eContent User's Guide

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Chapter 1. Introduction

This guide is intended for any user of the eContent Content Management System. It gives an overview of the functionality of the system, and directions on how to perform the most common tasks in managing content.

For more specialized and system configuration tasks, see also the eContent Administrator's Guide.

While this guide gives specific procedures and task descriptions, it is also important to refer to the Help files for each function and data area in the application itself. The Help files give you specific information on each field for each form in the application that must be filled out, as well as a description of that field's meaning to the system.
Chapter 2. Concepts and Definitions

Resources
The basic unit of content that eContent manages is called a "Resource". A resource can be anything from a simple text file, to a complex hierarchy of data elements, to an XML document, to a dynamic program that produces its content from a database. All of these are "types" of resources, as we'll see later on. Every resource in the system is defined by a unique identifier, called the resource number. This number is assigned automatically when the resource is created.

Resource Types
A resource type tells the system about the resource, and defines its capabilities and the additional information, or meta-data, that is stored with this resource. This includes the type of the resource's content (text, picture, sound, HTML, XML, etc), and what kinds of operations can be performed on this resource. The resource type also partly controls how the resource is displayed to the user, by defining the display "MIME type" of the resource.

Attributes
An attribute is an additional piece of information stored with a resource, separate from the main content of the resource itself. For example, a product might consist of a picture of the product, a description, and a price. The picture of the product is the content, and the description and price are attributes. Attributes can be of any data type, including a reference to another resource (allowing a kind of "resource nesting", where one resource is contained within another) or a link to an external application, such as a discussion forum or FAQ topic.

Categories
Categories are the way resources are organized and grouped together. They can contain resources and other categories (as well as a special type of element called a "Page", which we'll discuss later). This means that categories can be organized into complex hierarchies if required. A resource can also belong to more than one category, allowing multiple organizations of the same content - for example, one group of company reports might be organized by department, and the same group of reports also organized by geographic location.

Templates
Templates control how the resources (and categories) look when they are presented to the end user of the system - the user of the actual content. They may be one of several different types, but they contain no content themselves - they are just "containers" that specify the format of the content they present. A single resource (or category) may be presented via many different templates, allowing a single piece of content to have more than one "look".

Pages
A page is simply an association of a resource (or category) with a particular template. The combination of the two is them saved as a "Page", so that that resource and template combination can easily be
Chapter 2. Concepts and Definitions

displayed later.
Chapter 3. Creating and Publishing Content

Creating new Resource Types
A resource type defines the attributes and characteristics of a group of resources. For example, a
"product" resource for a flower company might consist of the name of the product, a description, an
image, and a price. These elements are defined as the attributes of the resource type "product". Once this
type is defined, new content of that type can easily be created and published. When the new resources
are created, they will automatically have an image, description, and price associated with them, and the
user will be prompted to enter each of these as each new "product" is defined. A new resource type is
created from the Resources page, by adding a new record in the Resource Types function. See the help
for the meaning of each field.

Creating and entering Content
Once a type is defined, new content is created via the "Edit/Create Resources" function, also found on
the Resources page.

Viewing the created Content
The newly created content can be viewed with the "View Resource Contents" function on the Resource
page. Click the link, and enter the number of the newly created resource. Note that this function only
displays the primary content of the resource, not the attributes. You can see the value of the attributes by
using the "Edit/Create" function again, then clicking "Edit" next to the type of the resource. You'll then
be presented with a list of all of the resource of that type to choose from. Select the newly created
resource, and you'll see the primary content and the existing values for the attributes.

Providing Multilingual Content
One of the easiest means to provide multi-lingual content is to set up an "alternate" for a resource. An
alternate is another resource, usually of the same type, that is presented instead of the original resource
when a particular condition is met. This condition can be the current user's language setting. So, for
example, if we have a product resource in english, say, resource 105, and the same product described in
french, say as resource 107, we would set up an alternate for resource 105, with the alternate being 107
in the case of the language being french. See the help file of the Resource alternates function for details.

Providing Content for different client types
In addition to providing alternate content when the user's language is specified, the system can also
provide alternate content if the "user agent" that the user is working with is a specific value. For
example, if we have an HTML version of a resource, an alternate WML version of the same resource might be set up if the user is accessing eContent from a cell phone or PDA. See the help file for both the Resource Alternates and the User Agent functions for details. Note that it is also possible to support multiple user agents from the *same* resource when XSL transformation is used on content stored in XML format - it can be transformed to HTML for one client, and WML for another. See the section on Templates for details.
Chapter 4. Organizing Content

Creating Categories
New categories can be created by creating a new entry in the "Categories" function on the Categories page. You will probably want to create a new Table of Contents set (from the Setup page) for all of the related categories in your project. Each category specifies a "parent", and thus forms a hierarchy of related categories. The administrative views of eContent, discussed in the Administrators Guide in more detail, provide more graphical means of creating category hierarchies.

Organizing Content into Categories
Once categories are created, resources are added to these categories. A single resource can belong to any number of categories. The resources are organized by a "sequence" number within the category, which establishes a particular order of the resources - this is the order in which the resources are presented when the category is displayed in a template.

Indexing Content
In order to later retrieve content by searching for keywords, new resource must be "indexed" - this creates the keyword list that can later be used for searching. This index operation may be performed when the new content is first published, or it may be deferred until later for performance reasons. See the Administrator Guide for details.

Searching for Content
Once content is indexed, eContent can provide search capabilities to locate the content more easily. The section on Templates provides information on how to create the "search" capability on templates that present content, and the built-in templates also provide searching ability.
Chapter 5. Formatting and Presenting Content

Choosing a Template Type

Three different types of templates are available, and each has its special capabilities in formatting.

Basic Text Templates

Basic text templates can only present a single resource, and use a template that is simple text - usually either HTML or WML. The content and attributes of a resource are defined in the template by means of a "token", which is simply the attribute "code" preceded by a "$" symbol. Some special tokens are defined - "$content" refers to the main content of this resource, "$ResourceTitle" refers to the Title field from the resource definition, and "$ResourceDescrip" to the Description field from the resource definition.

Struts Templates

Struts templates can be much more sophisticated than the Basic Text templates, and allow the full power of the Struts JSP tag library to be put to work in your templates. Working hand-in-hand with the "Content" controller object from eContent, the Struts template can be provided with a complete hierarchy of a table of contents set, or any subset thereof, or with a single resource, depending on how the template is used. The abilities of each template must reflect the way it is used - a template must be specified as working either with a resource or with an entire category. The following section assumes that you have a familiarity with the Struts tag library, and the Expresso extensions to that library. Please refer to the Expresso Developer's Guide for details.

Resource Templates

Accessing Resource Definition Fields

Accessing Resource Content

Accessing Resource Attributes

Category Templates

The "contents" hierarchy of outputs

Accessing Categories

Accessing Resources Content

Accessing Resources Attributes
Struts Template tags

XML Templates
XML templates are essential XSL stylesheets, and can be applied to resources stored in XML format. These stylesheets can transform the XML content in any legal way provided by the XSL definitions, and the resulting content is then sent to the user.

Creating Templates
Like resources, every template has a definition. The definition specifies the type of the template, and other configuration information, and gives the location of the template file on the external filesystem. Some types of templates must be located where the web/application server can access them (such as Struts JSP templates), whereas others do not need to be within the reach of the web/app server at all. You can create and edit the actual template in much the same way as the content of a resource can be created - via an online form. This is very useful for editing existing templates, or creating fairly simple templates. For more complex templates you may wish to use an external syntax-highlighting editor or other tool (such as Dreamweaver) to generate the template itself. As long as the template is in the location specified in the template definition, it does not matter how it is created.

Using Templates
Once templates have been defined, they may be applied to resources (or categories, as appropriate) via the Preview/View Template function. Once their appearance is correct, the template and the parameters to run it with an appropriate resource or category can be stored for easy access later.

Pages
A Page is simply a combination of a particular template with a particular resource, or category of resources. This combination is saved and assigned a unique identifier. This identifier can later be used to create a simple URL to access the content: /econtent/Content.do?state=viewPage&pageId=xxx, where xxx is the number of the Page entry created. This is the equivalent of using the "Preview/View Page" function and specifying all the same parameters.

Creating links to managed content
The link to a "page" item can then be embedded in an existing internet or intranet page, and the user can use this link to begin browsing the available content, or view the appropriate resource.
Chapter 6. Managing Content

Editing Content
Assuming appropriate security permission, Content can be edited at any time. Typically, editing is done via the Edit/Create Content link, but it may also be initiated via a direct link on one of the included templates, or via a custom template, as required.

Publish a new version of a resource
In order to publish new content for a resource:
This can be done from a number of different locations within eContent where you will find the Edit Resource link. This link can be found on:

For this example, we'll use the Administrative Hierarchical View

Check-in/Check-Out
In order to prevent multiple concurrent modifications, and the potential confusion and data loss to content authors, a Check-In/Check-Out mechanism can be used. This allows a resource to be "checked out" prior to modifications, and all other updates to this resource are blocked until it is checked back in, when the edits are complete. Most of the included templates display a special status on a resource when it is checked out, indicating that a particular user is editing the content.

Content Versions
Every time new content is published to a resource, a new "version" of that resource is created. Usually, at least a few of the previous versions are kept. This may be configured for each resource individually. The most recently published version is considered to be the "Current Version", and it is this version that is used if no specific version is requested.

Securing Content

Controlling the release of new Content
Workflow

Workflow sequences allow you to specify that for certain resources, new content requires an approval process.

This approval process can be very simple, or can have several different steps involved.

The steps are contained in a Workflow Sequence and it's details. When a resource is published that is associated with a workflow sequence, it acquires an initial "status" - this status indicates that the resource is available for "preview only", meaning that only a certain group of users see the new content for the resource until it is fully "approved", which allows it to move through a sequence of status codes until it reaches one that has Preview Only set to "N". At that time it may still be in a Workflow Sequence, however, it will be available to all Users with permission to that resource.

We will describe here the steps to set up the most basic possible workflow sequence: Resource content is uploaded and in Preview Only until such time as it has been approved, then it is available to all users.

To set up this basic workflow, we require the following:

Two Status Codes:

•
•

With the workflow set up as above, a resource will have it's content uploaded and will be in "Unapproved" status, viewable only by the Admin Group until such time as a member of the Admin Group approves the resource content. When it has been approved, the resource status changes from "Unapproved" to "Approved" and the content is then available to all user with permission to that resource.

Most Workflows involve several more sequences than our simple example above. To setup your workflow sequences, follow the detailed steps below.

To set up Workflow:

Set up Resource Status Codes

Set up Workflow Sequences

Set up Workflow Sequence Details
Assign a Resource to a Workflow Sequence

Publish the Resource

Workflows begin when new content is published to the resource, so publish a new version of your selected resource - you can use the Edit Resources link on the Resources page or from any of the Views.

Preview the Resource

The members of the group assigned to the first step in the workflow sequence will receive an email allowing them to preview and approve or disapprove the resource.

Approve the Resource
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCII</td>
<td>(American Standard Code for Information Interchange) This standard character encoding scheme is used extensively in data transmission.</td>
</tr>
<tr>
<td>ANSI</td>
<td>(American National Standards Institute) This group is the U.S. member organization that belongs to the ISO, the International Organization for Standardization.</td>
</tr>
<tr>
<td>DTD</td>
<td>(Document Type Definition) A DTD is the formal definition of the elements, structures, and rules for marking up a given type of SGML document. You can store a DTD at the beginning of a document or externally in a separate file.</td>
</tr>
<tr>
<td>HTML</td>
<td>(HyperText Markup Language) This is the format of files published on the . HTML is an application of SGML; to author in HTML using SGML-based authoring software, you simply need the HTML DTD.</td>
</tr>
</tbody>
</table>