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FatWire Content Server Advanced Interface User's Guide
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About This Guide

This guide provides an overview of FatWire Content Server’s functionality that you as a content provider will utilize to create, edit, and approve content for publication on your organization’s online site.

Who Should Use This Guide

This guide was written especially for content providers — anyone who creates, reviews, and approves content from Content Server’s Advanced interface. Typically, content providers are specialists in fields such as corporate communications, finance, human resources, sales, and marketing. The content providers’ expertise is rooted in the content, not in the software used to manage it. Technical proficiency is not required.

This guide is also helpful to individuals who support content providers, perform their functions, or simply need to understand Content Server’s basic concepts. For example, this guide is helpful to the Content Server administrator, who supports content providers by developing and customizing the installation to meet their needs. Furthermore, the administrator maintains the installation and provides the business users with technical services.

How This Guide Is Organized

To help you navigate through the information in this guide, the guide is divided into parts. Each part deals with a particular aspect of Content Server, and is divided into chapters, each dealing with a particular concept or process. The parts are as follows:

- Part 1: Introduction
  This part provides an introduction to Content Server. It describes the basic concepts and dependencies on which Content Server constructs are based.

- Part 2: Working in the Advanced Interface
  This part describes how to use Content Server’s Advanced interface. It explores the basics of navigating and interacting with the Advanced interface, explains tasks common to working with all asset types, and goes on to describe specific tasks and processes that you as a content provider will need to accomplish when working with Content Server.
• Part 3: Using Engage
This part describes tasks and responsibilities performed by marketers who want to target site visitors for marketing campaigns. This part describes Engage (an optional FatWire product) and the process of working with segments, recommendations, and promotions.

• Part 4: Appendices
This part contains appendix material helpful in further understanding some of the concepts presented in this guide.

• Other Helpful Information
In addition to a general index, the end of this guide includes an index of procedures to help you quickly navigate to content management steps.

Related Documents
See the following documents in the FatWire documentation set:
• FatWire Content Server Dash Interface User’s Guide
• FatWire Content Server Administrator’s Guide

Figures and Diagrams
This guide contains figures and diagrams showing parts of the Advanced interface running the Burlington Financial and FirstSite II sample sites. Due to the highly customizable nature of Content Server, your interface might appear slightly different from the depictions used in this guide. Because of that, all such depictions are for reference only.

Conventions
The following text conventions are used in this guide:
• Boldface type indicates graphical user interface elements that you select.
• Italic type indicates book titles, emphasis, or variables for which you supply particular values.
• Monospace type indicates file names, URLs, sample code, or text that appears on the screen.
• Monospace bold type indicates a command.

Third-Party Libraries
FatWire Content Server 7.6 patch 2 and its applications include third-party libraries. For additional information, see FatWire Content Server 7.6 Patch 2: Third-Party Licenses.
Part 1
Introduction

This part provides an introduction to FatWire Content Server. It contains the following chapter:

- Chapter 1, “Overview”
Chapter 1

Overview

As a content provider, you create, manage, and deliver web site content. Your expertise is rooted in the content, not in the software used to manage it. Since this guide is written specifically for content providers, it is intended to help you use Content Server efficiently to perform your content management tasks, without requiring technical proficiency.

This chapter contains the following sections:

- Introduction to FatWire Content Server
- Exploring Content Management Concepts
- What Can You Do with Assets in the Advanced Interface?
- Permissions to Assets
- Dependencies
- Selecting Page Content
- Approving and Publishing Assets
- Users, Roles, and Workflow Assignments
- Revision Tracking
- Features in the Advanced Interface
Introduction to FatWire Content Server

FatWire Content Server is a software suite that allows you to create and manage content to be published on your online site. The content is stored in Content Server’s database. You create and manipulate the content using Content Server’s interface, which provides a simple and intuitive way of accessing and working with the CS database.

The content that you manage with Content Server depends on the nature of your organization: a news site might produce articles, photos, and video clips; a human resources department might manage job postings and personnel policies; an online retailer might offer product descriptions, special offers, coupons, and so on.

The content objects that you manage using Content Server are called assets. Articles, product descriptions, photos, video clips, and other content stored in the CS database are assets. An asset moves from its creation to your online site in steps, and the process by which assets move from person to person through those steps is called workflow. As the asset moves through its workflow, you can use revision tracking to audit the changes made to the asset along the way.

Your end goal is to publish your content so that your site visitors can view it. When content is published, it is copied to your delivery system and made available to the visitors of your online site.

Content Server Systems

- **Content management (CM) system**: a Content Server system used by content providers to create and edit content. When ready for public delivery, the content is published (copied) from the CM system database to the delivery system database.

- **Delivery system**: a Content Server system that accepts and stores a duplicate of the content published from the content management system. The delivery system is the online site that the visitors access. When the content is requested by a site visitor, the delivery system formats, lays out (unless the content is already cached) and delivers that content to the site visitor’s browser.

When you create and edit content in Content Server, you use content entry forms. Their purpose is to give you an easy and intuitive way to access and work with the CS database that stores the content. A content entry form is specifically related to the online site and the CS database, as illustrated in Figure 1 and Figure 2, and explained below:

1. When you populate a content entry form (for example, the “Article” form in Figure 1) and save the content, Content Server stores the content in its database (step 1 in Figure 1).

2. After you (or another user) approve the content for publishing, you or the CS administrator publishes the content to the delivery system, where it is stored in a duplicate database (step 2 in Figure 1).

3. Finally, when the content is requested by a site visitor for viewing, it is retrieved from the database, formatted, laid out, (step 3 in Figure 1) and delivered to the site visitor’s browser by code (step 4 in Figure 2). (This code is created by site designers and/or developers.)

In simple terms, a content entry form accepts raw content for storage in the CS database. When the content is requested by a site visitor, the delivery system renders the content (unless it is already cached) and displays it in viewer-ready form in the visitor’s browser.
Content entry forms offer the following advantages:

- **Users don’t need to learn the specifics of Content Server’s database.**
  A content entry form can be thought of as a window into Content Server’s database. Content that you enter into a form is stored in the database. Content that you retrieve is read from the database and displayed in an editorial version of the content entry form. Because a content entry form provides a standard interface to the variety of databases that Content Server supports, it spares users from having to learn the specifics of any database in particular. If one database is replaced with another (for example, SQL Server is replaced with DB2) the switch is transparent to users.

- **Users don’t need to know HTML or other markup languages.**
  No content entry form requires its users to format the content they enter or edit. A default format (specified in the templates) is applied when a user-defined format is unavailable. And when a field displays a WYSIWYG editor (“What You See Is What You Get”), you can use its tools to format the field’s content – without having to know HTML. As a content provider, you have the option to remain strictly focused on the content, or to determine its appearance, as well.

- **Required information is clear.**
  In content entry forms, field names prompt users for certain kinds of information: a phone number, a job description, a file name, and so on. Users always know what kind of content is expected from them.

- **Reusability and consistency are maximized.**
  Each piece of content that you enter into a form can be reused as many times as necessary, in as many formats as necessary, in as many locations within the online site as necessary. Reusability ensures consistency across the site by eliminating the need for re-creating content each time it must be used.
Content Server 7.6 Patch 2 Advanced Interface User's Guide

Chapter 1. Overview

Figure 1: Content entry form

<table>
<thead>
<tr>
<th><strong>Article</strong>: NECUnveilsFirstMobilePhonewithHD</th>
</tr>
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<tbody>
<tr>
<td><strong>Name</strong>: NECUnveilsFirstMobilePhonewithHD</td>
</tr>
<tr>
<td><strong>Description</strong>:</td>
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<td><strong>Template</strong>: ArticleDetailPage</td>
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<td><strong>ID</strong>: 16928974656</td>
</tr>
<tr>
<td><strong>External Item ID</strong>:</td>
</tr>
<tr>
<td><strong>Content Definition</strong>: Article</td>
</tr>
<tr>
<td><strong>Headline</strong>: NEC Unveils 1st Mobile Phone</td>
</tr>
<tr>
<td><strong>Subheadline</strong>:</td>
</tr>
<tr>
<td><strong>Byline</strong>: by John Doe</td>
</tr>
<tr>
<td><strong>Abstract</strong>: - The phone makes its debut at ITU Telecom Asia 2004 in Suzan. - A tiny 1.5GB hard drive in the phone greatly expands memory capacity. - The phone is also equipped with a</td>
</tr>
<tr>
<td><strong>Body</strong>: &lt;p&gt;South Korea – September 7, 2004: NEC Electronics Company unveiled the first-ever mobile phone (model: SNEVS910) with an internal hard disc drive. The company’s latest</td>
</tr>
</tbody>
</table>

1. Content entered into the content entry form is stored in the content management system’s database.

2. After approving the content for publishing, a content provider or administrator publishes the content to the delivery system database.

3. When the content is ready for display on the online site, is retrieved from the database, formatted, and laid out by the code created by the site developers.
Figure 2: Online site

NEC Unveils 1st Mobile Phone with Hard Drive

by John Doe

BUSAN, Korea - September 7, 2004 - NEC Electronics Company unveiled the first-ever mobile phone (model: V540D) with an internal hard disk drive. The company’s latest innovation, which also comes with a mega-pixel camera, is currently being exhibited at the ITU Telecom Asia 2004 from September 8 to 11 at the Busan Exhibition and Convention Center (BEXCO).

The V540D is equipped with a 1.8-inch diagonal, 1.6GB hard disc drive that greatly expands the memory capacity of mobile phones from the conventional 100MB maximum capacity. In addition, the phone boasts a high-resolution (QVGA) 2.2-inch liquid crystal display and includes features such as MP3 player, electronic book and Korean/English/English-Korean dictionaries. A powerful microphone enhances the camcorder function, while dual speakers provide a 3D sound effect.

The breakthrough product will be available for Korean consumers in mid-September.

4 Formatted content is displayed on the online site.
From Your Desk to the Online Site

The example procedure below will give you an idea of the general steps involved in creating and publishing content. The steps below are based on the following assumptions:

- You are logging in to the FirstSite II sample site as the firstsite user. This user has all the permissions necessary to complete the steps in this section.
- Your management and delivery systems are configured to publish content.

If you are not sure which sample sites and sample users are available on your system, or how your system is configured, contact your CS administrator.

To create and publish an asset

1. Log in to the FirstSite II sample site using the user name firstsite and password firstsite.

2. Create a new “Content” asset:
   a. In the button bar, click New.
   b. In the list of asset types, select New Content.
   c. When prompted to select assignees, select the firstsite user and click Set Assignees.
   d. Populate all of the required fields (marked with a red asterisk) of the “New Content” form.
   e. Select a parent for the asset:
      1) In the tree, select the Content tab.
      2) In the Content tab, Click FSII Articles.
      3) In the “New Content” form, click Add Selected Items in the FSIICategory field.
   f. Click Save.

3. Add the new asset to your Active List by clicking Add to Active List in the action bar.

4. Assign the new asset to a page:
   a. In the button bar, click Search.
   b. In the list of asset types, select Find Page.
   c. In the “Search for Pages” form, click Search.
   d. In the list of search results, navigate to the FSIIHome page and click its Edit (pencil) icon.
   e. In the tree, click the Active List tab.
   f. In the Active List tab, select the asset you just created.
   g. In the “Edit” form, scroll to the Contains field and click Add Selected Items.
   h. Click Save Changes.

5. Approve the page and all assets it references for publishing:
   a. In the action bar, select Approve for Publish from the drop-down list.
   b. Select the destination for which you want to approve the asset (FSII Destination (dynamic) in our example) and click Approve.
c. In the form listing the page’s dependents, select all page assets by clicking the check box in the header row, then click Approve. Repeat this process until all dependent assets have been approved.

6. Publish the page and all assets it references to the online site:
   a. In the button bar, click Publishing.
   b. In the “Publishing destination” drop-down list, select the destination to which you want to publish the asset (FSII Destination (dynamic) in our example) and click Select Destination.
   c. Click Publish.
   d. In the pop-up dialog that appears, click OK.
   e. Watch the Active Tab of the Publishing Console for the completion of your publishing session.

Your asset has been published to the online site and appears on the selected page. (Contact your CS administrator to obtain the URL for the online site.)
Exploring Content Management Concepts

This section explains how Content Server defines and treats content. It explains terms such as “assets,” and “asset types,” which are used throughout this guide.

Content: Asset Types and Assets

Content items that you manage using Content Server are called assets, for example, articles, product descriptions, advertisements, photos, and video clips.

An asset type is an object that defines to CS users the type of content they are expected to provide. An asset type is used to create assets of that type. For example, if you publish magazine articles and sports car advertisements, you would create the magazine articles from the “Article” asset type and the advertisements from the “Sports Car” asset type.

Each asset type is represented in the CS interface as a content entry form (such as the one you see in Figure 3, on page 23) whose field names map to the column headings of a database table (or tables), used to store your field values. Because the set of field names defines the asset type, it also defines the type of content you are expected to provide. When you type in field values and save them, you create a record—an “asset”—in the CS database table. That asset is content, which you can edit or delete, pass through a workflow, and publish. (Note that by using the content entry form, you never have to access the database directly.)

Figure 3 illustrates the concept of “asset type” and “asset” by relating a news article to the “Article” asset type.
Exploring Content Management Concepts

Figure 3: Relation between an asset and its asset type

Field names (created by a developer) define the asset type.

Field values (entered by the content provider) define the asset.

When you save an asset (a news article in this example), it is stored on the database as a line item in one or more tables. Because of the content entry form, you never have to access the database directly.
An asset type is reusable, allowing you to create many unique assets from a single content entry form. Each asset is an instance of its asset type.

In our example in Figure 3, we have the “Article” asset type from which a content provider created a newspaper article on the subject of technology. Other content providers created the Finance Article asset, the Gardening Article asset, the Sports Article asset, and the Music Article asset (shown below), all of which are instances of the “Article” asset type:

In the next example, we have the “Sports Car” asset type, with a different set of fields, from which content providers created the Lotus, Ferrari, Maserati, and Bugatti assets. All are instances of the “Sports Car” asset type:
Typically, developers create many different asset types, giving you an appropriate range and type of content to create and publish. Each asset type has its own content entry form, formatted as shown on this page, but with a unique set of fields. When saved, an asset is stored in Content Server’s database. The asset can be edited, inspected, deleted, duplicated, placed into workflow, tracked through revision tracking, searched for, and delivered to the online site.

**Note**

To be technically accurate, the fields described in this section are *attributes*. The distinction is important to administrators and developers, but does not affect the content provider’s work or understanding of content management in Content Server. For this reason, the terms “field” and “attribute” are used interchangeably throughout this guide.
Structured Content Assets and Document Assets

As a content provider, you are likely to manage two kinds of assets: structured content assets and document assets. The difference is that a structured content asset requires you to enter prescribed pieces of content directly into the Content Server interface, whereas a document asset requires you to provide a file with the content (or layout) of your choice. The developer who creates the asset type specifies whether the asset type supports structured content, or documents, or both.

Structured content is used to enforce uniformity and standards. By contrast, file-based content is used when a free-style approach is acceptable. File-based content gives you the freedom to compose content of your own choice, and to present it in your own format.

• **When creating a structured content asset**, you enter the content directly into a form (as explained earlier). The fields impose content structuring by prompting you for specific information—for example, a headline, a byline, and body text (as shown in the inset).

When the content is published, its format and layout (predetermined by site designers) are implemented in the template that you choose to render the content.

• **When creating a document asset**, you enter content into a file of the format of your choice (a Word document in this example), then attach the file to the document asset. Optionally, you enter information describing the content, such as name, file size, format, or associated keywords, into the additional fields that developers might have created to help you describe the file and its content.

CS-DocLink, an extension to Windows Explorer, provides an easy way to create and manage document assets outside the CS interface. See “Creating a New Asset in CS-DocLink,” on page 80 for more information. To find out if your system is set up to support the CS-DocLink client, contact your administrator.

Depending on how your site is designed by developers, you might encounter assets that accept both structured and document-based content — for example, an “Article” asset that accepts an image file to accompany the article text. You will provide both types of content when creating or editing such assets.
Multilingual Assets

If your organization maintains localized sites for different geographic regions, each piece of content you create is likely to be translated into languages other than the one in which the content was originally created.

Content Server allows you to assign a locale designation to each asset, and to group together assets that are translations of one another. This way, you can easily track, manage, and publish multiple translations of your content.

For example, a global press release written in English can be translated into French, Spanish, and German, and the translations published on the respective regional sites. The press release and its translations exist in the Content Server database as separate assets, linked to each other into a multilingual set. Members of multilingual sets can be managed, passed through workflow, approved, and published to one or more destinations just like their non-localized counterparts.

On the other hand, you are free to create assets in different languages and assign locale designations to them independently of one another, without creating the translation links. For example, you would treat in this way content that is specific to one region only and should not be translated or published anywhere.

When configuring your site for multilingual support, your developers provide the site visitors with a way to specify their preferred language (or languages). The delivery system then determines (by checking which locales are enabled for the site, and through locale filtering, if applicable) which translation of each asset is displayed on the online site.

If you are using the workflow feature, you can group the member assets of a multilingual set into a workflow group to make sure that all translations of an asset are approved before the master asset and its translations are published.

Design Assets

Structured content assets are called design assets if they are used to format and organize web site content. They are also used to automate your tasks. For example, instead of manually searching for assets to place in a collection, you simply choose them from a list of results that is automatically returned to you by a query that runs when you build the collection. Your administrator creates the query and assigns it to the appropriate “Collection” asset in advance.

Design assets are created by developers for your use. Your access to design assets depends on which design assets were created and on the permissions granted to you by your CS administrator.

The following list describes the design assets you can use (given the appropriate permissions).

- **Page** assets are “containers” that reference the assets constituting a page (or a portion of a page) in the online site; they provide the structure and organization for the displayed content. As a content provider, your responsibility includes associating the content you want to appear on a particular page of the online site with the appropriate “Page” asset.

  Before you can select the correct content for your “Page” assets, you must be familiar with two things: how your site is structured, and what the “Page” and “Template” assets available to you are designed to do. Consult your site developers for instructions on how to work with the “Page” and “Template” assets available to you.
• **“Template” assets** create the look and feel of the web site. As a content provider, you assign “Template” assets to structured content assets to apply specific formatting to your content. Each “Template” asset formats assets of a specific type. Consult your site developers for instructions on how to work with the “Template” assets available to you.

• **“Link” assets** are used to embed external page URLs within structured content assets. You create a “Link” asset and store the external page URL within the asset. You then embed the “Link” asset into the desired structured content asset.

• **“Query” assets** provide custom search routines to assets that require specific sets of content. A query retrieves a set of assets based on specific criteria (for example, all articles about politics written in the last 24 hours). You select the content you want to include in your asset from the list of results returned by the query. The administrator sets up the search criteria for your queries and assigns the queries in advance to the assets that need them. The content retrieval for such assets is thus automated — no user input is required for a query to return its results to the asset.

• **“Collection” assets** store lists of basic assets of a single asset type, organized in a specific order. You use “Collection” assets to choose, rank in order, and deliver sets of content that your visitors will most likely want to see when viewing your site. For example, you can use a “Collection” asset to build and place a list of top five articles on politics on the home page of your site, and rank the assets in the list to appear in order of importance.

The assets you can include in a collection come from the results returned by one or more queries. You choose the assets you want to include in the collection by ranking the assets in the order of your choice. Your administrator creates the appropriate “Query” assets and assigns them to the “Collection” asset in advance.

Using design assets is described in detail in Chapter 4, “Working with Assets.”

**Content Server’s Data Models**

Asset data models define how content is stored in the Content Server database—in either a flat (single-level) or hierarchical (multi-level) structure. In Content Server, the flat model is referred to as the basic model, and the hierarchical model as the flex model. The data model is chosen by the developers during asset type creation to suit site design requirements.

**Note**

In most of your tasks as a content provider, the distinction between the asset models is not relevant, since the majority of the functions you perform in Content Server are the same whether you are working with basic or flex assets. This guide indicates when a function or situation is unique to either basic or flex assets. Consult your administrator to determine the assets model(s) used on your site.

**Basic vs. Flex**

The differences between the basic and flex asset models are summarized below:

• **Basic assets** are instances of basic asset types and always have the same set of properties (attributes), as defined by the asset type. They can be associated with other assets to form single-level “parent-child” dependencies, but they cannot inherit each
other’s properties. Thus, no complex hierarchies can be created with the basic asset model.

- **Flex assets** have the ability to inherit structure and content from multiple parents and grandparents, which makes them excellent for building complex hierarchical data structures (for example, creating large online catalogs of products). Unlike basic assets, flex assets in a given flex family can have different properties (attributes) based on the established hierarchy and inheritance rules set up by the administrator.

For more information, see Appendix A, “The Flex Asset Model.”

**Content Management Sites**

A content management (CM) site is the backend for the online site or one of its sections, and like everything else in Content Server, it is stored in the CS database. A CM site is the structural and logical framework that references several types of information:

- A CM site references all of the assets, asset types, and asset relationships that constitute the actual online site (or a section of it).

You can view a hierarchical representation of the site design for the CM site you are logged in to by clicking the **Site Plan** tab in the tree in the left pane of the Content Server interface. For example, a section of the site plan for the Burlington Financial sample site looks like this:

Notice the hierarchical structure in which the content is organized.

- A CM site also references the users, roles, and workflow processes used to manage and organize the site’s content. The CS administrator is responsible for managing these objects. Which CM sites you can work with is determined by the permissions granted to you by the CS administrator.

If you have permissions to work with more than one site, a site select screen appears when you log in to Content Server, allowing you to select the CM site you want to work with. You can also switch between CM sites during your session using the **Site** link at the right edge of the top bar.
Once you are granted access to a site, the administrator also grants you permissions to perform specific tasks within the site. For example, you may have the permissions to edit assets but not delete them.

The Burlington Financial sample site has a number of users holding different sets of permissions to functions (such as searching or editing assets) and specific types of assets, as shown in the following figure:

It is important to note that a CM site is not synonymous with the online site that visitors see in their browsers. For example, a small web site might have all of its assets contained in one CM site. A very large web site, on the other hand, might be divided into several sections, each contained in and managed through a separate CM site. A Content Server CM site is thus the supporting structure behind the actual web site (or a section of it), but they are not one and the same.

**Note**

Throughout this guide, the phrase “current site” refers to the CM site you are logged in to at the time, and not the online site that visitors access.
What Can You Do with Assets in the Advanced Interface?

Which functions and assets you have access to in the Advanced interface is determined by the role(s) granted to your user name by the administrator. If you do not have the right permissions, the function is unavailable to you – it is either grayed out, hidden from your interface, or it produces an error message when you attempt to use it.

If you have the permissions to work in the Dash interface, you may want to take advantage of the following features available there:

**Table 1: Useful Dash interface features**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucene search engine</td>
<td>Find assets within the current site without having to specify their asset types.</td>
</tr>
<tr>
<td></td>
<td>Search through names and values of all fields in all of the assets in the current site.</td>
</tr>
<tr>
<td>Tags</td>
<td>Create personalized lists of assets based on categories your choice.</td>
</tr>
<tr>
<td>“Locale Compare” mode</td>
<td>View two translations of an asset at once.</td>
</tr>
<tr>
<td></td>
<td>Edit one translation while viewing another.</td>
</tr>
</tbody>
</table>

A comparison of features available in the Dash and Advanced interfaces is included in the *Content Server Dash Interface User’s Guide*.

Permissions to Assets

Permissions are the access privileges to functions such as creating, viewing, or editing assets; participating in a workflow; and approving assets for publication. They also determine which assets and asset types are available for you to work on. Permissions are, thus, also responsible for the appearance of your Content Server interface. Your permissions are granted by your CS administrator, either directly, or through a workflow.

For example, the administrator may deny you the permission to create assets of a particular type; in this case, the asset type will not be displayed in the “New” asset list. You will also be unable to copy existing assets of that type.

If an asset is in a workflow, your permissions to the asset change depending on the workflow state the asset is in at the moment. For example, if you are not a participant of a particular workflow state, you cannot work with assets in that state.

Dependencies

Dependencies are an important consideration for the content provider, because they govern how assets can be managed – for example, if, and in what order, assets can be deleted or approved.
Dependencies are relationships that exist among assets which have somehow been associated with each other. You associate assets with each other for the following reasons:

- To keep and publish together assets you want to stay together – for example, a “Product” asset and the supporting “Image” and “Datasheet” assets. This ensures the integrity of your site by avoiding broken links and missing data.
- To avoid repetition and errors by sharing information among assets. When multiple assets share a piece of content, you ensure that the content remains identical.

Depending on the asset model, relationships are either inherent to the data model (predefined by Content Server) or created by developers. In any case, the relationships are actualized at the asset level by content providers. For example:

- Developers can create a data model that hierarchically associates one type of asset with another. You then associate assets of those types when you create the assets. For example, you can associate a particular “Product” asset (such as an MP3 player) with a particular “Document” asset (such as an owner’s manual in PDF format). The association creates a dependency.
- If your system is set up to use CS-DocLink, you can associate document assets with each other. For example, you create dependencies by attaching document assets to folder assets, and the folder assets to parent folder assets, and so on.

Whenever dependencies prevent you from performing a task, Content Server warns you of that fact and identifies the offending assets. You can then take appropriate actions to resolve the conflicts. For example, if you try to delete an asset that is referenced by other assets, Content Server displays a list of assets referencing the asset you are trying to delete. You must first remove the reference creating the dependency between the assets; only then can the referenced asset be deleted. If a hierarchical relationship exists between multiple assets, you must remove the dependencies the bottom of the hierarchy up.

**Selecting Page Content**

As a content provider, you may be responsible for associating content you want to display on a particular page on the online site with the appropriate “Page” asset. “Page” assets are “containers” that reference all of the assets constituting each section of the online site; they are created for you by site developers as a way of organizing content on the rendered page.

Before you can select the correct content for your “Page” assets, you must be familiar with how your site is structured and what the “Page” and “Template” assets available to you are designed to do. Site developers, who create the “Page” assets you work with, usually provide instructions on how to work with the page and “Template” assets available to you.

When the “Page” assets are rendered into online pages, Content Server uses the templates assigned to each asset referenced by the “Page” asset to apply the desired look and feel to the rendered content. The templates control which content goes where, how it is formatted, which buttons appear and what they do, and so on.

When selecting content, you can use the **Preview** function to see how a page would look if the asset were published, provided the asset has a template assigned to it. You may preview the page as it would appear at the present time or at a date in the future. For more information on previewing, see “**Previewing Assets,**” on page 95. For more information on previewing a page as it would appear at a date in the future, see “**Previewing Future Sites,**” on page 193.
Approving and Publishing Assets

As a content provider, your ultimate goal when using Content Server is to publish content to your delivery site. Before assets can be published, however, they must be approved.

Approving Assets

The purpose of approving assets for publishing is to ensure that both the parent assets and their dependent assets are approved before the assets are published. This safeguards against broken links on your delivery site.

Note

In some instances, unapproved assets are automatically published. For example, if a previously published asset is deleted from the content management system, it is automatically approved for publication to the delivery system as a deleted asset. When the next publishing session runs, the asset is published to (and thus deleted from) the delivery system.

While certain asset dependencies are intrinsic, designers and administrators are responsible for establishing explicit dependencies.

An asset dependency exists when there is an association of some kind between assets. For example, a “Page” asset has an association with a “Collection” asset; the “Collection” asset has an association with three “Article” assets; two of these articles have associations with “ImageFile” assets. This tree hierarchy forms a set of parent/child dependencies among all these assets. Because of that, all of these assets must be approved before they can be published. Content Server displays an error message when assets cannot be approved for publication, listing the offending assets.

As a content provider, if you have approval permissions, your role is to resolve any errors that might arise during the approval process so that you can publish your content successfully. Content Server enforces the dependencies put in place by the design team and identifies conflicts so that you can resolve them.

For more information about approving assets, see Chapter 7, “Publishing.”

Publishing Assets

Assets that are approved for publishing are marked as such in the CS database until a publishing session is initiated. A publishing session can be either scheduled (on a one-time or recurring basis), or launched manually by the administrator or a content provider with the appropriate permissions. When a publishing session is running, every asset flagged as “ready to publish” is published.

Content can be published in three distinct ways:

• **RealTime** — Content Server copies the published content from the content management system’s database to the delivery system’s database, committing assets to the database in approval related groups. The delivery system is the online site that the site visitors access. When the content is requested by a site visitor, the delivery system retrieves the content from its database, applies the selected formatting and layout, and delivers that content to the site visitor’s browser. (If the content is already cached, the cached copy is delivered instead.)
Users, Roles, and Workflow Assignments

In most organizations, people have different roles or responsibilities, and web sites are published by many people working together. Sometimes there are many people who perform the same role. Sometimes one person has more than one role. In Content Server, responsibilities are called **roles**, people are called **users**, and everyone has a user name, which they use to identify themselves and to log in.

Work moves from one person to another. For example, an author writes or assembles some text for an article and passes it to an editor. The editor makes suggestions and sends them back to the author along with the article, or makes changes and sends the article off for final review and approval. This process—the movement of content from one person to another in a predictable way—is called **workflow**.

You can assign a workflow process to an asset you create, but more typically, the administrator has already assigned workflow and set participants for the assets you are allowed to create, during the configuration of the workflow feature on your CS system.

When workflow is in use on your CS system, tasks and permissions are for the most part assigned to roles rather than user names. Although you log in with your user name, it is your assigned role that determines what you can do.

When you log in to the CS interface, Content Server shows you all of the assets assigned to you (under the “My Assignments” heading) and informs you how much time you have to complete each assignment. If you know you will be unavailable, (such as going on vacation) you can delegate your assignment to someone else who has the same role as you. If you are unable to complete your assignment, you can relinquish your participation by using the **Abstain from Voting** function.

When you are done working with an asset, you indicate that you have finished your workflow assignment for that asset by using the **Finish My Assignment** function. Content Server then changes the asset’s state and determines who gets the assignment next, according to the workflow process.

- **Dynamic (or Mirror to Server)** — Content Server copies the published content from the content management system’s database to the delivery system’s database. The delivery system is the online site that the site visitors access. When the content is requested by a site visitor, the delivery system retrieves the content from its database, applies the selected formatting and layout, and delivers that content to the site visitor’s browser. (If the content is already cached, the cached copy is delivered instead.)

- **Static (or Export to Disk)** — Content Server creates static HTML files on a local or networked file system. Content in this form can be delivered directly to a web browser (by a web server, for example).

- **Export to XML** — Content Server converts the published content to XML files. The resulting XML files can be imported by delivery systems not running Content Server.

In the end, which publishing method is used depends largely on your Content Server configuration and the choices made by your administrator.

Note that publishing is a background operation; you can continue to work in the Content Server interface while a publishing session is running. While the assets are being published, they can be previewed. However, they cannot be edited or deleted until the publishing session ends.

For more information on publishing, see Chapter 7, “Publishing.”
Workflow Groups

Workflow groups allow you to group assets in a workflow process so they reach the end of the workflow process together, prior to publishing. When creating the workflow group (provided you have the permissions to do so), you decide who can assign assets to the group and who can administer the group itself. You also assign a workflow process to the group.

Workflow Reports

Workflow reports allow you to track the progression of assets and user assignments in a workflow. They are a convenient mechanism for determining current workflow status. For example, you could run a report designed to show all authors who have assignments due in the next 24 hours. For more information about workflow, see Chapter 8, “Workflow.”

Revision Tracking

Content Server can track and recall changes made to assets. If your administrator has enabled revision tracking for a particular asset type, then you can do the following with assets of that type (for detailed information, see Chapter 9, “Revision Tracking”):

• Check out an asset, which prevents others from modifying or deleting it until you check it back in.
• Review the changes made to an asset.
• Restore an asset to a previous version (rollback).

Check In and Check Out

To work with an asset when revision tracking is enabled:

1. You check the asset out from the database.
   Keep in mind that an asset can be checked out to only one user at a time. This means that when an asset is checked out to you, only you can edit it, delete it, or assign it to a workflow. If you open an asset for editing without deliberately checking it out first, Content Server checks it out to you automatically.

2. After you have edited an asset, you check it back in.
   Checking in saves a new version of the asset, but does not overwrite the earlier versions stored in the CS database unless the maximum number of allowed revisions is reached (this limit is set by the administrator). When checked in, the asset becomes available for editing to other users. If you are working on an asset that was checked out to you automatically, Content Server checks it back in automatically when you save the asset.

Archive Options

You can check in an asset so you have an archived version saved, but keep it checked out to continue your work on it.
Cancelling Checkout

If you check out an asset and then decide that you do not want to save the changes you just made to it, or if you checked an asset out by mistake, you can undo the checkout. In such cases, Content Server does not store a new version of the asset nor make a record of the checkout in the database.

Rollback with Revision History

If, after checking an asset in, you decide you do not want to keep the changes you made to it, you can roll the asset back to any of its stored previous versions by using the Rollback function. You, and any other user, can also view the asset’s version history.
Features in the Advanced Interface

Table 2 provides an overview of the features available in the Advanced interface. It also shows which features are exclusive to either the Dash or Advanced interface.

Table 2: Features comparison

<table>
<thead>
<tr>
<th>Feature</th>
<th>Dash</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrative Controls</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perform administrative tasks</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Asset Model</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work with basic assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with flex assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Editorial Functions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create and copy assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Create dependent assets from asset’s edit screen</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Edit assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Delete assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Finding Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perform simple searches</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Perform advanced searches</td>
<td>Powered by Lucene search engine</td>
<td>Form-based search</td>
</tr>
<tr>
<td>Sort search results</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Save search criteria</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Save search results</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Attribute value search</td>
<td>✓</td>
<td>Pre-defined attributes only</td>
</tr>
<tr>
<td>Visually browse a site’s structure (site plan)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Visually browse flex family hierarchies</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Organizing Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work with tags</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Work with the Active List</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Share assets across sites</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Table 2: Features comparison *(continued)*

<table>
<thead>
<tr>
<th>Feature</th>
<th>Dash</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WYSIWYG Editors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work with FCKEditor</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with eWebEditPro</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Work with the DatePicker</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with the Image Picker</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with the Clarkii Online Image Editor (Clarkii OIE)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with Flash content</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Site Preview</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set start/end dates when assets can be previewed.</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>In search results lists, view an asset’s start/end date.</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>InSite Interface</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preview assets as they will appear at the current time</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Preview assets as they will appear at a future date (“Site Preview”)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Edit assets (“Editing” mode)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Add, replace, remove, and position assets on a page (“Page Builder” mode)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Finish workflow assignments</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Search for assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>View asset’s start/end date and description in a tooltip (in search results lists and Page Builder lists)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Asset Associations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate assets with other assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Assign templates to assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Assign assets to pages</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with collections</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Place and unplace pages</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
**Table 2: Features comparison (continued)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Dash</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Linking Assets using FCKEditor</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create a hypertext link to another asset</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Link two assets by inclusion</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Link two assets via an image asset</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Link two assets via “Image Picker”</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Link two assets (by hypertext link) by creating the target asset during the linking process</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Link two assets (by inclusion) by creating the target asset during the linking process</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Create an unmanaged link to a URL</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Create a managed link to a URL (work with “Link” assets)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Embedding Links</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Applies to standard text fields and fields enabled with a supported WYSIWYG editor other than FCKEditor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embed links to other assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Embed contents of other assets by reference</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Embed links to external web sites</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with “Link” assets</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Multilingual Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assign locale designations to assets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with linked translations of content</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Compare translations</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Workflow</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass assets through workflow</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with workflow groups</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Work with workflow reports</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Engage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work with segments</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Rate assets for segments</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Work with promotions</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Work with recommendations</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Work with recommendations List mode Static Lists only</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
### Table 2: Features comparison (continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Dash</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Publishing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approve assets for publishing</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Remove assets from the publishing queue</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Publish assets</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Monitor and manage publishing sessions</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td><strong>Revision Tracking</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Track revisions to assets</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Roll assets back to previous versions</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Working with System-Defined Asset Types</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create and access assets of the following types:</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Template</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Link</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Query</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DimensionSet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LinkSet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part 2

Working in the Advanced Interface

This part describes how to use Content Server’s Advanced interface. It contains the following chapters:

- Chapter 2, “Navigating Content Server’s Advanced Interface”
- Chapter 3, “Accessing the Sample Sites”
- Chapter 4, “Working with Assets”
- Chapter 5, “Using Start and End Dates”
- Chapter 6, “Previewing Future Sites”
- Chapter 7, “Publishing”
- Chapter 8, “Workflow”
- Chapter 9, “Revision Tracking”
Chapter 2

Getting Started

This chapter describes how to log in to and use Content Server’s Advanced interface. It includes the following sections:

- Logging In
- Navigating Content Server’s Advanced Interface
- When You Finish Your Work
Logging In

To log in to Content Server's Advanced interface

1. Open your browser and enter the URL to your Content Server system. You can obtain the URL, your user name, and your password from the Content Server administrator.

   The login form that is displayed to you depends on whether FatWire Web Experience Management (WEM) Framework is installed on your Content Server system.

   If WEM is not installed, then the Advanced login form appears:

   ![Advanced login form](image1)

   Notice that the Content Server Advanced login form lists which members of the Content Server product family are installed.

   If WEM is installed, then the WEM login form appears:

   ![WEM login form](image2)

   ![WEM login form](image3)

   Notice that the Content Server Advanced login form lists which members of the Content Server product family are installed.

2. Enter your user name and password, and click Login.

3. If a single site exists, the Advanced interface opens. If more than one site exists, select the site you want to work with from the list that appears.

   ![Site selection list](image4)

   ![Site selection list](image5)

   ![Site selection list](image6)

   Continue to the next section for an introduction to Content Server’s Advanced interface.

   ![Site selection list](image7)

   ![Site selection list](image8)

   ![Site selection list](image9)
Navigating Content Server’s Advanced Interface

The appearance of Content Server’s Advanced interface is determined by a number of factors, including:

- Which products are installed
- Which site you have selected to work in
- Your role(s) as a user
- Administrative configuration decisions

Open Content Server’s Advanced interface by doing the following:

1. Log in to the Content Server interface by following the instructions in “Logging In,” on page 44.
2. If prompted, select the site you want to work with (Burlington Financial in this example).

The Advanced interface loads. A typical view of the Advanced interface for a user working with the Burlington Financial sample site is shown below:

![Advanced Interface Components](image)

**Figure 4: Advanced Interface Components**
The key components of the Advanced interface, as indicated in the preceding figure, are:

- **Top Bar** – gives you single-click access to the Dash and InSite interfaces and to FatWire Analytics (if it is installed); the means to toggle the tree on and off; and the means to log out of Content Server.

  Your user name is displayed near the right edge of the bar. Click your user name to reveal a list of roles associated with it, and therefore the permissions granted to you on the current site.

- **Button Bar** – gives you single-click access to common content management tasks.

- **Tree** – presents information about the site’s organization and assets, categorized by tabs that are configurable, customizable, and dynamic.

- **Workspace** – where you take follow-up action on your initial request, such as, to create an asset, perform a search, review assignments, and so forth. Most often, you work in a form or with a list in this space.

- **Status Bar** – displays a description when you move the mouse pointer over a screen component. It also reports processing activity. The status bar appears only if you configure your browser to display it.

### Top Bar

The top bar gives you quick access to the following functions:

- **Dash** – opens a new browser window which loads the Dash interface and automatically logs you in to the site in which you are currently working.

- **Toggle Tree** – toggles the tree on and off. When you toggle the tree off, the workspace extends across the full width of the window with a refreshed display of the **My Work** view, regardless of what was displayed in the workspace with the tree toggled on. Note that tree display and tree toggling are under administrative control and may not be enabled in your site.

- **User** – displays the user name under which you are logged in to Content Server. Clicking your user name displays the “Edit User Profile” form, which presents the following information:
  - The list of roles that are assigned to you, and therefore the permissions granted to you on the current site. CS includes a set of generically linked user names to roles (**user_author** as “Author,” for example) to help you get started. For more information on these supplied user names and roles, see your administrator.
  - Options to modify your email address, locale preference, and password.

- **Help** – opens the FatWire Support site in a new browser window. The FatWire Support site contains documentation for Content Server and its supporting software; check this site periodically for updates to the documentation suite. Note that the site is password-protected; you must contact FatWire Support to obtain access.

- **Logout** – ends your session and logs you out of Content Server.
Button Bar

The button bar gives you quick access to Content Server’s most frequently used asset management functions:

- **New** – creates new instances of the asset types that you are permitted to work with.
- **Search** – finds assets in the site based on criteria you provide.
- **My Work** – shows your current workload. Refreshes the current workload view each time you click the button.
- **Workflow** – manages workflow reports and workflow groups.
- **Site Plan** – shows the hierarchical view of the site’s “Page” assets and their related assets, as arranged by the site designers.
- **Publishing** – shows the Publishing Console to review publishing activity.
- **Options** – allows you to choose your preferred way of displaying buttons in the bar.
- **Site** – shows the site select screen you see when you log in (assuming you have permissions to work with more than one site, and that more then one site is available).

New

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with (**Burlington Financial** in this example).
3. In the button bar, click **New**.
   A list of assets you can create, sorted alphabetically, appears in the workspace; for example:

   ![New Asset List](image)

4. Click the **New** link for the desired asset type (for example, **New Article**) to display the asset’s “New” form in the workspace.
Note that the “New Asset” list has been personalized for you by your administrator based on the role assigned to you and the sites that you are permitted to log in to. Thus, only the assets you are permitted to create will appear in this list.

For each asset type in the list, the administrator can pre-assign a workflow process and set the workflow participants.

For each asset type, the administrator can set fixed, pre-defined values for certain fields in the asset’s content entry form; if that’s the case, you cannot change these values. The administrator can also establish editable default values for each field, which you can change.

**Search**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with (**Burlington Financial** in this example).
3. In the button bar, click **Search**.

The list of asset types that you can search for appears in the workspace; for example.
4. Perform a search in one of the following ways:
   - Click the asset type in the list to open the simple “Search” form in the workspace.
   - Click **Advanced Search** to open the advanced “Search” form for the asset type.
   - Execute a saved search by clicking its name (or the binoculars icon next to it).

Like the types of assets that you can create, the types of assets that you can search for are determined by the administrator based on your role and site permissions. This list might include types of assets that do not appear in the **New** asset list. In other words, you can search for and inspect assets of these other asset types, but you cannot create new instances of them.

A list of saved searches, if any, will also appear below the list of searchable assets. A saved search refers to the criteria on which a previous search was based, not the results of a search. Saving search criteria is an efficient way of handling searches that you run repeatedly. Saved searches can be shared, so the list can appear even if you haven’t specifically saved any searches.

**My Work**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with (**Burlington Financial** in this example).

   Your current workload is displayed in the workspace.

Your workload consists of the assets that you either have chosen or have been assigned to work on. These include:

- Your assignments as established through workflow.
- Assets under revision tracking that you have (specifically or automatically) checked out.
- Assets on your Active List; that is, assets that you have designated to keep from session to session, until you decide to remove them from the list.

Initially, the “My Work” view may show only the following:

Click the **My Work** button in the button bar to refresh the view. As you manage your workload during a session, the lists will change to reflect what you are doing.
Benefits of Using the Active List

The Active List is your personal asset ledger that you maintain over time. The list is empty until you explicitly add assets to it. Assets that you have added to the list remain there until you explicitly remove them from the list (or until they are deleted).

The Active List has a number of uses, including:

- Provides a mechanism for saving search results, allowing you to examine individual assets one by one.
- Populates the “Candidates” list for establishing unnamed associations when the tree is toggled off.
- Becomes a source (together with the asset history list) of assets from which to choose an asset to link to an asset you are creating or editing.

Note that the Active List shows only those assets that are available to the site you are viewing.

Workflow

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Workflow.

The workflow management console is displayed in the workspace, as shown below:

![Workflow Console](image)

The console is used for creating and managing workflow groups and workflow reports. For detailed information on workflow functionality, see Chapter 8, “Workflow.”

Site Plan

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with (Burlington Financial in this example).
3. In the button bar, click Site Plan.
A list of child pages under the site root node is displayed in the workspace. The list consists of all top-level “Page” assets for the site. In the example below, the child page list for the Burlington Financial sample site’s root node is shown:

The number following each page link indicates how many child “Page” assets are directly below that top-level page. This view also denotes any unplaced pages and provides a link to the **Place Page** function.

The site plan that you can browse from the button bar is also visible as a hierarchical structure in the “Site Plan” tab in the tree in the left-hand portion of Content Server’s interface (see “Tree,” on page 55). However, the version invoked from the button bar provides a more detailed view, with detailed page information viewable one node at a time. Browsing the site plan from the button bar is also an alternative when the tree is toggled off or otherwise unavailable to your user role.

**Note**

Pages are placed and unplaced according to how the site plan is built; that is, where in the site hierarchy pages are to appear in relation to each other. This is typically the responsibility of the site designers.

4. For the purpose of this example, drill down through the site plan of the Burlington Financial sample site to reach the Stocks page by doing the following:

   a. **Click Home.**

   b. **Click Stocks.**

      Content Server displays the detailed information for the Stocks page.

      The sections of the form are described below using the Stocks page as an example.
Asset Details

This section is typical of the “Inspect” form view of an asset, with the action bar of standard command icons Preview, Inspect, Edit, Delete, and a drop-down list of functions you can perform on this asset type. Details also include identifying information such as name, description, asset type, and status. Here are the asset details of the Stocks page:

| Name: Stocks |
| Description: Burlington Financial Stocks |
| Status: Edited |
| ID: [ID number] |
| Type: Page |
| Modified: Mar 16, 2001 8:27:41 AM by user_author |

Path

This section provides the trail of assets you followed from the site root node to the current asset. You can work your way back up the chain by clicking a link to return to that level within the site plan. Note that a “Page” asset has only one path back to the site root node, while other asset types can have multiple paths. Here’s the path back to the site root node to the Tech Stocks page:

Path: BurlingtonFinancial
   -> Home
   -> Stocks
Child Pages

If the asset you are viewing is a “Page” asset, you see all of its child pages and the number of child pages directly below each (“Page” assets can only be children of the site plan root or of other “Page” assets). A link invoking the Place Page function is also present in this section. Shown below are the child pages for the Stocks page:

<table>
<thead>
<tr>
<th>Child pages:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Index Guide</td>
</tr>
<tr>
<td>Tech Stocks</td>
</tr>
<tr>
<td>Place pages under this Page</td>
</tr>
</tbody>
</table>

Related Assets

This section shows the child assets of the current asset and their number of directly referenced assets. The example below shows the child assets of the Burlington Financial Home page:

<table>
<thead>
<tr>
<th>Related Assets:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection:</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>SidebarBottom</td>
</tr>
<tr>
<td>SidebarMiddle</td>
</tr>
<tr>
<td>SidebarTop</td>
</tr>
<tr>
<td>TopStories</td>
</tr>
<tr>
<td>Query:</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Wirefeed</td>
</tr>
</tbody>
</table>

Multiple Paths

You might also see other assets that reference the current (non-page) asset. For example, the same article may be ranked in several collections. Here is an “Article” asset displayed via one path and simultaneously referenced by another asset:

<table>
<thead>
<tr>
<th>Path: Burlington Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
</tr>
<tr>
<td>Markets</td>
</tr>
<tr>
<td>MarketsTop</td>
</tr>
<tr>
<td>Scania-6620-2001Mar9</td>
</tr>
</tbody>
</table>

This asset does not refer to any other assets.

The Article “Scania-6620-2001Mar9” is also referenced by:

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CompaniesTop</td>
<td>Top Stories</td>
<td>Collection</td>
</tr>
</tbody>
</table>

When there are multiple paths to the same asset, only the path you followed to get to the asset is displayed. Any other possible path is visible as another asset referencing the current asset.

So, in the example above, the “Article” asset was displayed from the MarketsTop collection, and is referenced by the CompaniesTop collection. If you go to the CompaniesTop collection, you will see the same article ranked there. If you follow that link, the roles are reversed: CompaniesTop is in the path, and MarketsTop is the other reference.
Publishing

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click the Publishing button on the button bar

Content Server displays the Publish Console, as shown below:

The Publish Console provides a brief summary of the status of the publishing activities at your site. It shows:

- What is being published (Active Tab)
- What will be published (Scheduled Tab)
- What has been published (History Tab)

By clicking Select Destination, you can see how many assets are approved for publishing, and how many are being held pending approval of related assets, for the selected destination. These numbered totals are hyperlinks to lists of the respective approved and held assets. The list of held assets is particularly useful in troubleshooting publishing delays. If you have the right permissions, you can initiate a publishing session for assets that are ready to be published. For more information on the Publish Console, see Chapter 7, “Publishing.”

Options

Allows you to choose your preferred way of displaying the buttons in the button bar. Click the arrow button next to the Options button bar item to display a list of possible options:

- **Words** – displays the buttons as text only.
- **Icons** – displays the buttons as icons without text labels.
- **Words and Icons** – displays the buttons as icons with text labels. (The button bar defaults to this option every time you log in.)
Site

Returns you to the site select screen you see when you log in (assuming you have access to more than one site). This screen allows you to switch to another site using the user credentials you supplied when you logged in. If you click the Site link and there are no other sites, the window refreshes to the current My Work view.

Tree

The tree refers to the tabbed hierarchical structure that appears in the left pane of Content Server’s interface. If your administrator has enabled the tree, your view of the site and its assets is reflected in this hierarchy whenever you toggle on the tree. In the example below, the tree shows the site plan for the Burlington Financial sample site:

```
Notice that it presents the same root site node (top-level page) view as shown in the button bar version of the site plan (see “Site Plan,” on page 50). The site plan helps you visualize the configuration of pages and their contents. It also helps you understand the relationships and dependencies that exist for any given page. The tree is both a visual aid and an action launch pad.

The tree is dynamic — its composition changes as you navigate the site and perform asset management tasks. What you see is based on a combination of the site configuration, installed products, sample sites, roles, and your activities during the current session.

If the Tree Is Disabled or Toggled Off

In some situations, your administrator may have disabled the tree, for example, if your company’s security policy does not allow the execution of Java applets on employee machines. You may also have the ability to toggle the tree on and off yourself, if the administrator granted you the permissions to do so. If the tree is disabled or toggled off, you will not see it in your interface.

The procedures in this guide describe the default and most common implementation of Content Server’s user interface where the tree is enabled. If for some reason the tree is disabled on your system, consult your administrator to find out why it has been disabled.
For information on how to perform content management tasks that require the tree, when the tree is disabled (or toggled off), see Appendix B, “When There Is No Tree.”

**Tree Tabs**

The tabs displayed in the tree, as well as their contents, are influenced by many factors, including:

- Permissions and other administrative decisions
- Installed products
- Installed sample sites, and the current site you are logged in to
- User activity during a session

The following table describes how and when tabs appear in the tree by default:

<table>
<thead>
<tr>
<th>Tab Name</th>
<th>How and When It Appears in the Tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Plan</td>
<td>A default tab.</td>
</tr>
<tr>
<td>Active List</td>
<td>A default tab, which is initially blank. It becomes populated as you specifically add items to it from asset forms and asset lists (see “Working with the Active List,” on page 70). The list is specific to assets from the site you are logged into, unless the assets are shared. This list is persistent; that is, it is stored from session to session, and grows and shrinks as you add assets to and remove them from the list. A session is defined as the duration of a single logon to one site or more sites.</td>
</tr>
<tr>
<td>History</td>
<td>Appears automatically when you perform the first asset management task in the course of your session. The contents of the History tab are volatile. They exist only for the current browser window during the current session. If you open a new window during the session, the History tab is reset for that window. Keep in mind the History tab is site-specific — switching sites clears the history.</td>
</tr>
<tr>
<td>Marketing</td>
<td>Appears if you have Engage installed. Sample assets appear if the sample sites and their data are installed.</td>
</tr>
<tr>
<td>Design, Query</td>
<td>Appear only if you have appropriate permissions (see the Content Server Administrator’s Guide).</td>
</tr>
<tr>
<td>Admin, Site Admin, Workflow</td>
<td>Appear only if you have the respective admin privileges (see the Content Server Administrator’s Guide).</td>
</tr>
<tr>
<td>user-defined</td>
<td>Appear only if the administrator has configured custom tabs (see the Content Server Administrator’s Guide).</td>
</tr>
</tbody>
</table>
Using the Tree

When working in the tree, you click on tabs to display their contents. A tab in the back row of tabs moves to the front when clicked. You expand and collapse branches of the tree by clicking the plus and minus signs. You can resize the tree pane by dragging its right edge right or left to change its width.

The tree is automatically refreshed when you make a change locally; that is, if you add a new asset, it appears immediately in the tree. To see someone else’s changes who might be working on the same site, you have to use the Refresh command (see the table below).

You perform most functions within the tree by using context (pop-up) menus invoked by right-clicking on a tree node or the white space. The context menus change according to which tab you are viewing and where the mouse is pointing. Context menu commands are summarized in the following table:

<table>
<thead>
<tr>
<th>Command</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete</td>
<td>Marks the selected asset for deletion (you must have the right permissions).</td>
</tr>
<tr>
<td>Remove</td>
<td>Removes the asset from your Active List.</td>
</tr>
<tr>
<td>Edit</td>
<td>Opens a form in the workspace for editing the selected asset.</td>
</tr>
<tr>
<td>Inspect</td>
<td>Opens a page in the workspace for inspecting details of the selected asset.</td>
</tr>
<tr>
<td>Refresh</td>
<td>Refreshes all children below the selected node to ensure that you are looking at the latest version of the tree.</td>
</tr>
<tr>
<td>New asset type</td>
<td>Opens a form in the workspace for creating a new instance of the selected asset type. Restricted to the asset types you have permissions to create. For flex assets, you can create a flex parent (like this one), or a child of the flex parent (child).</td>
</tr>
<tr>
<td>Status</td>
<td>Opens a page in the workspace for viewing the status of the selected asset.</td>
</tr>
<tr>
<td>Preview</td>
<td>Displays the selected asset’s page as it would appear on the production site. A new browser window opens to show the preview. You can preview the page as it would appear now or at a future date. For more information on previewing a site as it would appear at a future date, see “Previewing Future Sites,” on page 193.</td>
</tr>
<tr>
<td>Place Page</td>
<td>Opens a dialog box in the workspace so that you can place and unplace pages in the tree, and also rerank pages. A page must be placed before it can be published. This is a design activity that requires the right permissions. It is available only from the Site Plan tab.</td>
</tr>
<tr>
<td>Refresh All</td>
<td>Refreshes the tab contents with a single click.</td>
</tr>
<tr>
<td>Clear All</td>
<td>Clears the contents of the History tab. For this command to appear, you must right-click in the empty space inside the tab (not on an asset).</td>
</tr>
</tbody>
</table>

Tip: Double-click an asset in any tree tab to display the asset in its “Inspect” form.
Workspace

The workspace is the portion of Content Server’s interface that displays forms and lists, based on the action you have taken. Its contents change to reflect your latest request.

When you first log in, the workspace displays your current workload.

When you view an asset in its “Inspect” form, or variations such as the “Status” form, the action bar appears at the top of the form, shown as follows:

This offers a selection of actions you can take on the current asset, as described in the following table:

Table 3: Action Bar functions

<table>
<thead>
<tr>
<th>Action</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preview</td>
<td>Opens the InSite interface and displays the asset’s parent page as it would appear on your site, using the template assigned to the asset as the default format. You can also see how the asset will look when you replace the current template with another appropriate template (by making a selection from the drop-down list in the InSite bar). By default you view the parent page as it would appear now; change the date in the navigation bar to see the parent page at a future date. Additionally, you can click the Preview in Full Window hyperlink in the top bar to view the asset in a new browser window that does not display the InSite interface.</td>
</tr>
<tr>
<td>Inspect</td>
<td>Displays a view-only summary of the asset’s details such as name, description, ID, and so forth.</td>
</tr>
<tr>
<td>Edit</td>
<td>Opens the asset in an edit form, where you can make changes to that asset. You can either save or cancel those changes from the “Edit” form.</td>
</tr>
<tr>
<td>Delete</td>
<td>Marks the asset for removal in the database. The next time your database administrator purges the database, that asset is deleted.</td>
</tr>
<tr>
<td>more ...</td>
<td>Depending on asset type and permissions:</td>
</tr>
<tr>
<td></td>
<td>• Approve the asset for publishing</td>
</tr>
<tr>
<td></td>
<td>• Make a copy of the asset (if you are allowed to create a new instance of this asset type)</td>
</tr>
<tr>
<td></td>
<td>• Create a new instance of the same asset type (if you are allowed to create a new instance of this asset type)</td>
</tr>
<tr>
<td></td>
<td>• Create a translation of the asset (if you are allowed to create a translation of this asset type)</td>
</tr>
<tr>
<td></td>
<td>• Search for an asset of the same type</td>
</tr>
</tbody>
</table>
Table 3: Action Bar functions (continued)

<table>
<thead>
<tr>
<th>Action</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>more ... (drop-down list)</td>
<td>• Show asset status</td>
</tr>
<tr>
<td>(continued)</td>
<td>• Share the asset across sites (if you have access to other sites where the asset type is also enabled; cannot share “Page” assets)</td>
</tr>
<tr>
<td></td>
<td>• Browse in Site Plan (“Page” assets only)</td>
</tr>
<tr>
<td></td>
<td>• Build a collection (“Collection” assets only)</td>
</tr>
<tr>
<td>Add to...</td>
<td>Adds the asset to your Active List. If the asset has already been added, the note at the top of the window reads: <strong>Item is in your Active List.</strong></td>
</tr>
</tbody>
</table>
Icons

When you are viewing a list of assets, each asset may have its own set of action icons and selections. The image below displays an asset from a list of search results.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Preview" /></td>
<td>Preview. Click to open the asset in the preview window of the InSite interface. This icon is disabled (grayed out) if you do not have permission to preview an asset.</td>
</tr>
<tr>
<td><img src="image" alt="Inspect" /></td>
<td>Inspect. Click to inspect the asset in the “Inspect” form, a view-only version of the “Edit” form. (In the “Inspect” form, you can view the asset’s field names and values.)</td>
</tr>
<tr>
<td><img src="image" alt="Edit" /></td>
<td>Edit. Click to open the asset in the “Edit” form, where you can modify the asset. This icon is disabled (grayed out) if you do not have permission to edit an asset.</td>
</tr>
<tr>
<td><img src="image" alt="Delete" /></td>
<td>Delete. Click this icon to remove the asset. All references to the asset must be removed before the asset may be deleted. This icon is disabled (grayed out) if you do not have permission to delete an asset.</td>
</tr>
<tr>
<td><img src="image" alt="Information" /></td>
<td>Information. Click this icon to display information (in a tooltip) about the asset.</td>
</tr>
</tbody>
</table>

Here, you have the same icons as on the asset forms, a link to the asset’s “Inspect” form, and a check box to single out assets to add to your “Active List” when you click the **Add to My Active List** button.

Table 4 describes the icons you will see in Content Server.
### Tooltips

The table below shows tooltips you can access in lists of assets, such as search results lists, assignment lists, and groups of assets in the asset tree.

<table>
<thead>
<tr>
<th>Tooltip</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Preview:</td>
<td><strong>Site Preview Date Range</strong></td>
</tr>
<tr>
<td>example 1</td>
<td>This tooltip appears when you hold your cursor over an asset’s name:</td>
</tr>
<tr>
<td></td>
<td>• The tooltip shows the asset’s start-end dates, if they are assigned, or “N/A” if they are not assigned.</td>
</tr>
<tr>
<td></td>
<td>• Following the date range is either the asset’s name or description. (The asset’s name might be truncated, depending on the column width.)</td>
</tr>
<tr>
<td></td>
<td>In example 1, both the start and end dates were assigned to the asset. The asset’s description follows the dates.</td>
</tr>
<tr>
<td></td>
<td>In example 2, neither a start date nor an end date was assigned to the asset, so “N/A” is displayed for both dates. Following “N/A” is the asset’s full name.</td>
</tr>
<tr>
<td></td>
<td>For information about the Site Preview feature, see “Previewing Future Sites,” on page 193.</td>
</tr>
<tr>
<td></td>
<td><strong>Information:</strong></td>
</tr>
<tr>
<td></td>
<td>This icon appears in the right margin of the “Name” column in search results lists and displays the asset’s description in a tooltip.</td>
</tr>
<tr>
<td></td>
<td><strong>Warning:</strong></td>
</tr>
<tr>
<td></td>
<td>Hold your cursor over a warning icon to display a tooltip with more details about the settings that are triggering the icon to appear (as shown in the example).</td>
</tr>
<tr>
<td></td>
<td>Triggers can be:</td>
</tr>
<tr>
<td></td>
<td>• Invalid start/end date fields (see “Using Start and End Dates,” on page 189 and “Approval Tasks,” on page 206).</td>
</tr>
<tr>
<td></td>
<td>• Workflow settings (see “Deadlocks,” on page 233).</td>
</tr>
</tbody>
</table>

### When You Finish Your Work

When you are finished working with Content Server, click **Logout** in the upper right corner of the interface to terminate your session. The interface returns to the login form.

Continue on to the next chapter for an in-depth look at Content Server asset management tasks.
Chapter 3

Accessing the Sample Sites

This guide uses examples from the Burlington Financial and FirstSite II sample sites throughout to illustrate Content Server’s features and functions. If you wish to access these sites, follow the login procedures in this chapter.

This chapter contains the following sections:

- **Logging in to the Burlington Financial Site**
- **Logging in to FirstSite II**
Chapter 3. Accessing the Sample Sites

Logging in to the Burlington Financial Site

1. Log in to Content Server with the following credentials:
   - **User Name:** fwadmin
   - **Password:** xceladmin

   A screen appears stating that you are logged in as fwadmin.

   ![Login Screen]

   ![Logged In Message]

   **Note**

   If only the Burlington Financial site is installed, you will see the “My Work” page (step 2 on page 65). Continue with “Assigning User Roles,” on page 65.
2. Select the Burlington Financial site by clicking on the **Burlington Financial** link in the table. You are taken to the “My Work” page showing your assignments, checkouts, and active list of assets.

![My Work screen](image)

**Assigning User Roles**

To access all the functions in this book, you need to assign yourself all the user roles.

1. Select the **Site Admin** tab.
2. From the tree (at the left), double-click **Users**.
3. In the **Username** field, enter `fwadmin` and click **Select**.

![User Role Management screen](image)

The “User Role Management” screen opens displaying the fwadmin user search results returning a single search result of fwadmin.

4. Assign all roles to fwadmin:
   a. Click the **Edit** icon (pencil).
Chapter 3. Accessing the Sample Sites

Logging in to the Burlington Financial Site

The “Edit Roles for User: fwadmin” page appears.

![Edit Roles for User: fwadmin](image)

b. Assign all user roles.

   Click on the first user role (AdvancedUser). Scroll to the end of the list and **Shift-Click** the last user role (WorkflowAdmin). All user roles should now be selected.

c. Click **Save**.

   The “User Role Management” screen appears confirming the addition of the new roles.

   ![User Role Management](image)

5. Continue on to “Navigating Content Server’s Advanced Interface,” on page 45 to begin working with Content Server.
Chapter 3. Accessing the Sample Sites

Logging in to FirstSite II

1. Log in with the following credentials:
   
   **User Name:** firstsite  
   **Password:** firstsite

   You are taken to the “My Work” page showing your assignments, checkouts, and active list of assets.

2. Continue on to “Navigating Content Server’s Advanced Interface,” on page 45 to begin working with Content Server.
Chapter 4
Working with Assets

Assets are objects that serve as the building blocks of Content Server. They can be created, edited, inspected, deleted, duplicated, assigned to workflow, tracked through revision tracking, searched for, previewed, and approved for publishing.

As mentioned in Chapter 1, “Overview” CS provides you with several content and site design assets. For definitions of these asset types, see the section “Content: Asset Types and Assets,” on page 22. Because your system is customized for your organization, you most likely have many more asset types to work with than the ones defined in that section.

Although there can be many different types of assets, you work with all of them in similar ways, using the same procedures. This chapter describes the basic procedures for working with assets, illustrated with examples from the Burlington Financial sample site.

This chapter contains the following sections:

• About Permissions
• Working with the Active List
• Creating New Assets
• Finding Assets
• Editing Assets
• Working with the InSite Interface
• Working with WYSIWYG Editors
• Linking Assets
• Embedding Links Within Assets
• Sharing Assets with Other Sites
• Working with Grouped Assets
• Working with Asset Associations
• Working with “Page” Assets
• Deleting Assets
• Working with Multilingual Assets
About Permissions

Your ability to perform asset management tasks such as creating, editing, or deleting an asset (and more) depends on permissions set up by the administrator of your Content Server system. The administrator either grants or denies permissions to users based on their roles. Roles represent job descriptions (or titles) of individuals with specific functions, such as content provider, editor, designer, or administrator. A role can be granted to more than one user; a user can also hold more than one role.

If you try to perform a task you do not have permissions for (or your role is not authorized to perform), Content Server displays a warning notifying you of that fact.

Access to assets and asset management tasks can also be restricted by workflow. If workflow is in use on your site, at times you might not be allowed to work with certain assets, depending on their workflow state and your assigned role(s). For example, your system might be set up so that only users with the editor role (but not the author role) can work on assets that are in the “Ready to Edit” state. In such cases, if you have a role other than the editor role, you will not be able to work on assets in that workflow state. For more information about workflow, see Chapter 8, “Workflow.”

Working with the Active List

The Active List is your personal asset ledger that you maintain over time. It is a place to store assets that you may require access to in the middle of a task, as many of Content Server’s asset management tasks require the selection of assets as part of the process. In such cases, you search for and add the required assets to your Active List first, and then perform the task requiring selecting those assets.

The Active List is empty until you explicitly add assets to it. Assets that you have added to the list remain there until you explicitly remove them from the list (or until they are deleted).

Viewing the Active List

To view the Active List

You can view the Active List in the following ways:

- Click My Work in the button bar. You may have to scroll down, because the Active List is the last of three lists appearing in this view. “My Work” is also the view you see when you first log in.
- Select the Active List tab in the tree. The tab shows all assets currently on your Active List.

Note that the Active List view is site-specific. If you add assets from one site, then switch sites and view your Active List again, you will not see the assets that you added in the first site, unless those assets happen to be shared with the second site.
Adding Assets to the Active List

You can add assets to the Active List from a list of search results, or from an asset’s “Inspect” form.

To add assets to the Active List from a list of search results

1. Find the asset(s) you want to add to your Active List:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset(s) you want to find.
   c. Enter the desired search criteria (if any) and click Search.

For more information on searching, see the section “Finding Assets,” on page 81.

The search results list appears in the workspace:

<table>
<thead>
<tr>
<th>Name</th>
<th>Locale</th>
<th>Modified</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>160-AS3F-2001Mar9</td>
<td></td>
<td>3/18/01 8:15 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMD-AS09-2001Mar9</td>
<td></td>
<td>3/18/01 8:13 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASF-A56-2001Mar9</td>
<td></td>
<td>2/28/01 7:52 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accent Burlington Financial</td>
<td></td>
<td>1/23/02 4:00 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ausus-A65-2001Mar9</td>
<td></td>
<td>3/18/01 7:52 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avid-A77G-2001Mar9</td>
<td></td>
<td>3/26/01 8:10 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avidus-A445-2001Mar9</td>
<td></td>
<td>3/18/01 8:04 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avidus-A678-2001Mar9</td>
<td></td>
<td>3/18/01 8:16 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avidus-A66-2001Mar9</td>
<td></td>
<td>3/26/01 7:52 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avidus-A528-2001Mar9</td>
<td></td>
<td>3/18/01 8:02 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avidus-A314-2001Mar9</td>
<td></td>
<td>3/18/01 7:55 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avidus-A442-2002Mar9</td>
<td></td>
<td>3/26/01 8:04 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avidus-A210-2001Mar9</td>
<td></td>
<td>3/18/01 8:12 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avidus-A91-2001Mar9</td>
<td></td>
<td>3/18/01 7:53 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcatel-A271-2001Mar9</td>
<td></td>
<td>3/26/01 7:59 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcatel-A211-2001Mar9</td>
<td></td>
<td>3/18/01 7:59 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anderson-4600-2001Mar9</td>
<td></td>
<td>3/18/01 8:14 PM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Select the assets you want to add by clicking their checkboxes. You must select at least one asset before clicking the Add to My Active List button.

3. When you have selected all of your assets, click Add to My Active List.

Content Server displays your updated Active List showing the assets you just added.

To add an asset to the Active List using the asset’s “Inspect” form

1. Find the asset you want to add to your Active List:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.

For more information on searching, see the section “Finding Assets,” on page 81.

2. Scroll to the asset you want to add to your Active List and click its Inspect icon.

Content Server displays the asset’s “Inspect” form.

3. In the “Inspect” form’s action bar, click Add to My Active List.

Content Server displays your updated Active List showing the asset you just added.
Removing Assets from the Active List

To remove an asset from the Active List

1. Access your Active List. In the button bar, click My Work and scroll to the Active List section of the “My Work” view.

![My Active List Table]

2. Select the assets you want to remove by clicking their checkboxes. You must select at least one asset before clicking the Remove button.

3. Click Remove.

The list refreshes, showing the results of the removal.

Note

You can also remove an asset by right-clicking the asset in the Active List tab and selecting Remove from the pop-up menu.

If an asset on the Active List is deleted from the system (by you or anyone else), it will also disappear from the list.
Creating New Assets

If you have the right permissions, you can create brand new assets “from scratch,” using Content Server’s Advanced interface. If the new asset that you want to create is similar to an existing one, you can copy the existing asset and make changes to the copy, which saves you a few steps. Both methods are described later in this section.

You can also create new assets using the Dash interface (described in the Content Server Dash Interface User’s Guide), or one of the Windows-based clients:

- **Content Server Desktop**, which enables you to create assets from within Microsoft Word.
- **Content Server DocLink**, which (in the form of a Windows Explorer extension) enables you to create assets out of a variety of popular file formats, such as Microsoft Word or PDF documents.

The difference between the two Windows clients is in how the assets they create are stored in the CS database: the assets you create with CS-Desktop are converted to the fields that you see in the “New” asset form in Content Server’s interface; the assets you create with CS-DocLink are stored in their native format as single objects called **blobs**, or **binary large objects**.

Which Assets Can You Create?

The assets you can create (and copy) are determined by how the administrator has personalized the **New** button on the button bar for your role. The purpose of personalizing the contents of the **New** button is to make your job easier.

- You should not have to see assets you are not interested in.
- You should not have to provide information that is already known, or that you have no way of knowing without researching.
- If set values are required, you should not be able to alter these values.
- Reasonable defaults should be preselected for you.
- A flex asset that is based on an asset definition should have that definition preselected.
- An asset that must enter a workflow upon creation should be preassigned to the appropriate workflow process.

By personalizing the contents of the **New** button, the administrator makes sure that you can focus on the quality of the content you create, and not on the technical aspects of entering and storing it in the Content Server system.
Creating a New Asset

To create a new asset

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with (Burlington Financial in this example).
3. In the button bar, click **New**. Content Server displays a list of asset types from which you can create assets.
4. Click the asset type of the asset you want to create (New Article in this example).
5. If the “Choose Assignees” screen (on the right) is not displayed, it means that your asset is either not assigned to a workflow or is assigned to a workflow that does not require choosing assignees. Proceed to step 6. Otherwise, continue with this step.
   a. In the **Assignees** field, go to the **Users** list box and select the workflow assignees — users to whom you are assigning this asset. Any of these users can complete the next step in the workflow process.
   b. Click **Set Assignees**.
6. Enter information in the fields of the content-entry form that is displayed. If a field has an asterisk (*) next to it, it is a required field. If the form for this asset has fields that are unfamiliar to you, consult your design team or administrator.
   a. In the **Name** field, enter a name for the asset. Note the following conventions when naming the asset:
      - The name must contain 1 (minimum) to 64 (maximum) alphanumeric characters.
      - The following characters are not allowed: single quote (’), double quote (“), semicolon (;), colon (:), question mark (?), percent sign (%), less-than sign (<), and greater-than sign (>).
      - The name can contain spaces (except for names of flex attributes), but cannot start with a space.
   b. (Optional) In the **Start/End Date** fields, use the date picker to enter these dates. For more information about Start/End Dates, see “Using Start and End Dates,” on page 189.
c. (Optional) If you plan to create translations of the asset, set the asset’s language (locale designation) using the “Locale” drop-down list.

\[\textbf{Note}\]

This option appears only if at least one locale is enabled on your site. Contact your administrator to find out if your site supports localized assets. For more information, see “Linking Assets” on page 124.

d. The asset type you are working with may be divided into subtypes. If this is the case, the “Subtype” drop-down list appears in the “New” asset form. Do one of the following:

- If the “Subtype” list appears in the form, select the subtype of the new asset.
- If the “Subtype” list does not appear, proceed to the next step.

e. When populating the form, take note of the following:

- **Required fields.** You must fill in all required (highlighted) fields before you are permitted to save the asset. Fill in all other fields as necessary.

- **WYSIWYG text fields.** You may see one or more text fields that are WYSIWYG-enabled (What You See Is What You Get) via a WYSIWYG editor, such as FCKEditor (see “Working with the FCKEditor,” on page 112). These text fields allow you to enter and format your content using controls similar to those of Microsoft Word. For more information, see “Working with WYSIWYG Editors,” on page 111.

- **Date fields.** You will see a **Date Picker** (calendar) icon next to a date field, such as start and end dates. Clicking the icon invokes the Date Picker attribute editor; see “Working with the Date Picker,” on page 123 for more information.

- **Image Picker fields.** You may see one or more fields that prompt you to select an image asset (to be associated with the asset you are creating) through the Image Picker attribute editor. In such cases, you will see a **Browse** button next to the field. Clicking the button displays a pop-up window showing thumbnails of the image assets you can select. For more information on Image Picker, see “Working with the Image Picker,” on page 114.

- **Clarkii Online Image Editor fields.** You may see a field (or fields) that allows you to edit images directly in the asset form, using Clarkii OIE. For detailed instructions, see “Working with the Clarkii Online Image Editor,” on page 117.

- **Flash content fields.** You may see a section in the asset form that prompts you to compose Flash content from Flash templates, images and text of your choice. For detailed instructions, see “Working with Flash Content,” on page 121.
Fields that prompt you to select assets. You may see a field (or fields) that prompt you to select a flex parent or a template, or associate an asset (such as an image) with the asset you are creating.

1) If the field displays a drop-down list, select the desired asset from the list. If the field displays an Add Selected Items button, proceed to the next step.

2) In the tree, select the tab containing the asset you want to select as a value for the field. Consult your design team or administrator to find out which assets are available in which tabs of your tree.

3) In the tab, select the desired asset.

4) Click Add Selected Items.

Content Server assigns the selected asset as a value for the field.

7. Click Save.

Content Server displays the asset in its “Inspect” form, showing a summary of the asset. If you duplicated any information that must be unique, Content Server displays an error message. Click the Back button in your browser to return to the form and edit the appropriate field.

8. (Optional) If the asset is not preassigned to a workflow, but you wish to send it through a workflow, you can assign the asset to a workflow process as described in the section “Assigning an Asset to a Workflow,” on page 241.

9. (Optional) If you want to see how the asset would look if it were published, you can preview it. To preview an asset, click Preview in the action bar at the top of the asset’s “Inspect” form. A new window will open and display the asset in its rendered form.

If the asset has no default template assigned to it, you are asked to select a template in which to preview it.
Creating a New Asset by Copying an Existing Asset

You can create a new asset by copying an existing asset. You can then work on the copy, reusing the information already present and making changes where necessary. You can copy an asset even if it is checked out by another user.

To copy an asset

1. Find the asset you want to copy:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to copy.
   c. Enter the desired search criteria (if any) and click Search.
   For more information on searching, see the section “Finding Assets,” on page 81.
2. In the search results list, navigate to the asset you want to copy and click its Inspect icon. Content Server displays the asset in its “Inspect” form.
3. In the asset’s “Inspect” form, select Copy via “New Asset Type” from the “more...” drop-down list.

   **Note**

   If Copy via “New Asset Type” is not listed as an option, you do not have the permissions to copy the asset; stop here. If you have questions about your permissions, contact your CS administrator.

4. If the “Choose Assignees” screen (at the right) is not displayed, it means that your asset is either not assigned to a workflow or is assigned to a workflow that does not require choosing assignees. Proceed to step 5. Otherwise, continue with this step.
   a. In the Assignees field, go to the Users list box and select the workflow assignees—workflow participants to whom you are assigning this asset. Any of these users can complete the next step in the workflow process.
   To select a block of users, Ctrl-Shift-click the extremes of the block. To select non-adjacent users, Ctrl-click each user. If you need information about workflow, see Chapter 8, “Workflow.”
   b. Click Set Assignees.
5. A form containing the fields and values of the asset you copied appears. For each field, replace the copied content as necessary. If any of the fields are unfamiliar to you, consult your design team or administrator.

   a. In the **Name** field, replace the copied name with a unique name for the new asset. Note the following conventions when naming the asset:
      - The name must contain 1 (minimum) to 64 (maximum) alphanumeric characters.
      - The following characters are not allowed: single quote ('), double quote ("), semicolon (;), colon (:), question mark (?), percent sign (%), less-than sign (<), and greater-than sign (>).
      - The name can contain spaces (except for names of flex attributes), but cannot start with a space.

   b. (Optional) In the **Start/End Date** fields, use the text boxes or date picker to enter these dates. See “Using Start and End Dates,” on page 189 for more information on these fields.

   c. (Optional) Set or change the new asset’s language (locale designation) using the “Locale” drop-down list.

   d. You may see one or more of the following types of fields:
      - **Required fields.** Do not leave any required (highlighted) fields blank. If you do, you will not be permitted to save the asset. Make changes to all other fields as necessary.
      - **WYSIWYG text fields.** You may see one or more text fields that are WYSIWYG-enabled (What You See Is What You Get) via a WYSIWYG editor, such as FCKEditor (see “Working with the FCKEditor,” on page 112). These text fields allow you to enter and format your content using controls similar to those of Microsoft Word. For more information, see “Working with WYSIWYG Editors,” on page 111.
      - **Date fields.** You will see a **Date Picker** (little calendar) icon next to a date field. Clicking the icon invokes the Date Picker attribute editor; see “Working with the Date Picker,” on page 123 for more information.
      - **Image Picker fields.** You may see one or more fields that prompt you to select an image asset (to be associated with the asset you are creating) through the Image Picker attribute editor. In such cases, you will see a **Browse** button next to the field. Clicking the button displays a pop-up window showing

   **Note**
   This option appears only if at least one locale is enabled on your site. Contact your administrator to find out if your site supports localized assets.

If you do not make a selection, one of the following happens:

- If the source asset has a locale designation, the new asset will retain the locale designation of the source asset.
- If the source asset has no locale designation, the new asset will not have a locale designation until you manually assign one.

For more information, see “Linking Assets,” on page 124
thumbnails of the image assets you can select. For more information on Image Picker, see “Working with the Image Picker,” on page 114.

- **Clarkii Online Image Editor fields.** You may see a field (or fields) that allows you to edit images directly in the asset form, using Clarkii OIE. For detailed instructions, see “Working with the Clarkii Online Image Editor,” on page 117.

- **Flash content fields.** You may see a section in the asset form that prompts you to compose Flash content from Flash templates, images and text of your choice. For detailed instructions, see “Working with Flash Content,” on page 121.

- **Fields that prompt you to select assets.** You may see a field (or fields) that prompt you to select a flex parent or a template, or associate an asset (such as an image) with the asset you are creating.
  
  1) If the field displays a drop-down list, select the desired asset from the list and proceed to step 6.

  If the field displays an **Add Selected Items** button, proceed to the next step, step 2.

  2) In the tree, select the tab containing the asset you want to select as a value for the field. Consult your design team or administrator to find out which assets are available in which tabs of your tree.

  3) In the tab, select the desired asset.

  4) Click **Add Selected Items**.

  Content Server assigns the selected asset as a value for the field.

6. **Click Save.**

Content Server displays a summary of the asset. If you duplicated any information that must be unique, Content Server displays an error message. Click the **Back** button on your browser to return to the form and edit the appropriate field.

7. **(Optional)** If the asset is not preassigned to workflow and you want to use the workflow feature, you can assign the asset to a workflow as described in the section “Assigning an Asset to a Workflow,” on page 241.

8. **(Optional)** If you want to see how the asset would look if it were published, you can preview it. To preview an asset, click **Preview** in the action bar at the top of the asset’s “Inspect” form. A new window will open and display the asset in its rendered form.

   **Note**

For the preview function to work, the asset must have a template assigned to it in the **Template** field.
Creating a New Asset in CS-Desktop

You can create new assets using the CS-Desktop client, provided your system is set up to support it. When using CS-Desktop, the assets you create originate as Word documents. The content from each document is entered into the Content Server database as an asset by mapping document contents to asset fields directly from within Microsoft Word. To do this mapping, you must have the CS-Desktop client installed on your local machine.

When you install the client, you also install an online Help file that describes how to use CS-Desktop. After the client is installed, the Help file is accessible from within Word. To install the client (and the Help file), extract the provided ZIP archive (csdesktop.zip) and launch the setup.exe file.

Creating a New Asset in CS-DocLink

You can create new assets from common binary file types such as text files, spreadsheets, and images using CS-DocLink, provided your system is set up to use it and you have the client software installed on your machine. You create new assets by dragging and dropping files into a folder-like hierarchical view of the Content Server database in Windows Explorer.

When you install the client, you also install an online Help file that describes how to use CS-DocLink. After the client is installed, the Help file is accessible from within Windows Explorer. To install the client (and the Help file), extract the provided ZIP archive (CSDoclink.zip) and launch the setup.exe file.

Note that the CS-DocLink client does not support locale-related functionality, such as setting an asset’s locale, or creating a translation. To perform such functions, use the Advanced interface.
Finding Assets

You can use Content Server’s search function to find assets and add them to your Active List for later retrieval.

Search Basics

Here are some general search characteristics:

- There are two kinds of searches: simple and advanced.
- The simple search form has a link to the advanced form; the advanced form has a link back to the simple form.
- For both kinds of searches, results are based on all criteria being satisfied.
- Both the simple and advanced search forms provide a total count of the number of instances of the specified asset type in the site.
- If you click the Search button without specifying any criteria, all instances of the selected asset type (up to 1000) are retrieved and displayed 20 per page, which is the default for the Show up to nn items per page drop-down field. If your search results exceed 1000, refine your search criteria.
- A text string search means that all instances of the asset that contain the specified search string in the selected field will be returned in the search results list.
- You can use the percent sign (%) in your search criteria as a wildcard character.
- Searches can be case-sensitive, depending on the search engine used and its configuration.
- By default, Content Server uses its own SQL-based database search mechanisms. Check with your system administrator to determine whether a search engine is in use. Consider the following when using the SQL default search mechanism:
  - Do not use phrases in the search string. Phrases are treated as a series of independent words delimited by space characters, and all records which match any of the words are retrieved.
  - Do not use quotation marks in the search string. Quotation marks are treated as a character. For example, a search on “John Doe” finds only John Doe in quotation marks.
  - Commas are not interpreted as characters (basic assets only). For example, a search on logo, banner finds occurrences of the word logo and occurrences of the word banner.

Note

Searches described in this section are based on assets — the results are specific to an asset type. You can perform searches across asset types by running workflow reports. For more information, see the section “Working with Workflow Reports,” on page 270.
Running a Simple Search

A simple search is a quick way to search across the Content Server database.

To run a simple search

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Search. Content Server displays a list of searchable asset types.
4. Click Find for the desired asset type to display the simple search form.

The “Simple Search” form for the desired asset type (“Article” in this example) appears as follows:

5. Enter the desired search criteria:
   a. In the “Search” drop-down list, select the attribute you want to search.
   b. In the for field, enter the text you want to search for (you can also leave this field blank).
   c. Select the number of matching assets to display per page (the incremental range is 10-300).
   d. Select a category by which to sort the results.

If you enter no criteria, the search will retrieve all instances of the asset type (up to 1000) and display them at 20 to a page in the default sort order.

6. Click Search.

The search results appear below the search form in the workspace.

<table>
<thead>
<tr>
<th>Name</th>
<th>Locate</th>
<th>Modified</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-637-2001Mar9</td>
<td>1</td>
<td>3/18/01 8:15 PM</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AMD-9500-2001Mar9</td>
<td>1</td>
<td>3/19/01 9:12 PM</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ASP-56-2001Mar9</td>
<td>1</td>
<td>3/18/01 7:52 PM</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>About Burlington Financial</td>
<td>1</td>
<td>1/23/02 4:09 PM</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>About -650-2001Mar9</td>
<td>1</td>
<td>3/18/01 7:52 PM</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Active-4745-2001Mar9</td>
<td>1</td>
<td>3/18/01 8:13 PM</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Astro-446-2001Mar9</td>
<td>1</td>
<td>3/18/01 8:04 PM</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Aggressive-4678-2001Mar9</td>
<td>1</td>
<td>3/18/01 8:14 PM</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Text at the left above the search results list tells you the range of the currently displayed assets out of the total number of assets that match your search criteria. You can display more results by clicking the Previous and Next hyperlinks at the right, above the results.
Notice the line of numbers at the bottom left of each page of search results:

Show 10 20 30 50 100 200 300 items per page

Click one of the numbers to rerun the search and display the selected number of assets per page.

Each asset returned in the search results list has a row of icons to its left. The icons are, in order of appearance, **Preview**, **Inspect**, **Edit**, and **Delete**. They work just like the commands in the action bar of an asset’s “Inspect” form.

If you hold your cursor over the Info icon to the right of the asset name, a tooltip with the asset’s description displays.

Information on start and end dates can be found in “Using Start and End Dates,” on page 189.

7. To save your search results, see the section “Saving Search Results,” on page 87.
8. To save your search criteria, see the section “Saving Search Criteria,” on page 87.

### Running an Advanced Search

In advanced search, you can locate assets using additional criteria not available in the simple search screen.

**To run an advanced asset search**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click **Search**.
   
   Content Server displays a list of searchable asset types.
4. Click **Advanced search** next to the asset type of the asset you want to find. Content Server displays the “Advanced Search” form.

   If you are searching for a flex type asset, the Select Attributes button appears; otherwise, this option is not available.

   ![Advanced Search Form](image)

   The advanced form presents additional search criteria that you can use to narrow down the scope of your search.

   - Search forms are customized by administrators.
   - Search options vary by asset type.
   - Some search criteria are available for all asset types. Not every search form will include these search terms, but all search forms can include them. Following is a list of these common search terms: “Name contains,” “Template is,” “Status is,” “Source is,” “Subtype is,” “Category is,” “Start Date before/after,” “End Date before/after” “ID is,” and “Modified after/before.” For more information on the asset fields listed above, see “Creating New Assets,” on page 73.
   - “Template,” “Start Date,” and “End Date” are optional, user edited fields on asset creation and edit forms; therefore, there may be no values assigned to them. Searches across these fields will only narrow your search results if these fields have been filled in by the asset’s creator or editor. For more information on templates, see “Design Assets,” on page 27. For more information on start/end dates, see “Using Start and End Dates,” on page 189.
5. (Optional) If you are searching for a flex type attribute and you want to search by specific attributes and/or specific attribute values:

   a. Click **Select Attributes** to open the “Select Attributes” form:

   ![Select Attributes Form](image)

   b. Select attributes in the **Available** list box and click the arrow button to move them to the **Selected** list box. You can choose multiple attributes by **Ctrl-clicking** the attributes you want to include. You can also select a range of attributes by **Shift-clicking** the first and last attributes to be included.

   c. Run a search on the attributes you selected or on the selected attributes’ values:
      - If you want to search by the selected attributes, click **Search**.
      - If you want to search by the selected attributes’ values:
         1) Click **Select Attribute Values** to specify the desired search criteria.
            Content Server displays a form allowing you to enter specific attribute values.

         ![Select Attribute Values Form](image)

         **Note**

         Content Server does not support value-based searches on text attributes. If you try to search for a text attribute’s value, the following error message is rendered: “Cannot search on Text Attribute “Attribute Name” because it does not have a search engine.”

         2) In the value-based search form, enter specific attribute values to search for.

         3) Click **Search**.
Chapter 4. Working with Assets
Finding Assets

The search results appear beneath the simple search form in the workspace.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Locale</th>
<th>Modified</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decoupl Super Fund</td>
<td>Pfundef</td>
<td>-</td>
<td>8/9/01 11:20 AM</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Financial Services Specialty</td>
<td>Pfundef</td>
<td>-</td>
<td>7/3/01 8:54 AM</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mid Cap Stock Fund</td>
<td>Pfundef</td>
<td>-</td>
<td>8/9/01 10:52 AM</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

See Step 6 for an explanation of the search results list.

6. (Optional) Enter the desired search criteria. Click Search.
If you enter no criteria, the search will retrieve all instances of the asset type (up to 1000) and display them at 20 per page in the default sort order.

The search results appear beneath the simple search form in the workspace.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Locale</th>
<th>Modified</th>
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<td>-</td>
</tr>
<tr>
<td>Mid Cap Stock Fund</td>
<td>Pfundef</td>
<td>-</td>
<td>8/9/01 10:52 AM</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The text at the left above the result list tells you the range currently displayed of the total number of assets that match the search criteria. You can display more results by clicking the Previous and Next hyperlinks at the right, above the results.

Notice the line of numbers at the bottom left of each search results page:

Show 10 20 50 100 200 300 items per page

Click one of the numbers to rerun the search and display the selected number of assets per page.

Each asset returned in the search results list has a row of icons to its left. The icons are, in order of appearance, Preview, Inspect, Edit, and Delete. They work just like and invoke the same functions as the commands in the action bar of an asset’s “Inspect” form.

If you hold your cursor over the Info icon to the right of the asset name, a tooltip with the asset’s description displays.

Information on start and end dates can be found in “Using Start and End Dates,” on page 189.

7. To save your search results, see the section “Saving Search Results,” on page 87.
8. To save your search criteria, see the section “Saving Search Criteria,” on page 87.
Saving Search Results

When you run a successful search, you can preserve some or all of the results for future use by adding them to your Active List. This way, you do not have to run the search again or page back in the browser.

To save search results

1. Run a simple or advanced search, as described earlier in this section.
2. On the first page of results, choose the assets you want to preserve by selecting the check box to the right.
3. When you have selected all the assets you want to preserve, click Add to My Active List.
   Your Active List appears, showing the assets you added. The assets you added also appear in the “Active List” tab in the tree pane in the left portion of the CS interface.
4. To save additional assets, do the following:
   a. Click your browser’s Back button to return to the search results page from which you selected the items.
   b. Choose the assets you want to preserve, by selecting the check box to the right.
   c. Click Add to My Active List.
   d. Repeat steps a – c until you have saved all of the desired assets.
5. Click Next to continue to the next page of the search results.
   If you click the browser’s Forward button after returning to the search results, you go back to your Active List.

Saving Search Criteria

When you run a search, you have the option of saving the search criteria you used and making the saved search available to other users. Saving searches means you can run them with a single click without having to re-enter the criteria each time.
To save a search

1. After running a search, click **Save This Search**. The “Save Search” form is displayed:

   ![Save Search Form]

   To save a search

2. Fill in the form as follows:
   
   a. Enter a name for the search. The name that you specify here will appear as a hyperlink in the **Saved Searches** section of the “Search” form.

   b. Indicate whether you want this search to be private or shared with users of certain roles. If you decide to share your search, select the roles that you want to share it with. You can choose multiple roles by **Ctrl-clicking** the roles you want to include. You can also select a range of roles by **Shift-clicking** the first and last roles to be included. All searches are **private** by default.

   c. If you want your search to be available on other sites you use, select the desired sites and click the right arrow to move sites from the **Available** list box to the **Selected** list box.

   ![Share to Other Sites]

   **Note**

   To be able to share your saved search to other sites you are using, the asset type being searched for must be enabled for each of the sites. You must also have a role assigned in each site. If either of these conditions is not met, the **Share to Other Sites** field does not appear.

   d. If you want to review or edit the search criteria, click the **Edit This Search** hyperlink. To save the revised search, you must run the search again and click **Save This Search** to return to the “Save Search” form.

3. Click **Save**.
Running Saved Searches

To run a saved search

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Search. Content Server displays a list of searchable asset types.
4. Scroll down to the Saved Searches section of the form.
5. In the list of saved searches, locate the search you want to run.
6. Click the search name or the corresponding Inspect icon to execute the search.

Editing Saved Searches

To edit a saved search

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Search. Content Server displays a list of searchable asset types.
4. Scroll down to the Saved Searches section of the form.
5. Locate the search you want to edit in the list of saved searches:
6. Click the Edit icon to open the saved search for editing.
7. Make your changes to the search parameters and click Search.
8. Save the new search by following the steps in “Saving Search Criteria,” on page 87.
Editing Assets

Assets can be edited in a variety of ways, depending on the asset type and your system configuration. You can edit an asset by using any of the following interfaces:

- Content Server’s Advanced interface
- Content Server’s Dash interface (described in the Content Server Dash Interface User’s Guide)
- The CS-Desktop and CS-DocLink Windows clients
- In an Internet browser window, using the InSite interface

Note that you must have the right permissions to edit assets.

Editing Assets in the Advanced Interface

To edit an asset in the Advanced interface

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to edit:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
   For more information on searching, see the section “Finding Assets,” on page 81.
4. In the search results list, navigate to the asset you want to edit and click its Edit icon.
   Content Server displays the asset’s “Edit” form.
5. Make your changes to the asset. If any of the fields or form sections are unfamiliar to you, consult your design team or administrator.
   a. For each field, replace the existing content with new content as necessary. When making your changes, take note of the following:
      - **Required fields.** Do not leave any required (highlighted) fields blank. If you do, you will not be permitted to save the asset. Make changes to all other fields as necessary.
      - **Date fields.** You may see a Date Picker (little calendar) icon next to a date field. Clicking the icon invokes the Date Picker attribute editor; see “Working with the Date Picker,” on page 123 for more information.
      - **WYSIWYG text fields.** You may see one or more text fields that are WYSIWYG-enabled (What You See Is What You Get) via a WYSIWYG editor, such as FCKEditor (see “Working with the FCKEditor,” on page 112). These text fields allow you to enter and format your content using controls similar to those of Microsoft Word. For more information, see “Working with WYSIWYG Editors,” on page 111.
      - **Image Picker fields.** You may see one or more fields that prompt you to select an image asset (to be associated with the asset you are creating) through the Image Picker attribute editor. In such cases, you will see a Browse button next to the field. Clicking the button displays a pop-up window showing
thumbnails of the image assets you can select. For more information on Image Picker, see “Working with the Image Picker,” on page 114.

- **Clarkii Online Image Editor fields.** You may see a field (or fields) that allows you to edit images directly in the asset form, using Clarkii OIE. For detailed instructions, see “Working with the Clarkii Online Image Editor,” on page 117.

- **Flash content fields.** You may see a section in the asset form that prompts you to compose Flash content from Flash templates, images and text of your choice. For detailed instructions, see “Working with Flash Content,” on page 121.

- **Fields that prompt you to select assets.** You may see a field (or fields) that prompt you to select a flex parent or a template, or associate an asset (such as an image) with the asset you are editing.

  1) If the field displays a drop-down list, select the desired asset from the list. If the field displays an **Add Selected Items** button, proceed to the next step.

  2) In the tree, select the tab containing the asset you want to select as a value for the field. Consult your design team or administrator to find out which assets are available in which tabs of your tree.

  3) In the tab, select the desired asset.

  4) Click **Add Selected Items**. Content Server assigns the selected asset as a value for the field.

6. Click **Save Changes** to save your changes.

   Content Server displays the asset’s “Inspect” form showing the changes. If you click **Cancel** instead, the asset appears unchanged in the “Inspect” form.

7. (Optional) If you want to see how the asset would look if it were published, you can preview it. To preview an asset, click **Preview** in the action bar at the top of the asset’s “Inspect” form. A new window will open and display the asset in its rendered form.
Editing Assets in CS-Desktop

To edit an asset that was created in Microsoft Word, you use the CS-Desktop toolbar, which is added to the Word interface when you install the CS-Desktop client on your local machine. For complete information about using CS-Desktop, consult the CS-Desktop Help file accessible from the CS-Desktop toolbar inside Microsoft Word.

**Note**

CS-Desktop assets cannot be edited in the Dash interface because saving a CS-Desktop asset in Dash would irreversibly sever the asset’s link to CS-Desktop. The asset would no longer be accessible in CS-Desktop.

If you attempt to edit a CS-Desktop asset in the Dash interface, a warning will appear and you will be returned to the asset’s “Inspect” screen.

Editing Assets in CS-DocLink

When you install the CS-DocLink client software, a “CS-DocLink” node is added to the tree in the left pane of the Windows Explorer window. To edit an asset that was created from a binary file, you navigate to the asset in the CS-DocLink hierarchy as if you were browsing your local file system and drag it to your desktop. You then open the file in its native application and make the appropriate changes. To save the modified file to the Content Server database, you save it in its native application and then drag it from your desktop back to where you found it in the CS-DocLink hierarchy.

**Note**

If you are working with Windows XP, you may receive the following error message when attempting to drag a file from CS-DocLink to your Desktop:

"Cannot read from source file or disk"

The reason may be that you are copying a file with invalid characters.

You must make sure that when you drag a document back to Doclink that it has the same name as the file that it is intended to overwrite, otherwise a new asset will be created.

For complete information on how to use CS-DocLink, see the online Help that is installed with the client software.
Working with the InSite Interface

Business users who do not ordinarily work in Content Server’s interface, but who occasionally need to approve or make changes to content, can do so directly on a rendered page, using the InSite interface. The InSite interface provides access to Content Server’s most commonly used content management functions, and is displayed alongside the rendered page, as follows:

Note

- The examples in this section are based on the FirstSite II sample site. Depending on how your site is set up, your interface may differ from the depictions in this section.
- Previous releases of Content Server contain a drag-and-drop templating feature called InSite Templating. InSite Templating has been integrated into the InSite interface as the “Page Layout” mode.
The InSite interface allows you to preview, edit, add, remove, replace, and position content directly on a rendered page. To accomplish these tasks, you work on content in one of the following modes:

- **Preview** – allows you to see how the content would look on the online site. For more information, see “Previewing Assets,” on page 95.
- **Editing** – allows you to edit content directly on a rendered page. For more information, see “Editing Assets in the InSite Interface,” on page 98.
- **Page Layout** – allows you to add, remove, replace, and position content on a page. For more information, see “Managing Page Content Using the InSite Interface,” on page 100.

Additionally, you can access the following functions through the InSite pane:

- **Search** – allows you to find other assets you want to work with in the InSite interface. For instructions, see “Searching for Assets Using the InSite Interface,” on page 106.
- **Assignments** – allows you to finish your workflow assignments. For instructions, see “Finishing Your Workflow Assignments Using the InSite Interface,” on page 107.

### Accessing the InSite Interface

#### Note

To use the InSite interface, the following conditions must be satisfied:

- You must have the appropriate permissions.
- You must be using a supported browser.
- The template used to display the asset you want to work on (and the page it is associated with, if applicable) must support InSite functionality.

Consult your CS administrator or site developers if you have any questions.

You access the InSite interface by previewing an asset. Once you have previewed the asset, you can use the InSite interface to perform other content management tasks.

You can preview an asset in several ways. For example:

- Use the Advanced interface to search for and preview the desired asset.
- Drill down the site plan in the Advanced interface to find and preview the desired asset.
- Obtain the InSite URL for the asset from another user or your CS administrator. For example, your colleague would e-mail you the InSite URL for an asset he or she has worked on, so that you can review it or make changes, depending on your permissions.

#### Note

Use the Get Link function to obtain the InSite URL for an asset. Once you have the URL, you can give it to another user so that he or she can work on the asset in the InSite interface, assuming the user has the necessary permissions. For more information, see “Obtaining the InSite URL for an Asset,” on page 110.
When you access the InSite URL, you will be asked to log in. Once you log in, the InSite interface displays the asset in “Preview” mode.

**Note**

There are a number of ways to preview an asset. The procedures in this section assume you are previewing an asset as described in the next section, “Previewing Assets.”

**Previewing Assets**

Previewing an asset displays the asset in its rendered form in the InSite interface.

**To preview an asset**

1. Log in to the site you want to work with.
2. Find the desired asset. Do the following:
   a. In the button bar, click **Search**.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click **Search**.
      
      For more information on searching, see “Finding Assets,” on page 81.
3. Preview the asset. In the list of search results, navigate to the asset you want to work with and click its **Preview** (binoculars) icon.

Content Server opens a new browser window and displays the desired asset in the InSite interface.

If the asset has no default template assigned to it, you are asked to select a template in which to preview it.
Here is an example view of the InSite interface showing the FirstSite II home page in “Preview” mode:

Select a template in which to view the asset.  
Select the wrapper in which to view the asset.  
Preview the asset as it will appear at a future date.  
Preview the asset in full screen mode (outside the InSite Interface).  
Toggle the InSite pane on and off.

The InSite interface contains the following components, as shown in the above figure:

- **InSite pane** – displays the type, name, and template (including descriptions) of the asset you are working with; allows you to switch between InSite modes (“Preview,” “Editing,” or “Page Layout”), search for assets, and finish your workflow assignments.
Chapter 4. Working with Assets

Working with the InSite Interface

- **Top bar** – allows you to open a new instance of the Advanced interface; preview the asset without displaying the InSite interface; toggle the InSite pane on and off; access the FatWire Support site; and end your InSite session.

- **InSite bar** – denotes the InSite mode you are working in; allows you to obtain the InSite URL of the displayed asset, and view the asset using alternate templates and wrappers.

4. (Optional) If you wish to see how the asset would look when rendered by a different template or wrapper, select a template from the “Template” drop-down list, and/or a wrapper from the “Wrapper” drop-down list in the InSite bar. Consult your site developers for information on the templates and wrappers available to you.

5. (Optional) If you would like to see how the asset will look at a date in the future, select a date using the date picker:

   **Note**

   To preview this asset in web page as it will appear at a future date:

   - Start and end dates must be assigned to the asset being previewed as explained in “About Site Preview,” on page 194.
   - The template in which the asset will appear must include the `asset:filterassetsbydate` tag. See your site administrator for assistance.

   **a.** Using the date picker in the Preview window toolbar, choose the date.

   The new date and time appears in the **Date** text box.

6. Once you have previewed the asset, you can perform the following tasks:

   - Edit the asset using the “Editing” mode. For instructions, see “Editing Assets in the InSite Interface,” on page 98.

   - If the asset you are previewing is assigned to a page (or is a page): add, remove, replace, and position content on the page using the “Page Layout” mode. For instructions, see “Managing Page Content Using the InSite Interface,” on page 100.

   - Find other assets to work on in the InSite interface. For instructions, see “Searching for Assets Using the InSite Interface,” on page 106.

   - Finish your workflow assignments. For instructions, see “Finishing Your Workflow Assignments Using the InSite Interface,” on page 107.

   - Obtain the InSite URL for the asset. For instructions, see “Obtaining the InSite URL for an Asset,” on page 110.
Editing Assets in the InSite Interface

To edit an asset in the InSite interface

1. Make sure the template assigned to the asset you want to edit supports InSite Editing. Consult your site designers if you have any questions.

2. Preview the asset, as described in “Previewing Assets,” on page 95.

3. In the InSite pane, click Editing. The InSite interface switches to the “Editing” mode.
   - If you see an Edit icon or button next to one or more fields, as shown below, the asset is editable in the InSite interface. Proceed to the next step.
   - If you do not see any Edit icons or buttons, stop here. The asset’s template does not support InSite Editing. If you have any questions, consult your developers.

4. (Optional) If you would like to view the asset using a template other than the one assigned to the asset, select a template from the “Template” drop-down list in the InSite bar. Consult your site developers for information on the templates available to you.

5. Click the Edit icon next to a field of your choice and make changes to the contents of the field.
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The **Edit** icon indicates a field that can be edited in an embedded WYSIWYG editor (such as FCKEditor). When you click the **Edit** icon, the WYSIWYG editor displays the field’s contents in editable form. You can then make your edits to both the text and its appearance. (See “Working with the FCKEditor,” on page 112 for more information.)

6. A dotted border with no associated **Edit** icon indicates a simple text field. To make changes to the field, click inside the dotted border, edit the text, and press **Enter** (or click anywhere outside the border). (When you click inside the dotted border, the border turns solid and a cursor appears, indicating that the field can be edited.)

If you change your mind about the edits you have made, you can restore the field’s previous content by pressing **Esc**.

7. The **Add New** and **Add Existing** buttons next to an image indicate that the image can be edited in the Image Editor. Click the button to open the image asset’s “Edit” form in a pop-up window and edit the image in OIE. For instructions, see “Working with Flash Content” (start with step 2 on page 121).

8. The **Edit Asset** button next to a piece of Flash content indicates that the content can be edited. Clicking the button opens the Flash content asset’s “Edit” form in a pop-up window. For more information about Flash content, see “Working with Flash Content,” on page 121.

### Note

- The InSite pane shows the name of the field you are currently editing, and the asset to which the field belongs. It also shows a history of assets you have edited during your current InSite session.
- When making your changes, keep the following in mind:
  - The button that invokes the “Edit” form for image and Flash assets in the InSite interface is generated by the `inset:editasset` tag and will display the label chosen by your developers. Our example uses the default label **Edit Asset**.
  - To make your job easier, toggle off the InSite pane to maximize the visible area on the page. Toggle the pane back on when you are ready to commit your changes to the database. (Use the **Toggle InSite Pane** button near the right end of the top bar to toggle the pane off and on).
  - If an editable field is protected by revision tracking, a lock icon replaces the **Edit** icon (or button) to indicate that the field cannot currently be edited.
  - When you are finished editing a field, click its **View** icon (or button) to return the field to the view-only state. While not required, doing so will help you keep track of the changes you make as your work progresses.

9. When you are finished making your changes, click **Save** in the InSite pane to commit your changes to the CS database. If you click **Cancel**, your changes will be discarded and the asset redisplayed in its unmodified state.

10. (Optional) If you would like to work on another asset using the InSite interface, find the asset by performing the steps in “Searching for Assets Using the InSite Interface,” on page 106, and repeat this procedure.
Managing Page Content Using the InSite Interface

If the asset you want to work with is a page (or is assigned to a page), you can work with content directly on the page using the “Page Layout” mode, provided the page has been set up to support slots.

In “Page Layout” mode, each slot on the page accepts one piece of content – an asset. You add, remove, replace, and position content on the page by dragging and dropping assets into slots. Below is an example view of the InSite interface showing the FirstSite II home page in “Page Layout” mode:

This section contains the following procedures:
- Adding or Replacing Content on a Page
- Removing Content from a Page
- Positioning Content on a Page
Adding or Replacing Content on a Page

This section shows you how to use the InSite interface to add or replace content on a page.

To add or replace content on a page using the InSite interface

1. Make sure the page you want to work with supports slots. Consult your site designers if you have any questions.
2. Preview the desired page, as described in “Previewing Assets,” on page 95.
3. In the InSite pane, click Page Layout.
   The InSite interface switches to the “Page Layout” mode.
   - If the page supports slots, you will see occupied and/or empty slots, similar to the ones shown in the figure on page 100.
   - If you do not see slots on the page, stop here. The page does not support slots.
   If you have any questions, consult your developers.
4. Find the asset you want to add to or use as a replacement on the page. Do the following in the InSite pane:
   a. In the “Type” drop-down list, select the type of asset you want to find.
   b. In the Containing field, enter search criteria describing the asset.
   c. In the “Template” drop-down list, select a template. Only assets to which the selected template is assigned will be returned.
   d. Click Search.
   The results of your search appear in the “Search Results” area of the pane:
e. In the list of search results, navigate to the desired asset.

The list shows five assets at a time, sorted alphabetically. When locating an asset, note that you can view more information about the listed assets by doing the following:

Hold your cursor over the asset’s name to view a tooltip. It shows the asset’s start and end dates and description. For more information on start/end dates, see “Using Start and End Dates,” on page 189.

- Click Next to view the next page of results.
- Click Prev to view the previous page of results.

5. In the list of search results, select the asset you want to add to the page.

The asset is displayed in its rendered form as a floating object that you can drag and drop into a slot on the page.
6. Drag and drop the asset into the slot of your choice. Do one of the following:

- If adding content to the page, drag the asset by its title bar into an empty slot.

- If replacing content on the page, drag the asset by its title bar into the slot containing the content you want to replace.

When the slot is ready to accept the asset, the slot’s border changes from a solid line to a “perforated” line. When that happens, drop the asset into the slot.

**Note**

If you are replacing content on a page, the asset currently occupying the slot is automatically removed from the slot when you drop in the new asset.

7. In the InSite pane, click **Save** to commit your changes to the CS database.

(If you click **Cancel**, your changes will be discarded and the page redisplayed in its unmodified state.)

Content Server refreshes the page, showing your changes.
Removing Content from a Page
This section shows you how to remove content from a page using the InSite interface.

To remove content from a page using the InSite interface
1. Make sure the page you want to work with supports slots. Consult your site designers if you have any questions.
2. Preview the desired page, as described in “Previewing Assets,” on page 95.
3. In the InSite pane, click Page Layout.
   The InSite interface switches to the “Page Layout” mode.
   - If the page supports slots, you will see occupied and/or empty slots, similar to the ones shown in the figure on page 100.
   - If you do not see slots on the page, stop here. The page does not support slots.
   If you have any questions, consult your developers.
4. On the page, locate the asset you want to remove and click the Delete Slot Content (X) button in the asset’s title bar.
   Content Server removes the asset from the slot.
5. In the InSite pane, click Save to commit your changes to the CS database.
   If you click Cancel, your changes will be discarded and the page redisplayed in its unmodified state.
6. (Optional) If you would like to populate the empty slot with another asset, go to step 4 of “Adding or Replacing Content on a Page,” on page 101.

Positioning Content on a Page
This section shows you how to position content on a page by moving an asset from one slot to another.

To position content on a page using the InSite interface
1. Make sure the page you want to work with supports slots. Consult your site designers if you have any questions.
2. Preview the desired page, as described in “Previewing Assets,” on page 95.
3. In the InSite pane, click Page Layout.
   The InSite interface switches to the “Page Layout” mode.
   - If the page supports slots, you will see occupied and/or empty slots, similar to the ones shown in the figure on page 100.
   - If you do not see slots on the page, stop here. The page does not support slots.
If you have any questions, consult your developers.

4. On the page, locate the asset you want to move to another slot, and choose the destination slot to which you will move the asset. The destination can be an empty slot or a slot already occupied by another asset.

5. Drag and drop the asset into the desired slot.

When the destination slot is ready to accept the asset, the slot’s border changes from a solid line to a “perforated” line. When that happens, drop the asset into the slot.

Note

If you are moving an asset to a slot that is already occupied by another asset, the asset you are moving automatically replaces the asset currently occupying the slot.

6. In the InSite pane, click Save to commit your changes to the CS database.

If you click Cancel, your changes will be discarded and the page redisplayed in its unmodified state.

Content Server refreshes the page, showing your changes.
Searching for Assets Using the InSite Interface

If you wish to find an asset to edit or preview, you can do so within the InSite interface.

To search for assets from within the InSite interface

1. In the InSite pane, click Search to expand the Search section.
   The InSite interface switches to the “Search” mode.
2. Search for an asset.
   Do the following:
   a. From the “Type” drop-down list, select the type of asset you want to find.
   b. (Optional) In the “Containing” field, enter your search criteria. Leave this field blank to return all assets of the selected type in your search results.
   c. Click Search.
      The results of your search appear underneath the fields.

3. In the list of search results, navigate to the desired asset.
   The list shows five assets at a time, sorted alphabetically. When locating an asset, note that you can view more information about the assets in the list by doing the following:
   a. Hold your cursor over the Info (i) icon next to the asset’s name to see a pop-up description of the work you have been assigned to complete on the asset. (This description has been entered by the previous assignee.)
   b. Hold your cursor over the asset’s name to view a tooltip. It shows the asset’s start and end dates for Site Preview and description. For more information on start/end dates, see “Using Start and End Dates,” on page 189.
      - Click Next to view the next page of results.
      - Click Prev to view the previous page of results.
4. Click the desired asset.

The InSite interface displays the asset in “Preview” mode. You can now perform the tasks described earlier in this section:

- Editing Assets in the InSite Interface
- Managing Page Content Using the InSite Interface
- Finishing Your Workflow Assignments Using the InSite Interface
- Obtaining the InSite URL for an Asset

Finishing Your Workflow Assignments Using the InSite Interface

If the asset you are working on in the InSite interface is assigned to a workflow and you hold an assignment for the asset, you can finish your assignment right in the InSite interface. (For more information on workflow, see Chapter 8, “Workflow.”)

To finish a workflow assignment using the InSite interface

1. In the InSite pane, click Assignments to expand the Assignments section.

   The Assignments section displays a list of your current workflow assignments.

2. If you have completed the necessary work on assigned asset, follow the steps below.
   a. In the list of workflow assignments, locate the asset for which you want to finish the workflow assignment. When locating an asset, note that you can view more information about the assets in the list by doing the following:
      1) Hold your cursor over the Info (i) icon next to the asset’s name to see a pop-up description of the work you have been assigned to complete on the asset. (This description has been entered by the previous assignee.)
      2) Hold your cursor over the asset’s name to view a tooltip. It shows the asset’s start/end dates and the asset’s description. For more information on start/end dates, see “Using Start and End Dates,” on page 189.
   b. Click the asset’s Finish Assignment (green arrow) icon.
The InSite pane displays the “Finish My Assignment” form. The top of the form indicates the workflow process to which the asset is assigned.

3. (Optional) If you have not yet completed the necessary work on the assigned asset, follow the steps below:
   a. In the list of workflow assignments, locate the asset for which you want to finish the workflow assignment. When locating an asset, note that you can view more information about the assets in the list by doing the following:
      Hold your cursor over the asset’s name to view a tooltip. It shows the asset’s start/end dates and the asset’s description. For more information on start/end dates, see “Using Start and End Dates,” on page 189.
   b. Select the asset to open it in the InSite interface.
   c. Complete the necessary work on the asset by following the steps in “Editing Assets in the InSite Interface,” on page 98 and “Managing Page Content Using the InSite Interface,” on page 100, whichever is applicable.
   d. Click Finish Assignment.

4. In the form, do the following:
   a. (Optional) If the form lists more than one step leading to the next workflow state, select the next workflow step to take.
   b. (Optional) In the **Action Taken** field, enter a short description of the work you completed on the asset.
   c. (Optional) In the **Action to Take** field, enter a short suggestion for the next person who will work with the asset.
   d. Click Finish Assignment.
5. (Optional) If the administrator has set up the workflow process in a way that requires you to choose assignees for the next step when you finish your assignment, Content Server prompts you to select assignees for the next workflow step, as follows:

In such case, do one of the following, select at least one user for each displayed role, then click **Save**.

What happens after you complete your assignment depends on the way the administrator set up the next workflow step. There are five possible options:

- **Retain “From” State Assignees** — you keep the assignment as the asset moves to the next state; this allows you to continue working on the asset in that state. You probably know why it is appropriate for you to keep the assignment, but if you don’t, ask your administrator.

- **No Assignments** — as the asset moves to the next state, it remains in the workflow so that function privileges defined for the workflow process are enforced. However, the asset is assigned to no one and participant roles alone (through their assigned function privileges) determine who can work on the asset, and how.

- **Assign To Everyone** — the asset is assigned to all users holding roles participating in the current workflow process.

- **Assign From a List of Participants** — When you (or another user with the appropriate privileges) assign an asset to a workflow, you have the option to decide which participants in each role get the assignment when the asset enters a workflow state requiring those roles. This is the default mechanism for moving an asset through a workflow.

- **Choose Assignees When Step is Taken** — this option is similar to the “Assign From a List of Participants” option described above, but instead of predetermining at the beginning of the workflow who will get the assignment during which workflow state(s), you choose assignees for the next workflow state in real-time each time you take a step. In such case, when you use the **Finish My Assignment** function to take the next step, Content Server prompts you to choose assignees for the asset for the next workflow state by showing a form like the one in step 5.
Obtaining the InSite URL for an Asset

If you would like a colleague to view or work on a particular asset using the InSite interface, you can give them a special URL that allows them to open the asset directly in the InSite interface. Such a URL is called an “InSite URL” and can be obtained as follows:

To obtain an InSite URL for an asset

1. Preview the asset, as described in “Previewing Assets,” on page 95.
2. In the InSite bar, click Get Link.
   Content Server displays a pop-up message confirming the URL has been copied to the clipboard.

Note
If you are using FireFox, the URL will be displayed to you. Copy the URL.

3. Paste the URL into the application of your choice (for example, a new e-mail message to your colleague).

Note
The recipient of the URL must hold a role that permits them to work with the asset and the InSite interface.
Content Server supports the use of third-party WYSIWYG (What You See Is What You Get) editors on most asset forms. A WYSIWYG editor allows you to see the end-result of your work, including all applicable formatting, directly in the asset form.

For example, a WYSIWYG text editor, such as FCKEditor, allows you to apply style characteristics such as bold, italics, and underlining, and closely mimics the text editing behavior of Microsoft Word. You can change font size and color, make bulleted lists, insert tables, images, and hyperlinked text. Your changes to the contents of the text field are instantly visible in the editor window. You can also use a WYSIWYG editor to edit fields in the InSite interface.

If your system is set up to use a WYSIWYG editor, the editor appears as part of the “New” and “Edit” asset forms, replacing the standard entry mechanism for the field that is WYSIWYG-enabled. The example below shows the body field of a “Content” asset, being edited in FCKEditor:

For instructions on how to use a WYSIWYG editor, consult the editor’s documentation.

This section contains the following subsections:

- Working with the FCKEditor
- Working with the Image Picker
- Working with the Clarkii Online Image Editor
- Working with Flash Content
- Working with the Date Picker
Working with the FCKEditor

FCKEditor is a popular third-party WYSIWYG editor that ships bundled with Content Server as the default editor for WYSIWYG-enabled text fields. FCKEditor allows you to apply a wide range of MS Word-style formatting to your content.

Figure 5: FCKEditor

To work more comfortably, click **Maximize** to expand FCKEditor to fill your workspace.

To restore FCKEditor to normal size, click **Maximize** again.

FCKEditor also provides advanced features, such as access to your content’s underlying HTML code, and the ability to accept pre-formatted content from MS Word documents.

Most features made available to you in the toolbar are native to FCKEditor. To learn more about FCKEditor and its capabilities, consult the editor’s documentation, available at [http://docs.fckeditor.net](http://docs.fckeditor.net).

Several features on the FCKEditor toolbar are specific to Content Server. The features are shown and explained below:

Figure 6: Content Server Specific Features in the FCKEditor
• **Stylesheet** – Lists XML files that specify how text can be formatted in the field you are working with.

Content Server ships with a default XML file template, and the developers for your system can create additional XML files. If your developers have not added any XML files, then only the default XML file will be available to you in the drop-down list.

Instructions on using the **Stylesheet** menu are available in “Linking Two Assets Directly” (see, in particular, step b on page 129).

• **Style** – Lists styles that are specified in the selected style sheet (in the **Stylesheet** menu).

• **Add asset link** – Enables you to create a hypertext link from one asset to another asset. For more information, see “Linking Two Assets Directly,” on page 125.

• **Include asset** – Enables you to render an asset’s previewable content in another asset. For more information, see “To Link Two Assets by Inclusion,” on page 130.

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**Note**

If the included asset is an image, then you can link the image to another asset. For more information, see “Linking Two Assets via an Image Asset,” on page 132.

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• **Pick an image to include** – Enables you to include an image from the “Image Picker” into the referring asset’s FCKEditor enabled field(s).

Once the image is included in the field, you have the option to link the image to another asset. For more information, see “Linking via an Image from the Image Picker,” on page 138.

• **Create and link a new asset** – Enables you to create a target asset directly from the referring asset’s FCKEditor enabled field(s), and to insert a hypertext link to that target asset into the field. For more information, see “Insert a Hyperlink to the New Target Asset,” on page 143.

• **Create and include a new asset** – Enables you to create a target asset directly from the referring asset’s FCKEditor enabled field(s), and to include the previewable content of that target asset into the field. For more information, see “Include the New Target Asset’s Previewable Content,” on page 146.

**Loading an FCKEditor**

When many FCKEditors are configured for a given asset (for example, an FCKEditor for each of five fields), the process of loading the asset’s “New” or “Edit” form can take a long time. To minimize the time it takes to load an asset form, your Content Server developers have the option to implement a feature called “lazyload.” When the `lazyload` parameter is set to `true`, FCKEditors in the asset will not automatically load with the asset form. Because less elements are loaded at the same time as the asset form, the loading process is faster.

To work in an FCKEditor-enabled field when lazyload is implemented, you must initiate FCKEditor for that field by clicking in the field. When you click in the field, the FCKEditor toolbar opens.
Working with the Image Picker

When working with assets whose forms allow you to associate them with one or more image assets, you may have the option to visually choose an image asset to associate with the asset you are creating or editing. This method of selection is made possible through the Image Picker attribute editor.

Perform the following steps to associate an image asset with the parent asset:

**To associate an image asset with a parent asset using the Image Picker**

1. In the asset’s “Edit” form, scroll to the desired field and click **Browse**.

Content Server opens the Image Picker in a pop-up window:

For each displayed image asset, Image Picker shows a thumbnail of the image, as well as its properties, such as file name, dimensions (in pixels), file size, MIME type, and the start and end date (if no start or end date is specified, N/A appears instead of a date).
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Hold your cursor over any image to view it full size. If the image name was elided in the thumbnail view, you can see the full image name in the mouseover window.

2. (Optional) If the pool of available images is large, you can narrow the selections by searching for a specific image asset. Enter one or more keywords describing the asset into the **Search** field at the top of the Image Picker window and click **Search**. Image Picker displays the images matching your search criteria.

3. (Optional) Adjust the size of the displayed thumbnails by selecting a pixel width from the “Size” drop-down list. Available sizes range from 100 to 200 pixels in 25-pixel increments.

4. Navigate to the desired image.
   - Use the **Next** and **Previous** links to page through the image thumbnails.
   - Use the **Sort By** links to sort the images by Name or Modified Date.

5. Click on the image you wish to associate with the asset.
The Image Picker window closes and the image asset you selected is associated with the parent asset. If the field was already populated with an image asset, the newly selected asset replaces the previous one. A thumbnail of the corresponding image appears in the field you have edited.

6. Click **Save & Close** to save your changes to the parent asset.
Working with the Clarkii Online Image Editor

The Clarkii Online Image Editor (Clarkii OIE) allows you to edit an image directly in an asset’s “New” or “Edit” form. For example, you can use Clarkii OIE to enhance an image by adding graphics and/or text to it.

Clarkii OIE is supported on all browsers on which Content Server is supported, including Safari. Your site developers enable Clarkii OIE on a per-field basis when configuring asset types. For more information, see the Content Server Developer’s Guide.

Figure 7 shows an example of an image that was edited in an asset field using Clarkii OIE.

Clarkii OIE requires you to have Flash installed. If you do not have Flash installed, then instead of Clarkii OIE you will see a link to download Flash. Click the link and download Flash. Once Flash is installed, Clarkii OIE loads in the appropriate field (as shown in the figure above).
When you work with an asset field using Clarkii OIE, you can do some or all of the following depending on how your developers configured Clarkii OIE:

- Select an image to place on the Clarkii OIE canvas, or select an image that will replace the images currently on the canvas. Your developers determine which images will be available to you.
- Add an image as a layer on top of existing images on the Clarkii OIE canvas. Your developers determine which images will be available to you.
- Use the toolbar and menu options available in the Clarkii OIE window to make other edits to the image(s) on the canvas as necessary.

Your developers have the ability to customize the functions available to you in the Clarkii OIE toolbar and menu. These functions are strictly Clarkii OIE related and as such are not documented in this guide. For instructions about using the toolbar and menu options provided by Clarkii OIE, visit the following URL:

http://www.online-image-editor-clarkii.com/

To edit images with the Clarkii Online Image Editor

1. Access Clarkii OIE in the desired asset’s “New” or “Edit” form. Depending on which interface you are working with, do one of the following:
   - If you are working in the Advanced interface, navigate to the field associated with Clarkii OIE in the asset’s “New” or “Edit” form.
   - If you are working in the InSite interface:
     1) In the InSite pane, click the Editing option.
     The asset is displayed in the “Editing” mode.
     2) Click Edit Asset next to the image you wish to modify.
     An Advanced “Edit” form for the selected asset is rendered in a pop-up window.

   Your site developers enable the button that invokes the asset’s “edit” form in the pop-up window. If you do not see an option to edit the image in the InSite interface, contact your administrators or developers.
The field associated with the Clarkii OIE feature looks similar to the following:

2. (Optional) Below are some of the commonly used steps for working with Clarkii OIE, such as inserting images and making other modifications (adding text, for example) as necessary.

   **Note**
   
   You can clear the canvas at any time by clicking the trash can icon above the **Browse Images** button.

- If you wish to place an image on the Clarkii OIE canvas, replacing any images currently existing on the canvas, do the following:
  
  a) Under the Clarkii OIE area, click **Browse Images** to select from a pool of images made available to you by your developers.

  The Image Picker opens in a pop-up window.

  b) In the Image Picker window, find and select the desired image. For instructions, see “Working with the Image Picker,” on page 114.

  Selecting an image closes the Image Picker window. The image is placed on the Clarkii OIE canvas, and replaces any images that are currently on the canvas.

  c) (Optional) If you wish to replace the image you chose with another one, select the desired image by repeating steps a and b.

- If you wish to add an image as a layer on top of existing images on the Clarkii OIE canvas, do the following:
  
  a) Under the Clarkii OIE area, click **Insert Image** to select from a pool of images made available to you by your developers.

  The Image Picker opens in a pop-up window.

  b) In the Image Picker window, find and select the desired image you wish to add as a layer on the Clarkii OIE canvas. For instructions, see “Working with the Image Picker,” on page 114.

  Selecting an image closes the Image Picker. The image is placed on the canvas as a layer on top of the other images currently on the canvas.
c) (Optional) If you wish to insert an additional image as a layer on top of the images currently on the canvas, repeat steps a and b.

- Depending on how your developers have configured the Clarkii OIE toolbar and menu options, you can add text and make other edits as necessary (such as repositioning images on the canvas).

For example, using the Clarkii OIE menu you can insert an image from your local computer on to the Clarkii OIE canvas:

a) In the Clarkii OIE menu, click **File > Open**.

The “Select a file to open” dialog box opens.

b) Select the image file you wish to insert on the Clarkii OIE canvas and click **Open**.

The image is placed on the canvas, and replaces any images currently existing on the canvas.

c) (Optional) If you wish to replace the image you chose with another one, select the desired image by repeating steps a and b.

For instructions on using specific functions, visit the following URL:

http://www.online-image-editor-clarkii.com/

3. Save the asset. Do one of the following:

- If you are working with the Advanced interface, fill in the required fields of the asset form, then click **Save (or Save Changes)** to save the asset.

- If you are working with the InSite interface, make any other changes to the asset’s “Edit” form and then click **Save Changes**. To close the pop-up window, click **Close this window**.

Once saved, the layered image becomes a flat image. This means that any images and/or text you added to the Clarkii OIE canvas are merged into one image.
Working with Flash Content

Content Server allows you to compose Flash content directly in an asset’s “New” or “Edit” form. You compose Flash Content through the following steps:

1. Select a Flash template. Your site designers create Flash templates that accept the foreground image and text you will be adding.
2. Select an image. The images and Flash templates, made available to you by your developers, have been designed to form complete pieces of content when combined.
3. Add text as necessary.
4. Preview the resulting Flash content and make further changes if necessary.
5. Save the asset. When the Flash content is rendered on the online site, the image and text you have added are automatically embedded in the Flash content.

If you have any questions about these steps, contact your site designers or developers.

To compose Flash content

Note

The procedure below is an example, based on the FirstSite II sample site, meant to illustrate the steps necessary to compose Flash content. The asset forms on your site may be set up differently from our example.

Before using this feature, make sure that:

• Your developers have coded the asset type and associated templates to support the image editing functionality
• Your site designers have created the appropriate Flash templates and images

If you have any questions, contact your site designers or developers.

1. Log in to the site you want to work with.
2. Find the desired Flash template and add it to your Active List:
   a. In the button bar, click Search.
   b. In the list of asset types, select the asset type of the desired Flash template. (In our example, click Find Flash Template.)
   c. (Optional) Specify the desired search criteria.
   d. Click Search.
   e. In the list of search results, navigate to the desired Flash template and select the check box at the end of its row.
   f. Click Add to Active List.
3. Create a new Flash content asset or find and open an existing asset that you want to modify.
4. In the asset form, navigate to the appropriate area. (In our example, the asset form contains a group of fields whose names begin with Flash.)
5. Select the Flash template:
   a. In the tree, select the **Active List** tab.
   b. Select the desired Flash template asset.
   c. In the **FlashTemplate** field in the asset form, click **Add Selected Items**.

6. Add an image:
   a. In the **FlashImages** field, click **Browse Images**.
      The Image Picker opens in a pop-up window.
   b. In the Image Picker window, find and select the desired image. For instructions, see “Working with the Image Picker” on page 114.
      When you select the image, the Image Picker window closes.
   c. If you decide that another image is more appropriate, repeat steps a and b to select another image.

7. Enter the supporting text into the **FlashText** field.

8. Click **Save and Preview** to preview the resulting Flash content.

9. (Optional) To add another foreground image and a supporting caption, do the following:
   a. In the **FlashImages** field, click **Add Another FlashImages**.
      A new **FlashImages** field appears in the form.
   b. Repeat step 6 to populate the field with an image.
   c. In the **FlashText** field, click **Add Another FlashText**.
      A new **FlashText** field appears in the form.
   d. In the new **FlashText** field, enter a supporting caption.
   e. (Optional) To change the order in which the captions appear in the Flash content, use the up and down arrows next to the desired **FlashText** field to move it.
   f. Click **Save and Preview** to preview the resulting Flash content.

10. Fill in all required fields in the form, then click **Save** (or **Save Changes**).
Working with the Date Picker

When working with assets whose forms include a date field (such as a post date, release date, start/end date, and so on), you may visually select a date using the Date Picker attribute editor, in addition to the standard text box.

The Date Picker is a calendar-like interface similar to date selectors found in many personal information management applications (for example, Microsoft Outlook).

To enter a date using the Date Picker

1. In the asset’s “New” or “Edit” form, scroll to the desired field and click the Date Picker icon.

Content Server opens the Date Picker pop-up window.

1. Select the month using the left and right single arrows (<, >) or the drop-down lists accessed by clicking and holding on the associated down arrows.

2. Select the year using the left and right double arrows (<<, >>) or the drop-down lists accessed by clicking and holding on the associated down arrows.

3. To increase/decrease the time, drag right/left. Clicking increases the units by 1; Shift+click decreases the units by 1.

2. In the Date Picker pop-up window, select the desired month, year, day, and time. Make sure you select the day last; when you click the desired day, the Date Picker pop-up window automatically closes, and the date you selected is reflected in the corresponding field in the asset’s “Edit” form.

3. Click Save to save your changes to the asset.
## Linking Assets

When creating and updating assets, you have the option to link the assets to each other in several ways, as long as the assets are on the same site. This section includes instructions for:

- Linking Two Assets Directly
- Linking Two Assets via an Image Asset
- Creating a Target Asset from the Referring Asset’s FCKEditor

The table below identifies the FCKEditor icons you will be working with for the following linking procedures:

### Table 1: FCKEditor Icons Used to Link Assets

| Type of Link                        | Icon(s)                                      | Description                                                                 | For Linking Procedures, See |
|-------------------------------------|----------------------------------------------|                                                                            |------------------------------|
| Linking two assets directly         | ![Source Icon] ![Add asset link Icon]        | Used to create a hyperlink to the target asset from the referring asset.   | “To Create a Hypertext Link to Another Asset,” on page 127 |
|                                     | ![Source Icon] ![Include asset Icon]         | Used to dynamically include the previewable content of one asset in another. | “To Link Two Assets by Inclusion,” on page 130 |
| Linking two assets via an image asset | ![Source Icon] ![Include asset Icon] ![Add asset link Icon] | 1. The **Include asset** icon is used to include an image from the “Active List” tab into the referring asset’s FCKEditor enabled field.  
2. Once the image is included, use the **Add asset link** icon to hyperlink the image to another asset. | “Linking via an Image from the ‘Active List’,” on page 134 |
|                                     | ![Source Icon] ![Pick an image to include Icon] ![Add asset link Icon] | 1. The **Pick an image to include** icon is used to include an image from the “Image Picker,” into the referring asset’s FCKEditor enabled field.  
2. Once the image is included, use the **Add asset link** icon to hyperlink the image to another asset. | “Linking via an Image from the Image Picker,” on page 138 |
Table 1: FCKEditor Icons Used to Link Assets

<table>
<thead>
<tr>
<th>Type of Link</th>
<th>Icon(s)</th>
<th>Description</th>
<th>For Linking Procedures, See</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linking two assets, when the target asset has not been created yet</td>
<td><img src="image" alt="Create and link a new asset" /></td>
<td>Used to create a target asset directly from the referring asset's FCKEditor enabled field, and then to insert a hypertext link to that target asset into the field.</td>
<td>“Insert a Hyperlink to the New Target Asset,” on page 143</td>
</tr>
<tr>
<td>Create and include a new asset</td>
<td><img src="image" alt="Create and include a new asset" /></td>
<td>Used to create a target asset directly from the referring asset’s FCKEditor enabled field, and then to include the previewable content of that target asset into the field.</td>
<td>“Include the New Target Asset’s Previewable Content,” on page 146</td>
</tr>
<tr>
<td>Linking assets to URLs</td>
<td><img src="image" alt="Insert/Edit Link" /></td>
<td>Used to insert an “unmanaged” hypertext link to a URL into the referring asset’s FCKEditor enabled field.</td>
<td>“Linking Assets to URLs,” on page 149</td>
</tr>
</tbody>
</table>

Linking Two Assets Directly

This section contains prerequisite steps and instructions for linking two assets, as follows:

- **Creating a hypertext link to another asset**
  You may have two assets—article assets, for example—with related content that you wish to join by a hypertext link. Working in the main article, you would use the **Add asset link** icon on the FCKEditor toolbar to insert a hypertext link to the related article. When site visitors access the main article’s content, they can click the inserted hypertext link to render the related article’s content.

- **Linking two assets by inclusion**
  A commonly performed CM operation is to insert previewable content from one asset into another asset, but without manually copying the content. Instead, the content is inserted “by reference,” so that it can be dynamically updated at the insertion point when the target asset (the source of content) is modified.

In this scenario, you would use the **Include asset** icon in the FCKEditor toolbar to insert the asset, whose previewable content is then rendered dynamically at the insertion point.
When using **Include asset**, you are actually inserting a link to the target asset, but rendering the link in the form of the target asset’s previewable content. The link persists after the target asset is included. As a result, the content is not editable at the insertion point, but it is refreshed when the target asset (the source of content) is modified. To view refreshed content, you must save, close, and then re-open the referring asset.

The extent to which these capabilities are available to you depends on how your site designers have implemented them as part of the custom asset design. For example, the “Content” asset type that ships with the FirstSite II sample site is configured with an FCKEditor in its “Body” field. Therefore the “Body” field supports the types of links described above.

**Prerequisites**

Before linking assets, you must verify that they can be linked. Use this section as a checklist. (It is assumed that you know how to edit and preview assets, and create them, if necessary. Basic instructions are given in various steps.)

**Participating Assets**

Two assets are involved in this procedure, and both assets are on the same site:

- The referring asset (in which you will create the link to the target asset)
- The target asset (which will be rendered when the link is clicked)

**Referring Asset**

- The referring asset displays the FCKEditor in the field where you will place the link.

If you need instructions for verifying that FCKEditor is displayed, complete the following steps:

---

**Note**

If you are creating a new referring asset, you can start this procedure in the asset’s “New” form. However, it is best to save the asset and then open its “Edit” form (to ensure against possible loss of any existing content, as you move from step to step).

1. Open the referring asset in its “Edit” form. If you need to find the referring asset, do the following:
   
   **a)** In the button bar, click **Search**.
   
   **b)** In the “Search” form, click the asset type of the asset you want to find.
   
   **c)** Enter the desired search criteria (if any) and click **Search**.
   
   **d)** In the search results list, navigate to the desired asset and click its **Edit** (pencil) icon.
2. Go to the field in which you would like to place the link and make sure it displays the FCKEditor.

**Note**

If FCKEditor is not displayed, click in the field. If the FCKEditor does not appear, then the field is not FCKEditor enabled and the assets cannot be linked. Contact your system administrator to have the field enabled.

- If you intend to publish the referring asset, the asset must be previewable, including the field where you will place the link. (Ensure that the referring asset can be rendered by one of the templates that is listed in the asset’s “Select a Template” field. For instructions on previewing assets, see “Previewing Assets,” on page 95.)

**Target Asset**

- The target asset is previewable (ensure that the target asset can be rendered by one of the templates that is listed in the asset’s “Select a Template” field).
- The target asset is readily available for linking. Place the asset into the “Active List” for easy retrieval during the linking process. (For more information about placing assets into the “Active List,” see “Working with the Active List,” on page 70.)

**Next Step**

At this point you are ready to link the assets. Continue to any one of the following sections, depending on how you wish to link the assets:

- “To Create a Hypertext Link to Another Asset”
- “To Link Two Assets by Inclusion,” on page 130

**To Create a Hypertext Link to Another Asset**

1. Ensure that all prerequisites starting on page 126 are met.
2. Open the referring asset in its “Edit” form.
3. Insert the link to the target asset:
   a. In the tree, click the Active List tab and select the target asset.
   b. In the desired field of the referring asset, select the text that you want to be hyperlinked. Alternatively, you can type new text anywhere in the field and select it.

   To work more comfortably, you can maximize the FCKEditor to fill your workspace. Click the Maximize icon.

   ![Maximize the editor size](image)
c. On the FCKEditor’s toolbar, click the **Add asset link** icon.

![Add asset link icon](image)

The following pop-up window opens:

![Add Embedded Link window](image)

1) In the “Select Template” drop-down list, verify that the correct template is selected. This template will render the target asset when the hyperlink is clicked. If necessary, choose a different template.

2) In the “Link Text” field, verify the text that you selected to be the hyperlink (in step b on page 127). If necessary, edit the text.

3) If the “Extra Parameters” section displays the “Name” and “Value” menus, you can use them to set the properties of the asset to which you are creating the link. Select the parameters that you need (one at a time), enter a value, and click **Add**.

![Note](image)

**Note**

The “Extra Parameters” section is enabled only if developers have configured parameters for the template that is associated with the target asset. Otherwise, “Extra Parameters” displays the message “Parameters are not available.”

4) Click **Save and Close** to save the hyperlink.
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Linking Assets

The pop-up window closes, and the linked text appears in the field, underlined and surrounded by a blue border, as shown below:

![Asset link (surrounded by blue border)](image)

4. You can now work with the link as follows:
   a. Right-click the linked text to open its context menu. From the context menu you can:
      - Open Link
      - Change Linked Asset
      - Edit Properties
      - Remove Linked Asset
      
      **Note:** Remove Linked Asset removes the link function, but not the text of the link. To restore the link function, click **Ctrl-z** until the blue border re-appears.

   b. You can format the text of the link by using the FCKEditor. One of your options is to use a style sheet to format the link (and other text) in the field:
      
      1) Select a style sheet from the **Stylesheet** drop-down list.
         
         Once you have selected a style sheet, its styles are made available to you, in the **Style** drop-down list.
      
      2) Apply different styles by highlighting the text and selecting the desired style from the **Style** drop-down list.

5. Save the referring asset:
   a. If you expanded the FCKEditor, click the **Maximize** icon to collapse the FCKEditor and view the entire asset.
   b. Click **Save Changes**.

6. If the referring asset is previewable, click **Preview** (in the action bar) to preview and test the link. Click the link to display the target asset.
To Link Two Assets by Inclusion

1. Ensure that all prerequisites starting on page 126 are met.
2. Open the referring asset in its “Edit” form.
3. Include the target asset:
   a. In the tree, click the Active List tab and select the target asset.
   b. In the desired field of the referring asset, place your cursor at the point where you want to include the previewable content of the target asset.

To work more comfortably, you can maximize the FCKEditor to fill your workspace. Click the Maximize icon.

1) In the “Select Template” drop-down list, verify that the correct template is selected. This template will render the target asset at its insertion point in the referring asset. If necessary, choose a different template.
2) If the “Extra Parameters” section displays the “Name” and “Value” menus, you can use them to set the properties of the asset you are including. Select the parameters that you need (one at a time), enter a value, and click Add.

   **Note**
   The “Extra Parameters” section is enabled only if developers have configured parameters for the template that is associated with the target asset. Otherwise, “Extra Parameters” displays the message “Parameters are not available.”

3) Click Save and Close.
   The pop-up window closes, and the target asset’s previewable content is rendered within the referring asset by the template that you selected.

   **Note**
   If you click on the included asset, you will find that all of its content is selected. You cannot select its individual pieces of content. The content is editable only in the target asset (the source of content).
   When the target asset is edited, the included content in the referring asset is automatically updated, but not in real time. To view an update, you must save, close, and then re-open the referring asset.

4. You can now work with the included asset as follows:
   a. Right-click the included asset to open its context menu. From the context menu you can:
      - Change Included Asset
      - Edit Properties
      - Remove Included Asset
   b. Enter text before or after the included asset.

5. Save the referring asset:
   a. If you expanded the FCKEditor, click the Maximize icon to collapse the FCKEditor and view the entire asset.
   b. Click Save Changes.

6. If the referring asset is previewable, verify that the included asset is properly rendered (click Preview, in the action bar).
Linking Two Assets via an Image Asset

Company logos (and other images) are often used as links to various types of content: news about the company, products and services offered by the company, and so on. Content Server enables you to include an image asset in a given asset, and then hyperlink the image to another asset. Clicking the image renders the target asset’s previewable content.

**Note**

When an image is used to link two assets, the image must be part of an image asset.

This section contains prerequisite steps and instructions for linking two assets via an image asset. Before continuing with the rest of this section, determine whether you will be including the image from the “Active List” tab (located in the Content Server tree), or from the “Image Picker”:

- **Linking via an image from the “Active List” tab using FCKEditor**

  In the FCKEditor enabled field of the asset you are working with, you may want to include an image asset from the “Active List” tab. From the FCKEditor toolbar, use the Include asset icon to include the image into the referring asset’s field. Use the Add asset link icon to hyperlink the included image to another asset.

- **Linking via an image from the Image Picker using FCKEditor**

  You might be working with an asset that is not enabled with an “Image Picker.” If you prefer to choose your image assets from the “Image Picker,” FCKEditor is capable of invoking an “Image Picker.” From the FCKEditor toolbar, use the Pick an image to include icon to access the “Image Picker,” and select an image to include in the field. Use the Add asset link icon to hyperlink the included image to another asset.

**Note**

The Pick an image to include icon is enabled by the developers of your site. If the icon has not been enabled then it will appear in grey on the FCKEditor toolbar. If this is the case, contact your administrator or, see “Linking via an Image from the ‘Active List’” for an alternate method of linking two assets via an image asset.

**Prerequisites**

Before linking assets, you must verify that they can be linked. Use this section as a checklist. (It is assumed that you know how to edit and preview assets, and create them, if necessary. Basic instructions are given in various steps.)

**Participating Assets**

Three assets are involved in this procedure, and all three assets are on the same site:

- The referring asset (in which you will include and hyperlink the image asset)
- The image asset (which you will include in the referring asset)
- The target asset (to which you will link the image asset)
Referring Asset

- The referring asset displays the FCKEditor in the field where you will place the link. If you need instructions for verifying that FCKEditor is displayed, complete the following steps:

**Note**

If you are creating a new referring asset, you can start this procedure in the asset’s “New” form. However, it is best to save the asset and then open its “Edit” form (to ensure against possible loss of any existing content, as you move from step to step).

1. Open the referring asset in its “Edit” form. If you need to find the referring asset, do the following:
   - a) In the button bar, click Search.
   - b) In the “Search” form, click the asset type of the asset you want to find.
   - c) Enter the desired search criteria (if any) and click Search.
   - d) In the search results list, navigate to the desired asset and click its Edit (pencil) icon.

2. Go to the field in which you would like to place the image asset and make sure it displays the FCKEditor.

**Note**

If FCKEditor is not displayed, click in the field. If the FCKEditor does not appear, then linking is not supported in the field. Contact your system administrator to have the field enabled with FCKEditor.

- If you intend to publish the referring asset, the asset must be previewable, including the field where you will include the image. (Ensure that the referring asset can be rendered by one of the templates that is listed in the asset’s “Select a Template” field. For instructions on previewing assets, see “Previewing Assets,” on page 95.)

Image Asset

- The image asset is previewable. Ensure that only the image is rendered by one of the templates that is listed in the asset’s “Select a Template” field.

**Note**

Rendering additional content (such as text) can interfere with and corrupt the linking process.

- Determine whether you will be retrieving the image from an “Image Picker” or from the “Active List” tab:

  - **If you are including an image from the Active List.** The target asset is placed in your “Active List” for easy retrieval during the linking process. (For instructions about placing assets into the “Active List,” see “Working with the Active List,” on page 70.)
- **If you are including an image from the Image Picker.** The image you wish to include is available from the “Image Picker.” (Developers enable the “Image Picker” for the **Pick an image to include** icon. If more than one “Image Picker” exists, developers will also determine which “Image Picker” is rendered when the **Pick an image to include** icon is selected.)

**Target Asset**

The target asset is also previewable and readily available for linking:

- The target asset can be rendered by one of the templates listed in the asset’s “Select a Template” field.
- The target asset is placed in the “Active List” for easy retrieval during the linking process. (For instructions about placing assets in the “Active List,” see “Working with the Active List,” on page 70.)

**Next Step**

At this point you are ready to link the assets. Continue to one of the following sections, depending on how you wish to include the image:

- “Linking via an Image from the ‘Active List’”
- “Linking via an Image from the Image Picker,” on page 138

**Linking via an Image from the ‘Active List’**

1. Assuming that all prerequisites starting on page 132 are met, continue as follows:

   **Include the image asset in the referring asset:**

   2. Open the referring asset in its “Edit” form.
   3. Include the image asset:
      
      a. In the tree, click the **Active List** tab and select the image asset that you want to include.
      
      b. In the desired field of the referring asset, place your cursor at the point where you want the image asset to be rendered.

      *To work more comfortably, you can maximize the FCKEditor to fill your workspace. Click the **Maximize** icon.*
c. On the FCKEditor toolbar, click the **Include asset** icon.

The following pop-up window opens:

1) In the “Select Template” drop-down list, verify that the correct template is selected. This template will render the image asset at the insertion point. If necessary, choose a different template.

2) If the “Extra Parameters” section displays the “Name” and “Value” menus, you can use them to set the properties of the image you are including. Select the parameters that you need (one at a time), enter a value, and click **Add**.

**Note**

The “Extra Parameters” section is enabled only if developers have configured parameters for the template that is associated with the target asset. Otherwise, “Extra Parameters” displays the message “Parameters are not available.”

3) Click **Save and Close**.

The pop-up window closes, and the image is rendered in the field:
d. If you change your mind about the image or wish to make other adjustments, right-click the linked image to open its context menu. From the context menu you can:
   - Change Included Asset
   - Edit Properties
   - Remove Included Asset

**Link the image asset to the target asset:**

4. Now that the image is rendered in the field, create a hyperlink from the image to the target asset:
   a. Select the image you have just inserted.
   b. In the tree, click the **Active List** tab and select the target asset.
   c. On the FCKEditor toolbar, click the **Add asset link** icon.

The following pop-up window opens:

1) In the “Select Template” drop-down list, verify that the correct template is selected. This template will render the target asset when the hyperlinked image is clicked. If necessary, choose a different template.
2) If the “Extra Parameters” section displays the “Name” and “Value” menus, you can use them to set the properties of the image you are including. Select the parameters that you need (one at a time), enter a value, and click Add.

Note
The “Extra Parameters” section is enabled only if developers have configured parameters for the template that is associated with the target asset. Otherwise, “Extra Parameters” displays the message “Parameters are not available.”

3) Click Save and Close to save the link.

The pop-up window closes, and the image you included in the field now appears as a hyperlink, surrounded by a blue border.

5. At this point, you can work with the linked image as follows:
   a. Right-click the linked image to open its context menu. From the context menu you can:
      - Open Link
      - Change Linked Asset
      - Edit Properties
      - Remove Link

      Note: Remove Link removes the link function, but not the included image. To restore the link function, click Ctrl-z until the blue border re-appears.

   b. Enter text before or after the linked image.

6. Save the referring asset:
   a. If you expanded the FCKEditor, click the Maximize icon to collapse the FCKEditor and view the entire asset.

   b. Click Save Changes.

Test the linked image:

7. If the referring asset is previewable, click Preview, in the action bar, to preview and test the linked image. Click the image to render the target asset.
Linking via an Image from the Image Picker

1. Ensure that all prerequisites starting on page 132 are met.
2. Open the referring asset in its “Edit” form.
3. Include the image asset:
   a. In the desired field of the referring asset, place your cursor at the point where you wish to include the image.

   To work more comfortably, you can maximize the FCKEditor to fill your workspace. Click the Maximize icon.

   ![Maximize the editor area]

   b. Click the Pick an image to include icon.

   ![Pick an image to include]

   c. The “Image Picker” window opens. Select the image that you want to include in the field.

   ![Image Picker window]
Chapter 4. Working with Assets

Linking Assets

The “Add Inclusion” window opens:

![Add Inclusion Window]

1) In the “Select Template” drop-down list, verify that the correct template is selected. This template will render the target image at its insertion point in the referring asset. If necessary, choose a different template.

2) If the “Extra Parameters” section displays the “Name” and “Value” menus, you can use them to set the properties of the asset you are including. Select the parameters that you need (one at a time), enter a value, and click **Add**.

**Note**

The “Extra Parameters” section is enabled only if developers have configured parameters for the template that is associated with the target asset. Otherwise, “Extra Parameters” displays the message “Parameters are not available.”

3) Click **Save and Close**.

The pop-up window closes, and the image is rendered within the referring asset by the template that you selected.

4. If you change your mind about the image or wish to make other adjustments, right-click the included image to open its context menu. From the context menu you can:
   - Change Included Asset
   - Edit Properties
   - Remove Included Asset

**Link the image asset to the target asset:**

5. Now that the image is rendered in the field, create a hyperlink from the image to the target asset:
   a. Select the image you have just inserted.
   b. In the tree, click the **Active List** tab and select the target asset.
c. On the FCKEditor toolbar, click the **Add asset link** icon.

The following pop-up window opens:

1) In the “Select Template” drop-down list, verify that the correct template is selected. This template will render the target asset when the hyperlinked image is clicked. If necessary, choose a different template.

2) If the “Extra Parameters” section displays the “Name” and “Value” menus, you can use them to set the properties of the asset to which you are creating the link. Select the parameters that you need (one at a time), enter a value, and click **Add**.

**Note**

The “Extra Parameters” section is enabled only if developers have configured the parameters for the template that is associated with the target asset. Otherwise, “Extra Parameters” displays the message “Parameters are not available.”

3) Click **Save and Close** to save the hyperlink.
6. At this point, you can work with the linked image as follows:
   a. Right-click the linked image to open its context menu. From the context menu you can:
      - Open Link
      - Change Linked Asset
      - Edit Properties
      - Remove Link
      
      **Note:** Remove Link removes the link function, but not the included image. To restore the link function, click Ctrl-z until the blue border re-appears.
   b. Enter text before or after the linked image.

7. Save the referring asset:
   a. If you expanded the FCKEditor, click the **Maximize** icon to collapse the FCKEditor and view the entire asset.
   b. Click **Save Changes**.

**Test the linked image:**

8. If the referring asset is previewable, click **Preview**, in the action bar, to preview and text the linked image. Click the image to render the target asset.
Creating a Target Asset from the Referring Asset’s FCKEditor

If you are working with a given asset and wish to link it to an asset that has not been created yet, you can create the asset directly from the referring asset’s FCKEditor enabled field(s). The type of link you insert into the field(s) depends on which icon you choose from the FCKEditor toolbar:

- **Create a hypertext link to the new asset**
  
  From the referring asset’s FCKEditor toolbar, use the **Create and link a new asset** icon to create the target asset, and to insert a hypertext link to the new target asset into the referring asset’s field.

- **Include the new asset in the referring asset**
  
  From the referring asset’s FCKEditor toolbar, use the **Create and include a new asset** icon to create the target asset, and to include the new target asset’s previewable content into the referring asset’s field.

Prerequisites

Before creating a new asset from the FCKEditor enabled field of a referring asset, you must verify that the referring asset can be linked. Use this section as a checklist. (It is assumed that you know how to edit and preview assets, and create them, if necessary. Basic instructions are given in various steps.)

Participating Assets

Two assets are involved in this procedure. The target asset has not been created yet:

- The referring asset (in which you will create the target asset along with the link)
- The target asset. You will create the target asset as well as the link.

Referring Asset

- The referring asset displays the FCKEditor in the field where you will place the link.

If you need instructions for verifying that FCKEditor is displayed, complete the following steps:

**Note**

If you are creating a new referring asset, you can start this procedure in the asset’s “New” form. However, it is best to save the asset and then open its “Edit” form (to ensure against possible loss of any existing content, as you move from step to step).

1. Open the referring asset in its “Edit” form. If you need to find the referring asset, do the following:
   a) In the button bar, click **Search**.
   b) In the “Search” form, click the asset type of the asset you want to find.
   c) Enter the desired search criteria (if any) and click **Search**.
   d) In the search results list, navigate to the desired asset and click its **Edit** (pencil) icon.
2. Go to the field in which you would like to place the link and make sure it displays the FCKEditor.

   **Note**
   If FCKEditor is not displayed, click in the field. If the FCKEditor does not appear, then the field is not FCKEditor enabled and the asset cannot be linked. Contact your administrator to have the field enabled.

- If you intend to publish the referring asset, the asset must be previewable, including the field where you will place the link. (Ensure that the referring asset can be rendered by one of the templates that is listed in the asset’s “Select a Template” field. For instructions on previewing assets, see “Working with the Active List,” on page 70.)

**Target Asset**
You will create this asset in one of the following procedures, depending on how you wish to link to the new target asset:

- “Insert a Hyperlink to the New Target Asset”
- “Include the New Target Asset’s Previewable Content,” on page 146

**Insert a Hyperlink to the New Target Asset**

1. Ensure that all prerequisites starting on page 142 are met
2. Open the referring asset in its “Edit” form.
3. From the referring asset’s FCKEditor enabled field, create the target asset and insert a hypertext link to the target asset into the field:
   a. In the desired field of the referring asset, select the text that you want to be hyperlinked. Alternatively, you can type new text anywhere in the field and select it.

   *To work more comfortably, you can maximize the FCKEditor to fill your workspace. Click the Maximize icon.*

   ![Maximize the editor size]
b. On the FCKEditor’s toolbar, click the **Create and link a new asset** icon.

![Create and link a new asset](image)

The “Add Asset” window opens:

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute Editor</td>
<td>New Attribute Editor, FirstSiteII</td>
</tr>
<tr>
<td>Content Attribute</td>
<td>New Content Attribute, FirstSiteII</td>
</tr>
<tr>
<td>Content Definition</td>
<td>New Content Definition, FirstSiteII</td>
</tr>
<tr>
<td>Content Filter</td>
<td>New Content Filter, FirstSiteII</td>
</tr>
<tr>
<td>Content Parent Definition</td>
<td>New Content Parent Definition, FirstSiteII</td>
</tr>
<tr>
<td>Content Parent</td>
<td>New Content Parent, FirstSiteII</td>
</tr>
<tr>
<td>Content</td>
<td>New Content, FirstSiteII</td>
</tr>
<tr>
<td>CSElement</td>
<td>New CSElement, FirstSiteII</td>
</tr>
<tr>
<td>Dimension</td>
<td>New Dimension, FirstSiteII</td>
</tr>
<tr>
<td>DimensionSet</td>
<td>New DimensionSet, FirstSiteII</td>
</tr>
<tr>
<td>Document Attribute</td>
<td>New Document Attribute, FirstSiteII</td>
</tr>
<tr>
<td>Document Definition</td>
<td>New Document Definition, FirstSiteII</td>
</tr>
<tr>
<td>Document Filter</td>
<td>New Document Filter, FirstSiteII</td>
</tr>
<tr>
<td>Document Parent Definition</td>
<td>New Document Parent Definition, FirstSiteII</td>
</tr>
<tr>
<td>Document Parent</td>
<td>New Document Parent, FirstSiteII</td>
</tr>
<tr>
<td>Document</td>
<td>New Document, FirstSiteII</td>
</tr>
</tbody>
</table>

1) From the list of available asset types, select the asset type that you will use to create the target asset. If the asset type that you need is not available, contact your administrator.

**Note**

In the “Add Asset” window, only the asset types enabled by the developers of your system are available.

c. The “New” form of the asset type you selected opens. Fill in the required fields and then click **Save** to save the new asset to Content Server. For instructions about working in an asset’s “New” form, see “Creating a New Asset,” on page 74.
The “Add Embedded Link” window opens:

![Add Embedded Link window]

1) In the “Select Template” drop-down list, verify that the correct template is selected. This template will render the target asset you created when the hyperlink is clicked. If necessary, choose a different template.

2) In the “Link Text” field, verify the text that you selected to be the hyperlink. If necessary, edit the text.

3) If the “Extra Parameters” section displays the “Name” and “Value” menus, you can use them to set the properties of the asset to which you are creating the link. Select the parameters that you need (one at a time), enter a value, and click Add.

Note

The “Extra Parameters” section is enabled only if developers have configured the parameters for the template that is associated with the target asset. Otherwise, “Extra Parameters” displays the message “Parameters are not available.”

4) Click Save and Close to save the hyperlink.

The pop-up window closes, and the linked text appears in the field, underlined and surrounded by a blue border.

4. You can now work with the link as follows:

a. Right-click the linked text and open its context menu. From the context menu you can:
   - Open Link
   - Change Linked Asset
   - Edit Properties
   - Remove Linked Asset
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Linking Assets

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Note: Remove Linked Asset removes the link function, but not the text of the link. To restore the link function, click Ctrl-z until the underscore re-appears.

b. You can format the text of the link by using the FCKEditor. One of your options is to use the style sheet to format the link (and other text) in the field:

1) Select a style sheet from the Stylesheet drop-down list.
   Once you have selected a style sheet, its styles are made available to you, in the Style drop-down list.

2) Apply different styles by highlighting the text and selecting the desired style from the Style drop-down list.

5. Save the referring asset:

a. If you expanded the FCKeditor, click the Maximize icon to collapse the FCKeditor and view the entire asset.

b. Click Save Changes.

6. If the referring asset is previewable, click Preview (in the action bar) to test the link. Click the link to display the new asset.

Include the New Target Asset’s Previewable Content

1. Ensure that all prerequisites starting on page 142 are met.

2. Open the referring asset in its “Edit” form.

3. From the referring asset’s FCKEditor enabled field, create the target asset and include the previewable content of that target asset into the field:

   a. In the desired field of the referring asset, place your cursor at the point where you want to include the previewable content of the target asset.

   To work more comfortably, you can maximize the FCKEditor to fill your workspace. Click the Maximize icon.

   b. Click the Create and include a new asset icon.

   Maximize the editor size

   Create and include a new asset
The “Add Asset” window opens:

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Content Parent Definition</td>
<td>New Content Parent Definition, FirstSiteII</td>
</tr>
<tr>
<td>Content Parent</td>
<td>New Content Parent, FirstSiteII</td>
</tr>
<tr>
<td>Content</td>
<td>New Content, FirstSiteII</td>
</tr>
<tr>
<td>CSSElement</td>
<td>New CSSElement, FirstSiteII</td>
</tr>
<tr>
<td>Dimension</td>
<td>New Dimension, FirstSiteII</td>
</tr>
<tr>
<td>DimensionSet</td>
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<td>New Document Parent, FirstSiteII</td>
</tr>
<tr>
<td>Document</td>
<td>New Document, FirstSiteII</td>
</tr>
</tbody>
</table>

1) From the list of available asset types, select the asset type that you will use to create the target asset. If the asset type that you need is not available, contact your administrator.

**Note**

In the “Add Asset” window, only the asset types enabled by the developers of your system are available.

c. The “New” form of the asset type you selected opens. Fill in the required fields and then click Save to save the asset to Content Server. For instructions about working with an asset’s “New” form, see “Creating a New Asset,” on page 74.
Chapter 4. Working with Assets

1) In the “Select Template” drop-down list, verify that the correct template is selected. This template will render the target asset at its insertion point in the referring asset. If necessary, choose a different template.

2) If the “Extra Parameters” section displays the “Name” and “Value” menus, you can use them to set the properties of the asset you are including. Select the parameters that you need (one at a time), enter a value, and click **Add**.

3) Click **Save and Close**.

   The pop-up window closes, and the previewable content of the target asset you created is rendered in the referring asset by the template that you selected.

   **Note**

   The “Extra Parameters” section is enabled only if developers have configured the parameters for the template that is associated with the target asset. Otherwise, “Extra Parameters” displays the message “Parameters are not available.”

4. You can now work with the included content as follows:
   a. Right-click the included content and open the context menu. From the context menu you can:
      - Change Included Asset
      - Edit Properties
      - Remove Included Asset
   b. Enter text before or after the included asset.

5. Save the referring asset:
   a. If you expanded the FCKEditor, click the **Maximize** icon to collapse the FCKEditor and view the entire asset.
   b. Click **Save Changes**.

6. If the referring asset is previewable, verify that the included asset is rendered properly (click **Preview** in the action bar).
Chapter 4. Working with Assets

Linking Assets to URLs

Using FCKEditor, you can link Content Server assets to URLs. Your options are the following:

- **Create an unmanaged link to a URL.** In this scenario, you will create the link directly in the content of an asset. For information (and instructions) on creating unmanaged links to URLs, see page 150.

- **Create a managed link to a URL.** In this scenario, you will insert a validated link (that is, an asset of type “Link”) into the content of an asset. For information (and instructions) on creating managed links to URLs, see page 153.

The extent to which these capabilities are available to you depends on whether FCKEditor is configured for your custom asset types. For example, the “Content” asset type that ships with the FirstSite II sample site is configured with an FCKEditor in its “Body” field. Therefore the “Body” field supports the types of links described above. The rest of this section describes how to link assets to URLs.

Recognizing Unmanaged and Managed Links

A link is said to be “unmanaged” if it is not stored in its own field in Content Server’s database. A link is said to be “managed” if it is a Content Server asset.

To help you easily recognize unmanaged and managed links, Content Server displays them differently in “Inspect” and “Edit” screens.

- An unmanaged link is underlined. For more information about unmanaged links, see page 150.
• A managed link is underlined and surrounded by a dotted border. For more information about managed links, see page 153.

Creating Unmanaged Links to URLs

A link is said to be “unmanaged” if it is not stored in its own field in Content Server’s database. The link can be created directly within any field of a Content Server asset, but it cannot be managed as an asset. As a result, the user who creates an unmanaged link to a URL must manually validate the URL to ensure its existence.

To create the link, you will use FCKEditor’s native function Insert/Edit Link and select the URL option. (Additional options, such as Email, are also available in Insert/Edit Link, but they are not covered in this guide. For information about the additional options, refer to the FCKEditor’s documentation at: http://docs.fckeditor.net)

To create an unmanaged link to a URL

1. Find the referring asset (in which you will specify a URL) and open its “Edit” form.

Note

If you are creating a new referring asset, you can start this procedure in the asset’s “New” form. However, it is best to save the asset and then open its “Edit” form (to ensure against possible loss of any existing content, as you move from step to step).
2. Go to the field in which you would like to place the link and make sure it displays the FCKEditor.

**Note**

If FCKEditor is not displayed, click in the field. If the FCKEditor does not appear, then the field is not FCKEditor enabled and the assets cannot be linked. Contact your system administrator to have the field enabled.

3. In the desired field, select the text that you want to be the hyperlink. Alternatively, you can type new text anywhere in the field and select it.

*To work more comfortably, you can maximize the FCKEditor to fill your workspace. Click the **Maximize** icon.*

4. On the FCKEditor toolbar, click the **Insert/Edit Link** icon.

The following pop-up window opens:

**a.** In the “Link Type” field, select **URL**.

**b.** In the “URL” field, type the URL of the Web site you wish to link to.

**c.** Click **OK** to convert the selected text to a link.
The pop-up window closes, and the hyperlinked text appears underlined in the field, as shown below:

5. If you wish to make adjustments to the link, right-click the link to open its context menu. From the context menu you can:
   - Cut
   - Copy
   - Paste
   - Open Link
   - Edit Link
   - Remove Link
   
   **Note:** Remove Link removes the link function, but not the text of the link. To restore the link function, click Ctrl-z until the underscore re-appears.

6. You can format the text of the link by using the FCKEditor. One of your options is to use a style sheet to format the link (and other text) in the field.
   a. Select a style sheet from the Stylesheet drop-down list.
      
      Once you have selected a style sheet, its styles are made available to you, in the Style drop-down list.
   b. Apply different styles by highlighting the text in the field and selecting the desired style from the Style drop-down list.

7. Save the referring asset:
   a. If you expanded the FCKEditor, click the Maximize icon to collapse the FCKEditor and view the entire asset.
   b. Click Save Changes.

8. Click Preview, to view and test the link. Click the link to open the corresponding Web page in the browser window.
Creating Managed Links to URLs

A link is said to be “managed” if it is a Content Server asset. One advantage of creating managed links to URLs is that Content Server can validate the URLs to ensure they exist. Another advantage is that you can treat managed links as you would any other asset.

Creating a managed link from an asset to a URL requires you to first have an asset of type “Link”:

For example, the link asset can be named “google” and its “HREF” field specifies the URL to the google web site: http://www.google.com

You will then use the Add asset link icon on the FCKEditor toolbar to add the link asset (“google”) to the content of other assets. The link (to google) will be rendered at the point where you added the link asset.

This type of link is “managed” because the URL that it specifies is stored in Content Server’s database, in its own field (called “HREF”), in the “Link” asset type. This means that the link is managed by Content Server; therefore the URL can be validated by Content Server whenever the link asset is updated and saved. (Enabling link validation is the option of the user who creates, or edits, the link asset.)

Prerequisites

Before creating a managed link to a URL, you must verify that the participating assets can be linked. Use this section as a checklist. (It is assumed that you know how to edit and preview assets, and create them, if necessary. Basic instructions are given in various steps.)

Participating Assets

Two assets are involved in this procedure, and both assets are on the same site:

- The referring asset (in which you will include the link asset)
- The link asset (which contains the URL)

Referring Asset

- The referring asset displays FCKEditor in the field where you will place the managed link. If you need instructions for verifying that FCKEditor is displayed, complete the following steps:

  Note
  If you are creating a new referring asset, you can start this procedure in the asset’s “New” form. However, it is best to save the asset and then open its “Edit” form (to ensure against possible loss of any existing content, as you move from step to step).

  1. Open the referring asset in its “Edit” form. If you need to find the referring asset, do the following:

     a) In the button bar, click Search.

     b) In the “Search” form, click the asset type of the asset you want to find.

     c) Enter the desired search criteria (if any) and click Search.


**Chapter 4. Working with Assets**

**Linking Assets to URLs**

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1. In the search results list, navigate to the desired asset and click its **Edit** (pencil) icon.

2. Go to the field in which you would like to place the managed link and make sure it displays the FCKEditor.

   **Note**

   If FCKEditor is not displayed, click in the field. If FCKEditor does not appear, then the field is not FCKEditor enabled. Contact your system administrator to enable the FCKEditor.

   - The referring asset is previewable, including the field where you will place the link. (Ensure that the referring asset can be rendered by one of the templates that is listed in the asset’s “Select a Template” field. For instructions on previewing assets, see “Previewing Assets,” on page 95.)

**Link Asset**

You have a link asset with the following characteristics:

- The link asset is located on the same site as the referring asset.
- The link asset specifies the desired URL.
- The URL can be rendered by one of the templates in the “Select a Template” field.
- The link asset is readily available for inclusion. (Place the link asset into your “Active List” for easy retrieval during the inclusion process. For more information about placing assets into the “Active List” see, “Adding Assets to the Active List,” on page 71.)

   **Note**

   - If you have the appropriate link asset, you are ready to include the managed link. Follow the steps in “To Add a Managed Link to an Asset,” on page 155.
   - If you need a link asset and you have permission to create such assets, follow the steps directly below (otherwise, contact your CS administrator for assistance).

**To create a link asset**

1. Select the site you need to work with (to ensure that the link asset is on the same site as the referring asset).

2. In the button bar, click **New**.

   Content Server displays a list of assets you can create.

3. Click **New Link**.
Chapter 4. Working with Assets

4. In the “New Link” asset form, populate the appropriate fields. Pay special attention to the following fields:
   - **Select a Template**: Be sure to select a template that renders the URL (which you specify in the “HREF” field).
   - **HREF**: Enter a URL.
   - **Select to validate this link on Save**: Select this option if you want Content Server to verify the existence of the URL that you entered into the HREF field. Validation takes place only when you save the link asset.

5. Click **Save**.
   The asset’s “Inspect” form is displayed. (If you chose to have Content Server validate the URL that you entered, then the “Link Status” field displays a message indicating the result of the validation.)

9. Add the link asset to the “Active List”:
   In the action bar of the “Inspect” form, click **Add to My Active List** to add your new link asset to your “Active List.” You will select this link asset from the “Active List” in order to include it in the referring asset, as described in the next section.

**To Add a Managed Link to an Asset**

1. Assuming that all prerequisites starting on page 153 are met, continue as follows:
2. Open the referring asset in its “Edit” form.
3. Include the link asset:
   a. In the tree, click the **Active List** tab and select the link asset that you want to insert.
   b. In the desired field of the referring asset, select the text that you want to be the managed link. Alternatively, you can type new text anywhere in the field and select it.
To work more comfortably, you can maximize the FCKEditor to fill your workspace. Click the **Maximize** icon.

**c.** On the FCKEditor toolbar, click the **Add asset link** icon.

The following pop-up window opens:

1) In the “Link Text” field, modify (if necessary), the text that will be the managed link.

2) Click **Save and Close**.
Chapter 4. Working with Assets

Linking Assets to URLs

The pop-up window closes, and the hyperlinked text appears underlined, and surrounded by a blue border, as shown below:

4. Right-click the linked text to open its context menu. From the context menu you can:
   - Open Link
   - Change Linked Asset
   - Edit Properties
   - Remove Linked Asset

   **Note:** Remove Linked Asset removes the link function, but not the text of the link. To restore the link function, click Ctrl-z until the underscore re-appears.

5. (Optional) You can format the text of the link by using the FCKEditor. One of your options is to use a style sheet to format the link (and other text) in the field.
   a. Select a style sheet from the **Stylesheet** drop-down list.
      Once you have selected a style sheet, its styles are made available to you, in the **Style** drop-down list.
   b. Apply different styles by highlighting the text in the field and selecting the desired style from the **Style** drop-down list.

6. Save the referring asset:
   a. If you expanded the FCKEditor, click the **Maximize** icon to collapse the FCKEditor and view the entire asset.
   b. Click **Save Changes**.
   c. Click **Preview** to view and test the link. Click the link to open the linked Web page in the browser window.
Embedding Links Within Assets

When creating and updating assets, you have the option to link assets to each other in several ways. This section includes instructions for linking assets from within a field that is enabled with an editor other than FCKEditor.

From an asset’s editor enabled field you can:

- **Embed a hyperlink to another asset from the current site.** For example, you may want to include a hyperlink to an article within the body text of another article. When site visitors access the content, they will be able to follow the link and access the related content.

- **Embed an external URL.** For example, if you are writing an article on stock trading, you may decide to include a hyperlink to a related website at the end of your article.

- **Include the contents of another asset from the current site.** For example, you may want to include a direct citation from an article in another article, without manually duplicating the content. This way, if the linked content changes, the content in which the link is embedded stays up to date. (Note that this method of linking may not be supported by some WYSIWYG editors.)

The extent to which these capabilities are available to you depends on how your site designers have implemented them as part of the custom asset design. For example, the “Article” asset type that ships with the Burlington Financial sample site supports all three types of embedded links in its **Body** field.

The following subsections describe how to use embedded links within the context of the Burlington Financial “Article” asset. For instructions on embedding links in an FCKEditor enabled field, see “Working with the FCKEditor,” on page 112.

### Embedding an Internal Link

An internal link invokes another asset within the same site.

Consult your administrator to find out which asset types on your system permit link embedding. Also, some assets may contain multiple fields that allow link embedding within their contents; in such cases, determine which field you would like to embed the link in before starting the procedure.

Before you can embed an internal link, you should place it in your “Active List” for easy retrieval during the linking process.

**Note**

The following section applies to linking assets from within a field that is enabled with an editor other than FCKEditor. For instructions about linking assets from within an FCKEditor enabled field, see “Linking Assets,” on page 124.

**To add an asset to your Active List:**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click **Search**.
4. In the “Search” form, click the asset type of the asset you want to find.
5. Enter the desired search criteria (if any) and click **Search**.

6. In the search results list, navigate to the asset you want to add to your “Active List,” and select the checkbox next to it. (You can select checkboxes for all of the assets you want to add to your “Active List” to add them all at once.)

7. When you have selected your assets, click **Add To My Active List**.

For more information on searching for assets and building your “Active List,” see the sections “Finding Assets,” on page 81 and “Saving Search Results,” on page 87.

**To insert an internal link into the editor field of an asset**

1. Ensure that the left hand navigation is open.

2. Find the asset into which you want to embed an internal link and open its “Edit” form:
   a. In the button bar, click **Search**.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click **Search**.
   d. In the search results list, navigate to the desired asset and click its **Edit** (pencil) icon.

   You can also embed an internal link in a new asset when populating its “New” form.

3. Click the **Active List** tab and select the asset that you want to link to.

4. In the desired field (**Body** field in this example), select the text that you want to be hyperlinked. Alternatively, you can type new text anywhere in the field and select it.

5. Embed the link by clicking the **Add Link** button. This button appears to the right of the field.
The “Add Embedded Link” pop-up window appears:

![Add Embedded Link Window](image)

6. In the “Add Embedded Link” window, edit the attributes as described below:

   - **Select Template**: From the drop-down list, select the template that will be used to display the linked asset. The linked asset’s default template is preselected.

   - **Select Wrapper**: (This attribute is available only when wrappers have been set up for the site in which you are working). From the drop-down list, select the wrapper that will be used to display the linked asset. The linked asset’s default wrapper is preselected.

   - **Link Text**: The text you selected to hyperlink displays in this field. If desired, you can edit the hyperlink text here.

   - **Extra Parameters**: To pass parameters for the linked asset to the current asset’s template, enter the parameter in the format `=` with each parameter joined by an ampersand (`&`), as shown:

     ```
     key1=value1key2=value2key3=value3
     ```

   - **Link anchor**: If you would like the link to jump to a particular place in the asset to which you are linking (for example, to load a long article so a particular paragraph appears at the top of the screen), link to a named anchor within that asset. Enter the anchor name to which you are linking in this text field. (In regular text fields, anchors are created with HTML code; in the FCKEditor, anchors are created using the anchor tool).

7. Click **Save & Close** to save the link.

The pop-up window closes.
Chapter 4. Working with Assets

Embedding Links Within Assets

- The link appears in coded format in the field:

```
<ipt>ATLANTA, Aug. 3 (UPI) -- CS
object "_embedded internal PACENAME " Burling
on financial&Party
ArticleScany_cid = 8415690404 a - Article"
contenteditTitle="false": Valujet Airlines</tp>
```

The information between the `<A>` and `</A>` tags denotes the link as internal and identifies the following for the system: the linked asset, the template to use, and the hyperlinked text.

**Note**

To ensure that the link functions properly, edit the hyperlink text only. Do not edit any other part of the string unless you are an experienced programmer or designer.

8. Click **Save Changes** to save the asset.
   
   If you cancel instead, the link is removed from the contents of the field.

9. Preview the asset to view and test the embedded link. The content should appear with a hyperlink to the asset that you embedded. Clicking the link displays the asset in the selected template (and wrapper, if available).

**Embedding an External Link**

**Note**

The following section applies to linking assets from within a field enabled with an editor other than FCKEditor. For instructions about linking assets from within an FCKEditor enabled field, see “Linking Assets,” on page 124.

An external link is one that invokes a URL to a page on an external web site. You can insert an external link only if a “Link” asset pointing to the external URL exists in the current site.

Consult your administrator to find out which asset types on your system permit link embedding. Also, some assets may contain multiple fields that allow link embedding within their contents; in such cases, determine which field you would like to embed the link in before starting the procedure.

**Note**

Before trying to embed an external link, contact your administrator to determine if you have the permissions to create or edit “Link” assets.

Before you can embed an external link into an asset, you should place the corresponding “Link” asset in your Active List for easy retrieval during the linking process.

**To create a Link asset:**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.

3. In the button bar, click Search.

4. In the “Search” form, click Find Link.

5. Enter the desired search criteria (if any) and click Search.

6. In the search results list, navigate to the asset you want to add to your Active List and select the box next to it. (You can select the boxes for all of the assets you want to add to your “Active List” to add them all at once).

7. When you have selected your asset, click Add To My Active List.

For more information on searching for assets and building your Active List, see the sections “Finding Assets,” on page 81 and “Saving Search Results,” on page 87.

If you want to link to an external page for which a “Link” asset does not yet exist in your CS site, you can create the “Link” asset and store the appropriate URL in it:

1. If Content Server’s interface is not already open, log in.

2. If prompted, select the site you want to work with.

3. In the button bar, click New.

Content Server displays a list of assets you can create.

4. Click New Link.

Content Server displays the “New Link” asset form:

5. In the “New Link” asset form, populate the appropriate fields. If you want Content Server to validate the URL you entered in the HREF field, select the Select to validate this link on Save box.

6. Click Save. Content Server displays the “Link” asset’s “Inspect” form. If you chose to have Content Server validate the URL you entered in the form, Content Server also displays a message indicating the result of the validation.

7. In the action bar of the “Inspect” form, click Add to My Active List to add the “Link” asset you just created to your Active List. You will select this “Link” asset from your “Active List” when embedding a link to the desired external page into your asset, as described in the next procedure.
To insert an external link in a text field of an asset

1. Ensure the left hand navigation is open.
2. Find the asset into which you want to embed an external link and open its “Edit” form:
   a. In the button bar, click **Search**.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click **Search**.
   d. In the search results list, navigate to the desired asset and click its **Edit** (pencil) icon.
   You can also embed an external link in a new asset when populating its “New” form.
3. Click the “Active List” tab and select the asset that you want to link to.
4. In the desired field (**Body** field in this example), select the text that you want to be hyperlinked. Alternatively, you can type new text anywhere in the field and select it.
5. Embed the link by clicking the **Add Link** button. This button appears to the right of the field.

The Add Embedded link pop-up window appears:
6. Fill in the Add Embedded Link pop-up window as follows:
   - **Link Text**: The text you selected to link to is entered in this field. If you wish to change the text, you can edit it here.
   - **Link anchor**: If you would like the link to jump to a particular place in the asset to which you are linking (for example, to load a long article so a particular paragraph appears at the top of the screen), link to a named anchor within that asset. Enter the anchor name to which you are linking in this text field. (In regular text fields, anchors are created with HTML code; in the FCKEditor, anchors are created using the anchor tool).
   - **Extra Parameters**: To pass parameters for the linked asset to the current asset’s template, enter the parameter in the format `key=value` with each parameter joined by an ampersand (`&`), as shown below:
     
     key1=value1&amp;key2=value2&amp;key3=value3

7. Click **Save & Close**.
   
   The pop-up window closes, and the link appears in the edited field as follows:

   ```html
   <A>ATLANTA, Aug. 3 (UPI) -- ValuJet Airlines</A>
   ``

   The information between the `<A>` and `</A>` tags denotes the link as external, identifies the asset containing the URL, and displays the hyperlinked text.

   **Note**

   To ensure that the link functions properly, edit the hyperlink text only. Do not edit any other part of the string unless you are an experienced programmer or designer.

8. Click **Save Changes** to save the asset.
   
   If you cancel instead, the link is removed from the contents of the field.

9. Preview the asset to view and test the embedded link. The content should appear with a hyperlink to the URL you embedded. Clicking the link opens the linked web page in a separate browser window. If you remove `TARGET="_blank"` from the embedded string, the web site opens in the current browser window.
Embedding the Contents of an Asset

You can embed the contents of another asset (from the current site) into an asset of your choice. That asset content is displayed by a particular template, typically a pagelet.

Consult your administrator to find out which asset types on your system permit content embedding. Also, some assets may contain multiple fields that allow link embedding within their contents; in such cases, determine which field you would like to embed the link in before starting the procedure.

Before you can embed the contents of an asset into another asset, you should add the source asset(s) to your Active List for easy retrieval during the embedding process.

**To add an asset to your Active List**

1. If Content Server's interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Search.
4. In the “Search” form, click the asset type of the asset(s) you want to find.
5. Enter the desired search criteria (if any) and click Search.
6. In the search results list, navigate to the asset you want to add to your Active List and select the check box next to it. (You can select the boxes for all of the assets you want to add to your Active List to add them all at once.)
7. When you have selected your assets, click Add To My Active List.

For more information on searching for assets and building your Active List, see the sections “Finding Assets,” on page 81 and “Saving Search Results,” on page 87.

**To embed another asset’s contents in the text field of an asset**

1. Ensure the left hand navigation is open.
2. Find the asset into which you want to embed the contents of another asset, and open its “Edit” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
   d. In the search results list, navigate to the desired asset and click its Edit (pencil) icon.

You can also embed the contents of an asset in a new asset when populating the new asset’s “New” form.

3. Click the “Active List” tab and select the asset that you want to link to.
4. In the desired field (Body field in this example), at the point where you want to insert the asset contents, type some text and select it. Anything will do; what you type and select is replaced by the included asset.
5. Click the **Include** button to the right of the field.

The “Add Inclusion” pop-up window appears:

6. Fill in the “Add Inclusion” pop-up window as follows:
   - **Select Template**: Select the template that will display the asset contents. The selected asset’s default template is preselected.
   - **Extra Parameters**: To pass parameters for the linked asset to the current asset’s template, enter the parameter in the format “<key>=<value>” with each parameter joined by an ampersand (&), as shown below:

```
key1=value1&key2=value2&key3=value3
```

7. Click **Save & Close**.

The pop-up window closes, and the link appears in the edited field as follows:
The information between the `<span>` and `</span>` tags identifies the asset as an inclusion and its URL to the system.

**Note**
To ensure that the link functions properly, do not edit the string unless you are an experienced programmer or designer.

If you cancel instead, the embedded asset content is removed from the contents of the field.

8. Preview the asset to view and test the embedded link. The content of the asset you included should appear within the asset you are previewing at the point of insertion, replacing the dummy text you entered as link text. The included asset contents should be displayed in the selected template.
Sharing Assets with Other Sites

If you are working with an asset that you want to use in more than one site, you can share it so that you do not have to create it more than once and maintain it across multiple sites.

Before you share an asset, consider the following:

- You must have the right permissions to share an asset.
- You can share an asset only to sites that you have access to. If you have access to only one site, the **Share Assets** function is not available to you.
- You cannot share “Page” assets.
- Share an asset only if its content does not have to be unique to the target site. For example, you can share an asset containing your company’s logo, because the same logo is likely to be used on all of the company’s sites.
  
  If the nature of the content dictates the need for a separate, unique version for each site, do not share the asset – instead, create a new asset for each site that requires a unique version of the content.
- Because of the nature of asset sharing, if a shared asset is deleted, it automatically disappears from all of the sites it was shared to.
- If the asset has a workflow assigned to it, you and others can change its workflow status only when you are working in the asset’s original site.
- It is good practice to share the asset only when you are ready to publish it; that is, wait to share the asset until it has been approved.
- If you want to share a localized asset to another site, the asset’s locale must be enabled on the target site.

**To share an asset**

1. If Content Server’s interface is not open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to share:
   a. In the button bar, click **Search**.
   b. In the “Search” form, click the asset type of the asset you want to share.
   c. Enter the desired search criteria (if any) and click **Search**.
   
   For more information on searching, see the section “Finding Assets,” on page 81.
4. In the search results list, navigate to the asset you want to share and click its **Inspect** icon. Content Server displays the asset’s “Inspect” form.
5. In the action bar, select **Share asset type** from the drop-down list.
6. In the “Share” form, select the names of the sites to which you want to share the asset.
7. Click **Save Changes**.

Content Server refreshes the asset’s “Inspect” form, with a confirmation message at the top listing the sites from which the asset is accessible.
Working with Grouped Assets

When working with assets, you might want to organize them in groups and place them in specific order. If you are a marketer and Engage is installed on your system, you might also want to create lists of assets related to other assets in some way based on context, or lists of asset that change based on some variable, such as the current date, or time of day. You might also want to deliver different groups of assets depending on the demographic data of your visitors. In such cases, you would use “Collection” and “Recommendation” assets.

Working with Collections

Suppose you want to choose, rank in order, and deliver sets of content that your visitors will most likely want to see when viewing your site. For example, you might want to place five top political news stories, organized in the order of importance, on the home page of your site every morning. In a case like this, you can build your “Top Five” list of articles using a “Collection” asset.

A “Collection” asset stores a list of basic assets of a single asset type, organized in a specific order. The assets you can include in a collection come from the results returned by one or more queries. You choose the assets you want to include in the collection by ranking them in the order of your choice in the list of query results. This ranked, ordered list of assets is the collection.

Typically, site designers or administrators create “Collection” assets and assign the appropriate queries and templates to them. Your job is to choose the most suitable content to be included in the collection.

Keep in mind is that once you build your collection, other users with the appropriate permissions can access the “Collection” assets you worked with and change your asset rankings within them.

Note

“Collection” assets can store lists of basic assets only. For flex assets, functionality similar to that of “Collection” assets (and much more) is provided by “Recommendation” assets (described later in this section).

Building a Collection

A “Collection” asset must already exist in the site you are working with in order for you to be able to build the desired collection. Your site designer or administrator is usually the person responsible for creating new “Collection” assets and editing existing ones.

To build a collection

1. If Content Server’s interface is not open, log in.
2. If prompted, select the site you want to work with.
3. Find the collection you want to build:
   a. In the button bar, click Search.
   b. In the “Search” form, click Find Collection.
   c. Enter the desired search criteria (if any) and click Search.

For more information on searching, see the section “Finding Assets,” on page 81.
4. In the list of search results, scroll to the desired “Collection” asset and click its **Inspect** icon.

5. In the action bar, select **Build** from the drop-down list. (You can also click the **Build** hyperlink in the lower right corner.)

Content Server runs the query (or queries) in the collection and displays the results in two or more lists of assets.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Remove</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Asea-A446-2001Mar9</td>
<td>Asea Reports Second Quarter 2000 Earnings</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>MetLife-A698-2001Mar9</td>
<td>MetLife Q2 Earnings Climb 18%, Led by Retail Products</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Wal-Mart-A705-2001Mar9</td>
<td>Wal-Mart Reports Record Sales And Income for the Second Quarter</td>
</tr>
</tbody>
</table>

6. Rank the assets by entering the appropriate number (up to three digits) in the **Rank** field. If you want to remove an asset that is already included in the top list, select the **Remove** option next to its **Rank** field. Deleting an asset’s rank number from the query list will not remove it from the collection.
Chapter 4. Working with Assets

Working with Grouped Assets

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7. Click Save Changes.

Content Server builds the collection and displays it in the “Inspect” form.

Working with Recommendations

“Recommendation” assets (provided Engage is installed on your CS system) allow you to personalize product placements and promotional offerings that are displayed for each site visitor. Recommendations determine which assets (products, for example) should be featured or “recommended” on a page, based on available information about your site visitors (such as age, or last viewed product).

You can personalize the content your visitors view in the following ways:

• Create Static List recommendations. These are lists of assets that are displayed according to demographic criteria such as age or income, as well as other information in the site visitor’s profile. For example, you can create a list of top dance clubs and show it only to visitors who specify their age range to be between 18 and 24. (This specific age range for which a list of clubs would be displayed is called a segment.) For visitors whose age falls outside this range, you can display another static list recommendation, for example, a list of top beach resorts.

• Create Related Items recommendations. Related Items recommendations allow you to link to each other assets that bear some sort of relation to one another. This way, whenever a visitor views an asset that is linked to another asset via a Related Items recommendation, he/she will also see the related asset. You can thus create a “path” or a “link trail” for your visitors to follow by consecutively linking assets to one another using a Related Items recommendation.

The goal is to persuade your visitors to view additional content related to the content they are viewing at a given moment by showing them a teaser for the related content alongside the main content. Related Items recommendations are thus excellent for business tactics such as up-selling or cross-selling merchandise.

For example, you can link to one another a number of movies that share a common theme or genre, such as the Godfather trilogy. You link part I of the trilogy to part II, and part II to part III using a Related Items recommendation. This way, when a visitor looks at part I of the trilogy, Content Server will also show part II. When the visitor then looks at part II, Content Server will also show part III. Additionally, you could link parts II and III to part I so your visitors know they should watch part I first when they view part II or III.

• Create Dynamic List recommendations. Unlike Static List and Related Items recommendations, the functionality of Dynamic List recommendations is defined by customized code written by your developers. Because of that, Dynamic List recommendations are the most flexible out of the three types of “Recommendation”

Note

When you rank the assets in your collection, do so in an order that is appropriate to the template element that renders the page. For example, if your collection contains 50 assets, but the template that renders it is coded to display only five, only the first five highest-ranked assets in the collection will be displayed on the page. Consult your site developers if you are unsure about the properties of the templates you are using.

7. Click Save Changes.

Content Server builds the collection and displays it in the “Inspect” form.

Working with Recommendations

“Recommendation” assets (provided Engage is installed on your CS system) allow you to personalize product placements and promotional offerings that are displayed for each site visitor. Recommendations determine which assets (products, for example) should be featured or “recommended” on a page, based on available information about your site visitors (such as age, or last viewed product).

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• Create Related Items recommendations. Related Items recommendations allow you to link to each other assets that bear some sort of relation to one another. This way, whenever a visitor views an asset that is linked to another asset via a Related Items recommendation, he/she will also see the related asset. You can thus create a “path” or a “link trail” for your visitors to follow by consecutively linking assets to one another using a Related Items recommendation.

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For example, you can link to one another a number of movies that share a common theme or genre, such as the Godfather trilogy. You link part I of the trilogy to part II, and part II to part III using a Related Items recommendation. This way, when a visitor looks at part I of the trilogy, Content Server will also show part II. When the visitor then looks at part II, Content Server will also show part III. Additionally, you could link parts II and III to part I so your visitors know they should watch part I first when they view part II or III.

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Note

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assets in terms of fulfilling specific business needs. For example, your developers can
code a Dynamic List recommendation to behave like a Related Items
recommendation, but instead of requiring the related assets be linked manually, the
recommendation can track the movies a visitor has bought in the past and recommend
movies that most closely match his or her past purchases in terms of theme or genre.
In such case, you would simply assign the recommendation to the assets you want to
be included in the recommendation.

In the end, the choice regarding the type of recommendations used depends largely on how
you or your site designers want your site to behave.

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>If Engage is not installed on your CS system, only Static List recommendations (without segment support) are available.</td>
</tr>
</tbody>
</table>

To learn how to create “Recommendation” assets, see “Creating Recommendation
Assets,” on page 325.

**Working with Asset Associations**

Some asset create and edit forms include fields where you link another asset to the one in
which you are working. These types of fields are called “associations.”

When you create asset associations, you are indicating assets that can work together in the
web site’s design or function. Associations makes it easier for content editors to locate the
appropriate assets to assemble when developing the web site.

Examples of assets which might be associated together are:

- **Assets associated by content:** For example, suppose an “article” asset creation form
  has an “image” association field. In this case, you might associate an article about
  technology with a picture of a computer. By associating the image asset with
  the article asset, you are indicating which image appropriately illustrates the article text.

- **Assets associated by design:** For example, an “image” asset creation form might have
  a “thumbnail size” association field. The regular image might be used in a product
detail page, while a thumbnail size image could be used on a page displaying small
preview images of products within a category. By associating the differently sized
versions of the image, you are associating similar assets that will be used in different
page layouts.

- **Assets associated by functionality:** For example, by associating a “media” asset with
  a “media player” asset, the site designers can design media pages that include a link to
  the appropriate media player download site.

In all of these associations, content creators indicate assets that are appropriately used
together. *How* the associated assets will actually be used on the web site is up to the site
developers. For example, for a “product” asset associated with a “recommendation” asset,
the site visitor could be presented with the product recommendation list while viewing the
product, after adding the product to the shopping cart, or in a post-purchase email,
depending on how developers code the site.

Note that an asset can be used in multiple associations. For example, in an online store a
user guide that covers three different models of similar products can be associated with all
three “product” assets, or even with several different association fields in an asset’s definition.

**Named and Unnamed Associations**

There are two types of associations, named and unnamed associations. They are compared in the table below.

**Table 2: Named and Unnamed Associations**

<table>
<thead>
<tr>
<th>Named Association</th>
<th>Unnamed Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be used with any type of asset.</td>
<td>Is only available on “Page” type assets.</td>
</tr>
<tr>
<td>Can be set up to allow the user to select either:</td>
<td></td>
</tr>
<tr>
<td>• A single asset (single valued) or</td>
<td>Always allows the selection of multiple assets (multi-valued).</td>
</tr>
<tr>
<td>• Several assets (multi-valued).</td>
<td></td>
</tr>
<tr>
<td>When multi-valued, the allowable assets will be of a single asset type.</td>
<td>Allows the selection of assets of different asset types.</td>
</tr>
</tbody>
</table>

**Named Associations**

Single-valued named associations are used when the user is required to make a one-to-one association between a field and the associated asset. For example, when a site’s design dictates that an “article” asset is paired with a single “image” asset.

Multi-valued named associations are used when the user must be restricted to a single asset type. For example, such a field might used to designate info sheets to associate with a product, where only “document” assets are the appropriate choices. Items will display in the order listed, and may be rearranged using the up and down arrows.

**Unnamed Associations**

Unnamed associations are generally used for designating the sets of assets used to assemble a page. For example, an ad banner, an article, an image file, and a video clip might all be associated with a “page” asset.

Items will display on the page in the order listed, and may be rearranged using the up and down arrows.

**Associating Assets**

To make it easier to select the assets you will associate within another asset’s definition, you can add them to your Active List.

If you wish to work with the Burlington Financial sample site, the article asset includes association fields for image files.

**To add assets to your Active List**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the desired asset(s) that you will associate and add them to your Active List:
   a. In the button bar, click Search.
   b. In the “Search” form, select the appropriate asset type.
   c. Enter search criteria (if any) and click Search.
      A search results list is returned.
   d. Check the boxes next to all assets you wish to add to your Active List.
   e. Click Add To My Active List.
      For more information on searching for assets and building your Active List, see
      the sections “Finding Assets,” on page 81 and “Saving Search Results,” on
      page 87.

To associate assets
1. Select the asset in which you will create the asset association.
   Do one of the following:
   - Create a new asset:
      1) Click New in the button bar.
      2) Select the desired asset type (for example, New Article).
      3) If the “Choose Assignees” screen appears, select the workflow participants
         for this asset and click Set Assignees. See Chapter 8, “Workflow” for more
         information.
   - Edit an existing asset:
      1) In the button bar, click Search.
         The Search list appears.
      2) Select the asset type of the asset you are searching for (Article in this
         example).
      3) Enter the search criteria (if any) and click Search.
         A search results list is returned.
      4) Navigate to the desired asset and click its Edit icon.
         For more information on searching, see the section “Finding Assets,” on
         page 81.

2. Associate the asset(s).
   a. In the “New” or “Edit” form, navigate to the association field.
   b. In the tree, click the Active List tab.
   c. In the Active List tab, select the desired child asset.
   d. Click Add Selected Items for the association field.
e. (Optional) Reorder the associated assets.

If the field allows you to association more than one asset, you may need to reorder the assets. Assets will appear on a page in the order they are listed. Change the order of the assets by selecting the asset you wish to move and clicking the up or down arrow button.

3. Make other changes on the form as necessary, then click Save.

Content Server displays the asset’s “Inspect” form.

Disassociating Assets

To disassociate assets

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Open the “Edit” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the desired asset.
   c. Enter the desired search criteria (if any) and click Search.
   d. In the search results list, navigate to the desired parent asset and click its Edit icon.

The “Edit” form opens.

For more information on searching, see the section “Finding Assets,” on page 81.

4. Navigate to the association field.
5. Do one of the following:
   - If the association is single valued, click the Delete icon next to the field.
- If the association is multi-valued, do the following:

1) Select the asset(s) you wish to disassociate. Select multiple assets using **Shift+click**. Select a range of assets by **Ctrl+clicking** the first and last assets in the range.

2) Click **Remove**.

6. Click **Save**.

   Content Server displays the parent asset’s “Inspect” form showing the asset’s details.
Parent Relationships

When you designate an asset as a parent of another asset, you are creating a hierarchical relationship between the two assets. An asset that is linked to a parent is called a “child” asset.

Parent-child relationships are used to organize assets on custom tabs in Content Server’s tree. Parent-child relationships are taken into account during approval and publishing so that no broken links result on the published site. More information can be found about publishing in “Publishing,” on page 201.

An asset can have more than one parent. When assigned multiple parents, the asset appears in multiple places in the Asset Tree, as a child of every parent node.
Working with “Page” Assets

As a content provider, you update or revise the content in your “Page” assets and then approve them for publishing. You complete the following tasks, as necessary, to get your “Page” assets ready for publishing approval:

• Edit the assets that are included in the page (for example, change a headline or an abstract).

• Examine the collections included in the “Page” assets, and then rank and organize the assets in them (that is, you build the collections).

• Remove outdated assets and select updated ones to replace them.

• Preview the “Page” assets to be sure they display correctly.

When editing a “Page” asset, you use the same procedure you use for editing any other asset. You select assets you want to include from the tree, or if the tree is toggled off, from the Candidates list populated by the contents of the Active List and History tabs.

• For information about editing assets, see “Editing Assets,” on page 90.

• For information about collections, see “Working with Collections,” on page 169.

• For information about previewing assets, see “Previewing Assets,” on page 95.

• For information about publishing approval, see Chapter 7, “Publishing.”

Deleting Assets

When you use the **Delete** function, the asset is not entirely removed from the database. The contents of the asset are emptied; however, the ID remains in the database as a record of the asset’s existence. This simple record is called a “voided asset.”

When a previously published asset is voided in the content management system, the voided asset is automatically approved for publishing to any destination the asset has ever been published to. The voided asset is placed in the publish queue, and published during the next publishing session. The voided asset then overwrites the previously published asset.

Voided assets are not returned in search results.

**Note**

Though voided assets are small, a great many of them may slow system performance. Administrators of large sites can perform a database purge to clear voided assets from the database.

Asset Deletion Rules

The following restrictions are enforced when you delete assets:

• You can delete an asset only if you have the permissions to do so.

• If an asset is in a workflow and is assigned to someone other than you, you cannot delete that asset even if you have the permissions to delete assets.
• You cannot delete a placed “Page” asset. You must unplace a placed “Page” asset before you can delete it.

• You cannot delete an asset if it is associated with another asset. (For example, an “ImageFile” asset referenced by an “Article” asset cannot be deleted without removing the reference first.) If you attempt to do so, Content Server displays a list of the offending associations. You can then edit the parent assets to disassociate the child asset you want to delete.

Deleting an Asset

To delete an asset

1. If Content Server’s interface is not already open, log in.

2. Find the asset you want to delete:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to delete.
   c. Enter the desired search criteria (if any) and click Search.
   For more information on searching, see the section “Finding Assets,” on page 81.

3. In the search results list, navigate to the asset you want to delete and click its Delete icon.
   You can also delete an asset from its “Inspect” form by clicking Delete in the action bar.

   Note

   If the asset you are trying to delete is associated with other assets, (for example, an “Article” asset belonging to a collection), Content Server displays an error message and a list with links to the associated assets. In such cases, you must unlink all associated assets from the asset you want to delete before you are allowed to delete it.

   Content Server displays a message asking to confirm the deletion of the asset.

4. If you are sure you want to delete the asset, click Delete This Item. Otherwise, click Cancel.
   Content Server displays a message confirming that the asset was deleted.
   The asset’s status in the database is changed to “void.” Standard searches will not retrieve assets that are marked as void.
Working with Multilingual Assets

Very often, organizations maintain one or more localized online sites that serve different geographic regions. Such sites will host content in one or more languages local to the region served by the site. In such cases, a piece of content can be translated to exist in multiple languages, or locales.

If two or more locales are set up on your site, you can translate assets into the languages enabled by the locales. When you create the first translation of an asset, the asset and its translation become a multilingual set, and the source asset is automatically designated as the master asset of the set. Once an asset is designated as the master of a set, it remains so until you designate another member of the set as the master.

You can create subsequent translations either from the master asset, or from an existing translation. The master asset and its translations are linked to one another to indicate they are members of the multilingual set. Each member contains the same piece of content but in a different language. You can not delete the master asset if at least one translation exists in the set. You will have to delete all of the translations linked to the master asset before you can delete it.

Each asset can have only one translation in each available language. For example, once a Canadian French translation of an asset exists, you cannot create another Canadian French translation within the same multilingual set. The example below shows the Translations field of a typical “Article” asset:

To create a translation of an asset, you must do the following:

1. Select the target language of the translation. Content Server does the following:
   a. Creates a copy of the source asset
   b. Sets the target language of the copy according to your selection
   c. Links the copy to the master asset and marks the copy as a translation of the master. If this is the first translation of the asset, a multilingual set is created and the source asset is designated as the master.

2. Translate the source content and store the translated content in the translation asset.
3. (Optional) Translate the assets associated with the source asset and associate the translated versions with the translation of the source asset. See Table 3, on page 181 for information on how asset relationships are handled when you create translations of assets.

**Table 3:** Asset relationship behavior for multilingual assets

<table>
<thead>
<tr>
<th>Relationship Type</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Named and Unnamed Associations</td>
<td>When you create a translation of an asset that contains named or unnamed associations, all assets associated with the source asset are automatically associated with the translation. You then have the choice to translate the associated assets and associate the translated versions with the translated asset.</td>
</tr>
<tr>
<td>Collections</td>
<td>When you create a “Collection” asset in a new locale, the new “Collection” asset retains the member assets of the source asset. You then have the choice to translate the member assets and place the translated versions in the new “Collection” asset, replacing the member assets carried over from the old collection.</td>
</tr>
<tr>
<td>Static Lists Recommendations</td>
<td>When you create a Static Lists recommendation in a new locale, the new “Recommendation” asset retains the member assets of the source asset. You then have the choice to translate the member assets and place the translated versions in the new “Recommendation” asset, replacing the member assets carried over from the old collection.</td>
</tr>
<tr>
<td>Dynamic Lists Recommendations</td>
<td>Since Dynamic Lists recommendations are populated by element code, they are not affected.</td>
</tr>
<tr>
<td>Related Items Recommendations</td>
<td>When an asset containing Related Items associations is translated, all assets associated with the source asset are automatically associated with the translation. You then have the choice to translate the associated assets and associate the translated versions with the asset.</td>
</tr>
<tr>
<td>Asset-Type Attributes</td>
<td>When an asset containing associations through asset-type attributes is translated, all assets associated with the source asset are automatically associated with the translation. You then have the choice to translate the associated assets and associate the translated versions with the translated asset.</td>
</tr>
<tr>
<td>Embedded Links</td>
<td>Embedded links are not affected. When an asset containing embedded links is translated, you must manually update the links to point to the corresponding translations of the linked content (if they exist).</td>
</tr>
</tbody>
</table>

For more information, see “Working with Asset Associations,” on page 172.
Chapter 4. Working with Assets

Working with Multilingual Assets

This section contains the following procedures:

• Setting or Changing an Asset’s Locale Designation
• Creating a Translation of an Asset
• Examining the Available Translations of an Asset
• Deleting a Translation of an Asset
• Changing the Master Asset of a Multilingual Set

Setting or Changing an Asset’s Locale Designation

Before you can create a translation of an asset, the asset must have a locale designation assigned to it. (Typically, you assign the locale designation when you create an asset.)

If you want to create a translation of an asset that has no locale designation, follow the steps below, then continue on to step 4 of the next section, “Creating a Translation of an Asset,” on page 183.

You can also change the locale designation of an asset that already has one assigned to it, if necessary. For example, if the administrator decides to divide the asset’s locale into specific flavors, (such as dividing French into Canadian French and Belgian French) you can update your assets to use the new locale designations.

To set or change an asset’s locale designation

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset whose locale you want to set or change and open its “Edit” form:
   a. In the button bar, click Search.
b. In the “Search” form, click the asset type of the asset you want to find.
c. Enter the desired search criteria (if any) and click Search.
   For more information on searching, see the section “Finding Assets,” on page 81.
d. Scroll to the desired asset and click the asset’s Edit icon.
   Content Server displays the asset’s “Edit” form.

4. In the “Locale” drop-down list, select the desired locale for the asset.
5. Click Save.
   Content Server redisplays the translation asset in the “Inspect” form, showing the new
locale designation in the Locale field.

Creating a Translation of an Asset

Note
Before performing the steps in this procedure, note the following:

- Before you can create a translation of an asset, the asset must have a locale
designation already assigned to it. The asset’s locale is listed in the Locale field
of the asset’s “Inspect” form and is usually assigned by the user who creates the
asset.
   If the asset does not have a locale designation, follow the steps in “Setting or
Changing an Asset’s Locale Designation,” on page 182, then skip to step 3
of this procedure.
- If you are creating the first translation of an asset, you are automatically creating
a multilingual set consisting of the source asset and the translation. The source
asset will be automatically designated as the master asset of the multilingual set.
- Have the translated content ready before you create the translation asset.

To create a translation of an asset
1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset for which you want to create a translation and open its “Inspect” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
      For more information on searching, see the section “Finding Assets,” on page 81.
   d. Navigate to the desired asset and click its name.
      Content Server displays the asset’s “Inspect” form.
4. Create the translation asset and set its target language. In the **Translations** field, click **Translate** next to the desired target language.

   ![Translations](image)

   - **VideogamesMikroweltenArtikel**  
     - **Make Master**
     - **Translate**
   - **GameMicroworldsArticle**  
     - **(Master Asset)**
     - **en_US**  
     - **Translate**
   - **es_ES**  
   - **fr_FR**  

   **Note**

   A multilingual set can contain only one translation per locale. If a translation of the asset already exists in a given locale, the **Translate** function is replaced by a **Delete** (trash can) icon.

   Content Server copies the asset, sets the locale of the copy according to your choice from step 4, and displays the copy in a “New” asset form. The form is pre-filled with the content from the source asset.

5. Translate the asset. In the “New” form, do the following:

   f. Enter a name for the translation asset.

   **Tip**

   It is a good idea to name the new asset in a way that indicates it is a translation of the source asset.

   Note the following conventions when naming the asset:

   - The name must be between 1 and 64 alphanumeric characters.
   - The following characters are not allowed: single quote (‘), double quote ("), semicolon (;), colon (:), question mark (?), percent sign (%), less-than sign (<), and greater-than sign (>).
   - The name can contain spaces (except for names of flex attributes), but cannot start with a space.

   g. For each field, replace its content with an appropriate translation. When making your changes, you may see one or more of the following types of fields:

   - **Required fields.** Do not leave any required (highlighted) fields blank. If you do, you will not be permitted to save the asset. Make changes to all other fields as necessary.

   - **WYSIWYG text fields.** You may see one or more text fields that are WYSIWYG-enabled (What You See Is What You Get) via a WYSIWYG editor, such as FCKEditor (see “Working with the FCKEditor,” on page 112). These text fields allow you to enter and format your content using controls similar to those of Microsoft Word. For more information, see “Working with WYSIWYG Editors,” on page 111.
- **Date fields.** You may see a **Date Picker** (little calendar) icon next to a date field. Clicking the icon invokes the Date Picker attribute editor; see “Working with the Date Picker,” on page 123 for more information.

- **Image Picker fields.** You may see one or more fields that prompt you to select an image asset (to be associated with the asset you are creating) through the Image Picker attribute editor. In such cases, you will see a **Browse** button next to the field. Clicking the button displays a pop-up window showing thumbnails of the image assets you can select. For more information on Image Picker, see “Working with the Image Picker,” on page 114.

- **Clarkii Online Image Editor fields.** You may see a field (or fields) that allows you to edit images directly in the asset form, using Clarkii OIE. For detailed instructions, see “Working with the Clarkii Online Image Editor,” on page 117.

- **Flash content fields.** You may see a section in the asset form that prompts you to compose Flash content from Flash templates, images and text of your choice. For detailed instructions, see “Working with Flash Content,” on page 121.

- **Fields that prompt you to select assets.** You may see a field (or fields) that prompt you to select a flex parent or a template, or associate an asset (such as an image) with the asset you are creating.

  1) If the field displays a drop-down list, select the desired asset from the list. If the field displays an **Add Selected Items** button, proceed to the next step.

  2) In the tree, select the tab containing the asset you want to select as a value for the field. Consult your design team or administrator to find out which assets are available in which tabs of your tree.

  3) In the tab, select the desired asset.

  4) Click **Add Selected Items.** Content Server assigns the selected asset as a value for the field.

6. When you are finished, click **Save.** Content Server displays the translation asset you created in the “Inspect” form.

7. (Optional) If you want to see how the asset would look if it were published, you can preview it. To preview an asset, click **Preview** in the action bar at the top of the form. A new browser window opens and displays the asset in its rendered form. For more information, see “Previewing Assets” on page 95.

8. Review the assets associated with the translation asset to determine which associated assets need to be translated into the target language.

   a. In the asset’s “Inspect” form, scroll to the “Related Items” area and examine the assets associated with the translation you created.

   When you create a translation of an asset, Content Server automatically associates the associated assets of the source asset with the translation asset. Depending on the nature of the associated assets, you may want to translate them and associate the translated versions with the translation asset instead. For example, an image depicting a product might not require a localized version, but a data sheet for the product will need to be translated.
See Table 3, on page 181 for information on how Content Server handles asset relationships with respect to multilingual assets.

b. (Optional) If in step a you determined that one or more assets associated with the translation asset have to be translated, repeat steps 3–6 (and, optionally, steps 7–8) of this procedure for each associated asset requiring translation, then follow the steps in “Associating Assets,” on page 173 to associate the translated versions with the translation asset. (If an associated asset has its own set of associated assets, repeat step 8 for each asset related to the associated asset.)

9. (Optional) If you want to create additional translations of the source asset, repeat steps 3–8 of this procedure.

Examining the Available Translations of an Asset

If you want to check if a translation of an asset exists in a specific language, examine the Translations field in the asset’s “Inspect” form. If the desired translation appears in the field, you can open the translation by clicking its name.

To check whether a specific translation of an asset exists

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset whose translations you want to examine and open its “Inspect” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
      For more information on searching, see the section “Finding Assets,” on page 81.
   d. Navigate to the desired asset and click its name.
      Content Server displays the asset in the “Inspect” form.
4. Examine the Translations field to see whether the translation you are looking for exists.

   This is an existing translation. Click its name to open it in the “Inspect” form.

   A translation in this language does not yet exist in this set.

5. (Optional) Click the name of the translation to open it in the “Inspect” form.
Deleting a Translation of an Asset

You can delete a translation of an asset using the asset’s “Inspect” form.

To delete a translation of an asset

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset whose translation you want to delete and open its “Inspect” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
      For more information on searching, see the section “Finding Assets,” on page 81.
   d. Scroll to the desired asset and click the asset’s hyperlinked name.
      Content Server displays the asset’s “Inspect” form.
4. In the Translations field, click the Delete (trash can) icon next to the translation you want to delete.

<table>
<thead>
<tr>
<th>Translations:</th>
<th>VideospielMikroweltenartikel</th>
<th>Make Master</th>
<th>de_DE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GameMicroworldsArticle</td>
<td>(Master Asset)</td>
<td>en_US</td>
<td></td>
</tr>
<tr>
<td>es_ES</td>
<td>Translate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fr_FR</td>
<td>Translate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Content Server displays a message asking you to confirm the deletion.

5. If you are sure you want to delete the translation asset, click Delete This Item. Otherwise, click Cancel.

   Content Server displays a message confirming that the translation asset was deleted.
   The asset’s status in the database is changed to “void.” Standard searches will not retrieve assets that are marked as void.

Changing the Master Asset of a Multilingual Set

When you create the first translation of an asset, the source asset becomes the master asset of a multilingual asset set consisting of the asset itself and its translation. As more translations of the source asset are created, the multilingual set grows.

If you need to designate another member of the set as the master (for example, when the multilingual set is copied to a site in another language), you can do so from the “Inspect” form of any member of the set.
The following procedure shows you how to set a new master asset from the “Inspect” form of the set’s current master asset.

**Note**

If a multilingual set is being revision-tracked, you must manually check out all members of the set before you can change the set’s master asset. For instructions, see “Checking Out Assets,” on page 279.

**To change the master asset of a multilingual set**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the master asset of the multilingual set and open its “Inspect” form:
   a. In the button bar, click **Search**.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click **Search**.
      For more information on searching, see the section “Finding Assets,” on page 81.
   d. Navigate to the desired asset and click its name.
      Content Server displays the asset’s “Inspect” form.
4. In the **Translations** field, click **Make Master** next to the translation you want to designate as the new master asset of the multilingual set.

   ![Translations Field](image)

   Content Server refreshes the “Inspect” form showing the newly selected master asset in the **Translations** field.
Chapter 5
Using Start and End Dates

While you are planning upcoming changes to a web site, you can assign start and end dates to an asset. Once start and dates are assigned, you can preview how the asset’s web page will look at different times in the future. The feature you use to generate future versions of the web site is known as “Site Preview.”

Once an asset is published, the asset displays on the web only during the specified date range.

You can search by start and end dates to locate it in the database.

This chapter contains the following sections:
  • About Start and End Dates
  • Site Preview
  • Approval for Publishing
  • Publishing
  • Advanced Search
About Start and End Dates

Start and end dates are optional field values you can assign to assets. This date range indicates when assets will appear on a web site, should they be published. Fill in these dates on the Metadata tab of the “Edit” pane.

Start and end dates affect the function of Site Preview, as discussed in this chapter. Start and end dates also appear in Advanced Search options, giving you the ability to search for assets based on the date range in which they will appear on the web site.

Site Preview

Site Preview is a tool for visualizing your web site as you strategize upcoming content changes. With Site Preview, you can preview an asset’s web page as it will appear at any selected moment in the future. By generating possible versions of a web page, you can more easily decide what to publish and when.

Content Server uses the assigned start and end dates to determine whether to display the asset in the Preview window. An asset is displayed only when the selected preview date falls within the asset’s start/end date range.

Instructions on previewing a site as it will appear on future dates and the impact of start and end dates on Site Preview are given in the Site Preview chapter. See “Previewing Future Sites,” on page 193.

Note

For Site Preview to work properly, developers must include the asset:filterassetsbydate tag in the template of the page which displays the asset. See your site administrator for further information about the tag.

Approval for Publishing

Before an asset is published to a web site, you must approve the asset and all of its dependents for publishing. This process ensures that all the assets published at the same time are up to date prior to publishing.

The start date that you set does not necessarily have to be the date on which the item gets published. However, the asset will not display on the web site until its start date. Content Server warns you if you try to approve an asset for publishing at a date prior to the start date, as a fail-safe mechanism. This warning does not interfere with the publishing process. This is true for all the dependent assets that you are approving as well.

Content Server also warns you if you try to approve an asset for publishing after the end date. This warning does not interfere with the publishing process. If you publish an asset
after its end date, the asset will be published to its destination; however, the asset will not appear on the site (the asset has expired).

**Note**

For assets to be viewable on the web site only during the defined start/end date range, developers must include the `asset:filterassetsbydate` tag in the template of the page where the asset displays. See your site administrator for further information about the tag.

For more information on approving assets, see “Approval for Publishing,” on page 202.

### Publishing

If time-sensitive assets are scheduled for publishing, a warning icon is displayed if

- the scheduled publishing time precedes the asset’s start date, or
- the scheduled publishing time follows the asset’s end date.

This warning is for your information only and does not interfere with the publishing process. See “Approval for Publishing” for more information on the effects of the start/end dates on published assets.

For further information on publishing, see “Publishing,” on page 201.

### Advanced Search

For many assets, you are able to use an advanced asset search to find assets by their start and end dates. For more information on advanced search, see “Running an Advanced Search,” on page 83.
Chapter 6
Previewing Future Sites

Web sites change from moment to moment, day to day. With the Site Preview feature, you can view site assets as they will display on a site at any particular moment in the future. Start and end dates are a key part of Site Preview, which is an enhanced function of the regular preview feature. You can preview how a page will appear without setting start and end dates (the regular preview function), but by assigning a start and end date range to an asset, you gain the ability to visualize upcoming changes to a web site. Once you assign a start date and/or an end date to an asset, you can see how the page will change over time by selecting dates from the date picker on the preview screen in the Insite interface.

This chapter contains the following sections:

- About Site Preview
- Assigning Start and End Dates
- Previewing a Site as It Appears at a Future Time
About Site Preview

Site Preview is a tool for visualizing your web site as you strategize upcoming content changes. With Site Preview, you can preview an asset’s web page as it will appear at any selected moment in the future. By generating possible versions of a web page, you can more easily decide what to publish and when.

Perhaps you work with more than one item at a time, deciding what banners to display when, what articles, what graphics, and so on — some items displaying for a week, others for a month, some for just one day. With Site Preview, you can pinpoint any particular moment in the future and see what all the changes you and other content contributors are making will look like on the web site at that time.

---

### Note

In order to preview a page as it will appear at future dates:

- Start and end dates must be assigned in the metadata field as explained in “Assigning Start and End Dates,” on page 195.

- The template for the page in which the asset appears must contain the `asset:filterassetsbydate` tag. See your site administrator for further information.

---

Impact of start and end dates on Site Preview

You will need to consider the following factors when assigning start and end dates.

1. The start and end date range are the times you expect the asset to be displayed on the web site.

   Once you set a start/end date range, you can use Site Preview to compare how the page on which that asset appears might look on dates before, during, and after the date range.

   When you first preview an asset, you see its web page as it would appear on the asset’s start date. (If no start date is assigned, the current date is used for the preview.)

   Choose a future date from the date picker in the upper right corner of the preview screen, and you can view how that page would appear at the selected time. When you select a date that falls during the asset’s start/end date range, the preview shows how the asset’s web page will look during the period the asset is visible on the web site.

   Conversely, if you choose a date that falls outside that date range, you see the asset’s web page as it might appear before the item is published or after the item is no longer visible on the page.

   Note that the publication date of the asset does not affect when and how long the asset displays on the web site; this is controlled by the start/end dates.

2. Neither the start date nor end date is a required field:

   - An asset without both start and end dates is always displayed when previewed, regardless of the preview date (when an asset is not time-sensitive, its preview is a regular preview).

   - However, an asset with explicitly set start and/or end dates is displayed conditionally; that is:
Assigning Start and End Dates

Start and end dates are optional values that you can assign to assets. Start/end dates indicate the date ranges in which assets will be displayed in the preview window.

Complete information on start and end dates can be found in “Using Start and End Dates,” on page 189.

To assign a date range to an asset

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to edit:
   In the button bar, click Search. Do one of the following:
   a. To perform a simple search, in the “Search” form, click the asset type of the asset you want to find. Enter the desired search criteria (if any) and click Search.
   b. To locate an asset that has previously been assigned start and end dates, in the “Search” form, click Advanced Search next to the asset type you wish to find. Use the date picker to select the start and end date criteria for your search and click Search.

   For more information on searching, see the section “Finding Assets,” on page 81.
4. In the search results list, navigate to the asset you want to edit and click its Edit icon. Content Server displays the asset’s “Edit” form.

- If the asset has both a start and end date, it is displayed only within the specified date range.
- If the asset has only a start date, the asset is displayed on all dates including and after the start date. (It never expires.)
- If the asset has only an end date, the asset is displayed on all dates up to and including the end date.
5. Set the item’s start date and/or end date and time (optional).
   In the “Start Date” and/or “End Date” fields, select the date and time from the date picker.

6. Choose **Save Changes** to update the asset.
   The asset’s inspect form with the new start and end dates appears.

7. To preview the page at a future date, go to “Using Start and End Dates,” on page 189.

---

**Note**

Your administrator may have set default “Start Dates” and “End Dates” for this asset type. You can change the settings if you wish.
Previewing a Site as It Appears at a Future Time

When assets have been assigned start and end dates, you can preview site pages as they will appear at future times of your choice.

Note

In order to preview at future dates:

- Start and end dates must be assigned as explained in “Assigning Start and End Dates,” on page 195.
- The template for the page in which the asset appears must contain the asset:filterassetsbydate tag. See your site administrator for further information.

To preview a site as it will appear at a future time

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to edit:
   a. In the button bar, click Search. Do one of the following:
      1) To perform a simple search, in the “Search” form, click the asset type of the asset you want to find. Enter the desired search criteria (if any) and click Search.
      2) To locate an asset that has previously been assigned start and end dates, in the “Search” form, click Advanced Search next to the asset type you wish to find. Use the date picker to select the start and end date criteria for your search and click Search.

For more information on searching, see the section “Finding Assets,” on page 81.

b. In the search results list, navigate to the desired asset and click the preview icon (binoculars).

The preview window displays the page as it appears on the asset’s start date.
For example, if you preview an asset that appears on the FirstSite II (English language) home page and starts on a date in October 2009, the following screen is displayed:

4. **View the page as it will appear on a future date.**
   Use the date picker in the Preview window toolbar to choose the date and time.

5. **Select Go to refresh the preview window and display the page as it will appear on the chosen date.**
   The preview window displays the page as it would appear on the selected date.
For example, if you preview the FirstSite II (English language) home page for a date in December 2009, the following screen is displayed:

![Screen capture of FirstSite II home page previewed for December 2009. The screen shows holiday savings promotion and on-sale items for LCD TVs.]
Chapter 7

Publishing

The goal of using Content Server is to publish content to a web site where site visitors can read and interact with that content. When you publish, you copy assets from your management system to your delivery system (the system that hosts the web site) or to a local file folder.

This chapter describes the publishing process and the procedures used to approve assets for publishing. It includes the following sections:

- Publishing Methods
- Approval for Publishing
- Approval Tasks
- Setting an Export Starting Point
- Publishing Tasks
Publishing Methods

Content Server lets you serve content from your delivery system to client browsers in several ways:

- Dynamically by drawing requested content from the CS database, formatting, and delivering it at the time of the request (unless the content is already cached).
- Statically (in the form of HTML files) from a delivery system powered by Content Server.
- Statically (in the form of XML files) from a delivery system powered by an application other than Content Server.

To support both dynamic and static content, Content Server provides the following publishing methods:

- **RealTime (dynamic destination)** — This publishing method copies your assets from the CS management system database to the CS delivery system database, committing assets to the delivery database in dependency related groups. Your web server generates pages dynamically when visitors request them.
- **Mirror to Server (dynamic destination)** — This publishing method copies your assets from the CS management system database to the CS delivery system database. Your web server generates pages dynamically when visitors request them.
- **Export to Disk (static destination)** — This publishing method renders all of your assets into static HTML files according to the templates provided by the design team. Those files can then be uploaded to the web server of your delivery system.
- **Export Assets to XML (external destination)** — This publishing method converts your assets into individual XML files and stores them in a directory. These asset files can then be published to an external content delivery system designed to handle them.

When you approve assets for publishing, you choose one or more delivery types and/or publishing destinations. Delivery types and destinations are set up and managed by the administrator. Consult your administrator to find out where (which destinations) and how (using which delivery type) your content is published.

Approval for Publishing

Dependencies are conditions that determine whether an asset can be published. An asset dependency exists when there is an association of some kind between assets. For example, a “Page” asset has an association with a “Collection” asset. The “Collection” asset has an association with three “Article” assets. Two of these articles have associations with “ImageFile” assets. This tree hierarchy forms a set of parent/child dependencies among all these assets.

Before an asset can be published, it must be **approved** for publishing. Requiring approval is a safeguard against publishing an asset whose dependent assets (parents or children) are not ready to be published. This prevents broken links on the delivery system.

The **approval status** of an asset indicates whether the asset can be safely published; that is, whether any dependency conflicts exist. An asset’s approval status is determined by its dependency relationships, which include the approval status of all assets associated with a particular asset, as well as the dependency relationships of those associated assets.
Asset Version Dependencies

Content Server enforces version control between dependent assets by using one of the following approval dependency relationships:

- **Exists** – requires that an asset’s dependent assets merely exist on the target destination, regardless of version. For example, a parent and its child asset have been approved and published. The child asset is edited, but not approved. The parent is then edited. When the parent is approved, it can be published even though the child has been edited and not yet approved again, because the child asset already exists on the target destination. An appropriate analogy for an exists dependency is an article and a supporting image: if the image is edited (resized, for example), the article that uses it can still be published without reapproving the image.

- **Exact** – requires that parent and child assets have the same version stamp on the target destination. For example, a parent and its child asset have been approved and published. The child asset is edited, but not approved. The parent is then edited. When the parent is approved, it is held for publishing because the child has been edited but not yet approved. When the child asset is approved, the parent is ready to be published because the versions now match. An appropriate analogy for an exact dependency is the relationship between a set of instructions and a supporting diagram: if one changes, the other must change to ensure they match.

Approval States

Because of the dependencies between assets, as well as the nature of the dependencies, approving an asset involves the concept of approval states. For example, “held” is an approval state an asset enters when the asset is approved for publishing but its dependent assets are not. In such a case, the asset is then held from publishing until its dependents are approved. See “Approval States,” on page 211 for detailed descriptions of the possible approval states an asset can enter.

If an asset enters an approval state that prevents publication, Content Server displays a list of dependent assets that require approval. Once all assets are approved, they can be published.

Dependencies: Mirror to Server and RealTime Publishing

When you approve an asset for publishing to a CS-powered delivery system using the Mirror to Server or RealTime delivery type, Content Server determines the asset’s dependencies (as well as their nature), and checks the version stamps on the dependent assets. In order to be published, all of its dependents must either be approved (exact) or previously published (exists). If not, the asset is held, pending resolution, which typically involves approval of the dependent assets.

Approval dependencies are recorded at the time the asset is approved. If the asset is subsequently changed, the asset is no longer considered to be approved, and it must be approved again before it can be published.

Dependencies: External Publishing

Assets approved for publishing as XML files using the Export to XML delivery type follow the same approval logic as those published using dynamic publishing. Each asset’s dependents must either have been approved (exact) or previously published (exists); otherwise, the asset is held pending approval of its dependents. When the asset is approved and ready for publishing, it is written to an XML file; approved dependent assets are also
written to separate XML files. Dependent assets that were previously published are not written to XML files again, unless those assets have changed.

**Dependencies: Static Publishing**

For static publishing using the Export to Disk delivery type, Content Server uses the “Template” asset to determine asset dependencies. All the assets that are displayed by and linked to the rendering template are considered dependencies. If the assets displayed by the template have other assets linked to them, those linked assets are not, however, considered dependent. By default, the displayed assets have an exact dependency; the assets the displayed assets are linked to have an exists dependency.

Ultimately, the template designer determines the dependency type for the Export to Disk delivery type.

**Default Approval Template**

When publishing an asset, it is often desirable to use different templates, depending on the context. For example, you might want to place the same piece of content in the body of one page, but in a sidebar on another page. (Your administrator and/or design team will be able to provide information on which templates are available to you and when/how to use them.)

When you approve an asset, the template used to calculate dependencies should be the most inclusive; that is, the one that contains the most representative set of dependencies for all of the templates, even though it might not be the template that actually renders the asset on the delivery system. The template which you choose is called the default approval template.

The administrator can configure a default approval template for each asset type for each publishing destination. An asset subtype can be used to further categorize an asset type. This way, the administrator can assign more than one default approval template for assets of a specific type, based on some other organizing construct. The list of subtypes (if any) that is available for a given asset type appears in a drop-down list in the asset’s “New” and “Edit” forms (basic assets only).

If no default template is configured, the display template selected in the asset’s “New” or “Edit” form is used to determine dependencies.

**Export Starting Point**

An export starting point must be defined for a static destination before approved assets can be published. If you try to publish without a starting point, you receive the following message after selecting a static destination:

```
Publish destination: MyExportTarget
Destination: MyExportTarget using Export to Disk
Arguments:
No publish starting points defined for this export destination
```

A starting point says in effect, “publish this and everything associated with it”— that is, the asset designated as the starting point, and it and everything it links to is published, using the template assigned. You can have one starting point or several starting points. Minimally, you would want each root node (top-level page) to be an export starting point,
but you can also use it as a vehicle for exporting a subset of assets that you want to push to the delivery system. For more information, see the section “Publishing Approved Assets,” on page 222.

**Publishing Protection Mechanisms**

The system ensures the integrity of content during the approval and publishing process in the following ways:

- Approval and publishing tasks require the right permissions.
- All approval and publish activities are by destination.
- You cannot edit an asset approved for a destination where publishing is in progress until the asset is published.
- If an approved asset is open for editing when a publishing session to its approved destination begins, you cannot save the asset until the existing version is published.
- Publishing is incremental; that is, only assets that are new or have been modified since the last publishing session for a given destination are published to that destination. The administrator can, however, force all approved assets to be published to a given destination even if identical assets already exist on that destination.
- All assets approved and ready for publication that were not previously published to a given destination are published to that destination during a publishing session.
- When an asset is removed from the publishing queue, if it is a child of one or more assets approved for publishing to the same destination, the parent assets are automatically removed from the destination’s publishing queue as well.
Approval Tasks

This section describes how to approve assets for publishing. The examples used are based on the Burlington Financial sample site.

This section describes the following tasks:

- Approving an Asset for Publishing
- Checking an Asset’s Approval Status
- Resolving Approval Conflicts
- Removing Assets from the Publishing Queue

Approving an Asset for Publishing

Before you can publish an asset, it has to be approved for publishing. Asset approval can be either manual or automatic.

You can manually approve assets one at a time from the asset’s “Status” form. If the asset has dependent assets that need approval, Content Server displays a list of dependent assets which you can then approve in bulk. You cannot, however, perform bulk approval on a group of assets of your own choice; this capability is reserved to the administrator.

Asset approval can also be automated. For example, the Normal Article Process workflow included with the Burlington Financial sample site has a final step that automatically approves assets in the workflow for publishing to the included Static and Dynamic target destinations. (For more information, see the section “Sample Workflow,” on page 234.)

The following procedure describes how to manually approve an asset for publishing. Before approving an asset for publishing, you should preview it first.

To manually approve an asset for publishing

1. If Content Server’s interface is not already open, log in.
2. Find the asset you want to approve for publishing and open its “Inspect” form:
   - If the asset is currently assigned to you to work on:
     a) In the button bar, click My Work.
        Content Server displays the “My Work” view, showing the “My Assignments” list.
     b) In the “My Assignments” list, navigate to the desired asset and click its name.
   - If the asset is not currently assigned to you to work on:
     a) In the button bar, click Search.
     b) In the “Search” form, click the asset type of the asset you want to find.
     c) Enter the desired search criteria (if any) and click Search.

Note

You can also approve assets from the “Status” form; see the section “Checking an Asset’s Approval Status,” on page 209.
Chapter 7. Publishing

Approval Tasks

For more information on searching, see the section “Finding Assets,” on page 81.

d) Scroll to the desired asset and click the asset’s Inspect icon.

Content Server displays the asset’s “Inspect” form.

3. (Optional) To preview the asset before you approve it for publishing, click Preview in the action bar in the asset’s “Inspect” form.

Content Server opens a new browser window displaying the asset in its rendered form.
If you want to make changes to the asset, close the preview window and click Edit in the action bar to open the asset’s “Edit” form; make your changes and click Save to save the asset.
If you are satisfied with the way the asset looks, close the preview window and continue to the next step.

4. In the asset’s “Inspect” form, select Approve for Publish from the drop-down list in the action bar.

Content Server displays the publishing approval form:

5. Select the destination for which you want to approve the asset.

“Destination 1 (static)” and “Destination 2 (dynamic)” are supplied generic target destinations for the Export to Disk and Mirror to Server publishing methods, respectively. Your own site may be configured with different publishing destinations. Note that you can approve an asset for only one destination at a time; repeat this procedure for each additional destination.

Note
Consult your administrator to find out where (which destinations) and how (using which delivery type) your content is published on your system.
6. Click **Approve**.

   a. At this point, one of the following happens:
      - If the asset has no dependencies, Content Server displays a message confirming the approval of the asset for publishing to the selected destination.
      - If the asset has dependencies that are preventing publication, Content Server displays a list of the dependent assets:

         ![Image of the Approval for publish to Destination 1 (static) of Product: Global Fund screen](image)

         You must approve the following assets for destination Destination 1 (static) before Global Fund can be published:

         | Asset Type | Name          | Locate | Start Date | End Date | Days Expired |
         |------------|---------------|--------|------------|----------|--------------|
         |            | Fund Prospectus | -      | -          | -        | -            |
         |            | FundGraphPoint | -      | -          | -        | -            |
         |            | FundDetails    | -      | -          | -        | -            |
         |            | FundBuyPage    | 11/24/08 10:26 AM | 11/28/08 10:26 AM | -        | -            |

         If an information icon is displayed next to the dependent asset’s check box, it means that either the dependent asset’s start date is in the future or its end date is in the past (this information displays in a tooltip as you hold your cursor over the icon).

         You can still approve the asset; however, note that if
         - the approved asset is published before its start date or after its end date and
         - the template for its parent page includes the `asset:filterassetsbydate` tag,

         the asset will not display on the web site. See your site administrator for further information about the `asset:filterassetsbydate` tag. For more information about start and end dates, see “Using Start and End Dates,” on page 189.

   b. To approve the dependencies, select all assets for approval by clicking the check box in the header row, then click **Approve**.

      Content Server approves the dependent assets and calculates their dependencies. If any of the dependent assets have their own dependencies, Content Server displays a list of the dependent assets’ dependencies.

   c. To approve the dependencies, select all assets for approval by clicking the check box in the header row, then click **Approve**. Continue this process until all dependencies for all assets are approved.

      When all dependencies for the original asset are approved, Content Server displays a message confirming the original asset is approved for publishing to the selected destination.
Checking an Asset’s Approval Status

To check an asset’s approval status

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset whose approval status you want to check and open its “Status” form:
   - **If the asset is currently assigned to you to work on:**
     a) In the button bar, click **My Work**.
     Content Server displays the “My Work” view, showing the “My Assignments” list.
     b) In the “My Assignments” list, navigate to the desired asset and click its workflow state, listed in the **Workflow State** column.
   - **If the asset is not currently assigned to you to work on:**
     a) In the button bar, click **Search**.
     b) In the “Search” form, click the asset type of the asset you want to find.
     c) Enter the desired search criteria (if any) and click **Search**.
     For more information on searching, see the section “Finding Assets,” on page 81.
     d) Scroll to the desired asset and click the asset’s status name link in the **Status** column of the search results list.
     Content Server displays the asset’s “Status” form.
4. In the asset’s “Status” form, scroll down to the **Publishing Destination** section, which looks similar to the following:

   ![](image)

   The form displays the approval status of the asset for each destination that has been defined by the administrator for the current site. Depending on your configuration, you might not see all of the options described in this section. The available options are:
   - The **Preview this for destination** link — when clicked, Content Server displays the asset in its rendered form in the preview window.
   - **Approval State** — describes the asset’s present approval state. A link is provided if some action is required; for example, **Approve this asset**. For more information, see “Approval States,” on page 211.
   - **Template** — shows the rendering template currently assigned to the asset.
- The **Specify Path/Filename, Start Points** link — when clicked, Content Server displays the “Set Export Starting Point” form allowing you to set an export starting point when statically publishing an asset. For detailed instructions, see “Setting an Export Starting Point,” on page 219.

- **Start Points** — shows the export starting points currently set for this asset, if any.

- **Approve Dependents**, the **dependent assets** link — clicking this link displays all assets that are dependent on the current asset, regardless of their approval state:

<table>
<thead>
<tr>
<th>Dependent Type</th>
<th>Name Description</th>
<th>Status</th>
<th>Approval Status</th>
<th>Dependency Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF</td>
<td>Fund Prospectus</td>
<td>Edited</td>
<td>Approved</td>
<td>Exact</td>
</tr>
<tr>
<td>Template</td>
<td>FundGraphFront</td>
<td>Created</td>
<td>Approved</td>
<td>Exact</td>
</tr>
<tr>
<td>Page</td>
<td>FundBuyPage</td>
<td>Created</td>
<td>Held</td>
<td>Exists</td>
</tr>
<tr>
<td>Page</td>
<td>FundBuyPage</td>
<td>Created</td>
<td>Held</td>
<td>Exists</td>
</tr>
<tr>
<td>Template</td>
<td>FundDetails</td>
<td>Edited</td>
<td>Approved</td>
<td>Exact</td>
</tr>
</tbody>
</table>

- If an asset’s approval status is **Needs Approval**, you can click the **Needs Approval** link for that asset to approve the asset for publishing; when you do so, Content Server calculates that asset’s dependencies and the asset’s approval status changes to either **Approved** or **Held**.

- If an asset’s approval status is **Held**, you can click the **Held** link for that asset to view a list of the asset’s dependent assets that require publishing approval. To approve the dependent assets, select all assets for approval by clicking the check box in the header row, then click **Approve**. Content Server approves the dependent assets and calculates their dependencies. If any of the dependent assets have their own dependencies, Content Server displays a list of the dependent assets’ dependencies; again, select all assets for approval by clicking the check box in the header row, then click **Approve**. Continue this process until all dependencies for all assets are approved.

- If an information icon appears next to the dependent asset’s check box, it indicates that either the dependent asset’s start date is in the future, or the end date is in the past (this information displays in a tooltip as you hold your cursor over the icon).

  - If the dependent asset is published before its start date or after its end date and the template for its parent page includes the `asset:filterassetsbydate` tag, the dependent asset will not appear on the website. See your site administrator for further information about the `asset:filterassetsbydate` tag. For more information about start and end dates, see “Using Start and End Dates,” on page 189.

These events parallel the actions that you take in step 6 of the procedure described in the section “Approving an Asset for Publishing,” on page 206.
## Approval States

The following table lists the approval states that can appear in the Approval State field in an asset’s “Status” form for each publishing destination, what the states mean, and the action to take, as appropriate:

<table>
<thead>
<tr>
<th>State</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved. Approved and ready to be published to destination.</td>
<td>(Informational) This asset will be published at the next publishing event to this destination, unless the asset, or one of its dependent assets (in Exact dependencies), is edited.</td>
</tr>
<tr>
<td>Approved and published. Asset version is the same as that on</td>
<td>(Informational) An asset with an exact dependency has been published to this destination.</td>
</tr>
<tr>
<td>destination</td>
<td></td>
</tr>
<tr>
<td>Approved for inclusion as a link in pages exported to destination.</td>
<td>(Informational) This asset is approved for static publishing if it is linked to from the page that is being exported.</td>
</tr>
<tr>
<td>Asset has been modified since approved for publish to</td>
<td>(Action required) The asset must be reapproved. Click the Approve this asset link to initiate the approval process.</td>
</tr>
<tr>
<td>destination</td>
<td></td>
</tr>
<tr>
<td>Approved, but approval for publish to destination was based on</td>
<td>(Action required) The asset must be reapproved so that its version matches that of its dependents. Click the Approve this asset link to initiate the approval process.</td>
</tr>
<tr>
<td>versions of the dependent assets that no longer exist.</td>
<td></td>
</tr>
<tr>
<td>Held. This asset cannot be published until dependent assets</td>
<td>(Action required) The asset will be held until the dependents are approved. Click the Show assets preventing this asset from being published link to view and approve the dependents.</td>
</tr>
<tr>
<td>have been approved.</td>
<td></td>
</tr>
<tr>
<td>Needs approval. Not yet approved for publish to destination.</td>
<td>(Action required) The asset must be approved. Click the Approve this asset link to initiate the approval process.</td>
</tr>
<tr>
<td>This asset cannot be published until assets referring to this asset have been approved.</td>
<td>(Action required) A referring asset has to be approved before this asset can be published. Related assets that are held are also listed and may require approval. Click the Show assets preventing this asset from being published link to view and approve referring and related assets.</td>
</tr>
</tbody>
</table>
Currently checked out. Will not be published to destination.

(Action may be required) The asset is checked out under revision tracking. Although approved, it cannot be published until revision tracking relinquishes control in one of the following ways:

- Checkin – the asset must be reapproved.
- Undo Checkout – the asset remains approved and can be published.
- Rollback – the asset must be reapproved.

Table 1: Asset approval states (continued)
Resolving Approval Conflicts

Approval conflicts arise when an asset is approved but is held from publishing because dependent or referring assets have not been approved.

To resolve an approval conflict for a single asset, follow the steps in “Resolving an Asset’s Approval Conflicts,” on page 213

To resolve multiple approval conflicts globally for a specific destination, follow the steps in “Resolving Approval Conflicts Globally for a Destination,” on page 215.

Resolving an Asset’s Approval Conflicts

To resolve an asset’s approval conflicts

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset whose approval conflicts you want to resolve and open its “Status” form:
   - If the asset is currently assigned to you to work on:
     a) In the button bar, click My Work.
        Content Server displays the “My Work” view, showing the “My Assignments” list.
     b) In the “My Assignments” list, navigate to the desired asset and click its workflow state, listed in the Workflow State column.
   - If the asset is not currently assigned to you to work on:
     a) In the button bar, click Search.
     b) In the “Search” form, click the asset type of the asset you want to find.
     c) Enter the desired search criteria (if any) and click Search.
        For more information on searching, see the section “Finding Assets,” on page 81.
     d) Scroll to the desired asset and click the asset’s name.
     e) In the asset’s “Inspect” screen, click the link in the “Status” field.
4. In the asset’s “Status” form, scroll down to the publishing destination section, which looks similar to the following:

<table>
<thead>
<tr>
<th>Destination 1 (static)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval State:</td>
</tr>
<tr>
<td>Show assets preventing this asset from being published.</td>
</tr>
<tr>
<td>Select a Template:</td>
</tr>
<tr>
<td>FundDetails</td>
</tr>
<tr>
<td>File/Path:</td>
</tr>
<tr>
<td>Specify Path/FileName.</td>
</tr>
<tr>
<td>Start point:</td>
</tr>
<tr>
<td>Not an export starting point.</td>
</tr>
<tr>
<td>Approve Dependencies:</td>
</tr>
<tr>
<td>3 dependent assets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Destination 2 (dynamic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval State:</td>
</tr>
<tr>
<td>Needs Approval. Not yet approved for publish to Destination 2 (dynamic).</td>
</tr>
</tbody>
</table>

The form displays the approval status of the asset for each destination that is defined by the administrator for the current site.

a. Click the link Show assets preventing this asset from being published for the destination for which you want to resolve this asset’s approval conflicts.
Content Server displays a list of the asset’s dependencies requiring approval for the selected destination:

If an information icon appears next to the dependent asset’s check box, it indicates that today’s date is out of the start/end date range (this information displays in a tooltip as you hold your cursor over the icon).

- If the dependent asset is published before its start date or after its end date and
- the template for its parent page includes the `asset:filterassetsbydate` tag,

the dependent asset will not display on the website. See your site administrator for further information about the `asset:filterassetsbydate` tag. For more information about start and end dates, see “Using Start and End Dates,” on page 189.

b. Select all dependent assets for approval by clicking the check box in the header row, then click Approve.

Content Server approves the dependent assets and calculates their dependencies. If any of the dependent assets have their own dependencies, Content Server displays a list of the dependent assets’ dependencies; in such a case, select all dependent assets for approval by clicking the check box in the header row, then click Approve. Repeat this process until all dependencies for all assets are approved.

When all dependencies for the original asset are approved, Content Server displays a message confirming the original asset is approved for publishing to the selected destination:
Resolving Approval Conflicts Globally for a Destination

You can resolve approval conflicts for all assets that are held from publishing to a specific publishing destination.

To resolve approval conflicts globally for a destination

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Publishing.
   Content Server displays the Publish Console.

   **Note**
   If you do not see the Publishing button, stop here. You do not have the necessary permissions to access the Publish Console. Consult your administrator if you have questions about your permissions.

4. In the “Publish Destination” drop-down list, choose a destination and click Select Destination.
   Content Server displays the status form for that destination:

5. Click the link, **xx assets are being held for publish**.
   Content Server displays a list of held assets for the selected destination:

6. In the list, locate the asset whose dependency conflicts you want to resolve and click the asset’s Held link.
Content Server displays a list of the asset’s dependencies preventing the asset from being published:

![Image](https://example.com/image.png)

If an information icon displays next to the dependent asset’s type, it indicates that today’s date is out of the start/end date range (this information displays in a tooltip as you hold your cursor over the icon).

- If the dependent asset is published before its start date or after its end date and
- the template for its parent page includes the `asset:filterassetsbydate` tag,
the dependent asset will not appear on the website. See your site administrator for further information about the `asset:filterassetsbydate` tag. For more information about start and end dates, see “Using Start and End Dates,” on page 189.

7. Select all dependent assets for approval by clicking the check box in the header row, then click **Approve**.

Content Server approves the dependent assets and calculates their dependencies. If any of the dependent assets have their own dependencies, Content Server displays a list of the dependent assets’ dependencies; in such a case, select all dependent assets for approval by clicking the check box in the header row, then click **Approve**. Repeat this process until all dependencies for all assets are approved.

When all dependencies for the original asset are approved, Content Server displays a message confirming the original asset is approved for publishing to the selected destination:

![Image](https://example.com/image.png)

8. Repeat this procedure for each remaining held asset for the selected destination until you have resolved all approval conflicts. The batch of approved assets can then be published to that target destination.
Removing Assets from the Publishing Queue

If you decide not to publish an approved asset, you can unapprove the asset. When you unapprove, Content Server removes the asset from the publishing queue (for the given destination) and changes its status to “Needs Approval.” If the unapproved asset is a child (referenced asset), Content Server removes the parent (referring) assets from the publishing queue for the destination and changes their approval states to “Held.”

To remove an asset from the publishing queue

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Publishing.
   Content Server displays the Publish Console.

   **Note**
   If you do not see the Publishing button, stop here. You do not have the necessary permissions to access the Publish Console. Consult your administrator if you have questions about your permissions.

4. In the “Publish Destination” drop-down list, choose a destination and click Select Destination.
   Content Server displays the status form for that destination:

   ![Publish Console](image)

5. Click the link, **xx assets are ready for publish.**
Content Server displays a list of approved assets.

6. (Optional) Search through the approved assets.
   a. Enter a search term in the Search text box.
      - Search runs across asset names and descriptions.
      - You cannot use wildcard and boolean operators.
   b. Click Search.
      The Search Results tab opens, displaying the results of your search.

Click the X to close out this tab and return to the Approved Assets tab.
7. On either the Approved Assets tab or the Search Results tab, click the check box next to the asset(s) you want to unapprove. Click Unapprove.

Content Server removes the asset from the publishing queue and changes its approval state to “Needs Approval.” If the asset is a child (referenced asset) of one or more assets in the publishing queue, Content Server removes the parent (referring) assets from the queue and changes their approval states to “Held.”

8. (Optional) To view the hold queue:
   a. Click Back to return to the Publish Destination screen. Note that there are now two text links. One lists the assets held for publish, the other the assets approved for publish. Click the Assets Held for Publish link.

   b. For instructions on removing assets from the held queue, go to step 5 of “Resolving Approval Conflicts Globally for a Destination,” on page 215.

Setting an Export Starting Point

When you publish content using the Export to Disk delivery type, you must define a starting point for the publishing process so the system knows where to start publishing from. You specify a top-level asset and the system publishes that asset and all the assets it links to.

When you set an asset as a starting point, you also have to specify the template to use for the asset. You can specify multiple templates for different publishing contexts. For example, you might want to place the same piece of content in the body of one page, but in a sidebar on another page. (Your administrator and/or design team will be able to provide information on which templates are available to you and when/how to use them.)

To set an asset as an export starting point

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to set as an export starting point and open its “Status” form:
   - If the asset is currently assigned to you to work on:
     a) In the button bar, click My Work.
        Content Server displays the “My Work” view, showing the “My Assignments” list.
     b) In the “My Assignments” list, navigate to the desired asset and click its workflow state, listed in the Workflow State column.
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Setting an Export Starting Point

- **If the asset is not currently assigned to you to work on:**
  
a) In the button bar, click **Search**.
  
b) In the “Search” form, click the asset type of the asset you want to find.
  
c) Enter the desired search criteria (if any) and click **Search**.
     For more information on searching, see the section “Finding Assets,” on page 81.
  
d) Scroll to the desired asset and click the asset’s status name link in the **Status** column of the search results list.

  Content Server displays the asset’s “Status” form.

4. In the **Publishing Destination** section of the asset’s “Status” form, locate the desired static destination and click its **Specify Path/Filename, Start Points** link.

  Content Server displays the export starting point form:

```
For Destination: Destination 1 (static)
Path: PhilosophyArticles
Filename: GameMicroworldsArticle

Is this asset an export starting point? ☑ Yes ☐ No

+---+---+---+
|    |    |    |
|☐☐☐|☐☐☐|☐☐☐|
|☐☐☐|☐☐☐|☐☐☐|
|☐☐☐|☐☐☐|☐☐☐|
|☐☐☐|☐☐☐|☐☐☐|
|☐☐☐|☐☐☐|☐☐☐|

Using templates:
☐ Compact
☐ Full
☐ fullText
☐ LeadColumnaidSummary
☐ LeadSummary
☐ SidebarRow
☐ Summary

[Cancel] [Save]
```

5. Complete the form as follows:

a. **Path** (optional) If you want to override the path specified on the asset form (if any), enter it here.

   The path is appended to the `<cs_install_dir>/export` directory.

   For example, if you enter **PhilosophyArticles**, the path becomes:

   `<cs_install_dir>/export/PhilosophyArticles`

b. **Filename** (optional) If want to override the file name specified on the asset form (if any), enter it here.

   By default, Content Server names the file as follows:

   `site-assettype-template_assetid.html`

   However, if you enter your own value in the **Filename** field, that value replaces the asset ID in the Content Server-default file name.

   For example, if you enter **GameMicroworldsArticle**, the file name becomes:

   `site-assettype-template_GameMicroworldsArticle.html`
Note that Content Server’s default naming convention preserves file name uniqueness. If you override the default naming convention, you must manually ensure that the custom file name is unique.

**Note**

- The path and file name you specify in this form are specific to the selected destination. You can specify them independently of declaring the asset a starting point. Be sure to follow the naming conventions implemented by the administrator.
- If no values are entered and the asset itself has a path and file name specified, those values are used. Otherwise, Content Server uses its default naming convention to set the path and the file name.

Consult your administrator if you are unsure about the path and filename conventions in effect on your system.

c. Select the checkbox(es) for the template(s) to use for the starting point. (Selecting a template automatically makes the asset an export starting point and selects the Yes radio button in the “Is this asset an export starting point?” field.) You can select multiple templates to define multiple starting points; for example, you might want a text-only starting point and a graphics-rich starting point, in which case, you might select the respective templates.

d. Indicate whether to force the specified path.

Looking at the example, if you force the path, but not the file name, the path and file name become the following:

```
PhilosophyArticles/
site-assettype-template_GameMicroworldsArticle.html
```

e. Indicate whether to force the specified file name. Forcing the file name drops the site-assettype-template portion, so that the name becomes simply the file name.

Looking at the example, the path and file name then become the following:

```
PhilosophyArticles/GameMicroworldsArticle.html
```

If you are defining multiple starting points, you can force the file name for only one of them.

6. Click **Save**.

Content Server updates the asset’s “Status” form is with the specified information.
Publishing Tasks

This section describes the following tasks related to publishing previously approved assets:

- Publishing Approved Assets
- Viewing Current Publishing Activity
- Review the details for the selected publishing session.
- Viewing Publishing History

Note

- The publishing tasks described in this section are executed from the Publish Console. Consult your administrator to find out if you have the appropriate permissions to access the Publish Console.
- This section provides a brief overview of publishing tasks. Detailed documentation on publishing can be found in the Content Server Administrator’s Guide.

Publishing Approved Assets

As you approve assets, Content Server analyzes the dependencies of your assets and creates a list of any other assets that need to be approved, as well. When assets are published, they are either published to a local file directory or to a delivery server, depending on the publishing method configured by your administrator.

Publishing can be started immediately from the “Publish Console,” or it can be scheduled by the administrator to start at a specific time. In both cases, publishing occurs as a background process, so you can continue to work in Content Server’s interface. The assets being published are locked for editing but are still viewable.

Who can publish is a matter of site policies and procedures.

To publish approved assets

Note

- Before attempting to publish content, ensure that all approval conflicts for the destination you want to publish to are resolved. See “Resolving Approval Conflicts,” on page 213 for more information.
- Consult your administrator to find out if you have the permissions to publish assets.

1. If Content Server’s interface is not already open, log in.
2. Select the site you want to work with.
3. In the button bar, click Publishing. Content Server displays the Publish Console.
4. In the Publish Console, choose a destination from the “Publish destination” drop-down list and click Select Destination.
Content Server displays the appropriate “Publish” form, according to the chosen delivery type.

Keep the following in mind:

- The Export to Disk delivery type is reference-based; that is, the HTML files being published contain references to the approved assets.
- Remember that the Export to Disk delivery type requires an export starting point (see “Setting an Export Starting Point,” on page 219).
- For destinations configured for Mirror to Server and RealTime publishing, a green or red circle appears next to the destination name, indicating whether communication with the publishing destination has been established. Green means “established”; red means “not established.” The same information is available in a mouseover window (hold your cursor over the circle).
- If there are no assets ready to be published to the selected destination, the Publish button does not appear on the form.
- If the form shows a link named **xx assets are held for publish**, there are assets with unresolved dependency conflicts that you must resolve before you can publish those assets. See the section “Resolving Approval Conflicts,” on page 213 for information on resolving dependency conflicts from the Publish Console.

5. To view the list of approved assets, click the **xx assets are ready to publish** link:

![assets list](image)

Clicking **Back** returns you to the publishing status form for the selected destination.

6. To publish the approved assets to the selected destination, click **Publish**.

Content Server displays a confirmation dialog box.

7. Click **OK** to continue.
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Publishing Tasks

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Content Server displays the publish console Active tab. The name of the destination appears in the Active Tab and the circling green arrows rotate while the session runs.

Note
Using RealTime publishing, you can selectively publish approved assets (On Demand publishing). With all other methods, you can only publish all approved assets at once or none at all.

Viewing Current Publishing Activity

You can use the Publish Console to monitor the status of the publishing sessions to which you have permissions currently in progress. The information appears in the Active tab of the Publish Console.

To examine current publishing activity
1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Publishing.
   Content Server displays the Publish Console.
4. Active publishing sessions display in the Active tab:

Keep the following in mind:
- Circling green arrows appear in the Active tab while a session is running or paused.
- This list displays currently running publishing sessions (by destination) that were initiated either manually from the Publish Console or automatically as a scheduled event. The sessions are listed in the order they were initiated, with the most recent one first.
- Session status can be either Running or Paused (a partially completed session that will continue only after user input; this status applies to RealTime publishing only). To continue a paused session, click the Resume (arrow) button that appears at the right side of the row.
- In RealTime publishing, you can click the Cancel button (square) to cancel the publishing process.
- Click the View Log icon to view logs of the publishing session.
5. Click the destination name link. For RealTime publishing sessions, the Publishing Status screen opens:

- **Restart button.** Available only when a delayed publishing session pauses.
- **Redo button.** Available only if the first three stages complete successfully.
- **Cancel button.** Click to end an active publishing session.

For all other publishing methods, the “Publish Session” screen opens:

Review the details for the selected publishing session.
Viewing Scheduled Publishing Tasks

If your administrator has set them up, publishing schedules for all destinations to which you have publishing permissions can be viewed in the Scheduled tab of the Publish Console.

To view scheduled publishing activity

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Publishing.
   Content Server displays the Publish Console.
4. In the Publish Console, click the Scheduled tab:

   ![Scheduled Publishing Tab](image)

   Mouse over the “Publish Schedule” code line to read the schedule.

   ![Publish Schedule Code](image)

   Keep the following in mind:
   - The administrator schedules publishing sessions by destination.
   - Schedule information is available for all destinations across all sites.

Viewing Publishing History

You can view the results of completed publishing sessions to which you have permissions in the History tab of the Publish Console.

To view the publishing history

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Publishing.
   Content Server displays the Publish Console.
4. In the Publish Console, click the **History** tab:

![Publish Console history tab](image)

Keep the following in mind:

- This list displays up to 10, 20, 30, or 50 completed publishing sessions per page, depending upon the user selection. The most recent session appears first.

- Status can be either **Success**, **Cancelled** (user cancelled the session; this status applies only to RealTime publishing), or **Failed** (an error occurred while the session was running that prevented all assets from publishing).

- To view a summary of a completed session, mouse over the “Destination” name link.

- Access the session logs by clicking the **View Log** icon.

- If available, click **Redo** to begin a RealTime publishing session that failed after the assets were deserialized and saved to the destination.

- To delete a session record, select the session(s) to delete, then click **Delete**. **Clear History** deletes all sessions.
Chapter 8

Workflow

Most web sites are produced by a team of people in which different individuals assemble content, edit and review it, decide what goes where and when to update the pages. Work flows from one person to the next in a predictable way, and that process is called workflow.

This chapter presents a brief overview of workflow concepts followed by procedures on how to perform specific tasks related to workflow. It includes the following sections:

- Overview
- Sample Workflow
- Using Your Assignment List
- Viewing the Status of an Asset
- Using Workflow Functions
- Working with Workflow Groups
- Working with Workflow Reports
Overview

The following sections describe basic workflow concepts and terminology.

Workflow and Assets

Assets can (but do not have to) be assigned to a workflow. A workflow routes an asset through a series of editorial tasks (states) by assigning the tasks to the appropriate users at the appropriate times. Either specific assets or all assets of a certain type can be assigned to a workflow. Assets can also be grouped to flow through the same workflow in unison.

Depending on how your site is configured, assets might be assigned to a workflow either automatically (for example, when you create a new asset) or manually. The workflow system lets Content Server direct and track the assignment of assets to users and specifies what users can do with those assets through permissions.

The flow of the editorial tasks performed on the asset, as well as who is authorized to perform those tasks at each point in the workflow is defined by a workflow process. The workflow administrator can define as many workflow processes per asset type as needed.

States and Steps

A workflow process defines a series of states. A state is a point in the workflow process that represents the status of the asset at that point, for example, “Ready for Review” or “Ready for Approval.”

States are linked together in a specific order by steps. A step is the movement of the asset between states. Because creating workflow steps links workflow states in a specific order, creating steps in a workflow process is what organizes the process. In each step, the asset goes from a start (“from”) state to an end (“to”) state. When creating the workflow process, the administrator defines the states and links them via the appropriate steps.

Steps and states have names; for example, in the Burlington Financial sample site, “Send for Review” is a step originating from the “Workflow Initiated” state and resulting in the “Ready for Review” state. An asset can move from one state to another via more than one step. For example, an “Article” asset in the “Ready for Review” state can be rejected because of factual errors (via the “Reject for Error” step) or for stylistic problems (via the “Reject for Style” step).

Assets are assigned to users by role. As an asset progresses through the workflow, each step assigns it to users holding role(s) authorized to work on the asset in the next state. For each step, there is at least one role authorized to complete work on an asset and allow it to continue moving through the workflow. In certain cases, a user holding the appropriate role can choose between steps; for example, a user holding the Approver role can either approve or reject an asset assigned to him/her for approval.

When you log in to Content Server’s interface, you see all the assets that are assigned to you. When your work on the asset is complete, you use the Finish My Assignment note.

Note

During workflow, the asset is not electronically transferred from one person (or group) to the next. What is transferred is permissions to the asset. The asset itself remains in its original location in the database throughout the workflow process and throughout its lifetime in Content Server.
function to invoke the next step in the workflow; the workflow process then moves the asset to the next state and assigns the asset to the appropriate users. Note that a step can be conditional: that is, certain users or all users can be prevented from taking a step until some condition is met.

Users, Roles, and Participants

A user in Content Server is a person who is assigned a Content Server user name which he/she uses to identify him/herself and to log in to the system. What a user can or cannot do is determined by the role (or roles) assigned to that user by the administrator.

A role describes and determines the function(s) of a user in a CM site by granting him/her permissions to perform specific functions; in the context of workflow, these permissions are called function privileges.

The workflow process grants roles (not individual users) the appropriate function privileges. The function privileges are enforced only when an asset has been assigned to a workflow. Function privileges depend not only on the user’s role, but also on the state of the asset and whether or not the asset has been assigned to the user.

Note

Because function privileges are granted to a user through his/her role(s), they function independently of the access permissions assigned by the administrator at the user level.

For example, a user might not normally have the permission to edit “Article” assets, but he/she can have the function privilege to do so if he/she has the Editor role, is participating in a workflow process for “Article” assets, and the asset he/she wants to edit is in the appropriate workflow state.

Each role required by a particular workflow state in a workflow process is a participating role. Participating roles are chosen for each state in a workflow process by the administrator. Each user whose assigned role(s) match those required by that workflow state is therefore a participant for that state in the workflow process and is authorized to take the workflow step leading from that state to the next state.

Unless the administrator decides otherwise, assets placed in workflow are assigned to all available participants for a given role. You can, however, limit which users can work with a particular asset by choosing the desired assignees from among the participants available in each participating role.

An assignee is a workflow participant chosen to work on a specific assignment. The ability to choose assignees is granted to specific roles, as defined in the workflow process. Assignees are set when an asset is assigned to a workflow, but can also be changed when an asset is already in a workflow process. When choosing assignees, you select at least one user for each role.

When assignees are set for a given asset in the workflow, only the chosen assignees will see the asset in their assignment lists, and only they will have to complete the assignment before the workflow process changes the state of the asset.
Workflow Assignments

An assignment is an asset that a chosen participant (an assignee) is (or is supposed to be) working on. An asset appears on the participant’s assignment list as soon as the asset enters a state for which the participant has a role to fulfill.

A typical workflow design generates an e-mail notification when you are given a workflow assignment. You see your assignments in the “My Work” view when you log in to Content Server’s interface. When you are logged in, you can see an updated list of your assignments at any time by clicking the My Work button in the button bar.

Assignment Duration

Each workflow state has an associated estimated time to completion (deadline) for an assignment. If the administrator has granted you the appropriate permission, you can override the default estimate for the next assignment. The estimated time to completion is noted in the Due column of the assignment list.

As the assignment deadline nears, associated assignment actions in the form of e-mail notifications can be triggered as timed events relative to the estimated time to completion. For example:

- You receive a reminder the day before your assignment is due.
- You and the workflow initiator receive a warning the day the assignment is due.
- The initiator receives notification the day after the due date that the assignment has not been completed.

Voting Your Assignments

If you participate in workflow, you have a vote. Voting means taking a workflow step that moves the asset from its current state to the next, after you have completed the task required by the current workflow state (such as editing an article) and committed the changes to the CS database (saved the asset), if applicable. You cast your vote by using the Finish My Assignment function (available in the “Workflow commands” drop-down list in the asset’s “Status” form). If more than one participant with a given role has the assignment, either one, or all of them must vote before the asset moves to the next state, depending on how the workflow was set up by the administrator.

Depending on your role in the workflow process, the Finish My Assignment function can give you a choice of steps to take; for example, if you are an approver and your current assignment is to either approve an asset for publishing or reject it, you can use the Finish My Assignment function to invoke either a step that approves the asset for publishing, or a step that rejects it due to factual error, depending on your choice. When you vote, the asset moves to the next workflow state unless the step you chose is in disagreement with the step chosen by other assignees with the same role as you.

If, for some reason, you are unable to complete your assignment, you can abstain from voting, as long as yours is not the last (or only) vote for that particular role and/or step. When you abstain, you still have the assignment, but the asset can continue through workflow. If you change your mind, you can reverse your abstention by voting again (using the Finish My Assignment function), as long as the asset has not already moved to the next state.
Delegating Your Assignments

Another way of handling an assignment is to delegate it to another participant holding the same role as you, assuming the asset you are delegating is not already assigned to that person for the current workflow state.

Your function privileges (set by the administrator) determine whether you can delegate your assignments. Also, the administrator can delegate assignments on your and other assignees’ behalf, if necessary.

Delegating an assignment can trigger associated delegate actions in the form of e-mail notifications. For example:

- The recipient of the new assignment is notified.
- The workflow administrator is notified of the assignment delegation.

Deadlocks

An asset moves from one state to the next when assignees cast their votes (that is, take a step) using the Finish My Assignment function. When defining the workflow process, the administrator decides whether each step is all-voting, that is, all assignees must vote (take the step) for the asset to move to the next state. By default, steps are not all-voting, which means that the first assignee to vote in a given workflow state determines the flow of the asset, and the assignments for the remaining assignees for that workflow state are cancelled. If the administrator set the step to be all-voting, the asset is held in its current workflow state until all assignees have voted, at which time the asset moves to the next state.

If there is a choice of steps and each step is all-voting, the potential for a deadlock exists. A deadlock occurs when all of the assignees must vote, and the voting is not unanimous on which step to take. A workflow process typically includes a deadlock action to generate e-mail notifications to all assignees, showing the vote tally and advising all assignees to vote again in favor of the majority. Deadlocks cause additional work for all the users involved, and should be avoided whenever possible. They should also be resolved as quickly as possible so that the flow of work is not hindered.

Group Deadlocks

For workflow groups, the administrator can choose when to force assets to move together on a step-by-step basis, by flagging a workflow step as group synchronized. When a step is group synchronized, it causes all assets in the group to move to the next state in unison; that is, the assets in the group are held in the current workflow state until all assets have been voted on.

An individual asset can be deadlocked in a workflow group just as it can in normal workflow: different all-voting steps (especially if they are group synchronized) can lead to different states and a non-unanimous vote among the assignees can bring the workflow group to a halt. Just like single-asset deadlocks, group deadlocks cause additional work for all the participants involved, and should be avoided whenever possible.
Sample Workflow

The Burlington Financial sample site includes a sample workflow process, **Normal Article Process**, which guides an “Article” asset from creation to approval for publishing. The sample workflow is simple, transitioning through three states via six possible steps, but it serves to illustrate how a workflow process works.

This sample workflow process has four roles participating: Author, Editor, Checker and Approver. Each role has only a single participant and the participant’s user name reflects their role; for example, user_author holds the author role. (Your organization will most likely have more complex processes, with several users participating in each role.) A participant from any of the four roles can create a new “Article” asset and assign it to the Normal Article Process workflow. By assigning the asset, workflow is initiated. The article then moves from author to editor to checker and approver. The checker and approver can either approve or reject the article. If either one rejects the article, it goes back to the editor. Both the checker and the approver must vote in agreement to approve the article for publishing. The next section describes a sample workflow process included in the Burlington Financial sample site.

Sample Workflow States and Steps

The flow of the Normal Article Process workflow is shown in the following diagram:

![Sample Workflow Diagram](image_url)
The steps and states from this workflow process are described in the following table:

<table>
<thead>
<tr>
<th>Article in State...</th>
<th>Step</th>
<th>Description</th>
<th>Article Moves to State...</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>StartStep</td>
<td>A user with any of the four roles—author, editor, checker, or approver—assigns an “Article” asset to the Normal Article Process workflow.</td>
<td>Workflow Initiated</td>
</tr>
<tr>
<td>Workflow Initiated</td>
<td>Send for Review</td>
<td>A user with the author role receives e-mail notification of the assignment. The author writes and revises the article to complete the assignment.</td>
<td>Ready for Review</td>
</tr>
<tr>
<td>Ready for Review</td>
<td>Send for Approval</td>
<td>A user with the editor role receives an e-mail notification of the assignment. The editor makes some revisions to the article to complete the assignment.</td>
<td>Ready for Approval</td>
</tr>
<tr>
<td>Ready for Approval</td>
<td>Reject for Error</td>
<td>A user with the approver role receives an e-mail notification of the assignment. The approver completes the assignment by rejecting the article because of factual errors. The rejection triggers a notice to the editor, who must make some corrections and resubmit the article for approval.</td>
<td>Ready for Review</td>
</tr>
<tr>
<td>Reject for Style</td>
<td>A user with the checker role receives an e-mail notification of the assignment. The checker completes the assignment by rejecting the article over stylistic objections. The rejection triggers a notice to the editor, who must make some corrections and resubmit the article for approval.</td>
<td>Ready for Review</td>
<td></td>
</tr>
<tr>
<td>Approve for Publishing</td>
<td>Both the approver and the checker complete their respective assignments by approving the article. The “Article” asset is flagged in the CS database as “ready to publish” for selected destinations. It is then removed from workflow.</td>
<td>none</td>
<td></td>
</tr>
</tbody>
</table>
Sample Workflow Scenario

This section describes the typical flow of an “Article” asset through the Normal Article Process sample workflow.

1. **A user creates the “Article” asset and assigns it to the workflow**

   The process starts when one of the eligible users creates the “Article” asset and assigns it to the workflow.

2. **The author writes the article and sends it for review**

   Ada the author receives e-mail notification of the assignment. The “Article” asset is in the “Workflow Initiated” state (the first state in the workflow). Ada writes the article, saves the “Article” asset, and uses the **Finish My Assignment** function to send it on for review.

   The workflow process changes the state of the article to “Ready for Review,” assigns it to Edie the editor, and sends Edie an e-mail notice about the new assignment.

3. **The editor edits the article and sends it for approval**

   Edie the editor logs in, sees her assignment list, and opens the “Article” asset for editing. She reads the article and fixes some punctuation. When done, Edie saves her changes and uses the **Finish My Assignment** function to send it on for approval.

   The workflow process changes the state of the article to “Ready for Approval,” assigns it to Alan the approver and to Charlie the checker, and sends them e-mail notices about their new assignment.

4. **The checker and approver approve the article**

   - **The approver approves the article**

     Alan the approver is already logged in, so when he receives his e-mail, he uses the **My Work** function to display his assignment list. Alan opens the newly assigned “Article” asset and examines it. It looks fine, so he uses the **Finish My Assignment** function. Because Alan can either approve or reject the article, the workflow process presents both options to him. However, since the approval step is all-voting, when Alan approves the “Article” asset, its state does not change until Charlie the checker also approves it.

   - **The checker approves the article**

     Charlie the checker examines and approves the article.

     If either Charlie or Alan had rejected the article, it would have returned to Edie the editor. Because Charlie and Alan have approved it, the article is automatically approved for publishing and removed from workflow.

     **Note**

     In the Normal Article Process workflow, a rejection by either the approver or the checker cancels the assignment of the other person and returns the article to the editor. Your administrator might set up a workflow in which a disagreement like this causes a deadlock (see “Deadlocks,” on page 233) that has to be resolved before the asset is returned to the previous state or moved to the next one.
Using Your Assignment List

When you first log in to a site, Content Server displays the “My Work” view in the workspace. Your assignments are listed in the “My Assignments” section of the “My Work” view.

As you work in the interface, new assignments might be given to you, and you may complete some of your current assignments, causing your assignment list to become outdated. To update your list while you are currently logged in, click the My Work button on the button bar to display a refreshed “My Work” view that appeared when you first logged in. The “My Work” view shows the “My Assignments” list, for example:

Notice that each assignment has a Due column. Each value in the Due column appears with color and symbols to indicate the status of the assignment:

<table>
<thead>
<tr>
<th>Color/Symbol</th>
<th>Status of the Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Due within the time shown</td>
</tr>
<tr>
<td>Orange</td>
<td>Due in less than 24 hours</td>
</tr>
<tr>
<td>Bold Orange</td>
<td>Due in less than 1 hour</td>
</tr>
<tr>
<td>Bold Red with plus sign (+)</td>
<td>Overdue by the time shown</td>
</tr>
</tbody>
</table>

The due and past due events can trigger e-mail to the other participants in the workflow, if timed events are set accordingly for the workflow process. If there is no assignment deadline shown for the asset, it means that none was set.

Any assets that appear under My Completed Assignments Still Pending are assets that you voted on and that are now queued, waiting for all participants in the role to vote.
Viewing the Status of an Asset

Many of the procedures that appear in this section instruct you to view an asset’s status, that is, to open the asset in the “Status” form. The “Status” form shows asset status information consisting of the asset’s current workflow state, its assignees, and a history of assignments for the asset (showing the action taken for each assignment) in the current workflow. The “Status” form also shows whether the asset is approved for publishing and for which destinations. Most importantly, the “Status” form contains the “Workflow commands” drop-down list from which you invoke the workflow functions described in this section.

The “Status” form of an asset can be accessed in a number of ways:

- From the “My Assignments” list
- From the asset’s “Inspect” form
- From the asset’s “Edit” form
- From the tree

Viewing the Status of an Asset from the “My Assignments” List

To view the status of an asset from the “My Assignments” list

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Open the “My Work” view by clicking **My Work** in the button bar.
4. In the “My Assignments” section of the “My Work” view, navigate to the desired asset and click its workflow state (listed in the **Workflow State** column), as follows:

Viewing the Status of an Asset from the “Inspect” Form

To view the status of an asset from the “Inspect” form

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset whose status you want to view and open its “Inspect” form:
   a. In the button bar, click **Search**.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click **Search**.
   
   For more information on searching, see the section “Finding Assets,” on page 81.
   
   d. In the list of search results, navigate to the desired asset and click its **Inspect** icon.
4. Open the asset’s “Status” form by doing one of the following:
   - In the asset’s “Inspect” form, select **Status** from the drop-down list in the action bar.
   - In the **Status** field of the asset’s “Inspect” form, click the hyperlinked status description, as follows:

   ![Status Form Example](image)

   **Viewing the Status of an Asset from the “Edit” Form**

   To view the status of an asset from the “Edit” form
   1. If Content Server’s interface is not already open, log in.
   2. If prompted, select the site you want to work with.
   3. Find the asset whose status you want to view and open its “Edit” form:
      a. In the button bar, click **Search**.
      b. In the “Search” form, click the asset type of the asset you want to find.
      c. Enter the desired search criteria (if any) and click **Search**.
         
         For more information on searching, see the section “Finding Assets,” on page 81.
      d. In the list of search results, navigate to the desired asset and click its **Edit** icon.
   4. In the **Status** field of the asset’s “Edit” form, click on the hyperlinked status description, as follows:

   ![Status Field Example](image)

   **Viewing the Status of an Asset from the Tree**

   To view the status of an asset from the tree
   1. If Content Server’s interface is not already open, log in.
   2. If prompted, select the site you want to work with.
   3. In the tree, select the tab that contains the desired asset:
      - If the asset is in your Active List, select the **Active List** tab.
- If you have recently worked with the asset, select the **History** tab.

**Note**

Since the tabs you see in the tree are set up by the administrator, consult your administrator to find out which tabs contain which assets.

4. Select the asset whose status you want to view.
5. Right-click the desired asset and select **Status** from the pop-up menu that appears.
Using Workflow Functions

The following subsections describe the workflow functions you use in Content Server’s interface. These functions are available in the “Workflow commands” drop-down list in the asset’s “Status” form (see “Viewing the Status of an Asset,” on page 238 to learn how to access this form). Depending on your function privileges and the way your site is configured, not all of the described functions might be available to you.

This section describes the following topics:
- Assigning an Asset to a Workflow
- Setting a Process Deadline
- Setting an Assignment Deadline
- Finishing Your Assignments
- Delegating Your Assignments
- Abstaining from Voting
- Resolving Deadlocks
- Removing an Asset from Workflow
- Viewing an Asset’s Participant (Assignee) List
- Setting Workflow Participants
- Examining the Workflow Progress of an Asset

Assigning an Asset to a Workflow

An asset can be assigned to a workflow either automatically or manually.

Automatic workflow assignment is set up by the administrator for selected asset types. When you create a new asset of such type, the asset is automatically placed in the workflow process assigned to that asset type. Consult your administrator to find out which asset types are set up for automatic workflow assignment.

Manual workflow assignment is available to users with appropriate permissions, assuming a workflow process is assigned for the asset type of the asset you want to assign to a workflow.

To manually assign an asset to a workflow

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to assign to a workflow and open its “Status” form:
   a. In the button bar, click Search.
b. In the “Search” form, click the asset type of the asset you want to find.

c. Enter the desired search criteria (if any) and click **Search**.

For more information on searching, see the section “Finding Assets,” on page 81.

d. In the search results list, navigate to the desired asset and click its status description (listed in the **Status** column).

Content Server displays the asset’s “Status” form, similar to the one below:

<table>
<thead>
<tr>
<th>Article: GameMicroWorldsArticle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Version 3</strong></td>
</tr>
<tr>
<td><strong>Check Out</strong></td>
</tr>
<tr>
<td><strong>Rush</strong></td>
</tr>
<tr>
<td><strong>New versions</strong></td>
</tr>
<tr>
<td><strong>Name:</strong> GameMicroWorldsArticle</td>
</tr>
<tr>
<td><strong>Description:</strong> Progression of Aura and Holding Power in and of Virtual Worlds Inside Computers</td>
</tr>
<tr>
<td><strong>Status:</strong> Edited</td>
</tr>
<tr>
<td><strong>Modified:</strong> Jan 18, 2007 3:55:50 PM by admin</td>
</tr>
</tbody>
</table>

**Workflow commands:**
- **<Select Workflow Action>**

**Workflow process:**
- This asset is not in Workflow.

**Workflow state:**
- There are no current assignments. Workflow is inactive.

**Workflow history:**
- This asset has no workflow history.

4. In the asset’s “Status” form, choose **Select Workflow** from the “Workflow commands” drop-down list. The “Select Workflow” form, similar to the one below, opens:

**Select Workflow for Article: GameMicroWorldsArticle**

<table>
<thead>
<tr>
<th>Article Name: GameMicroWorldsArticle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong> Progression of Aura and Holding Power in and of Virtual Worlds Inside Computers</td>
</tr>
</tbody>
</table>

**Workflow Process:**
- Select Workflow Process

<table>
<thead>
<tr>
<th>Action to Take:</th>
</tr>
</thead>
</table>

5. In the “Select Workflow” form, choose a workflow process from the “Workflow Process” drop-down list. Optionally, you can enter instructions in the **Action to Take** field; these instructions are for the person receiving the assignment.
6. If the administrator enabled the selection of participants for this assignment, a **Set Participants** button appears next to the “Workflow Process” drop-down list. When that happens, do one of the following:

- If you do not want to choose assignees (a participant who receives an assignment is an assignee) for this assignment, click **Select Workflow**. Content Server assigns the asset to the workflow you selected and gives the assignment to all users whose roles were defined by the administrator as participating in the selected workflow.

- If you decide to choose the participants you want to give this assignment to, click **Set Participants**.

Content Server displays the “Set Participants” form, similar to the image below:

Each participant you select in this form becomes an assignee for this assignment. Choose the desired assignees for this assignment by selecting their user names in each of the role lists. You can select multiple user names by **Ctrl-clicking** each user name you want to select. You can also select a range of user names by **Shift-clicking** the first and last user name in the range. When you have chosen the desired assignees, click **Set Participants**.
7. Content Server refreshes the asset’s “Status” form. A confirmation similar to the one below is shown at the top of the form:

At this point, the asset is in workflow; participants with roles required by the next state typically receive e-mail notifications of their assignments.

**Setting a Process Deadline**

A process deadline is the overall time allotted for an asset to pass through a workflow process. By default, no process deadline is set. This deadline is independent of the assignment deadline described later in this section; that is, the total of the individual assignment deadlines does not necessarily add up to a process deadline.

**Note**

Deadlines are informational only — the system does not impose any sort of penalty or issue error messages when a deadline is exceeded.

Before you can set a process deadline, the workflow administrator must first have done the following:

- Allowed a process deadline to be set for this workflow process.
- Assigned you a workflow administrator role for the workflow process, or otherwise provided you with the right function privileges.

The option to set a process deadline is available only if both of these conditions are met. Contact your administrator to find out if you have the appropriate privileges and whether setting a process deadline is enabled for the workflow process in question.
To set a process deadline

Note
This procedure describes how to set a process deadline via an asset’s “Status” form. You can also set a process deadline when you perform the following tasks, assuming you have the right privileges and the option for setting a process deadline is enabled by the administrator for these tasks:

- Placing an asset in workflow (see “Using Workflow Functions,” on page 241)
- Creating a workflow group (see “Setting Up a Workflow Group,” on page 262)
- Editing a workflow group (see “Editing or Deleting a Workflow Group,” on page 268)
- Adding an asset to a workflow group (see “Adding Multiple Assets to a Workflow Group,” on page 266)

In such cases, the forms you use to complete these tasks will include a Set Process Deadline field.

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset for which you want to set a process deadline and open its “Status” form:
   a. In the button bar, click My Work.
      Content Server displays the “My Work” view, showing the “My Assignments” list.
   b. In the “My Assignments” list, navigate to the desired asset and click the asset’s hyperlinked workflow state name in the Workflow State column.
      Content Server displays the asset’s “Status” form.
4. In the asset’s “Status” form, select Set Process Deadline from the “Workflow commands” drop-down list.

Note
If you do not see the Set Process Deadline function in the “Workflow commands” drop-down list, stop here. The function has not been enabled by the administrator or you do not have the right permissions to access it.
The “Set Process Deadline” form opens:

5. Enter a time and date in the prescribed format. When setting a process deadline, you should consider where the asset is in the workflow process, and the cumulative time of the remaining steps. The default is to have no process deadline.

6. Click Save to complete the operation. The system redisplays the “Status” form.

**Setting an Assignment Deadline**

An assignment deadline is the time allotted to the assignee to complete an assignment as an asset advances through workflow. This deadline is independent of the process deadline described earlier in this section; that is, the total of the individual assignment deadlines does not necessarily add up to a process deadline.

**Note**

Deadlines are informational only — the system does not impose any sort of penalty or issue error messages when a deadline is exceeded.

Before you can set an assignment deadline, the workflow administrator must first have done the following:

- Allowed an assignment deadline to be set for this workflow state.
- Assigned you a workflow administrator role for the workflow process, or otherwise provided you with the right function privileges.

The option to set the assignment deadline is available only if both of these conditions are met. Contact your administrator to find out if you have the appropriate privileges and whether an assignment deadline is allowed for the workflow state in question.
To set an assignment deadline

Note
This procedure describes how to set an assignment deadline via an asset’s “Status” form. You can also set an assignment deadline when you perform the following tasks, assuming you have the right privileges and the option for setting an assignment deadline is enabled by the administrator for these tasks:

- Placing an asset in workflow (see “Using Workflow Functions,” on page 241)
- Completing an assignment (see “Finishing Your Assignments,” on page 249)
- Adding an asset to a workflow group (see “Adding Multiple Assets to a Workflow Group,” on page 266)

In such cases, the forms you use to complete these tasks will include a Set Assignment Deadline field.

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset for which you want to set an assignment deadline and open its “Status” form:
   a. In the button bar, click My Work.
      Content Server displays the “My Work” view, showing the “My Assignments” list.
   b. In the “My Assignments” list, navigate to the desired asset and click the asset’s hyperlinked workflow state name in the Workflow State column.
      Content Server displays the asset’s “Status” form.
4. In the asset’s “Status” form, select Set Assignment Deadline from the “Workflow commands” drop-down list.

Note
If you do not see the Set Assignment Deadline function in the “Workflow commands” drop-down list, stop here. The function has not been enabled by the administrator or you do not have the right permissions to access it.
The “Set Assignment Deadline” form opens:

5. Enter a date in the prescribed format. The default assignment deadline is set by the administrator in the workflow state definition. For example, in the “Normal Article Process” sample workflow, each state has a duration of one year from the current date and time.

6. Click Save to complete the operation.
   Content Server rediscplays the asset’s “Status” form.
Finishing Your Assignments

After you complete your work for an assignment, you need to notify the system that you are done so the asset can continue to move through the workflow.

To finish your assignment for an asset

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset and open its “Status” form by doing one of the following:
   - If you are currently working on the asset in its “New” or “Edit” form:
     a. Review your work and click Save to save the asset.
     Content Server displays the asset’s “Inspect” form.
     b. In the asset’s “Inspect” form, select Status from the drop-down list in the action bar.
     c. Proceed to step 4 of this procedure.
   - If you have already completed your work and saved the asset:
     a. In the button bar, click My Work.
     Content Server displays the “My Work” view, showing the “My Assignments” list.
     b. In the “My Assignments” list, navigate to the desired asset and click the asset’s workflow state in the Workflow State column.
     Content Server displays the asset’s “Status” form.
     c. Proceed to step 4 of this procedure.
4. In the asset’s “Status” form, select Finish My Assignment from the “Workflow commands” drop-down list.

Content Server displays the “Finish My Assignment” form containing all of the possible next steps and the states these steps lead to:
5. Complete the form as follows:
   a. Select the next step for the asset.
   b. (Optional) In the Action Taken field, enter a short description of the work you completed on the asset.
   c. (Optional) In the Action to Take field, enter a short suggestion for the next person who will work with the asset.
   d. (Optional) If setting the assignment deadline is enabled for the next step you chose to take, the Set Assignment Deadline field will appear in the “Finish My Assignment” form, as shown below:

   ![Set Assignment Deadline](image)

   e. If you want to override the time allotted for the next assignment, use the Set Assignment Deadline section to enter a date in the prescribed format. If you do not enter a specific date, the assignment is due within the time determined by the next state, which will be the default value when you click the Due radio button.

   **Note**

   This feature appears only if enabled by the workflow administrator. You must also hold an administrative role in the workflow process or otherwise have the right privileges. For more information, see “Setting an Assignment Deadline,” on page 246.

6. Click Finish My Assignment.

   The “Status” form is updated to reflect the change. The action taken is visible in the Workflow history summary. The action to take is visible in the Workflow state summary.

   What happens after you complete your assignment depends on the way the administrator set up the next workflow step. There are five possible options:
   - **Retain “From” State Assignees** — you keep the assignment as the asset moves to the next state; this allows you to continue working on the asset in that state. You probably know why it is appropriate for you to keep the assignment, but if you don’t, ask your administrator.
   - **No Assignments** — as the asset moves to the next state, it remains in the workflow so that function privileges defined for the workflow process are enforced. However, the asset is assigned to no one and participant roles alone (through their assigned function privileges) determine who can work on the asset, and how.
   - **Assign To Everyone** — the asset is assigned to all users holding roles participating in the current workflow process.
   - **Assign From a List of Participants** — When you (or another user with the appropriate privileges) assign an asset to a workflow, you have the option to decide which participants in each role get the assignment when the asset enters a workflow state requiring those roles. This is the default mechanism for moving an asset through a workflow.
• **Choose Assignees When Step is Taken** — this option is similar to the “Assign From a List of Participants” option described above, but instead of predetermining at the beginning of the workflow who will get the assignment during which workflow state(s), you choose assignees for the next workflow state in real-time each time you take a step. In such case, when you use the **Finish My Assignment** function to take the next step, Content Server prompts you to choose assignees for the asset for the next workflow state by showing a form like the one below:

![Choose Assignees Form]

When the form appears, select the desired assignees for each displayed role and click **Set Assignees**. Content Server refreshes the asset’s “Status” form, showing a message confirming the completion of your assignment. The **Workflow state** and **Workflow history** fields in the “Status” form are also updated accordingly.
Delegating Your Assignments

As you review your assignment list, you might find that you will be unable to complete certain assignments. For example, you might notice that an assignment’s due date falls during your scheduled vacation time. In such situations, you can delegate your assignment to another user who has the same role as you, assuming that the user does not already have an identical assignment for the asset; that is, if both you and another user have the Editor role, you cannot delegate the asset to the other user if he/she already has the asset assigned through the Editor role. (The asset can still be assigned to the user through a different role or another workflow process.)

**To delegate an assignment**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset for which you want to delegate your assignment and open its “Status” form:
   a. In the button bar, click My Work.
      Content Server displays the “My Work” view, showing the “My Assignments” list.
   b. In the “My Assignments” list, navigate to the desired asset and click its workflow state (listed in the Workflow State column).
      Content Server displays the asset’s “Status” form.
4. In the asset’s “Status” form, select **Delegate Assignment** from the “Workflow commands” drop-down list.
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Using Workflow Functions

5. Select the user to whom you want to delegate the assignment. Optionally, enter a comment about your action.

6. Click Delegate.

A message confirming the delegation appears at the top of the “Status” form, and the Workflow state and Workflow history fields on the form are updated accordingly. This action also triggers a notification e-mail to the new assignee, assuming your site is configured to do so.

Abstaining from Voting

Sometimes, you are unable to deal with a particular assignment: your workload is too heavy, or perhaps you have been miscast in your role. In such situations, you can abstain from voting (that is, waive your participation), as long as yours is not the last (or only) vote for that particular role and/or step. When you abstain, you still have the assignment, but the asset can continue through workflow.

To abstain from voting on an assignment

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset for which you want to abstain from voting and open its “Status” form:
   a. In the button bar, click My Work.

   Content Server displays the “My Work” view, showing the “My Assignments” list.
   b. In the “My Assignments” list, navigate to the desired asset and click its workflow state (listed in the Workflow State column).

   Content Server displays the asset’s “Status” form.
4. In the asset’s “Status” form, select Abstain from Voting in the “Workflow commands” drop-down list.
Content Server displays the “Abstain from Voting” form:

Note
If you do not see the Abstain from Voting function in the “Workflow commands” drop-down list, stop here. You do not have the right permissions to access the function, or you are the only (or the only remaining) participant in your current role. In this case, you must find some other means of dealing with your assignment.

5. Enter a brief explanation for your abstention and click Abstain from Voting.

A message confirming your abstention appears at the top of the “Status” form, and the asset’s Workflow state and Workflow history in the “Status” form are updated accordingly. Keep in mind that abstaining does not cancel your assignment.

Resolving Deadlocks

A deadlock can occur when there is a choice of steps to move the asset to the next state, and each step requires all assignees to vote. If the vote is not unanimous in favor of a single step, there is a deadlock.

Frequently, resolving deadlocks involves offline communication and negotiation among assignees to achieve consensus; as such, deadlocks cause additional work for everyone involved and should be avoided whenever possible. If a deadlock occurs, it should be resolved as quickly as possible so that the flow of work suffers minimal delay.

To resolve a deadlock, certain participants must change their votes to achieve unanimity. If you receive an e-mail notification that your vote is the one causing the deadlock, you must vote again to break the deadlock.

To vote again on an assignment (to resolve a deadlock)

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.

3. Find the asset for which you want to vote again and open its “Status” form:
   a. In the button bar, click **My Work**.
      
      Content Server displays the “My Work” view, showing the “My Assignments” list.
   b. In the “My Assignments” list, navigate to the desired asset and click its workflow state (listed in the **Workflow State** column).
      
      Content Server displays the asset’s “Status” form.

4. In the asset’s “Status” form, select **Finish My Assignment** from the “Workflow commands” drop-down list.

   Content Server displays the “Re-vote My Assignment” form:

   ![Re-vote My Assignment form](image)

5. Complete the form as follows:
   a. Select the new next step for the asset.
   b. (Optional) In the **Action Taken** field, type a short description of the work that you completed on the asset.
c. (Optional) In the **Action to Take** field, type a short suggestion for the next person who will work with the asset.

**Note**

- In some cases, you can also resolve the deadlock by changing your vote to an abstention, which clears the way for the asset to move to the next workflow state (see “Abstaining from Voting,” on page 253).
- You resolve group deadlocks in the same manner as single-asset deadlocks, except that for a group deadlock all assignees have to vote in agreement on each deadlocked asset in the group.

### Removing an Asset from Workflow

You can remove an asset from workflow assuming you have the permissions to do so.

**To remove an asset from workflow**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to remove from workflow and open its “Status” form:
   a. In the button bar, click **My Work**.
      
      Content Server displays the “My Work” view, showing the “My Assignments” list.
   b. In the “My Assignments” list, navigate to the desired asset and click its workflow state (listed in the **Workflow State** column).
      
      Content Server displays the asset’s “Status” form.
4. In the asset’s “Status” form, select **Remove from Workflow** from the “Workflow commands” drop-down list.

Content Server displays the “Remove from Workflow” form:

```
Remove from Workflow for Article: GameMicroworldsArticle

<table>
<thead>
<tr>
<th>Article Name</th>
<th>GameMicroworldsArticle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Progression of Aura and Holding Power in and of Virtual World Inside Computers</td>
</tr>
<tr>
<td>Workflow Process</td>
<td>DF: Normal Article Process - DF: Ready for Approval</td>
</tr>
<tr>
<td>Currently Assigned To</td>
<td></td>
</tr>
<tr>
<td>Role</td>
<td>User</td>
</tr>
<tr>
<td>Checker</td>
<td>user_checker</td>
</tr>
<tr>
<td>Approver</td>
<td>taredin</td>
</tr>
</tbody>
</table>

[Cancel] [Remove from Workflow]
```

5. Click **Remove from Workflow**.

Content Server redisplay the asset’s “Status” form, showing a confirmation of the removal at the top of the form. The **Workflow history** section of the asset’s “Status” form is updated accordingly.
Viewing an Asset’s Participant (Assignee) List

To examine an asset’s participant (assignee) list

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset and open its “Status” form by doing one of the following:
   - If the asset is currently assigned to you to work on:
     a. In the button bar, click My Work.
        Content Server displays the “My Work” view, showing the “My Assignments” list.
     b. Navigate to the desired asset and click its workflow state (listed in the Workflow Status column).
     c. Proceed to step 4 of this procedure.
   - If the asset is not currently assigned to you to work on:
     a. In the button bar, click Search.
     b. In the “Search” form, click the asset type of the asset you want to find.
     c. Enter the desired search criteria (if any) and click Search.
        For more information on searching, see the section “Finding Assets,” on page 81.
     d. In the list of search results, navigate to the desired asset and click its status description (listed in the Status column).
     e. Proceed to step 4 of this procedure.

Content Server displays the asset’s “Status” form.

4. In the asset’s “Status” form, select Show Participants from the “Workflow commands” drop-down list.

Content Server refreshes the asset’s “Status” form and displays the “Show Participants” summary at the top of the form:

<table>
<thead>
<tr>
<th>Show ParticipantsArticle: GameMicroworldsArticle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step</strong></td>
</tr>
<tr>
<td>BF:Reject for Style</td>
</tr>
<tr>
<td>BF:Reject for Error</td>
</tr>
<tr>
<td>BF:Send for Approval</td>
</tr>
<tr>
<td>BF:Send for Edit Review</td>
</tr>
<tr>
<td>BF:StartStep</td>
</tr>
<tr>
<td>BF:Approve</td>
</tr>
</tbody>
</table>

For each step in the workflow process, the “Show Participants” summary displays the following:

- The authorized users – those who currently have the assignment for the asset and are authorized to take the next step using the Finish My Assignment function
- The notified users – those who will get the next assignment for the asset
Setting Workflow Participants

Once you have placed an asset in a workflow and chosen the assignees for each role in the workflow process, you might find that you forgot to include a certain user as an assignee for a particular role. Or perhaps you realized that you gave the assignment to a certain user by mistake. In such cases, you can modify the list of participants for an asset while the asset is in workflow.

To set workflow participants

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset for which you want to modify the workflow participants and open its “Status” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
      For more information on searching, see the section “Finding Assets,” on page 81.
   d. In the list of search results, navigate to the desired asset and click its status description (listed in the Status column).
4. In the asset’s “Status” form, select Set Participants from the “Workflow commands” drop-down list.

   Note

   If you do not see the Set Participants function in the “Workflow commands” drop-down list, stop here. You do not have the permissions to use the function.
Content Server displays the “Set Participants” form, similar to the image below:

5. Choose the desired assignees for this assignment by selecting their user names in each of the role lists. Each participant you select in this form becomes an assignee in the respective role(s) for this asset. You can select multiple user names by **Ctrl-clicking** each user name you want to select. You can also select a range of user names by **Shift-clicking** the first and last user name in the range.

6. When you have selected the desired assignees, click **Set Participants**.

Content Server displays the asset’s “Status” form, including a “Show Participants” summary updated to reflect your changes.

**Note**

The participants list will be updated as you requested, but added users will get the assignment only if the workflow state assigned to their role has not yet been reached.
Examining the Workflow Progress of an Asset

To examine the workflow progress of an asset

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset and open its “Status” form by doing one of the following:

   - **If the asset is currently assigned to you to work on:**
     a. In the button bar, click **My Work**.
        Content Server displays the “My Work” view, showing the “My Assignments” list.
     b. In the “My Assignments” list, navigate to the desired asset and click its workflow state (listed in the **Workflow State** column).

   - **If the asset is not currently assigned to you to work on:**
     a. In the button bar, click **Search**.
     b. In the “Search” form, click the asset type of the asset you want to find.
     c. Enter the desired search criteria (if any) and click **Search**.
        For more information on searching, see the section “Finding Assets,” on page 81.
     d. In the list of search results, navigate to the desired asset and click its status description (listed in the **Status** column).

Content Server displays the asset’s “Status” form.

The “Status” form of the asset contains the **Workflow state** and **Workflow history** sections, as shown below:

**Workflow process:**

<table>
<thead>
<tr>
<th>Assigned to</th>
<th>Assigned by</th>
<th>Assigned date</th>
<th>Action to Take</th>
<th>Step Chosen</th>
<th>Task Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>user_checker</td>
<td>user_editor</td>
<td>2007-01-19 14:35:58</td>
<td>Publish During</td>
<td>BF Approve</td>
<td>queued</td>
</tr>
<tr>
<td>user_approver</td>
<td>user_editor</td>
<td>2007-01-19 14:35:58</td>
<td>Revise</td>
<td>BF Reject</td>
<td>queued</td>
</tr>
</tbody>
</table>

**Workflow state:**

<table>
<thead>
<tr>
<th>Assigned to</th>
<th>Assigned date</th>
<th>Resolved by</th>
<th>Resolution Date</th>
<th>Action Taken</th>
<th>Task Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>user_checker</td>
<td>2007-01-19 14:35:58</td>
<td>user_checker</td>
<td>2007-01-19 14:35:58</td>
<td>completed</td>
<td></td>
</tr>
<tr>
<td>user_checker</td>
<td>2007-01-19 14:35:58</td>
<td>user_checker</td>
<td>2007-01-19 14:35:58</td>
<td>completed</td>
<td></td>
</tr>
<tr>
<td>user_checker</td>
<td>2007-01-19 14:35:58</td>
<td>user_checker</td>
<td>2007-01-19 14:35:58</td>
<td>completed</td>
<td></td>
</tr>
</tbody>
</table>

The **Workflow state** and **Workflow history** section contain the following information:

- **Workflow state** indicates where the asset currently is in the workflow process.
- Each row in **Workflow history** represents a single assignment. Items are ordered with the most recently completed step at the top of the list.
This table defines all the columns in the **Workflow state** and **Workflow history** section of the “Status” form:

<table>
<thead>
<tr>
<th>Column</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned To</td>
<td>The user name(s) of the assignee(s) for each assignment. Note that the user’s role appears in parentheses following the user name.</td>
</tr>
<tr>
<td>Assigned By</td>
<td>The user name of the assignee who finished working with the asset and assigned it to the next participant. The very first entry in this column (at the bottom of the list) shows the user name of the person who assigned the asset to the workflow process.</td>
</tr>
<tr>
<td>Assigned Date</td>
<td>The date and time the asset was assigned to the user.</td>
</tr>
<tr>
<td>Action to Take</td>
<td>Instructions from the user who assigned the asset, assuming that person entered instructions in the “Finish My Assignment” form when they finished their assignment (see page 249). “No Comment” appears if no instructions were entered. If the text is longer than the width of the column, click the text to view its entirety.</td>
</tr>
<tr>
<td>Step Chosen</td>
<td>The step indicated by the user who completed the assignment, when there is a choice of next step in the “Finish My Assignment” form.</td>
</tr>
<tr>
<td>Action Taken</td>
<td>Information about the work this user did with the asset (if information was entered on the form; appears as No Comment otherwise). Click to view the full text, if incomplete in this view.</td>
</tr>
<tr>
<td>Resolved By</td>
<td>The person whose action moved the asset to the next state.</td>
</tr>
<tr>
<td>Resolution Date</td>
<td>The date and time the action was taken to move the asset to the next state.</td>
</tr>
</tbody>
</table>
| Task Status       | The status of the assignment. Possible values are as follows:  
• Abstain – the assignee has abstained from voting.  
• Active – the asset is currently assigned to someone.  
• Cancelled – the first vote moved the asset to the next state, so the assignment has been canceled for the other assignees or the asset has been removed from workflow.  
• Completed – the assignee has completed the step.  
• Delegated – the assignment has been delegated to another user in the same role.  
• Queued – the asset has multiple assignees for the current state, the next step is all-voting, and not everyone has voted yet. (Also appears if the asset is deadlocked.)                                                                 |
Working with Workflow Groups

Workflow groups enable you to manage a defined set of assets in a coordinated manner that allows those assets to reach the end of the workflow process together, prior to publishing.

The following subsections describe how you create and manage workflow groups:

- Setting Up a Workflow Group
- Adding a Single Asset to a Workflow Group
- Adding Multiple Assets to a Workflow Group
- Removing Assets from a Workflow Group
- Editing or Deleting a Workflow Group

Setting Up a Workflow Group

To set up a workflow group

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Workflow.

   Content Server displays the Workflow Management console.

4. Click Create a Workflow Group.

   Content Server opens the “Workflow Group” form as shown below:

```
Create Workflow Group

*Group Name: ____________  [ ]

*Description: [ ]

*Workflow Process: [ ] Normal Article Process  [ ] Set Participants

Process Deadline: 

- Do not set
- Set

(Exp. 24-08 Mar 17 2002)

Add/Remove Assets:

- any user
- all users in the following roles:
  Analyst
  Approver
  ArticleAuthor
  ArtworkEditor
  Author

Edit/Delete Group:

- any user
- all users in the following roles:
  Analyst
  Approver
  ArticleAuthor
  ArtworkEditor
  Author

Group Deadlock Actions: [ ] Send Deadlock Email

[ Cancel ]  [ Save ]
```
5. Complete the “Workflow Group” form as described in the following table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Name</td>
<td>Enter a name for the group.</td>
</tr>
<tr>
<td>Description</td>
<td>Enter a brief description of the group’s purpose or function.</td>
</tr>
<tr>
<td>Workflow Process</td>
<td>Select a workflow process appropriate to the assets being grouped.</td>
</tr>
<tr>
<td>Set Participants</td>
<td>Click this button to set the participants (assignees), based on the workflow process you have chosen for the group via the “Set Participants for Group” form. In the form, you must select at least one user for each defined role. After you make your selections, click Set Participants to return to the “Add Workflow Group” form.</td>
</tr>
<tr>
<td>Process Deadline</td>
<td>Optionally, set a date by which the asset group is to complete the workflow process, using the prescribed format. For more information, see “Setting a Process Deadline,” on page 244. This feature appears only if it is enabled by the workflow administrator, and it is available only if you have the administrator role for the workflow process, or if you otherwise have the right privileges.</td>
</tr>
<tr>
<td>Add/Remove Assets</td>
<td>Specify who can add assets to the group and who can remove assets from the group. Select any user, or all users in selected roles. Choose multiple roles by using the Shift-click or Ctrl-click keyboard mouse combination.</td>
</tr>
<tr>
<td>Edit/Delete Group</td>
<td>Specify who can edit this group and who can delete the group altogether. Select any user, or all users in selected roles. Choose multiple roles by using the Shift-click or Ctrl-click keyboard-mouse combination.</td>
</tr>
<tr>
<td>Group Deadlock Actions</td>
<td>Indicate whether to send e-mail notifications to group members when a deadlock occurs.</td>
</tr>
</tbody>
</table>

**Note**

Red asterisks denote required fields. You must populate these fields before you can set participants.
6. When you are done filling in the form, click **Save**. The new workflow group definition summary appears:

<table>
<thead>
<tr>
<th>Workflow Group: Article Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspect</td>
</tr>
<tr>
<td>Name: Article Group</td>
</tr>
<tr>
<td>Workflow Process: BF: Normal Article Process</td>
</tr>
<tr>
<td>Process Deadline: 2007-1-22 12:00:00</td>
</tr>
<tr>
<td>Roles to edit/delete <em>ALL</em> group:</td>
</tr>
<tr>
<td>Group Contents: This workflow group is empty.</td>
</tr>
</tbody>
</table>

The group also appears in the **Workflow Groups** section of the Workflow Management console (accessible via the **Workflow** button in the button bar):

**Workflow**

- Please select one of the following items
- Create a Workflow Report
- Create a Workflow Group

**Workflow Groups**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Workflow Process</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article Group</td>
<td>Workflow Group for Articles</td>
<td>BF: Final Parent Process</td>
<td>0</td>
</tr>
</tbody>
</table>

**Saved Workflow Reports**

There are no Saved Workflow Reports.
Adding a Single Asset to a Workflow Group

You must meet the following criteria to add assets to a workflow group:

• You must have the function privileges to add assets to a workflow group, as specified in the group definition.
• You must have permission to take the initial step in the workflow process that you select for the group.
• The assets must be appropriate to the workflow process assigned to the group.
• You cannot add assets that are already in a workflow.

Consult your administrator if you are unsure about any of the above requirements.

To add a single asset to a workflow group

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to add to a workflow group and open its “Status” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
      For more information on searching, see the section “Finding Assets,” on page 81.
      Content Server displays a list of search results matching your criteria.
   d. Navigate to the desired asset and click its status name (for example, Created).
      Content Server displays the asset’s “Status” form.
4. In the “Workflow commands” drop-down list, select Add to Workflow Group.
   Content Server displays the “Add to Workflow Group” form showing the groups to which you can add the asset.

   ![Add to Workflow Group Form]

   **Article Name:** GameMicroworldsArticleRevised
   **Description:** Progression of Aura and Holding Power in and of Virtual Worlds Inside Computers
   **Add to Group:**
   - Article Group: Normal Article Process, the workflow group is empty
   - Urgent Item: Normal Article Process, the workflow group is empty

   **Action to Take:** Fast-track this one!

   ![Add to Group Form]

5. Select the group to which you want to add the asset.
6. (Optional) In the Action to Take field, enter instructions for the user(s) who will get the assignments for the asset(s) you are adding to the workflow group.
Chapter 8. Workflow

Working with Workflow Groups

7. Click Add to Group.
   Content Server displays a message confirming that the asset has been added to the workflow group you selected.

Adding Multiple Assets to a Workflow Group

You must meet the following criteria to add assets to a workflow group:

- You must have the function privileges to add assets to a workflow group, as specified in the group definition.
- You must have permission to take the initial step in the workflow process that you select for the group.
- The assets must be appropriate to the workflow process assigned to the group.
- You cannot add assets that are already in a workflow.

Consult your administrator if you are unsure about any of the above requirements.

To add multiple assets to a workflow group

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the assets you want to add to the workflow group and add them to your Active List:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
      For more information on searching, see the section “Finding Assets,” on page 81.
      Content Server displays a list of search results matching your criteria.
   d. In the list of results, navigate to the desired assets and select their check boxes.
   e. Click Add To My Active List.
4. In the button bar, click Workflow.
   Content Server displays the Workflow Management console.

5. In the “Workflow Groups” list, select the group to which you want to add your assets.
   Content Server displays the “Workflow Group” form.
6. In the tree, select the **Active List** tab.

7. In the **Active List** tab, select the assets you want to add to the workflow group.
   You can select multiple assets by **Ctrl-clicking** each asset you want to add; you can also select a range of assets by **Shift-clicking** the first and last asset in the range.

8. Click **Add to Group**.

   Content Server displays the “Add to Workflow Group” form showing the assets you want to add to the group. Any assets that you cannot add will have error messages next to them explaining why you cannot add them to the group.

   ![Add to Workflow Group Form](image)

9. (Optional) In the **Action to Take** field, enter instructions for the user(s) who will get the assignments for the asset(s) you are adding to the workflow group.

10. Click **Add to Group**.

    Content Server displays the “Workflow Group” form showing the newly added assets and a message at the top of the form confirming the action.

### Removing Assets from a Workflow Group

You can remove an asset (or assets) from a workflow group provided you have the permissions to do so.

**To remove an asset from a workflow group**

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the desired asset and open its “Status” form. Do one of the following:
   - **If the asset is currently assigned to you to work on:**
     a. In the button bar, click **My Work**.
        
        Content Server displays the “My Work” view, showing the “My Assignments” list.
     b. In the “My Assignments” list, navigate to the desired asset and click its workflow state (listed in the **Workflow State** column).
If the asset is not currently assigned to you to work on:

a. In the button bar, click Search.

b. In the “Search” form, click the asset type of the asset you want to find.

c. Enter the desired search criteria (if any) and click Search.

d. For more information on searching, see the section “Finding Assets,” on page 81.

e. In the list of search results, navigate to the desired asset and click its status description (listed in the Status column).

Content Server displays the asset’s “Status” form.

4. In the asset’s “Status” form, select Remove from Workflow Group from the “Workflow commands” drop-down list.

Content Server displays the “Remove from Workflow Group” form:

![Remove from Workflow Group form]

5. Click Remove from Group.

Content Server redisplay the asset’s “Status” form showing a confirmation that the asset was removed from the group. The workflow details on the form are updated accordingly. Although the asset was removed from the workflow group, it remains in the workflow process to which it was assigned as part of the group.

Note

If you remove the asset from the workflow process, the asset is automatically removed from any workflow groups it is assigned to.

Editing or Deleting a Workflow Group

You can edit or delete a workflow group assuming you have the permissions to do so. If you want to delete a group, it must be empty.

To edit or delete a workflow group

1. If Content Server’s interface is not already open, log in.

2. If prompted, select the site you want to work with.

3. In the button bar, click Workflow.
4. Content Server displays the Workflow Management console, as shown below:

![Workflow Management Console]

5. In the “Workflow Groups” section of the console, locate the desired workflow group and do one of the following:

- To edit the group, click the **Edit** (pencil) icon. Content Server displays the “Add to Workflow Group” form, prepopulated based on the group definition. Make your edits, remembering to hold the **Ctrl** key if you are making additions to current selections. When you are done, click **Save**.

- To delete the group, click the **Delete** (trashcan) icon. The group must be empty before you can delete it; otherwise, the **Delete** icon will be disabled.

**Note**

If you add new participants to the workflow group, they do not receive assignments for assets that are already in the group; they will only receive assignments for assets that are added to the group afterwards.
Working with Workflow Reports

Workflow reports allow you to track the progression of assets and user assignments in workflow. They are a convenient mechanism for determining current workflow status. Workflow reports also enable you to perform searches across asset types.

The following subsections describe how you create and manage workflow reports:

- Running a Workflow Report
- Saving Workflow Reports
- Running Saved Workflow Reports
- Editing Saved Workflow Reports
- Deleting Saved Workflow Reports

Running a Workflow Report

To set up and run a workflow report

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Workflow.
   Content Server displays the Workflow Management console.
4. In the Workflow Management console, click Create a Workflow Report.
   Content Server displays the “Create Workflow Report” form. Complete the form as described in the following table:

Table 2: “Create Workflow Report” form fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Type</td>
<td>Choose whether to report on all asset types or specific asset types. You can choose multiple assets by using Shift-click or Ctrl-click.</td>
</tr>
<tr>
<td>Workflow State</td>
<td>Choose whether to report on all workflow states or specific workflow states. You can choose multiple states by using Shift-click or Ctrl-click.</td>
</tr>
<tr>
<td>Assigned to</td>
<td>Choose whether to report on:</td>
</tr>
<tr>
<td></td>
<td>• Any user</td>
</tr>
<tr>
<td></td>
<td>• Specific users</td>
</tr>
<tr>
<td></td>
<td>• All users of specific roles</td>
</tr>
<tr>
<td></td>
<td>You can choose multiple users by using Shift-click or Ctrl-click.</td>
</tr>
</tbody>
</table>
Table 2: “Create Workflow Report” form fields (continued)

<table>
<thead>
<tr>
<th>Field</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due Date</td>
<td>Choose to report on assignments that have:</td>
</tr>
<tr>
<td></td>
<td>• Any due date</td>
</tr>
<tr>
<td></td>
<td>• A due date within a selected time period. The time period can be set from 20 minutes to three days, in 20 minute increments.</td>
</tr>
<tr>
<td></td>
<td>• A date that is past due by a specified time period. The past due period can be set from 20 minutes to three days, in 20-minute increments.</td>
</tr>
<tr>
<td>Process Due Date</td>
<td>Choose to report on workflow processes that have:</td>
</tr>
<tr>
<td></td>
<td>• Any process due date</td>
</tr>
<tr>
<td></td>
<td>• A process due date within a selected time period. The time period can be set from 20 minutes to three days, in 20 minute increments.</td>
</tr>
<tr>
<td></td>
<td>• A process due date that is past due by a specified time period. The past due period can be set from 20 minutes to three days, in 20-minute increments.</td>
</tr>
<tr>
<td>Report Options</td>
<td>Specify how many returned items to report on, ranging in increments from two to 300.</td>
</tr>
<tr>
<td></td>
<td>Specify to sort the report by:</td>
</tr>
<tr>
<td></td>
<td>• Assignee (assigned to)</td>
</tr>
<tr>
<td></td>
<td>• State of the asset (workflow state)</td>
</tr>
<tr>
<td></td>
<td>• when the assignment was made (date assigned)</td>
</tr>
</tbody>
</table>

5. When you have completed the form, click **Report**.

6. Content Server displays the “Results of Workflow Report” form:

<table>
<thead>
<tr>
<th>Results of Workflow Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Create a New Workflow Report</em></td>
</tr>
<tr>
<td>Report : all assignments [Edit This Workflow Report] [Save This Workflow Report]</td>
</tr>
<tr>
<td><strong>Type</strong></td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Article</td>
</tr>
<tr>
<td>Article</td>
</tr>
<tr>
<td>Article</td>
</tr>
<tr>
<td>Article</td>
</tr>
<tr>
<td>Article</td>
</tr>
</tbody>
</table>
The form shows assets matching the report criteria you specified in the “Workflow Report” form in step 4 of this procedure. The criteria are listed at the top of the form for your reference. You can edit these criteria and rerun the report by clicking Edit This Workflow Report at the top of the form.

**Saving Workflow Reports**

When you run a workflow report, you have the option to save the report criteria and make them available to other users. Saving workflow reports means that you can execute them at will with a single click, without having to re-enter the criteria each time.

**To save a workflow report**

1. Run a workflow report as described in “Running a Workflow Report,” on page 270.
2. In the “Results of Workflow Report” form, click Save This Workflow Report.

   Content Server displays the “Save Workflow Report” form:

   ![Save Workflow Report Form](image)

3. Complete the form as follows:
   
   a. Enter a name for the report (this is a required field). The name you specify here will appear in the list in the **Workflow Reports** section of the Workflow Management console.
   
   b. If you want to share this report with other users holding certain roles, select the Share this search box, and then select the roles you want to share this report with. You can select multiple roles by Ctrl-clicking each role you want to select. You can also select a range of roles by Shift-clicking the first and last roles in the range.
   
   c. (Optional) If you want to review or edit the report criteria, click Edit This Search. Note that this will require you to run the report again; then you must click Save This Workflow Report at the top of the “Results of Workflow Report” form to return to the “Save Workflow Report” form.

4. Click Save.
Running Saved Workflow Reports

To run a saved workflow report

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Workflow.
   Content Server displays the Workflow Management console.
4. In the Workflow Reports section of the Workflow Management console, locate the report you want to run:

<table>
<thead>
<tr>
<th>Name</th>
<th>Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articles in Worklow</td>
<td>shared</td>
</tr>
<tr>
<td>Urgent Articles</td>
<td>private</td>
</tr>
</tbody>
</table>

5. Click the name, or the View (binoculars) icon of the workflow report you want to run.
   Content Server runs the report and displays the results:

Editing Saved Workflow Reports

To edit a saved workflow report

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click Workflow.
   Content Server displays the Workflow Management console.
4. In the Workflow Reports section of the Workflow Management console, locate the report you want to edit:

<table>
<thead>
<tr>
<th>Name</th>
<th>Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articles in Worklow</td>
<td>shared</td>
</tr>
<tr>
<td>Urgent Articles</td>
<td>private</td>
</tr>
</tbody>
</table>

5. Click the Edit (pencil) icon of the workflow report you want to edit.
   Content Server displays the “Create Workflow Report” form with the currently saved criteria selected.
   Make your edits, remembering to use the Ctrl key if you are making additions to current selections. When you are done, click Report to execute the report again.
6. Click Save This Workflow Report at the top of the “Results of Workflow Report” form to return to the “Save Workflow Report” form.
7. In the “Save Workflow Report” form, click Save to commit the changes to the database.
Deleting Saved Workflow Reports

To delete a saved workflow report

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click **Workflow**.
   
   Content Server displays the Workflow Management console.
4. In the **Workflow Reports** section of the Workflow Management console, locate the report you want to delete.
5. Click the **Delete** (trashcan) icon of the workflow report you want to delete.
   
   Content Server displays a confirmation dialog.
6. Click **Delete this Item** to delete the workflow report.
Chapter 9
Revision Tracking

Revision tracking is a configurable feature and must be enabled by the CS administrator for the asset types on your sites. Revision tracking allows you to track and control the changes made to your assets.

With revision tracking, you can:

• Enforce that only one person at a time can edit or delete an asset.
• Keep track of past versions of an asset and who created them.
• Restore (roll back) an asset to a previous version.

This chapter describes revision tracking and the procedures used to track assets. It contains the following sections:

• Overview
• Checking Out Assets
• Undoing a Checkout
• Checking In Assets
• Examining Revision History
• Comparing Versions

Note

In the Burlington Financial and FirstSite II sample sites, revision tracking is not enabled by default. Contact your administrator if you have any questions or concerns about revision tracking as it applies to you.
Overview

Revision tracking allows you to check out, or lock, assets. When you check out an asset, no one else can edit or delete it. When you are finished working with the asset, you check it back in. The asset is then again available for modification by other users. An asset that is checked out to you, however, can still be viewed and searched for by other users, as well as retrieved by queries or collections.

When revision tracking is enabled, you control access to an asset by checking it out and back in. You can either check assets out and back in manually, or let Content Server handle the process automatically.

Manual Checkout and Checkin

When manual checkout is enabled, there are three commands that control access to assets:

- **Check out.** Only one user can check out an asset at any given time. If other users try to check the asset out or modify it, CS informs them that the asset is unavailable.
  
  If an asset is assigned to you in a workflow, and you have checked out the asset, then you cannot finish your assignment until you check the asset back in.
  
  An asset that is checked out cannot be approved for publishing until it is checked in.

- **Check in.** You check in assets that you have checked out. After the asset is checked in, others can work with it, and if the asset is assigned to you in a workflow, you can finish your assignment.
  
  When you check in an asset that you have checked out, a record is made of the checkin, and a copy of the last saved version of the asset is preserved (the number of versions kept is set by the administrator).
  
  Another option is to check in the asset so that you have an archived version but to keep it checked out. This option enables you to store a version but keeps the asset available to you alone.

- **Undo Checkout.** If you check out an asset and then decide that you don’t want to save the work you did on it, cancel or “undo” the checkout. In this case, the asset is simply unlocked and no new version is saved.

Automatic Checkout and Checkin

If you try to edit, delete, roll back, or assign a workflow process to an asset that is not already checked out, CS checks it out to you automatically. When you save the edited asset, CS checks it back in automatically and saves the new version. (When you manually check out an asset, edit it, and then save it, the new version is not saved until you manually check the asset back in.) Therefore, if the situation requires it, you can choose to bypass the step of manually checking out and checking in an asset and rely on the automatic revision tracking feature instead.

When to Use Automatic Checkout

Be sure that you rely on automatic checkout only when it is appropriate to do so. For example, if you are going to make one simple change to an asset, you can use automatic checkout. However, if you are making extensive revisions, you should not use automatic checkout for the following reasons:

- The volume of revisions that could be saved (depending on your configuration)
• Overwriting a version of the asset you might need later

When an asset is automatically checked out to you, CS saves an official, archived version of the asset each time you click Save. Therefore, if you make several changes to an asset—saving and inspecting each change separately—CS checks in a version of the asset at each save. Depending on the number of versions CS is configured by the administrator to store, you might overwrite older versions that you wanted to keep with the automatically checked-in versions.

Releasing Locked Assets

Because automatic checkout is in effect when revision tracking is enabled, you might accidentally check out an asset while you work in Content Server’s interface. This locks the asset and prevents other users from working with it. To make sure that you are not stopping other people from working with assets that you have inadvertently checked out, review the assets checked out to you by viewing your “My Checkouts” list and check in (or, if you do not want to commit your changes to the database, undo the checkout of) any assets that you do not need.

Functions That Use Automatic Checkout and Checkin

The following table describes asset management functions that check assets out or in automatically:

<table>
<thead>
<tr>
<th>Command</th>
<th>Effect on Revision Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>New</td>
<td>As soon as you open a “New” asset form, the asset is checked out to you and a SYSTEM version is stored. This version has no content. When you save the asset, another (second) version is stored.</td>
</tr>
<tr>
<td>Edit</td>
<td>Checks out the asset and prohibits other users from editing or deleting it.</td>
</tr>
<tr>
<td>Save</td>
<td>Checks in the asset, but only if it was checked out automatically.</td>
</tr>
<tr>
<td>Copy</td>
<td>Checks out a new copy of the asset. The source asset is not checked out during the copy operation. The new copy behaves as if you created a new asset as described above in the New function column. The only difference is that there is more data included in the copied version. The copied asset is displayed in its “Edit” form. When the asset is saved, a second version of the asset is created.</td>
</tr>
<tr>
<td>Delete</td>
<td>Checks out the asset. When the user confirms the deletion, CS checks the asset back in.</td>
</tr>
<tr>
<td>Build</td>
<td>Checks out the “Collection” asset and then checks it back in when the build operation completes.</td>
</tr>
<tr>
<td>Place</td>
<td>Checks out the “Page” asset and then checks it back in when the place operation completes.</td>
</tr>
<tr>
<td>Rollback</td>
<td>Clicking Rollback checks out the asset, then immediately checks it back in.</td>
</tr>
</tbody>
</table>
Rollback and Revision History

When you check in an asset that you have checked out, CS stores a new version of the asset and adds it to a list of previous versions (assuming the administrator allowed the storage of multiple versions). You can later restore the asset to one of those previous versions and you can examine the asset’s revision history.

- **Rollback** means restoring the asset to a previous version. When you have an asset checked out, you can roll it back to any previous version. Rollback restores the contents of an asset, but does not reset the status (created, edited, received, and so forth) as of the previous version, nor does it affect workflow status. If the asset is part of a workflow, anyone who has the appropriate permissions can restore it to a previous version.

- **Revision History.** You or any user can list and examine the revision history of an asset. The revision history also shows who, if anyone, currently has the asset checked out. You can tell whether a version was created by an automatic or manual checkout by looking at the comment section of the revision history. Versions created through automatic checkout will be automatically commented by Content Server with “Version created by function name.” Versions created through manual checkout will either have comments entered by the users who edited the asset at the time or have no comments at all if the user who edited the asset at the time chose not to enter any.
Checking Out Assets

To check out an asset

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to check out and open its “Inspect” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to check out.
   c. Enter the desired search criteria (if any) and click Search.
   For more information on searching, see the section “Finding Assets,” on page 81.
4. In the search results list, navigate to the desired asset and click its Inspect icon.
   Content Server displays the asset’s “Inspect” form.
5. In the action bar, click Check Out.

If you don’t see the Check Out button in the asset’s “Inspect” form, stop here. Revision tracking for that asset type is not enabled on your site. If you have questions about revision tracking, contact your CS administrator.

If the asset is already checked out to another user, Content Server displays a message informing you of that fact. If your checkout is successful, Content Server displays the message, “Checkout was successful,” and updates the checkout status as follows:
Undoing a Checkout

To undo a checkout

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to undo the checkout for and open its “Inspect” form:
   a. In the button bar, click My Work.
      Content Server displays the “My Work” view, showing the “My Checkouts” list.
   b. In the “My Checkouts” list, navigate to the asset for which you want to undo the checkout, and click its name.
      Content Server displays the asset’s “Inspect” form.
4. In the action bar, click Undo Checkout.

Note

If you don’t see the Undo Checkout button in the asset’s “Inspect” form, revision tracking for that asset type is not enabled on your site.

Content Server displays the message: “Undo Checkout was successful;” the asset is returned to the database without a record of this checkout.
Checking In Assets

To check in an asset

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click **My Work**.
   Content Server displays the “My Work” view, showing the “My Checkouts” list.
4. In the “My Checkouts” list, navigate to the asset you want to check in, and click its **Check in** button.
   Content Server displays the “Check In” form:

   ![Check In Form]

   5. (Optional) In the **Comments** text box, enter comments or instructions that pertain to the version that you are checking in. Comments are displayed with the asset title when you view the version history.

   6. (Optional) If you want to back up the asset but need to continue working on it, select the **Keep Checked Out** box.

   7. Click **Check In**.

   A confirmation message appears. Note that the version number has increased by one.
Examining Revision History

To examine an asset’s revision history

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset whose revision history you want to examine and open its “Inspect” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
      For more information on searching, see the section “Finding Assets,” on page 81.
4. In the search results list, navigate to the desired asset and click its Inspect icon.
   Content Server displays the asset’s “Inspect” form.
5. In the action bar, click Show Versions.
   Content Server displays the asset’s Revision History Report.

To view a specific version of the asset, click the Inspect icon next to the desired version. Content Server displays that version’s “Inspect” view in a separate window.
Comparing Versions

To Compare Versions

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset whose revisions you want to compare and open its “Inspect” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to find.
   c. Enter the desired search criteria (if any) and click Search.
   For more information on searching, see the section “Finding Assets,” on page 81.
4. In the search results list, navigate to the desired asset and click its Inspect icon.
   Content Server displays the asset’s “Inspect” form.
5. In the action bar, click Show Versions.
   Content Server displays the asset’s Revision History Report.

<table>
<thead>
<tr>
<th>Revision History Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Version</strong></td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

6. To view a specific version of the asset, click the Inspect icon next to the desired version. Content Server displays that version’s “Inspect” view in a separate window.
7. Click on the other version(s) you wish to compare to the currently open version. Each version you select opens in its own separate window. You can arrange these windows so that you can compare the different versions side-by-side.
Reverting to a Previous Version (Rollback)

To roll back an asset

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the asset you want to roll back and open its “Inspect” form:
   a. In the button bar, click Search.
   b. In the “Search” form, click the asset type of the asset you want to roll back.
   c. Enter the desired search criteria (if any) and click Search.
   For more information on searching, see the section “Finding Assets,” on page 81.
4. In the search results list, navigate to the desired asset and click its Inspect icon.
   Content Server displays the asset’s “Inspect” form.
5. In the action bar, click Rollback.
   Content Server displays a list of the asset’s versions:


<table>
<thead>
<tr>
<th>Rollback</th>
<th>Version</th>
<th>Date</th>
<th>User</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>2008-9-14 12:24:11</td>
<td>fadmin</td>
<td>fixed spelling error</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2008-9-14 12:43:56</td>
<td>fadmin</td>
<td>fixed spelling error</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2008-9-14 12:47</td>
<td>fadmin</td>
<td>Added text</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2008-9-14 12:23:31</td>
<td>fadmin</td>
<td>Version created by Edit</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2008-9-14 12:21:53</td>
<td>fadmin</td>
<td>Version created by Edit</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2008-9-14 12:24</td>
<td>fadmin</td>
<td>Version created by Edit</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2008-9-14 12:15:55</td>
<td>fadmin</td>
<td>Version created by Edit</td>
</tr>
</tbody>
</table>

   Select the version that you want to roll back to and then click Rollback.


   - **Note**
     If the asset is already checked out to another user, you cannot roll it back to a previous version. In such cases, Content Server displays a message informing you of this situation. To roll the asset back, wait until the user working on it finishes his/her work and checks the asset back in.

6. In the Rollback column, select the version of the asset you want to roll back to.
7. Click Rollback.
   A confirmation message appears. Note that rolling back an asset creates another version of it.
This part describes tasks and responsibilities performed by marketers who want to target site visitors for marketing campaigns using Engage, an optional Content Server application.

This part contains the following chapters:

- Chapter 10, “Engage Overview”
- Chapter 11, “Grouping Visitors into Segments”
- Chapter 12, “Creating and Configuring Recommendations”
- Chapter 13, “Creating Promotions”
Chapter 10

Engage Overview

With Content Server, you can use the flex asset model to create an online catalog offering products and content for sale. If you want to divide your market into segments that define specific groups of customers and then target those segments with personalized promotional or marketing messages, the solution is Engage.

Engage adds merchandising features to Content Server and extends the XML and JSP object methods available for programming your e-commerce site. It enables you to design online sites that gather information about your site visitors and customers, evaluate that information, and then use that information to personalize the product placements and promotional offerings that are displayed for each visitor.

This chapter contains the following sections:

• About Merchandising Assets
• Using Segments to Categorize Visitors
• Making Recommendations to Segmented Visitors
• Basing Promotions on Buying Patterns
About Merchandising Assets

With Engage, you use merchandising assets to do the following:

- Collect visitor data using the “Visitor Attribute,” “History Attribute,” and “History Definition” assets
- Use that visitor data to define visitor segments (using “Segment” assets)
- Recommend products and content to visitors based on the segments they belong to (using “Recommendation” assets)
- Run promotions that apply to all or specific segments (“Promotion” assets)

Developers and administrators create and manage the visitor data and underlying business logic, while marketers create and manage the “Segment,” “Recommendation,” and “Promotion” assets. As with any of the other Content Server applications, you create and work with assets on the management site. Then, when assets are approved, you publish them to your delivery site.

Marketers and developers are expected to collaborate extensively to implement effective merchandising efforts.

Using Segments to Categorize Visitors

Segments are assets that categorize groups of visitors based on the visitor data that you are gathering about them. You build segments by determining which kinds of visitor data to use as filtering criteria and then setting the values that qualify or disqualify a visitor for the segment.

You use the “Segment Filtering” forms in Engage to categorize groups of visitors based on the visitor attributes, history attributes, and history definitions created by the developers.

Segments are the key to personalization with Engage. When visitors browse your site, the information they submit is used to qualify them for segment membership. When the site displays a page with a recommendation or promotion, Engage determines which segments a visitor belongs to and displays the product recommendations or promotional messages that are designated for those segments.

For detailed information on segments, see Chapter 11, “Grouping Visitors into Segments.”

Making Recommendations to Segmented Visitors

You create “Recommendation” assets and then configure them by rating assets based on their importance to the segments that you have created.

Recommendations are assets that determine which products or content should be featured or “recommended” on a site page. These assets are rules that are based on the segments the visitors qualify for, and, in some cases, relationships between the product or content assets.

Recommendations have templates. A recommendation returns a list of assets to its template when the template is rendered on a site page. The items in a list of recommended assets are rated according to their importance to the current visitor based on the segments that the visitor belongs to.
For detailed information on recommendations, see Chapter 12, “Creating and Configuring Recommendations.”

**Basing Promotions on Buying Patterns**

Promotions are assets that define an offer of value (a discount) to the visitors based on the products that the visitor is buying and the segments that the visitor qualifies for. This value can be offered in several ways:

- A discount off the purchase price of the promoted products
- A discount off the entire value of the shopping cart
- A discount off shipping charges
- A combination discount: a shipping discount with a price or cart discount

Promotions use the same templates as recommendations. You decide which recommendation the promotion overrides, and Engage uses that recommendation’s template to render the promotion on the site page.

For detailed information on segments, see Chapter 13, “Creating Promotions.”
Chapter 11

Grouping Visitors into Segments

Segments are assets that categorize visitors into groups on the basis of visitor data that you gather. You build segments by determining which kinds of visitor data to use as filtering criteria and then setting values that qualify or disqualify a visitor for the segment.

This chapter describes segments and presents procedures for creating them. It includes the following sections:

• About Segments
• About the Segment Forms
• Creating Segments
• Sample Segment Assets
• Publishing Segments
• After You Publish
About Segments

Segments are used to create recommendations and promotions. The segments determine which content in the recommendations and promotions visitors qualify for and display that content to the visitors.

Segments are the key to personalization and merchandising with Engage. You, as a marketer, create the visitor segments that the site pages depend on because you know which merchandising messages should be associated with specific visitor segments.

When you create a segment, you specify filtering criteria that a visitor must match in order to be included as a member of that segment. This is comparable to when database or site administrators create a database query, and they specify parameters that a database record must match in order to be included in the results of the query.

Segments and Visitor Data Assets

You build segments by using the visitor data assets as filtering criteria. There are three kinds of visitor data assets: visitor attributes, history attributes, and history definitions.

- **Visitor attributes** hold types of information that specify one characteristic only. For example, there can be attributes named *years of experience*, *job description*, or *number of children*.

  When visitors change the data, the new data overwrites the old. For example, if a visitor changes her job description from *analyst* to *marketing specialist*, there is no record of the fact that the visitor used to be an analyst.

- **History attributes** are individual information types that you group together to create a single type of historical record.

- This historical record is a **history definition**. For example, a history definition called *purchases* could be made up of the history attributes *SKU #*, *itemname*, *quantity*, and *price*.

  Engage treats the data recorded as a history definition as a whole unit of information. It assigns a timestamp to and stores each instance of the data, which means that you can create segments based on counts or sums of history definitions.

Developers create the visitor data assets based on the kinds of information that the marketing and design teams want to collect and analyze. You and the other marketers can use those assets to create segments that categorize your visitors, and the developers program your site pages to collect and store visitor information.

Developing Segments: Process Overview

There are five general steps for creating segments:

1. **Planning.** A cross-functional design team including developers and marketers determines the data you want to gather about your site visitors.

2. **Creating visitor data assets.** The developers create and define the necessary visitor attributes, history attributes, and history definitions using the forms in Engage.

3. **Creating segments.** You (the marketers) use the “Segment” forms in Engage to categorize visitors on the basis of visitor attributes, history attributes, and history definitions.
4. **Collecting visitor data.** The developers program the appropriate site pages to collect and store visitor data. For example, they might create an online registration form for visitors to fill out with information that qualifies them for segments. When visitors browse your site, the information they submit is stored in the Content Server database.

5. **Segmenting visitors.** Now when visitors browse your site, the information they submit is used to qualify them for segment membership. The promotional messages and recommended products are personalized based on the segments that visitors qualify for.

### About the Segment Forms

You will use two forms when creating segments, the “Segment Filtering Criteria” form and the “Segment Definition” form. This section describes these forms.

#### “Segment Filtering Criteria” Form

The “Segment Filtering Criteria” form displays the visitor data assets that you can use to create segments. In this form you select the criteria that will define your segment.

#### Categories

The visitor data assets in the “Segment Filtering Criteria” form are organized within categories that are listed across the top of the form. For example:

<table>
<thead>
<tr>
<th>Segment Filtering Criteria: Classic Movie Fan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buyer Contact</td>
</tr>
</tbody>
</table>

When you click a category, the form displays the visitor attributes or the history definitions in that category.

Because visitor data assets are so varied, developers assign them to categories to organize them. (Developers create categories when they define visitor data assets.) For example, the above image displays the category **Profile**, which developers created for visitor attributes that are related to personal information about the visitors.

#### Note

The actual categories of visitor data assets will likely differ for your installation, depending on the installation options and what your developers have defined. See your developers if you need information about categories or visitor data assets.
Chapter 11. Grouping Visitors into Segments

The “Shopping Cart” Form

“Shopping Cart” is listed with the categories on the segment filter forms but the shopping cart is a special, default feature rather than a category of attributes.

You can use the “Shopping Cart” form to create segments based on the following kinds of conditions:

- The total value of all the products in the shopping cart
- Whether a specific product is in the shopping cart
- Whether a certain number of products are in the shopping cart
- Whether a certain number of specific products is in the shopping cart

If you want to implement a promotion based on the current state of a visitor’s shopping cart, use this form to build a segment and then use the segment in the promotion.

The “Shopping Cart” form is always available for defining your segments. Therefore, even before your site developers create visitor attributes or history definitions, you can create segments defined by shopping cart information.
The “Segment Definition” Form

While you’re creating a segment, Engage displays each condition (criterion) that you add to the segment in a form similar to the following:

As you add criteria to a row (across the table), you create a more inclusive segment. In the preceding form, the visitor can be interested in either suspense movies or romance movies or both kinds of movies to be included in the segment. In other words, you add more factors that can qualify a visitor for a segment by working across the table, adding criteria to the same row.

As you add criteria to a column (down the table), you create a more restrictive segment. In the following example, a visitor belongs to the segment only if both the criteria are true:

The visitor must be interested in slapstick movies and be between the ages of 18 and 30 to belong to the segment. In other words, you add restrictions to a segment by working down the form, adding them to the column.

In summary, segments broaden as you add criteria across the table and narrow as you add criteria down the table.
Creating Segments

Before you create segments, be sure the following tasks have been completed:

• The marketing, design, and development teams met to determine the kinds of data that you want to collect about your visitors.

• The developers created the visitor attributes, history attributes, and history definitions that the cross-functional team decided are necessary.

• You (the marketers) obtained a list or overview of the visitor data assets that were created and you understand what they mean and how they are categorized.

Step 1: Name and Define the Segment

1. If Content Server’s interface is not open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click New.
   
   Content Server displays the “New” form.
4. In the “New” form, select New Segment.

   Content Server displays the “New Segment” form:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter a unique, descriptive name for the segment.</td>
</tr>
<tr>
<td>Description</td>
<td>Enter a brief description of the segment.</td>
</tr>
<tr>
<td>Start Date</td>
<td>Select the start date for the segment.</td>
</tr>
<tr>
<td>End Date</td>
<td>Select the end date for the segment.</td>
</tr>
</tbody>
</table>

5. In the Name field, enter a unique, descriptive name for the segment. You can enter up to 64 alphanumeric characters, including spaces. The first character must be a letter.

6. In the Description field, enter a brief description of the segment. You can enter up to 128 alphanumeric characters.

7. In the Start Date and End Date fields, use the date picker to select the date range that the segment will be used on the web site.

8. Click Continue.
Chapter 11. Grouping Visitors into Segments

Creating Segments

Content Server displays the “Segment Filtering Criteria” form. The categories of visitor attributes and history definitions you can use to build your segment are listed across the top of the form.

Content Server displays the “Segment Filtering Criteria” form. The categories of visitor attributes and history definitions you can use to build your segment are listed across the top of the form.

Note that filtering on text strings is case-sensitive unless it is explicitly set not to be so.

9. Do one of the following:
   - If you want to create a segment based on a buyer contact information, go to “Step 2: Create Segment Filtering Criteria with Visitor Attributes,” on page 297.
   - If you want to create a segment based on the user profile, go to “Step 2: Create Segment Filtering Criteria with Visitor Attributes,” on page 297.
   - If you want to create a segment based on buyer history, go to Step 3: Create Segment Filtering Criteria with History Definitions.
   - If you want to create a segment based on a history definition, go to Step 3: Create Segment Filtering Criteria with History Definitions.
   - If you want to create a segment based on the shopping cart, go to Step 4: Define the Segment with Shopping Cart Criteria.

Step 2: Create Segment Filtering Criteria with Visitor Attributes

1. In the “Segment Filtering Criteria” form, click the name of a category that lists visitor attributes.

   Engage displays a list of the attributes in the category.

2. Click the name of the attribute that you want to use to define the segment.

3. The form displays constraint fields that are meaningful for that attribute.

4. Use the form to set the attribute values that include a visitor in the segment or exclude a visitor from the segment.
For example, if the attribute is “age” and you want to include people between the ages of 18 and 30, set the values as follows:

<table>
<thead>
<tr>
<th>Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include</td>
</tr>
</tbody>
</table>

To exclude people who are in that age range, set the values as follows:

<table>
<thead>
<tr>
<th>Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclude</td>
</tr>
</tbody>
</table>

To include only people who are 18, set the values as follows:

<table>
<thead>
<tr>
<th>Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include</td>
</tr>
</tbody>
</table>

5. Click Add This Criterion.

The criterion is added to the segment.

6. Do one of the following:
   - If you are finished creating this segment, click Save.
   - To add another criterion to the segment, continue this procedure.

7. Do one of the following:
   - To add another criterion that qualifies a visitor for this segment, select a category name from the drop-down list to the right (in the same row) of the criterion that you just added, and click Include Others.
   - To add more restrictions to the segment, select a category name from the drop-down list under (in the next row) the criterion that you just added, and click Restrict Further.
8. Do one of the following:
   - If you selected a visitor attribute category, go back to step 2 of this procedure.
   - If you selected a history definition category, go to Step 3: Create Segment Filtering Criteria with History Definitions.
   - If you selected Shopping Cart, go to Step 4: Define the Segment with Shopping Cart Criteria.
Step 3: Create Segment Filtering Criteria with History Definitions

1. In the “Segment Filtering Criteria” form, click on a category for a history definition. The “Segment Filtering Criteria” form for history definitions is displayed. It shows the first history definition in the category. For example:

![History Definition Form Example](image)

It has three general areas that you use to restrict or filter items:
- The options area at the top of the form
- The time restriction area on the left of the form
- The history attribute restriction area on the right of the form. This section lists the history attributes that define the history definition.

**Note**

To use a different history definition from the one displayed in the form, select one from the **Additional Criteria** list at the bottom of the form.

2. Use one or more of the following options to create simple or complex criteria by using all three areas in the “Segment Filtering Criteria” form to restrict or filter one item.
Option 1: Filtering Based on a Total

You can define the segment based on a total, such as the total amount spent, a total price, or a total number of items.

For example, a site developer could create a history definition named **Purchase History**, which would be a historical record of purchases made by site visitors. One of the history attributes in this definition could be **number of items**. Using this history definition, a marketer could create a segment based on the total number of items purchased by site visitors.

To define a segment based on a total, complete the following steps:

1. **Select the Total option** and then set the values that include a visitor in the segment or exclude a visitor from the segment.

   For instance, the example history definition **Purchase History** could be set to include visitors who have purchased 10 items or more:

   - Include Total Number of items is greater than or equal to 10

2. **Under Restrict to a specific time period**, specify the time period to use for the total.

   For example, to include visitors who bought the specified number of items during the last six months, the time option values for the **Purchase History** history definition could be set as follows:

   - The last 6 months

   To include visitors who bought the specified number of items on a specific day—perhaps a holiday—the values could be set as follows:

   - A specific time period:

   - between Jul 3 4 2006 and Jul 3 4 2006

3. **(Optional) To further restrict this criterion by adding a history attribute to it**, go to **Option 5: Adding a History Attribute to Further Define the Segment**.

4. **Click Add this Criterion.** The criterion is added to the segment.
5. Do one of the following:
   - If you are finished creating this segment, click **Save**.
   - To add another criterion to the segment, continue this procedure.

6. Do one of the following:
   - To add another criterion that qualifies a visitor for this segment, select a category name from the drop-down list to the right (in the same row) of the criterion that you just added, and click **Include Others**.
   - To add more restrictions to the segment, select a category name from the drop-down list under (in the next row) the criterion that you just added, and click **Restrict Further**.

7. Do one of the following:
   - If you selected a visitor attribute category, go to **Step 2: Create Segment Filtering Criteria with Visitor Attributes**
   - If you selected a history definition category, go to **Step 3: Create Segment Filtering Criteria with History Definitions**
   - If you selected Shopping Cart, go to **Step 4: Define the Segment with Shopping Cart Criteria**

**Option 2: Filtering Based on a Count**

You can define the segment based on the total number of times this history definition was recorded for a visitor.

For instance, using the **Purchase History** history definition described in **Option 1: Filtering Based on a Total**, a marketer could define a segment based on the number of times **Purchase History** was recorded for a visitor. The effect of this criterion is that Engage would consider how many times a visitor purchased anything instead of considering what they bought or how much they spent.

To define a segment based on a count, complete the following steps:

1. Select the **Count** option at the top of the form and then set the values that include a visitor in the segment or exclude a visitor from the segment.

   For example, the **Purchase History** history definition could be set to include visitors who have purchased something (anything) at least five times:

   ![Include Count as greater than or equal to 5](image)

2. Under **Restrict to a specific time period**, specify the time period to use for the count.

   For example, to include visitors who bought during the last six months, the time option values for the **Purchase History** history definition could be set as follows:

   ![Restrict to last 5 months](image)
To include visitors who bought something on a specific day—perhaps a holiday—the values could be set as follows:

3. (Optional) If you want to further restrict this criterion by adding a history attribute to it, go to Option 5: Adding a History Attribute to Further Define the Segment.

4. Click **Add this Criterion**.

The criterion is added to the segment.

5. Do one of the following:
   - If you are finished creating this segment, click **Save**.
   - To add another criterion to the segment, continue this procedure.

6. Do one of the following:
   - To add another criterion that qualifies a visitor for this segment, select a category name from the drop-down list to the right (in the same row) of the criterion that you just added, and click **Include Others**.
   - To add more restrictions to the segment, select a category name from the drop-down list under (in the next row) the criterion that you just added, and click **Restrict Further**.

7. Do one of the following:
   - If you selected a visitor attribute category, go to Step 2: Create Segment Filtering Criteria with Visitor Attributes.
   - If you selected a history definition category, go to Step 3: Create Segment Filtering Criteria with History Definitions.
   - If you selected Shopping Cart, go to Step 4: Define the Segment with Shopping Cart Criteria.
Option 3: Filtering Based on the First Time a History Definition Was Recorded

You can define the segment based on the first time the history record was recorded for visitors.

For instance, using the Purchase History history definition described in Option 1: Filtering Based on a Total a marketer could define a segment based on the first time the visitor purchased something—in other words, the first time a Purchase History record was recorded for the visitor.

To define the segment based on the first time the definition was recorded, complete the following steps:

1. Select the Earliest option at the top of the form and then set the values that include a visitor in the segment or exclude a visitor from the segment.
   
   For example, the Purchase History history definition could be set to include visitors who purchased something on or before January 1, 2007:

   ![Include option]

   - Earliest date recorded: Jan 1, 2007
   - Less than or equal to: 12:00 AM
   - Time zone: -05:00

2. Under Restrict to a specific time period, specify the time period to use for this condition.

   For example, if a marketer wanted to include visitors who purchased something on or before a specific date (in this example, January 1, 2007) but did not want to include them if the date of that purchase was more than two years ago, the Purchase History time values could be set as follows:

   ![Restrict to a specific time period]

   - The last 2 years

3. (Optional) If you want to further restrict this criterion by adding a history attribute to it, go to Option 5: Adding a History Attribute to Further Define the Segment.

4. Click Add this Criterion.

   The criterion is added to the segment.

   ![Filtering Criteria]

   - This segment includes:
     - All Visitors
   - Restrict Visitors
     - Include (Purchase summary)
       - First date ≤ January 1, 2007
       - Last 2 years
   - Restrict Visitors
     - Buyer Contact
     - Restrict further

   This segment is:
   - Classic Movie Fan
5. Do one of the following:
   - If you are finished creating this segment, click **Save**.
   - To add another criterion to the segment, continue this procedure.

6. Do one of the following:
   - To add another criterion that qualifies a visitor for this segment, select a category name from the drop-down list to the right (in the same row) of the criterion that you just added, and click **Include Others**.
   - To add more restrictions to the segment, select a category name from the drop-down list under (in the next row) the criterion that you just added, and click **Restrict Further**.

7. Do one of the following:
   - If you selected a visitor attribute category, go to **Step 2: Create Segment Filtering Criteria with Visitor Attributes**.
   - If you selected a history definition category, go to **Step 3: Create Segment Filtering Criteria with History Definitions**.
   - If you selected Shopping Cart, go to **Step 4: Define the Segment with Shopping Cart Criteria**.

### Option 4: Filtering Based on the Last Time a History Definition Was Recorded

You can define the segment based on the last time (the most recent time) the history definition was recorded for a visitor.

For instance, using the **Purchase History** history definition described in **Option 1: Filtering Based on a Total** a marketer could define a segment based on the most recent time the visitor purchased something—in other words, the last time a **Purchase History** record was recorded for the visitor.

To define the segment based on the last time the history definition was recorded, complete the following steps:

1. Select the **Latest** option at the top of the form and then set the values that include a visitor in the segment or exclude a visitor from the segment.
   
   For example, to include visitors who have purchased something since January 1, 2007, the **Purchase History** values could be set as follows:

   ![Purchase History Values](image)

2. Under **Restrict to a specific time period**, specify the time period to use for this condition (**Overall** in our example).

3. (Optional) If you want to further restrict this criterion by adding a history attribute to it, go to **Option 5: Adding a History Attribute to Further Define the Segment**.
4. Click **Add this Criterion**.
The criterion is added to the segment. For example:

```
Filtering Criteria:
This segment includes:
[All Visitors]
```

5. Do one of the following:
   - If you are finished creating this segment, click **Save**.
   - To add another criterion to the segment, continue this procedure.

6. Do one of the following:
   - To add another criterion that qualifies a visitor for this segment, select a category name from the drop-down list to the right (in the same row) of the criterion that you just added, and click **Include Others**.
   - To add more restrictions to the segment, select a category name from the drop-down list under (in the next row) the criterion that you just added, and click **Restrict Further**.

7. Do one of the following:
   - If you selected a visitor attribute category, go to Step 2: Create Segment Filtering Criteria with Visitor Attributes.
   - If you selected a history definition category, go to Step 3: Create Segment Filtering Criteria with History Definitions.
   - If you selected Shopping Cart, go to Step 4: Define the Segment withShopping Cart Criteria.

**Option 5: Adding a History Attribute to Further Define the Segment**

You can add a history attribute to create a more complex segment—one that further restricts the count, total, first, or last record by taking a specific attribute into consideration.

To add a history attribute to further define the segment, complete the following steps:

1. Select and configure one of the four options at the top of the form (**Count**, **Total**, **Earliest**, or **Latest**). If you need help with this step, go to one of these procedures:
   - **Option 1: Filtering Based on a Total**
   - **Option 2: Filtering Based on a Count**
   - **Option 3: Filtering Based on the First Time a History Definition Was Recorded**
   - **Option 4: Filtering Based on the Last Time a History Definition Was Recorded**
2. Under History Attributes (on the right side of the form), select the Values for selected attributes option.

3. Under the attribute list for this history definition, click the history attribute that you want to use as a filter.
   The form displays constraint fields that are meaningful for that attribute.

4. Use the constraint fields to set the attribute values that further constrain the criterion. For example:

   ![Values for selected attributes]
   ![Store ID 1]

5. Under Restrict to a specific time period, specify the time period to use for this condition.

6. Click Add this Criterion.
   The criterion is added to the segment.

7. Do one of the following:
   - If you are finished creating this segment, click Save.
   - To add another criterion to the segment, continue this procedure.

8. Do one of the following:
   - To add another criterion that qualifies a visitor for this segment, select a category name from the drop-down list to the right (in the same row) of the criterion that you just added, and click Include Others.
   - To add more restrictions to the segment, select a category name from the drop-down list under (in the next row) the criterion that you just added, and click Restrict Further.

9. Do one of the following:
   - If you selected a visitor attribute category, go to Step 2: Create Segment Filtering Criteria with Visitor Attributes.
   - If you selected a history definition category, go to Step 3: Create Segment Filtering Criteria with History Definitions.
   - If you selected Shopping Cart, go to Step 4: Define the Segment with Shopping Cart Criteria.
Option 6: Adding Products to Further Define the Segment

You can add products to create a more complex segment—one that further restricts the count, total, first, or last record by taking specific products into consideration—if the history definition that you use to define this segment has a product list history attribute.

To add a product to the segment definition, complete the following steps:

1. Select and configure one of the four options at the top of the form (Count, Total, Earliest, or Latest). If you need help with this step, go to one of these procedures:
   - Option 1: Filtering Based on a Total
   - Option 2: Filtering Based on a Count
   - Option 3: Filtering Based on the First Time a History Definition Was Recorded
   - Option 4: Filtering Based on the Last Time a History Definition Was Recorded

2. Under History Attributes (on the right side of the form), select the Values for selected attributes option.

3. Under the attribute list, select Product List.
   The form displays a Select button.

4. In the tree, select the Product tab.

5. Click the product that you want to select. To select more than one product use Ctrl-click or Shift-click.

6. Click Select.
   Engage lists the product parents and products that you selected. For example:

   ![Select button](image)

   - Values for selected attributes

   - Product List

   - Product Groups Comedy

   - Product Groups Mystery and Suspense

7. Under Restrict to a specific time period, specify the time period to use for this criterion.

8. Click Add this Criterion.
   The criterion is added the segment.

9. Do one of the following:
   - If you are finished creating this segment, click Save.
   - To add another criterion to the segment, continue this procedure.

10. Do one of the following:
    - To add another criterion that qualifies a visitor for this segment, select a category name from the drop-down list to the right (in the same row) of the criterion that you just added, and click Include Others.
    - To add more restrictions to the segment, select a category name from the drop-down list under (in the next row) the criterion that you just added, and click Restrict Further.
11. Do one of the following:
   - If you selected a visitor attribute category, go to Step 2: Create Segment Filtering Criteria with Visitor Attributes.
   - If you selected a history definition category, go to Step 3: Create Segment Filtering Criteria with History Definitions.
   - If you selected Shopping Cart, go to Step 4: Define the Segment with Shopping Cart Criteria.

Step 4: Define the Segment with Shopping Cart Criteria

1. Click Shopping Cart.

   Engage displays the “Shopping Cart” section of the “Segment Filtering Criteria” form:

   ![Shopping Cart Form](image)

2. Do one of the following:
   - To define this segment based on the total value of the items in a visitor’s shopping cart, select the first option and then set the values. For example, to include visitors who have at least $50 worth of products in their carts, set the values as follows:
     - Include: Total value of items in the cart is equal to
     - Value: $50
   - To define this segment based on the total number of items in the visitor’s shopping cart, select the second option and then set the values. For example, to include visitors who have three or more items in their carts, set the values as follows:
     - Include: Total count of items in the cart is equal to
     - Value: 3

3. To restrict the item count or cart value to specific products in the catalog:
   a. Select Restrict to specific items from the tree.
   b. In the tree, select the Product tab.
   c. Click the product that you want to select. To select more than one product, use Ctrl-click and Shift-click.
   d. In the “Segment Filtering” form, click Add Selected Items.

4. Click Add this Criterion.
The shopping cart criterion is added to the segment.

5. Do one of the following:
   - If you are finished creating this segment, click **Save**.
   - To add another criterion to the segment, continue this procedure.

6. Do one of the following:
   - To add another criterion that qualifies a visitor for this segment, select a category name from the drop-down list to the right (in the same row) of the criterion that you just added, and click **Include Others**.
   - To add more restrictions to the segment, select a category name from the drop-down list under (in the next row) the criterion that you just added, and click **Restrict Further**.

7. Do one of the following:
   - If you selected **Shopping Cart**, return to step 2 in this procedure.
   - If you selected a visitor attribute category, go to **Step 2: Create Segment Filtering Criteria with Visitor Attributes**.
   - If you selected a history definition category, go to **Step 3: Create Segment Filtering Criteria with History Definitions**.

---

**Sample Segment Assets**

When you install Engage with the Burlington Financial sample site, you get two sample segment assets, **BFfrequentvisitors** and **highriskinvestors**, which appear in the **Marketing** tab in the tree. These segments are designed to work in concert with the sample “Recommendation” and “Promotion” assets that also appear in the **Marketing** tab. Use these sample segments as templates for creating segment assets for your site.

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**Publishing Segments**

When your segments are ready, you must approve them so they can be published to your delivery system. Engage can then use the segments to assess visitors and recommend the appropriate items to them.
Be sure to examine or inspect your segments to verify that you configured them correctly before approving them for publishing.

For more information about approving and publishing assets, see Chapter 7, “Publishing.”

After You Publish

After you have created, verified, and published the segments, you must assign ratings to the products and content that are significant to members of each segment. For details, see Chapter 12, “Creating and Configuring Recommendations.”

You can also create promotions after you have created segments. For more information, see Chapter 13, “Creating Promotions.”
Chapter 12

Creating and Configuring Recommendations

Recommendations are assets that determine which assets are featured or “recommended” on a site page. Recommendations calculate which assets to recommend based on the segments the visitors qualify for, and, in some cases, context-based relationships between assets (for example, movies related to each other by genre).

After you create the “Recommendation” assets, (typically, marketing people create “Recommendation” assets), you configure them by rating their child assets based on their importance to the segments that visitors qualify for. Assets are recommended (or are not recommended) based on those ratings. Additionally, the Related Items recommendation defines relationships between assets that allow for cross- or up-selling items according to how those items are related to one another. You determine which assets have those relationships.

This chapter contains the following sections:

- Recommendation Assets
- Asset Selection Factors
- Creating Recommendation Assets
- Editing Recommendation Assets
- Configuring Assets to Be Recommended
- Configuring Asset Relationships Using Related Items Recommendations
- Verifying Recommendation Assets
- Publishing Rated Flex Assets
Chapter 12. Creating and Configuring Recommendations

Recommendation Assets

A “Recommendation” asset collects, assesses, and sorts assets, and then recommends the most appropriate of these assets to the current visitor. How does it determine which assets are the most appropriate? By consulting the list of segments that the visitor belongs to and any confidence set in the recommendation for each asset. (For information about confidence, see “Confidence,” on page 319.)

You create segments and then rate the flex assets for their importance to each segment. When a “Recommendation” asset is invoked from a site page, Engage determines which segments the current visitor qualifies for, and then selects the assets that are identified by the recommendation to have the highest rating for those segments. These are the assets that are recommended to the visitor.

Engage provides the following types of recommendations:

- **Static Lists** – operates in two modes, List and Recommendation:
  - In List mode, a Static Lists recommendation holds and returns a single static, preselected list of assets regardless of segments (or whether segments apply at all). Confidence values are automatically assigned to assets on the list based on their position on the list; the first asset receives a confidence value of 100%, the next one 99%, and so on, in descending order.
  - In Recommendation mode, a Static Lists recommendation holds and returns static, preselected lists of recommended assets when the visitor qualifies for segments defined in the recommendation, and also when no segments apply.

  When a template invokes the recommendation, the recommendation returns the assets on the static lists. For each asset that you add to a segment’s static list, you can assign a confidence value for In Segment and Out of Segment ratings. (A variant of this type of recommendation was formerly known as “manual.”)

You create a static lists recommendation by selecting assets from your Active List and adding them to each segment’s list (recommendation mode) or the common list (list mode). Because this is a static lists recommendation, the assets in the list(s) remain the same until you change them (or delete them from the database).

- **Dynamic Lists** – references a special asset called a “CSElement” asset, which your developers have coded as a type of program known as an element. When a template invokes the Dynamic Lists recommendation, it executes the element, which returns a list based on the conditions defined in the element. For example, you could create a recommendation named “New Products” whose referenced element selects only those “Product” assets that have been added to the database in the past five days.

You create a Dynamic Lists recommendation by selecting a “CSElement” asset (which contains the logic for generating the list) in the tree. You can then test the selected element by displaying the current list results.

As its name implies, this type of recommendation is dynamic: each time it is invoked by a template, the recommendation executes the element, which regenerates the list, based on the current state of the database.

- **Related Items** – holds the name of a relationship between flex assets that are related to one another based on context (for example, similarly themed movies). When a template invokes a Related Items recommendation, assets are returned (recommended) only if they are manually configured to have the relationship named by the recommendation with the asset that is currently displayed on the page.
Typical relationships between assets are cross-sell and up-sell relationships. For example, a Related Items recommendation named “Cross-Sell” displays a list of science fiction movies on rendered pages that display suspense movies because the marketers determined that people who buy science fiction movies also buy suspense movies.

You create a Related Items recommendation by naming it and specifying that it is a Related Items recommendation. You must then determine which flex assets should have the relationship represented by this recommendation with other flex assets. You assign these relationships in the parent asset’s “New” or “Edit” form, and you assign a confidence value to each asset on the list for each segment.

When the recommendation is rendered by its template, Engage does the following:

- Identifies which assets have the relationship named by the recommendation with the currently displayed asset.

- Examines the ratings for those assets to determine whether those assets are relevant for the current visitor.
The functionality of each of the available types of “Recommendation” assets is summarized in the following table:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Static Lists (List Mode)</th>
<th>Static Lists (Recommendation Mode)</th>
<th>Dynamic Lists</th>
<th>Related Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings (by segment)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Confidence (by segment)</td>
<td>Determined by asset’s position in the list; no segment distinction.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Selection Criteria</td>
<td>Highest only</td>
<td>Highest, Random</td>
<td>Highest, Random</td>
<td>Highest, Random</td>
</tr>
<tr>
<td>Sort Order</td>
<td>Descending by confidence only</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Options</td>
<td>• Can return the children of recommended assets</td>
<td>• Can return the children of recommended assets</td>
<td>• Can return the children of recommended assets</td>
<td>• Can return the children of recommended assets</td>
</tr>
<tr>
<td></td>
<td>• Can be overridden by promotions</td>
<td>• Can be overridden by promotions</td>
<td>• Can be overridden by promotions</td>
<td>• Can be overridden by promotions</td>
</tr>
<tr>
<td></td>
<td>• Can apply to all or select asset types</td>
<td>• Can apply to all or select asset types</td>
<td>• Can apply to all or select asset types</td>
<td>• Can apply to all or select asset types</td>
</tr>
<tr>
<td>Build</td>
<td>Built by manually adding assets to the list and setting their order in the list.</td>
<td>Built by manually assigning assets to and setting their confidence values for each segment’s list.</td>
<td>Built in realtime by code in the assigned “CSElement” asset.</td>
<td>Built by adding assets to each segment’s list in the parent asset’s “New” and “Edit” forms.</td>
</tr>
</tbody>
</table>
Asset Selection Factors

When Engage determines which assets are the most appropriate to recommend to the current visitor through a given recommendation, it multiplies each asset’s individual **rating** in the segment by the **confidence** value assigned to the asset in the recommendation to obtain the asset’s **weighted** rating. The following sections describe these concepts in detail.

### Ratings

An asset’s individual rating establishes how important the asset is to the visitor belonging to a particular segment. You manually assign the rating to the asset in the asset’s “New” or “Edit” form.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Segment</td>
<td>Used when the current visitor is a member of a specific segment.</td>
</tr>
<tr>
<td>Out of Segment</td>
<td>Used when the current visitor is not a member of a specific segment.</td>
</tr>
<tr>
<td>When no segment ratings apply</td>
<td>Used when no segments are defined for the current site, or the asset is placed in a recommendation that does not recognize segments (Static Lists recommendation in List mode).</td>
</tr>
</tbody>
</table>

There is also a system default rating for flex assets or flex parents that have not been assigned any of these specific ratings. The system default is set to 50 unless you and your development team decide to change it (through an XML or JSP object method on your site pages). The system default represents the average or middle point in the rating scale for your site, which is why FatWire recommends that you keep the system default rating set to 50.

### Range of Ratings

The valid range for individual ratings is 0 through 100. The individual values of 0 and 100 are special and affect an asset’s rating as follows:

- An asset rating of 0 for a segment tells Engage to never recommend the asset to a member of the segment. For example, you might want to make sure that your site never recommends PCs or PC software to members of a segment named “Macintosh Users.”
- An asset rating of 100 for a segment tells Engage to always recommend the asset to a member of the segment.

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**Note**

Only flex assets can be rated for segments. Basic assets do not support ratings and are ignored by the recommendation if placed in it. Consult your administrator to make sure you are only placing flex assets in the recommendations you create.
Inheritance of Ratings

Flex assets and flex parents inherit “In Segment,” “Out of Segment,” and “When No Segment Ratings Apply” (“fallback”) ratings from their parents. The asset’s or parent’s final rating is the average of its individual rating (which is the system default rating if it has no individual rating) plus its inherited rating. The asset’s inherited rating is the final rating of its parent, as illustrated by the following formula:

\[
\text{Final rating} = \frac{\text{individual rating} + \text{inherited rating}}{2}
\]

where,

- individual rating = system default if custom rating is not specified
- inherited rating = parent’s final rating

For example:

<table>
<thead>
<tr>
<th>Asset or Parent</th>
<th>Individual Rating</th>
<th>Inherited Rating</th>
<th>Final Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Parent A</td>
<td>70</td>
<td>no rating inherited</td>
<td>70</td>
</tr>
<tr>
<td>(top-level group)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset Parent B</td>
<td>60</td>
<td>70</td>
<td>(60 + 70) / 2 = 65</td>
</tr>
<tr>
<td>(child of Asset Parent A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset 1</td>
<td>95</td>
<td>65</td>
<td>(95 + 65) / 2 = 80</td>
</tr>
<tr>
<td>(child of Asset Parent B)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the flex asset inherits a rating for a segment that it does not have an individual rating for, Engage averages the inherited rating with the system default rating (which is typically 50) to determine the final rating. For example:

<table>
<thead>
<tr>
<th>Asset or Parent</th>
<th>Individual Rating</th>
<th>Inherited Rating</th>
<th>Final Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Parent A</td>
<td>80</td>
<td>nothing inherited</td>
<td>80</td>
</tr>
<tr>
<td>(top-level group)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset Parent B</td>
<td>none, so the system default of 50 is used</td>
<td>80</td>
<td>(50 + 80) / 2 = 65</td>
</tr>
<tr>
<td>(child of Asset Parent A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset 1</td>
<td>70</td>
<td>65</td>
<td>(70 + 65) / 2 = 67.5</td>
</tr>
<tr>
<td>(child of Asset Parent B)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Because the values of 0 and 100 have special functions, the following rules apply to them when inheritance is concerned:

- If either the individual or the inherited rating is 0, the final rating is 0.
• If either the individual or the inherited rating is 100, the final rating is 100 unless the other value is 0.

If the current visitor belongs to more than one segment and the asset has ratings for those segments, the following rules apply:
• The highest of the ratings is the final rating.
• If one of those ratings is 0, the final rating is 0.

Confidence

Confidence in Engage indicates how likely your visitors are to want to view a particular piece of content; thus, Engage uses confidence values assigned to each asset in a recommendation to decide how often a piece of content is to be recommended to the visitor. When a recommendation assesses an asset against a given segment, the asset’s rating (either individual or final, depending on the scenario) is multiplied by the confidence value for that segment in the recommendation to produce the asset’s weighted rating. The weighted rating is then used by the recommendation to determine how relevant the asset is to the current visitor. Confidence is therefore a scaling factor for the asset’s rating. Keep in mind that neither an asset’s individual rating nor its confidence value alone can be used to recommend the asset to the visitor; the weighting process applies to all assets assigned to a given recommendation.

Note that when an asset is assessed by multiple recommendations, its respective weighted ratings are calculated independently of one another; that is, the confidence values assigned to the asset in one recommendation do not affect the asset’s rating “visible” to the other recommendation. For example, if an asset has an individual rating of 80, a 60% confidence for Segment A in Recommendation 1, and a 90% confidence for Segment A in Recommendation 2, both recommendations use the asset’s individual rating of 80 when calculating its respective weighted rating.

The way confidence is assigned depends on the type of recommendation:
- For Static Lists recommendations in List mode, Engage automatically assigns a confidence value to each asset in the list based on the asset’s position in the list: the first asset on the list gets a value of 100%, the second 99%, the third 98% and so on, in descending order.
- For Static Lists recommendations in Recommendation mode, you manually assign confidence values to assets for each segment in the recommendation via the recommendation’s “New” or “Edit” forms.
- For Related Items recommendations, you manually assign confidence values to assets for each segment in the recommendation via the parent asset’s “New” or “Edit” form.
- For Dynamic Lists recommendations, confidence values are returned to Engage by the selected “CSElement” asset and assigned to the respective assets automatically.

Range of Confidence Values

Because confidence is a scaling factor, it is presented as a percentage. The valid range of percentage values is 0 through 100. The values of 0% and 100% affect an asset’s rating as follows:
• A confidence value of 0% means the asset will never be returned by that recommendation because the asset’s rating is multiplied by 0% (0), which results in a rating of 0.

• A confidence value of 100% means the asset’s rating is not scaled or affected by the confidence at all because the asset’s rating is multiplied by 100% (1).

Inheritance of Confidence Values

Typically you designate relationships between flex assets and assign a confidence value to that relationship at the parent level because assets inherit the confidence value assigned to their parents by the recommendation.

If the asset has more than one confidence value for the same recommendation, Engage uses the highest value (even if one of those values is 0); it does not average them.

Selection Criteria

<table>
<thead>
<tr>
<th>Asset</th>
<th>Weighted Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movie 123</td>
<td>95</td>
</tr>
<tr>
<td>Movie ABC</td>
<td>87</td>
</tr>
<tr>
<td>Movie RedYellowBlue</td>
<td>65</td>
</tr>
</tbody>
</table>

Note

List mode Static Lists recommendations do not support the Random selection criterion.

Selection Criteria is a configuration option that allows you to specify how the “Recommendation” asset selects assets to be returned to the template that requests them.

The method that you select for Selection Criteria determines how Engage selects assets from the database. There are two Selection Criteria methods:

• **Highest** – Engage selects the assets with the highest weighted rating for the current segments (that is, the segments that the current visitor belongs to).

• **Random** – Engage uses a weighted random algorithm (operating on the assets’ weighted ratings) to select the assets from the list. Use this selection criterion to design a recommendation that rotates its message, keeping the recommended assets current or different each time a visitor returns to the site page. The selections are still based on the weighted ratings of the assets, however, because this is a weighted random algorithm. The higher the asset’s rating for the current segment, the more likely it is to be chosen.

For example, a template is coded to call a recommendation that uses the random selection criteria method for one asset. The possibilities include these three products:

The probability of the product being selected is its rating divided by the sum of all the ratings (247). Therefore, “Movie 123” has a 38% chance of being selected, “Movie ABC” has a 35% chance, and “Movie RedYellowBlue” has a 26% chance.
Sort Criteria

Sort Criteria is a configuration option that allows you to specify the order in which the template should render the assets returned to it by the recommendation. Sort Criteria are applied to the list of returned assets after the Selection Criteria method determines which assets to include in the list.

By default, you can sort the list of selected assets by the following attributes:

- “_ASSETTYPE_” – sorts the assets in the list alphabetically by asset type. For example, “Article” assets are first, then Image assets, and then the Product assets. (By default, assets are sorted in ascending order; you can reverse the sort order by selecting the Descending sort direction.)
- “_CONFIDENCE_” – sorts the returned assets by their confidence values.
- “_RATING_” – sorts the returned assets by their rating (individual or final, if applicable).

For each attribute, you can specify either ascending or descending sort order.

Sort options specific to the asset types available on your site are set up by your administrator. As an example, a site could be set up to include the following attribute types and corresponding attributes:

- “Product Attribute” – sorts by product attributes such as Price, SKU, or Color, and so on (depending on which product attributes are used in your system).
- “Content Attribute” – sorts by content attributes such as Headline, Filename, or Author, and so on (depending on which content attributes are used in your system). Note that content attribute means only those attributes that are used to define flex assets, not basic assets.

You can add as many sort options as you want to a recommendation. Engage uses these options in the order in which they appear on the recommendation form.
Asset Recommendation Processes

The following section explains how Engage determines which assets to pass to the template for each type of recommendation.

Static Lists in List Mode

List mode allows you to create a simple static list with the marketing options (such as selection and sort criteria) fixed to specific values (see table on page 316 for this information). When a List mode Static Lists recommendation is invoked by a template, all assets in the list will always be displayed in the order you specify within the “Recommendation” asset.

- If a template invokes a List mode Static Lists recommendation but it does not ask for a specific number of assets, the recommendation examines the ratings of the assets in the recommendations and eliminates assets with a rating of 0. The recommendation then returns all the assets on its list that are not rated 0, regardless of the segment(s) the visitor belongs to.

- When a template invokes a List mode Static Lists recommendation and it requests fewer assets than are on the recommendation’s list, Engage recommends the assets with the highest weighted ratings (the random weighted algorithm is not supported in List mode).

The recommendation calculates the weighted ratings of the assets on its list as follows:

1. It examines each asset on the recommendation’s list to determine whether that asset has a “No segment ratings apply” rating.

2. For each asset that has such a rating, Engage multiplies the rating by the confidence value for the asset (determined by the asset’s position in the list). This value is the asset’s weighted rating. For example, if the rating is 90 and the confidence is 75%, it calculates the weighted rating to be 67.5 (that is, 90 x 0.75).

3. Engage recommends the assets using the **Highest** selection criterion to determine which assets to return (the **Random** selection criterion is not supported in List mode). For more information on selection criteria, see the section “Selection Criteria,” on page 320.

Static Lists in Recommendation Mode

In contrast to List mode, when a Recommendation mode Static Lists recommendation is invoked by a template, the order of the displayed assets is determined by segments and ratings, not by the list order. Furthermore, the application of segments and ratings can result in some assets in the list being filtered out entirely.

- If a template invokes a Recommendation mode Static Lists recommendation but it does not ask for a specific number of assets, the recommendation examines the ratings of the assets in the recommendations and eliminates assets with a rating of 0. The recommendation then returns all the assets on its list that are not rated 0 for the current visitor.

- When a template invokes a Recommendation mode Static Lists recommendation and it requests fewer assets than are on the recommendation’s list, Engage uses the **Selection Criteria** method specified in the recommendation to determine which assets to return.
The recommendation calculates the weighted ratings of the assets on its list as follows:

1. It determines which segments the current visitor belongs to.
2. It examines each asset on the recommendation’s list to determine whether that asset has a rating for any of the segments that apply to the current visitor.
3. For each asset that has a rating for the segment(s) the current visitor belongs to, Engage multiplies the rating by the confidence value assigned in the recommendation for that asset. This value is the asset’s weighted rating. For example, if the rating is 90 and the confidence is 75%, it calculates the weighted rating to be 67.5 (that is, 90 x 0.75).
4. If the Selection Criteria method is Highest, Engage recommends the assets with the highest weighted ratings. If the Selection Criteria method is Random, Engage uses a weighted random algorithm to select and return the recommended assets (based on their weighted ratings). For more information on selection criteria, see the section “Selection Criteria,” on page 320.

Dynamic Lists

When a Dynamic Lists recommendation is invoked by a template, the order of the displayed assets is determined by segments and ratings. Furthermore, the application of segments and ratings can result in some assets in the list being filtered out entirely.

- If a template invokes a Dynamic Lists recommendation but it does not ask for a specific number of assets, the recommendation returns all the assets it obtains from the generated list. Engage does not calculate weighted ratings in this case.
- If a template invokes a Dynamic Lists recommendation and it requests fewer assets than are on the recommendation’s list, Engage uses the Selection Criteria method specified in the recommendation to determine which assets to return.

Engage calculates the asset ratings as follows:

1. It determines which segments the current visitor belongs to.
2. It examines each asset returned by the element to determine whether that asset has a rating for any of the segments that apply to the current visitor.
3. For each asset that has an appropriate rating, it multiplies the rating by the confidence value for that asset (from the element). This value is the asset’s final rating. For example, if the rating is 90 and the confidence is 0.75, it calculates the final rating to be 67.5 (90 x 0.75). If the element does not return a confidence value, Engage assigns a confidence value of 1 to each asset in the list.
4. If the Selection Criteria method is Highest, Engage recommends the assets with the highest final ratings. If the Selection Criteria method is Random, Engage uses a weighted random selection to return the recommended assets.

Related Items

In this example, a template that displays a product description for a “Movie” asset named Movie 123 invokes a Related Items recommendation named “Cross-Sell.” The template for “Cross-Sell” asks for five assets that have the “Cross-Sell” relationship with Movie 123.

Engage does the following:

1. Determines which segments the current visitor belongs to.
2. Examines the **Related Items** section of the asset form for Movie 123 to determine which assets are listed for the “Cross-Sell” recommendation. It also examines the related assets for all parents of Movie 123.

3. Creates a preliminary list of all “Movie” and “Product” assets that have the “Cross-Sell” relationship with Movie 123. (This list includes all the “Product” assets that inherited this relationship from their parents.) This list also determines the confidence value for each asset.

4. Examines the **Ratings** section on the asset forms for all of the “Movie” and “Products” assets on the preliminary list.

5. Constrains the preliminary list to include only those “Movie” and “Product” assets that have applicable ratings for the segments that the current visitor belongs to.

6. Multiplies the rating by the confidence for each asset on the constrained list.

7. If the **Selection Criteria** method is **Highest**, Engage recommends the five assets with the highest final ratings. If the **Selection Criteria** method is **Random**, Engage uses a weighted random algorithm (operating on the assets’ weighted ratings) to return the five recommended assets.
Creating Recommendation Assets

Note

Typically, marketing people create “Recommendation” assets and set confidence values for assets referenced by Static Lists and Related Items recommendations. (Confidence for Dynamic Lists recommendations is coded into the template that renders the assets being recommended).

Business users assign individual ratings to assets referenced by recommendations created by marketing.

Recommendation Development Overview

The basic steps for setting up recommendations are as follows:

1. Designers and developers meet with the marketing team to define all the merchandising messages that you want to display on your site and to plan how to represent those messages using recommendation and promotion assets.

2. The designers and developers design and code templates for the recommendations. If Dynamic Lists recommendations will be used, they also write “CSElement” assets designed to generate dynamic lists.

3. Marketing then uses Engage Recommendation forms to create “Recommendation” assets (that is, name and configure the recommendations).

4. Using the Engage flex asset forms, you rate how important the assets are to each segment, and, therefore, to the individual visitors who become members of those segments. (Typically, you assign ratings to flex parents instead of to individual flex assets.)

   For each Related Items recommendation, you assign to flex assets the assets with relationships that are defined by that recommendation. (Typically, you specify relationships for flex parents instead of for individual flex assets.)

This section describes how to create and configure “Recommendation” assets (step 3 above). The section “Configuring Assets to Be Recommended,” on page 346 describes how to assign ratings to assets and how to assign flex assets to flex parent assets via the relationships defined in a Related Items recommendation (step 4 above).

This section covers the following procedures:

- Creating Static Lists Recommendations in List Mode
- Creating Static Lists Recommendations in Recommendation Mode
- Creating Dynamic Lists Recommendations
- Creating Related Items Recommendations

Creating Static Lists Recommendations in List Mode

List mode allows you to create a simple static list with the marketing options (such as selection and sort criteria) fixed to specific values (see table on page 316 for this information). When a List mode Static Lists recommendation is invoked by a template, all assets in the list will always be displayed in the order you specify within the “Recommendation” asset.
To create a Static Lists recommendation in List mode

**Note**

You can click **Save** as you progress through the sections of the “New Recommendation” form in this procedure to save the changes you have made up to and in that section.

Before you can assign assets to a recommendation, you should add the source asset(s) to your Active List for easy retrieval during the creation of the recommendation.

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the assets to be included in the recommendation and add them to your Active List:
   a. In the button bar, click **Search**.
   b. In the “Search” form, select the asset type of the asset(s) you want to find.
   c. Enter the desired search criteria (if any) and click **Search**.
   d. In the search results list, navigate to the asset(s) you want to add to your Active List, and select the check box(es) next to it. (You can select the boxes for all of the assets you want to add to your Active List to add them all at once.)
   e. When you have selected your assets, click **Add To My Active List**.

For more information on searching for assets and building your Active List, see the sections “Finding Assets,” on page 81 and “Saving Search Results,” on page 87.

4. In the button bar, click **New**.
   Content Server displays the “New” form.
5. In the “New” form, click **New Recommendation**.
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Creating Recommendation Assets

Content Server displays the “Recommendation” form. Notice the names of the form’s sections near the top. When you create a new “Recommendation” asset, the Name section of the form is displayed.

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
</tr>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Subtype</strong></td>
</tr>
<tr>
<td><strong>Select a Template</strong></td>
</tr>
<tr>
<td><strong>Start Date</strong></td>
</tr>
<tr>
<td><strong>End Date</strong></td>
</tr>
<tr>
<td><strong>Locale</strong></td>
</tr>
<tr>
<td><strong>Mode</strong></td>
</tr>
</tbody>
</table>

Note

When creating or editing a “Recommendation” asset, you can switch between the sections of the “New” or “Edit” form by clicking the name of the section you want to switch to.

6. In the Name section of the “Recommendation” form, do the following:
   a. In the Name field, enter a unique, descriptive name for the list. You can enter up to 64 alphanumeric characters, including spaces. The first character must be a letter.
   b. In the Description field, enter a brief description of the list. You can enter up to 128 alphanumeric characters.
   c. In the “Subtype” drop-down list, select a subtype for the recommendation. A subtype is a way of categorizing lists. If the design team did not define subtypes for this type of recommendation, the drop-down list is empty. Consult your developers for information on available recommendation subtypes (if any).
   d. In the “Template” drop-down list, select a template for the recommendation.

   Note

   If the Template field does not include a drop-down list, it means that no templates have been created for recommendations on your site. Consult your developers for information on recommendation templates.

   e. In the Start Date and End Date fields, select a date range in which the asset will display online. For more information on Start/End dates, see “Using Start and End Dates,” on page 189.
   f. In the Mode field, select the List radio button.
   g. Click Continue.
Content Server displays the “Options” section of the “Recommendation” form:

7. In the “Options” section, set the options appropriately for the list’s intended purpose. When you are done, click **Continue**.

Content Server displays the **Build** section of the “Recommendation” form:

8. In the tree, click the **Active List** tab and select the assets you want to add to the list. You can select multiple assets by **Ctrl-clicking** each desired asset; you can also select a range of assets by **Shift-clicking** the first and last assets in the range.

9. Click **Add Selected Items**.

10. (Optional) You can change the order in which the assets in the list are organized by selecting the asset(s) in the list and clicking the up or down arrow button to move the asset(s) up or down the list. You can select multiple assets by **Ctrl-clicking** each desired asset; you can also select a range of assets by **Shift-clicking** the first and last assets in the range.
11. Click **Save**.

    Content Server displays the new recommendations’s “Inspect” form.

### Creating Static Lists Recommendations in Recommendation Mode

In contrast to List mode, when a Recommendation mode Static Lists recommendation is invoked by a template, the order of the displayed assets is determined by segments and ratings, not by the list order. Furthermore, the application of segments and ratings can result in some assets in the list being filtered out entirely.

Keep the following in mind:

- If you are going to use segments, make sure you know which assets belong in which segments.
- If the segments you need do not exist, you can create them (assuming you have the appropriate permissions). See Chapter 11, “Grouping Visitors into Segments” for information on creating and configuring segments.
- You should know in advance the confidence values (in segment, out of segment, and when no segments apply) you will assign to the assets you are adding to the list.

Before you can assign assets to a recommendation, you should add the source asset(s) to your Active List for easy retrieval during the creation of the recommendation.

**To create a Static Lists recommendation in Recommendation mode**

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can click <strong>Save</strong> as you progress through the sections of the “New Recommendation” form in this procedure to save the changes you have made up to and in that section.</td>
</tr>
</tbody>
</table>

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the assets to be included in the recommendation and add them to your Active List:
   a. In the button bar, click **Search**.
   b. In the “Search” form, select the asset type of the asset(s) you want to find.
   c. Enter the desired search criteria (if any) and click **Search**.
   d. In the search results list, navigate to the asset(s) you want to add to your Active List, and select the check box(es) next to it. (You can select the boxes for all of the assets you want to add to your Active List to add them all at once.)
   e. When you have selected your assets, click **Add To My Active List**.

For more information on searching for assets and building your Active List, see the sections “Finding Assets,” on page 81 and “Saving Search Results,” on page 87.

4. In the button bar, click **New**.
5. Content Server displays the “New” form.
6. In the “New” form, click **New Recommendation**.
Chapter 12. Creating and Configuring Recommendations

Creating Recommendation Assets

Content Server displays the “Recommendation” form. Notice the names of the form’s sections near the top. When you create a new “Recommendation” asset, the Name section of the form is displayed first:

7. In the Name section of the “Recommendation” form, do the following:
   a. In the Name field, enter a unique, descriptive name for the recommendation. You can enter up to 64 alphanumeric characters, including spaces. The first character must be a letter.
   b. In the Description field, enter a brief description of the recommendation. You can enter up to 128 alphanumeric characters.
   c. In the “Subtype” drop-down list, select a subtype for the recommendation. A subtype is a way of categorizing lists. If the design team did not define subtypes for this type of recommendation, the drop-down list is empty. Consult your developers for information on available recommendation subtypes (if any).
   d. In the “Template” drop-down list, select a template for the recommendation.

   Note

   When creating or editing a “Recommendation” asset, you can switch between the sections of the “New” or “Edit” form by clicking the name of the section you want to switch to.

   7. In the Name section of the “Recommendation” form, do the following:
      a. In the Name field, enter a unique, descriptive name for the recommendation. You can enter up to 64 alphanumeric characters, including spaces. The first character must be a letter.
      b. In the Description field, enter a brief description of the recommendation. You can enter up to 128 alphanumeric characters.
      c. In the “Subtype” drop-down list, select a subtype for the recommendation. A subtype is a way of categorizing lists. If the design team did not define subtypes for this type of recommendation, the drop-down list is empty. Consult your developers for information on available recommendation subtypes (if any).
      d. In the “Template” drop-down list, select a template for the recommendation.

   Note

   If the Template field does not include a drop-down list, it means that no templates have been created for recommendations. Consult your developers for information on creating templates for recommendations.

   e. In the Start Date and End Date fields, select a date range in which the asset will display online. For more information on Start/End dates, see “Using Start and End Dates,” on page 189.
   f. In the Mode field, select the Recommendation radio button.
   g. Click Continue.
Chapter 12. Creating and Configuring Recommendations

Creating Recommendation Assets

Content Server displays the **Type** section of the “New Recommendation” form:

8. In the **Type** section of the “New Recommendation” form, do the following:
   a. Select **Static Lists**.
   b. Click **Continue**.

Content Server displays the **Options** section of the “New Recommendation” form:

9. In the **Options** section of the “New Recommendation” form, do the following:
   a. Set the options appropriately for the recommendation’s intended purpose.
   b. Click **Continue**.

Content Server displays the **Build** section of the “New Recommendation” form:

10. In the **Build** section of the “New Recommendation” form, do the following:
a. In the “New Static List” drop-down list, select a segment.

Content Server creates a new static list for the segment and displays it in the form.

b. In the tree, click the Active List tab and select the assets you that you want to add to this segment’s list. You can select multiple assets by Ctrl-clicking each asset, or select a range of assets by Shift-clicking the first and last asset in the range.

c. Click Add Selected Items.

d. Assign a confidence value for each asset, both In Segment and Out of Segment. Confidence is a weighting factor for the recommendation to use in determining which assets to return for the current visitor when that visitor is a member of the segment and when that visitor is not a member of the segment. The defaults are 100% and 0% respectively.

For additional information, see “Confidence,” on page 319.

e. Repeat steps a – d for as many segments as you want to include. After you select a segment, it no longer appears in the drop-down list.

f. (Optional) Repeat steps b – d for the If No Segments Apply category and assign confidence values as appropriate.
The completed form will look similar to the following:

<table>
<thead>
<tr>
<th>Recommendation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Static Lists:</td>
</tr>
</tbody>
</table>

- **New Static List:**

  <Select Segment>

**Segment: BFfrequentvisitors**

<table>
<thead>
<tr>
<th>Item Name</th>
<th>In Segment Confidence</th>
<th>Out of Segment Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASP-A56-2001Mar9 (Article)</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>A5D-A560-2001Mar9 (Article)</td>
<td>85%</td>
<td>15%</td>
</tr>
</tbody>
</table>

- **Add Selected Items**

  Hint: Select items from the tree, then click Add Selected Items.

**Segment: highriskinvestors**

<table>
<thead>
<tr>
<th>Item Name</th>
<th>In Segment Confidence</th>
<th>Out of Segment Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>OJ Index (Product)</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Convertible Bond (Product)</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

- **Add Selected Items**

  Hint: Select items from the tree, then click Add Selected Items.

**If No Segments Apply:**

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index Article (Article)</td>
<td>100%</td>
</tr>
</tbody>
</table>

- **Add Selected Items**

  Hint: Select items from the tree, then click Add Selected Items.

**g. Click Continue.**

Content Server displays the **Selection** section of the “New Recommendation” form:

<table>
<thead>
<tr>
<th>Selection Criteria:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Random (weighted by rating)</td>
<td></td>
</tr>
<tr>
<td>Highest Rating</td>
<td></td>
</tr>
</tbody>
</table>

**11. In the Selection section of the “New Recommendation” form, do the following:**

- **Choose the selection criterion for the recommendation. For more information, see the section “Selection Criteria,” on page 320.**

- **b. Click Continue.**
Chapter 12. Creating and Configuring Recommendations

Creating Recommendation Assets

Content Server displays the Sort section of the “New Recommendation” form:

12. In the Sort section of the “New Recommendation” form, do the following:
   a. In the “Attribute Type” drop-down list, select the type of attribute by which you want to sort the asset list. By default, only the Special attribute type is available, allowing you to sort by asset type, confidence, and rating. Attribute types specific to the nature of the assets on your site are set up by the administrator and developers.
      
      For more information, see the section “Sort Criteria,” on page 321.

   b. In the “Attribute” drop-down list, select the attribute by which you want to sort the asset list. The contents of the list depend on the option that you selected in the Attribute Type field. For example, if you selected the Special attribute type in step a, the Attribute field will contain the options, _ASSETTYPE_, _CONFIDENCE_, and _RATING_.

      Note that attributes specific to the nature of the assets on your site must be set up by the administrator and developers before you can use them.

   c. In the Direction field, choose whether the sort direction should be ascending or descending.

   d. Click Add Sort Criteria. Your criteria appear at the bottom of the form.

   e. (Optional) To add more sort criteria, repeat steps a – d. Be sure to add the new sort criteria in the order in which you want Engage to sort the assets in the list. For example, you might want to sort assets first by asset type, and then by rating.

   f. When you have selected the desired sort criteria, click Save. Content Server displays the recommendation’s “Inspect” form.
Creating Dynamic Lists Recommendations

To create a Dynamic Lists recommendation

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click **New**.
   
   Content Server displays the “New” form.
4. In the “New” form, click **New Recommendation**.
   
   Content Server displays the “New Recommendation” form. Notice the names of the form’s sections near the top. When you create a new “Recommendation” asset, the **Name** section of the form is displayed first:

```
<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Subtype</td>
</tr>
<tr>
<td>Select a Template</td>
</tr>
<tr>
<td>Start Date</td>
</tr>
<tr>
<td>End Date</td>
</tr>
<tr>
<td>Locale</td>
</tr>
<tr>
<td>Mode</td>
</tr>
</tbody>
</table>
```

5. In the **Name** section of the “New Recommendation” form, do the following:
   
   a. In the **Name** field, enter a unique, descriptive name for the recommendation. You can enter up to 64 alphanumeric characters, including spaces. The first character must be a letter.
   
   b. In the **Description** field, enter a brief description of the recommendation. You can enter up to 128 alphanumeric characters.

Note

Before beginning this procedure, Consult your developers to find out which “CSElement” asset(s) should be used with the Dynamic Lists recommendation(s) you want to create.

Note

When creating or editing a “Recommendation” asset, you can switch between the sections of the “New” or “Edit” form by clicking the name of the section you want to switch to.
c. In the “Subtype” drop-down list, select a subtype for the recommendation. A subtype is a way of categorizing lists. If the design team did not define subtypes for this type of recommendation, the drop-down list is empty.

d. In the “Template” drop-down list, select a template for the recommendation.

**Note**

If the Template field does not include a drop-down list, it means that no templates have been created for recommendations. Consult your developers for information on creating templates for recommendations.

e. In the Start Date and End Date fields, select a date range for the asset to display in Site Preview. For more information on Start/End dates, see “Using Start and End Dates,” on page 189.

f. In the Mode field, select the Recommendation radio button.

g. Click Continue.

Content Server displays the Type section of the “New Recommendation” form:

<table>
<thead>
<tr>
<th>Recommendation Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Related Items (defined on asset forms)</td>
</tr>
<tr>
<td>□ Static Lists (optionally by segment)</td>
</tr>
<tr>
<td>□ Dynamic Lists (generated by an element)</td>
</tr>
</tbody>
</table>

6. In the Type section of the “New Recommendation” form, do the following:

   a. Select Dynamic Lists.

   b. Click Continue.
Content Server displays the Options section of the “New Recommendation” form:

<table>
<thead>
<tr>
<th>Recommendation: Dynamic List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>Options:</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

7. In the Options section of the “New Recommendation” form, do the following:
   a. Set the options appropriately for the recommendation’s intended purpose.
   b. Click Continue.

Content Server displays the Build section of the “New Recommendation” form:

<table>
<thead>
<tr>
<th>Recommendation: Dynamic List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>Build:</strong></td>
</tr>
<tr>
<td><strong>CSElement:</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

8. In the Build section of the “New Recommendation” form, do the following:
   a. In the tree, click the Design tab and select the “CSElement” asset you want your recommendation to use. Note that you can select only one “CSElement” asset.
   b. Click Add Selected Element.

Content Server refreshes the form showing the added “CSElement” asset:
Creating Recommendation Assets

If you want to replace the currently chosen “CSElement” asset, select another asset in the Design tab and click Update Selected Element to replace the current one.

c. Click Display Results to view the list that the element will currently generate.

A form similar to the following appears:

<table>
<thead>
<tr>
<th>Asset Name</th>
<th>Asset ID</th>
<th>Asset Type</th>
<th>Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income (Class A, Max Load)</td>
<td>993405444459</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Domestic Equity Portfolio</td>
<td>993405042773</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Emerging Markets Equity Fund</td>
<td>993405585336</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Mid Cap Growth Fund</td>
<td>993405458858</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Global Fund</td>
<td>993405046085</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>EastWest Fund</td>
<td>993405046766</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Tech Titans</td>
<td>993405046576</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Financial Titans Fund</td>
<td>993405046528</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Large Cap Growth (Class A, Max Load)</td>
<td>993405047330</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>International Titans Funds</td>
<td>993405046733</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Ero Titans</td>
<td>993405046733</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Worldwide Spectrum</td>
<td>993405046656</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Small Cap (Class A, Max Load)</td>
<td>993405046966</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Convertible Bond</td>
<td>993405046979</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Small Cap Growth</td>
<td>993405050215</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>DJ Index</td>
<td>993405050144</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Ultra Risk Intl</td>
<td>993405051245</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Small Cash Hedged</td>
<td>993405051452</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Energy Sector</td>
<td>993405052220</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Financial Services Specialty</td>
<td>993405052428</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Health Care</td>
<td>993405052046</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Communications</td>
<td>993405052236</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Utilities</td>
<td>993405052444</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>International Index Fund</td>
<td>993405052542</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Select Industrial Equipment</td>
<td>993403550350</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Tax-Managed U.S. 5-10 Value</td>
<td>993405055270</td>
<td>Products</td>
<td>100.0%</td>
</tr>
<tr>
<td>Dow Jones Super Fund</td>
<td>9934050576745</td>
<td>Products</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The element is required to return a list of a specific type containing these columns:

- **Asset Name** – the name of the asset, which is guaranteed to be unique for the site
- **Asset ID** – generated identifier of the asset
- **Asset Type** – the name of the asset type (for example, “Products”)
- **Confidence** – a value that is either calculated by the developer, or assigned by Engage as 1 (100%) |

Remember that the list is dynamic, so the list contents are likely to change if assets have changed in your database when the recommendation is invoked by the template. If you select another “CSElement” asset from the tree, the currently displayed list results will be cleared.

When you click Display Results, several other outcomes are possible:

- The element fails to return the expected list type.
- The returned list is missing a required column.
- The element encountered the displayed error condition.
- The element fails to return any assets (not necessarily an error; the expected assets may not yet exist, in which case, you should contact your administrator).

If you encounter any of these conditions, select another “CSElement” asset and try again or consult your developers to troubleshoot the faulty “CSElement” asset.

d. Click Continue.
9. In the Selection section of the “New Recommendation” form, do the following:
   a. Choose the selection criterion for the recommendation. For more information, see the section “Selection Criteria,” on page 320.
   b. Click Continue.

   Content Server displays the Sort section of the “New Recommendation” form:

10. In the Sort section of the “New Recommendation” form, do the following:
   a. In the “Attribute Type” drop-down list, select the type of attribute by which you want to sort the asset list. By default, only the Special attribute type is available, allowing you to sort by asset type, confidence, and rating. Attribute types specific to the nature of the assets on your site are set up by the administrator and developers.

       For more information, see the section “Sort Criteria,” on page 321.
   b. In the “Attribute” drop-down list, select the attribute by which you want to sort the asset list. The contents of the list depend on the option that you selected in the Attribute Type field. For example, if you selected the Special attribute type in steps a, the Attribute field will contain the options, _ASSETTYPE_, _CONFIDENCE_, and _RATING_.

       Note that attributes specific to the nature of the assets on your site must be set up by the administrator and developers before you can use them.
   c. In the Direction field, choose whether the sort direction should be ascending or descending.
   d. Click Add Sort Criteria. Your criteria appear at the bottom of the form.
   e. (Optional) To add more sort criteria, repeat steps a – d. Be sure to add the new sort criteria in the order in which you want Engage to sort the assets in the list. For example, you might want to sort assets first by asset type, and then by rating.
   f. When you have selected the desired sort criteria, click Save.

       Content Server displays the recommendation’s “Inspect” form.
Creating Related Items Recommendations

To create a Related Items recommendation

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click **New**.
   Content Server displays the “New” form.
4. In the “New” form, click **New Recommendation**.
   Content Server displays the “New Recommendation” form. Notice the names of the form’s sections near the top. When you create a new “Recommendation” asset, the **Name** section of the form is displayed first:

   ![Image of the New Recommendation form]

   **Note**
   When creating or editing a “Recommendation” asset, you can switch between the sections of the “New” or “Edit” form by clicking the name of the section you want to switch to.

5. In the **Name** section of the “New Recommendation” form, do the following:
   a. In the **Name** field, enter a unique, descriptive name for the recommendation. You can enter up to 64 alphanumeric characters, including spaces. The first character must be a letter.
   b. In the **Description** field, enter a brief description of the recommendation. You can enter up to 128 alphanumeric characters.
   c. In the “Subtype” drop-down list, select a subtype for the recommendation. A subtype is a way of categorizing lists. If the design team did not define subtypes for this type of recommendation, the drop-down list is empty. Consult your developers for information on available recommendation subtypes (if any).
d. In the “Template” drop-down list, select a template for the recommendation.

Note
If the Template field does not include a drop-down list, it means that no templates have been created for recommendations. Consult your developers for information on creating templates for recommendations.

e. In the Start Date and End Date fields, select a date range for the asset to display in Site Preview. For more information on Start/End dates, see “Using Start and End Dates,” on page 189.

f. In the Mode field, select the Recommendation radio button.

g. Click Continue
Content Server displays the Type section of the “New Recommendation” form:

6. In the Type section of the “New Recommendation” form, do the following:
   a. Select the Related Items radio button.
   b. Click Continue.
Content Server displays the Options section of the “New Recommendation” form:

7. In the Options section of the “New Recommendation” form, do the following:
   a. Set the options appropriately for the recommendation’s intended purpose.
Chapter 12. Creating and Configuring Recommendations

Creating Recommendation Assets

b. Click Selection at the top of the form (Related Items recommendations have no “Build” step).

If you click Continue, the following message appears:

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Build</th>
<th>Selection</th>
<th>Sort</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recommendation Type “Related Items” does not have a Build step. Related items are defined on asset forms.</td>
<td></td>
</tr>
</tbody>
</table>

In such a case, click Continue again to go to the Selection section of the form.

Content Server displays the Selection section of the “New Recommendation” form:

8. In the Selection section of the “New Recommendation” form, do the following:

a. Choose the selection criterion for the recommendation. For more information, see the section “Selection Criteria,” on page 320.

b. Click Continue.

Content Server displays the Sort section of the “New Recommendation” form:

9. In the Sort section of the “New Recommendation” form, do the following:

a. In the “Attribute Type” drop-down list, select the type of attribute by which you want to sort the asset list. By default, only the Special attribute type is available, allowing you to sort by asset type, confidence, and rating. Attribute types specific to the nature of the assets on your site are set up by the administrator and developers.

For more information, see the section “Sort Criteria,” on page 321.

b. In the “Attribute” drop-down list, select the attribute by which you want to sort the asset list. The contents of the list depend on the option that you selected in the Attribute Type field. For example, if you selected the Special attribute type in step a, the Attribute field will contain the options, _ASSETTYPE_, _CONFIDENCE_, and _RATING_.

Note that attributes specific to the nature of the assets on your site must be set up by the administrator and developers before you can use them.
c. In the **Direction** field, choose whether the sort direction should be ascending or descending.

d. Click **Add Sort Criteria**. Your criteria appear at the bottom of the form.

e. (Optional) To add more sort criteria, repeat steps a – d. Be sure to add the new sort criteria in the order in which you want Engage to sort the assets in the list. For example, you might want to sort assets first by asset type, and then by rating.

f. When you have selected the desired sort criteria, click **Save**.

Content Server displays the recommendation’s “Inspect” form.

This recommendation now appears in the Related Items section of the “New” and “Edit” forms for flex assets and flex parent assets. You can now configure relationships for flex assets.

For more information, see “Configuring Asset Relationships Using Related Items Recommendations,” on page 347.
Editing Recommendation Assets

To edit a “Recommendation” asset

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. Find the “Recommendation” asset you want to edit and open its “Edit” form:
   a. In the button bar, click Search.
   b. In the “Search” form, select the asset type of the asset(s) you want to find.
   c. Enter the desired search criteria (if any) and click Search.
   d. In the search results list, navigate to the desired asset and click its “Edit” (pencil) icon.

For more information on searching, see the section “Finding Assets,” on page 81. Content Server displays the recommendation’s “Edit” form.

4. Click the Change button next to the section you want to edit. For example, to edit the sort criteria, click the corresponding button.
Content Server displays the corresponding section of the recommendation’s “Edit” form with the current configuration options preselected:

5. Make your edits and click **Save Changes** to complete the operation. Content Server redisplay the asset’s “Inspect” form.
Configuring Assets to Be Recommended

The next step is to configure the segment ratings and asset relationships for the assets that you want to promote using recommendations. Specifically, you need to use the flex asset and flex parent asset forms in Content Server’s interface to do the following:

• Rate how important the assets and parent assets are to the members of each segment.
• Configure the asset relationships that are represented by the Related Items recommendations.

Assigning Ratings to an Asset

You can assign ratings to individual flex assets or to flex parents. FatWire recommends using asset parents to assign ratings, for the following reasons:

• It is much easier to manage the ratings for multiple assets if those assets reside in groups. In fact, it is often a good idea to create flex parents whose sole purpose is to assign ratings to child assets. You can make all of the assets that have identical rating conditions children of the same parent. Then, you can modify the ratings for all the child assets by making a single change.
• It is easier to compare the ratings for one group of assets to the ratings of another group than it is to compare the ratings of individual assets.
• Ratings are calculated more quickly because there are fewer assets with individual ratings; this speeds up system performance.

You should avoid using ratings to try to promote a specific flex asset in a specific circumstance. Instead, you should recommend specific assets, using either a Static Lists recommendation or a promotion to accomplish your goal.

Before you begin, be sure to complete the following tasks:

• Examine the segments to understand how they are defined and then determine which flex parents are significant for which segments.
• Ask your site developers whether they changed the system default rating for unrated assets. If they did not override the system default rating, that default rating is 50. This rating represents the average or middle point in your rating scale. Make a note of this value and keep it in mind while you rate assets. For example, rating an asset at lower than the system default rating means that it is unlikely that it would ever be recommended to a site visitor.

To assign ratings to an asset

1. If Content Server’s interface is not open, log in.
2. If prompted, select the site you want to work with.
3. Find the flex asset or flex parent you want to assign ratings to and open its “Edit” form:
   a. In the button bar, click Search.
   b. In the “Search” form, select the asset type of the asset you want to find.
c. Enter the desired search criteria (if any) and click **Search**.

d. In the search results list, navigate to the desired asset and click its **Edit** (pencil) icon.

For more information on searching, see the section “Finding Assets,” on page 81.

Content Server displays the asset’s “Edit” form.

4. In the asset’s “Edit” form, scroll to the **Ratings** section. This section of the form lists all the segments that have been created for this site. For example:

<table>
<thead>
<tr>
<th>Segment</th>
<th>In Segment</th>
<th>Out of Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affluent Young Singles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classic Movie Fan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No segment ratings apply</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Using a range of 0 through 100 (100 is the highest value), rate this asset for the segments in the list:

- Enter a value in a segment’s **In Segment** column to rate the asset for members of this segment.

- Enter a value in a segment’s **Out of Segment** column to rate the asset for visitors who are not members of this segment.

- Enter a value in the **no segment ratings apply** field to assign an intrinsic rating to the asset; this rating is used when no segments are defined or the asset is assigned to a recommendation that does not recognize segments (List mode Static Lists recommendation).

For more information about ratings, see “Ratings,” on page 317.

6. Click **Save Changes**.

The segment ratings are now assigned to the asset.

### Configuring Asset Relationships Using Related Items Recommendations

Before you begin, be sure to complete the following tasks:

- Ask the developers to describe each of the Related Items recommendations so that you are familiar with the relationships the Related Items recommendations represent.

- Find out whether the recommendation is programmed to display a combination of flex assets, for example, “Product” and “Content” assets, so that you can configure the relationships correctly.

**To configure relationships between assets**

1. If Content Server’s interface is not open, log in.

2. If prompted, select the site you want to work with.

3. Find the flex parent that has the Related Items relationship(s) that you want to configure and open its “Edit” form:

   a. In the button bar, click **Search**.

   b. In the “Search” form, select the asset type of the asset(s) you want to find.

   c. Enter the desired search criteria (if any) and click **Search**.

   d. In the search results list, navigate to the desired asset and click its **Edit** (pencil) icon.
4. In the parent asset’s “Edit” form, scroll to the **Related Items** section, which will look similar to the image below:

5. In the tree, select the tab containing the flex asset that you are setting up a relationship to.

6. In the tree tab, click to select the flex asset or flex parent. To select more than one asset, use **Ctrl-click** and **Shift-click**.

7. In the “Edit” form, under the name of the recommendation that defines this relationship, click the **Add Selected Items** button.
   
   If the tree is toggled off, the **Add Selected Items** button becomes a right arrow, which, when clicked, opens a pop-up window where you can select items from your active list and history.
   
   Engage lists the assets under the recommendation.

8. In the **Confidence** column next to an asset or asset parent, enter a confidence value that represents the weight of this relationship; confidence is expressed as a percentage ranging between 0 and 100. If you enter 0 or leave the field empty, the asset is excluded from this recommendation. For example:

9. Repeat step 8 for each asset in the list.

10. Repeat steps 5 – 9 for each recommendation listed in the Related Items section of the asset’s “Edit” form.

11. Click **Save Changes**.

   The asset relationships for the asset are now configured.
Verifying Recommendation Assets

To verify that you configured your “Recommendation” assets correctly, complete the following kinds of exercises:

• Create some test segments (see Chapter 11, “Grouping Visitors into Segments” for information on creating segments).
• In the flex asset and flex parent asset forms (for example, “Product” and “Product Parent”), assign ratings for the segments.
• Browse your site as a visitor and register yourself so that you qualify for the test segment.
• Examine the items that the “Recommendation” assets return.
• If you find problems, ask your developers to write test pages that isolate the problem.

Publishing Rated Flex Assets

Since asset ratings and relationships take effect only after they are published, you must approve the assets whose ratings and relationships you configured so they can be published to your delivery system.

For more information about approving and publishing assets, see Chapter 7, “Publishing.”
Chapter 13
Creating Promotions

Promotions are merchandising assets that offer some type of value or discount to your site visitors based on the products the visitors are buying and the segments they qualify for. This chapter describes how promotions work and how to create them. It contains the following sections:

• About Promotions
• Creating Promotions
• Sample Promotion Asset
• Publishing Promotions
About Promotions

Promotions offer some type of value to your site visitors and customers based on the segments the visitors belong to and products that they buy or view. This value can be offered in several ways:

- A discount off the purchase price of the promoted products.
- A discount off the entire value of the shopping cart.
- A discount off shipping charges.
- A combination discount: a shipping discount with a price or cart discount.

You (the marketers) define your promotions by using the following criteria:

- The segment members who qualify for the promotion. Promotions can be offered to everyone or to visitors in selected segments.
- The products to promote.
- The value the customers receive when they purchase the promoted product.
- The duration of the promotion.
- The text or graphics (or both) that appear on the rendered site page that notifies visitors of the promotion.
- The location of the notification. Promotions are displayed on the live (public) site pages by replacing the recommendation that would normally appear there.

About Promotions and Recommendations

“Recommendation” assets are the delivery mechanism for all promotional content. When you create a promotion asset, you determine where you want the promotion to be displayed by selecting a “Recommendation” asset. The promotion replaces, or overrides, the recommendation and uses the template assigned to that recommendation to render the promotion in place of the recommendation that would normally be displayed.

Consequently, when Engage calculates the recommendation that a template asks for, it automatically checks whether there are any promotions that should override the recommendation. If so, it passes the promotion back to the recommendation’s template and the template displays the promotion instead.

When Promotions Overlap

More than one promotion can use the same recommendation. What happens, then, when a visitor qualifies for more than one promotion and those promotions are using the same recommendation? It is easiest to explain with an example:

**Example: Overlapping Promotions**

There are two promotions running and both override the same recommendation:

<table>
<thead>
<tr>
<th>Name</th>
<th>End-of-Summer Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount</td>
<td>10% off the entire contents of the visitor’s shopping cart</td>
</tr>
<tr>
<td>Segments it applies to</td>
<td>All segments</td>
</tr>
</tbody>
</table>
Question: How does Engage decide which promotion to display if the visitor is from either the Home Office Worker segment or the Back to School segment? And which discount is applied?

Answer: Engage randomly selects which promotion to display (each has a 50/50 chance) but it applies both discounts. However, applying both discounts does not mean that printers are discounted twice.

Examine the contents of this shopping cart:

**Item in Cart**
- box of paper
- printer
- toner cartridge

Before Engage applies the discounts, it lists and compares the promotions for all the items in the cart:

**Item in Cart**  **Summer Sale**  **Printer Sale**
- box of paper  10%  
- printer  10%  30%  
- toner cartridge  10%

Engage then applies the largest discount to each item. Therefore, on the final bill, the box of paper and the toner cartridge are 10% off and the printer is 30% off (not 40%).

**Question:** Only one of the promotions was displayed: how do the shoppers understand the total on the invoices?

**Answer:** If you (the marketers) created the promotions correctly, you entered a meaningful description of the discount in the Engage discount forms. Those descriptions are printed on the invoice next to the discounted items.
Creating Promotions

To create a promotion

Before you create your promotions, be sure that you complete the following tasks:

- Ask your site developers for a list of all the recommendations in your system and a description of where each one is programmed to appear.
- If you are creating promotions that apply to specific segments, you and the other marketers must create the segments.

Step 1: Name and Define the Promotion

1. If Content Server’s interface is not open, log in.
2. If prompted, select the site you want to work with.
3. In the button bar, click New. Content Server displays a list of assets can create.
4. In the “New” form, click New Promotion.

Content Server displays the “New Promotion” form. Notice the names of the form’s sections near the top. When you create a new “Promotion” asset, the Name section of the form is displayed:

![New Promotion Form]

- Name
- Goals
- Segments
- Discount
- Duration
- Display

Name & Description

*Name: ____________________

Description: ____________________

Start Date: ____________—__________—__________

End Date: ____________—__________—__________

Note

When creating or editing a “Promotion” asset, you can switch between the sections of the “New” or “Edit” form by clicking the name of the section you want to switch to.
5. In the **Name** section of the “New Promotion” form, do the following:
   a. Click in the **Name** field and enter a unique, descriptive name for the recommendation. You can enter up to 64 alphanumeric characters, including spaces. The first character must be a letter.
   b. Click in the **Description** field and enter a brief description of the promotion. You can enter up to 128 alphanumeric characters.
   c. Click **Continue**.
      Content Server displays the **Goals** section of the “New Promotion” form.

Even though you can skip to any section of the “New Promotion” form, be sure that you create your first promotions in the sequence that takes place when you use the **Continue** button. Remember that the information you enter on any form is not saved to the database until you click **Save**.

**Step 2: Define the Goals for the Promotion**

![Promotion: Winter Special](image)

A statement of goals is useful if your work is to be reviewed by others. Additionally, you might want to document why you designed the promotion a certain way after the promotion is complete.

In the **Goals** section of the “New Promotion” form, do the following:
1. Click in the first **Goal** field and describe a goal.
2. Enter goals in the second and third **Goal** fields, as needed.
3. Click **Continue**.
   The “Segment” form appears, as shown in the next step.
Step 3: Define Which Visitors Are Eligible for the Promotion

Use the Segment section of the “New Promotion” form to select the visitors who are eligible for the promotion. If you do not make any selections on this form, all visitors to the site are eligible for the promotion.

1. Do one of the following:
   - To offer the promotion to all visitors to the site, select **Apply to all visitors**.
   - To restrict the promotion to visitors from certain segments, select **Apply to selected segments** and select the segments to whom you want to offer the promotion.

2. (Optional) If you need to create a new segment for the promotion, complete the following steps:
   a. Open a new browser window by clicking the arrow icon in the upper right corner of the form.
   b. Create a new segment in the new window. For help with this step, see “Creating Segments,” on page 296.
   c. Click the **Refresh** icon in the parent window (the window in which you are creating the promotion).
   d. Repeat the first step in this procedure to include this segment in the promotion.

3. Click **Continue**.

The Discount section of the “New Promotion” form appears, as shown in the next step.
Step 4: Define the Discount

### Option 1: Discounting the Entire Shopping Cart

In the **Discount** section of the “New Promotion” form, do the following:

1. Select the second option under **Purchases** and then set the values that define the discount.

   For example, to offer $5.00 off, set the values as follows:

   ```
   Purchases:
   - No Discount
   - $5 dollars off the promoted products
   ```

   To offer 10% off, set the values as follows:

   ```
   Purchases:
   - No Discount
   - 10 percent off the promoted products
   ```
2. Select Every product in the catalog.

3. Click in the Describe purchase discount text box and enter a meaningful description of the discount. The text that you enter in this field is displayed on the invoice or receipt next to the items that it applies to. Use it to describe to your visitors how their bill is calculated. For example:

   Describe purchase discount for display on invoices or receipts: 10% Winter Special

4. Either click Continue or go to Option 3: Discounting the Shipping Costs.

Option 2: Discounting Specific Products

In the Discount section of the “New Promotion” form, do the following:

1. Select the second option under Purchases and then set the values that define the discount.

   For example, to offer $5.00 off, set the values as follows:

   ![Discount options]

   To offer 10% off, set the values as follows:

2. Select the products that the discount applies to:

   ![Product selection]

   a. Select Specific item(s) from the tree.
   b. In the tree, select the tab appropriate to the flex asset you are applying a discount to. For the Burlington Financial sample site, it is the Product tab.
   c. Click to select the product or product category from the tree. To select more than one, use Ctrl-click and Shift-click.
   d. In the “Promotion” form, click Add Selected Items.

   The flex assets or flex parents that you selected are listed on the form. For example:

   ![Selected items]

3. Click in the text box and enter a meaningful description of the discount. The text that you enter in this field is displayed on the invoice or receipt next to the items that it applies to. Use it to describe to your visitors how their bill is calculated.

   For example:

   Describe purchase discount for display on invoices or receipts: 10% Winter Special

4. Either click Continue or go to the procedure Option 3: Discounting the Shipping Costs.
Option 3: Discounting the Shipping Costs

You can discount shipping in addition to, or instead of, discounting purchases. In the Discount section of the “New Promotion” form, do the following:

1. Under **Shipping Fees**, set the values that define the discount.
   
   For example, to offer 15% off shipping set the values as follows:

   ![Shipping Fees](image)

2. Click in the **Describe shipping fee discount** text box and enter a meaningful description of the discount. The text that you enter in this field is displayed on the invoice or receipt next to the items that it applies to. Use it to describe to your visitors how their bill is calculated. For example:

   ![Describe shipping fee discount](image)

3. Click **Continue**.

   The **Duration** section of the “New Promotion” form appears, as shown in the next step.

### Step 5: Define the Promotion’s Duration

<table>
<thead>
<tr>
<th>Promotion: Winter Special</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="" /></td>
</tr>
</tbody>
</table>

**Note**

If you do not specify how long the promotion should run, the promotion runs until you delete it.

In the **Duration** section of the “New Promotion” form, do the following:

1. Under **Duration**, set a start date and start time.
2. Specify when the promotion will end. Do one of the following:
   - If you want the promotion to run until you delete it or change its duration, select **Apply until deleted**. Use this option if you are designing an ongoing promotion with an indefinite duration. When you want to cancel it, you can either delete it or you can edit it and apply an end duration date.
   
   ![Apply until deleted](image)

   - If you want the promotion to run for a certain period of time after the start time that you specified in step 1, click **Apply for**. Enter a whole number (not a fraction or decimal) in the text box and choose hours, days, weeks, months, or years from the drop-down field.

   ![Apply for](image)
If you want the promotion to run until a specific date, select **Apply until** and enter the date and time that you want it to end. The current date and time are displayed by default.

3. Click **Continue**.

   The **Display** section of the “New Promotion” form appears, as shown in the next step.

### Step 6: Advertise the Promotion on Your Site

In the **Display** section of the “New Promotion” form, do the following:

1. In the tree, select the tab appropriate to the asset that you want to use to advertise the promotion.
2. Click to select the name of the asset that you want to use to advertise this promotion. (Typically a promotional banner is stored as either an article or an image.)

   **Note**

   You can select multiple assets by **Ctrl-clicking** each asset you want to select; you can also select a range of assets by **Shift-clicking** the first and last assets in the range.

   If you select multiple assets, when the promotion is displayed on your site pages, **Engage** displays the content that was rated the highest for the segments that the visitor belongs to. In other words, if you are using this promotion for more than one segment, you can use segment-specific ad banners for the promotion.

3. Click **Add Selected Items**.

   The items appear on a list in the form with a drop-down list box of recommendations next to each name. For example:

   **Note**

   You can select multiple assets by **Ctrl-clicking** each asset you want to select; you can also select a range of assets by **Shift-clicking** the first and last assets in the range.

   If you select multiple assets, when the promotion is displayed on your site pages, **Engage** displays the content that was rated the highest for the segments that the visitor belongs to. In other words, if you are using this promotion for more than one segment, you can use segment-specific ad banners for the promotion.

4. In the **Pick recommendation** field next to the first item, select the name of the recommendation that you want to replace or override with this item. (The recommendation provides the location for the text you selected in step 3.)
For example:

![Example image](image-icon)

5. Repeat step 4 for each item that you selected in step 3.
6. Click **Save**.

The “Inspect” form appears, displaying a summary list of information about the promotion.

---

### Sample Promotion Asset

When you install Engage with the Burlington Financial sample site, you get a sample promotion asset, **High Risk Discount**, that appears on the **Marketing** tab in the tree. This promotion is designed to work in concert with the sample “Segment” and “Recommendation” assets that also appear on the **Marketing** tab. Use the sample promotion as a template for creating promotion assets for your site.

### Publishing Promotions

After you create a promotion, it must be approved before it can be published to your delivery system. The promotion takes effect only after it is published. Be sure to examine or inspect your promotion to verify that you configured it correctly before you approve it for publishing.

For more information about approving assets, see Chapter 7, “Publishing.”
Appendices

This part contains the following appendices:

- Appendix A, “The Flex Asset Model”
- Appendix B, “When There Is No Tree”
Appendix A

The Flex Asset Model

As a content provider, you do not need to understand all of the details of the flex asset model. The purpose of this appendix is to help you develop a general understanding of this data model and how it relates to you as a content provider.

This appendix contains the following sections:

• Overview of the Flex Asset Model
• Flex Asset Functionality
Overview of the Flex Asset Model

As mentioned in Chapter 1, “Overview” Content Server developers use two asset data models to create asset types and define how asset data is stored in the Content Server database: the basic asset model and the flex asset model.

The flex asset model is more complex than the basic asset model. Unlike basic assets, where the information for one instance of an asset is stored in one row of a database table, the information for one instance of a flex asset is stored in multiple database tables.

Whereas basic asset types are standalone asset types, flex asset types are composed of families of asset types. The members of a flex family are:

- Flex attribute type (required)
- Flex asset type (required)
- Flex definition (required)
- Flex parent (required)
- Flex parent definition (required)
- Flex filter type (optional)

The members of a flex family form an asset inheritance tree, where child assets inherit various attributes from their parents.

As a content provider, you will not directly work with all of the members of the flex family. In fact, you will mainly be working with flex assets, which are the key members of flex families (all of the other members of a flex family contribute to the flex asset in some way). If you have the appropriate permissions, you may also be responsible for creating new flex attributes, which are characteristics of flex assets.

Flex Asset Functionality

In many of your daily activities as a content provider, the distinction between basic asset types and flex asset types is not relevant, because the majority of the functions you perform are the same whether you are working with flex or basic assets. However, in some of your activities, you may encounter functionality that is unique to flex assets.

Note

Your access to such functionality depends on your role and the permissions set by your CS administrator.

When Working with Engage

You can use Engage with both basic assets and flex assets. However, more Engage functionality is available when used with flex assets.

- Only flex assets and flex parents can be rated for segments. Basic assets cannot be rated for segments. See “Ratings,” on page 317 for more information on rating assets.
- You can create a Related Items recommendation only with flex assets. See “Related Items,” on page 323 and “Configuring Asset Relationships Using Related Items Recommendations,” on page 347 for information on related items recommendations.
• When configuring sort order for a “Recommendation” asset, flex attributes only (not basic attributes) are available as a sorting option. See “Sort Criteria,” on page 321 for more information.

When Searching for Assets

• Searching for specific attributes is available only for flex assets. See “Running an Advanced Search,” on page 83 for more information.

When Creating New Assets

• When creating a new flex asset, you may see a field (in the content entry form) that prompts you to select a parent or multiple parents for the new asset.
  - Depending on how your developers configured the asset type, this field could be required or optional.
  - You will either see (S) or (M) next to the parent selection field. (S) indicates that you can only select one parent; if this field is required, you must select one parent before saving the new asset. (M) indicates that you can select more than one parent; if this field is required, you must select at least one parent before saving the new asset.
  - Depending on the design implemented by your developers, you will either use select boxes or you will select from the tree to choose parents.

• If you have the appropriate permissions, you may be responsible for creating new flex attributes. When naming flex attributes, note that flex attribute names cannot contain spaces.
Appendix B

When There Is No Tree

This appendix contains supplemental information that you will find helpful when working in Content Server’s Advanced interface.

It contains the following section:

• Working With Assets When There Is No Tree
Working With Assets When There Is No Tree

The tree can be disabled by your administrator by denying you the permissions that allow the display of the tree. (For example, your organization’s security policy might not allow the execution of Java applets on employee machines.) You can also toggle the tree off and back on yourself (unless it was disabled by the administrator):

1. If Content Server’s interface is not already open, log in.
2. If prompted, select the site you want to work with.
3. In the top bar, click the **Toggle Tree** button.
4. The interface refreshes and displays the “My Work” view.

When the tree is off, Content Server’s interface becomes all workspace (see “Workspace,” on page 58), as shown below:

Functions that you access via the tree are available on the button bar:

- Display the site plan in the workspace by clicking **Site Plan** on the button bar (see “Site Plan,” on page 50).
- Display the “My Work” view by clicking the **My Work** button (see “My Work,” on page 49).
- View the contents of other asset-specific tabs by performing asset type searches (see “Finding Assets,” on page 81).
- Access administrative functions such as accessing sites, creating flex families, and managing user profiles through the **Admin** button.
- View the last assets with which you worked by clicking the **History** button.

The absence of the tree also has an impact on creating and editing assets. Many “New” and “Edit” asset forms support data selection from the tree; that is, when filling in the form, you can select values (assets) from the tree and click a button to add your selections to the asset definition.
For example, in the “New Article” form, you can add assets from a pre-associated asset type — in this case, the “Collection” asset type (the administrator creates these associations):

When the tree is on, you select “Collection” assets in the tree and click **Add Selected Items** to include them as “Article” asset associations.

When the tree is toggled off, the **Add Selected Items** button is replaced by a **Browse** button:

When you click the Browse button, a tabbed pop-up window appears:

This window contains “Search,” “Active List,” “History,” and “My Assignments” tabs. Through this window you can search for an asset to associate with the new asset you are
creating, or add an asset that’s already in your Active List, your History, or your “My Assignments” list.

Once you have located the document asset you want to use, click it to associate it with your new product asset. The popup window will automatically close.

The following asset management tasks support this dual selection capability:

- Making asset associations for basic assets
- Selecting parents for flex assets
- Selecting attribute values for attributes of type asset that use the PickAsset attribute editor
- Adding segment filtering criteria
- Setting up asset relationships for recommendations
- Selecting flex assets and flex parents for promotions
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