eContent Administrator's Guide

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This guide is intended for the system administrator of an eContent installation. The system administrator differs from the regular users of eContent in that they are responsible for additional tasks that most users of the system are not: these tasks include initial system configuration after installation, changing system parameters, setting up new work areas and projects, setting up security and security groups, and more.

This guide is intended to be used in conjunction with the eContent User's Guide, and the administrator should read that guide first, and be familiar with all of the operations it describes.

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.

It's also a good idea to refer to the release notes for the version of eContent you're using before beginning any administrative task.
Chapter 2. System Configuration

The eContent system is highly customizable. Much of its configuration is done after the initial installation process, and this chapter describes how this configuration is done, and where.

Installation

When eContent is initially installed, it may be (depending on your installation) set up to use a default "example" database and resource repository. The installation is then adjusted to either replace this database with your new production database, or to create a second context with the new production database. See the instructions in the Expresso Developer's Guide for creating new contexts, and how to manage multiple contexts.

Each separate context can contain a completely different collection of content, security definitions, and other configurations.

Setup Values

In each context, a Setup tables holds application-specific configuration information. On the Setup page in eContent, see the "Setup Values" function for a list of these values. The relevant values for eContent are described below:

Resource Repository Location

Resource content may be stored either in the database or on an external filesytem. If any content is to be stored externally, the location of the resource repository must be specified. This is done by providing a value for the "ResourceRoot" setup code to indicate this top-level directory. This should be an empty directory that is *outside* the web application, and in fact outside the directories served by the web application server entirely. For example, if you're using Tomcat, then eContent resides in the same web application directory as Expresso, within the "/usr/tomcat/webapps/expresso" directory, for example (assuming you installed Tomcat in "/usr/tomcat"). You might create a "/usr/resources" directory for the resource repository, as this is outside the directories served by Tomcat. The setup value should end with a "/", indicating a directory.

All resources within this context will be stored in sub-directories of this resource root directory. You should *not* use the same resource root for more than one context.

Resource Types

Resource types are described in the User's Guide in more detail. Every Resource Type has associated with it one of the available Resource Type Implementation classes.

Resource Type Implementations

The Resource Type implementation specifies the behaviour of all Resource Types that use it as far as how they are published (and/or run), where their content is stored, and other functional details. This is
called the "Resource Type Implementation", and refers to a object which is a sub-class of a class called 
"com.jcorporate.econtent.resourcetype.ProcessResource".

**File Resources**

Resource types that use this implementation are stored as regular operating-system files in subdirectories 
within the Resource Root directory (see the section on Setup Values). These files can be of any type -
HTML, JPG, GIF, Word processing documents, and so forth.

**Client-Side Redirect**

These resource types do not store any actual content, but instead store the information to link to another 
piece of content. This can be either another resource, or any other URL reachable by the client’s 
browser.

Client-Side Redirects must have a single attribute, with an attribute code of "URL". This attributes 
supplies the URL that is the destination of the redirect. The URL used should be an "Absolute" URL, e.g. 
it is taken from the document root of the web server if it begins with "/", and can even be a reference to a 
URL on another system, by prefixing it with a protocol (e.g. http://www.cnn.com).

**Server-Side Redirect**

Server-side redirects are similar to client side, except that the redirect process takes place transparently 
to the client. When a particular URL is requested, the output supplied is that of the redirected URL, 
rather than the original - the client browser does not need to support redirects or be aware that a redirect 
has occurred.

Server-side redirects can only refer to resources on the same server that eContent is using, and only 
within the current web-application.

Resources of this type also take a single URL attribute, which is assumed to be relative to current web 
application root. This is the ideal type of redirect for referring to another resource.

**Database Resource**

Size limitations

**Database Object Resource**

**CVS Resource**

The CVS Resource Type Implementation is not yet available - please contact Jcorporate support for 
details.

**Output Types**

An "Output Type" and a "Storage Type" are specified for each Resource Type as they are created. The
available choices for these types are selected from the Output Types defined for this instance of eConent. A number of default types are supplied, and more can be easily added.

Conversions

If the storage type and the output type for a resource are not the same, then it is possible to set up automatic conversion of the resource content, either as it is originally published or when it is displayed to the user. This uses a "Converter" object, which takes one type of resource and changes it into another. A few converter objects are supplied with the system, and more can be added by extending a simple interface.

Mime Types

Every output type is associated with a browser MIME type. This type is set whenever output is written to the user's browser from a resource using this type, and determines the browser's response.

Viewers/Helper Applications

In order to use content that is associated with data that a browser cannot directly handle, a "helper application" must be specified on the client's browser. For example, the Microsoft Excel application has a specific associated MIME type when used with the Internet Explorer application on Windows, and encountering this MIME type will usually cause the browser to launch Excel in order to view the content. We say "usually" because this MIME type to application mapping is completely under the control of the user - so you cannot absolutely rely on what that mapping will be ahead of time.
Chapter 3. Tables of Content Sets

Multiple "projects" can be handled on the same instance of eContent in several different ways:

**Different Contexts**

If the projects are truly unrelated, in that they have a different group of user’s and administrators, you may wish to create a separate database context for them. This is the highest level of separation, and the different contexts can have completely different user communities, different resource repositories, and different table of content sets.

**Table of Contents Sets**

If, on the other hand, the projects do share at least some users, and if even a few of its resources are to overlap other projects (e.g., the same resource is to be used in more than one project), then you might prefer to simply use different Table of Contents Sets for each project. A TOC Set contains a group of categories, but those categories can contain resources from anywhere in the context. This allows, for example, an external website to share some of the same resources as the Intranet web site.
Chapter 4. Security

Security in eContent consists of the authentication of the user (determine *who* the user is) and then the authorization of that user to specific tasks (determining *what* that user is allowed to do). Typically, the user "Admin" is set up to have all permissions available (in fact, Expresso will do this by default), so the password to this user should be guarded carefully.

Users

The current user is determined at login time: see the Expresso Developer's Guide for a detailed explanation of the login and autentication process. Once a user is logged in, they are associated with a specific set of user groups to which they belong, and this association lasts until they either log out, or their session becomes invalid - which will happen when they either close all of their browsers windows, log off explicitly, or remain inactive for a long time (typically 30 minutes).

Keep in mind, however, that if they have stored a Cookie when they logged in (by checking the "Remember" checkbox) that they will be immediately logged in again when they return to eContent.

Groups

You should set up at least two security groups for your eContent users, and many more might be appropriate. You will need an administrator group - which need not be the same as the default "admin" group created in Expresso - and at least one "regular user" group.

Database Object Security

Controller Security

Controller security for eContent is also administered via the Security page in Expresso. It is important that the appropriate access to at least the "Contents" controller be granted to all eContent users, as this is the controller that supplies all content and category information to users, even if they only have permission to view resources.

Security for the Import, Export, and Security Administration controllers in eContent should of course be tightly controlled.

Category Security

Administer Category Security

Resource Security

Administer Resource Security
Template Security
Chapter 5. Managing Content

Importing and Exporting Content

Existing static content can be easily imported into eContent, and often this is the first function you will use: to import an existing static website, for example. Once this content is imported, it may remain within eContent, and be dynamically managed, or it can be manipulated and organized and then re-exported, creating a new static group of resources. Sometimes a combination approach is best, with part of the site being dynamic, part static. It is important to understand the facilities of eContent that cannot be applied to the static content, however: this includes security, dynamic generation of personalized pages, and search capabilities. Templates can be used when the content is exported to provide its formatting, but the resultant content does not directly use templates once it has been exported, and changes to the template will only be reflected if the content is re-exported.

Importing and exporting are done to and from directories and files on the same server that eContent is running on.

Import Resources

Content can be imported to produce the primary content for resources. This can be done one resource at a time, or an entire category or hierarchy of categories at once.

Import Resources

The most basic type of import is one resource at a time. A resource definition must already exist, and the import creates a new version of the resource. Only the resource primary content can be imported, not the attributes.

Import Categories

Importing categories creates a new category structure. The new structure is imported into an existing category, and creates new categories and sub-categories, one for each directory and subdirectory. As each directory is scanned, each of the files in that directory are read: each file is matched up with an output type, and the first resource type that matches that resource type will be used to create the new resource. The resource will then be added to the category. You can then of course use eContent to adjust the resource types of the imported resources.

It is important to set up your resource types correctly when importing: as each file is found for import, the system selects the first resource type that has the correct output type by considering resource types in order of their list sequence field. The resource type with the lowest list sequence and the appropriate output type is selected as the resource type for the newly imported resource.

Export Resources

Individual resources can be written out to a file very easily: each export utilizes only the primary content of the resource, not the attributes, and writes to the file name that you specify (on the server).
Export Categories

Entire categories can also be exported, and this is the normal method that is used when creating an entire static web-site, or a static portion of a mixed-mode (static and dynamic) site. Exporting a category includes not only the resources in that category and all nested categories, it also creates output files for every Page object in those categories. This allows you to utilize both resource and category templates to create static output.

When exporting categories, you specify a top-level category and a directory to use (again, on the server) for the export. As each category is processed, a directory is created. The name of the directory will normally be "catnnn", where nnn is the number of the category itself - e.g. category 23 would create a directory of "cat23". You can adjust this behaviour for more meaningful directory names by specifying a category parameter for each category you are going to export. The category parameter must be called "dir", and it's value specifies the name of the directory to be created. So, for example, if category 23 has a parameter called "dir" with a value of "products", then a directory named "products" will be created, instead of "cat23".

Each resource will be exported to a filename with an appropriate extension based on the output type of the resource. Keep in mind when creating templates that are going to be used for export that the links in those templates should reflect the directory structure of the exported content - for example, it should not use "/econtent/Content.do" calls (unless of course it is to be used in "mixed mode" as described previously).

Backing Up Content

Database, repository and templates

Backing up configuration

Workflow Sequences
Chapter 6. System Tuning

Database Object Caching

Content Caching
Chapter 7. Views: Guide to the built-in templates for administering eContent

Included with eContent are a number of Category Templates that provide a convenient way to administer many of eContent's functions.

Administrative Hierarchical View

Administrative Folder View

User Subscribed Folders View

User Hierarchical View

Creating Custom Administrative Views

Using Administrative Views on your Site
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