Content Central Installation Guide

Document Management Software

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Preface

1. Foreword

When we at Ademero set out to design a document management system, we wanted to provide the framework and feature set that *you* the user have requested over the years. We believe Content Central has accomplished just that. We respect your thoughts and opinions and consider all feedback we receive from our customers. Always feel free to drop us a line via phone, Web, or e-mail. Customer satisfaction is our primary goal.

We've attempted to write this documentation in a way that provides concepts and definitions first and foremost before instructions. If for any reason any part of this document is unclear or the product does not perform as indicated or expected, please contact our support center below for a quick response and resolution to the issue you're experiencing. We pride ourselves on customer service; that's why we offer our support to you 24 hours-a-day, 7 days-a-week on any day of the year.

Ademero Support Channels

Phone	(863) 937-0272
Toll-Free	(888) 276-2914
E-mail	support@ademero.com [mailto:support@ademero.com]
Web Site	http://www.ademero.com/

2. System Requirements

2.1. Server(s)

Content Central requires at least one PC-based server platform for product installation.

2.1.1. Hardware

Minimum Requirements

- 2GHz Dual-Core Processor
- 2GB RAM
- 80GB Redundant Storage Space

Recommended Hardware

- Quad-Core Intel® Xeon® Processors
- 4GB RAM
- 250GB Redundant Storage Space

2.1.2. Software

Content Central (server software) runs only on Microsoft® Windows® operating systems.

- Microsoft® Windows® XP Professional or higher (Windows Server 2008 or higher recommended)

- Microsoft® Internet Information Services (IIS) 5.0 or higher (7.0 or higher recommended)

- Microsoft® .NET Framework 3.5 or higher (included in the Content Central installation package)

- Microsoft® SQL Server 2005 or higher (SQL Server 2008 Express Edition included in the Content Central installation package)

2.2. Client Workstations

Content Central does not require software to be installed on client workstations. The client should contain an operating system and a Web browser. An optional `PDF` viewer (such as Adobe® Reader®) can be used to view captured paper documents.

2.2.1. Hardware

Minimum Requirements

- 2GHz Processor

- 1GB RAM

Recommended Hardware

- 2.5GHz Dual-Core Processor

- 2GB RAM

2.2.2. Software

- Microsoft® Windows® 2000 or higher (Microsoft® Windows® XP Pro or higher recommended); or

- Mac® OS X or higher

- Microsoft® Internet Explorer 7.0 or higher; or

- Mozilla Firefox® 3.0 or higher

- Sun Microsystems® Java™ runtime environment (JRE) 6.0 or higher

2.2.3. Optional Software

- Browser-based `PDF` viewer

- TWAIN driver for any scanner you wish to use with the DirectScan™ applet

3. Server Modules

The complete Content Central application consists of seven server modules. Each server module can reside on separate, physical servers or be combined on one server. In high-volume environments, e.g., more than 100 active users and/or more than 10,000 captured pages per day, it may be wise to provide a server for each of the modules. This will greatly improve performance. In low to medium-volume environments all modules can typically run on the same physical server without any performance degradation. When more than one server will be used, each should be connected to the same local network.

Content Central Server Modules

- Web Application Server(s)

- MS SQL Database Server(s)

- Catalog Service

- Capture Service (includes the Configuration Manager application)

- Workflow Service

- Document Storage Area (includes *Coding Queue* Documents, Deleted Content, Unprocessed Content)

- Search Indexes (includes the Catalog Manager application)

⚠ **Important**

Search Indexes and the Catalog Service should exist on the same machine for the best performance.

3.1. Web Application Server(s)

This module delivers the content that each user of Content Central interacts with on a regular basis. As a browser-based document management system, most of the administrative and user tasks will be performed within this module.

Requirements: IIS 5.0 or higher; Microsoft® .NET 3.5 Framework

3.2. MS SQL Database Server(s)

Content Central uses Microsoft® SQL Server to store all information related to the application, including user accounts, system configuration settings, document records, logging, and notifications.

Requirements: Microsoft® SQL Server 2005 or higher

3.3. Catalog Service

Both the Catalog Service and Capture Service are Windows® services, each of which can be dedicated to a physical server. The Catalog Service is responsible for updating catalogs with information about new, modified, or deleted documents. This service also removes documents from the system when their specified retention period has expired.

3.4. Capture Service

The Capture Service performs Optical Character Recognition (OCR) on captured images to provide full-text search capabilities and then converts those images to `PDF` documents. It also handles the capture process for electronic files obtained from monitored folders. Zonal recognition operations and data-source field lookups are also handled in this service.

3.5. Workflow Service

The Workflow Service performs automated operations based on live events and scheduled processes.

3.6. Document Storage Area

System   The subfolders beneath the `System` root are necessary for Content Central to run properly. They can each grow in size, and may need to be checked periodically.

- `CodingQueue`: This subfolder will hold documents that are awaiting user coding and have not been committed to their appropriate storage areas.

- `DeletedContent`: This subfolder will contain documents that have been removed from the Content Central database by user action or by an enforced retention policy.

- `Indexes`: This subfolder will contain a subfolder for each catalog. These subfolders store the Index information used to provide quick search results. For more information, see Section 3.7, "Search Indexes".

- `Unprocessed`: This subfolder will hold documents that have not been successfully captured by the Capture Service.

Incoming   The `Incoming` folder will contain one or more subfolders for each catalog and document type. Each of these subfolders are monitored by the Capture Service to import images and other content.

- `IncomingQCard`: This subfolder is the drop point for image files acquired from a scanning device using QCards™. The images will be converted into searchable `PDF` files.

- `IncomingImage`: This subfolder is the drop point for image files acquired from a scanning device *without using* QCards™. The image files will be converted into searchable `PDF` files.

- `IncomingElectronic`: This subfolder is the drop point for electronic files. Files dropped in this folder will be captured as-is.

- `IncomingXML`: This subfolder is the drop point for `XML` files that describe other files dropped in the same folder. The `XML` file can define document boundaries, document properties, and more. For more information, visit http://www.ademero.com/XmlSchemas/ContentCentral/XmlCaptureDescriptor/.

Documents   The `Documents` folder will contain a subfolder for each catalog. These subfolders are the root storage location for documents and other content. This storage space should be fully redundant and backed up on a regular basis for data security and integrity. The space required will vary by organization. At least 80 gigabytes of storage space is recommended for even the smallest operation.

3.7. Search Indexes

Each catalog, containing document types describing documents, lives within the Content Central SQL database. A search Index is also generated (as a flat file on the file system) for each catalog. Storage-space requirements should be taken into consideration. A typical Index will require an additional 10 to 20 percent of the amount of space the documents within a catalog require. For example: An estimated 100-gigabyte catalog of documents will require an additional 10 to 20 gigabytes of storage space for the Index.

Part I. Installation Guide

Chapter 1. Software Installation

1. Introduction

You will now load the Content Central software on your server(s). When you've completed the steps in this chapter, you will have installed all necessary software components of Content Central and will be ready to either evaluate the software or begin configuring for production.
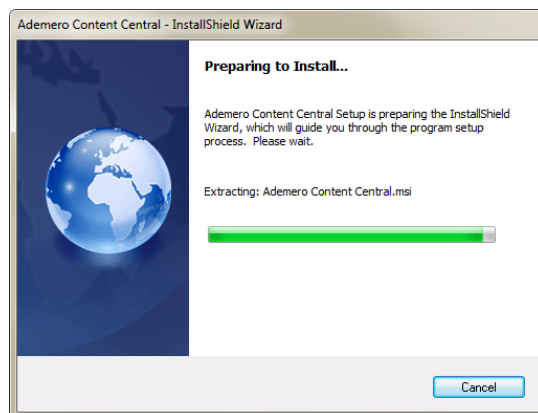
2. Installing Content Central

Launch the installation program, `ContentCentral_Setup.exe`. Content Central requires several supporting packages to be installed prior to installation. Select the **Install** button to proceed. Be patient as the installer will load several prerequisites, including a new instance of Microsoft® SQL Server Express Edition.

You may be provided with an option to install additional packages. Choose the appropriate selections for your organization.
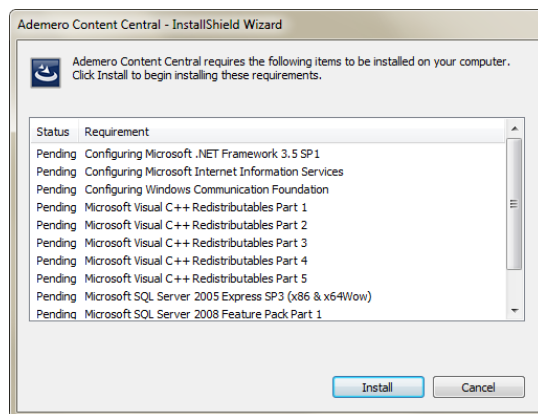
Installation Prerequisites

After the prerequisites have finished installing, the InstallShield Wizard will appear and prepare for installation.
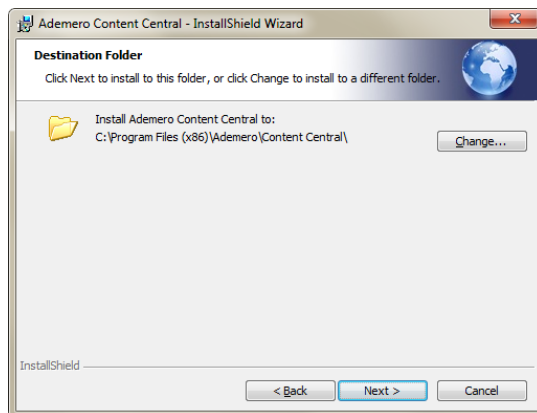

InstallShield Wizard Preparation

To begin the installation of Content Central, select the **Next** button. You will be presented with the Ademero End-User License Agreement. Select the **Next** button if you wish to proceed.

InstallShield Wizard Welcome Screen

You may now choose your **Destination Folder** for the Content Central software. After choosing the appropriate location, select the **Next** button to continue.
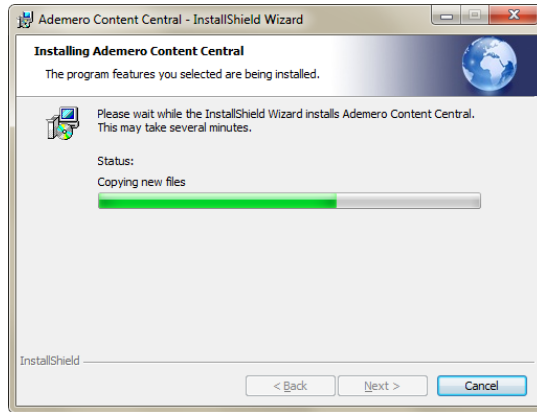

*Content Central **Destination Folder***

You now have the opportunity to go back and make changes if necessary, otherwise select **Install**.
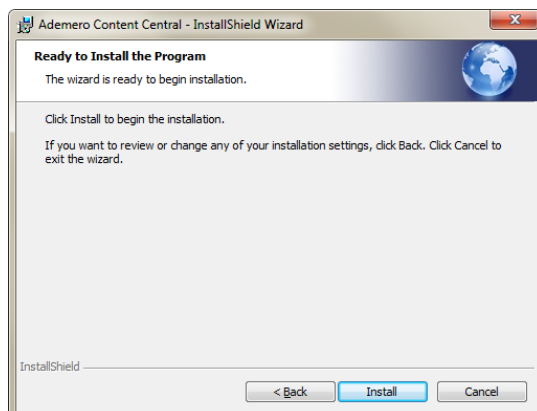

InstallShield Wizard - Begin Installation

Be patient as the application is installed.

Content Central Installation Progress

When the installation is complete you will be presented with a **Finish** button to exit the InstallShield Wizard. You can optionally choose to **View Release Notes**, which will be opened when the wizard closes. Content Central is now installed.
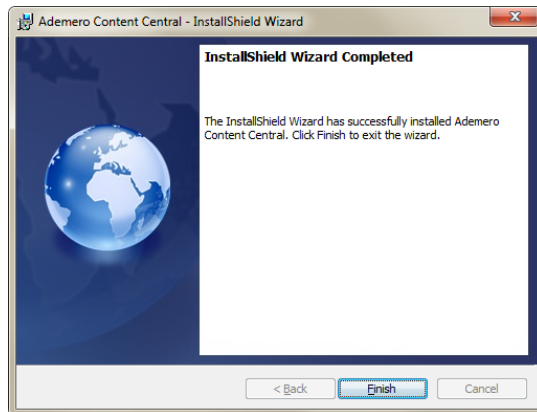
Content Central Installation Progress

3. Evaluating Content Central

If you've installed Content Central for evaluation purposes, you may login to the Web site immediately and begin using the product with the installed demonstration catalogs and documents.

Launch the Web site by selecting the Content Central shortcut on your desktop. In most cases, the URL is http://localhost/ContentCentral/Login.aspx.

Login with the **Username** *demo* and **Password** *demo*.

You can proceed directly to the User Guide.

Chapter 2. Production Configuration

1. Introduction

In this chapter, you will create several file folders on your server(s) for system data, incoming content, and documents.

2. Data Folders

Content Central requires three main folders to be created on your file system: `System`, `Incoming`, and `Documents`. These folders are often found together under a main `ContentCentral` folder. For more information, see Section 3.6, "Document Storage Area".

2.1. `System` Folder and Subfolders

The `System` folder and its subfolders need to be created for Content Central processing data. In multi-server environments these will usually be created on the server you've designated to house documents and other content.

1. Launch an instance of Windows® Explorer.

   ℹ️ **Tip**

   > Use the **Windows Key**-**E** key combo.

2. Browse to, or create the root folder where you would like to create these `System` folders, e.g., `D:\ContentCentral\System\`.
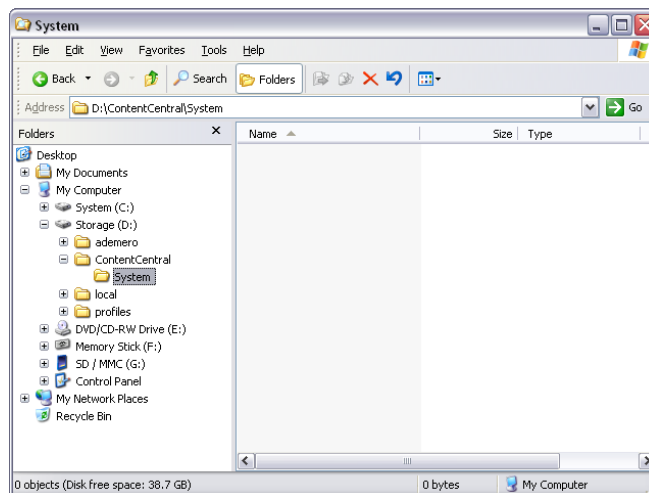
   The System Folder

3. Create the following folders inside the `System` folder:

   - `CodingQueue`: This folder will hold documents captured with a *Post-Capture Coding* or *Versatile Coding* QCard™ until they have been fully coded and archived.

- `DeletedContent`: This folder will contain documents that have been removed from the database either by user action or an enforced retention policy. The `XML` files produced alongside documents are compliant with the Capture Service and can be used to recapture the document by moving the entire package to an `XML`-based capture folder.

- `Indexes`: This folder will contain one subfolder for every Index.

- `Unprocessed`: This folder will contain any captured documents that are unable to be processed due to one or more problems with the incoming file.

- `Reports`: This folder will contain any reports generated by the workflow engine.

- Thumbnails: This folder will contain thumbnails when thumbnails have been enabled.

The System Subfolders

2.2. `Incoming` **Folder**

The `Incoming` folder can contain subfolders for each catalog or document type you create. These subfolders will temporarily hold images and other content to be imported by the Capture Service.

1. Launch an instance of Windows® Explorer or use the existing Explorer window from the previous section.
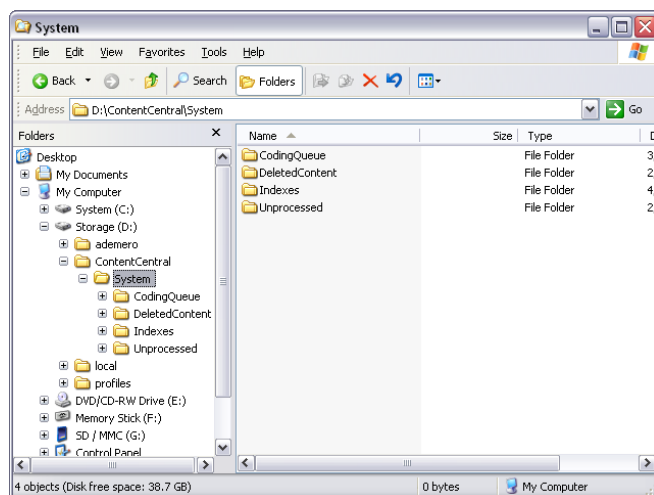
   ⓘ **Tip**

   Use the **Windows Key**-**E** key combo.

2. Browse to, or create the root folder where you would like your incoming images and other content to be routed, e.g., `D:\ContentCentral\Incoming\`.

The `Incoming` *Folder*

2.3. `Documents` **Folder**

The `Documents` folder will contain a subfolder for each catalog you create. These subfolders will store the documents and other content for your organization.
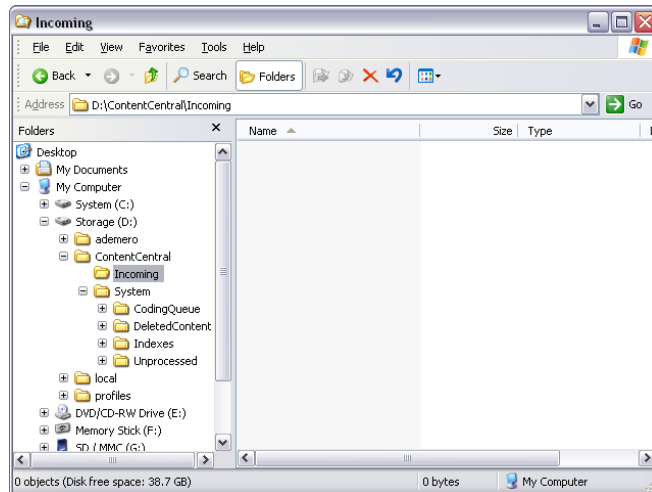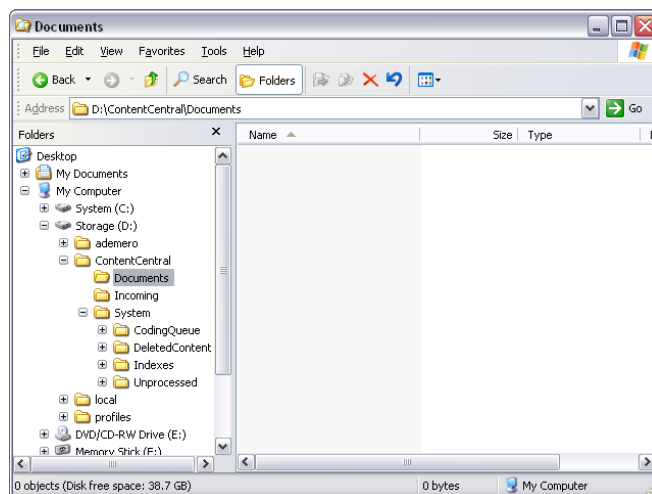
1. Launch an instance of Windows® Explorer or use the existing Explorer window from the previous section.

   ⓘ **Tip**

   Use the **Windows Key**-**E** key combo.

2. Browse to, or create the root folder where you would like your documents and other content to be stored, e.g., `D:\ContentCentral\Documents\`.

The `Documents` *Folder*

3. Adding Proper Security Credentials to Data Folders

This step permits Content Central to write documents and other content to the data folders.

Perform the appropriate task below for each of the following data folders:

```
\System\CodingQueue\
\System\DeletedContent\
\System\Indexes\
\System\Unprocessed\
\System\Reports\
\System\Thumbnails\
\Documents\
```

|	
Windows® XP Professional	Add the *ASPNET* system account or the impersonation account to each folder and grant *Full Control* to this account. Inheritance should be enabled.
Windows® Server 2000, Server 2003, Vista	Add the *Network Service* system account or the impersonation account to each folder and grant *Full Control* to this account. Inheritance should be enabled.

4. Optimizing Performance

The following adjustments can improve system performance and response.
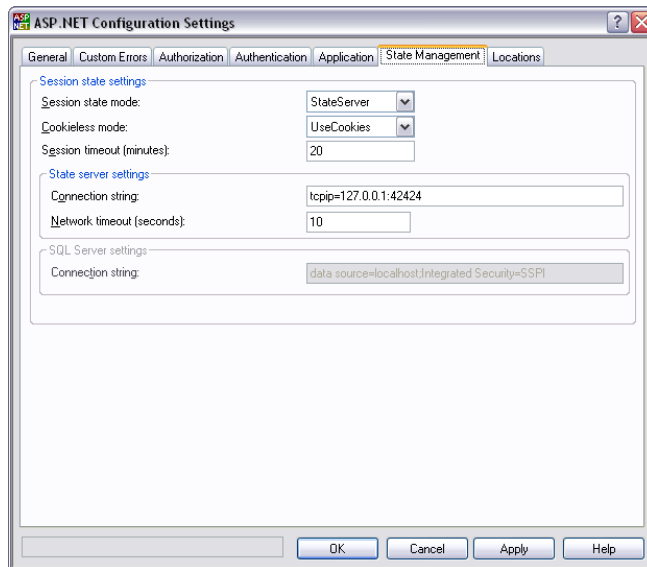
4.1. The ASP.NET State Service

The ASP.NET State Service improves performance by maintaining session data between the server and client(s). To enable it, access the **Services** dialog on the machine you've designated for the Web site. Locate the service named, *ASP.NET State Service*, and set the *Startup Type* to Automatic. If the service is not currently running, start the service. You may now exit the **Services** dialog.

Access the **Internet Information Services** dialog on the same machine. This can be found from within the **Administrative Tools** section of the **Control Panel** or inside the **Management** dialog of **My Computer** (right-click, **Manage**). Expand the computer-name node to reveal the **Web Sites** node. Continue expanding until you locate the **ContentCentral** node. Access the properties of **ContentCentral** (right-click, properties) and select the **ASP.NET** tab. Select the **Edit Configuration** button. When the **ASP.NET Configuration Settings** dialog appears, select the **State Management** tab. Choose the **StateServer** option from the **Session state mode** drop down list.

If you would like to also enable **ASP.NET Impersonation** (the next optimization), remain in this dialog and skip to the next section. Otherwise, select the **OK** button to save the **ASP.NET** configuration settings. Select the **OK** button to save the changes to the **ContentCentral** Web site. You may now exit the **Internet Information Services** dialog.
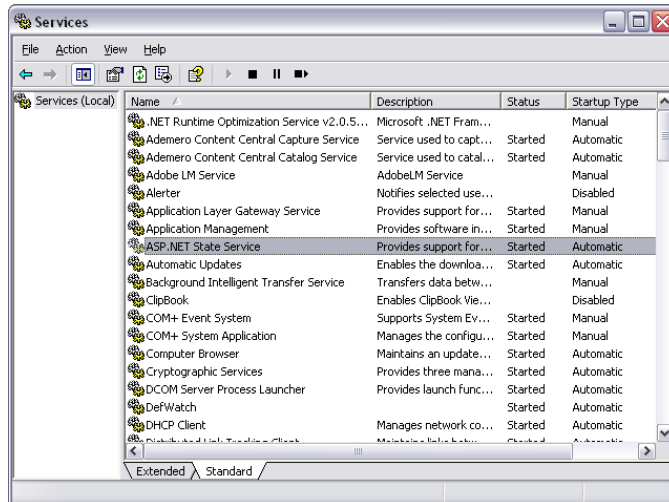
The ASP.NET State Service

Enabling the ASP.NET State Server

4.2. ASP.NET Impersonation

When users make requests to Content Central, Internet Information Services will use an ASP.NET process identity to access resources such as the SQL Server. Perform the following if you would like to define a different Windows® account for these operations.

☞ **Note**

> When operating Content Central in a multi-server environment, impersonation is mandatory.

Within the **Application** tab of the **ASP.NET Configuration Settings** dialog for the **ContentCentral** virtual directory, add a check to the **Local impersonation** checkbox and provide a pre-defined user account for impersonation. Select the **OK** button to save the **ASP.NET** configuration settings. Select the **OK** button to save the changes to the **ContentCentral** Web site. You may now exit the **Internet Information Services** dialog.

Once impersonation has been enabled, the account used must be allowed permissions to read and write within a few of the previously-defined data folder(s) (See Section 3, "Adding Proper Security Credentials to Data Folders"). The account will also need read and write access to the database in SQL (described later).
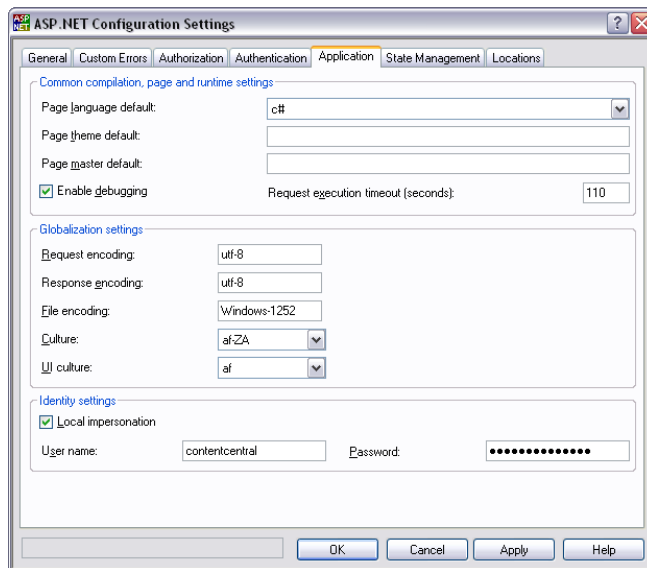
Enabling ASP.NET Impersonation

5. Configuration Manager

The Configuration Manager is responsible for defining the SQL database, linking each server in a multi-server environment, enabling Active Directory integration, and managing licensing.

⚠ **Important**

> Because the Configuration Manager stores the OCR license, it must be installed on the server containing the Capture Service.

Begin by launching the application using the desktop shortcut labeled **Configuration Manager**.

The Configuration Manager Main Menu

5.1. SQL Settings

Select the **Server Name** of your installed SQL Server. If your SQL Server is installed on a non-standard port, you may enter the port number in the **Port Number** field. Choose the correct **Version** of SQL Server you have installed.

The **Database Name** field defaults to *ContentCentral*, but you may change it if you desire.

- SQL Admin Login: Choose the method of authentication for accessing SQL with *Admin* rights. This security level is necessary to create the Content Central database.

- SQL User Login: Choose the method of authentication you would like Content Central to access SQL with during production. When using **SQL Authentication**, the username and password provided will be *created*, i.e., the user does not need to exist in SQL. When using **Windows Authentication** you will need to access the database and provide db_datareader/db_datawriter access to the system account being impersonated through ASP.NET. This will either be the *ASPNET* or *Network Service* account when *Local Impersonation* is disabled (default) or the system account provided when enabling impersonation as described in Section 4.2, "ASP.NET Impersonation".

Complete the **SQL Settings** configuration by selecting each of the three buttons at the bottom of the **SQL Settings** tab. The **Create/Edit Database** button will create the database for Content Central, and the **Test User Login** button will create the user when using *SQL Authentication*.
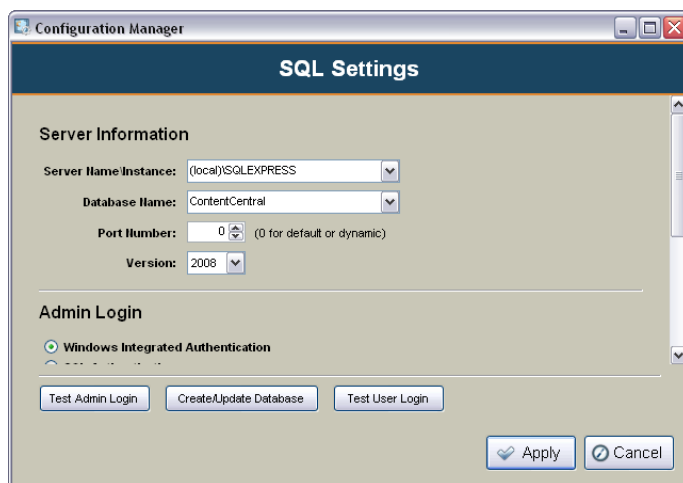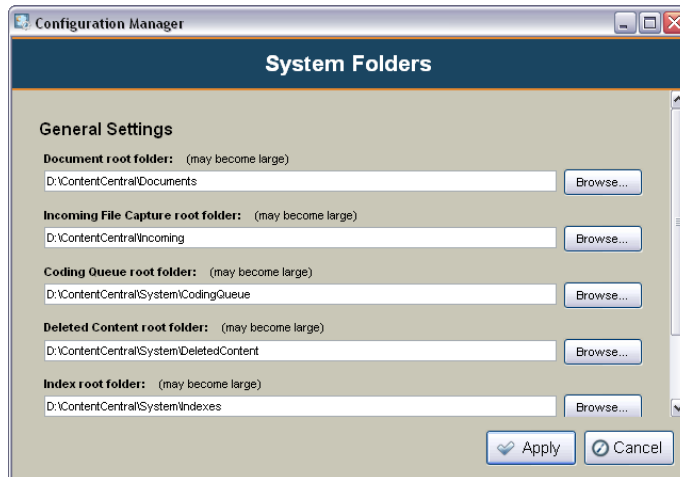

The SQL Settings Dialog

5.2. System Folders

Proceed to the **System Folders** tab.

Browse to the appropriate folders created in Section 2.1, "`System` Folder and Subfolders".

The System Folders Dialog

5.3. Active Directory [*Enterprise Edition*]

Content Central can be integrated with Microsoft® Windows® Active Directory so that users can be added to the system easily. Active Directory users will use their existing Windows® account name and password to login to Content Central.

Select the **Add** button to add an Active Directory domain to Content Central. To enable this domain, select the **Enable Active Directory Authentication** checkbox, enter the **Fully Qualified Domain Name** , and provide an Active Directory **User name** and **Password**. Select the **Test Login** button to verify Content Central can access the Active Directory server.

For information on how to add Active Directory users to Content Central, see ???.
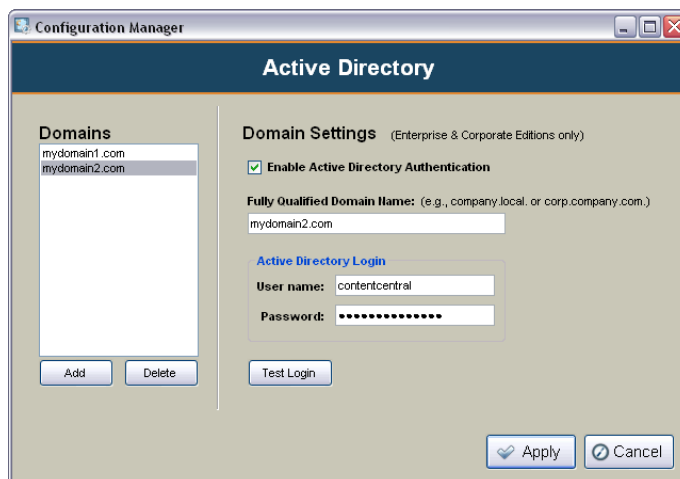
The Active Directory Dialog

5.4. Licensing

You should have received both a user license and OCR license from Ademero Select the **Enter License Key** button to enter the *User License* key and the **Import OCR License** button to load the *OCR License* file. You may select the **OK** button when you've completed this step to save your changes.
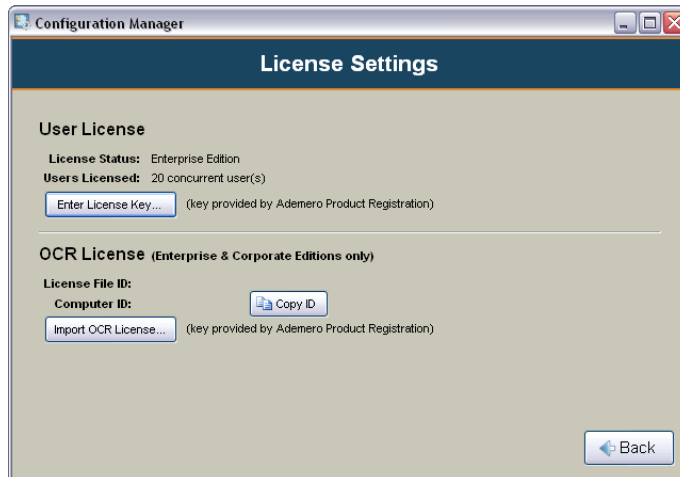
The License Dialog

5.5. External Applications [*Enterprise Edition*]

External applications are used as Workflow Actions in Workflow Rules. An external application can be started in response to one or more Workflow Triggers meeting their conditions. For more information on how to use these external applications, see ???.

Select the **Add** button to add an external application to Content Central. Provide a descriptive **Name** to help identify the application later.

An application can be bound to a catalog or document type by selecting the appropriate item(s) from the **Visibility** drop-down list. To make an application available globally, select **All Catalogs**.

Choose the location of the application by selecting the **Browse** button to locate the executable.

An optional list of **Arguments** may be provided. The following list identifies the variables that may be used in the argument list. All variables are case sensitive.

$object	Returns the file path when return object is an item of content or coding-queue content. Returns a number when return object is an integer.
$clickid	Returns a unique id associated with a user click from a menu. This variable is valid only when an external application is activated from a custom menu item.
$docfolder	Returns the folder path when return object is an item of content or coding-queue content.
$docfilename	Returns the file name when return object is an item of content or coding-queue content.
$docid	Returns the internal identifier for the item of content or coding-queue content.
$catalog	Returns the catalog for the item of content or coding-queue content.
$doctype	Returns the document type for the item of content or coding-queue content.

$field:[field name]	Returns the value of an index field from an item of content or coding-queue content. Enter the field name inside the square brackets.
$packetname	The name of the packet template
$packetfieldname	The name of the key field of the packet template
$packetfieldvalue	The value of the key field of the packet
$packetstatus	One of the following indicators for the packet
	Packet is complete. Packet is incomplete. The following document types are missing: *doctype1*, *doctype2...doctypeN*.
$actinguserusername	The username of the user causing the action
$actinguserfirstname	The first name of the user causing the action
$actinguserlastname	The last name of the user causing the action
$actinguseremailaddress	The e-mail address of the user causing the action
$apname	Returns the name of the approval process when the return object is an item of content and the workflow trigger is of type: **Approval Processes: Movement on Process**.
$apaction	One of the following approval-process actions when the workflow trigger is of type: **Approval Process: Movement on Process**
	Assigned to Process Approved Rejected Process Completed Rejected from Process Removed from Process
$apdate	Returns the date of the approval-process event when the return object is an item of content and the workflow trigger is of type: **Approval Processes: Movement on Process**.
$aptime	Returns the time of the approval-process event when the return object is an item of content and the workflow trigger is of type: **Approval Processes: Movement on Process**.
$appriority	Returns the current priority of the approval-process event when the return object is an item of content and the workflow trigger is of type: **Approval Processes: Movement on Process**.
$apnote	Returns the note of the approval-process event when the return object is an item of content and the workflow trigger is of type: **Approval Processes: Movement on Process**.
$apassignerusername	Returns the username of the user who began the approval process when the return object is an item of content and the workflow trigger is of type: **Approval Processes: Movement on Process**.

$apassignerfirstname	Returns the first name of the user who began the approval process when the return object is an item of content and the workflow trigger is of type: **Approval Processes: Movement on Process**.
$apassignerlastname	Returns the last name of the user who began the approval process when the return object is an item of content and the workflow trigger is of type: **Approval Processes: Movement on Process**.
$apassigneremailaddress	Returns the e-mail address of the user who began the approval process when the return object is an item of content and the workflow trigger is of type: **Approval Processes: Movement on Process**.

Some applications require argument data to be enclosed in single or double quotes. Example: -argument "$object". Likewise, it may be necessary to escape double quotes (") existing within the data that a variable represents, such as when a user enters double quotes in an approval-process note. In these cases you can **Use Escape Character for Double-Quotes**. The character used depends on the application. Batch files in Windows® use an additional double-quote to escape a double-quote. Example: "This is a ""quoted"" line." Other applications may use a backslash character. Example: "This is a \"quoted\" line."

Select the **Delete** button to remove one or more applications from the list.
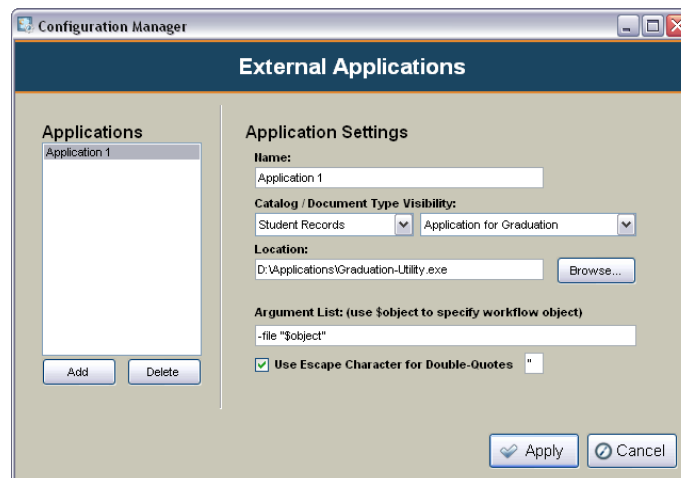
The External Applications Dialog
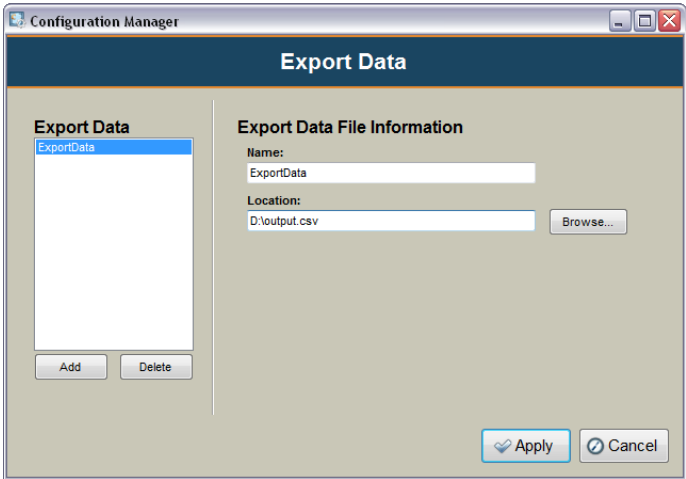
5.6. Export Data [*Enterprise Edition*]

The **Export Data** area allows you to specify files on the server that will be used to export document information in Content Central using workflow rules.

Select the **Add** button to add a new file. Provide a **Name** that will be used to reference this file in the Web application. Select the **Browse** button to select an existing file on the server or specify a new one. This file can be a CSV or TXT file.

⛔ Warning

> New information will be appended to the selected file. Do not choose an existing file that contains important information.

For details on how to export data in Content Central, see [???](???).

The Export Data Dialog