

ALGENTA TECHNOLOGIES

Colectica Repository Deployment



COLECTICA REPOSITORY DEPLOYMENT

This document provides detailed instructions for deploying Colectica Repository.

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COLECTICA REPOSITORY DEPLOYMENT

This chapter provides detailed instructions for deploying Colectica Repository.

DATABASE OPTIONS

Colectica Repository is tested to work with the following databases:

- Microsoft SQL Server 2008 R2
- Microsoft SQL Server Express 2008 R2
- PostgreSQL version 9 or higher

AUTHENTICATION OPTIONS

Colectica Repository can use the following authentication mechanisms:

- Built-in Colectica authentication
- ActiveDirectory

STEP 1. DNS

Create a DNS record for the hostname you would like to use to access Colectica Repository.

STEP 2. DATABASE

SQL Server

1. Connect to your SQL Server
2. Create a database named `colectica`
3. Run the SQL commands in `bin\sqlserver2008-RepositorySchema.sql` of the Colectica Repository package
4. If using the built-in Colectica authentication system:
 - a. Launch a command line with Administrative rights
 - b. Navigate to `drive:\WINDOWS\Microsoft.NET\Framework\versionNumber`
 - c. Run the `Aspnet_regsql.exe` tool
 - d. In the wizard that follows:
 - i. Choose to “Configure SQL Server for application services”
 - ii. Select your database server. Leave the database as Default
 - iii. Click Next twice and your authentication database will be created

PostgreSQL

1. Connect to your PostgreSQL server
2. Create a database named `colectica`
3. Run the SQL commands in `bin\postgres8.4-RepositorySchema.sql` of the Colectica Repository package
4. If using the built-in Colectica authentication system, create a database named `colectica_user` and run the SQL commands in `bin\postgres8.4-ProviderSchema.sql` of the Colectica Repository package

STEP 3. DEPENDENCIES

1. Install .NET 3.5.1 features
2. Install .NET 4.0 Framework (the full version)
3. Install the IIS Server Role on Windows Server Web Server. Include the following options.
 - a. Web Server
 - i. Common HTTP Features
 - ii. Static Content
 - iii. Default Document
 - iv. Directory Browsing
 - v. HTTP Errors
 - vi. HTTP Redirection
 - b. Application Development
 - i. ASP.NET
 - ii. .NET Extensibility
 - iii. ISAPI Extensions
 - iv. ISAPI Filters
 - c. Health and Diagnostics
 - i. HTTP Logging
 - ii. Request Monitor
 - d. Security
 - i. Basic Authentication,
 - ii. Windows Authentication,
 - iii. Digest Authentication,
 - iv. Client Certificate Mapping Authentication,
 - v. IIS Client Certificate Mapping Authentication,
 - vi. URL Authorization,
 - vii. Request Filtering,
 - viii. IP and Domain Restrictions
 - e. Performance
 - i. Static Content Compression
 - ii. Dynamic Content Compression
 - f. Management Tools
 - i. IIS Management Console

STEP 4. DEPLOY SITE BINARIES

1. Extract the ColecticaRepository/ directory to a location where IIS can access it.

STEP 5. IIS CONFIGURATION

Create Site for Colectica Repository

1. In IIS, choose your machine and select Add Web Site
 - a. Site Name: ColecticaRepository
 - b. Physical path: The location where you extracted the ColecticaRepository/ directory
 - c. Binding: net.tcp

- d. Binding Information: 19893:*
2. In the newly created Application Pool, make sure the .NET Framework Version is set to 4.0
3. Right Click the new web site, choose Edit Bindings
 - a. Add an HTTPS Binding
 - i. Type: https
 - ii. Port: 19894
 - iii. SSL Certificate: select the certificate you installed for Colectica Repository
 - b. Add an HTTP Binding
 - i. Type: http
 - ii. Port: 19895
 - iii. Hostname: your desired hostname
4. Right click the new web site, choose Manage Web Site – Advanced Settings
 - a. Set Enabled Protocols to `http, https, net.tcp`

Update Web.Config for Colectica Repository

Search for the word “TODO” and update the following information as appropriate.

1. Database connection strings
2. Hostnames and ports
3. Certificate name

STEP 6. SYSTEM CONFIGURATION

Certificate

1. Obtain a certificate and install it in the local machine’s certificate store
 - a. A self-signed certificate can be created using the makecert.exe tool
`makecert.exe -sr LocalMachine -ss My -a sha1 -n
 CN=<hostname> -sky exchange -pe`
2. Give read permission to IIS
 - a. Run the Certificate MMC addin and find the newly installed certificate
 - b. Right click – All Tasks – Manage Private Keys
 - c. Add the NETWORK SERVICE account and make sure Read access is enabled

Miscellaneous

1. Make sure the .NET TCP Listening Adapter service is started
2. Add appropriate ports to any inbound firewall configurations

STEP 7. TEST

1. Make sure you can connect to the repository.
2. Make sure you can connect to Colectica Web.

COLECTICA WEB DEPLOYMENT

Colectica Web runs on top of Colectica Repository. Before deploying Colectica Web, be sure Colectica Repository is running as described in ODeployment.

Deploy Site Binaries

Extract the `ColecticaWeb/` directory to a location where IIS can access it.

Create Site for Colectica Web

1. In IIS, choose your machine and select Add Web Site
 - a. Site Name: `ColecticaWeb`
 - b. Physical path: The location where you extracted the `ColecticaWeb/` directory
 - c. Binding: `http`
 - d. Hostname: your desired hostname
2. In the newly created Application Pool, make sure the .NET Framework Version is set to 4.0

Update Web.Config for Colectica Web

Search for the word “TODO” and update the following information as appropriate.

1. Database connection strings

You can also update several general settings in the `applicationSettings` section of the configuration file.