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Asbru Ltd.

Asbru Web Content Management System

Installation Guide

Easily & Inexpensively
Create, Publish & Manage Your Websites

30. May 2014 Version 9.1

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Asbru Web Content Management System

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Introduction

This document is the installation guide for the Asbru Web Content Management System. The installation guide describes how you, the system administrator and website administrator, install and configure the Asbru Web Content Management System to create, publish and manage your websites.

Installing and configuring the Asbru Web Content Management system is easy and should take no more than a few minutes if you are familiar with web servers and database servers.

This installation guide is divided into eight main parts:

Section 1 describes the system requirements and what you need to do and know before you install the Asbru Web Content Management system.

Section 2 describes how to download and install the Asbru Web Content Management system program files.

Section 3 describes the initial minimal quickstart configuration of the Asbru Web Content Management system to get it running on your website with your database.

Section 4 describes how to proceed when the Asbru Web Content Management system has been installed and configured.

Section 5 describes how to upgrade the Asbru Web Content Management system program files and database to a newer version.

Section 6 describes how to translate the Asbru Web Content Management system to other languages than the included default languages and how to use alternative languages.

Section 7 describes how to install and configure custom and third-party add-on modules and extensions as well as programming API scripts.

Table of Contents

1 System Requirements

The Asbru Web Content Management system is very flexible and unparalleled in that it runs on most major website platforms: operating systems, web servers, programming/scripting languages and database servers. No matter which platform your website runs on it is likely to be supported.

If you need to switch from one platform - such as the combination of Microsoft Windows, Internet Information Server, .NET and Access - to another platform - such as the combination of Unix, Apache, Java Server Pages and Oracle – you can simply move everything and continue to use the Asbru Web Content Management system without purchasing a new web content management system, redeveloping your website and retraining your website administrators.

The Asbru Web Content Management system runs on the following website platforms:

Website Platform Component	Supported Products
Operating System	Microsoft Windows Unix/Linux
Web Server	Microsoft Internet Information Server Apache (+ any other standard compliant web server)
Programming / Scripting Language	.NET (2.0 or newer) JSP (with Java 1.6 or newer) PHP (5.x with PHP PEAR MDB2)
Database Server	Microsoft SQL Server Oracle Database Server IBM DB2 Universal Database Server MySQL Database Server PostgreSQL Database Server
Web Browser (website administrators)	Microsoft Windows Internet Explorer (v8.0 or newer) Mozilla Firefox (v3.0 or newer) Safari (v2.0.1 or newer) Google Chrome (v2.0 or newer) Older web browser versions and other web browsers may also work fully or partially
Web Browser (website users/visitors)	Any standard compliant web browser

Please note that only recent versions of the website platform software are supported by the Asbru Web Content Management system. You should always make sure to keep your website platform software updated to the latest or at least a recent version to avoid functionality and security problems.

Before installing the Asbru Web Content Management system you should make sure that:

- Your operating system, web server, programming/scripting language, database server, database drivers and web browser are installed and working correctly.

- You have access and permissions to copy files to your web server and your website directory/folder through FTP (File Transfer Protocol) or Microsoft Networking or

similar.

- The Asbru Web Content Management system web server process/user has file create and write permissions for the website files and folders:
    - /
    - /defaults.aspx /defaults.jsp /defaults.php
    - /ini.aspx /ini.jsp /ini.php
    - /file/
    - /image/
    - /upload/

- An empty database instance is created on your database server with permissions to connect, create/drop tables and create/delete records.

- You have the database instance name, username, password and permissions to connect to your database from your website.

2 Download and Installation

The Asbru Web Content Management system is available for download from the Asbru website (www.asbrusoft.com). The software is available in a variety of packages and formats. Please check the website for details.

The downloaded package is a compressed file archive, which you must uncompress and extract for installation on a web server; or the compressed file archive can be deployed to a cloud web hosting service. The package includes a large number of folders and files. Depending on the downloaded package the root folders and files could be:

Root Folders and Files Example			
App_Code/	element.aspx	page.original.aspx	shopcart.aspx
file/	element.jsp	page.original.jsp	shopcart.jsp
image/	element.php	page.original.php	shopcart.php
password/	file.aspx	post.aspx	stylesheet.aspx
personal/	file.jsp	post.jsp	stylesheet.jsp
upload/	file.php	post.php	stylesheet.php
webadmin/	image.aspx	product.aspx	stylesheet.original.aspx
WEB-INF/	image.jsp	product.jsp	stylesheet.original.jsp
atom.aspx	image.php	product.php	stylesheet.original.php
atom.jsp	index.aspx	product.original.aspx	subscribe.aspx
atom.php	index.jsp	product.original.jsp	subscribe.jsp
config.aspx	index.php	product.original.php	subscribe.php
config.jsp	link.aspx	register.aspx	template.aspx
config.php	link.jsp	register.jsp	template.jsp
config.static.aspx	link.php	register.php	template.php
config.static.jsp	login.aspx	rss.aspx	unavailable.aspx
config.static.php	login.jsp	rss.jsp	unavailable.jsp
contact.aspx	login.php	rss.php	unavailable.php
contact.jsp	login_post.aspx	script.aspx	unsubscribe.aspx
contact.php	login_post.jsp	script.jsp	unsubscribe.jsp
contentitem.aspx	login_post.php	script.php	unsubscribe.php
contentitem.jsp	logout.aspx	script.original.aspx	webadmin.aspx
contentitem.php	logout.jsp	script.original.jsp	webadmin.jsp
data.aspx	logout.php	script.original.php	webadmin.php
data.jsp	page.aspx	search.aspx	xml.aspx
data.php	page.jsp	search.jsp	xml.jsp
default.gif	page.php	search.php	xml.php

Please note that some of the Asbru Web Content Management system files may be named identically to some of your existing website files in which case your existing files will be overwritten. Please make sure to backup all your existing website files before installing the Asbru Web Content Management system.

To install the Asbru Web Content Management system you must copy all the files and folders including all their files and sub-folders etc. to your website root/home folder on your web server – except for the .NET software package where you should only copy all the files and folders including all their files and sub-folders etc. from the "Content\Default Web Site" folder to your website root/home folder on your web server (the folders and files outside of this are only used for cloud deployment). Your website root/home folder is where your main homepage file is located.

2.1 .NET Installation and Server Configuration

The .NET version of the Asbru Web Content Management system also includes a minimal "web.config" web server configuration file and a "global.asax" program file. If you have an existing "web.config" web server configuration file or an existing "global.asax" program file you may need to merge these with the Asbru Web Content Management system "web.config" web server configuration file and "global.asax" program file.

As default the .NET version of the Asbru Web Content Management system is configured to run on a web server with .NET 2.0-3.5. If you are using .NET 4.0 you will need to edit the "web.config" web server configuration file and uncomment (delete the "<!—" and "-->" before and after) the "<httpRuntime requestValidationMode="2.0" />" configuration setting or the web content management system may not work correctly failing to save content which contains special characters etc.

2.2 JSP Installation and Server Configuration

The JSP version of the Asbru Web Content Management system also includes a minimal "/WEB-INF/web.xml" web/application server configuration file and a number of "/WEB-INF/lib/" jar program files. If you have an existing "/WEB-INF/web.xml" web/application server configuration file you may need to merge these with the Asbru Web Content Management system "/WEB-INF/web.xml" web/application server configuration file. If your web/application server already includes some of the "/WEB-INF/lib/" jar program files you may need or want to ignore the copies of these files included with the Asbru Web Content Management system and use your existing copies of these files. Your web/application server may also already include some of the "/WEB-INF/lib/" jar program files in other locations on the server in which case you may need to delete the "/WEB-INF/lib/" jar program files to avoid conflicts – for example the common "activation.jar" and "mail.jar" program files may already me included in the web/application server, and additional copies of these files in the "/WEB-INF/lib/" folder may cause the Asbru Web Content Management system email functionality to not work.

2.3 Spell Checking

The Asbru Web Content Management system supports integrated spell checking of web content through the Aspell (aspell.net) spell checking application.

To enable the spell checking functionality you must download and install the Aspell application and dictionaries on your web server. Aspell is free and can be downloaded from aspell.net. Please see the Aspell documentation for details on how to install Aspell.

When Aspell has been installed on your web server you must configure the Asbru Web Content Management system and specify where Aspell is installed on your web server and which dictionaries to use. These are configured in the "config.asp", "config.jsp" and "config.php" files in the "webadmin/webeditor" folder.

You must configure the following variables in the configuration file(s):

spellcheckCommand	The full path and file name of your installed copy of Aspell as well as the Aspell command line parameters to use for spell checking. As default this should be:

	"C:\Progra~1\Aspell\bin\aspell.exe -a –H" for Microsoft Windows and: "/usr/bin/aspell –a –H" or "/usr/local/bin/aspell –a –H" for Linux, Macintosh and Unix. Set this to blank ("") to disable access to spell checking.
spellcheckDictionary	Aspell command line parameter to use to specify which dictionary to use for spell checking. As default this should be: "-d"
spellcheckDictionaries	The dictionaries to be made available to users for spell checking. These must be specified as HTML SELECT OPTION tags. The OPTION values should be Aspell dictionary names such as "en", "en_GB" and "en_US" language/country codes or "english", "british" and "american" language names. Please see the Aspell dictionaries documentation for details.

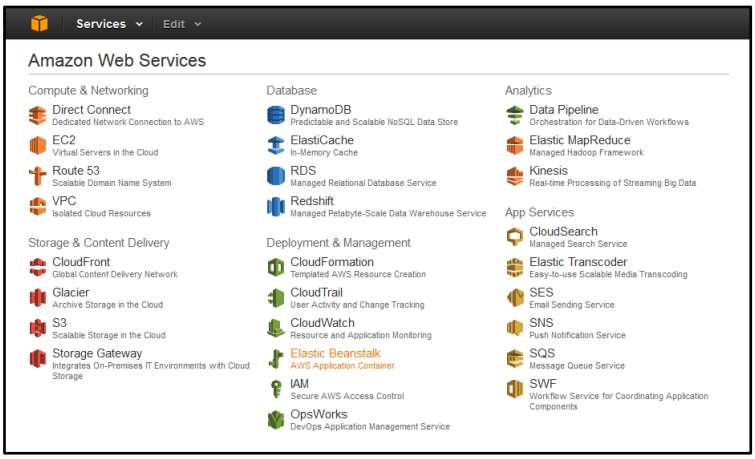
2.4 Amazon Web Services (AWS) Cloud Deployment

The Asbru Web Content Management system supports easy deployment to the Amazon Web Services cloud hosting services simply by choosing the operating system and database server, and the number and size of servers to use, and uploading the Asbru Web Content Management software package.

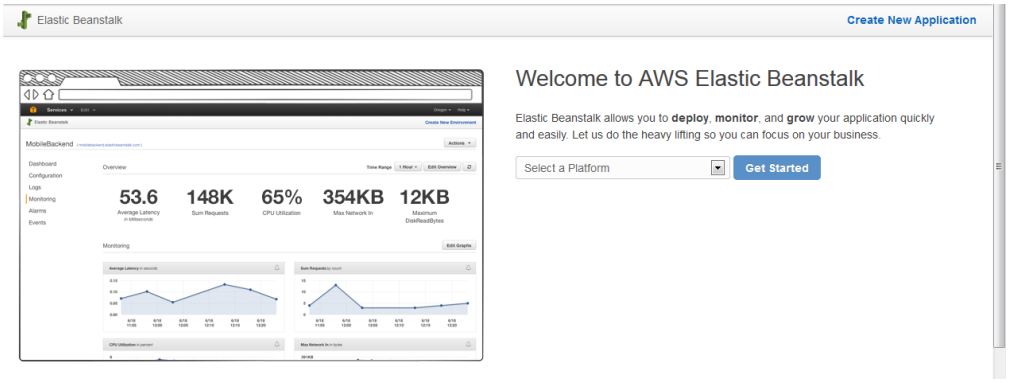
2.4.1 Elastic Beanstalk

To use Amazon Web Services (AWS) Cloud Deployment, sign up for an account at http://aws.amazon.com/ and access the AWS Management Console. A large number of different AWS cloud services are available for advanced requirements. The Asbru Web Content Management can be easily deployed using the AWS Elastic Beanstalk service.

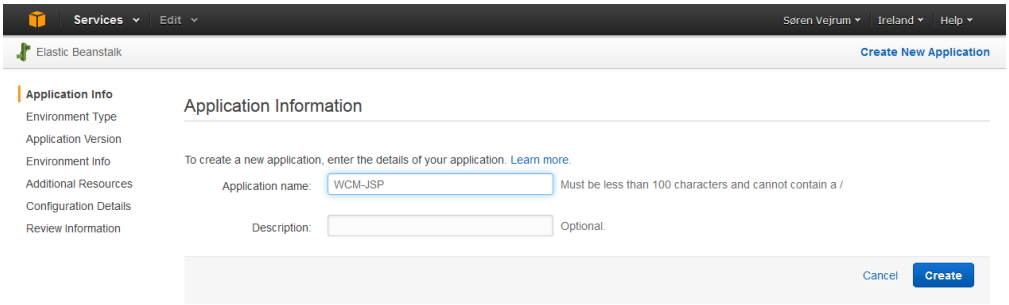
Please note that the AWS services, user interface and options may be changed. Please see the general AWS documentation for details.



Select “Create New Application” to deploy the Asbru Web Content Management software.



Enter a name for your new application – for example “WCM-JSP”, “WCM-NET” or “WCM-PHP”, and select “Create”.

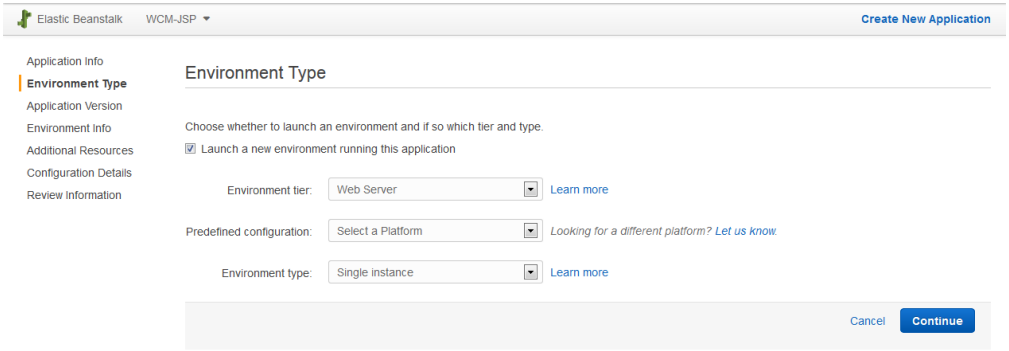


2.4.2 Environment and Platform

Select the environment type to launch for your Asbru Web Content Management deployment:

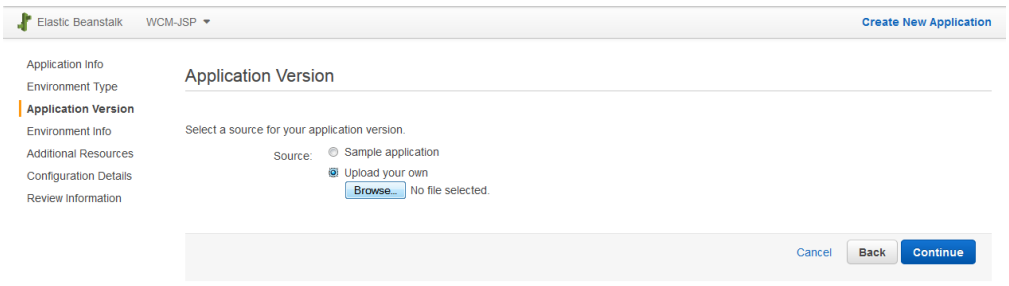
- Environment tier
    - Web Server

- Platform:
    - IIS
      for the .NET programming language version of the Asbru Web Content Management software.
    - PHP
      for the PHP programming language version of the Asbru Web Content Management software.
    - Tomcat
      for the JSP/Java programming language version of the Asbru Web Content Management software.
- Environment type:
    - Single instance
      for simple fixed capacity setup with a single web server.
    - Load balancing, autoscaling
      for advanced scalable capacity setup with multiple web servers.



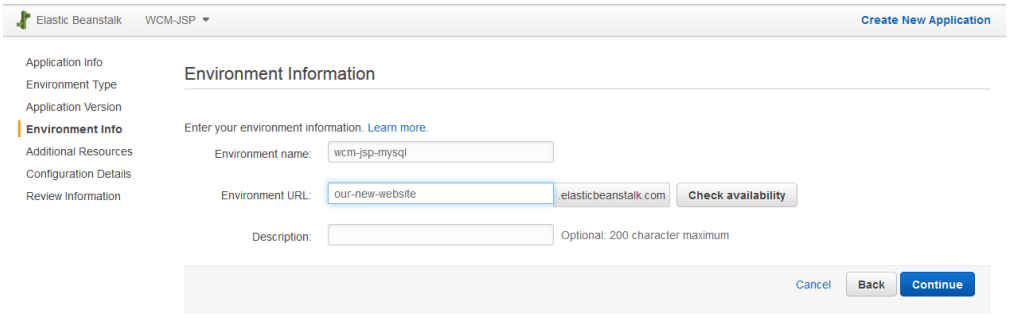
2.4.3 Upload

Upload the Asbru Web Content Management software package ZIP compressed file archive. The uploaded software package should match the selected platform: AsbruWCM.net.zip for IIS; AsbruWCM.php.zip for PHP; AsbruWCM.jsp.zip for Tomcat. Please note that it may take a few minutes to upload the software package depending on your Internet connection speed.



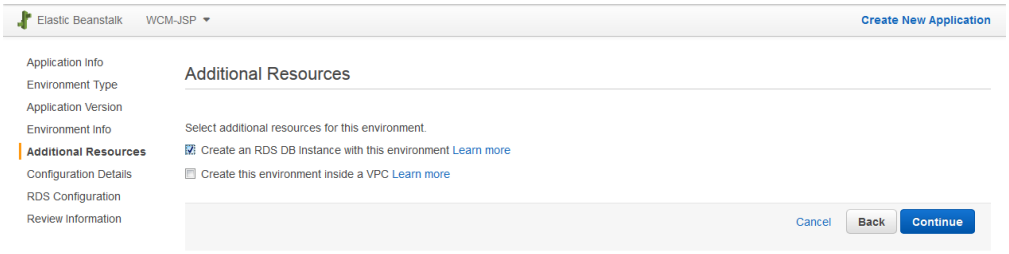
2.4.4 Domain Name

Enter an administrative name and a unique environment URL for for your launched environment. The environment URL can be used to access your deployment of the Asbru Web Content Management system and your new website (You can also add your own additional domain names to access your deployment of the Asbru Web Content Management system and your new website later. Please see the general AWS documentation and your domain name service provider for details).



2.4.5 Database

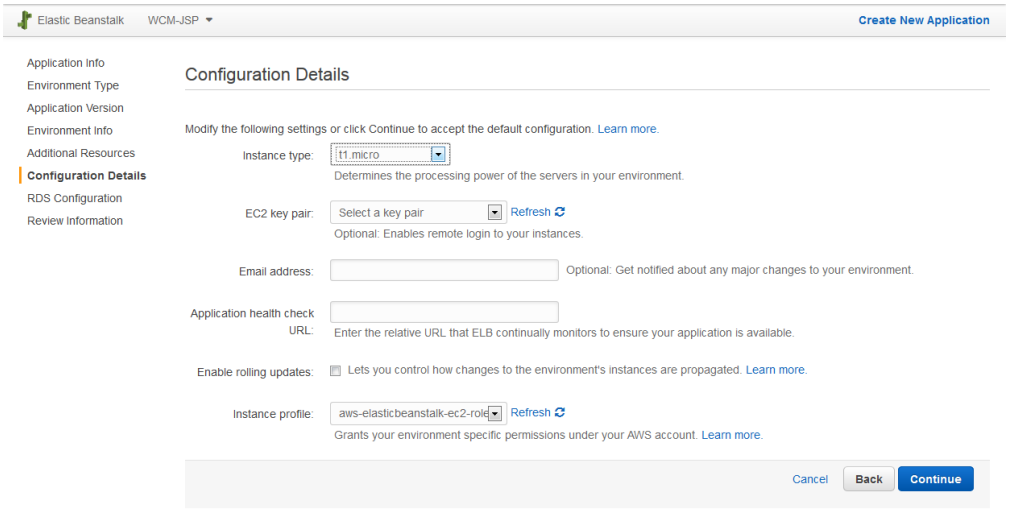
The Asbru Web Content Management system requires a database server instance to store the website content and other data.



2.4.6 Hardware

Select the instance type (hardware capacity) to be used for your deployed web servers. Please see the general AWS documentation for details on capacity and pricing.

Optionally, you can also enable remote login to your deployed servers, email notifications, and application health check monitoring.



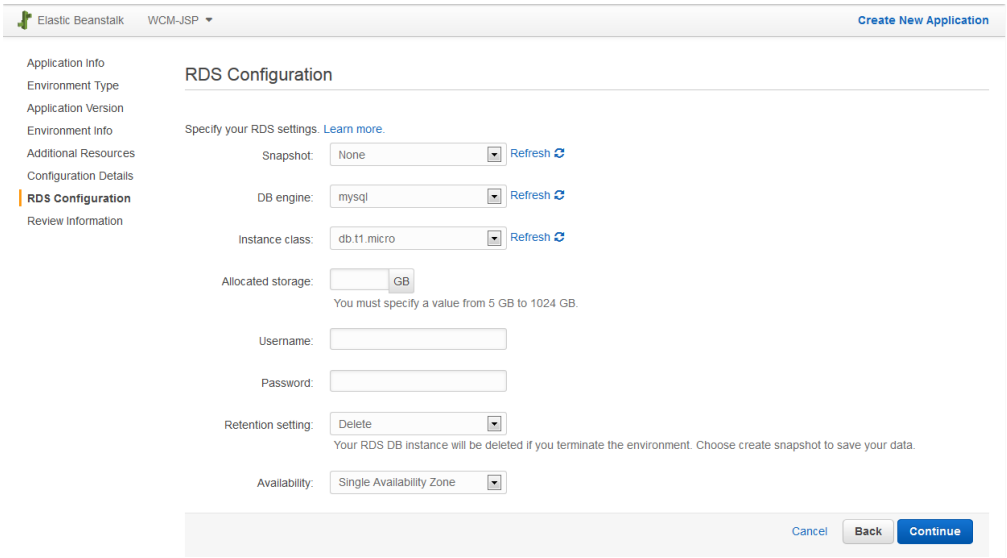
2.4.7 Database Server

Select one of the supported database server engines (mysql, postgres, oracle, sqlserver) and the instance class (hardware capacity) to be used for your deployed database server. Please see the general AWS documentation for details on capacity and pricing.

Also enter how much storage space to allocate, and a username and password for your deployed database.

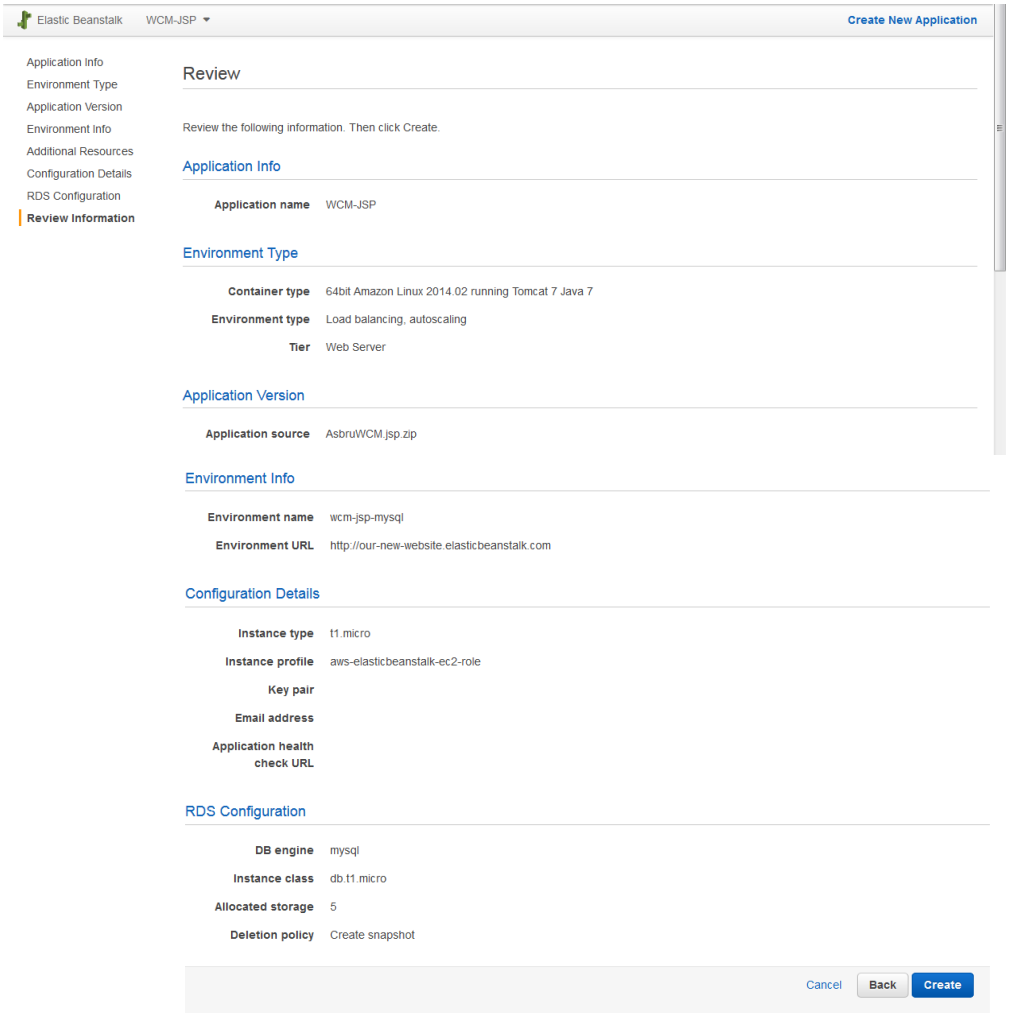
IMPORTANT: Please note the difference between the retention setting options:

- Retention Setting
    - Delete
      NOT RECOMMENDED
      This option will delete all your database server data including all your website content and other data if you “terminate” your deployed environment. This should only be used for a temporary test deployment – this should never be used for a production deployment.
    - Create snapshot
      RECOMMENDED
      This option will create a snapshot (backup) of all your database server data including all your website content and other data if you “terminate” your deployed environment. This should always be used for a permanent test deployment, development deployment or production deployment.

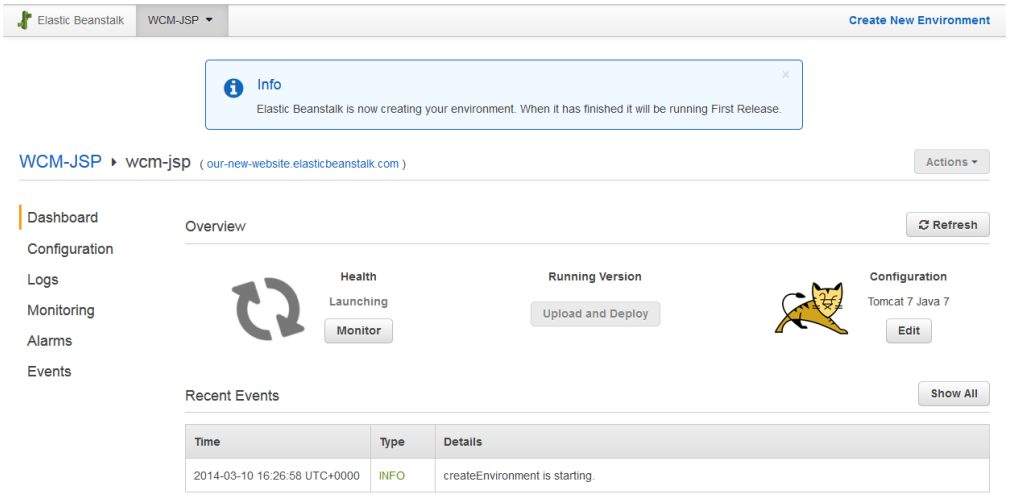


2.4.8 Deployment

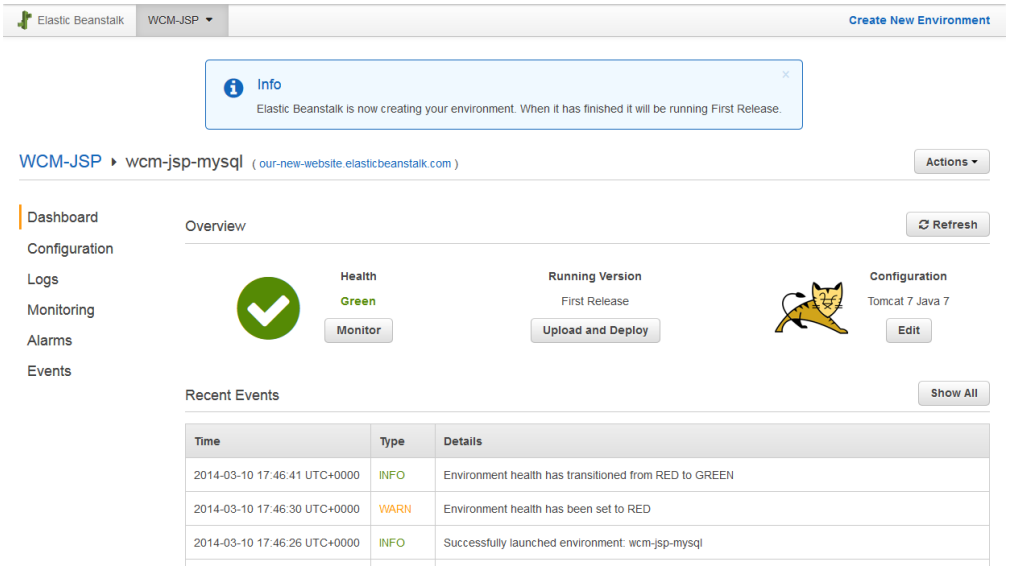
Finally, review and confirm your deployment settings.



Your Asbru Web Content Management system website environment will then be deployed which may take a few minutes depending on the setup.



When the deployment has completed the web server(s) and database server will be running.



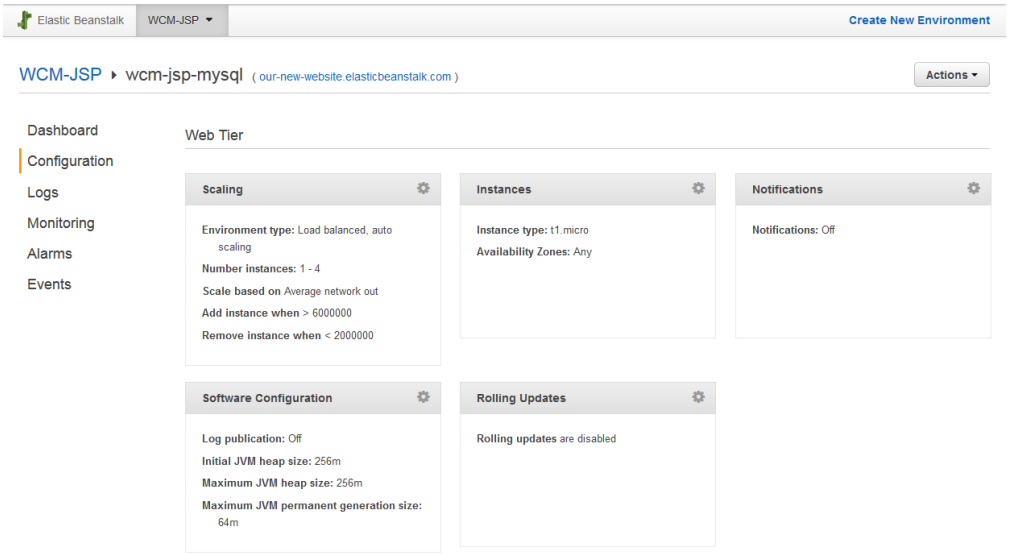
The web server(s) and database server is now running and can be accessed through your chosen Environment URL – for example http://our-new-website.elasticbeanstalk.com/ which should give you access to the Asbru Web Content Management QuickStart Configuration.

IMPORTANT: Your deployed web servers have no permanent file storage and no shared file storage. If you have deployed multiple web servers uploaded images and other files may only be available on one of the web servers. If the web servers are restarted or stopped all upload images and other files may be lost.
You MUST configure your deployed environment or the Asbru Web Content Management system to use a cloud storage service for uploaded media files.

2.4.9 Cloud Storage

It is strongly recommended that you configure the required cloud storage service details for your deployed environment (instead of configuring this through the Asbru Web Content Management system configuration).

Select “Configuration” for your deployed environment



Select “Software Configuration” (click the gear/wheel) and enter your AWS S3 cloud storage service details.

Please see the general AWS documentation for details on signing up for the AWS S3 cloud storage; getting your access keys; creating a “bucket” for your website media files; and getting the web address URL for your “bucket”.

- AWS_ACCESS_KEY_ID
  The username/key authorised to store images and files on your cloud storage.
  For example: 0JB41D9NP3YQFZ8G05G6

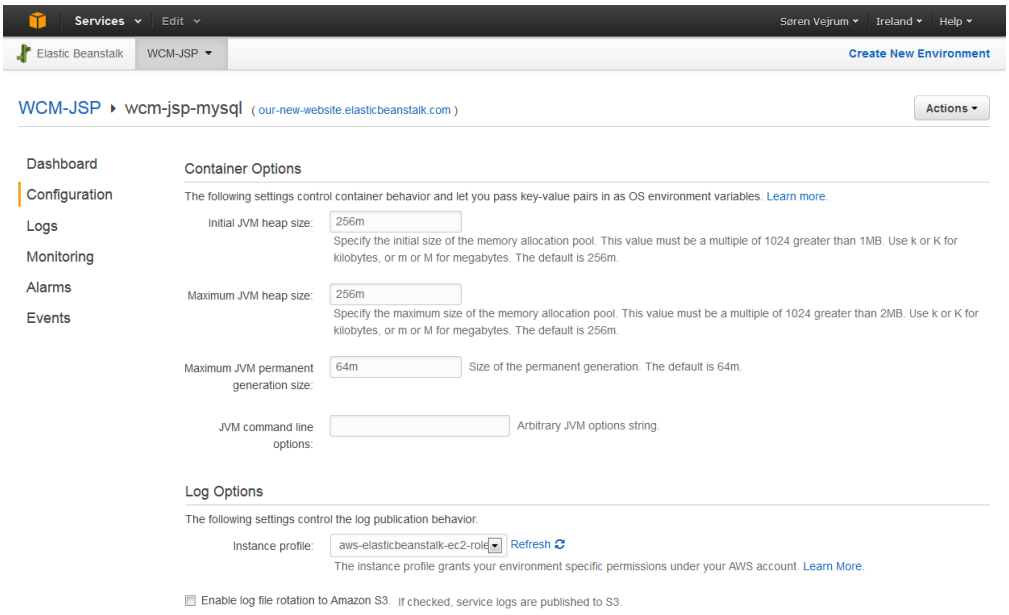
- AWS_S3_BUCKET
  The folder/bucket in and under which to store images and files on your cloud storage.
  For example: our-new-website

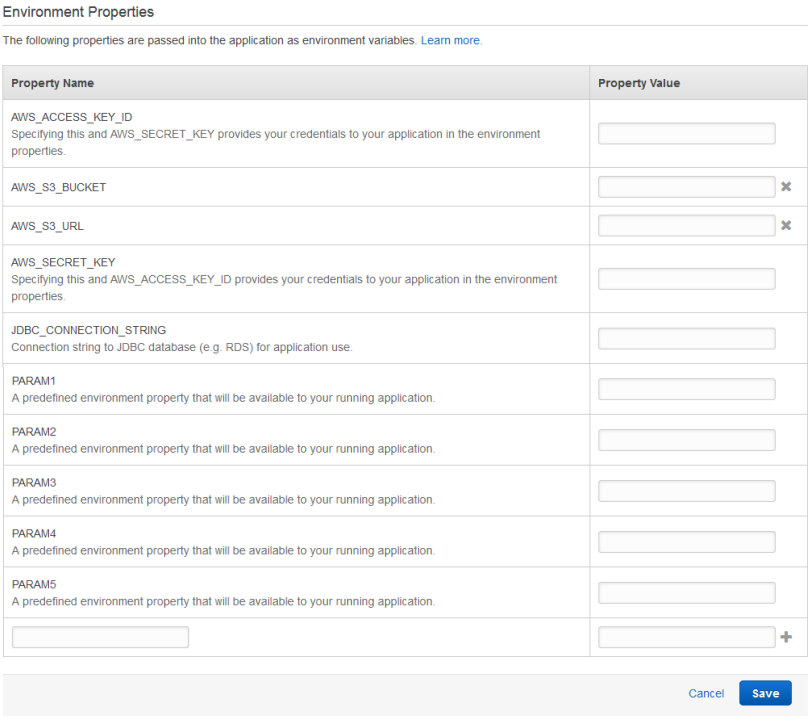
- AWS_S3_URL
  The external web address for how to access the images and files stored on your cloud storage.
  For example: http://our-new-website.s3-website-eu-west-1.amazonaws.com/

- AWS_SECRET_KEY
  The password/secret authorised to store images and files on your cloud storage.
  For example: zhCufvD8e4LasXA6zfuaEpQGyoNpx10EXCVWaiob

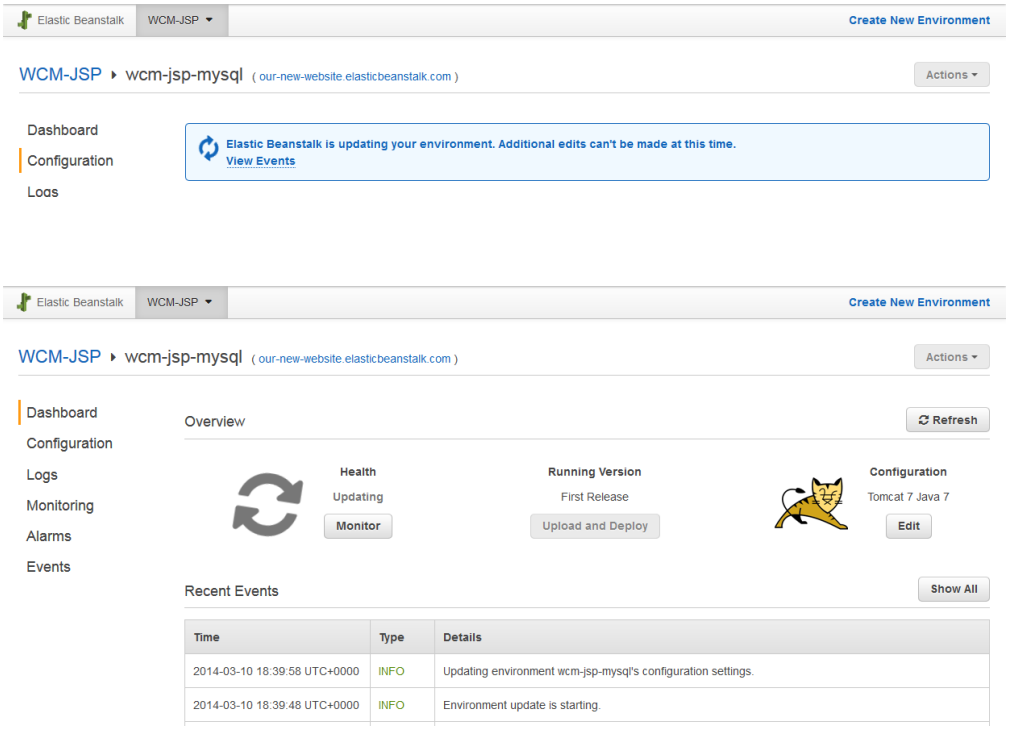
Optionally, if you have special requirements for the database connection string used by the Asbru Web Content Management system to connect to your database server, or if you have deployed an environment without a database server and instead want to use an existing database server, you can configure your own custom database connection string:

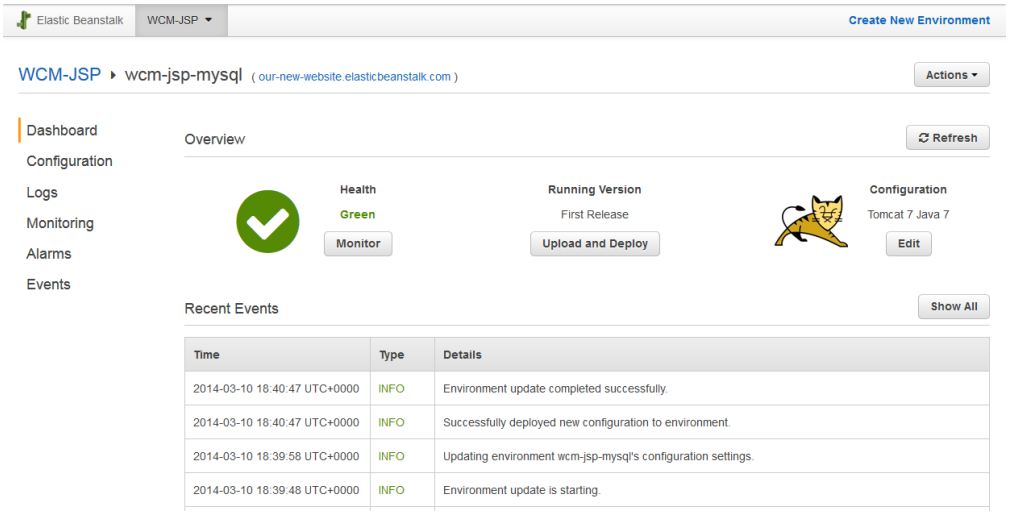
- JDBC_CONNECTION_STRING
  A database connection string formatted as normally configured in the Asbru Web Content Management system. Generally, a standard Java/JDBC database connection string with a prefix identifying the type of database server.
  If no database connection string is configured, this we be generated automatically by the Asbru Web Content Management system.





Select “Save” to update your deployed environment settings and to restart your web server(s), which may take a few minutes.

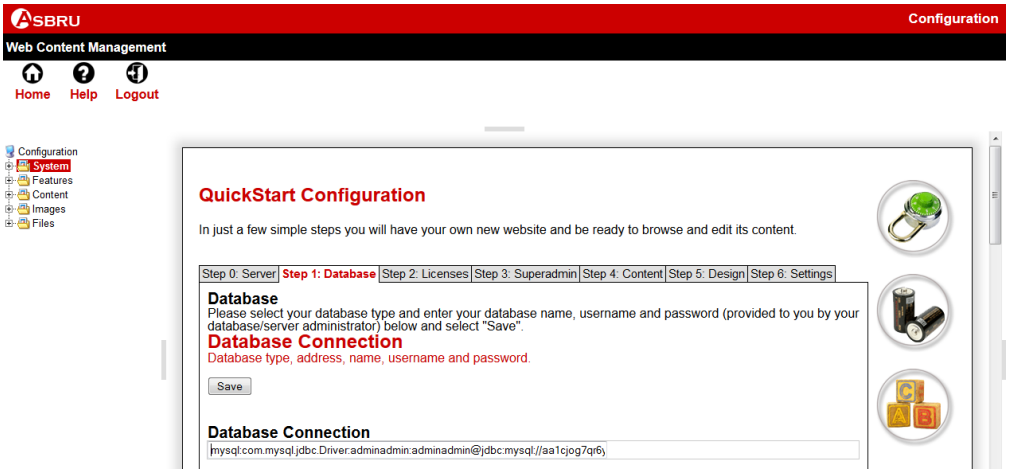




2.4.10 QuickStart Configuration

When the environment update is completed, the web server(s) and database server is now running and can be accessed through your chosen Environment URL – for example http://our-new-website.elasticbeanstalk.com/ which should give you access to the Asbru Web Content Management system QuickStart Configuration.

During the Asbru Web Content Management system QuickStart Configuration you should simply accept and save the proposed database connection string.



2.4.11 Connection Timeout

Please note that currently the AWS Elastic Beanstalk Load Balancer service use a connection timeout of 60 seconds. Unfortunately, this is not currently configurable, so any access to the web content management system so as database initialisation and import which may take longer than 60 seconds may be timed out by the AWS Elastic Beanstalk Load Balancer service.

Database initialisation and import may take longer than 60 seconds resulting in a connection timeout, but the database initialisation and import should continue to run in the background. You can simply access the web content management system administration database configuration pages again, and the web content management system may show that the database initialisation and import is still running. When the database initialisation and import has completed you can use the web content management system administration.

Alternatively, you can configure the deployed AWS cloud services to allow direct access to the deployed web server instances. Please see the general AWS documentation for details.

3 Quickstart Configuration

After installing the Asbru Web Content Management system files to your website root/home directory, access your website using your usual website domain name or IP number. If your web server and programming/scripting language is working correctly, you should now automatically get access to the Asbru Web Content Management system's Quickstart Configuration web page.

The Quickstart Configuration web page shows a few simple steps to configure and start using the Asbru Web Content Management system. The next step to be configured is displayed. Please select/enter the requested quickstart configuration details such as the database connection string, license keys, superadmin and contact details and the initial website content.

After completing a step or by selecting Home in the left-hand menu, you return to the Quickstart Configuration web page and continue with the next step.

When the few simple steps have been completed you will see the Asbru Web Content Management main administration page instead of the Quickstart Configuration page.

3.1 Server

The Asbru Web Content Management system is a pure web application so it should run on any web server which supports one of the available programming language versions. Apart from that there are only a few "special" requirements. Primarily, that it is installed in the right location on the web server, and that the Asbru Web Content Management system has permissions to create/write files on the web server.

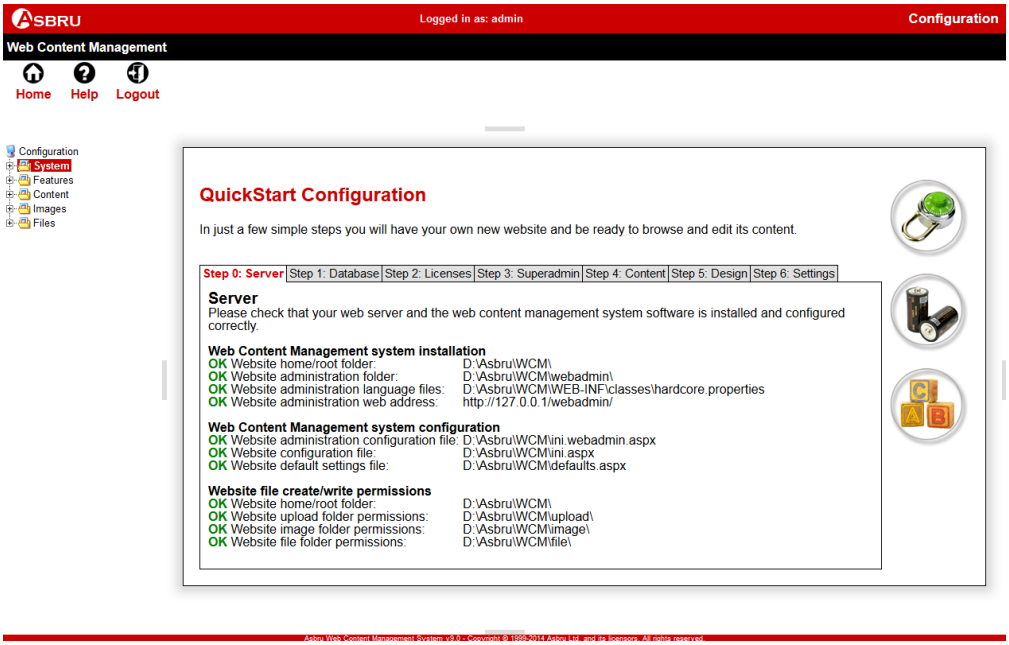
The server quickstart configuration lists and checks a number of different server settings and requirements:

- Web Content Management system installation
  The Asbru Web Content Management system software must be installed in the website's home/root folder - the folder on the web server which your "www.yourwebsite.com" website domain name address points to, so that "http://www.yourwebsite.com/webadmin/" gives access to the web content management system administration web pages.

- Web Content Management system configuration
  The Asbru Web Content Management system uses a number of configuration files, which it must have permission to create and write – at least initially when the web content management system is configured.

- Website file create/write permissions
  The Asbru Web Content Management system must have permissions to create and write files in the "image", "file" and "upload" to be able to upload images and other files to the website. To publish content to user-friendly, static filenames on the website as for example "products.html", the Asbru Web Content Management system must also have permissions to create and write files in the website home/root folder and/or in other folders for content published to static filenames.

If the Asbru Web Content Management system server check reports any errors (in red text), you need to check and modify your web server configuration and/or your installation of the Asbru Web Content Management system. You should also note eventual warnings (in yellow text) of limitations reported by the Web Content Management system server check.



3.2 Database

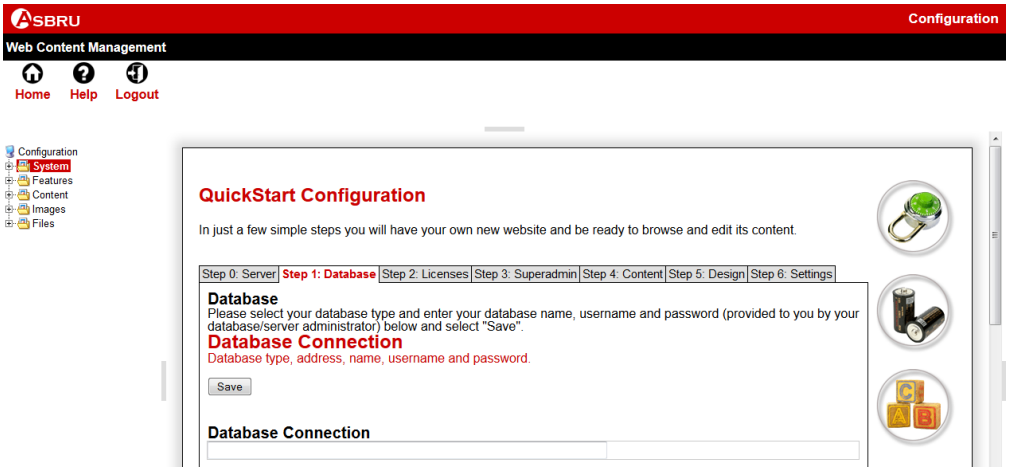
Everything in the Asbru Web Content Management system is database driven. The first essential configuration step is to configure, which database the Asbru Web Content Management system shall use. You must configure your database before using any other features of the Asbru Web Content Management system. Otherwise, anything you do may result in errors or may only be applied to a default temporary database and be lost when you configure your database.

The web content management system needs to be configured with a database connection string which defines the type of database, the name of the database, the location of the database, the method to be used to connect to the database and the username and password to be used to connect to the database.

First, you must create the database to be used by the web content management using your general system / database administration tools, or your database details may be provided to you by your web hosting service provider / system administrator.

The database quickstart configuration lists a number of different database connection options for different types of databases. Select an appropriate option for your database. This will set the database connection string to the correct format for that type of database and database connection. Then modify the database name, address, username and password in the database connection string to match your database details and select Save.

For details on the different database connection options please see the following database configuration sections of this user guide. Due to system differences the database configuration differs depending on which operating system, programming/scripting language and database product you use for your Asbru Web Content Management system. Please see 3.2.1 Database Connection for .NET, 3.2.2 Database Connection for JSP, or 3.2.3 Database Connection for PHP respectively for the programming/scripting language you use. Finally, please continue with 3.2.4 Database Connection String.



3.2.1 Database Connection for .NET

If your programming/scripting language is .NET you have the choice between accessing your database directly or through an ODBC Data Source Name (DSN).

The Asbru Web Content Management system can access all supported database products directly through a given database driver. To connect to your database directly, your web hosting provider must provide you with the name of your database instance as well as the username and password to connect to your database instance. Your web hosting provider must also have installed and configured the native database driver to be used. Please note that default direct database driver configuration options are not provided for all database servers. For other database servers and drivers, please see your database server and database driver for database connection string details and simply put "mssql:", "mysql:", "oracle:", "db2:" or "pgsql:" infront of the database connection string.

The Asbru Web Content Management system can access all supported database products through an ODBC Data Source Name (DSN). To access the database through an ODBC Data Source Name (DSN) your web hosting provider must configure an ODBC Data Source Name (DSN) on your web/database server and provide you with the name of the ODBC Data Source Name (DSN) as well as the username and password to connect to your database instance.

To configure the Asbru Web Content Management system to access your database instance directly through a native database driver, please select one of the following options:

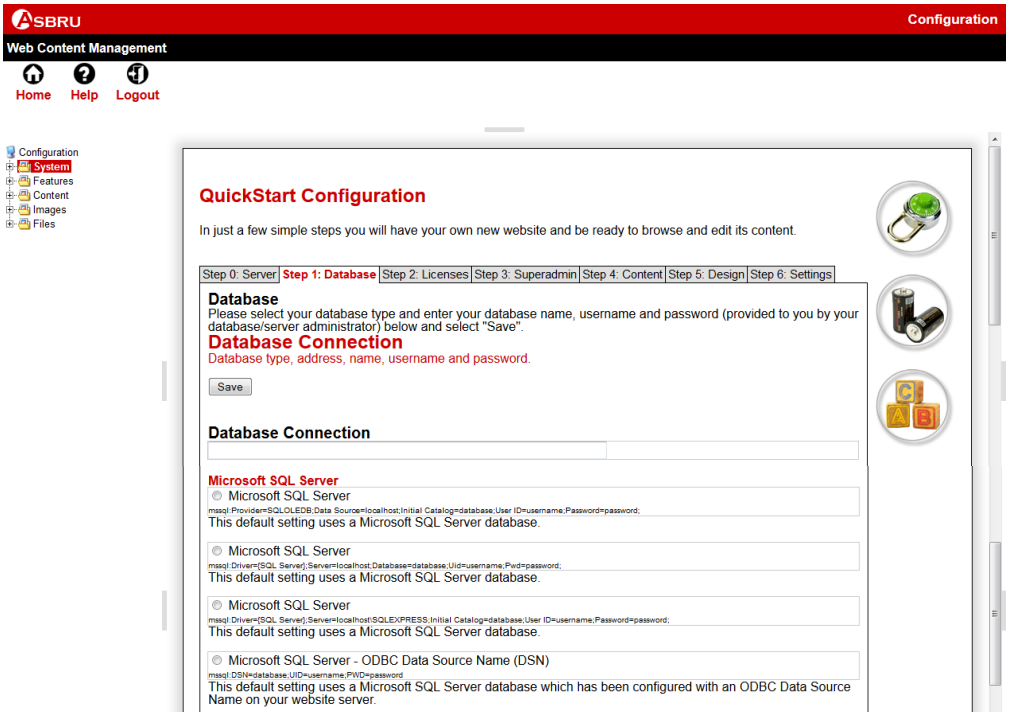
- Microsoft SQL Server

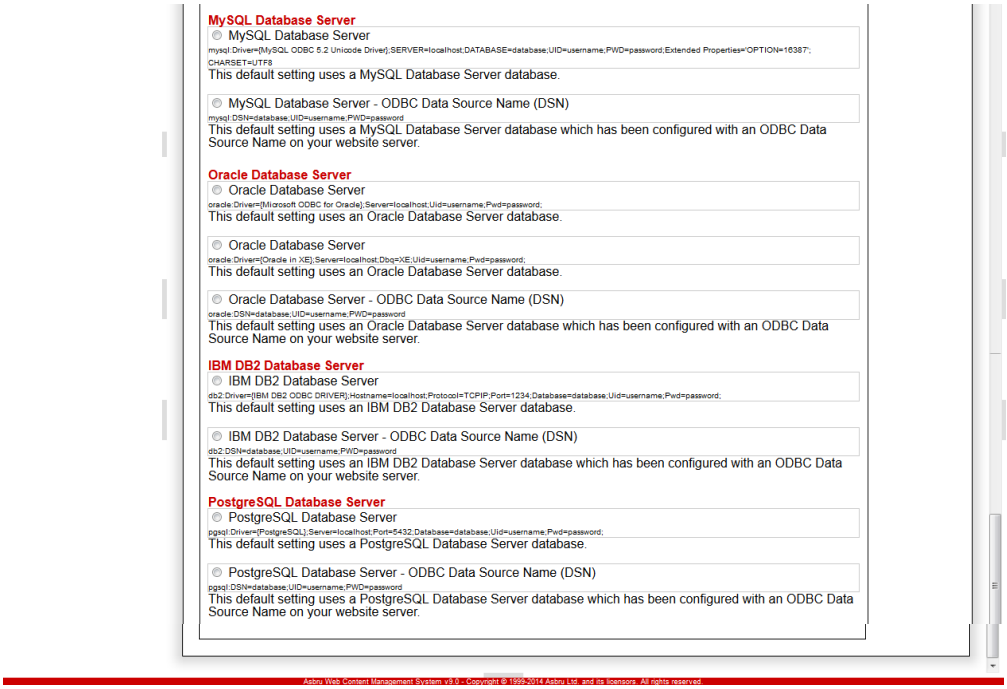
- MySQL Database Server
- Oracle Database Server
- IBM DB2 Universal Database Server
- PostgreSQL Database Server

To configure the Asbru Web Content Management system to access the database through the ODBC Data Source Name (DSN) go to the Database section in the System menu and select the relevant option for your database product. You can choose one of the following options:

- Microsoft SQL Server - ODBC Data Source Name (DSN)
- MySQL Database Server - ODBC Data Source Name (DSN)
- Oracle Database Server - ODBC Data Source Name (DSN)
- IBM DB2 Universal Server – ODBC Data Source Name (DSN)
- PostgreSQL Database Server – ODBC Data Source Name (DSN)

When you have chosen your database server, please adjust your database connection string as described in 3.2.4 Database Connection String.





3.2.2 Database Connection for JSP

If your programming/scripting language is JSP you can connect to your database instance directly through native database drivers, through an ODBC Data Source Name (DSN) or through a Java Data Source.

- To connect to your database through a Java Data Source, your web hosting provider must configure a Java Data Source for your Java application server and provide you with the name of the Java Data Source as well as the username and password to connect to your database instance.

- To connect to your database through an ODBC Data Source Name (DSN), your web hosting provider must configure an ODBC Data Source Name (DSN) on your web/database server and provide you with the name of the ODBC Data Source Name (DSN) as well as the username and password to connect to your database instance. Your web hosting provider must also have installed and configured the "sun.jdbc.odbc.JdbcOdbcDriver" database driver.

- To connect to your database directly, your web hosting provider must provide you with the name of your database instance as well as the username and password to connect to your database instance. Your web hosting provider must also have installed and configured the native database driver to be used.

  The Asbru Web Content Management database configuration includes options for the standard native database drivers such as "oracle.jdbc.driver.OracleDriver". However, any JDBC compliant database driver can be used. Simply change the database driver class name (i.e. "oracle.jdbc.driver.OracleDriver") and connection parameters (i.e.

"jdbc:oracle:thin:@localhost:1521:database") parts of the Asbru Web Content Management database connection string as required for your preferred database driver.

To configure the Asbru Web Content Management system to access your database instance directly through a native database driver, please select one of the following options:

- Microsoft SQL Server
- MySQL Database Server
- Oracle Database Server
- IBM DB2 Universal Database Server
- PostgreSQL Database Server

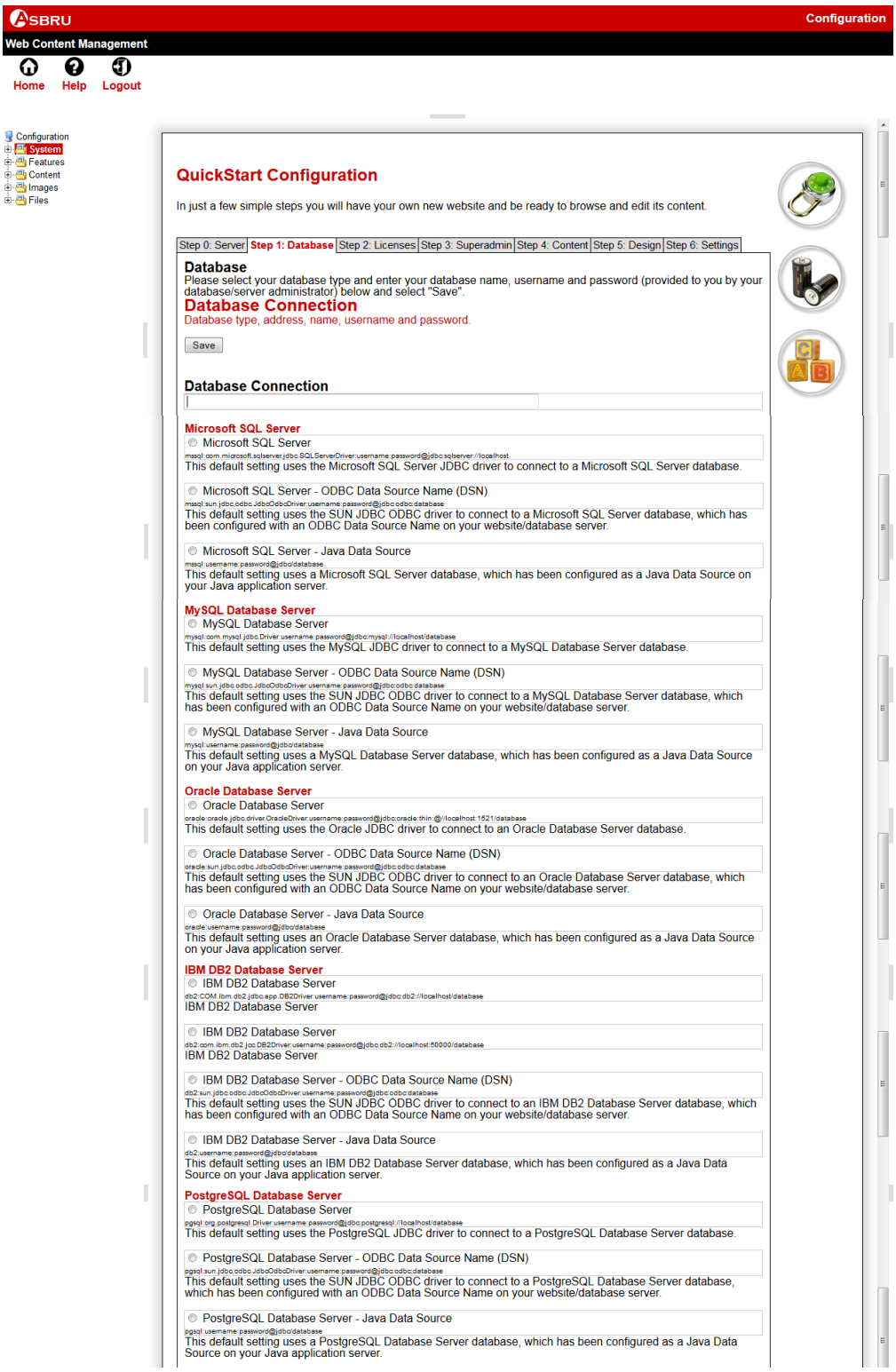
To configure the Asbru Web Content Management system to access your database instance through an ODBC Data Source Name (DSN), please select one of the following options:

- Microsoft SQL Server - ODBC Data Source Name (DSN)
- MySQL Database Server - ODBC Data Source Name (DSN)
- Oracle Database Server - ODBC Data Source Name (DSN)
- IBM DB2 Universal Database Server – ODBC Data Source Name (DSN)
- PostgreSQL Database Server – ODBC Data Source Name (DSN)

To configure the Asbru Web Content Management system to access your database instance through a Java Data Source, please select one of the following options:

- Microsoft SQL Server - Java Data Source
- MySQL Database Server - Java Data Source
- Oracle Database Server - Java Data Source
- IBM DB2 Universal Database Server – Java Data Source
- PostgreSQL Database Server – Java Data Source

When you have chosen a database option, please adjust your database connection string as described in 3.2.4 Database Connection String.


ASBRU
Configuration
Web Content Management
Home
Help
Logout
Configuration
System
Features
Content
Images
Files
QuickStart Configuration
In just a few simple steps you will have your own new website and be ready to browse and edit its content.
Step 0: Server
Step 1: Database
Step 2: Licenses
Step 3: Superadmin
Step 4: Content
Step 5: Design
Step 6: Settings
Database
Please select your database type and enter your database name, username and password (provided to you by your database/server administrator) below and select "Save".
Database Connection
Database type, address, name, username and password.
Save
Database Connection
Microsoft SQL Server
Microsoft SQL Server
mssql:com.microsoft.sqlserver.jdbc.SQLServerDriver:username:password@jdbc:sqlserver://localhost
This default setting uses the Microsoft SQL Server JDBC driver to connect to a Microsoft SQL Server database.
Microsoft SQL Server - ODBC Data Source Name (DSN)
mssql:sun.jdbc.odbc.JdboOdbcDriver:username:password@jdbc:odbc:database
This default setting uses the SUN JDBC ODBC driver to connect to a Microsoft SQL Server database, which has been configured with an ODBC Data Source Name on your website/database server.
Microsoft SQL Server - Java Data Source
mssql:username:password@jdbc/database
This default setting uses a Microsoft SQL Server database, which has been configured as a Java Data Source on your Java application server.
MySQL Database Server
MySQL Database Server
mysql:com.mysql.jdbc.Driver:username:password@jdbc:mysql://localhost/database
This default setting uses the MySQL JDBC driver to connect to a MySQL Database Server database.
MySQL Database Server - ODBC Data Source Name (DSN)
mysql:sun.jdbc.odbc.JdboOdbcDriver:username:password@jdbc:odbc:database
This default setting uses the SUN JDBC ODBC driver to connect to a MySQL Database Server database, which has been configured with an ODBC Data Source Name on your website/database server.
MySQL Database Server - Java Data Source
mysql:username:password@jdbc/database
This default setting uses a MySQL Database Server database, which has been configured as a Java Data Source on your Java application server.
Oracle Database Server
Oracle Database Server
oracle:oracle.jdbc.driver.OracleDriver:username:password@jdbc:oracle:thin:@//localhost:1521/database
This default setting uses the Oracle JDBC driver to connect to an Oracle Database Server database.
Oracle Database Server - ODBC Data Source Name (DSN)
oracle:sun.jdbc.odbc.JdboOdbcDriver:username:password@jdbc:odbc:database
This default setting uses the SUN JDBC ODBC driver to connect to an Oracle Database Server database, which has been configured with an ODBC Data Source Name on your website/database server.
Oracle Database Server - Java Data Source
oracle:username:password@jdbc/database
This default setting uses an Oracle Database Server database, which has been configured as a Java Data Source on your Java application server.
IBM DB2 Database Server
IBM DB2 Database Server
db2:COM.ibm.db2.jdbc.app.DB2Driver:username:password@jdbc:db2://localhost/database
IBM DB2 Database Server
IBM DB2 Database Server
db2:com.ibm.db2.jcc.DB2Driver:username:password@jdbc:db2://localhost:50000/database
IBM DB2 Database Server
IBM DB2 Database Server - ODBC Data Source Name (DSN)
db2:sun.jdbc.odbc.JdboOdbcDriver:username:password@jdbc:odbc:database
This default setting uses the SUN JDBC ODBC driver to connect to an IBM DB2 Database Server database, which has been configured with an ODBC Data Source Name on your website/database server.
IBM DB2 Database Server - Java Data Source
db2:username:password@jdbc/database
This default setting uses an IBM DB2 Database Server database, which has been configured as a Java Data Source on your Java application server.
PostgreSQL Database Server
PostgreSQL Database Server
pgsql:org.postgresql.Driver:username:password@jdbc:postgresql://localhost/database
This default setting uses the PostgreSQL JDBC driver to connect to a PostgreSQL Database Server database.
PostgreSQL Database Server - ODBC Data Source Name (DSN)
pgsql:sun.jdbc.odbc.JdboOdbcDriver:username:password@jdbc:odbc:database
This default setting uses the SUN JDBC ODBC driver to connect to a PostgreSQL Database Server database, which has been configured with an ODBC Data Source Name on your website/database server.
PostgreSQL Database Server - Java Data Source
pgsql:username:password@jdbc/database
This default setting uses a PostgreSQL Database Server database, which has been configured as a Java Data Source on your Java application server.

3.2.3 Database Connection for PHP

If your programming/scripting language is PHP you can connect to your database instance directly through native database drivers or through an ODBC Data Source Name (DSN):

- To connect to your database through an ODBC Data Source Name (DSN), your web hosting provider must configure an ODBC Data Source Name (DSN) on your web/database server and provide you with the name of the ODBC Data Source Name (DSN) as well as the username and password to connect to your database instance.

- To connect to your database directly, your web hosting provider must provide you with the name of your database instance as well as the username and password to connect to your database instance.

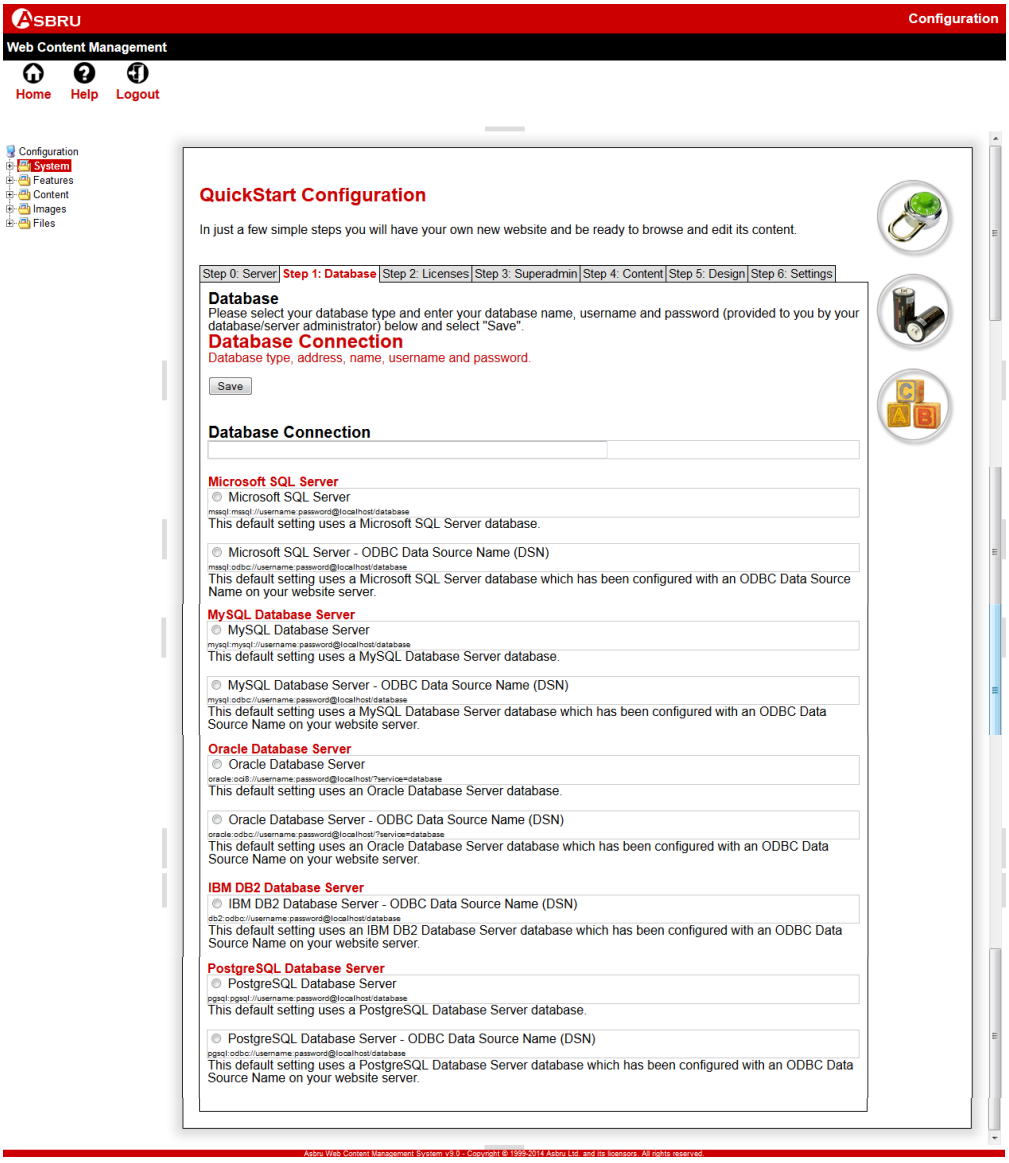
To configure the Asbru Web Content Management system to access your database instance directly through a native database driver, please select one of the following options:

- Microsoft SQL Server
- MySQL Database Server
- Oracle Database Server
- IBM DB2 Database Server
- PostgreSQL Database Server

To configure the Asbru Web Content Management system to access your database instance through an ODBC Data Source Name (DSN), please select one of the following options:

- Microsoft SQL Server - ODBC Data Source Name (DSN)
- MySQL Database Server - ODBC Data Source Name (DSN)
- Oracle Database Server - ODBC Data Source Name (DSN)
- IBM DB2 Universal Database Server – ODBC Data Source Name (DSN)
- PostgreSQL Database Server – ODBC Data Source Name (DSN)

When you have chosen a database option, please adjust your database connection string as described in 3.2.4 Database Connection String.



3.2.4 Database Connection String

When you have selected your database connection option, the Database field will display a default “database connection string”. Replace “database”, “username” and “password” in the default “database connection string” with the ODBC Data Source Name (DSN) / database instance name, username and password for your database instance as provided by your web hosting provider.

Your database server may run on the same computer as your web server or the database server and web server may run on separate computers depending on your web hosting provider:

- If your database server runs on the same computer as your web server, please leave "localhost" as it is in your database connection string.

- If your database server runs on a different computer than your web server, please replace "localhost" in your database connection string with the Internet domain name or IP-number of the database server as provided by your web hosting provider.

After selecting a database option and adjusting the database connection string please select Save.

If you get an error please wait a minute and select Save again as the web server may take a few seconds to recognise the database configuration. If you continue to get an error please check your database connection string and select Save again.

If the connection to your database instance is working correctly – that is if you do not get an error when you select Save – you are ready to initialise your database.

3.3 License

To use the Asbru Web Content Management system you must obtain a license from Asbru (www.asbrusoft.com) and configure your license key(s). The license may also be provided by your web hosting provider, if they have provided you with the Asbru Web Content Management system.

The Asbru Web Content Management system and licenses are available in different editions with access to different features of the Asbru Web Content Management system.

- Personal
  Single-user system for an individual website administrator to create and manage a small business or personal website.

- Professional
  Full standard system, which supports all business needs for a larger website and multiple website administrators.

- Enterprise
  Extended system, which supports back-end integration with other technical and business systems.

- Hosting
  Internet, Hosting and Application Service Provider system, which supports easy hosting and administration for multiple clients.

A number of Asbru Web Content Management Add-On modules and licenses are also available:

- E-Commerce
  Product catalogue, shopping cart, checkout, payment processing, order confirmation, order notification and order tracking.

- Community
  User registration, personalisation, message board, chat forum, issue tracker, polls, mailing list and communication tools.

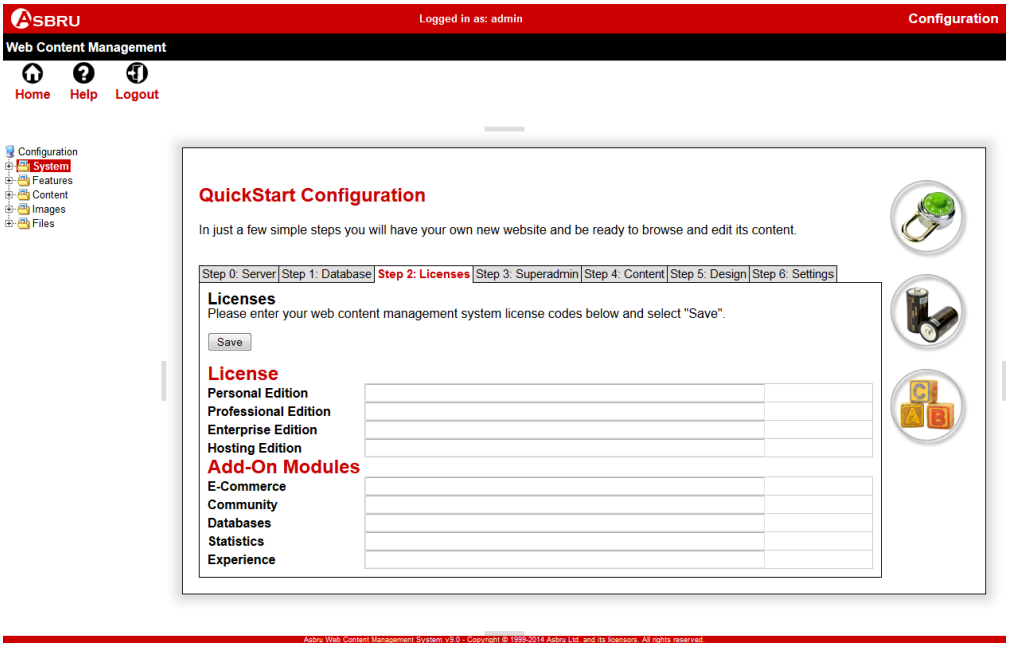
- Databases
  Database creation, import/export, synchronisation, database administration and browse & search.

- Statistics
  Website usage statistics for monitoring how and how much the website is used.

- Experience
  Website visitor segmentation and content personalisation, content variants user tests, and website heatmaps.

To configure your Asbru Web Content Management system and Add-On modules licenses please copy/enter all the license codes provided by Asbru into the appropriate fields and select Save.

If you get an error when you select Save please check the license codes and try again.



3.4 Superadmin

The Asbru Web Content Management superadmin is your main website administrator with special permissions and access to configure your system.

A username and password as well as an e-mail address must be configured for your superadmin website administrator. As default the superadmin username and password is configured to “admin” and “admin”. You should change the password to something else or anyone can easily get unauthorised access to manage your website.

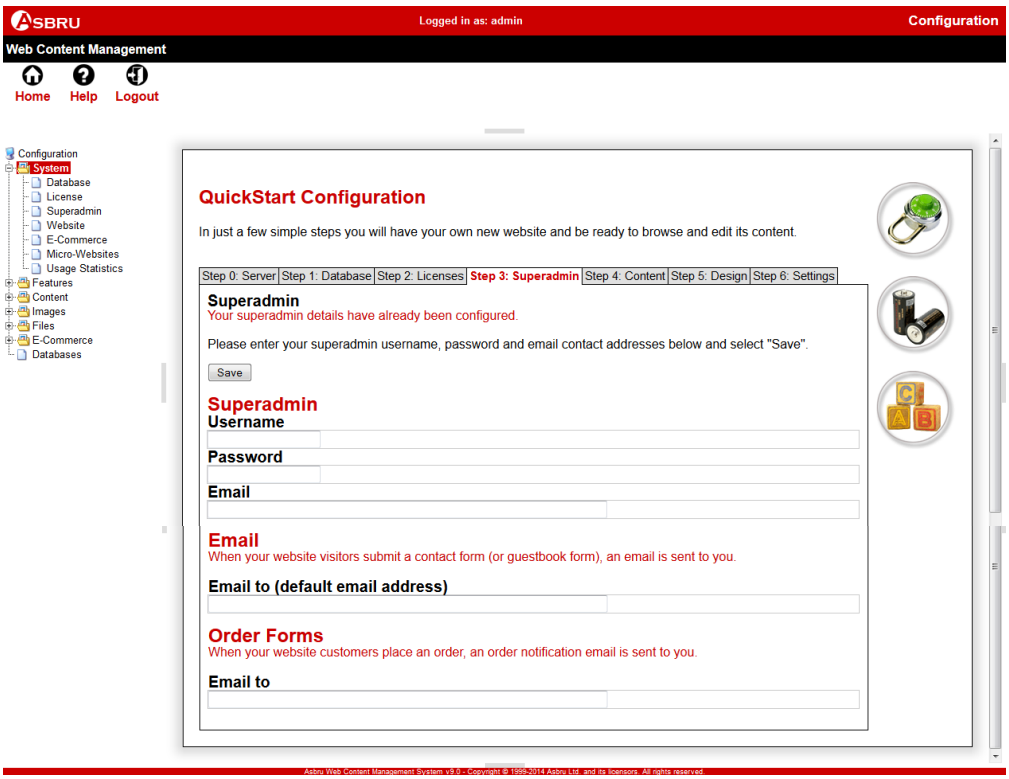
It is important that you remember your superadmin username and password or you may not be able to get access to the Asbru Web Content Management system and to manage your website.

As a safeguard you should also configure a working e-mail address for your superadmin website administrator and remember to update it if it changes. If you loose your superadmin username and password the only easy way to retrieve them is to have them e-mailed to the configured superadmin e-mail address. Otherwise, you will have to access your database directly and manually to reset or retrieve the superadmin username and password.

An additional email address to which your website contact forms etc. are sent to as default should also be configured.

If you are using the E-Commerce Add-On module an additional email address to which your website orders etc. are sent to as default should also be configured.

To configure your Asbru Web Content Management system superadmin and email addresses please enter your preferred username, password and e-mail addresses and select Save.



3.5 Website Content

To get you started quickly with your website you can import your existing HTML file-based website or import one of a number of different example and quickstart websites included with the Asbru Web Content Management system.

Later, you can reimport your existing HTML file-based website or an example/quickstart website through the Database Configuration web content administration pages (Please see the Configuration Guide for details).

3.5.1 Import Existing Website

If you have an existing HTML file-based website you can select the "Import your existing website" option. Then you can select an "Editable region for page title" and an "Editable region for page content". If your existing website's HTML files are created using Dreamweaver templates a number of different "editable regions" extracted from your website HTML files may be listed and you should select which (if any) of your editable regions contains your web pages' title and which (if any) of your editable regions contains your web pages' primary content. Otherwise you should simply choose the default "none" and "all" options. Finally, select "Initialize & Import Website" to import your existing website HTML files.

The web content management system will then analyze and import ".dwt" files, ".html"/",htm" files, images and other files on your website.

Each of your ".html"/".htm" files will be stripped of any other content than the region selected below and will be imported as a "page" in the web content management system. If there is an "index.html" file in the website home/root folder this page will become the "Default Page (Homepage)" in the web content management system.

If there are ".dwt" files on your website they will be imported as "templates" in the web content management system and these templates will be used for the "pages" created from your ".html"/".htm" website files. If there are any additional regions in your ".dwt" files they will be imported as "classes"/"elements" in the web content management system.

3.5.2 Import Example/Quickstart Website

Alternatively, the available example and quickstart websites are listed. Some of the listed example and quickstart websites may be disabled and greyed out depending on your configured license keys.

- Basic
  A blank website with pre-created and pre-configured Special Pages. This is the recommended option for you to create your own website from scratch.

- Empty
  A completely blank website for you to create everything from scratch including all required Special Pages. (Usually the "Basic" website should be used instead of the "Empty" website).

- Business Website Professional Suite (recommended)
  Advanced example website using a wide selection of the web content management system functionality.
  This is the recommended option for your initial website content for an easy to modify, ready to use website template with most of the website content and functionality typically used on a company website. Unwanted website content and functionality can easily be removed; and the website content and design can easily be modified; and additional

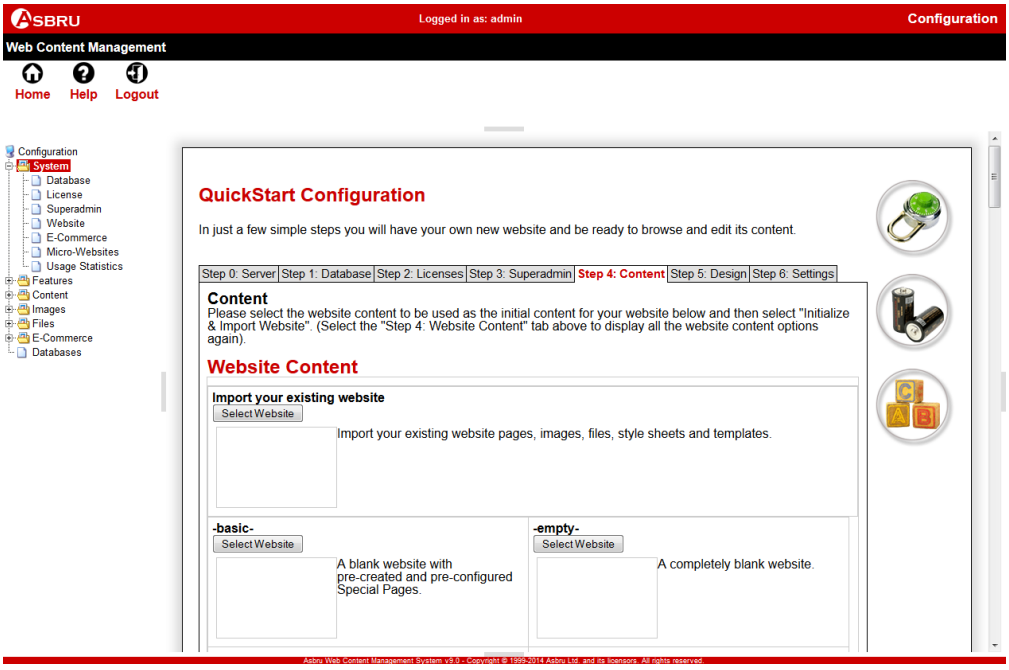
website content and functionality can be added.

- Eagle Golf
  Advanced example websites using a wide selection of the web content management system functionality. A number of different Eagle Golf example websites for the different editions of the Asbru Web Content Management system are available.

To initialise your website content please select the “Select Website” button for one of the listed example and quickstart websites and select the “Initialise & Import Website” button to confirm the website content initialisation (or select the “Step 4: Website Content” tab to list all the available example and quickstart website options again).

This will import the selected website content data into the web content management system database. This may take a few minutes or several minutes to complete. Database import progress information is displayed in your web browser.

If your database initialisation did not complete successfully, you need to reinitialise your database. Please repeat the database initialisation steps as described above or as described in detail in the 3.2 Database section. If your imported website content is relatively large and/or your database server is relatively slow at importing the data your web server may "timeout" before the database import is completed, and you may need to increase the resources available to the website content import. Please see the Configuration Guide – Database Configuration – Advanced Import section for details.



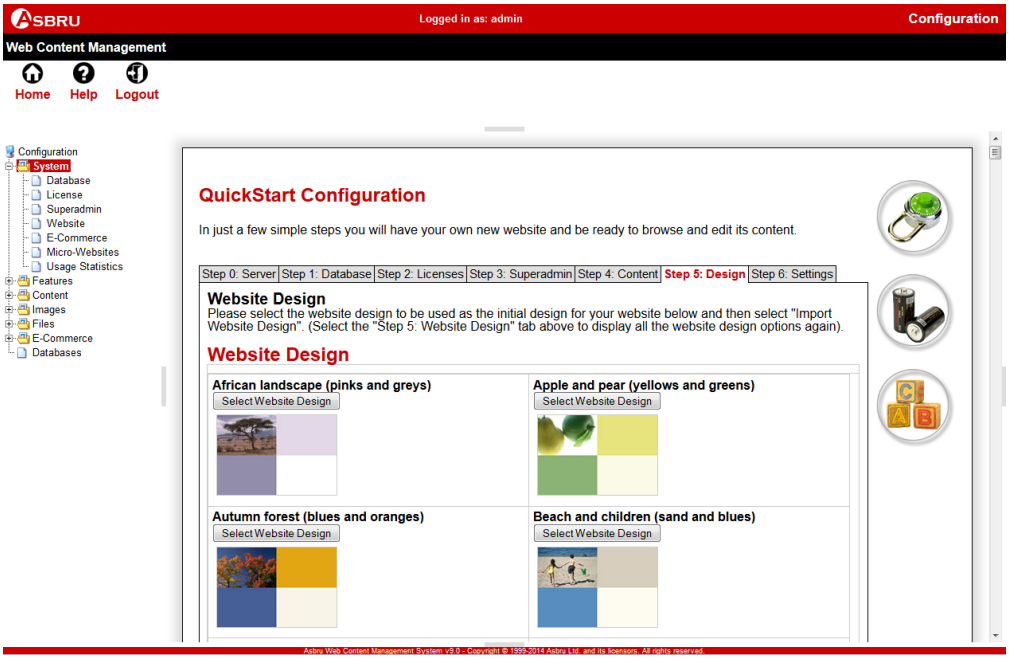
3.6 Website Design

To get you started quickly with your website a number of different quickstart website designs are included with the Asbru Web Content Management system. The available quickstart website designs are listed.

Please note that your selected/imported Website Content example/quickstart website may also already have imported a website design in which case this final Website Design quickstart configuration step will be skipped.

To import your website design please select the “Select Website Design” button for one of the listed website designs and select the “Import Website Design” button to confirm the website design import (or select the “Step 5: Website Design” tab to list all the available website design options again).

This will import the selected website design data into the web content management system database. This should only take a few seconds or a few minutes to complete. Database import progress information is displayed in your web browser.

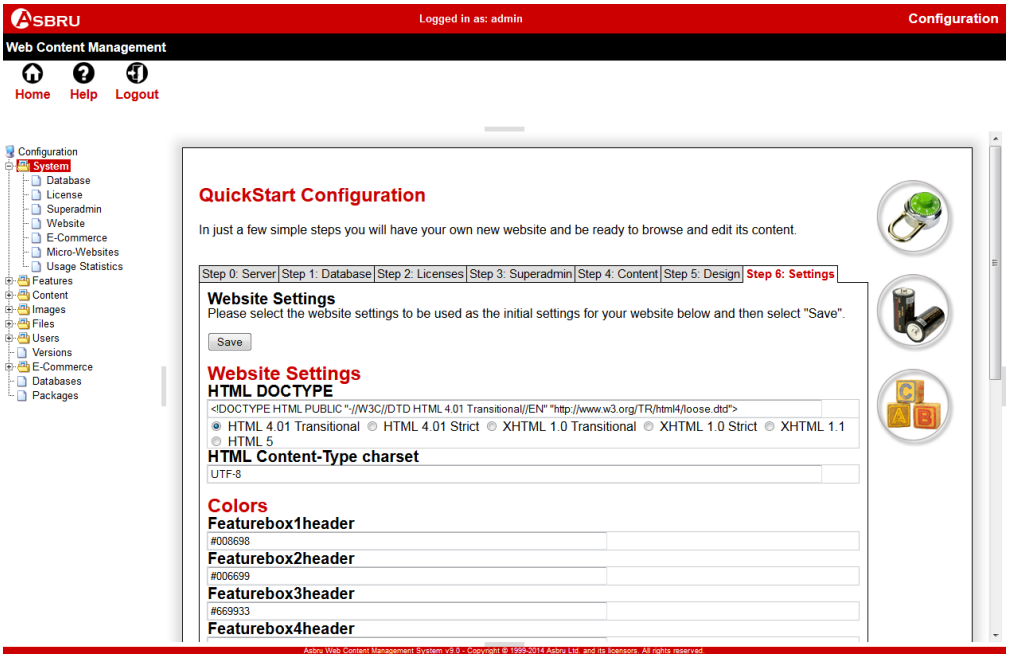


3.7 Website Settings

Finally, you can adjust a number of website settings.

The basic website settings are two special HTML headers, which tells web browsers which version of HTML code and which character set encoding you are using for your website. If you do not have any preferences for this, simply leave the “HTML DOCTYPE” blank or select the “HTML 4.01 Transitional” option, and set the “HTML Content-Type charset” to the default “UTF-8”.

A number of additional website settings may also be listed depending on your imported Website Content and Website Design. You may simply want to leave these as they are, initially, and change them later.


ASBRU
Logged in as: admin
Configuration
Web Content Management
Home
Help
Logout
Configuration
System
Database
License
Superadmin
Website
E-Commerce
Micro-Websites
Usage Statistics
Features
Content
Images
Files
Users
Versions
E-Commerce
Databases
Packages
QuickStart Configuration
In just a few simple steps you will have your own new website and be ready to browse and edit its content.
Step 0: Server
Step 1: Database
Step 2: Licenses
Step 3: Superadmin
Step 4: Content
Step 5: Design
Step 6: Settings
Website Settings
Please select the website settings to be used as the initial settings for your website below and then select "Save".
Save
Website Settings
HTML DOCTYPE
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
HTML 4.01 Transitional
HTML 4.01 Strict
XHTML 1.0 Transitional
XHTML 1.0 Strict
XHTML 1.1
HTML 5
HTML Content-Type charset
UTF-8
Colors
Featurebox1header
#008698
Featurebox2header
#006699
Featurebox3header
#669933
Featurebox4header

4 Installed and Configured

Once you have configured the database, license, superadmin, website content and website design as described in the previous sections, you are ready to start using the Asbru Web Content Management system.

There are many further configuration options to customise the Asbru Web Content Management system and to enable additional features to suit your requirements. You can reconfigure the Asbru Web Content Management system and enable or disable features at any time – even after using the system extensively, so there is no need to enable features until you actually need them. Please see the separate Configuration Guide document for details.

Initially, we recommend you to use the basic web content management features to get familiar with the basics, which are described in the separate Website Editor Guide and Website Administrator Guide.

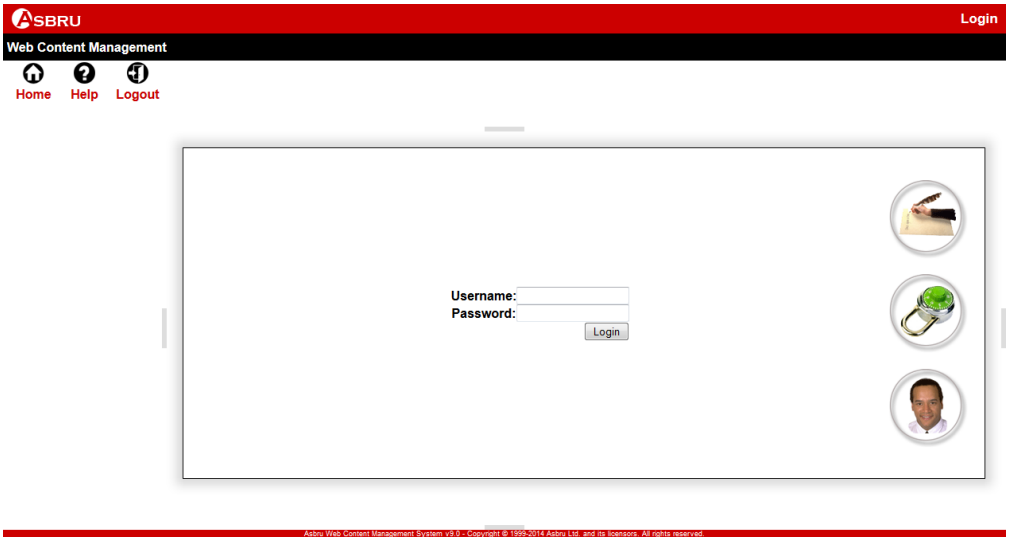
When you configured and initialised the Asbru Web Content Management database, you were automatically "logged in" as the superadmin website administrator. You can "logout" by selecting the "Logout" link in the top-right hand corner of the Asbru Web Content Management administration web page.

When you logout you will see your new example website homepage.

4.1 Login

To access the Asbru Web Content Management system to manage your website you must open your usual website address followed by "/webadmin/". For example, if you usually access your website using the address "http://127.0.0.1", you must use the address "http://127.0.0.1/webadmin/" to access the Asbru Web Content Management system.

When accessing the Asbru Web Content Management system you must first authenticate yourself using the configured superadmin or another configured website administrator username and password to login. Please note that you must enter the username and password exactly as configured with lowercase/uppercase, spacing and punctuation etc.



4.2 Logout

After a successful login you have access to the Asbru Web Content Management system for your website – and so has anybody else with access to your computer. Before leaving your computer for a longer or shorter period of time you should logout from the Asbru Web Content Management system to prevent others from using it to make changes to your website. This is especially important if you use a computer which other people have access to.

To logout from the Asbru Web Content Management system, please select the "Logout" link in the top-left hand corner of the Asbru Web Content Management administration and Browse & Edit pages. After logging out you will see your website homepage.

You will also be logged out automatically after some time depending on the configuration of your web server. Technically, your login/logout is controlled through so-called "session variables" on your web server. Your web server may be configured to automatically expire session variables after anything from a few minutes to a few days.

Please note that you will need to login again if your web server session variables and thus your login expire while you are using the Asbru Web Content Management system. E.g. if you are using a long time to edit the content of one of your web pages and your login expires before you save, your changes will be lost. If you experience this problem you should make sure to save your work regularly. Alternatively you can ask your web hosting provider to

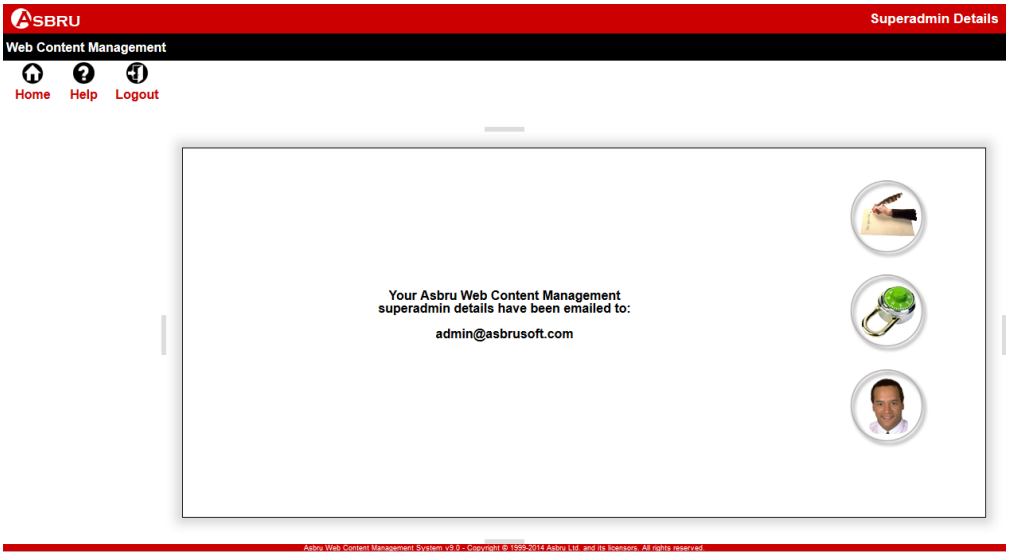
"increase the web server session variable expiration time". Usually your web server configuration should be fine, but occasionally it may have been configured to expire session variables after just a few minutes.

4.3 Retrieve superadmin username and password

You should make sure not to forget and loose your superadmin username and password, which are essential to get full access to the Asbru Web Content Management system for your website.

However, if you do forget and loose your superadmin username and password you will be able to retrieve it if you have configured a working superadmin e-mail address.

To retrieve a forgotten and lost superadmin username and password you must open your usual website address followed by "/webadmin/password/". For example, if you usually access your website using the address "http://127.0.0.1", you must use the address "http://127.0.0.1/webadmin/password/" to have your superadmin username and password e-mailed to your configured superadmin e-mail address.



If you have forgotten and lost your superadmin username and password and your configured superadmin e-mail address is not configured or is not working, there is no other easy way to retrieve your superadmin username and password.

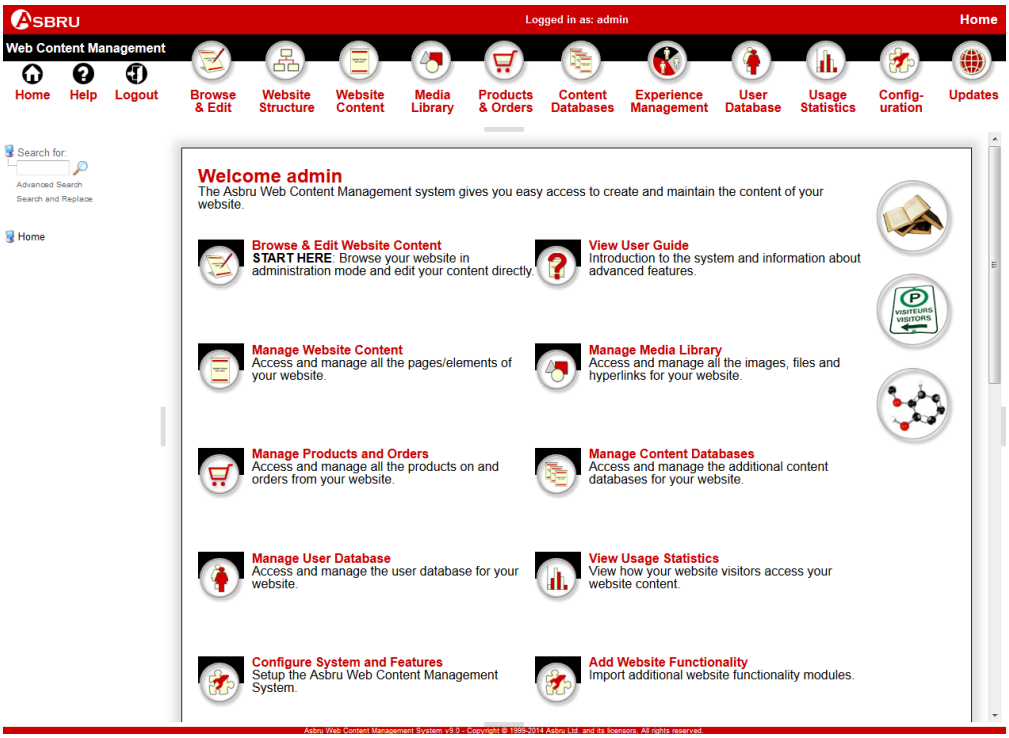
Alternatively, you must access your Asbru Web Content Management database manually and reset the superadmin username and password to the default "admin" and "admin" using the following SQL database command statements:

DELETE * FROM config WHERE configname='superadmin';
DELETE * FROM config WHERE configname='superadmin_password';

WARNING: This requires specialist technical knowledge and errors may cause loss of part of or all of your website content etc. Please do not loose your superadmin username and password.

4.4 Home

After a successful login to the Asbru Web Content Management system you will see the main administration page.



5 Software Updates

The Asbru Web Content Management system is improved and extended, continuously, and new releases may be made available for download from the Asbru website (www.asbrusoft.com).

The current version of the Asbru Web Content Management system is displayed in the footer at the bottom of all the web content management system administration pages for v6.3 or newer. (For older versions the current version number is not visible on the web content management system administration pages, but it can be identified by the web content editor version number displayed at the bottom of the web content editor help pop-up window).

This section describes the general procedure for upgrading the Asbru Web Content Management system. However, the upgrade procedure may vary for some releases. Please make sure to read and follow any special upgrade instructions on the Asbru website.

Upgrading the Asbru Web Content Management should usually never cause any of your website content and other data to be modified or deleted. However, before upgrading the Asbru Web Content Management you should always make a backup copy of your existing program files, data files and database, which you can restore if anything goes wrong with the upgrade.

5.1 Download and Installation

To download and install a new release of the Asbru Web Content Management system, simply download a package in an appropriate format, unpack it and copy it to your website folder in a similar way to your initial installation. The program files in the new release should replace your existing program files – except for a few files. When upgrading you should not replace but keep your existing files of the following (located in the root folder of your website):

ini.aspx and/or ini.jsp and/or ini.php
ini.webadmin.aspx and/or ini.webadmin.jsp and/or ini.webadmin.php
defaults.aspx and/or defaults.jsp and/or defaults.php

These files contain settings for your website. If you accidentally replace these files, your website may behave erroneously. However, your website settings are not lost but can and should be restored by opening the following web address in your web browser:

http://127.0.0.1/webadmin/database/upgrade.aspx

if you are using the .NET version of the Asbru Web Content Management system, or:

http://127.0.0.1/webadmin/database/upgrade.jsp

if you are using the JSP version of the Asbru Web Content Management system, or:

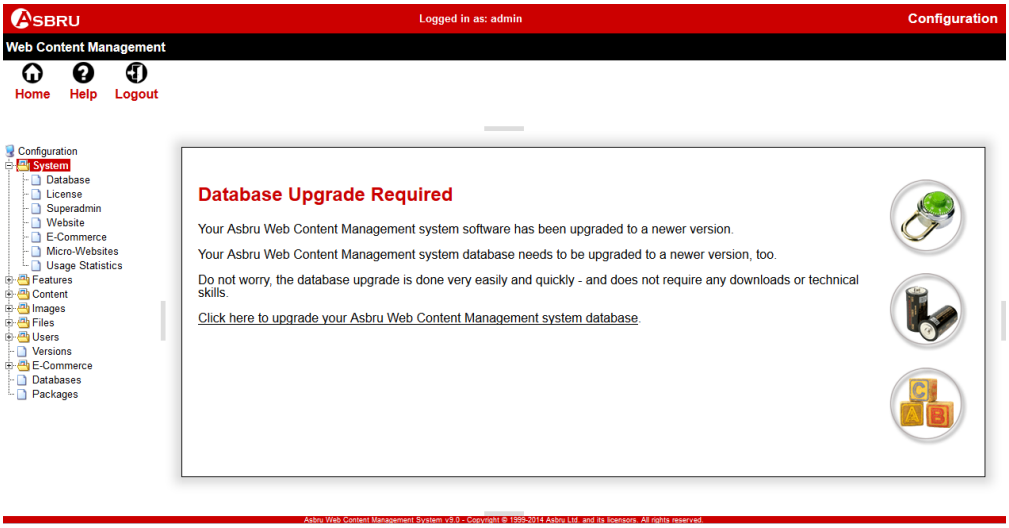
http://127.0.0.1/webadmin/database/upgrade.php

if you are using the PHP version of the Asbru Web Content Management system.
Please note that you must replace “127.0.0.1” with your own website address, and that “log in” using the superadmin administrator username and password for your website is required.

5.2 Database Upgrade

Immediately, after installing a new release of the Asbru Web Content Management system, you should always “log in” as the superadmin website administrator.

New releases of the Asbru Web Content Management system may require you to upgrade your database model. When you “log in” as the superadmin website administrator after installing a new release of the Asbru Web Content Management system, you may be presented with a “database upgrade required” message. Simply select the provided link to upgrade your database, which is done automatically.



6 Internationalisation

The Asbru Web Content Management system supports internationalisation with translations of all text to other languages than the default (English) and automatic detection of each website administrator's language preferences.

6.1 Asbru Web Content Management system texts

All texts in the Asbru Web Content Management system are located in the "/WEB-INF/classes/hardcore.properties" file. This file contains the default texts used if no specific language is selected and available.

Additional language files can be created with translations of all texts to other languages. As default a Danish language translation file is included. The "/WEB-INF/classes/hardcore_da.properties" file contains all texts in the Asbru Web Content Management system translated to Danish.

To add support for other languages, simply copy the "/WEB-INF/classes/hardcore.properties" file and translate its contents. The copied file must be named "/WEB-INF/classes/hardcore_xx.properties" where "xx" is the ISO 639 language code such as:

- ar – Arabic
- de – German
- en – English
- es – Spanish
- fr – French
- ja – Japanese
- zh – Chinese

Additional language files for language variations can be created with translations for individual countries. To add support for language variations, simply copy the "/WEB-INF/classes/hardcore.properties" file or another language file and translate its contents. The copied file must be named "/WEB-INF/classes/hardcore_xx_YY.properties" where "xx" is the ISO 639 language code as described above and where "YY" is the ISO 3166 country code such as:

- AU – Australia
- CA – Canada
- GB – United Kingdom
- US – United States

To change the default language, simply replace the default English "/WEB-INF/classes/hardcore.properties" file with a copy of another language file.

6.2 Asbru Web Content Editor texts

All texts in the Asbru Web Content Editor are located in the "/webadmin/webeditor/properties.js" file. This file contains the default texts used if no specific language is selected and available.

Additional language files can be created with translations of all texts to other languages. As default a Danish language translation file is included. The "/webadmin/webeditor/properties_da.js" file contains all texts in the Asbru Web Content Editor translated to Danish.

To add support for other languages, simply copy the "/webadmin/webeditor/properties.js" file and translate its contents (and add the language to the "/webadmin/webeditor/webeditor.properties.js" as described below). The copied file must be named "/webadmin/webeditor/properties_xx.js" where "xx" is the ISO 639 language code such as:

- ar – Arabic
- de – German
- en – English
- es – Spanish
- fr – French
- ja – Japanese
- zh - Chinese

Additional language files for language variations can be created with translations for individual countries. To add support for language variations, simply copy the "/webadmin/webeditor/properties.js" file or another language file and translate its contents. The copied file must be named "/webadmin/webeditor/properties_xx_YY.js" where "xx" is the ISO 639 language code as described above and where "YY" is the ISO 3166 country code such as:

- AU – Australia
- CA – Canada
- GB – United Kingdom
- US – United States

To change the default language, simply replace the default English "/webadmin/webeditor/properties.js" file with a copy of another language file.

To add support for new language files, the "/webadmin/webeditor/webeditor.properties.js" file must be modified. Add the language/country code to the following line at the top of the file:

```
var webeditor_languages = "|da|en|";
```

To add support for a new language file name "/webadmin/webeditor/properties_xx.js" modify the line to:

```
var webeditor_languages = "|da|en|xx|";
```

To add support for a new language file name "/webadmin/webeditor/properties_xx_YY.js" modify the line to:

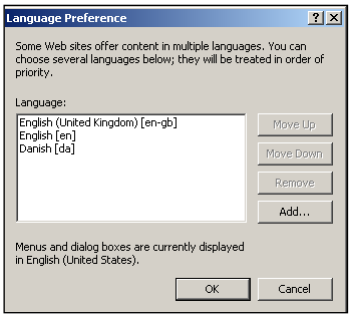
```
var webeditor_languages = "|da|en|xx_YY|";
```

The language/country codes must be separated and enclosed by | characters.

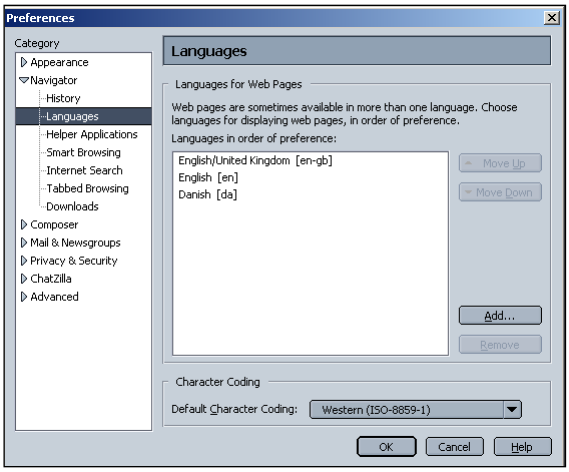
6.3 Website Administrator Language Preferences

The language used by the Asbru Web Content Management is selected by each individual website administrator through his/her web browser's language preferences settings.

In Microsoft Internet Explorer language preferences can be selected through the Tools – Internet Options – General – Languages menu/window. Please see the Microsoft Internet Explorer documentation for details.



In Mozilla language preferences can be selected through the Edit – Preferences – Navigator – Languages menu/window. Please see the Mozilla documentation for details.



The Asbru Web Content Management system will detect the selected web browser language preferences and use one of the selected languages if available. If none of the selected languages are available the default language will be used.

7 Add-On Modules and Extensions and programming API scripts

7.1 Custom / Third-Party Add-On Modules

The Asbru Web Content Management system enables you to create your own custom add-on modules and to use third-party developed add-on modules.

Custom / third-party add-on modules can be integrated with the Asbru Web Content Management system administration pages and can have their own administration section and/or add menu-items to the existing administration sections.

Cusom /third-party add-on modules can also be payment service provider modules for use with the E-Commerce Add-On module

7.1.1 Installation and Configuration

To install an additional add-on module the module files must be copied to the web server (as default as a new folder under the "/webadmin/module/" folder).

The Asbru Web Content Management system must be configured to load the additional add-on module by editing the "/webadmin/module/config.xxx" file (where "xxx" is "aspx", "jsp" or "php" depending on which version of the Asbru Web Content Management system you are using) and adding an additional line to the bottom of the file. For example to activate the "example" module add the following lines:

- .NET:
  <!-- #include file="example/config.aspx" -->

- JSP:
  <%@ include file=" example /config.jsp" %>

- PHP:
  <?php include " example /config.php"; ?>

If multiple add-on modules are configured the order of them determines the order their administration sections and menu items are displayed on the web content management system administration pages.

7.2 Custom / Third-Party Extensions

The Asbru Web Content Management system enables you to create your own custom extensions and to use third-party developed extensions.

Custom / third-party extensions can be integrated with the Asbru Web Content Management system content to include content from other applications and sources than the web content management system.

7.2.1 Installation and Configuration

To install an additional extension the extension file must be copied to the web server (as default as a new file under the "/webadmin/extension/" folder). No configuration is required.

7.3 Product Availability and Delivery Custom /Third-Party Extensions

The Asbru Web Content Management system E-Commerce Add-On module enables you to create your own product availability and delivery custom extensions and to use third-party developed extensions.

Product availability and delivery custom / third-party extensions can be integrated with the Asbru Web Content Management system E-Commerce Add-On module to check product availability and handle automated product delivery through other applications and sources than the web content management system.

7.3.1 Product Availability Custom/Third-Party Extensions

Product availability custom/third-party extensions can be used on product, shopping cart and checkout pages to check if a product is available. For example, to check your own external stock inventory system to see if a product is in stock; or to check a supplier's external stock inventory system to see if a product is in stock and can be ordered; or to check if non-physical products such as usernames, email addresses and Internet domain names are available or have already be registered.

7.3.1.1 Installation and Configuration

To install an additional product availability extension the extension file must be copied to the web server (as default as a new file under the "/webadmin/productavailability/" folder). No configuration is required.

7.3.2 Product Delivery Custom/Third-Party Extensions

Product delivery custom/third-party extensions can be used to automatically generate digital products and to update external systems when a product has been ordered. For example, to update your own external stock inventory system; or place an order with a supplier; or to generate/deliver non-physical products such as usernames, email addresses and Internet domain names.

7.3.2.1 Installation and Configuration

To install an additional product delivery extension the extension file must be copied to the web server (as default as a new file under the "/webadmin/productdelivery/" folder). No configuration is required.

7.4 Workflow Action Custom/Third-Party Extensions

The Asbru Web Content Management system enables you to create your own workflow action custom extensions and to use third-party developed extensions.

Workflow action custom / third-party extensions can be integrated with the Asbru Web Content Management system to make and log content administration actions through other applications and sources than the web content management system.

7.4.1 Installation and Configuration

To install an additional workflow action extension the extension file must be copied to the web server (as default as a new file under the "/webadmin/workflowaction/" folder). No configuration is required.

7.5 Web Content Editor Custom/Third-Party Extensions

The Asbru Web Content Management system enables you to create your own web content editor custom extensions and to use third-party developed extensions.

Web content editor custom / third-party extensions can be integrated with the Asbru Web Content Management system to use other web content editors than the Asbru Web Content Editor included in the web content management system.

7.5.1 Installation and Configuration

To install an additional web content editor extension the extension file(s) must be copied to the web server (as default as a new file under the "/webadmin/webeditors/EXTENSION NAME/" folder). No configuration is required.

7.6 Programming API Scripts

The Asbru Web Content Management system enables you to create your own custom program scripts to extend and customize the web content management system's functionality.

7.6.1 Installation and Configuration

To install programming API scripts they must be copied to the web server (as default as a file under the "/webadmin/api/" folder). No configuration is required.

7.6.2 External Website Publishing/Archiving Programming API

As default the Asbru Web Content Management system runs on the actual website and delivers the website content dynamically. However, for special requirements you may want to program your own program scripts to be executed when a content item is published or unpublished in the web content management system - for example to copy the file to another web server or an archive/backup server.

When a new or updated content item with a "static filename" is published the web content management system will check if a "/webadmin/api/published", "/webadmin/api/published.bat" or "/webadmin/api/published.sh" file exists and execute it with the published content item's static filename as parameter.

When a content item with a "static filename" is unpublished the web content management system will check if a "/webadmin/api/unpublished", "/webadmin/api/unpublished.bat" or "/webadmin/api/unpublished.sh" file exists and execute it with the published content item's static filename as parameter.

7.6.3 File Upload Programming API

As default the Asbru Web Content Management system simply adds uploaded images and other files as content items in the web content management system. However, for special requirements you may want to program your own program scripts to be executed when an "image" or a "file" is uploaded to the web content management system – for example to check files for virus infections or to convert the files to other formats or sizes.

When an "image" or a "file" is uploaded the web content management system will check if a "/webadmin/api/image", "/webadmin/api/image.bat", "/webadmin/api/image.sh", "/webadmin/api/file", "/webadmin/api/file.bat" or "/webadmin/api/file.sh" file exists and execute it with the uploaded file's filename as parameter.

Depending on what the program script does and what the web content management system should do the program script must return/output:

- The same filename as passed to the program script as a parameter
  If the program script has not renamed, moved or deleted the uploaded file.

- The uploaded file's new filename
  If the program script has renamed or moved the uploaded file. The web content management system will then update the content item with the new filename.

- Nothing
  If the program script has deleted the uploaded file. The web content management system will then also delete the content item.

When an "image" or a "file" is uploaded the web content management system will also check if a "/webadmin/api/image1", "/webadmin/api/image1.bat", "/webadmin/api/image1.sh", "/webadmin/api/image2", "/webadmin/api/image2.bat", "/webadmin/api/image2.sh", "/webadmin/api/image3", "/webadmin/api/image3.bat", "/webadmin/api/image3.sh", "/webadmin/api/file1", "/webadmin/api/file1.bat", "/webadmin/api/file1.sh", "/webadmin/api/file2", "/webadmin/api/file2.bat", "/webadmin/api/file2.sh", "/webadmin/api/file3", "/webadmin/api/file3.bat" or "/webadmin/api/file3.sh" file exists and execute it with the uploaded file's filename as parameter. Depending on what the program script does and what the web content management system should do the program script must return/output:

- The filename of new, alternative copy of the uploaded file
  If the program script has created a new, alternative copy of the uploaded file – for example a small resolution version of an image, or a PDF version of a Microsoft Word document, or a compressed version of a program file etc. The web content management system will then create an additional content item for the new file. The original uploaded file's content item's corresponding Additional Content / Image 1 / Image 2 / Image 3 / File 1 / File 2 / File 3 attribute will point to the new, alternative file's content item. The new, alternative file's content item's Content Relations / Page Up attribute will point to the original uploaded file's content item.

- Nothing
  If the program script has not created a new, alternative copy of the uploaded file. No additional content item will be created by the web content management system.

7.6.4 Validate Content Data Programming API

If you have special requirements for the website content you can program your own program scripts to validate content when/before it is saved to the web content management system. If a "/webadmin/api/validatecontent.xxx" (replace "xxx" with your programming language extensions: "aspx", "jsp" or "php") program script exists then that will be executed when an added or updated content item is saved. The content item's data will be posted to the program script as standard HTML POST form data.

The posted content item data can then be validated and the program script should return a structured response to the web content management system:

- "OK"
  The content item data are ok and the content item will be saved.

- "OK:ALERT:MESSAGE"
  The content item data are ok and the content item will be saved and the "MESSAGE" will be displayed to the website administrator (replace "MESSAGE" with your own text).

- "ERROR:CONFIRM:MESSAGE"
  There is a potential problem with the content item data and the website administrator will be prompted with the "MESSAGE" to confirm to save or cancel / re-edit the content item (replace "MESSAGE" with your own text).

- "ERROR:ALERT:MESSAGE"
  There is a problem with the content item data and the content item will not be saved. The "MESSAGE" will be displayed to the website administrator and the website administrator must re-edit the content before it can be saved (replace "MESSAGE" with your own text).

7.6.5 Validate User Data Programming API

If you have special requirements for the website user accounts you can program your own program scripts to validate user data when/before they are saved to the web content management system. If a "/webadmin/api/validateuser.xxx" (replace "xxx" with your programming language extensions: "aspx", "jsp" or "php") program script exists then that will be executed when an added or updated user account is saved as well as when a user registers on the website. The user account's data will be posted to the program script as standard HTML POST form data.

The posted user account data can then be validated and the program script should return a structured response to the web content management system:

- "OK"
  The user account data are ok and the user account will be saved.

- "OK:ALERT:MESSAGE"
  The user account data are ok and the user account will be saved and the "MESSAGE" will be displayed to the website administrator (replace "MESSAGE" with your own text). For website user registrations the "MESSAGE" will be displayed to the website user.

- "ERROR:CONFIRM:MESSAGE"
  There is a potential problem with the user account data and the website administrator will be prompted with the "MESSAGE" to confirm to save or cancel / re-edit the user account (replace "MESSAGE" with your own text). For website user registrations the "MESSAGE" will be displayed to the website user.

- "ERROR:ALERT:MESSAGE"
  There is a problem with the user account data and the user account will not be saved. The "MESSAGE" will be displayed to the website administrator and the website administrator must re-edit the user account before it can be saved (replace "MESSAGE" with your own text). For website user registrations the "MESSAGE" will be displayed to the website user.

7.6.6 Media Cloud Storage API

As default the Asbru Web Content Management system stores the website images and files on the website server. If the website and the Asbru Web Content Management system run on a cluster of website servers they must be setup to use shared or mirrored/replicated file storage to make the website images and files available on all the website servers. Alternatively, you may want to use a cloud storage service (or some other type of shared storage service) for your website images and files.

When the web content management system is configured to use cloud storage through Configuration / System / Website / Media Storage / Cloud Storage the web content management system will execute a number of "/webadmin/api/" program scripts when website images and files are uploaded, copied, moved/renamed, deleted and downloaded:

- /webadmin/api/exists.xxx" (replace "xxx" with: "aspx", "jsp" or "php")
  The web content managemenet system needs to know if a given website image/file exists on the cloud storage.

- /webadmin/api/upload.xxx" (replace "xxx" with: "aspx", "jsp" or "php")
  A new website image/file has been uploaded to the website and should be uploaded to the cloud storage.

- /webadmin/api/copy.xxx" (replace "xxx" with: "aspx", "jsp" or "php")
  A website image/file has been copied and should be copied on/to the cloud storage.

- /webadmin/api/move.xxx" (replace "xxx" with: "aspx", "jsp" or "php")
  A website image/file has been moved/renamed and should be moved/renamed on the cloud storage.

- /webadmin/api/delete.xxx" (replace "xxx" with: "aspx", "jsp" or "php")
  A website image/file has been deleted and should be deleted from the cloud storage.

- /webadmin/api/download.xxx" (replace "xxx" with: "aspx", "jsp" or "php")
  A modified or non-existing website image/file has been accessed and should be downloaded from the cloud storage.

These "/webadmin/api/" program scripts are included with the web content management system with support for a number of cloud storage service providers as well as placeholder comments in the program code for you to add your own custom programming for your own or other third-party cloud storage service providers. Please see the included "/webadmin/api/" program scripts for details.

7.6.7 Cloud Deployment API

The Asbru Web Content Management system can be installed on your own servers locally or with a hosting service provider of your own choise as well as cloud hosting services.

For a cloud hosted installation of the web content management system with dynamic scalability through addition of additional web servers, the web content management system installation may need to automatically detect and connect to the configured database server and media cloud storage when a new web server is added.

As default the Asbru Web Content Management system includes support for a number of cloud hosting services and database servers with automatic detection and connection to the database server. To use the web content management with other cloud hosting services and/or databases than the ones supported as default, you may need to add your own program code to automatically detect the configured database server and generate the database connection string to be used by the web content management system to connect to the configured database server as well as the media cloud storage configuration settings.

The cloud deployment detection and database connection and media cloud storage is handled by the "/config.cloud.xxx" (replace "xxx" with: "aspx", "jsp" or "php") special configuration program script. To add support for other cloud hosting service providers and database servers, simply edit this program script and add your own program code to:

- Detect the cloud deployment settings through the server environment variables or any other way these settings are made available by the cloud hosting services.

- Set the "database" to the database connection string for the configured database server as it would be entered into the web content management system's Configuration / System / Database / Database Connection configuration page.

- Set the "database_init" configuration setting to any special SQL commands, which may be required to create and initialise the database server.

- Set the "csservice" configuration setting to one of the supported media cloud storage service providers or to any other unique id/name for your cloud storage service provider as also used in your Media Cloud Storage API program scripts.

- Set the "csusername", "cspassword", "csrootpath" and "csURLrootpath" configuration settings to the relevant values as they would be entered into the web content management system's Configuration / System / Website / Media Storage configuration page.

7.6.8 Usagelog Data Summarisation

The Asbru Web Content Management system Usage Statistics Add-On module includes functionality to periodically summarise old usagelog data for reduced database storage space. This can be done manually through the web content management system administration pages, or you may want to this automatically. To do this automatically, you can use your operating system's general functionality to execute programs periodically to access the web content management system's usagelog data summarisation functionality.

IMPORTANT: It is strongly recommended that you only do this locally on the web server, or using encryption over any network connection:

http://localhost/webadmin/usage/summarise.aspx?username=USERNAME&password=PASSWORD

https://www.yourwebsite.com/webadmin/usage/summarise.aspx?username=USERNAME&password=PASSWORD

Please note that each access to this will only summarise one configured usagelog data summarisation period, so this should be done with (at least) the same frequency as your

configured usagelog data summarisation period - although, not more frequently than the usagelog data summarisation will have time to complete between each access.