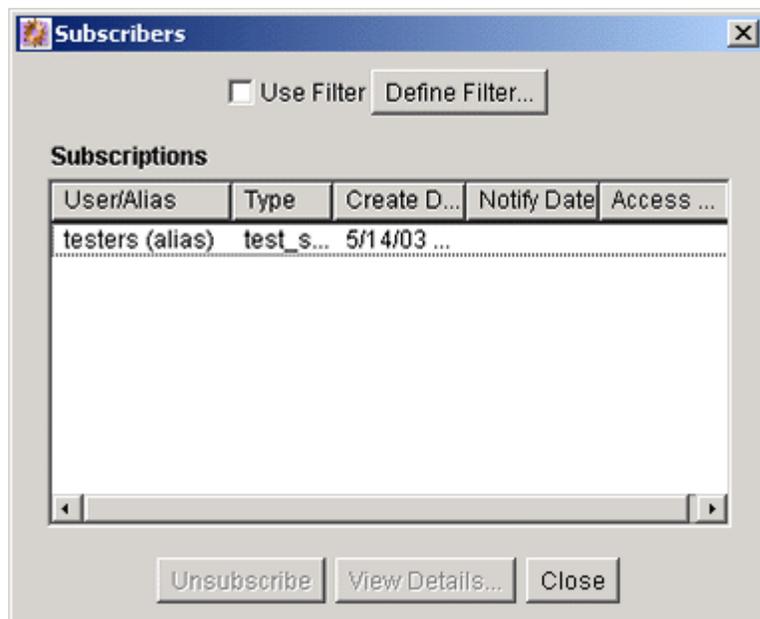
The Subscribers screen is used to view and unsubscribe users from subscriptions to a particular revision. To access this screen, select a revision on the Repository Manager: Content Tab Screen (page 5-8), and do one of the following:

❖ Select **Functions—Subscribers**.

❖ Right-click and select **Subscribers**.

Feature	Description
Use Filter check box	Select this check box to narrow the Subscriptions list as defined by the Show Columns Screen (page 1-19).
Define Filter button	Displays the Define Filter Screen (page 1-14).
User/Alias column	The user or alias that is subscribed to the revision.
Type column	The subscription type.
Create Date column	The date the user or alias was added to the subscription (regardless of enabled/disabled status).

Feature	Description
Notify Date column	The last date that the user was notified by e-mail about a revision to the subscribed content item.
Access Date column	The last date that the user accessed the file defined by the subscription criteria.
Unsubscribe button	Cancels the selected subscription.
View Details button	Displays the Subscription Detail Screen (page 6-17).
Close button	Closes the Subscribers screen.

Subscription Detail Screen
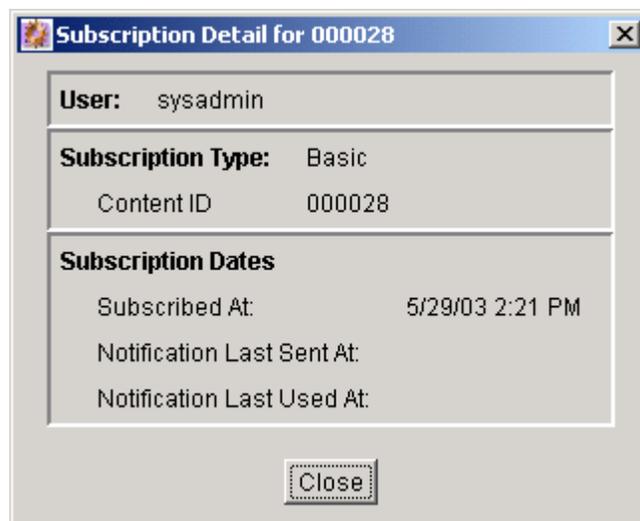
The Subscription Detail screen is used to view the details of a subscription. To access this screen, select a user or alias on the Subscribers Screen (page 6-16), and click **View Details**.

Feature	Description
User or Alias field	The user or alias subscribed to the revision.
Subscription Type field	The type of subscription.
Metadata fields	The fields and values that define the subscription criteria.
Subscribed At field	The date the user or alias was added to the subscription (regardless of enabled/disabled status).
Notification Last Sent At field	The last date that the user was notified by e-mail about a revision to the subscribed content item.
Notification Last Used At field	The last date that the user accessed the file defined by the subscription criteria.

7

USING SCHEMAS TO CUSTOMIZE METADATA

OVERVIEW

This section covers these topics:

Concepts

Tasks

Interface

ABOUT DCLS AND METADATA SCHEMAS

The Information Fields tab of the Configuration Manager enables you to create custom metadata fields with option lists. Additionally, you can structure an information field to make its associated option list dependent on another information field's option list. This organization is called a *dependent choice list* (DCL).

For example, assume there is an option list for a Country information field and another option list for a State information field. The available choices in the State option list would be dependent on which country was selected from the Country option list.

The metadata schema mapping feature is similar to the dependent choice list function in that a hierarchical structure can be created for information field option lists. However, the metadata schema mapping is more versatile. Option list views can be easily adjusted to accommodate localization requirements.

The Content Server metadata schema mapping feature involves the structure that is set up and used to manage information lists and corresponding option lists. A metadata schema defines the option lists (contained in database tables), the available choices (values in the table columns), and dependencies (relationships) between the choices and option lists.

Schemas can be complex to set up. If you have any questions prior to setting up a schema, contact Consulting Services to review your plans.

Note: Because Internet Explorer 5.0 does not support DHTML, any DCLs created using the Content Server schema mapping feature do not display the option list values. This is not an issue with Internet Explorer 6.0.

When using schemas with Content Publisher, wrapping a query page in a table causes an error in Internet Explorer. This is caused by the interaction of schema with the page.

This section covers the following topics:

❖ Schema Hierarchical Structure (page 7-3)

❖ Schema Elements (page 7-5)

❖ Sample Schema-Based Option Lists (page 7-7)

❖ Directory Structure for Schema (page 7-8)

Schema Hierarchical Structure

A *schema* is a collection of related schema objects. The term schema also refers to a graphical depiction of the database hierarchy that is created to support the Content Server metadata schema mapping feature. The schema hierarchical structure consists of tables and their respective columns (or fields), views of the data, and the relationships between them.

The Country and State example can be continued to more fully describe a schema hierarchy. Additional information fields (City, Region, and Area Code) are included to illustrate a three-tiered dependency structure.

In Figure 7-1, the sample basic schema hierarchy, one independent field has two dependent fields. Each dependent field also has a dependent field. These dependencies are also referred to as *Parent/Child relationships*.

Figure 7-1   Basic Schema Hierarchy Example
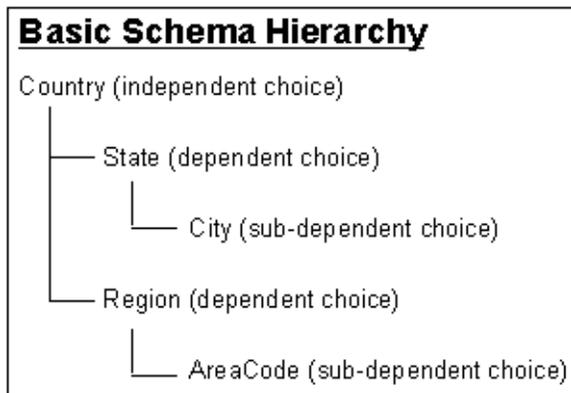
This three-level schema hierarchy produces five distinct metadata fields: **Country, State, City, Region**, and **Area Code**. Each field presents a specific option list to the user.

The contents of the option lists are contingent on whether the information field is dependent or not. Thus, the following option lists result from the sample basic Country/State/Zip schema hierarchy:

❖   The Country option list is independent and the choices remain constant.

❖   The choices available in the State option list are variable and depend on which country the user selects from the Country option list.

❖   The choices available in the City option list are variable and depend on which state the user selects from the State option list.

❖   The choices available in the Region option list are variable and depend on which country the user selects from the Country option list.

❖   The choices available in the Area Code option list are variable and depend on which region the user selects from the Region option list

Schema Elements

Schemas are comprised of:

❖ Tables (page 7-5)

❖ Views (page 7-6)

❖ Relationships (page 7-6)

Tables

Schema tables are database tables that store the choices displayed in information field (metadata) option lists.

Tables and their columns are created using the Tables tab (see Configuration Manager: Tables Tab (page 7-14)). Multiple columns can be created in each table but at least two are essential for producing dependent choice lists:

❖ The common column name used to create the dependency between one option list and a second option list that is dependent on the choice made from the first (for example, Country and State, respectively).

❖ The column that stores the choices for metadata option lists.

Figure 7-2   Schema Tables Example

Using the geographical example (Country, State, City, Region, Area Code) in the three-tiered schema hierarchy, a table must be created for each *branch* in the schema tree structure. Additionally, the dependent tables (child tables) must contain a column that corresponds to an identical column in the table to which it is subordinate (the parent table). These corresponding columns are used to create the dependencies between the two tables and are ultimately used to generate the dependent choice lists.

For example, the tables in Figure 7-3 illustrate how the Country and State table columns might be populated. The data in each **name** column provides the choices available on the option lists. The relationship that is created between the corresponding columns in the

Country and State tables (countryID) determines what choices are displayed in the State metadata option list.

Figure 7-3   Populated Schema Tables

Country		State		
countryID	**countryName**	**countryID**	**stateID**	**stateName**
1	United States	1	1A	Minnesota
2	Canada	1	1B	Wisconsin
		2	2A	Manitoba
		2	2B	Ontario

Views

A view is a tailored presentation of the corresponding table. Views do not contain data, but they derive data from their tables. Views are used to simplify a database for use and to present data in a different perspective.

A view consists of a list of properties and associated display rules. Each table in the schema must have an associated view. Views provide information about these items:

❖ Specific columns in the table included in the schema. The selected columns are used to establish the dependencies between tables and also to generate the dependent choice lists.

❖ Internal and external column names.

❖ User interface display characteristics.

❖ Editing and sort order criteria.

Relationships

Relationships define the dependencies between tables and are essential in generating the appropriate dependent choice lists. Each defined relationship establishes the correspondence between parent and child tables. This correspondence is created by specifying the column in the child table that is dependent on the column in the parent table. Thus, the choices displayed using column data from the child table are contingent on the choice made from the corresponding column data from the parent table.

Figure 7-4   Table and Column Relationships
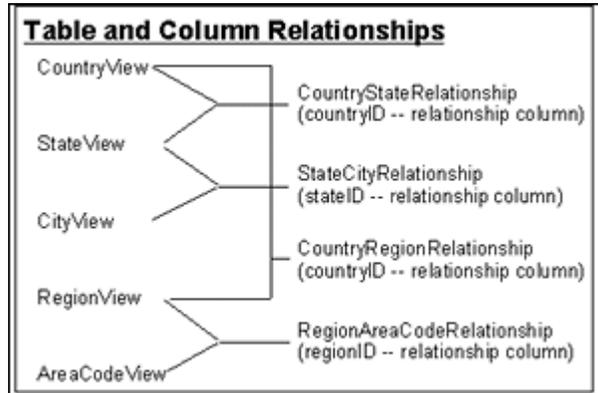
For example, in Figure 7-4, the CountryView (Country table) and the StateView (State table) use the countryID column to create a relationship that generates a parent country list and a child state list. This means that the choices available in the State metadata option list are dependent on the choice made in the Country metadata option list.

Sample Schema-Based Option Lists

After the schema tables, views, and relationships are created and properly established, the option lists display the appropriate choices. For example, in Figure 7-5, the Country option list now displays two choices: United States and Canada.

Figure 7-5   Option List Example

Because the State metadata field is contingent on the Country field, the State option list contains items based on the choice made in the Country option list. In this case, if the United States choice is selected, the State option list displays Minnesota and Wisconsin as choices. If Canada had been selected, then the State option list would display Ontario and Quebec.

Figure 7-6   Dependent Option List Example

Directory Structure for Schema

Three subdirectories are associated with the Schema function:

❖ schema

❖ schema.work

❖ schema.old

These are located in the *<install_dir>*/*<instance>*/weblayout/resources directory.

The schema.work directory is usually not listed because it is a temporary directory. When the schema creation process completes, the directory is renamed. If this directory exists it indicates one of the following:

❖ A large schema rebuild is in progress

❖ The schema is created, but there is a problem with the schema structure.

Caution: If you are working inside the directory structure to review the Schema files and directories, be sure to close all open applications that are accessing these files. The directories are renamed on completion of processing. However, if external applications, such as text editors, are using these files the schema.work directory cannot be renamed.

CREATING SCHEMAS

The Tables, Views, and Relations tabs in the Configuration Manager are used to create the schema structure.

❖ The Table tab is used to select or create the database tables.

❖ The Views tab is used to manipulate the views used in the schema.

❖ The Relations tab is used to manipulate the dependencies.

The Information Fields tab is used to create the metadata fields that are used on Content Server pages. The metadata fields must be correlated to the tables and views to properly display the option lists.

New or modified schemas are automatically updated during each scheduled publishing cycle. Because the default interval between each publishing cycle is set to four hours, you will not see immediate results for new or modified schemas. You can, however, adjust the interval between each publishing cycle by changing the default value of a configuration variable. For more information, see Modifying the Publishing Cycle Interval (page 7-12).

This section covers the following topics:

❖ Building a Basic Schema (page 7-9)

❖ Modifying the Publishing Cycle Interval (page 7-12)

Building a Basic Schema

This section provides an overview of a simple sequence using the applicable Configuration Manager tabs to create a schema structure. See Schema Interface Screens (page 7-13) for representations of the screens used to create a schema.

Selecting Tables for the Schema

1. Select the Configuration Manager: Tables Tab (page 7-14)).

2. To add tables to the schema, select **Add Tables** and choose the tables to add to the schema from the Select Table Screen (page 7-15). If you are creating a new table, select **Create Table**.

Important: While you can use core Content Server system tables such as Revisions, Alias, Documents, and Users you cannot edit those tables (remove columns, alter column length, etc.)

3. After selecting the tables to use, the Create/Edit Table "name" Screen (page 7-16) is displayed with Table Column names filled in.

4. Select the column that will be used as a primary key to establish a dependency and select **Edit**. The Add/Edit Column Screen (page 7-18) is displayed.

5. Check the box labeled "Primary Key" and click **OK**. Select **Add Recommended** to add recommended columns to the table.

Repeat these steps for all tables that will be used together in the schema. When finished, click **OK**.

Creating the Schema View

1. Select the Configuration Manager: Views Tab (page 7-19). The names of configured views are displayed.

2. To create a new view, click **Add** to open the Add View Screen: Select Table (page 7-20) page.

3. Select the table to use in the view, and click **Next**. The Add View Screen: Select Columns (page 7-21) page is displayed.

4. Choose the columns to include in the view, and click **Finish**. The Add/Edit View Screen: Info Tab (page 7-21) is displayed.

5. Select a name for the view, and add information for the description. Choose the internal column (name in the database) to use in the view, and choose the visible column that is displayed to end users. You can also set a display expression, which determines how the name in the option list will be displayed. When done, click **OK**.

6. Repeat these steps for all tables to be included in the view.

Creating the Schema Relationships

1. After the tables and associated views are completed, select the Configuration Manager: Relations Tab (page 7-30) to establish the dependencies between tables and columns. A list of the currently existing schema relationships is displayed.

2. Click **Add** to set up a new schema relation. The Add/Edit Relationship Screen (page 7-31) is displayed.

3. Enter the name of the relationship (for example, Country_State to indicate the relationship between the Country and the State tables). In the Parent Info pull-down box, select the table where the parent information resides (for example, the Country table) and the column that will be used to establish the dependencies (for example, the Country ID). Do the same for the Child Info field (for example, selecting State as the table name and countryID as the relationship).

4. Click **OK** when done. The new relationship is now displayed on the **Relations** list.

Adding Metadata Fields

The final phase in schema creation is to set up the metadata fields to use the columns and to configure them to use the Views and Relations created previously. See Adding a Metadata Field (page 4-7) and Defining an Option List (page 4-8) for an overview of this procedure.

This can be a somewhat complex procedure and is dependent on the types of fields you've set up. See the SchemaDCLSample component for a complete tutorial in enabling the metadata fields for your Dependent Choice Lists.

Enabling the Schema

After the configuration of the schema, the views, and the relationships is completed, you must update your database design (a selection key on the Configuration Manager screen) and you should click **Options—Publish Schema** from the Configuration Manager menu.

Republishing (updating) of schema takes place automatically based on these things:

❖ Existence of the data/schema/publishlock/publish.dat file.

❖ The internal schedule of automatic publishing times. See Modifying the Publishing Cycle Interval (page 7-12) for details.

❖ How long it took to publish schema last time.

Do not select **Options—Publish Schema** unless you need to see the new Content Type quickly and do not mind the load on the system that may occur when large option lists are republished.

Modifying the Publishing Cycle Interval

New or modified schemas are automatically updated during the automatic schema publishing cycle. However, by default, the interval between publishing cycles is set to four hours. This means that new schemas or changes to existing schemas will not be seen in the corresponding drop-down menu lists until the completion of the next publishing cycle. However, you can adjust the publishing cycle interval by changing the value of the SchemaPublishInterval configuration variable.

To change the interval of schema publishing cycles:

1. In a text editor, open the *<install_dir>*/config/config.cfg file.

2. Add the following configuration variable and value:

   ```
   SchemaPublishInterval=300
   ```

   The value is specified in seconds. Therefore, in this configuration example, the option lists will be republished every 300 seconds (i.e., 5 minutes).

   Note: Depending on the number of option lists in addition to the size and complexity of each list, automatically republishing (updating) your schemas frequently may have a significant impact on your system's performance.

3. Save and close the config.cfg file.

4. Restart Content Server to apply the changes.

   Note: The queries for schema publishing are cached up to five minutes. Therefore, publishing more frequently will not retrieve new values until the current cache expires.

If a new value is added to a metadata field, that value will not be displayed on the content item's Content Information page until the next publishing cycle is complete.

If one content item is checked with a unique value in a dynamic option list and a second item is checked in with the same value but using a different case, the value is treated as one value in the option list. The case used is dependent on the database sorting scheme.

For more information about creating dynamic option lists, see Schema Example: Dynamic Option Lists (page 7-33).

SCHEMA INTERFACE SCREENS

The following screens are used to create a schema:

❖ Configuration Manager: Tables Tab (page 7-14)

❖ Select Table Screen (page 7-15)

❖ Create/Edit Table "name" Screen (page 7-16)

❖ Add/Edit Column Screen (page 7-18)

❖ Configuration Manager: Views Tab (page 7-19)

❖ Add View Screen: Select Table (page 7-20)

❖ Add View Screen: Select Columns (page 7-21)

❖ Add/Edit View Screen: Info Tab (page 7-21)

❖ Add/Edit View Screen: Change Columns (page 7-23)

❖ Add/Edit View Screen: Display Tab (page 7-23)

❖ Add/Edit View Screen: Display Tab: Edit Display Rule (page 7-24)

❖ Add/Edit View Screen: Options Tab (page 7-25)

❖ Add/Edit View Screen: Security Tab (page 7-26)

❖ Edit Values For View Screen (page 7-27)

❖ Add/Edit Value Screen (page 7-28)

❖ Edit Values: Edit Batch (page 7-29)

❖ Configuration Manager: Relations Tab (page 7-30)

❖ Add/Edit Relationship Screen (page 7-31)

❖ Edit Tree Screen (page 7-32)

Configuration Manager: Tables Tab
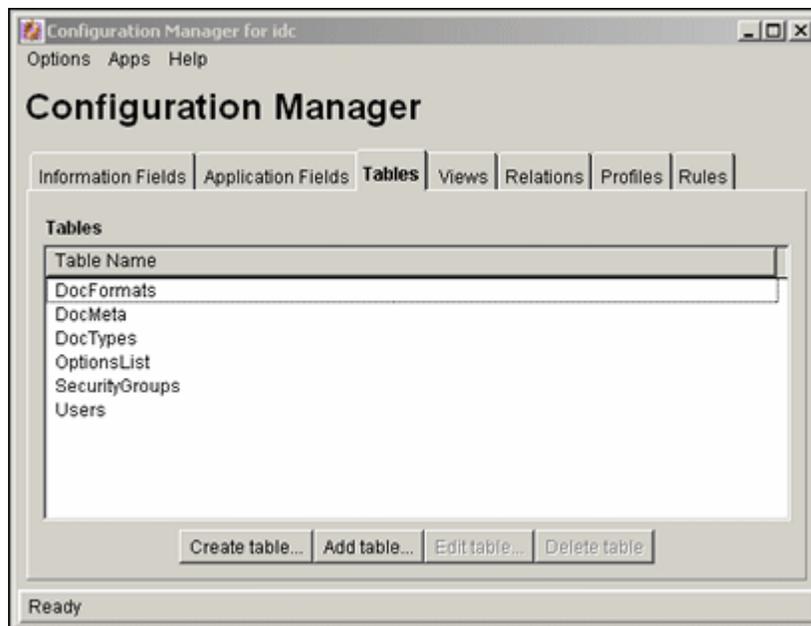
⚠ **Important:** While you can use core Content Server system tables such as Revisions, Alias, Documents, and Users you cannot save any edits to those tables (if you try to remove columns, alter column length, etc.)

The Tables tab on the Configuration Manager is used to create or edit tables and columns used in schemas. To access this screen, click the **Tables** tab on the Configuration Manager Application (page 1-9).

💡 **Note:** If you are not using existing tables when establishing views and relationships, you will need to use an external tool to generate records and populate the tables that you create using the Tables tab.

Feature	Description
Table Name column	Lists the existing tables.
Create table button	Displays the Create/Edit Table "name" Screen (page 7-16).
Add table button	Displays the Select Table Screen (page 7-15).
Edit table button	Displays the Create/Edit Table "name" Screen (page 7-16).

Feature	Description
Delete table button	Enables you to delete the selected table.

Select Table Screen
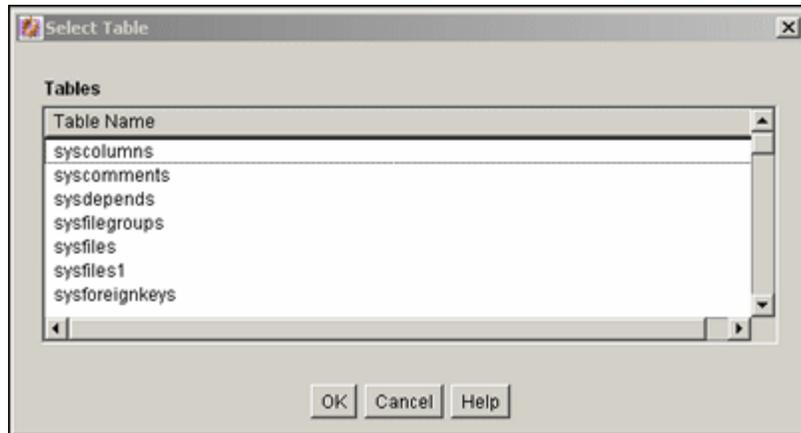
The Select Table screen is used to indicate which tables will be used in the schema. This screen displays a list of tables that can be used. It is accessed by clicking **Add Table** from the Configuration Manager: Tables Tab (page 7-14) screen or **Add Table** on the Add View Screen: Select Table (page 7-20) page.

Feature	Description
Table Name list	Lists the existing Content Server database tables from the list.

Create/Edit Table "*name*" Screen

This screen is used to specify the columns in tables to be used in a schema. To access this screen, click **Create Table** or **Edit Table** on the Configuration Manager: Tables Tab (page 7-14) screen or click **Create Table** on the Add View Screen: Select Table (page 7-20) page.

Important: While you can use core Content Server system tables such as Revisions, Alias, Documents, and Users you cannot save any edits to those tables.

Feature	Description
Table Name field	The name of the table to be created or edited.
Table Description field	A brief description of the table to be created of edited.
Column fields	Displays the columns and their properties that are included in this table.
Add button	Displays the Add/Edit Column Screen (page 7-18).
Edit button	Displays the Add/Edit Column Screen (page 7-18).
Delete button	Enables you to delete the selected column.
Add Recommended button	Standard, recommended columns that are added to the table. For example, schPrimaryKey, schCreateTimestamp, schModifyTimestamp, and schSourceID.
Row Creation Timestamp Column list	This column must be added to the table to ensure that table replication functions properly. This field indicates the timestamp when a row in the table is created.
Row Modification Timestamp Column list	This column must be added to the table to ensure that table replication functions properly. This field indicates the timestamp when a row in the table is modified.
Synchronize definition	Loads the definition of the table from the database and synchronizes it with the one currently in view. This is particularly useful when two people are manipulating the table simultaneously and a warning is issued, indicating that the copy of the table is outdated. Synchronizing the definition will update the table.

Add/Edit Column Screen

The Add/Edit Column screen is used to select the column that will be the primary key in the schema. To access this screen, select a column from the and click **Edit** or click **Add** to create a new column.

Feature	Description
Column Name field	The name of the column to be created or edited. **Note:** To avoid potential conflicts with Content Server database tables, always add a prefix to column names. For example, schColumnOne.
Column Type list	Select the column type from the list (varchar is the default value).
Column Length field	The length of the value to be stored in the column.
Primary Key check box	If selected, this column is designated as a primary key for the table.

Configuration Manager: Views Tab
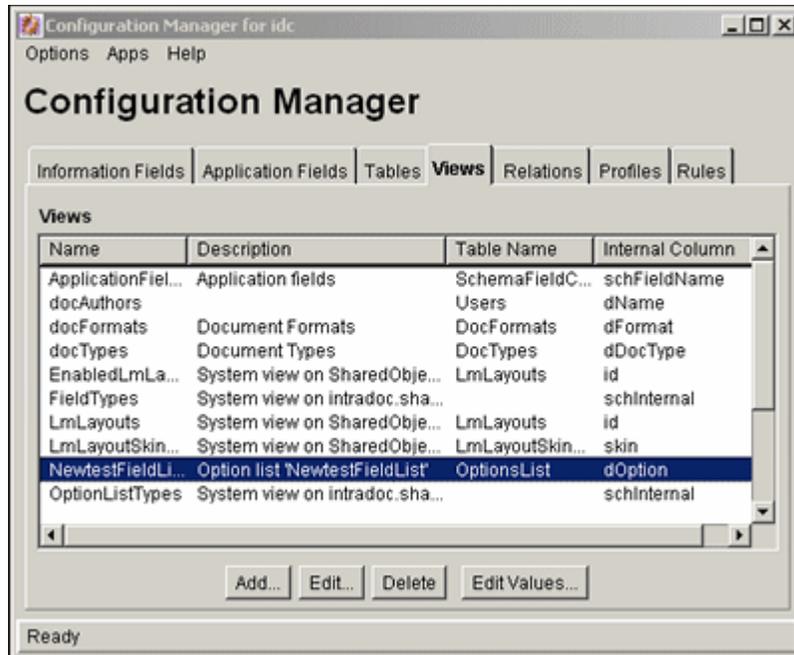
The Views tab is used to create the views used with the schemas. To access this screen, click the **Views** tab on the Configuration Manager Application (page 1-9).

Feature	Description
Views list	Lists the existing views.
Add button	Displays the Add View Screen: Select Table (page 7-20) screen.
Edit button	Displays the Add/Edit View Screen: Info Tab (page 7-21).
Delete button	Enables you to delete the selected view.
Edit Values button	Displays a screen such as the Add/Edit Value Screen (page 7-28) or the Option List Screen (page 4-19) where you can add or change values in the table associated with the view. The screen which appears is dependent on the type of table used for the view.

Add View Screen: Select Table
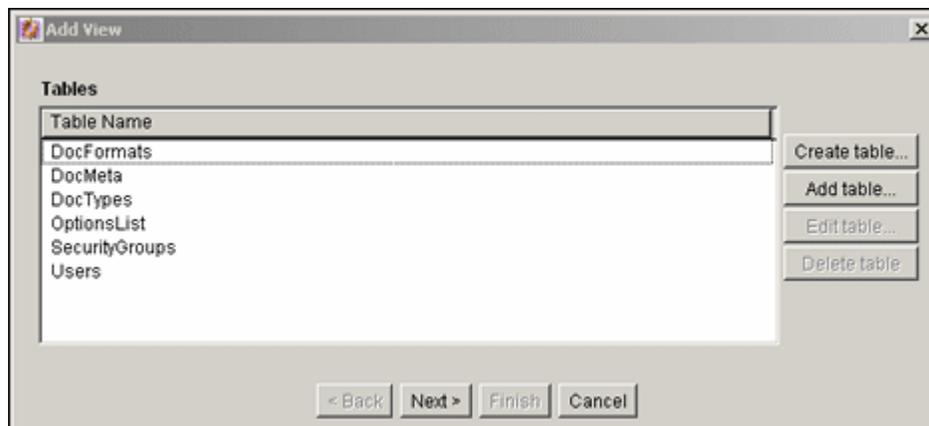
The Select Table screen is used to create a new view for a schema. To access this screen, click **Add** from the Add View Screen: Select Table (page 7-20) screen.

Feature	Description
Table Name list	Lists the tables created that do not already have a view.
Create table button	Displays the Create/Edit Table "name" Screen (page 7-16), used to create a new table.
Add table button	Displays the Select Table Screen (page 7-15), used to add a table to the view.
Edit table button	Displays the Create/Edit Table "name" Screen (page 7-16), used to alter the table and the primary keys.
Delete table button	Enables you to delete the selected table in this schema.

Add View Screen: Select Columns
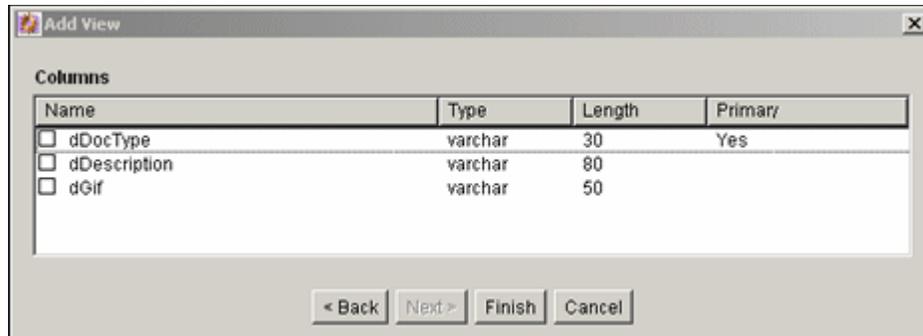
The Select Column screen is used to choose the columns for the schema view. To access this screen, select a table from the Add View Screen: Select Table (page 7-20) page and click **Next**.

Feature	Description
Name list	Lists the names of the existing table columns that can be selected to be included in the view and published out to schema.

Add/Edit View Screen: Info Tab
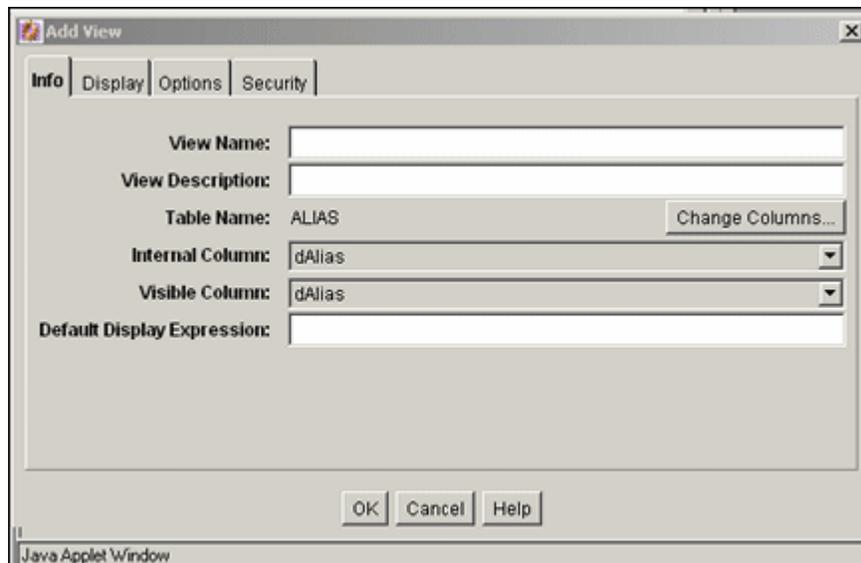
The Info Tab of the Add View screen is used to name the new view for the schema. This screen is displayed after you choose the columns to use for the view on the Add View Screen: Select Columns (page 7-21) page and click **Finish** or if you choose a view to edit on the Configuration Manager: Views Tab (page 7-19).

Feature	Description
View Name field	The name of the view to be created or edited.
View Description field	A brief description of the view to be created.
Table Name field	The table associated with this view.
Change Columns button	Displays the Add/Edit View Screen: Change Columns (page 7-23) screen. Changes the columns originally selected.
Internal Column list	The column name in the view being created (used internally).
Visible Column list	The column name displayed to system users.
Default Display Expression field	This field determines how the name in the corresponding option list will be displayed. The value in this field can be either text or an Idoc Script expression. **Note:** Whatever value is set for this field will be displayed on the Content Information page rather than the actual value that is assigned to that field. To avoid this, clear this field when creating the view.

Add/Edit View Screen: Change Columns
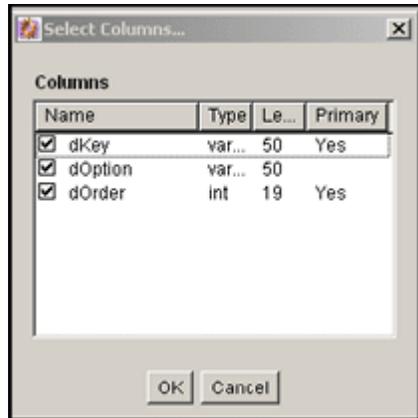
The Change Column screen is used to change the list of columns to be used in the schema view. This screen is accessed by click the **Change Columns** button next to the table name on the Add/Edit View Screen: Info Tab (page 7-21) screen.

Feature	Description
Columns list	Lists the existing view columns and is used to change the columns originally selected using the Add View Wizard. See Add View Screen: Select Columns (page 7-21).

Add/Edit View Screen: Display Tab
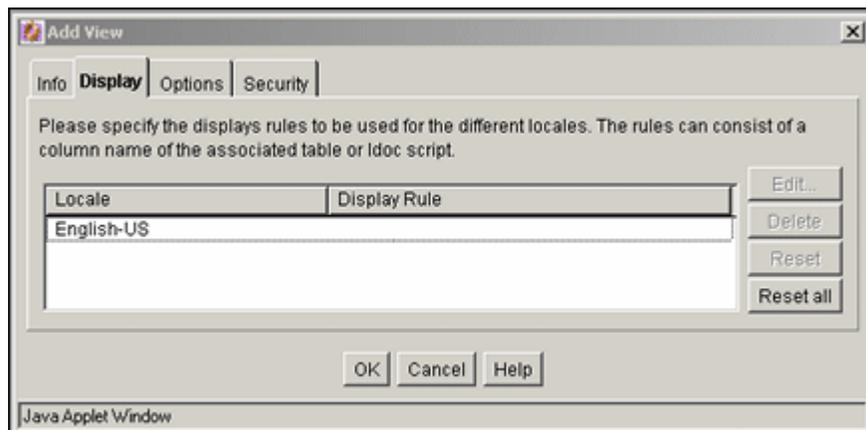
The Display tab on the Add View Screen is used to specify rules for the display of the schema data. This screen is displayed after you select a view and click **Edit** on the

Configuration Manager: Views Tab (page 7-19) or after you click **Add** on the Configuration Manager: Views Tab (page 7-19) and follow the steps needed to create a new view. Click the **Display** tab to display this screen.

Feature	Description
Locale/Display Rule list	Lists the defined display rules for the locales.
Edit button	Displays the Edit Display Rule screen for the selected rule. See Add/Edit View Screen: Display Tab: Edit Display Rule (page 7-24).
Delete button	Enables you to delete the selected locale/display rule.
Reset button	Resets the display rule for the selected locale.
Reset all button	Resets all of the display rules for their respective locales.

Add/Edit View Screen: Display Tab: Edit Display Rule

The Edit Display Rule screen is used to alter the display rules for the schema. To access this screen, click the **Edit** button on the Add/Edit View Screen: Display Tab (page 7-23) screen.

Feature	Description
Display Rule list	The pull-down menu lists the columns originally selected on the Add View Screen: Select Columns (page 7-21) screen.

Add/Edit View Screen: Options Tab

The Options tab of the Add View Screen is used to establish the sort order and criteria for the data in the schema. This screen is displayed after you click **Edit** on the Configuration Manager: Views Tab (page 7-19) or after you click **Add** on the Configuration Manager: Views Tab (page 7-19) and follow the steps needed to create a new view. Click the **Options** tab to display this screen.

Feature	Description
Column list	Lists the columns originally selected using Add View Screen: Select Columns (page 7-21).
Edit criteria field	Enter or edit the edit criteria statement which will be used to narrow the table values used in the view.
Is sorted by check boxes	As selected, either the server, the database, or the client database provides sorting functionality.
Sort Field lists	Lists the columns to be used in sorting.
Sort Order	Sorts either in ascending or descending order.

Add/Edit View Screen: Security Tab
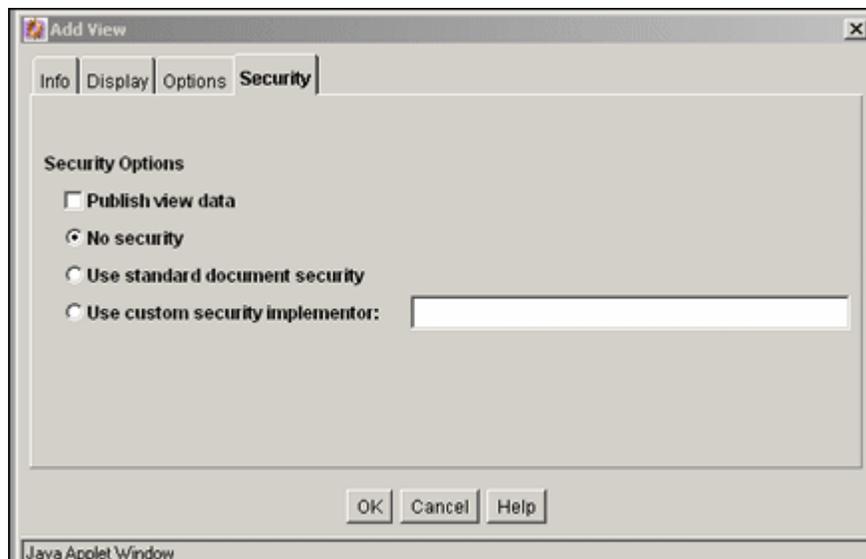
The Security tab on the Add/Edit View Screen is used to establish the security rules to use for the schema. This screen is displayed after you click **Edit** on the Configuration Manager: Views Tab (page 7-19) or after you click **Add** on the Configuration Manager: Views Tab (page 7-19) and follow the steps needed to create a new view. Click the **Security** tab to display this screen.

Feature	Description
Publish view data	Allows the view that was set up to be visible to other users..
No security	Disables standard filter security for the schema.
Use standard document security	Provides a minimal level of security for the schema and the documents in the schema..
Use custom security implementator	Enables you to alter the security filter.

Edit Values For View Screen
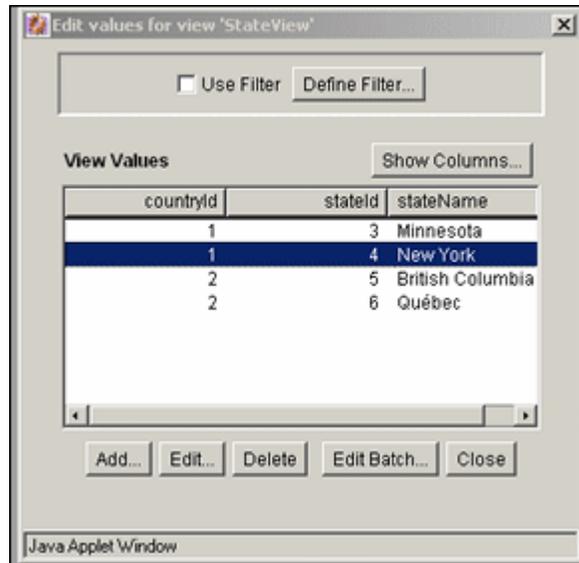
The Edit Value for Views screen is used to select values that are assigned to the view for editing. To access this screen, click **Edit Values** on the Configuration Manager: Views Tab (page 7-19). This screen is identical to the Edit View Values Screen (page 4-18), which can be accessed through the Configuration Manager. See Defining an Option List (page 4-8) for details.

Note: The type of information displayed on this screen is dependent on the type of option list you chose to use for the view.

Feature	Description
Use Filter/Define Filter	Used to alter which values are displayed in the selected columns.
Show Columns	Limits the number of columns to show in the view. See Show Columns Screen (page 1-19).
Add	Displays the Add/Edit Value Screen (page 7-28), used to edit values in the view or to add a new column to the table.
Edit	Displays the Add/Edit Value Screen (page 7-28), where you can alter the values in a column.

Feature	Description
Delete	Used to delete a value from the table. You are prompted to confirm the deletion.
Edit Batch	Displays the Edit Values: Edit Batch (page 7-29) screen, used to copy and paste large amounts of information in order to alter values.

Add/Edit Value Screen

This screen is used to change the values in the view or to add a new column to the table associated with the new metadata field. To access this screen, highlight a value assigned to the view on the Edit Values For View Screen (page 7-27) and click **Edit**.

Edit Values: Edit Batch
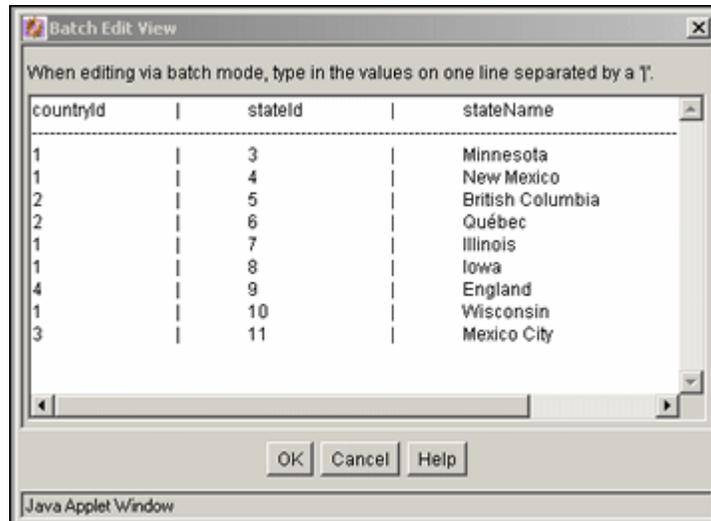
The Edit Batch screen is used to alter large amounts of information in a line editor, compared to the single line edits made with the Add/Edit Value Screen (page 7-28) or the Edit View Values Screen (page 4-18).

To access this screen, click **Edit Batch** on the Edit Values For View Screen (page 7-27).

The existing columns in the table are displayed. You can add values to the table by entering the data in the appropriate columns, separated by a pipe (|) symbol. Each row in the table should begin on a new line.

Configuration Manager: Relations Tab
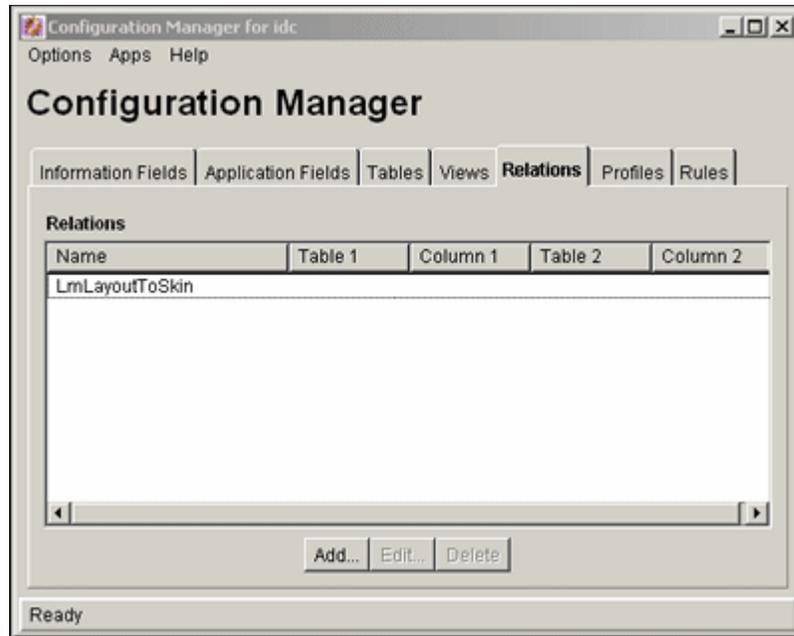
The Relations tab of the Configuration Manager is used to establish the relationship between schema views and schema tables. To access this screen, click the **Relations** tab on the Configuration Manager Application (page 1-9).

Feature	Description
Relations list	Lists the existing relationships between specific tables and columns.
Add button	Displays the Add/Edit Relationship Screen (page 7-31).
Edit button	Displays the Add/Edit Relationship Screen (page 7-31).
Delete button	Enables you to delete the selected relationship.

Add/Edit Relationship Screen

The Add/Edit Relationship Screen is used to add or alter a schema relationship between a table and a view. To access this screen, select Add or Edit from the Configuration Manager: Relations Tab (page 7-30).

Feature	Description
Relationship Name field	Name of relationship being created or edited.
Relationship Description field	Brief description of relationship.
Parent Info list	Name of the table that determines choices in dependent choice list.
Field list	Name of the column in the parent table.
Child Info list	Name of the table that is dependent upon the choice from the parent table.
Field list	Name of the column in the child table.

Edit Tree Screen
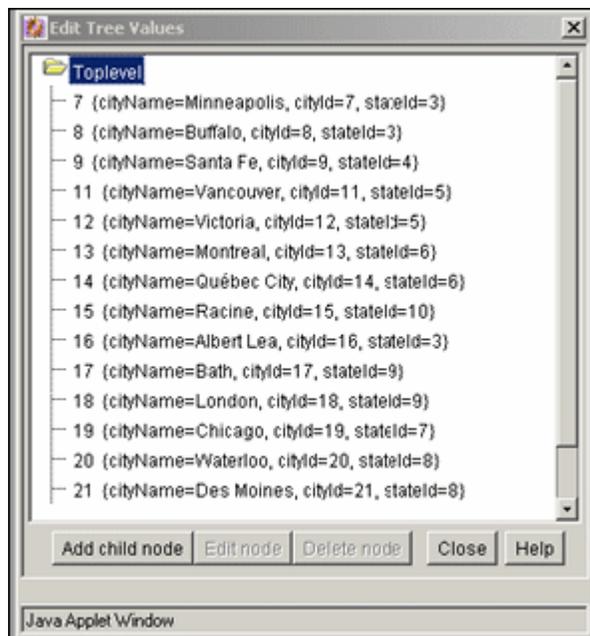
The Edit Tree screen provides a hierarchical view of the values in an option list or table. To access this screen, highlight a field associated with a table and select **Edit Tree** from the Configuration Manager: Information Field Tab (page 4-10). Note that if you are using an option list created with the Option List Screen (page 4-19), that option list appears rather than the hierarchical view of a tree.

Feature	Description
Add Child Node	Active when a parent node is selected. This displays the Add Node screen, which has the same functionality as the Add/Edit Value Screen (page 7-28). See those field descriptions for details on use.
Edit Child Node	When a node is selected, displays the Edit Node screen, which has the same functionality as the Add/Edit Value Screen (page 7-28). See those field descriptions for details on use.
Delete node	Used to delete a node from the table. If a parent is deleted, subsequent children are also deleted.

SCHEMA EXAMPLE: DYNAMIC OPTION LISTS

Creating a *dynamic* option list enables users to add values to metadata drop-down option lists. For example, if a value already exists in an option list, users can select the value from the list. However, if it's a new value, users can enter the value into a text field and it becomes available as an option following the next publishing cycle. For more information about automatic publishing cycles and their intervals, see Modifying the Publishing Cycle Interval (page 7-12).

To create a dynamic option list, first create a view into the table in the database. The option list values are pulled directly from the metadata columns where they are stored. As content items are checked in, revised, and removed, the option list values change or are updated accordingly.

The following is an example of creating a dynamic option list:

1. Click the **Admin Applets** link in the Administration Tray.

   The Administration page is displayed.

2. Click the **Configuration Manager** icon.

   The Configuration Manager: Information Field Tab (page 4-10) is displayed.

3. Click **Add** on the Information Fields tab.

   The Add Metadata Field Name Screen (page 4-12) screen is displayed.

4. Enter the name of the metadata field that has the dynamic option list. For example, TestMetadata.

5. Click **OK**.

   The Add/Edit Metadata Field Screen (page 4-13) for TestMetadata is displayed.

6. Complete the fields as desired but do not select the Enable Option List check box.

7. Click **OK**.

   The screen is closed and the metadata field is added to the Field Info list on the Configuration Manager: Information Field Tab (page 4-10).

8. Click **Update Database Design**.

   The Update Database Design Screen (page 4-21) is displayed and informs you that the TestMetadata will be added.

9. Click **OK**.

10. Open the Configuration Manager: Views Tab (page 7-19) and click **Add**.

The Add View Screen: Select Table (page 7-20) screen is displayed.

11. Click **Add Table**.

    The Select Table Screen (page 7-15) is displayed.

12. Select the **DocMeta** table.

13. Click **OK**.

    The Select Table screen is closed and the DocMeta table is added to the Tables list on the Add View Screen: Select Table (page 7-20) screen.

14. Click **Next**.

    The Add View Screen: Select Columns (page 7-21) screen with column names is displayed.

15. Select the column you want to use to create the option list for TestMetadata.

16. Click **Finish**.

    The Add/Edit View Screen: Info Tab (page 7-21) page is displayed.

17. Enter a view name. For example, `TestMetadata_view`.

18. Click **OK**.

19. Open the **Information Fields** tab on the Configuration Manager: Information Field Tab (page 4-10) and select TestMetadata.

20. Click **Edit**.

    The Add/Edit Metadata Field Screen (page 4-13) for TestMetadata is displayed.

21. Select the **Enable Option List** check box.

22. Click **Configure**.

    The Add/Edit Custom Info Field: Configure Option List Screen (page 4-15) for TestMetadata is displayed.

23. Select **Edit and Select List** from the Option List Type drop-down option list.

24. Select the **Use View** radio button and select a view from the drop-down option list. For example, `TestMetadata_view`.

25. Click **OK**.

    The Add/Edit Custom Info Field: Configure Option List Screen (page 4-15) is closed.

26. Click **OK**.

    The Add/Edit Metadata Field Screen (page 4-13) is closed.

27. Select **Publish schema** from the Options menu on the Configuration Manager: Information Field Tab (page 4-10).

You can test this option list by checking in a document and entering a value into the new dynamic metadata field. Initially, the option list is empty because no documents have been checked in that contain data in the TestMetadata field. However, as documents are checked in with values entered in TestMetadata, the option list will include them.

USING PROFILES TO CUSTOMIZE CONTENT SCREENS

OVERVIEW

This chapter covers these topics:

Concepts

Tasks

Interface

Examples

ABOUT CONTENT PROFILES

Administrators can use Content Profiles to configure Check In, Update, Content Information, and Search pages, so end users see only directly relevant metadata fields, thereby rendering basic pages simpler to use.

Content profiles do not create or modify any content server tables. They are simply used as a type of filter for what information will be displayed. All information for the Content Profile is stored on the file system in the *<install_dir>*/*<instance_dir>*/data/profiles/document/ directory.

This section covers the following topics:

❖ Content Profile Elements (page 8-4)

❖ Profile Links (page 8-5)

Content Profile Elements

A profile is composed of rules and a trigger value, which are set up on the Profiles and Rules tabs of the Configuration Manager screen. Administrators can create multiple content profiles and all are available to the end user. For each profile, the end user has a distinct Check In page and Search page available. Although all profiles are visible to all users, each user can configure their user interface to hide or display links to specified profiles. See Profile Links (page 8-5).

Note: Documents cannot be associated with more than one profile in the system.

Content profiles consist of:

❖ Rules (page 8-4)

❖ Triggers (page 8-5)

Rules

A rule consists of a set of metadata fields that determine whether fields are editable, required, hidden, excluded, or read-only based on their criteria when specific conditions are met. You can change a rule's behavior based on an input, or *activation condition*. A rule can be evaluated for every profile (*global*), or it can be evaluated for specific profiles. For ease of use, you can use rules to group metadata fields under an optional header.

For example, a profile's rules can determine the user type and, depending on the document type being checked in, ensure that only specific metadata fields are displayed. All other fields can be hidden.

Note: Rules must be established before a profile is created. See Profile Rules (page 8-6) for details.

Triggers

A *trigger field* is a metadata field that is defined on the Configuration Manager: Profiles Tab (page 8-73). If a document matches a *trigger value* for a profile, then that profile is evaluated for the document. There can be an unlimited number of profiles, but only one trigger value per profile.

Note: Although you create rules before you create triggers and profiles, it is necessary to know what your trigger will be prior to creating rules.

Profile Links

When a profile is enabled on the Edit Content Profile Links page, the profile is available from the Search and New Check In drop-down menus on the toolbar. If no profiles are enabled for display, the Search and New Check In menus become direct links to the Advanced Search page and standard Content Check In Form, respectively.

After a profile has been created, it appears in the Search and New Check In drop-down menus on the toolbar when you refresh your browser session. By default, all profiles are listed as options under both menus. However, not every user will be authorized to use all of the listed profiles. On the Edit Content Profile Links page, users can decide which profiles to display by selecting or clearing applicable check boxes.

For example, a marketing employee may not have the necessary privileges to use an accounting profile. In this case, the user can clear the check boxes for the accounting profile and it does not display under Search and New Check In drop-down menus. For more information about the user interface in general and the content profile links in particular, see the *Content Server User Guide*.

CONTENT PROFILE RULES

This section covers these topics:

Concepts

❖ Profile Rules (page 8-6)

❖ Global Rules (page 8-6)

❖ Metadata Fields and Attributes in Rules (page 8-7)

❖ Activation Conditions in Rules (page 8-8)

❖ Restricted Lists to Modify Defined Option Lists (page 8-9)

Profile Rules

A profile consists of one or more rules and a trigger value (see Content Profile Elements (page 8-4)). The rules determine how metadata fields are displayed on the Check In, Update, Content Information, and Search pages and if a rule will be used (depending on how it is evaluated). Each rule consists of the following:

❖ A set of metadata fields—see Metadata Fields and Attributes in Rules (page 8-7).

❖ An optional activation condition—see Activation Conditions in Rules (page 8-8).

❖ An option that indicates if it is a global rule and has a specified priority.

❖ An option that indicates if the metadata fields in the rule can be relocated by grouping and if an optional header is used.

Note: Although you create rules before you create triggers and profiles, it is necessary to know what your trigger will be prior to creating rules.

Global Rules

Global rules are always "on" (always evaluated). A global rule automatically affects the metadata fields displayed on the Check In, Update, Content Information, and Search pages even if it is not included in a profile or even if no profiles have been created. It is not necessary for a profile to exist in the system for any defined global rules to take effect and be applied to events, actions, or workflow states. However, you cannot preview the effects of a global rule unless it is associated with a profile.

Global rules are evaluated first and can be superseded by specific profile rules. You can set the priority for the global rule, though, and increase its precedence. It may then have a higher priority than specific rules and produce different profile results. You can view those results by previewing the profile and seeing the consequence of rule selection. See Preview Profile Screen (page 8-81) for more details about previewing profiles and viewing how rules affect the profile.

A global rule obeys the following guidelines:

❖ It is always on, is independent of a profile, and is always evaluated.

❖ For documents and searches with profiles, the global rule is evaluated first. The specific profile rules are evaluated after the global rule. This means that global rules have a lower priority with respect to profile rules.

❖ Global rules have a priority number—see Add/Edit Rule "name" Screen: General Tab (page 8-37). The priority determines the order in which the rule is evaluated. Lower priority rules are executed earlier and rules with higher priority can override changes made by rules with lower priority.

Metadata Fields and Attributes in Rules

Each metadata field in a rule has the following attributes:

❖ Field position (required):

This attribute offers three general placement choices: top, middle, and bottom. The selected option adjusts the general placement order of the metadata field. This attribute is assigned using the Add Rule Field Screen (page 8-52).

❖ Display type (required):

The value of this attribute can be *edit*, *Info Only*, *hidden*, *excluded*, or *required*. The selected option determines how the metadata field is displayed on the Check In and Search pages. This attribute is assigned using the Add/Edit Rule Field "name" Screen (page 8-54).

❖ Required message (optional unless the display type is required):

If the metadata field is designated as required, a required message must be specified. This attribute is specified using the Add/Edit Rule Field "name" Screen (page 8-54).

❖ Default value (optional):

This attribute displays a default value for the metadata field. It is activated using the Add/Edit Rule Field "name" Screen (page 8-54) and defined using the Edit Default Value screen tabs (see pages 8-58 through 8-62).

❖ Derived value (optional):

This attribute enables the metadata field to be set to a specified value on update or check in. It is activated using the Add/Edit Rule Field "name" Screen (page 8-54) and defined using the Edit Derived Value screen tabs (see pages 8-62 through 8-63).

❖ Restricted list (optional):

On presentation, this attribute allows the option list metadata field to be restricted to either a specific list of values or to a filtered list of values. It is activated using the Add/Edit Rule Field "name" Screen (page 8-54) and defined using the Edit Restricted List Screen (page 8-63). See Restricted Lists to Modify Defined Option Lists (page 8-9) for details.

Activation Conditions in Rules

An activation condition allows you to change the profile behavior based on various different inputs. For example, a rule may not be active for the search page. For a contributor, certain fields may be hidden or overridden on check in. Also, because profiles are activated during any check in process, distinctions are made between a browser check in and a batch load check in.

Profiles can be previewed to assess the validity of the activation conditions that may be included in the profile rules. The previewing screen allows you to check the existing profile as well as perform what-if scenarios by changing activation condition choices and evaluating the results. See Preview Profile Screen (page 8-81) for details. The documentation for the Edit Activation Condition screen provides more detailed information about activation condition choices and how they are created and defined (see pages 8-41 through 8-48).

An activation condition for a rule can be based on:

❖ System event

System event-based activation condition choices include on request events, on submit events, and on import events.

❖ User action

User action-based activation condition choices include check in new, check in selected, content information, content update, and search.

❖ Workflow state

State-based activation conditions are contingent on whether the content item is in workflow or not.

❖ Document type

Activation condition clauses can use components based on document metadata fields.

❖ User type

Activation condition clauses can use components based on user metadata fields.

Caution: Be very careful when using activation conditions that include one or more combinations of condition choices. Not all combinations of activation condition choices are valid and some may be mutually exclusive. For example, if an activation condition requires the event to be an import and the action to be a document information page request, the activation will never be true and the rule will never be active.

Restricted Lists to Modify Defined Option Lists

The restricted list is an optional attribute that can be defined for a metadata field in a rule. Two methods can be used to modify the user interface drop-down list for metadata fields defined as option lists.

❖ Specifying a fixed list:

Using a restricted list allows you to specify an explicit set of values that override the actual master list for the metadata field that was defined as an option list. Only those items already in the master option list are displayed in the user interface drop-down list.

❖ Using regular expression evaluation:

You can also choose to use regular expressions to evaluate the option list. The list can include wild cards and other special characters for string pattern matching and evaluation processes. The items displayed in the user interface drop-down list are those values that satisfy the regular expression.

⚲ **Note:** This section provides only a brief overview of using regular expression evaluation to generate modified user interface drop-downs for option list metadata fields. Regular expressions are currently supported with restricted lists. Because of the complexity of regular expressions, system administrators should be familiar with regular expressions, building patterns, and implementing regular expression methods. If not, use Oracle consulting services to assist you in defining restricted lists.

This section covers the following topics:

Regular Expressions

Regular expressions are ideal for text manipulation and describe the format of strings. In its simplest form, a regular expression is the text to match.

For example, the regular expression "ABC" matches the string ABC but not the string DEF. Wild card characters, such as the asterisk (*), can be used to match more strings. For example, the regular expression "A*B" will match the strings B, AB, AAB, AAAB, etc. The asterisk (*) is a quantifier on the preceding character.

Commonly Used Elements of Java Regular Expressions

The following table lists the most commonly used modifiers, metacharacters, and special characters used in building patterns for regular expression evaluation.

Element	Definition
Modifiers:	
g	Global pattern matching.
i	Case-insensitive pattern matching.
m	Allows the special characters ^ and $ to match multiple times within a string.
s	Allows the special character . to match newlines.
x	Ignores whitespace within a pattern.
Metacharacters:	
\s	Matches whitespace (including tabs and newlines).
\S	Matches anything that is not whitespace.

Element	Definition
\b	Matches only a word boundary.
\B	Matches only nonword boundaries.
\d	Matches digits 0 through 9.
\D	Matches only nonnumeric characters.
\w	Matches only letters, numbers, or underscores.
\W	Matches only characters that are not letters, numbers, or underscores.
\A	Matches the beginning of a string only.
\Z	Matches the end of a string only.
Special Characters:	
*	Matches zero or more occurrences of the preceding character.
+	Matches one or more occurrences of the preceding character.
?	Matches zero or one occurrence of any character.
.	Matches any one character, except newlines.
^	Matches the beginning of a string, like the \A metacharacter.
$	Matches the end of a string, like the \Z metacharacter.
|	Imposes either, or.

Examples of Defining Restricted Lists

The examples included in this section illustrate the results displayed in the user interface drop-down lists depending on how the Edit Restricted List Screen (page 8-63) is completed. The restricted lists being defined use a metadata field defined to be an option list. Its master list values are the U.S. states in alphabetical order. The two dependencies include:

❖ The items or expression entered into the text pane.

❖ The Allow Java Regular Expressions check box (selected or unselected).

Example 1:

In this example, text values are entered into the text pane and the Allow Java Regular Expressions check box is not selected. In this case, the options "NoState" and "Carolina" are not included in the resulting list because they are not full names of states. Also notice that the order is maintained as typed into the text area.

If the following values are entered into the text pane:

Alabama
Minnesota
NoState
Utah
Carolina

The results displayed in the user interface drop-down list are:

Alabama
Minnesota
Utah

Example 2:

In this example, the same text values are entered into the text pane as in Example 1. However, the Allow Java Regular Expressions check box is selected.

If the following values are entered into the text pane:

Alabama
Minnesota
NoState
Utah
Carolina

The results displayed in the user interface drop-down list are:

Alabama
Minnesota
Utah
North Carolina
South Carolina

In this case, both "North Carolina" and "South Carolina" are included in the resulting list because they match the regular expression "Carolina".

Example 3:

In this example, the Allow Java Regular Expressions check box is selected and instead of entering similar text values (as in the previous examples) the ^ special character is used with alphabet characters.

In this case, there are two regular expressions. The first expression specifies choosing everything in the master list beginning with C and the second expression specifies choosing everything beginning with Al. Notice that the results order is dictated by how the list was entered in the text pane.

If the following values are entered into the text pane:

^C
^Al

Then the results displayed in the user interface drop-down list are:

California
Colorado
Connecticut
Alabama
Alaska

Example 4:

In this example, the same values are entered into the text pane as in Example 3. However, both values are entered on the same line and separated with the pipe (|) special character which is evaluated as "or". In this case, the expression retains the values in order because the list is filtered exactly once for values that begin with either Al or C.

If the following values are entered into the text pane:

^C | ^Al

The following results are displayed in the user interface drop-down list:

Alabama
Alaska
California
Colorado
Connecticut

CONTENT PROFILES AND METADATA ORGANIZATION

This section covers these topics:

❖ Using Rules to Group Metadata Fields (page 8-14)

❖ Display Results of Reordered Metadata Fields (page 8-18)

Using Rules to Group Metadata Fields

Metadata fields that display on the Check In, Update, Content Information, and Search pages can be added to a rule as a group and, optionally, the group can be labeled with an appropriate header. Editing the rule also lets you rearrange individual metadata fields within the group. The fields are displayed on the Check In, Update, Content Information, and Search pages according to how they are arranged in the group.

You establish metadata groups by selecting the Is group check box on the Add/Edit Rule "name" Screen: General Tab (page 8-37). Individual metadata fields are added to the group using the Add/Edit Rule "name" Screen: Fields Tab (page 8-50). Use the Up and Down buttons on this screen to rearrange the fields.

This section covers the following topics:

❖ Reorganizing Metadata Fields (page 8-14)

❖ Metadata Field Conflicts Between Groups (page 8-15)

❖ Resolution Rules (page 8-16)

Reorganizing Metadata Fields

You can create a rule that groups specific metadata fields and determines how they are listed on the Check In, Update, Content Information, and Search pages. For example, Figure 8-1 shows a rule on the left that results in the metadata field list on the Check In page on the right. In this example, Content ID is the group leader because it is the first element in the group list. The metadata fields included after Content ID are the group associates.

Figure 8-1   Metadata Fields Generated from Rule
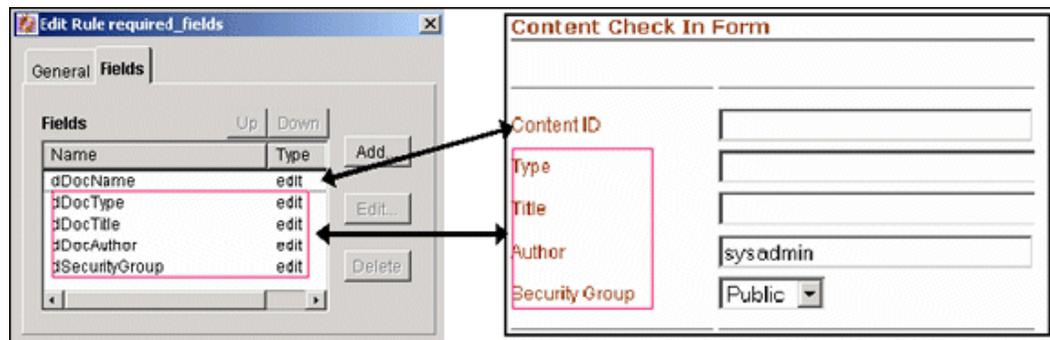
Figure 8-2 shows the same rule but the metadata fields in the group have been rearranged using the Up and Down buttons. This reorganization results in a different listing of the same metadata fields on the Check In page. In this case, Security Group becomes the group leader and the other fields are now the group associates.

Figure 8-2   Reorganized Metadata Fields

Metadata Field Conflicts Between Groups

It is possible that one or more metadata fields in a group could belong to groups in other rules that use grouped metadata fields. This could create conflicts about how the metadata fields are displayed on the Check In, Update, Content Information, and Search pages.

In Figure 8-3, a single profile contains three rules that have grouped metadata fields. Each group has one field that belongs to another group. In this situation, the system uses resolution rules to reconcile any conflicts. See Resolution Rules (page 8-16) for details.

Figure 8-3   Profile with Rules Grouping Metadata Fields
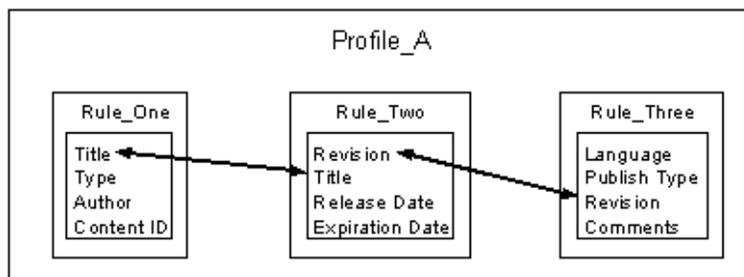
Caution: System evaluation and implementation of additional profile and global rules that contain one or more of these metadata fields can cause grouping conflicts. Depending on the priorities or precedences of the rules within a profile, some rules executed later may override earlier rules. This, in turn, can affect how grouped metadata fields are resolved. For more information about how rules are evaluated, refer to Profile Rules (page 8-6) and Global Rules (page 8-6).

Resolution Rules

The following rules are used sequentially to resolve metadata grouping conflicts:

1. The first element in the list is the group leader.

2. All elements following the first element are the group associates.

3. If the group leader is not a group leader in another group listing, then assign any group associates to the group, below the group leader.

4. If a group leader is a group associate in a prior group listing, then the new group listing is merged with the prior group listing as follows:

    a. Find the main group leader (the group leader in the prior group).

    b. Insert the new group associates after the group leader in the main group leader's group associates list.

5. Make sure that no group associate has more than one group leader. If so, remove the associate from the prior group leader's list.

6. If a grouping has a group associate that is a group leader in another later grouping, then this rule is invalid, an error is reported, and the rule is not evaluated. (If this were to be allowed, the result would be a non-group leader (a group associate) being promoted to a group leader.)

Example 1:

IF: A,B,C is a metadata group

> **WHERE:** A is the group leader and B and C are group associates to A

AND: B,D,E is another metadata group

> **WHERE:** B is the group leader and D and E are group associates to B

RESULT: A,B,D,E,C

Example 2:

IF: A,B,C is a metadata group

> **WHERE:** A is the group leader and B and C are group associates to A

AND: A,D,E is another metadata group

> **WHERE:** A is the group leader and D and E are group associates to A

RESULT: A,D,E,B,C

Example 3:

IF: A,B,C is a metadata group

> **WHERE:** A is the group leader and B and C are group associates to A

AND: C,B,D is another metadata group

> **WHERE:** C is the group leader and B and D are group associates to C

RESULT: A,C,B,D

Example 4:

IF: A,B is a metadata group

> **WHERE:** A is the group leader and B is a group associate to A

AND: B,A,C is another metadata group

> **WHERE:** B is the group leader and A and C are group associates to B

RESULT: Theoretically, this situation can be resolved to B,A,C but this makes the A,B grouping irrelevant. Therefore, to avoid confusion for other groupings, this is treated as an error case.

Example 5:

IF: A,B,C is a metadata group

> **WHERE:** A is the group leader and B and C are group associates to A

AND: D,A,E is another metadata group

> **WHERE:** D is the group leader and A and E are group associates to D

RESULT: Error—it is impossible to resolve this grouping conflict.

Display Results of Reordered Metadata Fields

Content profiles can be used to reorder metadata fields on the Check In, Update, Content Information, and Search pages. Custom metadata fields as well as system-specific information fields can be reordered to suit your particular needs. This section provides more explicit information about the display results of reordered custom and system information fields on the Check In, Update, Content Information, and Search pages.

This section covers the following topics:

❖ Positioning Metadata Fields (page 8-18)

❖ Moving Metadata Fields (page 8-23)

Positioning Metadata Fields

This section covers the following topics:

❖ General Sequence of Grouped Metadata Fields on Content Server Pages (page 8-19)

❖ Positioning Metadata Fields Within a Group (page 8-19)

❖ Display Results of Grouped Metadata Fields on the Check In, Update, and Check In Selected Pages (page 8-21)

❖ Display Results of Grouped Metadata Fields on the Search Page (page 8-22)

❖ Display Results of Grouped Metadata Fields on the Content Information Page (page 8-22)

❖ Display Results of Grouped Metadata Fields on the Folder Information Page (page 8-23)

General Sequence of Grouped Metadata Fields on Content Server Pages

The positioning of grouped system and custom metadata fields on Content Server pages is determined by the priority of the first metadata field in the group. When you add a custom metadata field to the system, you establish its positioning sequence (field order).

You add custom metadata fields using the Configuration Manager: Information Field Tab (page 4-10) and assign the sequence number in the Order field on the Add/Edit Metadata Field Screen (page 4-13).

When a custom metadata field is the first field in a group, that group is positioned on the page according to the field order assigned to the custom metadata field. When a system metadata field is the first field in a group, that group is positioned according to their established precedence.

Depending on the specific Content Server page, additional system metadata fields may be included in the general display order. Or, some system metadata fields are not included. For example, the Search page displays the Release Date and Expiration Date system metadata fields but excludes Revision.

By default, the general order for system metadata fields is as follows:

> Content ID (dDocName)
> Type (dDocType)
> Title (dDocTitle)
> Author (dDocAuthor)
> Security Group (dSecurityGroup)
> Account (dDocAccount)
> Revision (dRevLabel)

Note: Generally, a group with a system metadata field as the first field are displayed in their default order. For example, if Author is the first field in a group of custom metadata fields, that group is displayed below any group that contains Content ID, Type, or Title as its first field.

Positioning Metadata Fields Within a Group

The section Using Rules to Group Metadata Fields (page 8-14), describes how you can define rules to conveniently group custom and system metadata fields on the Check In, Update, Content Information, and Search pages. In addition to grouping your metadata fields, you can order them to suit your application.

There are two options available to order metadata fields:

❖ **Option 1: Field Position**

You can use the Field Position drop-down list that provides three positioning options: top, middle, and bottom. This option is available when you are adding metadata fields to rules using the Add Rule Field Screen (page 8-52). This option works in a relative manner. For example, you might add the following metadata fields:

xRegion (Top position)
xSubDept (Bottom position)

If you add xDept with a field position of Middle, it is added as follows:

xRegion (Top position)
xDept (Middle position)
xSubDept (Bottom position)

If you then add xContinent with a field position of Top, it is added as follows:

xRegion (Top position)
xContinent (Top position)
xDept (Middle position)
xSubDept (Bottom position)

Similarly, if you add xManager with a field position of Middle, it is added as follows:

xRegion (Top position)
xContinent (Top position)
xDept (Middle position)
xManager (Middle position)
xSubDept (Bottom position)

For more information about the Field Position option, refer to the Field Position list (page 8-53) feature on the Add Rule Field Screen (page 8-52).

Note: This ordering option produces these display results on the Check In, Update, Content Information, and Search pages if you have grouped the fields. That is, when you add the fields to a rule, you must select the Is Group check box on the Add/Edit Rule "name" Screen: General Tab (page 8-37).

❖ **Option 2: Up and Down buttons**

You can use the Up and Down buttons to reorder fields. This option is available when you are adding metadata fields to rules using the Add/Edit Rule "name" Screen: Fields Tab (page 8-50). This method is useful to reorder fields that have already been added, or to reorder fields that have been added with the same field position.

For example, if you added three fields with a field position of Top, they are positioned in the order they were added to the rule. However, if one of the three field needs to be moved to the absolute top, you can use the Up button to achieve this. Similarly, if any field is not positioned properly when it was added, you can use the Up and Down buttons to more precisely re-position them.

For more information about using the Up and Down buttons, refer to the Up button (page 8-51) and Down button (page 8-51) features on the Add/Edit Rule "name" Screen: Fields Tab (page 8-50).

Display Results of Grouped Metadata Fields on the Check In, Update, and Check In Selected Pages

The following rules specify how metadata groups are displayed on the Check in, Update, and Check in Selected pages.

❖ If the first field in a group is a system field (such as Content ID, Type, Title, etc.), the group is always displayed above the Primary File field.

❖ If automatic Content ID generation is disabled, then the Content ID field is always listed as the first field on the page followed by the remaining fields in the group. Also, if a separate group includes other system fields like Title and Type, that group is listed after the Content ID group but above the Primary File field.

❖ If automatic Content ID generation is enabled, then the Content ID field functions like a custom metadata field with 1 as its field order. In this case, if Content ID is the first field in a group, then the group is displayed immediately below the Primary File and Alternate File fields. Also, the Revision system metadata field is displayed after the last field in the Content ID group. (Note that, by default, Revision is displayed below the Alternate File field.)

❖ If the first field of a group is a custom metadata field, then the group is displayed in the order that is determined by the field order number of the lead metadata field in relation to the field order numbers of lead metadata fields in other groups. This is valid even if system metadata fields are grouped with custom metadata fields.

❖ The Release Date and Expiration Date fields are always listed last on the page unless they are grouped with a custom metadata field that has a higher (i.e., smaller number) field order value. Or, if Release Date and Expiration Date are grouped with a system metadata field, then they are listed above the Primary File field.

Display Results of Grouped Metadata Fields on the Search Page

The following rules specify how metadata groups are displayed on the Search page.

❖ The Content ID field is always positioned first unless it is part of a group and it is not the first field. However, if Content ID is the first field of a group, then that group is listed first.

❖ If a system metadata field (other than Content ID) is the first field in a group, that group is listed after the Content ID field or Content ID group.

❖ All other groups with custom metadata fields as the first fields are displayed after groups with system metadata fields as the lead fields. When groups have a custom metadata field as the first field, the ordering of these groups is determined by the field order numbers of the lead metadata fields of groups in relation to each other.

Note: In order for a metadata field to be displayed on a search page, the *Enable for Search Index* must be set on the Add/Edit Metadata Field Screen (page 4-13).

Display Results of Grouped Metadata Fields on the Content Information Page

The following rules specify how metadata groups are displayed on the Content Information page.

❖ The Content ID field is always positioned first unless it is part of a group and it is not the first field.

❖ The Checked Out By, Status, and Formats fields are always listed at the bottom.

❖ The Security Group field, or any group with Security Group as the first field, is listed above the Checked Out By, Status, and Formats fields. This is valid unless:

• The account is disabled. If the account is enabled, then Security Group is displayed above the Checked Out By field. Security Group is displayed above the Account field.

• The Security Group field is part of a group where it is not the first field, and the lead metadata field has a field order number that positions it above other custom metadata fields. In this case, the Security Group field is displayed in the order that is determined by the field order number of the group's lead metadata field.

❖ The Release Date and Expiration Date fields are listed as part of the Revision History table at the bottom of the page.

❖ All other groups with custom metadata fields as the first fields are displayed in the order that is determined by the field order numbers of the lead metadata fields of groups in relation to each other.

Display Results of Grouped Metadata Fields on the Folder Information Page

The following rules specify how metadata groups are displayed on the Folder Information page.

❖ The Content ID field is not displayed unless it is part of a group. Currently, any group with Content ID as the first field is not displayed. You can counteract this by defining another system or custom metadata field in the group as the lead field.

❖ All the groups are listed that have system metadata fields as their lead field (provided their assigned display attribute is Edit, Label, or Required). If any system or custom metadata field is assigned a Hidden or Excluded display attribute, it will not be displayed. For more information about the display attributes assigned to metadata fields, refer to the Type list (page 8-55) feature on the Add/Edit Rule Field "name" Screen (page 8-54).

❖ All other groups with custom metadata fields as the first fields are displayed in the order that is determined by the field order numbers of the lead metadata fields of groups in relation to each other.

Moving Metadata Fields

This section covers the following topics:

❖ Moving System Metadata Fields to a Position Below the Primary File Field (page 8-24)

❖ Moving Custom Metadata Fields to a Position Above the Primary File Field (page 8-24)

Moving System Metadata Fields to a Position Below the Primary File Field

To force any system metadata field to display below the Primary File field:

1. Add the desired system metadata field to a group that includes custom metadata fields.

2. Ensure that the first field in the group is a custom metadata field.

This ensures that the group is displayed below the Primary File field. The group is positioned based on the field order number of the lead field.

Moving Custom Metadata Fields to a Position Above the Primary File Field

To force any custom metadata field to display above the Primary File field:

1. Add the desired custom metadata field to a group that includes system metadata fields.

2. Ensure that the first field in the group is a system metadata field.

This ensures that the group is displayed above the Primary File field. The group is positioned based on which system metadata field is the lead field.

MANAGING RULES

The following tasks are included in rule management:

❖ Deleting an Existing Activation Condition (page 8-29)

❖ Defining the Attributes of a Metadata Field (page 8-30)

❖ Editing the Attributes of a Metadata Field (page 8-34)

❖ Setting the Display of a Required Field (page 8-35)

Creating a New Rule

To create a new rule:

1. On the Rules tab of the Configuration Manager, click **Add**.

   The Add/Edit Rule "name" Screen: General Tab (page 8-37) is displayed.

2. Enter the name and description information about the new rule.

3. Click **OK**.

The following list provides references to sections describing how to configure the new rule:

❖ To create a global rule, see Creating a New Global Rule (page 8-26).

❖ To group metadata fields belonging to a rule, see Adding Metadata Fields to a Rule (page 8-27).

❖ To include activation conditions to the rule, see Editing an Existing Activation Condition (page 8-29).

❖ To add metadata fields and define related attributes to the rule, see Grouping Metadata Fields (page 8-28) and Defining the Attributes of a Metadata Field (page 8-30), respectively.

Editing an Existing Rule

To edit an existing rule:

1. On the Rules tab of the Configuration Manager, select the rule to edit from the Rules list pane, and click **Edit**.

   The Add/Edit Rule "name" Screen: General Tab (page 8-37) is displayed and the fields are populated with the previously set values for the selected rule.

2. Edit the field values.

3. Click **OK**.

Deleting an Existing Rule

To delete an existing rule:

1. On the Rules tab of the Configuration Manager, select the rule to delete from the Rules list pane, and click **Delete**.

   You are asked to verify your decision to delete the rule.

2. Click **OK**.

   The selected rule is removed.

Creating a New Global Rule

To create a global rule:

1. Open the Add/Edit Profile Screen (page 8-75) by adding a new rule or selecting an existing rule to edit—see Creating a New Rule (page 8-25) or Editing an Existing Rule (page 8-25).

2. On the General tab, select the Is global rule with priority check box.

3. Optionally, change the default priority number. By default, 10 is the priority number listed. For more information about how rules are evaluated and resolved, see Profile Rules (page 8-6).

4. Click **OK**.

Editing an Existing Global Rule

To edit an existing global rule:

1. On the Rules tab of the Configuration Manager, select the global rule to edit from the Rules list pane, and click **Edit**.

   The Add/Edit Rule "name" Screen: General Tab (page 8-37) is displayed and the fields are populated with the previously set values for the selected global rule.

2. Edit the field values.

3. Click **OK**.

Deleting an Existing Global Rule

To delete an existing global rule:

1. On the Rules tab of the Configuration Manager, select the global rule to delete from the Rules list pane, and click **Delete**.

   You are asked to verify your decision to delete the rule.

2. Click **OK**.

   The selected rule is removed.

Adding Metadata Fields to a Rule

To add metadata fields to a rule:

1. Open the Add/Edit Rule "name" Screen: General Tab (page 8-37) by adding a new rule/global rule or selecting an existing rule/global rule to edit.

Note: For more detailed information, see Creating a New Rule (page 8-25), Creating a New Global Rule (page 8-26), Editing an Existing Rule (page 8-25), or Editing an Existing Global Rule (page 8-26)

2. Open the Fields tab, and click **Add**.

   The Add Rule Field Screen (page 8-52) is displayed.

3. Select a metadata field from the Field Name option list.

4. Select a general placement choice for the metadata field from the Field Position option list.

5. Click **OK**.

   The Add/Edit Rule Field "name" Screen (page 8-54) is displayed.

6. Enter the information about the metadata field.

7. Click **OK**.

8. For each metadata field to be added to the rule, repeat steps 2 through 7 above.

The following list provides references to sections describing how to configure the metadata rule:

❖ For more detailed information about default values, derived values and restricted lists, see Add/Edit Rule Field "name" Screen (page 8-54).

❖ For general instructions on adding these attributes to the metadata fields, see Setting a Metadata Field Default Value (page 8-31), Setting a Metadata Field Derived Value (page 8-32), and Setting a Metadata Field Restricted List Condition (page 8-33).

Grouping Metadata Fields

To group metadata fields:

1. Open the Add/Edit Rule "name" Screen: General Tab (page 8-37). See step 1 in the Adding Metadata Fields to a Rule (page 8-27) procedure.

2. On the General tab, select the Is group check box.

3. Click **OK**.

   The Edit Rule "*name*" screen closes.

Adding a Header to a Metadata Field Group

To include a label (header) to a metadata group:

1. Open the Add/Edit Rule "name" Screen: General Tab (page 8-37). See step 1 in the Adding Metadata Fields to a Rule (page 8-27) procedure.

2. On the General tab, select the Has group header check box.

3. Click the corresponding **Edit** button.

   The Edit Group Header Screen (page 8-39) is displayed.

4. Enter the text of the header and click **OK**.

   The header is displayed above the grouped metadata fields.

Defining a New Activation Condition

To add an activation condition to a rule:

1. Open the Add/Edit Rule "name" Screen: General Tab (page 8-37). See step 1 in the Adding Metadata Fields to a Rule (page 8-27) procedure.

2. On the General tab, select the Use rule activation condition check box.

3. Click the corresponding **Edit** button. The Edit Activation Condition: Conditions Tab (page 8-41) is displayed.

4. Click **Add**. The Edit Activation Condition: Add Condition Screen (page 8-42) is displayed.

5. Enter the name of the activation condition in the Name field, and click **OK**. The Edit Activation Condition: Conditions Tab / General Tab (page 8-43) is displayed.

6. Enter the information using the General tab and Clauses tab to define the activation condition. Optionally, you can write custom Idoc Script using the Custom tab. For more detailed information about defining activation conditions, see:

   • Edit Activation Condition: Conditions Tab / General Tab (page 8-43)

   • Edit Activation Condition: Conditions Tab / Clauses Tab (page 8-46)

   • Edit Activation Condition: Custom Tab (page 8-48).

   • Edit Activation Condition: Side Effects Tab (page 8-49)

7. Click **OK**.

Editing an Existing Activation Condition

To edit an existing activation condition:

1. Open the Add/Edit Rule "name" Screen: General Tab (page 8-37). See step 1 in the Adding Metadata Fields to a Rule (page 8-27) procedure.

2. Click the **Edit** button that corresponds to the activation condition check box.

   The Edit Activation Condition: Conditions Tab (page 8-41) is displayed.

3. On the Conditions tab, select the activation condition that you want to edit from the Conditions list.

4. Edit the field values.

5. Click **OK**.

Deleting an Existing Activation Condition

To delete an existing activation condition:

1. Open the Add/Edit Rule "name" Screen: General Tab (page 8-37). See step 1 in the Adding Metadata Fields to a Rule (page 8-27) procedure.

2. Click the **Edit** button that corresponds to the activation condition check box.

   The Edit Activation Condition: Conditions Tab (page 8-41) is displayed.

3. On the Conditions tab, select the activation condition to delete from the Conditions list.

4. Click **Delete**.

   The activation condition is removed.

Defining the Attributes of a Metadata Field

You must assign the required attributes (field position and type) to each metadata field belonging to a rule. You can also define optional attributes that include a required message, a default value, derived value or a restricted list. For more detailed information about the attributes of metadata fields in rules, see Metadata Fields and Attributes in Rules (page 8-7).

To define the attributes of a metadata field:

1. Open the Add/Edit Rule "name" Screen: General Tab (page 8-37). See step 1 in the Adding Metadata Fields to a Rule (page 8-27) procedure.

2. Open the Fields tab, and click **Add**.

   The Add Rule Field Screen (page 8-52) is displayed.

3. Select a metadata field from the Field Name option list.

4. Select a general placement choice for the metadata field from the Field Position option list.

5. Click **OK**.

   The Add/Edit Rule Field "name" Screen (page 8-54) is displayed.

6. Select a display type from the Type option list.

7. If desired, enter a required message.

8. Define the additional attributes by setting default values, derived values or a restricted list. For more detailed information, see:

   • Setting a Metadata Field Default Value (page 8-31)

   • Setting a Metadata Field Derived Value (page 8-32)

   • Setting a Metadata Field Restricted List Condition (page 8-33).

9. Click **OK**.

Setting a Metadata Field Default Value

To set a default value field attribute:

1. On the Add/Edit Rule Field "name" Screen (page 8-54), select the Use default value check box.

2. Click the corresponding **Edit** button.

   The Edit Default Value: Conditions Tab (page 8-58) is displayed.

3. On the Conditions tab, click **Add**.

   The Edit Default Value: Add Condition Screen (page 8-61) is displayed.

4. Enter the name for this default value attribute and click **OK**.

   The Add Condition screen closes and the default attribute name is added to the Conditions list.

5. Select a Field value and Operator from the option lists. Depending on the selected value from the Field list, the Value field provides:

   • An editable field to enter the data.

   • A choice list of appropriate options.

   • An editable field with a corresponding Select button.

6. Enter or select a value for the upper Value field, as applicable:

   a. Click **Select** if:

      • The Field value is Content ID—the Edit Default Value: Select Field Screen (page 8-61) is displayed.

      • The Field value is Author—the User View Screen (page 1-12) is displayed.

   b. Use the filters as desired to select content.

   c. Click **OK**.

      The Content Item View Screen (page 1-11)/User View Screen closes and the selected content value is added to the upper Value field on the default value Conditions tab.

7. Click **Add**.

   The statement is added to the expression pane.

8. Click **Compute**.

   The Edit Default Value: Select Field Screen (page 8-61) is displayed.

9. If the field is linked to a schema view, you can select a column. Otherwise, click **OK**.

    The Select Field screen closes and the computed value is added to the lower Value field on the default value Conditions tab.

10. Click **OK**.

    The Edit Default Value screen closes and the Idoc Script statement is displayed in the default value text pane on the Add Rule Field <*name*> screen.

11. If you are finished adding metadata field attributes, click **OK**. Otherwise, continue to include additional attributes. See Setting a Metadata Field Derived Value (page 8-32) and Setting a Metadata Field Restricted List Condition (page 8-33).

Setting a Metadata Field Derived Value

To set a derived value field attribute:

1. On the Add/Edit Rule Field "name" Screen (page 8-54), select the Is derived field check box.

2. Click the corresponding **Edit** button.

    The Edit Derived Value: Conditions Tab (page 8-62) is displayed.

3. On the Conditions tab, click **Add**.

    The Edit Derived Value: Add Condition Screen (page 8-62) is displayed.

4. Enter the name for this derived value attribute and click **OK**.

    The Add Condition screen closes and the derived attribute name is added to the Conditions list.

5. Select a Field value and Operator from the option lists. Depending on the selected value from the Field list, the Value field provides:

    • An editable field to enter the data.

    • A choice list of appropriate options.

    • An editable field with a corresponding Select button.

6. Enter or select a value for the upper Value field, as applicable:

    a. Click **Select** if:

        • The Field value is Content ID—the Edit Derived Value: Select Field Screen (page 8-63) is displayed.

        • The Field value is Author—the User View Screen (page 1-12) is displayed.

    b. Use the filters as desired to select content.

    c. Click **OK**.

      The Content Item View Screen (page 1-11)/User View Screen closes and the selected content value is added to the upper Value field on the default value Conditions tab.

7. Click **Add**.

   The statement is added to the expression pane.

8. Click **Compute**.

   The Edit Derived Value: Select Field Screen (page 8-63) is displayed.

9. If the field is linked to a schema view, you can select a column. Otherwise, click **OK**.

   The Select Field screen closes and the computed value is added to the lower Value field on the derived value Conditions tab.

10. Click **OK**.

    The Edit Derived Value screen closes and the Idoc Script statement is displayed in the default value text pane on the Add Rule Field *<name>* screen.

11. If you are finished adding metadata field attributes, click **OK**. Otherwise, continue to include additional attributes. See Setting a Metadata Field Default Value (page 8-31) and Setting a Metadata Field Restricted List Condition (page 8-33).

Setting a Metadata Field Restricted List Condition

To use a restricted list for the metadata field:

1. On the Add/Edit Rule Field "name" Screen (page 8-54), select the Has restricted list check box.

2. Click the corresponding **Edit** button.

   The Edit Restricted List Screen (page 8-63) is displayed.

3. To use a list of values that are directly associated with rules, select the Is filtered list option.

   Otherwise, if you want to use a list of specific values, select the Is strict list option and enter the specific items in the Restricted value text pane.

4. Click **OK**.

   The Edit Restricted List screen closes and if you used the strict list option, the items are displayed in the restricted list text pane on the Add Rule Field *<name>* screen.

Editing the Attributes of a Metadata Field

To edit the attributes of a metadata field:

1. Open the Add/Edit Rule "name" Screen: General Tab (page 8-37). See step 1 in the Adding Metadata Fields to a Rule (page 8-27) procedure.

2. Open the Fields tab, and select the metadata field whose attributes you want to edit.

3. Click **Edit**.

   The Add/Edit Rule Field "name" Screen (page 8-54) is displayed.

4. Click the corresponding **Edit** button of the attribute you want to edit.

   • If you are editing the default value attribute, the Edit Default Value: Conditions Tab (page 8-58) is displayed.

   • If you are editing the derived value attribute, the Edit Derived Value: Conditions Tab (page 8-62) is displayed.

   • If you are editing the restricted list attribute, the Edit Restricted List Screen (page 8-63) is displayed.

5. For either the default value or derived value, select the value to edit in the Conditions text pane.

   a. Select the desired new Field and/or Operator field values.

   b. To edit the upper Value field value without deleting and redefining the clause:

      1. Highlight the clause in the Clause pane.

      2. Edit the value in the upper Value field.

      3. Click **Update**.

         The new value is updated and displayed in the Clause pane.

   c. Click **Compute**.

   d. Click **OK**.

      The Edit Default/Derived Value screen closes and the revised values are displayed in the default/derived value text pane on the Edit Rule Field *<name>* screen.

4. For the restricted list attribute,

   a. On the Edit Restricted List screen, select the desired list option and edit the text pane as necessary.

   b. Click **OK**.

The Edit Restricted List screen closes and the revised restricted list information is displayed in the restricted list text pane on the Edit Rule Field *<name>* screen.

5. Click **OK**.

The Edit Rule Field *<name>* screen closes.

Setting the Display of a Required Field

Two configuration variables control how required metadata fields appear on the Check In page. These variables must be manually set in the *<install_dir>*/config/config.cfg file. For more information, see the Content Server Idoc Script Reference Guide.

❖ To use red lettering for a required field, use the following configuration variable and value:

```
StyleForRequiredFields=requiredField
```

❖ To mark the required field with any symbol, use the following configuration variable and value:

```
NotationForRequiredFields=*
```

In this example, an asterisk is used to mark the required fields.

PROFILE RULES INTERFACE SCREENS

The following screens are used to create profile rules:

❖ Configuration Manager: Rules Tab (page 8-36)

❖ Add/Edit Rule "name" Screen: General Tab (page 8-37)

❖ Edit Group Header Screen (page 8-39)

❖ Edit Activation Condition: Conditions Tab (page 8-41)

❖ Edit Activation Condition: Add Condition Screen (page 8-42)

❖ Edit Activation Condition: Conditions Tab / General Tab (page 8-43)

❖ Edit Activation Condition: Conditions Tab / Clauses Tab (page 8-46)

❖ Edit Activation Condition: Custom Tab (page 8-48)

❖ Edit Activation Condition: Custom Tab (page 8-48)

❖ Edit Activation Condition: Custom Tab (page 8-48)

Configuration Manager: Rules Tab

The Rules tab of the Configuration Manager is used to create, define, edit, and delete the rules used in content profiles. Activation conditions can be defined and included in each rule and the display and values of information fields (metadata) can also be customized.

Feature	Description
Name column	Lists the names of the existing created rules.
Description column	Shows the description of each rule. Rule descriptions are provided when defining the rules using the Add/Edit Rule "name" Screen: General Tab (page 8-37) and Add/Edit Rule "name" Screen: Fields Tab (page 8-50).
Add/Edit buttons	Displays the Add/Edit Rule "name" Screen: General Tab (page 8-37).
Delete button	Enables you to delete the selected rule.

Add/Edit Rule "*name*" Screen: General Tab

The General tab on the Add/Edit Rule screen is used to specify global rules, define rule groups with optional headers, and define activation conditions. To access this screen, click **Add** or **Edit** on the Configuration Manager: Rules Tab (page 8-36).

Feature	Description
Name field	The name of the rule being defined or edited. You cannot edit the name of an existing rule.
Description field	Description of the rule being defined or edited. You can edit the description of an existing rule.
Is global rule with priority check box/ priority field	*Check box:* **Selected**—Enables the rule as a global rule. For more information about global rules and their properties, see Profile Rules (page 8-6). **Clear**—Disables the rule as a global rule. *Priority field:* Lists the priority number of the global rule and determines the order in which the rule is evaluated. A low priority number means lower precedence. A lower priority rule is executed before higher priority rules. This allows higher priority rules to override the changes made by lower priority rules.
Is group check box	**Selected**—Enables metadata fields that belong to the rule being defined or edited to be relocated into a group. For more information about groups and their resolution rules, see Using Rules to Group Metadata Fields (page 8-14). **Clear**—Disables custom metadata field grouping for the rule being defined or edited.
Has group header check box/ Edit button	*Check box:* **Selected**—Enables adding a label to a group of metadata fields that belong to the rule being defined or edited. **Clear**—Disables group labeling. *Edit button:* Displays the Edit Group Header Screen (page 8-39).

Feature	Description
Use rule activation condition check box	**Selected**—Enables a profile to change based on rules that are applied or suppressed if specific conditions are met. Sets an activation condition for the rule being defined or edited. For more information about activation conditions and defining their settings, see Activation Conditions in Rules (page 8-8). **Clear**—Disables the use of activation conditions for the rule being defined or edited.
Edit button	Displays the Edit Activation Condition: Conditions Tab (page 8-41).
Activation condition text pane	Displays the computed Idoc Script for each activation condition created for the rule being defined or edited. The script statements are automatically generated after the condition is added and its properties are defined. See Edit Activation Condition: Conditions Tab / General Tab (page 8-43) and Edit Activation Condition: Conditions Tab / Clauses Tab (page 8-46). Also displays any customized text entered in the custom text pane on the Edit Activation Condition: Custom Tab (page 8-48).

Edit Group Header Screen

The Edit Group Header screen is used to add or edit a header to a group of metadata fields belonging to a rule being defined or edited. To access this screen, select **Is group** and **Has group header** and click the corresponding **Edit** button on the Add/Edit Rule "name" Screen: General Tab (page 8-37).

Feature	Description
Hide Group by default	**Selected**—Hides the group metadata fields and displays only the group header with a [Show] link when the page loads. Clicking the [Show] link displays the metadata fields. **Clear** (default)—Displays the group metadata fields and group header with a [Hide] link when the page loads. Clicking the [Hide] link hides the metadata fields.
Start Include	**Standard separator**—Separates the group on a page by placing a standard horizontal rule above the header. **Start HTML table**—Begins a standard table border above the group header. When used in conjunction with *End HTML table*, the group is displayed in an HTML table with standard borders for each row, beginning above the header and ending after the last grouped metadata field. **Display Nothing** (default)—No distinction is made on the page to separate the grouped fields, other than the group heading.
End Include	**Standard separator**—Separates the group on a page by placing a standard horizontal rule below the last metadata field. **End HTML table**—Ends a standard table border below the last grouped metadata field. When used in conjunction with *Begin HTML table*, the group is displayed in an HTML table with standard borders for each row, beginning above the header and ending after the last grouped metadata field. **Display Nothing** (default)—No distinction is made on the page to separate the grouped fields, other than the group heading.

Feature	Description
💡 **Note:** The standard include options listed in the Start Include and End Include drop-down lists are defined in the *DpDisplayIncludes* table of the std_resources.htm file. To add additional include options, a custom component must be written defining the new includes and merging them into the DpDisplayIncludes table. For more information on writing custom components, see the separate guide, *Working With Components*.	
Header text pane	Displays the header associated with a group of metadata fields belonging to the rule being defined or edited.

Edit Activation Condition: Conditions Tab
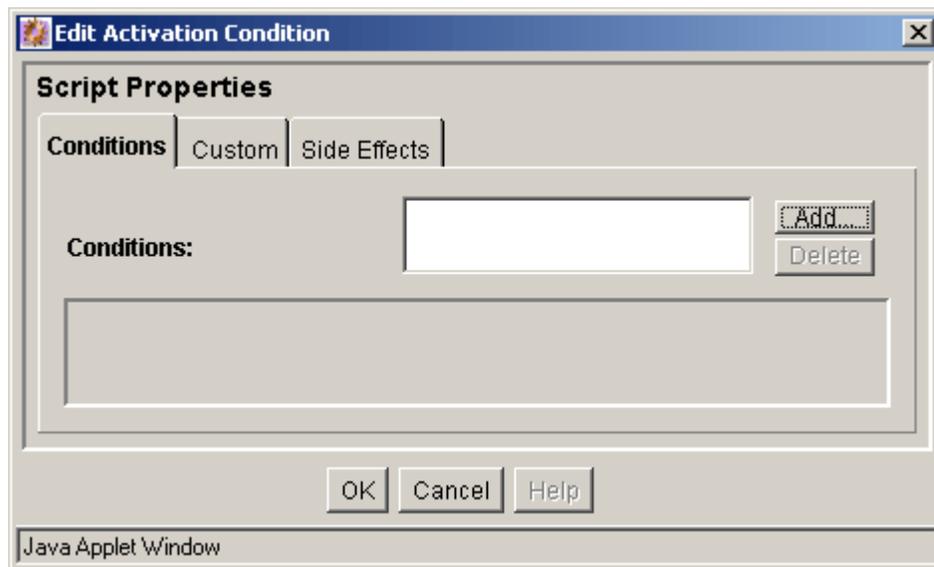
The Edit Activation Condition screen is used to define specific conditions for a rule that when met affect the behavior of the associated profile.

The Conditions tab and Custom tab are mutually exclusive. If the Conditions tab is used to define rule conditions, the Custom tab is disabled for the current rule and vice versa. See Edit Activation Condition: Custom Tab (page 8-48).

The Conditions tab on the Edit Activation Condition screen is used to add activation conditions and define them using the General and Clauses tabs displayed after adding the first condition. See Edit Activation Condition: Conditions Tab / General Tab (page 8-43) and Edit Activation Condition: Conditions Tab / Clauses Tab (page 8-46).

To access the Edit Activation Condition screen, select the Use rule activation condition check box and click the corresponding **Edit** button on the Add/Edit Rule "name" Screen: General Tab (page 8-37).

Feature	Description
Conditions list pane	Displays the names of the activation conditions created for the rule being defined or edited.
Add button	Displays the Edit Activation Condition: Add Condition Screen (page 8-42).
Delete button	Enables you to delete the selected activation condition and remove it from the rule being defined or edited.

Edit Activation Condition: Add Condition Screen

The Add Condition screen is used to provide the name of the new activation condition being added to the current rule. To access this screen, click **Add** on the Edit Activation Condition: Conditions Tab (page 8-41).

Feature	Description
Name field	Displays the name of the activation condition being created.

Edit Activation Condition: Conditions Tab / General Tab
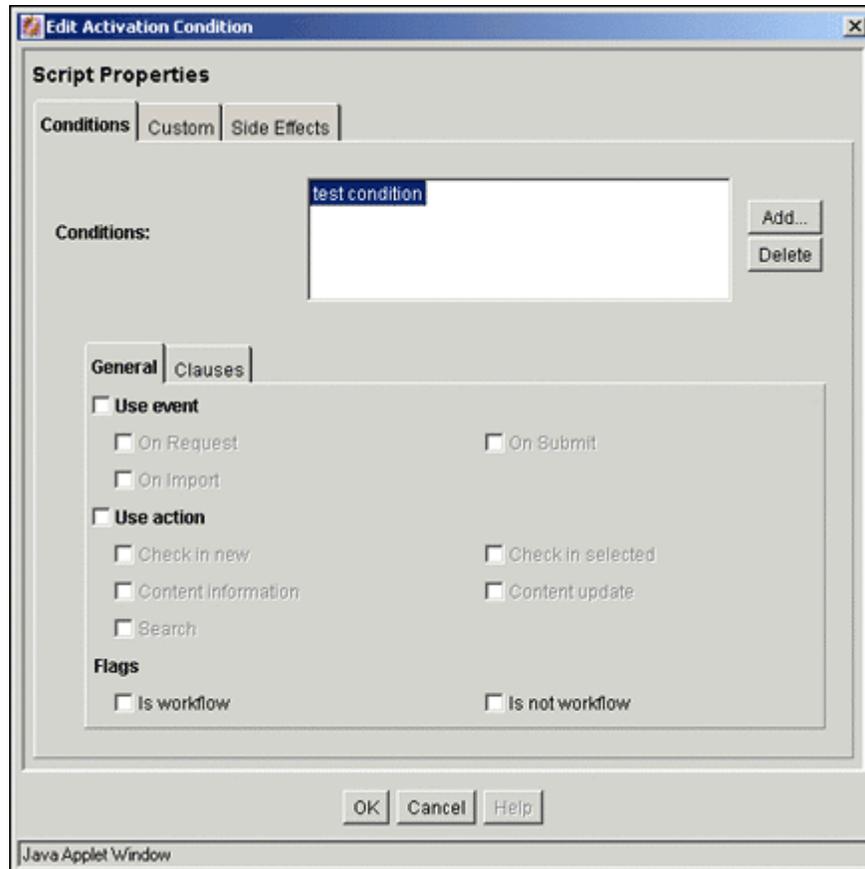
The General tab (on the Condition tab) is used to specify the event, action, or state that will trigger the activation condition of the rule being defined or edited. The General and Clauses tabs display after adding an activation condition using the Edit Activation Condition: Add Condition Screen (page 8-42).

Feature	Description
Use event check box	If selected, enables a profile and/or rule to perform differently using activation conditions that are based on event acknowledgements detected by the system. Depending on the event, some profile rules may be activated while others are not. **Selected**—Enables event-based profile and/or rule behavior changes and activates the On Request, On Import, and On Submit check box options. **Clear**—Disables event-driven profile and/or rule behavior changes.

Feature	Description
On Request check box	**Selected**—Enables profile and/or rule behavior change that is dependent on activation conditions defined with request events. **Clear**—Disables this type of profile and/or rule behavior change.
On Import check box	**Selected**—Enables profile and/or rule behavior change that is dependent on activation conditions defined with import events. **Clear**—Disables this type of profile and/or rule behavior change.
On Submit check box	**Selected**—Enables profile and/or rule behavior change that is dependent on activation conditions defined with submit events. **Clear**—Disables this type of profile and/or rule behavior change.
Use action check box	If selected, enables a profile and/or rule to perform differently using activation conditions that are based on a user action detected by the system. Depending on the action, some profile rules may be activated while others are not. **Selected**—Enables action-based profile and/or rule behavior changes and activates the Check in new, Content Information, Search, Check in selected, and Content update check box options. **Clear**—Disables action-driven profile and/or rule behavior changes.
Check in new check box	**Selected**—Enables profile and/or rule behavior change that is dependent on activation conditions defined with new contribution actions. **Clear**—Disables this type of profile and/or rule behavior change.
Content Information check box	**Selected**—Enables profile and/or rule behavior change that is dependent on activation conditions defined with information page viewing actions. **Clear**—Disables this type of profile and/or rule behavior change.
Search check box	**Selected**—Enables profile and/or rule behavior change that is dependent on activation conditions defined with search actions. **Clear**—Disables this type of profile and/or rule behavior change.
Check in selected check box	**Selected**—Enables profile and/or rule behavior change that is dependent on activation conditions defined with content item revision actions. **Clear**—Disables this type of profile and/or rule behavior change.

Feature	Description
Content update check box	**Selected**—Enables profile and/or rule behavior change that is dependent on activation conditions defined with information page revision actions. **Clear**—Disables this type of profile and/or rule behavior change.
Is in Workflow check box	If selected, enables a profile and/or rule to perform differently using activation conditions that are based on the workflow state of a document. Depending on the state, some profile rules may be activated while others are not. When a document is in workflow, you may want to display a different Content Information page. **Selected**—Enables the in workflow flag for this activation condition. **Clear**—Disables the in workflow flag for this activation condition.
Is not workflow check box	**Selected**—Enables the not in workflow flag for this activation condition. **Clear**—Disables the not in workflow flag for this activation condition.

Note: If neither workflow check box is selected, then the workflow state is ignored as a criteria for activation.

Edit Activation Condition: Conditions Tab / Clauses Tab
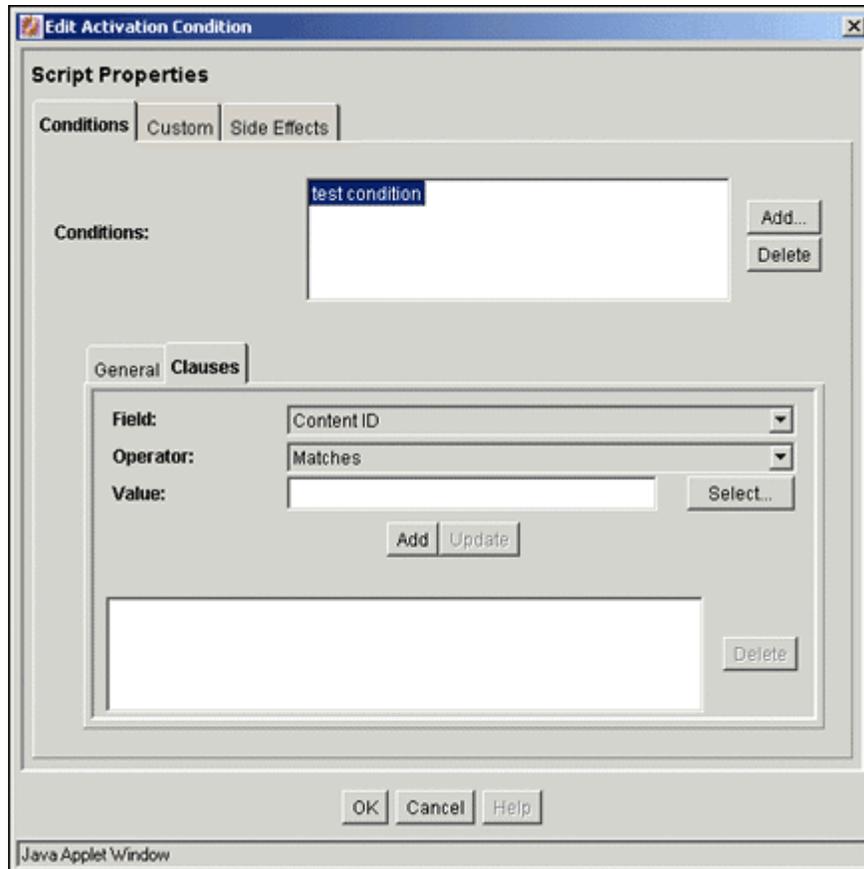
The Clauses tab (on the Condition tab) is used to generate custom Idoc Script clauses for the activation condition of the rule being defined or edited. The General and Clauses tabs are displayed after adding an activation condition using the Edit Activation Condition: Add Condition Screen (page 8-42). The Clauses tab is essentially an Idoc Script wizard. It is primarily used to automate the process of creating Idoc Script statements.

Feature	Description
Field list	Displays a choice list of metadata options.

Feature	Description
Operator list	The operator specifies the method for searching the metadata fields. The selected field determines the set of available values. The following operators are available for all fields except Release Date and Expiration Date: **Matches**—The entire text within the specified metadata field contains the specified metadata Value. **Contains Word**—The text within the specified metadata field contains the metadata Value. **Begins With**—The text within the specified metadata field starts with the metadata Value. *Release Date and Expiration Date operators:* **Is Date Before**—The date in the specified metadata field occurs before the Value date. **Is Date After**—The date in the specified metadata field occurs after the Value date.
Value field/ Select button	*Value field:* Depending on the selected metadata Field, the Value field provides: • An editable field to enter the data. • A choice list of appropriate options. • An editable field with a corresponding Select button. *Select button:* • If the Field value is Content ID, clicking the **Select** button displays the Edit Activation Condition: Custom Tab (page 8-48). • If the metadata Field is Author, clicking the **Select** button displays the User View Screen (page 1-12).
Add button	Adds the completed clause (Field + Operator + Value) to the Clause pane.
Update button	Used to edit the completed clause without deleting and redefining the clause. Use it by highlighting the clause in the Clause pane, edit the Value field, and click **Update**. The revised clause displays in the Clause pane.
Clause pane	Lists the existing clauses for the activation condition currently being defined or edited.

Feature	Description
Delete button	Enables you to delete the selected clause.

Edit Activation Condition: Custom Tab
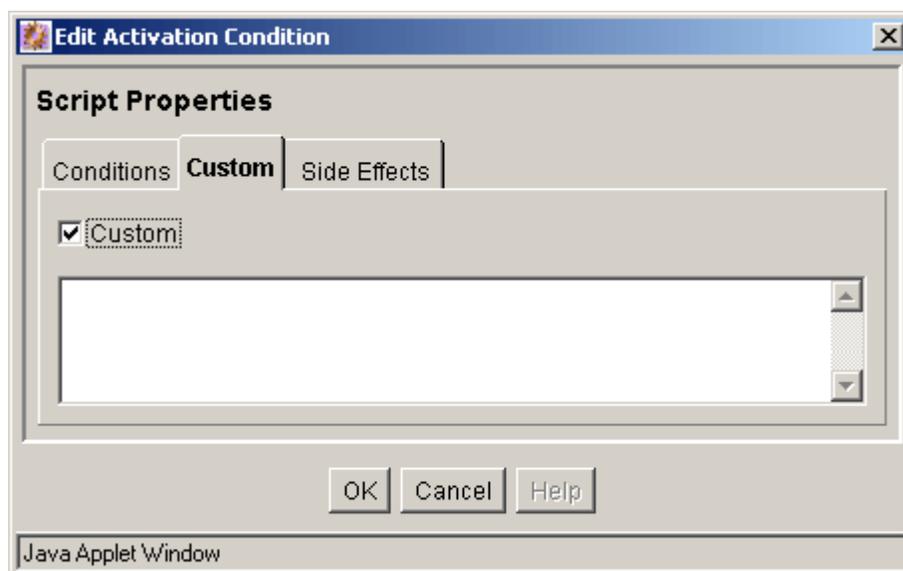
The Edit Activation Condition screen is used to define specific conditions for a rule that, when met, will affect the behavior of the associated profile. The Custom tab and Conditions tab are mutually exclusive. If the Custom tab is used to define rule conditions, the Conditions tab is disabled for the current rule and vice versa. See Edit Activation Condition: Conditions Tab (page 8-41).

The Custom tab on the Edit Activation Condition screen is used to manually write custom Idoc Script statements. To access this screen, select the Use rule activation condition check box and click the corresponding **Edit** button on the Add/Edit Rule "name" Screen: General Tab (page 8-37).

Feature	Description
Custom check box	**Selected**—Activates the custom text pane and enables you to write custom Idoc Script statements. If you use the Custom tab, then the Condition tab is disabled. **Clear**—Disables the custom text pane but enables the Conditions tab.

Feature	Description
Custom text pane	Used to enter customized text when the Custom check box is selected. The information displays in the activation condition text pane on the Add/Edit Rule "name" Screen: General Tab (page 8-37).

Edit Activation Condition: Side Effects Tab
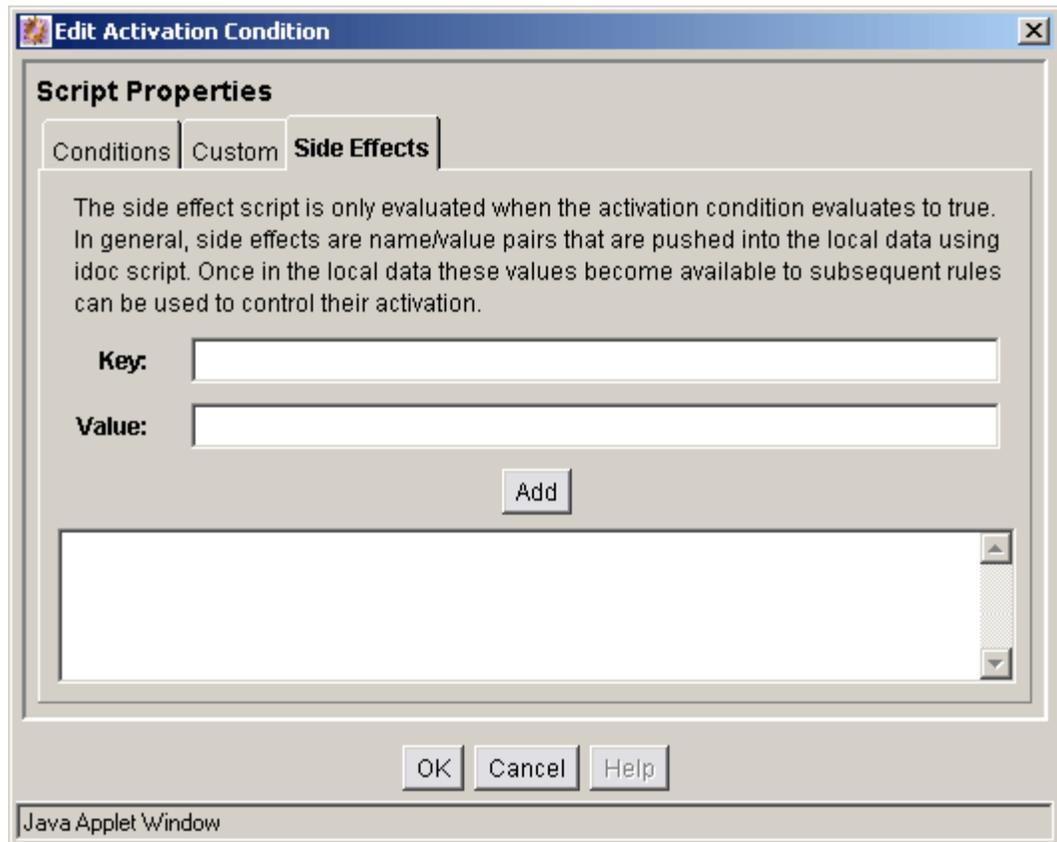
The Side Effects tab on the Add/Edit Activation Conditions screen allows you to do two things:

❖ Easily add name:value pairs as Idoc Script variables that get pushed to local data using Idoc Script if the activation condition is true.

❖ Add custom Idoc Script to a rule that is only evaluated if the activation condition is true.

This means that because the side effect is Idoc Script and evaluated once a rule is activated, you can also include logical statements such as like `if`, `elseif`, and `else` statements, and can execute any Idoc Script function. For example, you can establish a rule that can control the activation of other rules. For more information scripting in Idoc Script, see the *Idoc Script Reference Guide*.

Feature	Description
Key	The name used as the Idoc Script variable.
Value	A literal string equating to the Idoc Script variable.
Add	Converts the entered key and value to Idoc Script and displays it in the Idoc Script pane.
Idoc Script pane	Displays the Idoc Script of the entered keys and values, and allows direct entry of Idoc Script. Any Idoc Script function and logic entered here will be executed subsequent to the activation condition being met.

Add/Edit Rule "*name*" Screen: Fields Tab
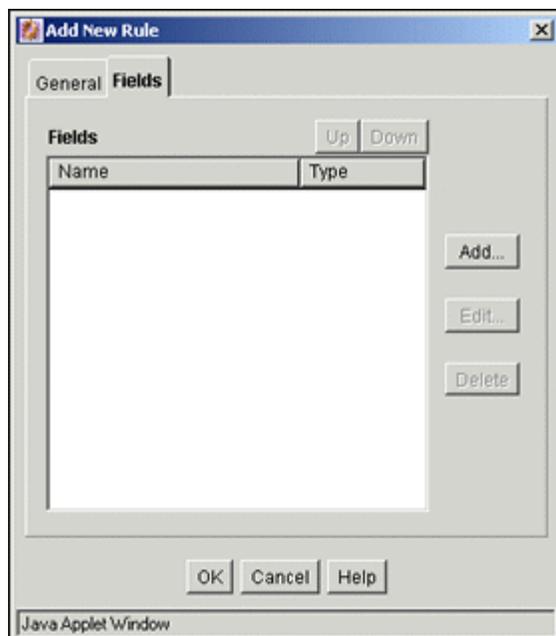
The Fields tab on the Add/Edit Rule screen is used to select and add specific metadata fields to use in the rule being defined or edited. Each metadata field is assigned specific

attributes such as the general position within the list of fields in the rule and a display type. Each metadata field can also be assigned optional attributes such as a required message, a default value, derivation features, or a restricted list.

For more information about metadata fields belonging to rules, see Metadata Fields and Attributes in Rules (page 8-7). For more information about assigning attributes to metadata fields in rules, see the Add Rule Field Screen (page 8-52) and the Add/Edit Rule Field "name" Screen (page 8-54). To access the Fields tab, click **Add** or **Edit** on the Configuration Manager: Rules Tab (page 8-36) and select the **Fields** tab.

Feature	Description
Up button	Adjusts the specific placement order of the metadata fields in the list. The position of each metadata field in the list is relevant to its priority in the evaluation process. The general position (top, middle, or bottom) in the list is established when the field is initially added to the rule—see the Add Rule Field Screen (page 8-52). However, the Up button further refines the placement by moving the metadata field to a higher, more precise position.
Down button	Adjusts the specific placement order of the metadata fields in the list. The position of each metadata field in the list is relevant to its priority in the evaluation process. The general position (top, middle, or bottom) in the list is established when the field is initially added to the rule—see the Add Rule Screen (page 8-80). However, the Down button further refines the placement by moving the metadata field to a lower, more precise position.
Name column	Lists the names of the metadata fields that belong to the rule being created or edited.
Type column	Provides the kind of display attribute assigned to each metadata field.
Add button	Displays the Add Rule Field Screen (page 8-52).
Edit button	Displays the Add/Edit Rule Field "name" Screen (page 8-54) with the previously defined attribute values of the metadata field being edited.
Delete button	Enables you to delete the selected metadata field and remove it from this rule.

Add Rule Field Screen
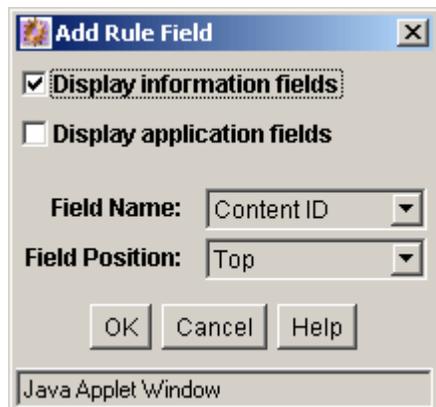
The Add Rule Field screen is used to include one or more metadata fields to the rule being created or edited. To access this screen, click **Add** on the Add/Edit Rule "name" Screen: Fields Tab (page 8-50).

Feature	Description
Display information fields	**Selected** (default)—Lists metadata fields in the Field name drop-down list, making them available for display on the standard check in and search pages. **Clear**—Hides any metadata fields in the Field name drop-down list.
Display application fields	**Selected**—Lists any custom application fields in the Field name drop-down list, making them available for display on the standard check in and search pages. **Clear** (default)—Hides any custom application fields in the Field name drop-down list. **Important:** By selecting an application field for display through the use of a rule, you are changing the field behavior as defined for the application normally used to display the field. For more information, see About Application Fields (page 4-2).
Field Name list	Displays a choice list of available metadata fields that can be added to the rule being defined or edited.

Feature	Description
Field Position list	The position attribute is required for each metadata field added. The selected option adjusts the general placement order of the metadata fields in the list on the Add/Edit Rule "name" Screen: Fields Tab (page 8-50). The position of each metadata field in the list is relevant to its priority in the evaluation process. Placement can be further refined using either the Up button (page 8-51) or the Down button (page 8-51). **Top**—Moves the metadata field to a relatively higher position. **Middle**—Moves the metadata field to a relatively central position. **Bottom**—Moves the metadata field to a relatively lower position.

Add/Edit Rule Field "*name*" Screen
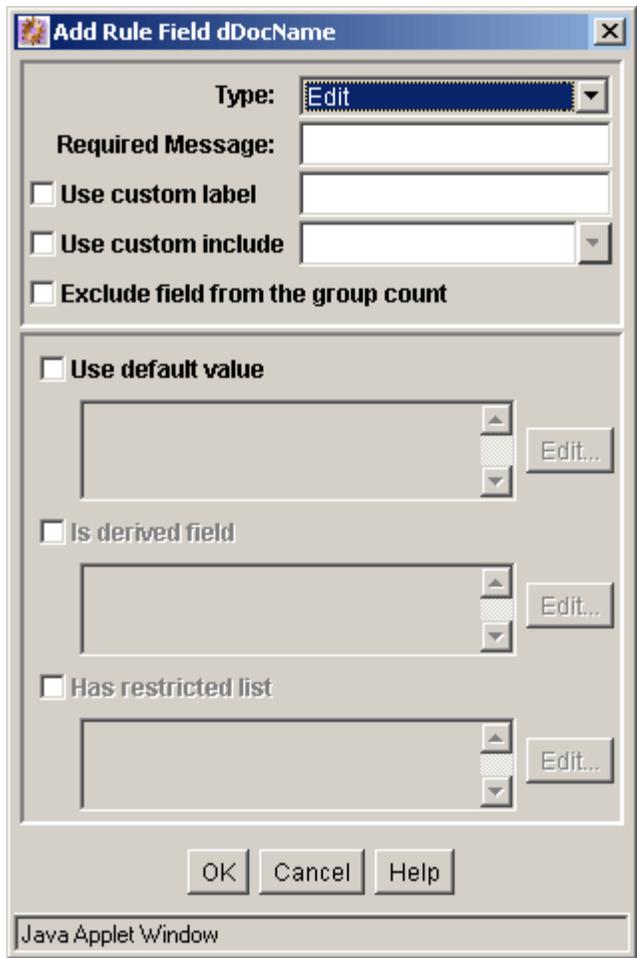
The Add/Edit Rule Field *name* screen is used to add and define the required and optional attributes to the metadata fields belonging to the rule being created or defined. This screen displays after adding a metadata field using the Add Rule Field Screen (page 8-52). If you are editing an existing metadata field selected from the list on the Add/Edit Rule "name" Screen: Fields Tab (page 8-50), this screen is displayed after clicking the **Edit** button.

Feature	Description
Type list	Each metadata field is required to have a display attribute assigned. The selected option determines how the metadata field is displayed on the Check In and Search pages. **Edit**—If selected, the metadata field is editable even if a default value is provided. **Label**—If selected, the metadata field is read-only (fixed but displayed). **Hidden**—If selected, the field does not display. However, when the user submits a content item, this metadata field value goes with and remains on the source page. **Excluded**—If selected, the field does not display. Unlike a hidden metadata field, an excluded value does not remain on the source page. **Required**—If selected, the metadata field is required. Two configuration variables can be set to distinctively format the metadata field name.
Required Message field	The required message field attribute is optional for all type attributes except the Required type. If the metadata field is designated as required, a required message must be specified.
Use custom label	This field changes the label displayed in the Content Server interface for the field being included in the rule. This allows different content profiles to label and display metadata with user-specific terms.
Use custom include	This option provides a way to insert a custom include in the page display, as a way to facilitate moving fields on the page. This provides a way to easily reposition standard fields. For example, creating a group that includes a placeholder field and the title field moves the title field below the other standard fields on the page. A custom include can then be used for the placeholder field to control how or if it is displayed. **Selected**—Allows the use of a custom include to replace the field in the page display. The provided includes are: • Standard Separator—Places a standard horizontal rule on the page where the field otherwise would be. • Display Nothing—hides the field when the page is displayed. **Clear** (default)—The field is displayed.

Feature	Description
💡 **Note:**	The standard include options listed in the Start Include and End Include drop-down lists are defined in the *DpDisplayIncludes* table of the std_resources.htm file. To add additional include options, a custom component must be written defining the new includes and merging them into the DpDisplayIncludes table. For more information on writing custom components, see the separate guide, *Working With Components*.
Exclude field from the group count	If the number of fields in a group is greater than zero, then the group header is displayed. For example, a placeholder field used for presentation purposes may be the only field in a group that is displayed. Enabling this check box prevents the group header from being displayed while keeping the presentation properties of the placeholder field. **Selected**—Prevents the field from being counted as part of the group. **Clear** (default)—Includes the field when counting number of fields in a group.
Use default value check box	The default value field attribute is optional. This attribute allows a default value to display on the Content Check In Form or Search page. Default values are computed for On Request events. This field attribute is Idoc Script enabled. Additional schema values can also be used in creating the value if the selected metadata field is associated with a schema view. This is done using the Edit Default Value: Select Field Screen (page 8-61). For more detailed information about schema views, see Configuration Manager: Views Tab (page 7-19). **Selected**—Activates the corresponding Edit button and enables the metadata field to use a default value. **Clear** (default)—Disables the default value field attribute.
Default value text pane/Edit button	Displays the computed Idoc Script for the default value field attribute. The script statements are automatically generated after the default value attribute is added and its properties are defined. See the Edit Default Value: Conditions Tab (page 8-58) and the Edit Default Value: Custom Tab (page 8-62).

Feature	Description
Is derived field check box	The derived value field attribute is optional. This attribute enables the metadata field to be set to a specified value on update or check-in. Derived values are computed for On Submit and On Import events. This field attribute is Idoc Script enabled. Also, additional schema values can be used in creating the value if the selected metadata field is associated with a schema view. This is done using the Edit Derived Value: Select Field Screen (page 8-63). For more detailed information about schema views, see Configuration Manager: Views Tab (page 7-19). **Selected**—Activates the corresponding Edit button and enables the metadata field to use a derived value. **Clear**—Disables the derived value field attribute.
Derived field text pane/Edit button	Displays the computed Idoc Script for the derived value field attribute. The script statements are automatically generated after the derived value attribute is added and its properties are defined. See Edit Derived Value: Conditions Tab (page 8-62) and Edit Derived Value: Custom Tab (page 8-63).
Has restricted list check box	The restricted list field attribute is optional. On presentation, this attribute allows the option list metadata field to be restricted to either a specific list of values or to a filtered list of values. **Selected**—Activates the corresponding Edit button and enables the metadata field to use a restricted list. **Clear**—Disables the restricted list field attribute.
Restricted list text pane/Edit button	Displays the computed Idoc Script for the restricted list field attribute. The script statements are automatically generated after the restricted list attribute is added and its properties are defined. See the Edit Restricted List Screen (page 8-63).

Edit Default Value: Conditions Tab
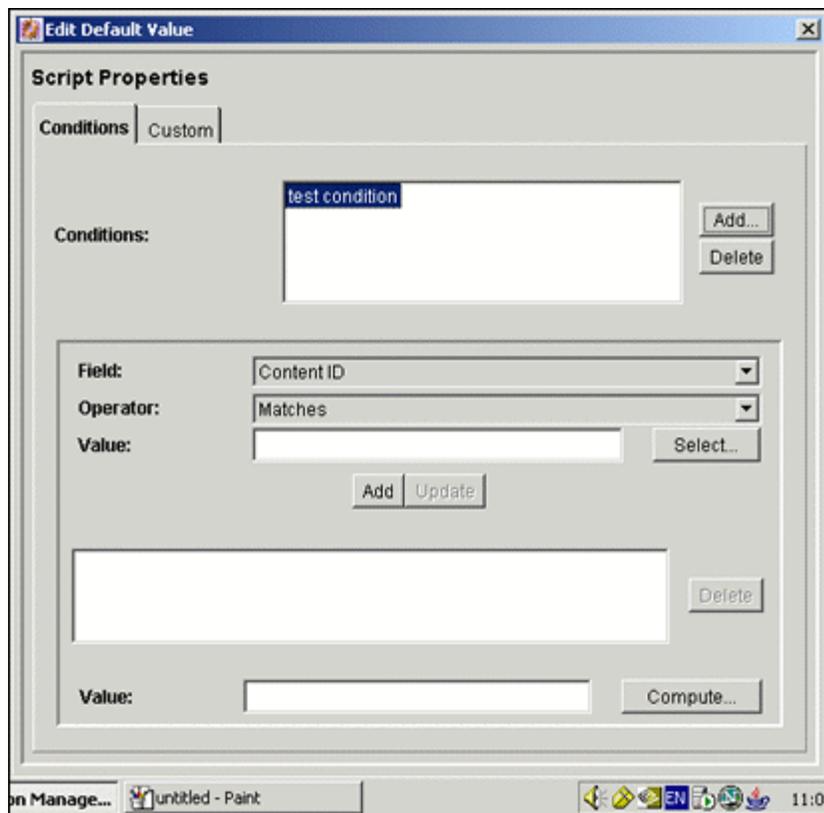
The Edit Default Value screen is used to add and define default value field attributes. The Conditions tab and Custom tab are mutually exclusive. If the Conditions tab is used to define the default value field attribute, the Custom tab is disabled and vice versa. See the Edit Default Value: Custom Tab (page 8-62). When the Conditions tab on the Edit Default Value screen initially displays, only the Conditions list pane is visible.

After a new default value is added using the Edit Default Value: Add Condition Screen (page 8-61), the lower expression pane is displayed. If an existing default value is selected, the lower expression pane also is displayed with populated fields available for editing. The fields in the lower expression pane are used to create and define the default value field attribute that is Idoc Script enabled.

To access the Edit Default Value screen to define default value field attributes, select the **Use default value** check box and click the corresponding **Edit** button on the Add/Edit Rule Field "name" Screen (page 8-54).

Feature	Description
Conditions text pane	Displays the names of the conditions created for the metadata field attribute value.
Add button	Displays the Edit Default Value: Add Condition Screen (page 8-61).
Delete button	Enables you to delete the selected condition for the metadata field attribute value.
Field list	Displays a choice list of metadata options.
Operator list	The operator specifies the method for searching the metadata fields. The selected field determines the set of available values. The following operators are available for all fields except Release Date and Expiration Date: **Matches**—The entire text within the specified metadata field contains the specified metadata Value. **Contains Word**—The text within the specified metadata field contains the metadata Value. **Begins With**—The text within the specified metadata field starts with the metadata Value. *Release Date and Expiration Date operators:* **Is Date Before**—The date in the specified metadata field occurs before the Value date. **Is Date After**—The date in the specified metadata field occurs after the Value date.

Feature	Description
Value field/ Select button	*Value field:* Depending on the selected metadata Field, the Value field provides: • An editable field to enter the data. • A choice list of appropriate options. • An editable field with a corresponding Select button. *Select button:* • If the Field value is Content ID, clicking the **Select** button displays the Edit Default Value: Select Field Screen (page 8-61). • If the metadata Field is Author, clicking the **Select** button displays the User View Screen (page 1-12).
Add button	Adds the completed clause (Field + Operator + Value) to the Clause pane
Update button	Used to edit the completed clause without deleting and redefining the clause. Use it by highlighting the clause in the Clause pane, edit the Value field, and click **Update**. The revised clause displays in the Clause pane.
Condition expression pane	Lists the existing clauses for the metadata field attribute value.
Delete button	Enables you to delete the selected clause.
Value field	Displays the computed value after clicking the **Compute** button on this screen and the **OK** button on the Edit Default Value: Select Field Screen (page 8-61).
Compute button	Displays the Edit Default Value: Select Field Screen (page 8-61).

Edit Default Value: Add Condition Screen

The Add Condition screen is used to provide the name of the new default value field attribute. To access this screen, click **Add** on the Edit Default Value: Conditions Tab (page 8-58).

Note: This screen is identical to the Add Condition screen used to add a new activation condition. To view a sample Add Condition screen and read the applicable field description, see the Edit Activation Condition: Add Condition Screen (page 8-42).

Edit Default Value: Select Field Screen

The Select Field screen is used to select a default metadata value to include when the completed default value clause (Field + Operator + Value) is processed. Additionally, schema values can be used to create the default value field attribute if the metadata field is associated with a schema view. To access this screen, click **Compute** on the Edit Default Value: Conditions Tab (page 8-58). For more detailed information about schema views, see Configuration Manager: Views Tab (page 7-19).

Feature	Description
Field Name list	Displays a choice list of metadata options.
Column list	Displays a choice list of table columns. A column is shown only if the metadata field is associated with a schema view. In this case, you can select a column value from the table and use it in the computation. For more detailed information about schema views, see Configuration Manager: Views Tab (page 7-19).

Edit Default Value: Custom Tab

The Edit Default Value screen is used to add and define default value field attributes. The Conditions tab and Custom tab are mutually exclusive. If the Custom tab is used to define the default value field attribute, the Conditions tab is disabled and vice versa. See the Edit Default Value: Conditions Tab (page 8-58).

Note: This screen is identical to the Custom tab used to define specific activation condition attributes for a rule. To view a sample Custom tab and read the applicable field descriptions, see the Edit Activation Condition: Custom Tab (page 8-48).

Edit Derived Value: Conditions Tab

The Edit Default Value screen is used to add and define derived value field attributes. The Conditions tab and Custom tab are mutually exclusive. If the Conditions tab is used to define the default value field attribute, the Custom tab is disabled and vice versa. When the Conditions tab on the Edit Default Value screen initially displays, only the Conditions list pane is visible.

After a new default value is added using the Edit Derived Value: Add Condition Screen (page 8-62), the lower expression pane is displayed. Or, if an existing default value is selected, the lower expression pane displays with populated fields available to be edited. The fields in the lower expression pane are used to create and define the default value field attribute that is Idoc Script enabled. To access the Edit Default Value screen to define derived value field attributes, select the Use derived value check box and click the corresponding **Edit** button on the Add/Edit Rule Field "name" Screen (page 8-54).

Note: This screen is identical to the Conditions tab (on the Edit Default Value screen) used to add and define default value field attributes. To view a sample Custom tab and read the applicable field descriptions, see the Edit Default Value: Conditions Tab (page 8-58).

Edit Derived Value: Add Condition Screen

The Add Condition screen is used to provide the name of the new derived value field attribute. To access this screen, click **Add** on the Edit Derived Value: Conditions Tab (page 8-62).

Note: This screen is identical to the Add Condition screen used to add a new activation condition. To view a sample Add Condition screen and read the applicable field description, see the Edit Activation Condition: Add Condition Screen (page 8-42).

Edit Derived Value: Select Field Screen

The Select Field screen is used to select a default metadata value to include when the completed derived value clause (Field + Operator + Value) is processed. Schema values can also be used to create the default value field attribute if the metadata field is associated with a schema view. To access this screen, click **Compute** on the Edit Derived Value: Conditions Tab (page 8-62). For more detailed information about schema views, see Configuration Manager: Views Tab (page 7-19).

Note: This screen is identical to the Select Field screen used to select a default metadata value to include in the processed default value clause. To view a sample Select Field screen and read the applicable field descriptions, see the Edit Default Value: Select Field Screen (page 8-61).

Edit Derived Value: Custom Tab

The Edit Derived Value screen is used to add and define default value field attributes. The Conditions tab and Custom tab are mutually exclusive. If the Custom tab is used to define the default value field attribute, the Conditions tab is disabled and vice versa. See the Edit Derived Value: Conditions Tab (page 8-62).

Note: This screen is identical to the Custom tab used to define specific activation condition attributes for a rule. To view a sample Custom tab and read the applicable field descriptions, see Edit Activation Condition: Custom Tab (page 8-48).

Edit Restricted List Screen

The Edit Restricted List screen is used to allow the option list metadata field (on presentation) to be restricted to either a specific list of values or to a filtered list of values resulting from the evaluation process of one or more regular expressions. For more detailed information about regular expressions, see Restricted Lists to Modify Defined Option Lists (page 8-9).

Selecting or not selecting the option to use regular expressions determines how the system interprets the values entered in the text pane. To access this screen, select the **Has restricted list** check box and click the corresponding **Edit** button on the Add/Edit Rule Field "name" Screen (page 8-54).

Feature	Description
Restricted value text pane	Allows you to enter the specific items to be included in the modified option list. If the metadata field for this restricted list has been defined as an option list, then the displayed results in the user interface drop-down will include the values entered in this pane if they are also in the master option list.
Allow Java Regular Expressions check box	**Selected**—Enables displaying a filtered list of values based on the evaluation of one or more regular expressions. Using wild cards and other special characters in the expression will display a subset of all values in the metadata field's usual option list that match the evaluated regular expression. **Clear**—Enables displaying a specific set of actual values, as they are specified in the text pane provided each value is in the master list. This selection overrides the metadata field's master option list and sets the list to a specified set of values. The values are not evaluated, so whatever is entered into the text pane will be displayed.

CONTENT PROFILE TRIGGERS

This section covers the following topic:

❖ About Triggers (page 8-65)

❖ Selecting a Profile Trigger Field (page 8-65)

❖ Disabling a Profile Trigger Field (page 8-66)

❖ Edit Trigger Field Screen (page 8-66)

About Triggers

A *trigger field* is a metadata field that is defined on the Configuration Manager: Profiles Tab (page 8-73). If a document matches a *trigger value* for a profile, then that profile is evaluated for the document. There can be an unlimited number of profiles, but only one trigger value per profile.

For example, if the trigger field is dDocType, Profile1 can use the trigger value of ADACCT and Profile2 can use the trigger value of ADSALES. See Add Profile Screen (page 8-74) for details.

The selected trigger field must satisfy the following criteria:

❖ It must be an option list metadata field. The metadata fields that are defined as option lists are included in the drop-down list for selecting the trigger field. Refer to the Add Profile Screen (page 8-74).

❖ After the trigger field has been defined, it cannot be deleted from the system.

❖ It is possible to "undefine" or disable the trigger field. The administrator can set the trigger field back to "none specified". This disables all profiles. See Disabling a Profile Trigger Field (page 8-66).

❖ The trigger field may be changed. See Disabling a Profile Trigger Field (page 8-66). When it is changed, profiles may become invalid and it is the administrator's responsibility to resolve the situation. However, user interface hints are provided concerning which profiles are invalid.

Note: Although you create rules before you create triggers and profiles, it is necessary to know what your trigger will be prior to creating rules.

Selecting a Profile Trigger Field

Only one trigger field can be selected for each content server instance.

To select or change the current profile trigger field:

1. On the Profiles tab of the Configuration Manager, click **Select**.

   The Add Profile Screen (page 8-74) is displayed.

2. Select a new trigger field from the option list in the Field Name field.

3. Click **OK**.

Note: If you change the trigger field after one or more profiles have already been created, the new trigger field could cause the existing profiles to become invalid.

Disabling a Profile Trigger Field

To completely disable the trigger field and essentially disable all profiles as well:

1. On the Profiles tab of the Configuration Manager, click **Select**.

   The Add Profile Screen (page 8-74) is displayed.

2. Select **none specified** from the option list in the Field Name field.

3. Click **OK**.

Edit Trigger Field Screen

The Edit Trigger Field screen is used to select or change the trigger field. To access this screen, click **Select** on the Configuration Manager: Profiles Tab (page 8-73).

Caution: The trigger field may be changed. However, when it is changed, profiles may become invalid and it is the responsibility of the system administrator to resolve the situation. The user interface provides hints about invalid profiles.

Feature	Description
Field Name list	The metadata fields that are defined as option lists are included in this drip-down list. If a metadata field is selected, the applicable option list values are provided in the Trigger field drop-down list on the Add/Edit Profile Screen (page 8-75). **none specified**—If selected, all profiles are essentially disabled.

MANAGING CONTENT PROFILES

This section covers these topics:

❖ Creating and Defining a New Profile (page 8-67)

❖ Editing an Existing Profile (page 8-68)

❖ Deleting an Existing Profile (page 8-68)

❖ Managing the Rules in a Profile (page 8-68)

❖ Previewing a Profile (page 8-69)

❖ Troubleshooting a Previewed Profile (page 8-70)

Creating and Defining a New Profile

To create a new profile:

1. On the Profiles tab of the Configuration Manager, click **Add**.

   The Add Profile Screen (page 8-74) is displayed.

2. Enter the name of the new profile in the Profile Name field.

3. Click **OK**.

   The Add/Edit Profile Screen (page 8-75) is displayed.

4. Enter the information about the new profile on the Add Profile "*name*" screen.

5. Click **Add** to include rules in the new profile.

   The Add Rule Screen (page 8-80) is displayed.

Note: Rules cannot be added to the profile until you have created and defined them using the Configuration Manager: Rules Tab (page 8-36).

6. Select rules from the option list and assign them a general placement priority value.

7. Click **OK**.

   The new profile is included in the Profiles list on the Profiles tab.

Editing an Existing Profile

To edit an existing profile:

1. On the Profiles tab of the Configuration Manager, select the profile you want to edit from the Profiles list pane, and click **Edit**.

    The Add/Edit Profile Screen (page 8-75) is displayed and the fields are populated with the previously set values for the selected profile.

2. Edit the field values.

3. Click **OK**.

Deleting an Existing Profile

To delete an existing profile:

1. On the Profiles tab of the Configuration Manager, select the profile to delete, and click **Delete**.

    You are asked to verify your decision to delete the profile.

2. Click **OK**.

    The selected profile is removed.

Managing the Rules in a Profile

Managing the rules that belong to a profile means that, if necessary, you can add, strategically prioritize, or delete the profile's rules as follows:

❖ Adding Rules to an Existing Profile (page 8-68)

❖ Prioritizing Rules in an Existing Profile (page 8-69)

❖ Deleting Rules from an Existing Profile (page 8-69)

Adding Rules to an Existing Profile

1. On the Profiles tab of the Configuration Manager, select the appropriate profile from the Profiles list, and click **Edit**.

    The Add/Edit Profile Screen (page 8-75) is displayed.

2. Click **Add**.

The Add Rule Screen (page 8-80) is displayed.

3. Select a rule from the Name option list.

4. Select a general placement choice for the rule from the Rule Priority option list.

5. Click **OK**.

The selected rule is added to the Rules list.

Prioritizing Rules in an Existing Profile

1. On the Add/Edit Profile Screen (page 8-75), select the rule to reposition.

2. Click **Up** to move the rule to increase the rule's priority or click **Down** to decrease the rule's priority.

The rule's placement is shifted and its priority will be appropriately adjusted in the evaluation process.

Deleting Rules from an Existing Profile

1. On the Add/Edit Profile Screen (page 8-75), select the rule to delete.

2. Click **Delete**.

The selected rule is removed from the profile.

Previewing a Profile

To preview a profile for verification or review:

1. On the Profiles tab of the Configuration Manager, select the profile to be previewed from the Profiles list, and click **Preview**.

The Preview Profile Screen (page 8-81) is displayed.

2. To review the compiled results of the current profile, do not change any field values on the Preview Profile screen. Click **Compute results**.

The Preview Results Screen (page 8-83) is displayed.

3. Review the computed results, and click **OK**.

Troubleshooting a Previewed Profile

In addition to previewing the compiled results of your profile, the Preview Profile Screen (page 8-81) is also used to troubleshoot invalid profiles and perform analysis on any profile.

Troubleshooting using what-if scenarios is an iterative process, composed of trying combinations of inputs to evaluate the profile's rules. In addition to using different input values, you can include filtered selections of documents.

Changing the different criteria (with or without filters) and computing the results allows you see how various input combinations affect the evaluation of rules. When the system evaluates the profile's rules, the computed results are displayed either as script string statements (SQL or Idoc Script) in a standard dialog text pane or as simulated Check In or Search pages (if you select the On Request option as the Event field value). Using the flexibility of the what-if analysis process helps you debug and optimize your profiles.

Using Inputs and Filters to Perform What-If Analysis

To perform what-if scenarios using diverse combinations of inputs and filters:

1. On the Profiles tab of the Configuration Manager, select the profile to be reviewed and tested from the Profiles list, and click **Preview**.

    The Preview Profile Screen (page 8-81) is displayed.

2. Select field values, as applicable, from the Event, Action, and Is workflow option lists.

3. To include filtered choices for the Content ID field, click the corresponding **Select** button.

    The Content Item View Screen (page 1-11) is displayed.

4. Select content item filter options, as applicable, and click **OK**. You are returned to the Preview Profile screen.

5. To include filtered choices for the User Name field, click the corresponding **Select** button.

    The User View Screen (page 1-12) is displayed.

6. Select user filter options, as applicable, and click **OK**. You are returned to the Preview Profile screen.

Note: To evaluate the rules using the new inputs and review the results as script string statements in a dialog, see Evaluating the Results as Script Strings in a Dialog (page 8-71).

To evaluate the rules using the new inputs and review the metadata results as a simulated Check In or Search page in a dialog, see Evaluating Results as a Simulated Page in a Browser Window (page 8-71).

Evaluating the Results as Script Strings in a Dialog

To view the evaluated rules as coded statements:

1. Perform a what-if analysis — see Using Inputs and Filters to Perform What-If Analysis (page 8-70).

2. Click **Compute results**.

    The Preview Results Screen (page 8-83) is displayed and the coded statements from the evaluated rules are shown in the dialog text pane.

3. Review the computed results, and click **OK** to return to the Preview Profile screen and continue testing additional what-if profile scenarios.

Evaluating Results as a Simulated Page in a Browser Window

Note: If you have selected the On Request option in the Event field on the Preview Profile screen, then the Show button opens a browser window to display a reconstructed image of the page showing the processed metadata field results. Also, previews performed in the browser window do not use a User Name field value.

To view the evaluated rules and resulting metadata fields as they would display on Check In or Search pages for end users:

1. On the Profiles tab of the Configuration Manager, select the profile to be reviewed and tested from the Profiles list, and click **Preview**.

    The Preview Profile Screen (page 8-81) is displayed.

2. In the Event field, select the **On Request** option.

3. Select field values, as applicable, from the Action and Is workflow option lists.

4. To include filtered choices for the Content ID field, see steps 3 and 4 in the section Using Inputs and Filters to Perform What-If Analysis (page 8-70).

5. Click **Show** on the Preview Profile screen.

   The system launches a browser window that displays the resulting metadata fields in a simulated Check In or Search page. This window provides a graphic view or what the end user will see.

6. Review the computed results and to continue testing additional what-if scenarios, close the browser window to return to the Preview Profile screen.

CONTENT PROFILE INTERFACE SCREENS

The following screens are used in the creation of a content profile:

❖ Configuration Manager: Profiles Tab (page 8-73)

❖ Add Profile Screen (page 8-74)

❖ Add/Edit Profile Screen (page 8-75)

❖ Add Rule Screen (page 8-80)

❖ Preview Profile Screen (page 8-81)

❖ Preview Results Screen (page 8-83)

Configuration Manager: Profiles Tab
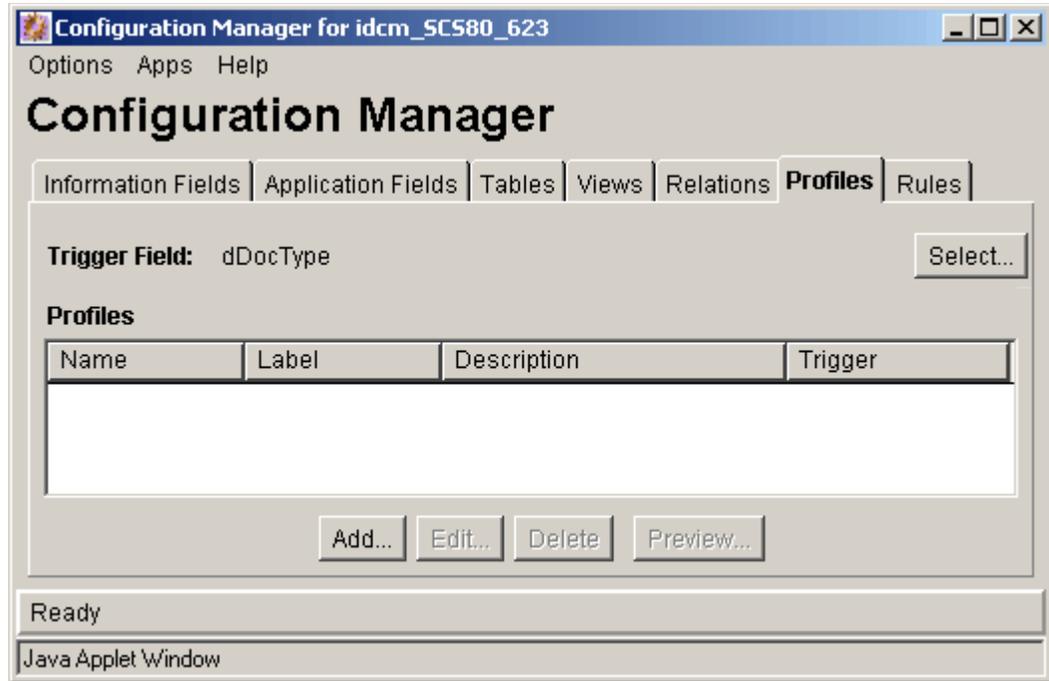
The Profiles tab of the Configuration Manager is used to create, edit, delete, and preview profiles. You can also use it to define a profile trigger value and change or disable the associated profile trigger field values including selected filter and column options.

Feature	Description
Select button	Displays the Add Profile Screen (page 8-74).
Name column	Lists the names of the existing created profiles.
Description column	Shows the description of each profile. Profile descriptions are provided when defining the profiles using the Add/Edit Profile Screen (page 8-75).
Trigger column	Lists the option list values used to identify checked in documents. This is the value selected from the Trigger list for this profile using the Add/Edit Profile Screen (page 8-75).
Add button	Displays the Add Profile Screen (page 8-74).

Feature	Description
Edit button	Displays the Add/Edit Profile Screen (page 8-75).
Delete button	Enables you to delete the selected profile.
Preview button	Displays the Preview Profile Screen (page 8-81).

Add Profile Screen
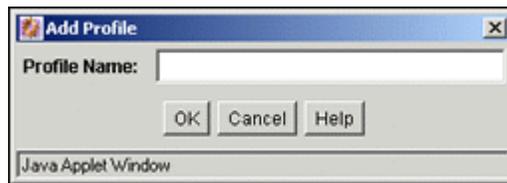
The Add Profile screen is used to create and name a new profile. To access this screen, click **Add** on the Configuration Manager: Profiles Tab (page 8-73).

Feature	Description
Profile Name field	The name of the profile being created.

Add/Edit Profile Screen

The Add/Edit Profile screen is used to define or edit a profile. This screen is displayed after clicking **OK** on the Add Profile Screen (page 8-74) or by selecting a profile on the Configuration Manager: Profiles Tab (page 8-73) and clicking **Edit**.

Feature	Description
Name	Lists the name assigned to the profile that is being defined or edited. This is the name assigned to the newly created profile using the Add Profile Screen (page 8-74).
Display Label field	Used as the profile name displayed in the My Check ins and My Searches document profile links included in the My Oracle tray of the Content Server's Navigation area.
Description field	Description of the profile currently being defined.
Trigger list	Lists the option list values for the Trigger field selected on the Add Profile Screen (page 8-74). The choices consist of the applicable option list values associated with the profile trigger.

Feature	Description
Exclude non-rule fields check box	**Selected**—Excludes all the metadata fields that do not belong to the rules included in the profile. **Clear**—All the metadata fields belonging to all rules are included.
Restrict personalization links	**Selected**—Allows admin user to suppress any or all check in or search links to a particular user or group of users. When selected, an Idoc Script based on user info is entered into the Profile Links Screen (page 8-77) and must evaluate to true before a link is displayed. **Clear** (default)—All check in or search links are displayed for all users by default, unless handled by another profile.
Edit button	Displays the Profile Links Screen (page 8-77).
Rules pane	Lists the rules included with the profile currently being defined.
Up button	Adjusts the specific placement order of the rules in the list. The position of each rule in the list is relevant to its priority in the evaluation process. The general position (top, middle, or bottom) in the list is established when the rule is initially added to the profile. See Add Rule Screen (page 8-80) for more details. However, the Up button further refines the placement by moving the rule to a higher, more precise position.
Down button	Adjusts the specific placement order of the rules in the list. The position of each rule in the list is relevant to its priority in the evaluation process. The general position (top, middle, or bottom) in the list is established when the rule is initially added to the profile. See Add Rule Screen (page 8-80) for more details. However, the Down button further refines the placement by moving the rule to a lower, more precise position.
Add button	Adds the profile to the system and includes it in the list of profiles on the Configuration Manager: Profiles Tab (page 8-73).
Delete button	Enables you to delete the selected rule and remove it from this profile.

Profile Links Screen
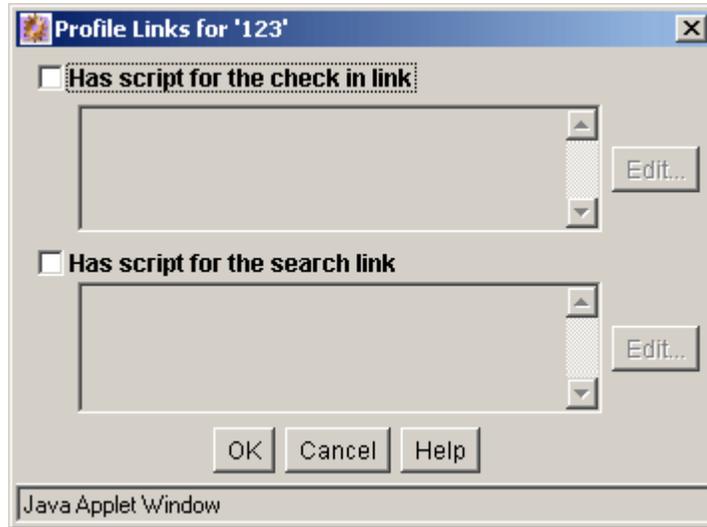
The Profile Links screen allows admin user to suppress the display of any or all check in or search links to a particular user or group of user by adding an Idoc Script that must evaluate to true before the link is displayed in the browser. To access the Profile Links screen, select the Restrict personalization links check box on the Add/Edit Profile Screen and click **Edit**.

Feature	Description
Has script for the check in link	**Selected**—Enables the associated Idoc Script which must evaluate to true before allowing the display of link on the Content Check In Form. **Clear** (default)—Disables any associated Idoc Script.
Has script for the search link	**Selected**—Enables the associated Idoc Script which must evaluate to true before allowing the display of link on the Advanced Search Form. **Clear** (default)—Disables any associated Idoc Script.
Edit	Displays the Check In/Search Link screen for either the check in or search link.

Check In/Search Link Screen: Conditions Tab
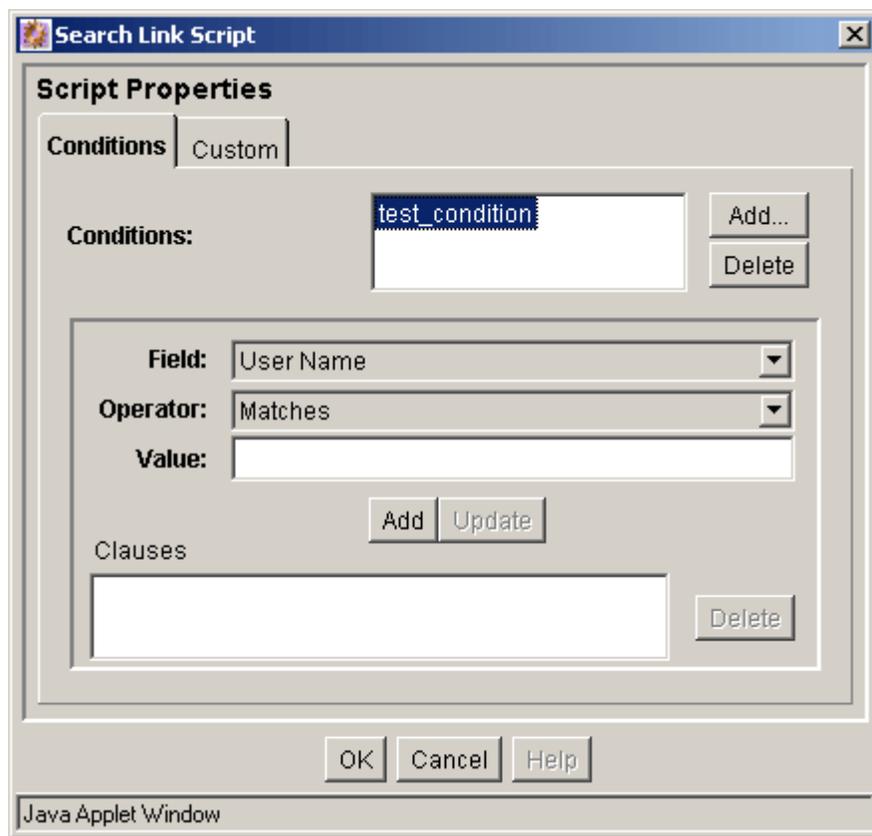
The Check In/Search Link screen is used to add the conditions that determine if any or all check in or search links are displayed on the Check In or search pages. The Conditions tab and Custom tab are mutually exclusive. If the Conditions tab is used to define the conditions, the Custom tab is disabled and vice versa. See the Check In/Search Link Screen: Custom Tab (page 8-80). When the Conditions tab on the Check In/Search Link screen initially displays, only the Conditions list pane is visible.

After a new default value is added using the Check In/Search Link: Add Condition Screen (page 8-80), the lower expression pane is displayed. If an existing condition is selected, the lower expression pane also is displayed with populated fields available for editing. The fields in the lower expression pane are used to create and define the condition clauses.

To access the Check In/Search Link screen to define conditions for the display or suppression of the Check and Search links, select the **Has script for the check in link** check box or the **Has script for the search link** check box and click the corresponding **Edit** button on the Profile Links Screen (page 8-77).

Feature	Description
Conditions text pane	Displays the names of the conditions created for displaying or suppressing links.
Add button	Displays the Check In/Search Link: Add Condition Screen (page 8-80).
Delete button	Enables you to delete the selected condition.
Field list	Displays a choice list of metadata options.
Operator list	The operator specifies the method for searching t-he metadata fields. The selected field determines the set of available values. **Matches**—The entire text within the specified metadata field contains the specified metadata Value. **Contains Word**—The text within the specified metadata field contains the metadata Value. **Begins With**—The text within the specified metadata field starts with the metadata Value.
Value field	Depending on the selected metadata Field, the Value field provides: • An editable field to enter the data. • A choice list of appropriate options. • An editable field with a corresponding Select button.
Add button	Adds the completed clause (Field + Operator + Value) to the Clauses pane
Update button	Used to edit the completed clause without deleting and redefining the clause. Use it by highlighting the clause in the Clauses pane, edit the Value field, and click **Update**. The revised clause displays in the Clause pane.
Clauses pane	Lists the existing clauses for the metadata field attribute value.
Delete button	Enables you to delete the selected clause.

Check In/Search Link: Add Condition Screen

The Add Condition screen is used to provide the name of the new condition. To access this screen, click **Add** on the Check In/Search Link Screen: Conditions Tab (page 8-78).

Note: This screen is identical to the Add Condition screen used to add a new activation condition. To view a sample Add Condition screen and read the applicable field description, see the Edit Activation Condition: Add Condition Screen (page 8-42).

Check In/Search Link Screen: Custom Tab

The Check In/Search Link screen is used to add the conditions that determine if any or all check in or search links are displayed on the Check In or search pages. The Conditions tab and Custom tab are mutually exclusive. If the Custom tab is used to define the display conditions, the Conditions tab is disabled and vice versa. See the Check In/Search Link Screen: Conditions Tab (page 8-78).

Note: This screen is identical to the Custom tab used to define specific activation condition attributes for a rule. To view a sample Custom tab and read the applicable field descriptions, see the Edit Activation Condition: Custom Tab (page 8-48).

Add Rule Screen

The Add Rule screen is used to include one or more rules in a profile. To access this screen, click **Add** on the Add/Edit Profile Screen (page 8-75).

Feature	Description
Name list	Lists the names of available rules that can be added to the profile currently being defined.

Feature	Description
Rule Priority list	The selected option adjusts the general placement order of the rules in the list on the Add/Edit Profile Screen (page 8-75). The position of each rule in the list is relevant to its priority in the evaluation process. Placement can be further refined using either the Up button (page 8-76) or the Down button (page 8-76). **Top**—Moves the rule to a relatively higher position. **Middle**—Moves the rule to a relatively central position. **Bottom**—Moves the rule to a relatively lower position.

Preview Profile Screen
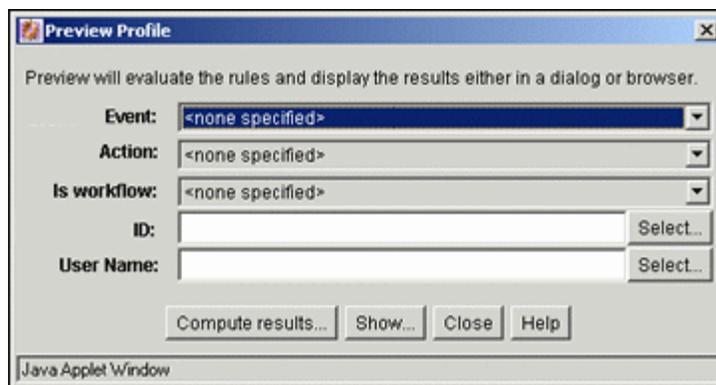
The Preview Profile screen is used to review the rules and trigger field that comprise a selected profile. By selecting different options from the metadata field lists, a profile is simulated and you can preview what might occur based on various choices.

The evaluation results are displayed in either a dialog or browser window using the **Compute results** button or the **Show** button. This screen is useful to assess how rules affect metadata fields during the rule evaluation process. To access this screen, click **Preview** on the Configuration Manager: Profiles Tab (page 8-73).

Feature	Description
Event list	**none specified** — An event is not included in the profile evaluation. **On Request**—Includes the internal event resulting from a user's request to view a Content Server page. **On Submit**—Includes the internal event resulting from a content item contribution process. **On Import**—Includes the internal event resulting from a batch loading or archiving procedure. If the activation condition for a rule requires On Import, the rule is only active for Archiver, batch loading, or any other process that uses a special check in service (for example, Content Publisher).
Action list	**none specified**—A user action is not included in the profile evaluation. **Check in new**—Includes the user action to contribute a new content item. **Check in selected**—Includes the user action to submit revisions to an existing checked in document. **Content information**—Includes the user action requesting to view the document information page. **Content update**—Includes the user action to submit revisions to the document information page. **Search**—Includes the user action requesting to view the search page.
Is workflow list	**none specified**—A workflow state is not included in the profile evaluation. The document may or may not be in a workflow, but its workflow state has not been specified. **Yes**—The document is in a workflow and you may want to display a different Content Information page. **No**—The document is not in a workflow.
Content ID field/Select button	The Content ID field displays the content ID of the selected document to use in the evaluation process to assess the profile's validity. This value is obtained based on the selected filter criteria. Clicking the corresponding **Select** button displays the Content Item View Screen (page 1-11).

Feature	Description
User Name field/Select button	The User Name field displays the selected user to use in the evaluation process to assess the profile's validity. This value is obtained based on the selected filter criteria. This field is only used with the **Compute results** button and is not used with the **Show** button.
	Clicking the corresponding **Select** button displays the User View Screen (page 1-12).
Compute Results button	Displays the Preview Results Screen (page 8-83).
Show button	Launches a browser window that displays a duplicate of the page that the end user will see. It is necessary to select On Request as the Event field value, select an Action value, and leave the User Name field blank.

Preview Results Screen

The Preview Results screen is used to compute and review the selections made on the Preview Profile screen. This screen displays the coded rule statements (script strings) that result from the preliminary evaluation and reflects any field value changes made to facilitate previewing various profile scenarios. To access this screen, click **Compute results** on the on the Preview Profile Screen (page 8-81).

CONTENT PROFILE EXAMPLES

These profile examples are included to help you develop useful profiles:

❖ Department-Based Content Profile (page 8-84)

❖ Black-Hole Check In Profile for Resumes (page 8-90)

❖ Global Rule to Restrict Content Check-In Based on User Role (page 8-99)

❖ Global Rule to Restrict Content Type Metadata Changes (page 8-101)

Department-Based Content Profile

This example shows how to plan and create a department-based profile that includes one global rule and one regular profile rule.

The goal is to control how the metadata fields governed by the rules are displayed on the Check In, Update, Content Information, and Search pages. Ideally, only department-specific fields are displayed. This minimizes the number of metadata fields that users see.

This example creates the applicable rules first and then the profile because the rules are added to the profile during the process of creating the actual profile.

This example is divided into the following main steps:

❖ Create a global rule with the characteristics:

- Ensure that all new and updated content items that are checked in have comments associated with them. The optional comments metadata field is revised to be a required field.

- Allow the content item title metadata field to be editable.

See Create the Global Rule (page 8-85).

❖ Create a profile rule with the following characteristics:

- Provide a default value for the comments metadata field but also allow it to be editable. The default message is triggered by marketing-specific documents.

- Provide default values that are read-only text for the publish type and revision label metadata fields.

See Create the Profile Rule (page 8-86).

❖ Create a department-based profile with the characteristics:

- Organize the metadata fields that are hidden or displayed on the Check In, Update, Content Information, and Search pages.

- Display only those fields that are relevant to the marketing department.

- Group selected metadata fields using a marketing-based group heading.

See Create the Department-Based Profile (page 8-89).

Create the Global Rule

1. Open the Rules tab on the Configuration Manager, and select **Add**.

   The Add/Edit Rule "name" Screen: General Tab (page 8-37) is displayed.

2. On the General tab, enter the name of the global rule in the Name field (for example, CmtsRqd).

3. Optionally, enter a description for the global rule.

4. Select the **Is global rule with priority** check box. (You can optionally change the priority number.)

5. Add and define the Comments metadata field as follows:

   a. On the Fields tab, click **Add**.

      The Add Rule Field Screen (page 8-52) is displayed.

   b. Select **Comments** from the Field Name drop-down option list.

   c. Select a general position from the Field Position drop-down option list (for example, top).

   d. Click **OK**.

      The Add/Edit Rule Field "name" Screen (page 8-54) is displayed.

   e. Select the **Required** display type from the Type drop-down option list (to ensure that users must enter a comment about the content item being checked in).

   f. Enter a statement in the Required Message field. (This is optional for all rule field types except the Required type.)

   g. Select the **Use default value** check box and click the corresponding **Edit** button.

      The Edit Default Value: Conditions Tab (page 8-58) is displayed.

   h. On the Conditions tab, click **Add**.

      The Edit Default Value: Add Condition Screen (page 8-61) is displayed.

   i. Enter the name of the field condition (for example, UserMsg).

      j.   Click **OK**.

          The Add Condition screen closes and the clause-generating fields display on the lower pane of the Conditions tab.

      k.   Enter a short statement in the lower Value field, at the far bottom of the screen (near the **Compute** button). This statement will be the default value for the Comment field.

      l.   Click **OK**.

          The Edit Default Value screen closes and the default value Idoc Script clause for the UserMsg field condition is added to the Default Value text pane.

      m. Click **OK**.

          The Add Rule Field screen closes and the Comments metadata field is added to the Fields list.

6.   Add and define the Document Title metadata field as follows:

      a.   On the Fields tab of the Add/Edit Rule screen, click **Add**.

      b.   Select **Title** from the Field Name drop-down option list.

      c.   Select a general position from the Field Position drop-down option list (for example, bottom).

      d.   Click **OK**.

      e.   Select the **Edit** display type from the Type drop-down option list (to allow this metadata field to be editable on the Check In and Search pages).

      f.   Optionally, enter a note in the Required Message field.

      g.   Click **OK**.

          The Title metadata field is added to the Fields list.

7.   Click **OK**.

    The Add/Edit Rule screen closes.

Create the Profile Rule

1.   On the Rules tab, select **Add**.

2.   On the General tab, enter the name of the profile rule in the Name field (for example, DefaultMktComment).

3.   Optionally, enter a description for the profile rule.

4. Select the **Is group** check box.

5. Select the **Has group header** check box, and click the corresponding **Edit** button.

    The Edit Group Header Screen (page 8-39) is displayed.

6. Enter the text to use as the header for the grouped metadata fields (for example, "Marketing-Specific Information").

7. Click **OK**.

8. Add and define the Comments metadata field as follows:

    a. On the Fields tab, click **Add**.

    b. Select **Comments** from the Field Name drop-down option list.

    c. Select a general position from the Field Position drop-down option list (for example, top).

    d. Click **OK**.

    e. Select the **Edit** display type from the Type drop-down option list (to allow this metadata field to be editable on the Check In, Update, Content Information, and Search pages).

    f. Optionally, enter a note in the Required Message field.

    g. Select the **Use default value** check box, and click the corresponding **Edit** button.

    h. On the Conditions tab, click **Add**.

    i. Enter the name of the field condition (for example, CurrentMktgDocs).

    j. Click **OK**.

    k. Enter **These are Current Marketing Docs** into the lower Value field at the bottom of the screen (near the **Compute** button).

    l. Click **OK**.

        The default value Idoc Script clause for the 7.5MktgDocs field condition is added to the Default Value text pane.

    m. Click **OK**.

        The Comments metadata field is added to the Fields list.

9. Add and define the Publish Type metadata field as follows:

    a. On the Fields tab, click **Add**.

    b. Select **Publish Type** from the Field Name drop-down option list.

    c.   Select a general position from the Field Position drop-down option list (for example, middle).

    d.   Click **OK**.

    e.   Select the **Label** display type from the Type drop-down option list (to make this a read-only metadata field on the Check In, Update, Content Information, and Search pages).

    f.   Optionally, enter a note in the Required Message field.

    g.   Select the **Use default value** check box and click the corresponding **Edit** button.

    h.   On the Conditions tab, click **Add**.

    i.   Enter the name of the field condition (for example, MktgDocsOnly).

    j.   Click **OK**.

    k.   Enter **@dDocName** into the lower Value field at the bottom of the screen (near the **Compute** button).

    l.   Click **OK**.

        The default value Idoc Script clause for the MktgDocsOnly field condition is added to the Default Value text pane.

    m.   Click **OK**.

        The Publish Type metadata field is added to the Fields list.

10. Add and define the Revision Label metadata field as follows:

    a.   On the Fields tab, click **Add**.

    b.   Select **Revision** from the Field Name drop-down option list.

    c.   Select a general position from the Field Position drop-down option list (for example, bottom).

    d.   Click **OK**.

    e.   Select the **Label** display type from the Type drop-down option list (to make this a read-only metadata field on the Check In, Update, Content Information, and Search pages).

    f.   Optionally, enter a note in the Required Message field.

    g.   Select the **Use default value** check box.

    h.   Click **OK**.

        The Revision Label metadata field is added to the Fields list.

11. Click **OK**.

    The Add/Edit Rule screen closes.

Create the Department-Based Profile

1. Open the Profiles tab on the Configuration Manager and click **Select**.

    The Add Profile Screen (page 8-74) is displayed.

2. Select **Type** from the Field Name drop-down option list.

3. Click **OK**.

4. Click **Add** on the Profiles tab.

    The Add Profile Screen (page 8-74) is displayed.

5. Enter the name of the profile (for example, MktgDoc).

6. Click **OK**.

    The Add/Edit Profile Screen (page 8-75) is displayed.

7. Enter the profile description in the Description field (for example, Current Mktg docs).

8. Enter a label for the profile that clearly identifies its use (for example, MarketingSpecific).

9. Select **ADMKT** (or an equivalent marketing option) from the Trigger drop-down option list.

10. Click **Add** to include the rules in this profile.

    The Add Rule Screen (page 8-80) is displayed.

11. Select the **DefaultMktComment** rule from the Name drop-down option list.

12. Select a general priority placement from the Rule Priority drop-down option list (for example, top).

13. Click **OK**.

14. Click **Add**.

15. Click **OK**.

16. Click **OK**.

    The Add Profile screen closes and the profile is added to the list of profiles on the Profiles tab.

Black-Hole Check In Profile for Resumes

This example shows how to plan and create a "black-hole check in" profile used to submit resumes to Human Resources.

The goal is to restrict the visible metadata fields available on the Check In, Update, Content Information, and Search pages when using this profile. After a resume is initially checked in, the derived settings for all the potentially searchable metadata fields prevent unauthorized users from retrieving the document. This example creates the applicable rules first and then the profile because the rules are added to the profile during the process of creating the actual profile.

This example is based on the default metadata fields displayed using a non-customized Content Server instance. The visible metadata fields in this profile are limited to Type, Primary File, Alternate File, and Comments. The Type field uses a read-only label. On submission the value is reset to an HR-accessible value to ensure confidentiality of the document. Only the Comments field is editable. The remaining metadata fields are hidden and on submission also have their values reset. In this example, the hidden metadata fields include Title, Author, Security Group, Content ID, Revision, Release Date, and Expiration Date.

Note: If selected, both the Hidden and Excluded display attributes conceal the defined metadata field. Using the Hidden type has the advantage of allowing the field value to remain on the source page. Thus, the contributor does not see the Hidden fields when checking in the document, but the assigned field values are still visible to an authorized viewer. The Excluded type precludes the field values on the source page.

Note: In a black-hole check in profile, it is not advisable to depend on the "Exclude non-rule fields" check box to hide unnecessary metadata fields (see Exclude non-rule fields check box (page 8-76).) Selecting this check box suppresses the display of all metadata fields that do not belong to the profile's rules. Therefore, contributors would not see these fields. However, it would not prevent default values from being assigned and subsequently stored on the source page. It would then be possible for unauthorized users to find a "black-hole" document by searching on the excluded metadata fields.

This example is divided into the following main steps:

❖ Create a profile rule that:

- Hides non-essential metadata fields and does not display them on the Check In, Update, Content Information, and Search pages.

- • Resets the default values of each hidden metadata field to ensure that unauthorized users cannot search and retrieve documents using the hidden fields.

  See Create a Profile Rule for the Hidden Metadata Fields (page 8-91).

- ❖ Create a profile rule that:
  - • Allows the display of specific metadata fields related to checking in a resume.
  - • Resets the values of each visible metadata field to ensure that unauthorized users cannot search and retrieve documents using these fields.

  See Create a Profile Rule for the Visible Metadata Fields (page 8-97).

- ❖ Create a black-hole check in profile that:
  - • Restricts the metadata fields that are hidden or displayed on the Check In, Update, Content Information, and Search pages.
  - • Displays only those fields that are relevant to an employee who is checking in a resume for an internal company position.

  See Create the Black-Hole Check In Profile for Resumes (page 8-98).

Create a Profile Rule for the Hidden Metadata Fields

1. Open the Rules tab on the Configuration Manager, and select **Add**.

   The Add/Edit Rule "name" Screen: General Tab (page 8-37) is displayed.

2. On the General tab, enter the name of the rule in the Name field (for example, NoExtraFields).

3. Optionally, enter a description for the global rule.

4. Add and define the Title metadata field as follows:

   a. On the Fields tab, click **Add**.

      The Add Rule Field Screen (page 8-52) is displayed.

   b. Select **Title** from the Field Name drop-down option list.

   c. Select a general position from the Field Position drop-down option list.

   d. Click **OK**.

      The Add/Edit Rule Field "name" Screen (page 8-54) is displayed.

   e. Select **Hidden** from the Type drop-down option list (to ensure that this metadata field does not display on the Check In, Update, Content Information, and Search pages).

f.   Optionally, enter a statement in the Required Message field.

g.   Select the **Is derived field** check box and click the corresponding **Edit** button.

The Edit Derived Value: Conditions Tab (page 8-62) is displayed.

h.   On the Conditions tab, click **Add**.

The Edit Derived Value: Add Condition Screen (page 8-62) is displayed.

i.   Enter the name of the field condition (for example, HRsEyesOnly).

j.   Click **OK**.

The Add Condition screen closes and the clause-generating fields display on the lower pane of the Conditions tab.

k.   In the lower Value field, enter a confidential string (for example, No specific title). This will help to prevent unauthorized users from using the Title metadata field to search for and retrieve the documents checked in using this profile.

l.   Click **OK**.

The Edit Derived Value screen closes and the computed Idoc Script clause is added to the derived field text pane.

m.   Click **OK**.

The Add Rule Field screen closes and the Title metadata field is added to the Fields list.

5.   Add and define the Author metadata field as follows:

a.   On the Fields tab, click **Add**.

b.   Select **Author** from the Field Name drop-down option list.

c.   Select a general position from the Field Position drop-down option list.

d.   Click **OK**.

e.   Select **Hidden** from the Type drop-down option list (to ensure that this metadata field does not display on the Check In, Update, Content Information, and Search pages).

f.   Optionally, enter a statement in the Required Message field.

g.   Select the **Is derived field** check box and click the corresponding **Edit** button.

h.   On the Conditions tab, click **Add**.

i.   Enter the name of the field condition (for example, HRsEyesOnly2).

j. Click **OK**.

k. Select **Author** from the Field drop-down option list.

l. Select **Matches** from the Operation drop-down option list.

m. Click **Select**.

The User View Screen (page 1-12) displays. Select the applicable user name. (For example, select an HR employee or whoever is authorized to view the documents checked in using this profile. This will help ensure that unauthorized users cannot search and retrieve these documents using the Author metadata field.)

n. Click **OK**.

The User View screen closes and the selected user is entered in the upper Value field.

o. Click **Add**.

The clause is added to the clause pane.

p. Click **OK**.

q. Click **OK**.

6. Add and define the Security Group metadata field as follows:

a. On the Fields tab, click **Add**.

b. Select **Security Group** from the Field Name drop-down option list.

c. Select a general position from the Field Position drop-down option list.

d. Click **OK**.

e. Select **Hidden** from the Type drop-down option list (to ensure that this metadata field does not display on the Check In, Update, Content Information, and Search pages).

f. Optionally, enter a statement in the Required Message field.

g. Select the **Is derived field** check box and click the corresponding **Edit** button.

h. On the Conditions tab, click **Add**.

i. Enter the name of the field condition (for example, HRsEyesOnly3).

j. Click **OK**.

k. Select **Security Group** from the Field drop-down option list.

l. Select **Matches** from the Operation drop-down option list.

    m. Select an applicable choice from the Value drop-down option list.

        For example, select HR or any other department that is authorized to view the documents checked in using this profile. This helps ensure that unauthorized users cannot search and retrieve these documents using the Security Group metadata field.

    n. Click **Add**.

    o. Click **OK**.

    p. Click **OK**.

7. Add and define the Content ID metadata field as follows:

    a. On the Fields tab, click **Add**.

    b. Select **Content ID** from the Field Name drop-down option list.

    c. Select a general position from the Field Position drop-down option list.

    d. Click **OK**.

    e. Select **Hidden** from the Type drop-down option list (to ensure that this metadata field does not display on the Check In, Update, Content Information, and Search pages).

    f. Optionally, enter a statement in the Required Message field.

    g. Select the **Is derived field** check box and click the corresponding **Edit** button.

    h. On the Conditions tab, click **Add**.

    i. Enter the name of the field condition (for example, HRsEyesOnly4).

    j. Click **OK**.

    k. Select **Content ID** from the Field drop-down option list.

    l. Select **Begins With** from the Operation drop-down option list.

    m. Enter a confidential string or, optionally, click **Select**.

        The Edit Derived Value: Select Field Screen (page 8-63) is displayed. You can select a content item from the list. However, to ensure greater security, you should enter a unique string (for example, Res). This helps ensure that unauthorized users cannot search and retrieve these documents using the Content ID metadata field.

    n. Click **OK** (if you selected a content item from the Content Item View Screen (page 1-11)).

    o. Click **Add**.

p. Click **OK**.

q. Click **OK**.

8. Add and define the Revision metadata field as follows:

    a. On the Fields tab, click **Add**.

    b. Select **Revision** from the Field Name drop-down option list.

    c. Select a general position from the Field Position drop-down option list.

    d. Click **OK**.

    e. Select **Hidden** from the Type drop-down option list (to ensure that this metadata field does not display on the Check In, Update, Content Information, and Search pages).

    f. Optionally, enter a statement in the Required Message field.

    g. Select the **Is derived field** check box and click the corresponding **Edit** button.

    h. On the Conditions tab, click **Add**.

    i. Enter the name of the field condition (for example, HRsEyesOnly5).

    j. Click **OK**.

    k. Select **Revision** from the Field drop-down option list.

    l. Select **Begins With** from the Operation drop-down option list.

    m. Enter a confidential string in the upper Value field (for example, Res). This helps ensure that unauthorized users cannot search and retrieve these documents using the Revision metadata field.

    n. Click **Add**.

    o. Click **OK**.

    p. Click **OK**.

9. Add and define the Release Date metadata field as follows:

    a. On the Fields tab, click **Add**.

    b. Select **Release Date** from the Field Name drop-down option list.

    c. Select a general position from the Field Position drop-down option list.

    d. Click **OK**.

    e.   Select **Hidden** from the Type drop-down option list (to ensure that this metadata field does not display on the Check In, Update, Content Information, and Search pages).

    f.   Optionally, enter a statement in the Required Message field.

    g.   Select the **Is derived field** check box and click the corresponding **Edit** button.

    h.   On the Conditions tab, click **Add**.

    i.   Enter the name of the field condition (for example, HRsEyesOnly6).

    j.   Click **OK**.

    k.   In the lower Value field, enter a confidential string (for example, No specific release date). This will help to prevent unauthorized users from using the Release Date metadata field to search for and retrieve the documents checked in using this profile).

    l.   Click **OK**.

    m.   Click **OK**.

10. Add and define the Expiration Date metadata field as follows:

    a.   On the Fields tab, click **Add**.

    b.   Select **Expiration Date** from the Field Name drop-down option list.

    c.   Select a general position from the Field Position drop-down option list.

    d.   Click **OK**.

    e.   Select **Hidden** from the Type drop-down option list (to ensure that this metadata field does not display on the Check In, Update, Content Information, and Search pages).

    f.   Optionally, enter a statement in the Required Message field.

    g.   Select the **Is derived field** check box and click the corresponding **Edit** button.

    h.   On the Conditions tab, click **Add**.

    i.   Enter the name of the field condition (for example, HRsEyesOnly7).

    j.   Click **OK**.

    k.   In the lower Value field, enter a confidential string (for example, No specific expiration date). This will help to prevent unauthorized users from using the Expiration Date metadata field to search for and retrieve the documents checked in using this profile).

    l.   Click **OK**.

    m. Click **OK**.

11. Click **OK**.

    The Add Rule screen closes.

Create a Profile Rule for the Visible Metadata Fields

1. On the Rules tab, select **Add**.

2. On the General tab, enter the name of the profile rule in the Name field (for example, VisibleFields).

3. Optionally, enter a description for the profile rule.

4. Add and define the Type metadata field as follows:

    a. On the Fields tab, click **Add**.

    b. Select **Type** from the Field Name drop-down option list.

    c. Select a general position from the Field Position drop-down option list.

    d. Click **OK**.

    e. Select **Label** from the Type drop-down option list (to make this a read-only metadata field on the Check In, Update, Content Information, and Search pages).

    f. Optionally, enter a statement in the Required Message field.

    g. Select the **Use default value** check box, and click the corresponding **Edit** button.

    h. On the Conditions tab, click **Add**.

    i. Enter the name of the field condition (for example, ResumeType).

    j. Click **OK**.

    k. In the lower Value field, enter **Resume**.

    l. Click **OK**.

    m. Select the **Is derived field** check box and click the corresponding **Edit** button.

    n. On the Conditions tab, click **Add**.

    o. Enter the name of the field condition (for example, ResumeType2).

    p. Click **OK**.

    q.   In the lower Value field, select an appropriate document type from the Value drop-down option list (for example, HRresumes).

    r.   Click **OK**.

    s.   Click **OK**.

5.   Add and define the Comments metadata field as follows:

    a.   On the Fields tab, click **Add**.

    b.   Select **Comments** from the Field Name drop-down option list.

    c.   Select a general position from the Field Position drop-down option list.

    d.   Click **OK**.

    e.   Select **Edit** from the Type drop-down option list (to allow this metadata field to be editable on the Check In, Update, Content Information, and Search pages).

    f.   Select the **Use default value** check box and click the corresponding **Edit** button.

    g.   On the Conditions tab, click **Add**.

    h.   Enter the name of the field condition (for example, PositionAppliedFor).

    i.   Click **OK**.

    j.   In the lower Value field, enter an appropriate statement (for example, Please specify the position title).

    k.   Click **OK**.

    l.   Click **OK**.

    m. Click **OK**.

Create the Black-Hole Check In Profile for Resumes

1.   Open the Profile tab on the Configuration Manager and click **Select**.

    The Add Profile Screen (page 8-74) is displayed.

2.   Select **Type** from the Field Name drip down option list.

3.   Click **OK**.

4.   Click **Add** on the Profiles tab.

    The Add Profile Screen (page 8-74) is displayed.

5.   Enter the name of the profile (for example, BlackHoleResumeCheckIn).

6. Click **OK**.

   The Add/Edit Profile Screen (page 8-75) is displayed.

7. Enter the profile description in the Description field (for example, For internal user resumes only).

8. Select **HRresumes** (or the equivalent option) from the Trigger drop-down option list.

9. Click **Add** to include the rules in this profile.

   The Add Rule Screen (page 8-80) is displayed.

10. Select the **NoExtraFields** rule from the Name drop-down option list.

11. Select a general priority placement from the Rule Priority drop-down option list.

12. Click **OK**.

13. Click **Add**.

14. Select the **VisibleFields** rule from the Name drop-down option list.

15. Select a general priority placement from the Rule Priority drop-down option list.

16. Click **OK**.

17. Click **OK**.

   The Add Profile screen closes and the profile is added to the list of profiles on the Profiles tab.

Global Rule to Restrict Content Check-In Based on User Role

This example shows how to create a global rule that can validate metadata fields when users check in content. The global rule validates the data in a request, and returns an error message if the data is incorrect. Specifically, this example shows how to allow only an administrator to check in content that specifies ADACCT as the Content Type.

Enable Content Server to Issue a Fatal Error Upon a Global Rule Violation

1. In a text editor, open the config.cfg file:

   <*install_dir*>/config/config.cfg

2. Add the following configuration setting:

```
IsDpSubmitErrorFatal=true
```

3. Close and save the file.

4. Restart the Content Server.

Create a Global Rule to Restrict Content Type Check-Ins

This global rule validates the value for dDocType and ensures that an administrator is checking in an ADACCT document. However, the rule is configured to affect only the Check In and Update pages.

1. Open the Rules tab on the Configuration Manager, and click **Add**.

   The Add/Edit Rule "name" Screen: General Tab (page 8-37) is displayed.

2. On the General tab, enter the name of the global rule in the Name field (for example, FailOnCheckInError).

3. Optionally, enter a description for the global rule.

4. Select the **Is global rule with priority** check box. (You can optionally change the priority number.)

5. Select the **Use rule activation condition** check box and click the corresponding **Edit** button.

   The Edit Activation Condition: Conditions Tab (page 8-41) is displayed.

6. Click **Add**.

   The Edit Activation Condition: Add Condition Screen (page 8-42) is displayed.

7. Enter the name of the condition in the Name field (for example, CheckIn).

8. Click **OK**.

   The Add Condition screen closes and the Edit Activation Condition: Conditions Tab / General Tab (page 8-43) is displayed. The clause-generating tabs display on the lower pane.

9. Select the **Use event** check box.

10. Select the **On Submit** check box.

11. Select the **Use action** check box.

12. Select the **Check in new**, **Check in selected**, and **Content update** check boxes.

13. Click **OK**.

The Edit Activation Condition screen closes and the activation condition clause is entered into the Use rule activation condition text pane.

14. Click the **Fields** tab.

    The Add/Edit Rule "name" Screen: Fields Tab (page 8-50) is displayed.

15. Click **Add**.

    The Add Rule Field Screen (page 8-52) is displayed.

16. Select **Type** from the Field Name drop-down list.

17. Optionally, select a general position form the Field Position drop-down list.

18. Click **OK**.

    The Add/Edit Rule Field "name" Screen (page 8-54) is displayed.

19. Select the **Is derived field** check box and click the corresponding **Edit** button.

    The Edit Derived Value: Conditions Tab (page 8-62) is displayed.

20. Click the **Custom** tab.

    The Edit Derived Value: Custom Tab (page 8-63) is displayed.

21. Select the **Custom** check box and enter the following Idoc Script:

    ```
    <$if dDocType like "ADACCT" and not userHasRole("admin")$>
    <$abortToErrorPage("Only administrators can use ADACCT.")$>
    <$endif$>
    ```

22. Click **OK**.

23. Click **OK**.

24. Click **OK**.

The rule is added to the list of Rules.

Global Rule to Restrict Content Type Metadata Changes

This example shows how to create a global rule that can validate metadata fields when users check in content. The global rule validates the data in a request, and returns an error message if the data is incorrect. Specifically, this example shows how to allow only an administrator to change the content type of a checked-in document.

Enable Content Server to Issue a Fatal Error Upon a Global Rule Violation

1. In a text editor, open the config.cfg file:

   <*install_dir*>/config/config.cfg

2. Add the following configuration setting:

   `IsDpSubmitErrorFatal=true`

3. Close and save the file.

4. Restart the Content Server.

Create a Global Rule to Restrict Content Type Changes

This global rule validates the value for dDocType and ensures that an administrator is changing the content type of a checked-in document. However, it is configured to affect only the Check In page.

1. Open the Rules tab on the Configuration Manager and click **Add**.

   The Add/Edit Rule "name" Screen: General Tab (page 8-37) is displayed.

2. On the General tab, enter the name of the global rule in the Name field (for example, FailOnCheckInError).

3. Optionally, enter a description for the global rule.

4. Select the **Is global rule with priority** check box. (You can optionally change the priority number.)

5. Select the **Use rule activation condition** check box and click the corresponding **Edit** button.

   The Edit Activation Condition: Conditions Tab (page 8-41) is displayed.

6. Click **Add**.

   The Edit Activation Condition: Add Condition Screen (page 8-42) is displayed.

7. Enter the name of the condition in the Name field (for example, CheckIn).

8. Click **OK**.

   The Add Condition screen closes and the Edit Activation Condition: Conditions Tab / General Tab (page 8-43) is displayed. The clause-generating tabs display on the lower pane.

9. Select the **Use event** check box.

10. Select the **On Submit** check box.

11. Select the **Use action** check box.

12. Select the **Content update** check box.

13. Click **OK**.

    The Edit Activation Condition screen closes and the activation condition clause is entered into the Use rule activation condition text pane.

14. Click the **Fields** tab.

    The Add/Edit Rule "name" Screen: Fields Tab (page 8-50) is displayed.

15. Click **Add**.

    The Add Rule Field Screen (page 8-52) is displayed.

16. Select **Type** from the Field Name drop-down list.

17. Optionally, select a general position form the Field Position drop-down list.

18. Click **OK**.

    The Add/Edit Rule Field "name" Screen (page 8-54) is displayed.

19. Select the **Is derived field** check box and click the corresponding **Edit** button.

    The Edit Derived Value: Conditions Tab (page 8-62) is displayed.

20. Click the **Custom** tab.

    The Edit Derived Value: Custom Tab (page 8-63) is displayed.

21. Select the **Custom** check box and enter the following Idoc Script:
    ```
    <$oldType = getValue("DOC_INFO", "dDocType")$>
    <$newType = getValue("#local", "dDocType")$>
    <$if not (newType like oldType) and not (userHasRole("admin"))$>
    <$abortToErrorPage("Only administrators can change dDocType.")$>
    <$endif$>
    ```

22. Click **OK**.

23. Click **OK**.

24. Click **OK**.

    The rule is added to the list of Rules.

A

MANAGING LINKED CONTENT WITH LINK MANAGER

OVERVIEW

Link Manager is an optional component bundled with Content Server. If installed, it evaluates, filters, and parses the URL links of indexed content items before extracting them for storage in a database table (ManagedLinks). After the ManagedLinks table is populated with the extracted URL links, the Link Manager component references this table to generate link search results, lists of link references for the Content Information page, and the resource information for the Link Info page. The Link Manager component enables you to:

❖ View lists of links using specific search criteria

❖ View detailed information about a specific link

❖ Recompute and refresh links to reevaluate and validate them

❖ View the links to other content in a specific content item

❖ View the links back to a specific content item.

The search results, link references lists, and Link Info pages are useful to determine what content items are affected by content additions, changes, or revision deletions. For example, before deleting a content item, you can verify that any URL references contained in it are insignificant. Another use might be to monitor how content items are being used.

Note: Because the Link Manager component extracts the URL links during the Content Server indexing cycle, only the URL links of released content items are extracted. For content items with multiple revisions, only the most current released revision will have entries in the database table. If you install the Link Manager component after content items are already checked in, you will need to perform a rebuild to ensure that all links are included in the ManagedLinks table.

Because Link Manager does all of its work during the indexing cycle, it will increase the amount of time required to index content items and to rebuild collections. For information about disabling Link Manager during the rebuild cycle, refer to the sections on `LkDisableOnRebuild` and `LkReExtractOnRebuild` in the *Idoc Script Reference Guide*.

However, the time taken may not be noticeable since most of the time is spent indexing the content item into the collection. Although, the amount of time required does depend on the type and size of the content items involved. That is, if the file needs to be converted, this requires more time than text-based (HTML) files.

For more information about file formats, conversion, and link extraction, see *Link Extraction Process* (page A-3) and *File Formats and Conversion* (page A-4).

This section covers the following topics:

❖ About Managed Links (page A-3)

❖ Managing Links (page A-5)

❖ Link Manager Database Tables (page A-8)

❖ Link Manager Filters (page A-10)

❖ Site Studio Integration (page A-11)

ABOUT MANAGED LINKS

This section covers the following topics:

❖ Link Extraction Process (page A-3)

❖ File Formats and Conversion (page A-4)

❖ Link Status (page A-5)

Link Extraction Process

The Link Manager consists of an extraction engine and a pattern engine. The extraction engine includes a conversion engine (HtmlExport). The conversion engine is used to convert files that the extraction engine cannot natively parse to a text-based file format (HTML).

Link Manager does not use HtmlExport to convert files that contain any of the following strings in the file format: hcs, htm, image, text, xml, jsp, and asp. These text-based files are handled by Link Manager without need for conversion.

During the indexing cycle, the Link Manager component searches the checked-in content items to find URL Links. This occurs as follows:

1. The extraction engine converts the file using the conversion engine (if necessary).

2. The extraction engine then uses the pattern engine to access the link evaluation rules defined in the LinkManagerPatterns table.

3. The evaluation rules tell the extraction engine how to sort, filter, evaluate, and parse the accepted URL links in the content items.

4. The accepted URL links are inserted or updated in the ManagedLinks table.
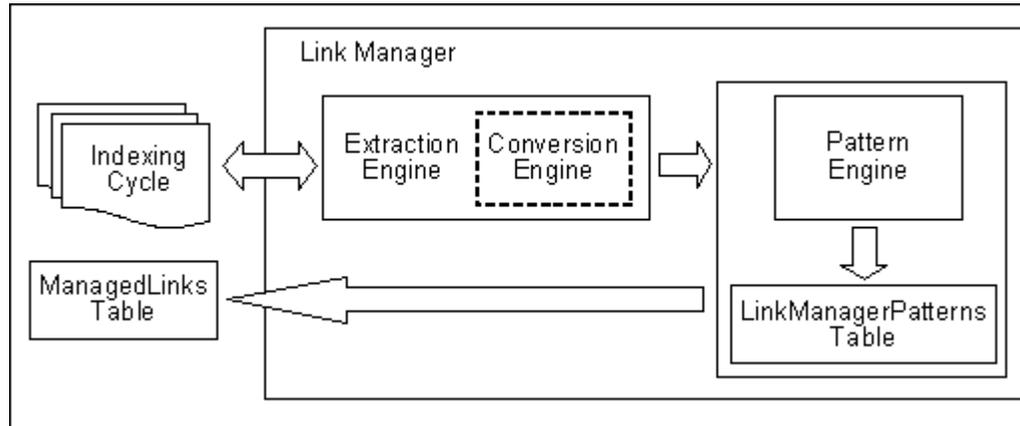
Caution: With this release, the Link Manager component uses HtmlExport 8 (shipped with the current version of Content Server) for file conversion. A link extractor template file is included with the Link Manager component. HtmlExport 8 requires this template. Do not edit this file.

Important: To execute successfully, HtmlExport requires either a virtual or physical video interface adaptor (VIA). For example, most Windows environments have graphics capabilities that provide HtmlExport access to a frame buffer. UNIX systems, however, may not have graphics cards and do not have a running X-Windows Server for use by HtmlExport. For systems without graphics cards, a virtual frame buffer (VFB) can be installed and used.

File Formats and Conversion

There are various file formats (such as Word) that need to be converted by the conversion engine (HtmlExport) before links can be extracted. However, links in text-based files (HTML) can be extracted by Link Manager without requiring conversion by HtmlExport. Therefore, Link Manager does not use HtmlExport to convert files that contain any of the following strings in the file format: hcs, htm, image, text, xml, jsp, and asp.

Furthermore, Link Manager handles all the variations of these file formats. For example, the hcs string matches the dynamic server page strings: hcst, hcsp, and hcsf. Also, the image string matches all comparable variants such as image/gif, image/jpeg, image/rgb, image/tiff, etc. In addition to these, there may be other file types that you do not want to be converted. In this case, you can use a configuration variable to prevent their conversion. For more information, see the sections on `LkDisallowConversionFormats` in the *Idoc Script Reference Guide*.

Link Manager recognizes links in the following file formats:

❖ Text-based formats (txt, html, xml, jsp, asp, csv, hcst, hcsf, and hcsp)

❖ Email (msg and eml)

❖ Microsoft Word

❖ Microsoft Excel

❖ OpenOffice Writer

❖ OpenOffice Calc

Link Status

All new and existing links are managed during the indexing cycle. When content items are checked in, the accepted links in these content items are added to or updated in the ManagedLinks table. Additionally, existing links are evaluated for changes resulting from content items being checked in or deleted. As links are added or monitored, they are marked as either valid or invalid.

When one content item in the system references another content item in the system, the resulting link is marked as valid. When an existing link references a content item that has been deleted, the link is reevaluated and the status changes from valid to invalid. Statuses are recorded as a Y (valid) or N (invalid) in the *dLkState* column of the ManagedLinks Table (page A-9) and displayed for the user in the *State* column of the Link Info page as *Valid* or *Invalid.* For more information on the Link Info page, see the *Content Server User Guide*.

MANAGING LINKS

The Link Manager component uses an extraction engine that references the link patterns defined in the resource table (LinkManagerPatterns). These link patterns are rules that tell the extraction engine how to sort the different links, which links to filter out, which links to accept, and how to parse the links for more information.

Note: The LinkManagerPatterns table is an hda table that is easily accessible by other components. The LinkManagerPatterns table is located in the following file:

<install_dir>/<instance_dir>/custom/LinkManager/resources/linkmanager_resource.htm

This section covers the following topics:

LinkManagerPatterns Table

The LinkManagerPatterns table includes the following columns:

Column Name	Description
lkpName	Provides the name of the pattern and is considered to be the primary key of the table. It is used mainly in error handling and to allow other components to directly target the override of a specified rule.
lkpDescription	Provides an explanation of the purpose of the pattern.
lkpType	The type specifies the initial screening of the URL. Supported types include: **prefix**—examines the path (or address) of the URL for the specified parameters. If the path begins with one of the specified parameters, then the condition is met. **contains**—examines the path (or address) of the URL for the specified parameters. If the path contains one of the specified parameters, then the condition is met. **service**—examines the query string of the URL. If the URL contains a value for IdcService and if this value matches one of the parameters, the condition is met. **Note:** The extraction engine is actually a two-step engine and the three types above fall into two distinct groups. The 'prefix' and 'contains' types are used on the path part of the URL, while the 'service' type is used on the query string part of the URL.

Column Name	Description
lkpParameters	A comma-separated list of patterns or parameters used by the type. The parameters are Idoc Script capable and are initially evaluated for Idoc Script. The engine uses the following rules for extracting the patterns from the parameters: 1. The parameter string is evaluated for Idoc Script. 2. The parameters are parsed using the comma separator. The result is a list of patterns. 3. Each pattern is XML decoded. Consequently, one rule looks for a URL that begins with the resolved value for <$HttpRelativeWebRoot$> by setting lpkParameters to <$HttpRelativeWebRoot$>. A subsequent rule may look for a URL that literally begins with <$HttpRelativeWebRoot$> by setting the parameter to <$HttpRelativeWebRoot$>
lkpAccept	If a pattern is matched, this value determines if the URL is accepted. The possible values include: **accept**—if a pattern is matched, then the URL is accepted. **filter**—if a pattern is matched, the URL is rejected. This value is usually combined with lkpContinue set to false to stop the processing. **pass**—if a pattern is matched for the specified type, no determination is made. The 'action' is used to determine how this URL is processed.
lkpContinue	The value determines whether the pattern processing engine will continue to parse the URL. **true**—the processing continues. **false**—the processing stops.
lkpLinkType	Specifies the URL type determined for this link.

Column Name	Description
lkpAction	This is a function defined in the LinkHandler class. It refers to a method in the LinkImplementor class that is used to further parse and evaluate the URL. **Note:** LinkImplementor can be class aliased or extended.
lkpOrder	The order in which the patterns are to be evaluated.
lkpEnabled	This value is Idoc Script capable and determines whether this rule should be evaluated. It is calculated and evaluated during start up when the patterns are loaded.

Examples of Link Patterns and Customization

A components resource table (LinkManagerPatterns) is included with the Link Manager component. Refer to this table for examples of link evaluation rules. This table is located in the
<*install_dir*>/<*instance_dir*>/custom/LinkManager/resources/linkmanager_resource.htm file. The table can be customized by adding new rules or editing the existing default rules. You can customize the LinkManagerPatterns table using standard component architecture.

LINK MANAGER DATABASE TABLES

This section covers the following topics:

❖ ManagedLinks Table (page A-9)

❖ LinkReferenceCount Table (page A-9)

ManagedLinks Table

Important: To improve query execution performance, standard indices were added to the dDocName and dLkResource columns in the ManagedLinks table. System administrators are responsible for adjusting these indices to accommodate specific database tuning requirements in various system environments.

A link is stored in the ManagedLinks table if the pattern engine successfully processes it and determines that the link is acceptable. Each link in the table is assigned a unique class id (dLkClassId) and each row in the table has a unique GUID (dLkGUID). A single link may consist of multiple rows in the table if multiple resources define the link and each resource can independently break the link.

This is especially true for Site Studio links where a single link may be defined by both a node and a content item. If the node is missing, the link breaks. If the content item is missing, the link breaks. In this case, there are two resources that do not depend on each other and each can break the link. Consequently, each resource is managed separately in the ManagedLinks table. For additional information about Site Studio links, see *Site Studio Integration* (page A-11).

Note: When a content item is checked in and a link references it, the link is marked as valid. When a link references a deleted content item, the link is marked as invalid. Notice that the dLkState column indicates the link's status as Y (valid) or N (invalid).

LinkReferenceCount Table

The LinkReferenceCount table maps the content items to the number of times each is referenced in the ManagedLinks table. A content item in this table might not be a content item that is currently managed by Content Server. If there is an entry for a content item in this table, it only indicates that a link in the ManagedLinks table, as parsed by the pattern engine, has referenced the content item as a 'doc' resource.

LINK MANAGER FILTERS

The Link Manager component provides filters for parts of the pattern engine that allow customization of some very specific behavior. In general, the rules of the pattern engine are the most likely to be modified. However, in certain circumstances, Link Manager explicitly creates and uses filters to augment its standard behavior.

This section covers the following topics:

- ❖ extractLinks Filter (page A-10)
- ❖ linkParseService Filter (page A-10)
- ❖ sortAndDecodeLinks Filter (page A-11)

extractLinks Filter

The extractLinks filter is used during the Link Extraction Process (page A-3) when the extraction engine parses the accepted URL links. As links are extracted, Link Manager looks for specific HTML tags. However, you may decide that other HTML tags might also contain relevant links. In this case, you can use this filter to extract these additional links.

The tag is passed to the filter as a cached object with the key HtmlTag. The value (or link) is passed back to the parse with the key HtmlValue. If the filter extracts extra information, you should be aware that the passed-in binder is flushed before being passed to the pattern engine. The service.setCachedObject and service.getCachedOject methods should pass and retrieve the extra information, respectively.

Note: By default, it looks for the following HTML tags: <a>, <link>, <iframe>, <img>, <script>, and <frame>.

linkParseService Filter

The linkParseService filter is used during the Link Extraction Process (page A-3) when the pattern engine evaluates links. Specifically, the links that are identified to use the

IdcService parameter. After evaluation, the link binder and service are provided for the linkParseService filter.

The service contains the binder for the parsed URL and information map. You may choose to customize the values in the parsed URL binder by adjusting certain parameters. Or, you may decide to customize the information map (which tells the parseService method what parameters to extract from the URL binder and how to map the data to resource types).

sortAndDecodeLinks Filter

The sortAndDecodeLinks filter is only available from the 'refresh' option. That is, it is only called when users are refreshing the links. For more information about Link Manager refresh options, refer to *Managed Links Administration Page* (page A-14). The service contains the 'LinkSetMap' which includes a sorted list of links contained in the ManagedLinks table. The refresh validates the Site Studio links and the existence of all links referring to 'doc' resources. However, you may decide to create a component that augments the standard validation.

SITE STUDIO INTEGRATION

Important: When you are using Site Studio, you must set the *HasSiteStudio* configuration variable value to true. This variable enables the Site Studio-specific patterns for parsing 'friendly' URLs for the pattern engine. For more information on the `HasSiteStudio` variable, see the *Idoc Script Reference Guide*.

When configured to work with Site Studio, Link Manager obtains links from Site Studio by directly requesting a parsing of the links that Site Studio has identified. In return, Site Studio provides information about the links pertaining to its health and components. In particular, Site Studio provides information about the node/section, if a content item is used, the state of the content item, the type of link (friendly, page, or node), and if the link is valid.

Note: Site Studio does not load its project information when the Standalone applications are launched. Therefore the Site Studio links will not be properly evaluated if a rebuild or index update cycle is started and completed by a standalone application.

When a user changes the links via the Site Studio designer, Link Manager listens to filter events. Consequently, if a node is deleted, Link Manager marks all links using the deleted node as invalid. This means that Link Manager successfully manages links that directly

reference the node ID. Additionally, with information provided by Site Studio, Link Manager can accurately determine the state of the link.

However, friendly URLs (i.e., links that do not reference the node ID or dDocName) are more difficult to manage and ensure accuracy. When a node property changes, Link Manager marks all friendly links using this node as invalid and broken. This includes both absolute and relative links. Although this may not actually be the case, Link Manager can not retrace the parent chain to determine what part of the link was changed, how to fix it, or determine if it is actually broken.

Types of Site Studio Managed Links

Site Studio uses two types of managed links:

❖ Completely Managed Links:

- Any links using the SS_GET_PAGE IdcService.

- Links to nodes that include:

  javascript:nodelink(Node,Site)

  javascript:nodelink(Node)

  ssNodeLink(Node,Site)

  ssNodeLink(Node)

  ssNODELINK/Site/Node

  ssNODELINK/Node

- Links to pages that include:

  javascript:link(Doc,Node,Site)

  javascript:link(Doc,Node)

  javascript:link(Doc)

  ssLink(Doc,Node,Site)

  ssLink(Doc,Node)

  ssLink(Doc)

  ssLINK/Site/Node/Doc

  ssLINK/Node/Doc

  ssLINK/Doc

❖ Provisionally Managed Links: The following Site Studio links are managed up to Site Studio node changes. The state of the links can be determined by using the 'refresh' option from the Managed Links Administration Page (page A-14). If the majority of links are of this form and nodes have changed dramatically, it is recommended to refresh or recompute the links.

- Absolute (or full URLs): http://site/node/doc.htm

- Friendly links to nodes

   <!--$ssServerRelativeSiteRoot-->dir/dir/index.htm

   [!--$ssServerRelativeSiteRoot--]dir/dir/index.htm

   <%=ssServerRelativeSiteRoot%>dir/dir/index.htm

- Friendly links to pages

   <!--$ssServerRelativeSiteRoot-->dir/dir/doc.htm

   [!--$ssServerRelativeSiteRoot--]dir/dir/doc.htm

   <%=ssServerRelativeSiteRoot%>dir/dir/doc.htm

LINK ADMINISTRATION

This section covers the following topics:

Managed Links Administration Page

The Managed Links Administration page enables you to perform refresh activities to update the ManagedLinks and LinkReferenceCount tables. You can access the Managed Links Administration page by clicking the **Managed Links Administration** link in the Administration tray.

Feature	Description
Status	The status indicates whether the Content Server is performing a refresh activity. When idle, the status is 'Ready'. Otherwise, the status indicates what kind of refresh is being performed, how many links have been processed, and how many errors have been encountered. For an example of refresh status information, refer to Refresh Activity Status (page A-15).
Recompute links option	This refresh activity takes each link in the ManagedLinks table and resubmits it to the patterns engine. The link is evaluated according to the pattern rules and updated in the table. A link may be reclassified as another type of link depending on which patterns have been enabled or disabled. Use this option if the pattern rules have changed.

Feature	Description
Refresh links option	This refresh activity takes each link in the ManagedLinks table and attempts to determine if the link is valid. In the special case of Site Studio links, the links are sent to the Site Studio decode method. This determines what nodes and content items are used by the link. It also determines if the link is valid and is indeed a Site Studio link. Use this option when there have been a lot of changes to Site Studio node/section properties. LinkManager can not completely track the changes to 'friendly' Site Studio links. By refreshing or forcing a validation on the links, Link Manager can more accurately determine which links are broken and which are valid.
Refresh references counts option	This refresh activity flushes the LinkReferenceCount table and queries the ManagedLinks table for the content item references. Both the 'recompute' and 'refresh' table activities try to maintain the LinkReferenceCount table. However, on occasion, this table may get out-of-sync and this option, when used on a quiet system, rebuilds this table.
Abort refresh activity option	This option aborts the current refresh activity. Only one refresh activity can be active at any one time.

Refresh Activity Status

The following screen provides an example of the status message generated during a refresh activity.
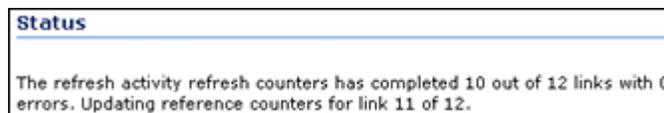
Alternative Refresh Methods

In addition to the refresh activities available on the *Managed Links Administration Page* (page A-14), there are also alternative methods you can use to update the ManagedLinks and LinkReferenceCount tables:

❖ Using the Repository Manager, perform a collection rebuild. This process rebuilds the entire search index, and the old index collection is replaced with a new index collection when the rebuild is successfully completed.

If you open the Repository Manager as a standalone application, you can only use this alternate refresh method when the `HasSiteStudio` configuration variable is not enabled. When information is requested from Site Studio and the Repository Manager is in standalone mode, Site Studio is not initialized completely and does not return accurate information. This is not an issue if you open the Repository Manager applet.

❖ If custom fields have been added while content is in the system, you can use the Configuration Manager to perform the updates because the Rebuild Search Index button is enabled. This rebuilds the entire search index.

Recomputing Links in the ManagedLinks Table

To reevaluate the links in the ManagedLinks table:

1. Click the **Managed Links Administration** link in the Administration tray. The Managed Links Administration page is displayed.

2. Click **Go** located next to the Recompute links option. The Status area indicates how many links have been processed and how many errors have been encountered.

Note: Only one refresh activity can be active at any one time. You must wait until the refresh activity completes and the 'Ready' status is displayed before attempting another refresh activity.

Refreshing Links in the ManagedLinks Table

To update the links in the ManagedLinks table:

1. Click the **Managed Links Administration** link in the Administration tray. The Managed Links Administration page is displayed.

2. Click **Go** located next to the Refresh links option. The Status area indicates how many links have been processed and how many errors have been encountered.

Note: Only one refresh activity can be active at any one time. You must wait until the refresh activity completes and the 'Ready' status is displayed before attempting another refresh activity.

Refreshing the References Counts

To update the links in the LinkReferenceCount table:

1. Click the **Managed Links Administration** link in the Administration tray. The Managed Links Administration page is displayed.

2. Click **Go** located next to the Refresh references counts option. The Status area indicates how many links have been processed and how many errors have been encountered.

Note: Only one refresh activity can be active at any one time. You must wait until the refresh activity completes and the 'Ready' status is displayed before attempting another refresh activity.

Aborting the Refresh Activity

To abort the selected refresh activity:

1. Click the **Managed Links Administration** link in the Administration tray. The Managed Links Administration page is displayed.

2. Click **Go** located next to the Abort refresh activity option. The refresh activity stops and the Status area reverts to a 'Ready' status.

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OVERVIEW

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

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ZLIB LICENSE

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

 version 1.2.3, July 18th, 2005

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