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# Asbru Web Content Management System

## Hosting Edition Guide

*Easily & Inexpensively  
Create, Publish & Manage Your Websites*



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# Asbru Web Content Management System

*Easily & Inexpensively  
Create, Publish & Manage Your Websites*

## Introduction

The Hosting Edition of the Asbru Web Content Management system includes a number of additional features, which enables you to run any number of separate client websites on a single, easy to maintain and support installation of the Asbru Web Content Management system.

Web hosting service providers can use the Hosting Edition features to offer inexpensive web hosting standard packages with full web content management system to their clients. Clients may also be offered single page business card websites (i.e. for Internet domain name registration holding pages or email-only packages), which the clients can update themselves through a simple web-based administration interface with the Asbru Web Content Editor.

Larger organisations can use the Hosting Edition features to manage multiple, independent websites for different divisions, departments, projects, brands and campaigns etc.

This installation guide is divided into six main parts:

Part 1 describes how to install and configure the Hosting Edition of the Asbru Web Content Management System to run on your website.

Part 2 describes how to configure the Hosting Edition of the Asbru Web Content Management System to create and manage hosting client websites to run on your website.

Part 3 describes how to create and manage hosting client websites.

Part 4 describes how to enable and use the E-Commerce Add-On Module features for automated delivery of hosting client websites.

Part 5 describes how hosting client websites can be setup in different ways on your web server.

Part 6 describes how the Hosting Edition programming API can be customized to change how hosting client websites are setup on your web server.



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## **1 Installation and Basic Configuration**

The basic installation and configuration for the Hosting Edition of the Asbru Web Content Management system is exactly the same as for the other editions of the Asbru Web Content Management system - Except that you must download the Asbru Web Content Management Hosting Edition software package and configure a Hosting Edition software license. Also, for the Asbru Web Content Management Hosting Edition a special Hosting Edition example website is available for the Database Initialisation and Import configuration. The special Hosting Edition example website is recommended for use with the Asbru Web Content Management Hosting Edition. The Hosting Edition example website is fully customisable. Simply select the “Hosting Edition” data file for the database initialisation and import instead of one of the other data file options. Please see the Configuration Guide for details.

You may use the Asbru Web Content Management system default website for your own website describing your web hosting services etc. Please see our own [www.asbruweb.com](http://www.asbruweb.com) website for an example.

Please note that the Hosting Edition example website includes a number of hosting client websites in the Hosting Clients administration section, but that these hosting client websites are not fully configured and ready for use – the folders and databases they are configured to use do not exist. These hosting client websites are only examples. You should delete them and eventually create your own similar hosting client website “templates” created with actual folders and databases as described in the following sections.



## 2 Hosting Clients Configuration

When a Hosting Edition license is configured, an additional Configuration / System / Hosting Clients menu item is added to the Configuration section of the web content management system. This is used to configure various database server settings for use with MySQL databases (and other databases supported in the Hosting API). For use with Microsoft Access databases these configuration settings are not required and used.

- **Database Data Folder Path/Name**  
The full folder path/name of the database server's database data folder under which a sub-folder exists for each existing database instance. For example, “/var/lib/mysql/” for MySQL. (For Microsoft Windows the drive letter must also be added).
- **Database Administrator Username**  
Username to be used to connect to the database server to create new database instances and to copy existing database instances. This database administrator should have full “superadmin” administrator permissions for the database server to create new database instances and grant database administrator permissions etc.
- **Database Administrator Password**  
Password to be used to connect to the database server to create new database instances and to copy existing database instances. This database administrator should have full “superadmin” administrator permissions for the database server to create new database instances and grant database administrator permissions etc.

The screenshot shows the Asbru Web Content Management System interface. The top navigation bar includes the Asbru logo and the title "Hosting Clients Configuration". Below this is a "Web Content Management" section with icons for Home, Help, Logout, Browse & Edit, Website Content, Media Library, Products & Orders, Content Databases, User Database, Configuration, Hosting Clients, and Updates. The left sidebar shows a tree view of the system configuration, with "Hosting Clients" highlighted under the "Configuration" section. The main content area is titled "Hosting Clients" and contains a "Save" button and a form with the following fields:

- Database Data Folder Path/Name**: A text input field containing the value "/var/lib/mysql/".
- Database Administrator Username**: A text input field containing the value "username".
- Database Administrator Password**: A text input field containing the value "password".

Below the form, there is a footer bar with the text: "Asbru Web Content Management System v6.3 - Copyright © 1999-2007 Asbru Ltd. and its licensors. All rights reserved."



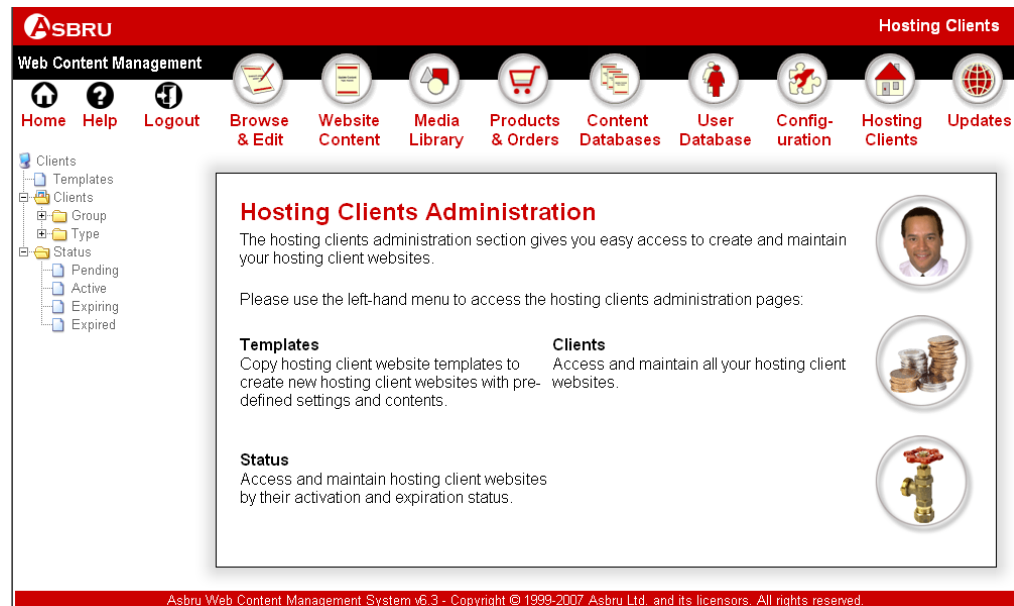


### 3 Hosting Clients Management

When a Hosting Edition license is configured, the toolbar at the top of all the main administration pages includes an additional Hosting Clients link and icon. This gives you access to the hosting clients website administration section of the Asbru Web Content Management system.

A number of different left-hand menu items give you access to list all or some of your existing hosting client websites:

- **Templates**  
Hosting client websites for which no “superadmin” administrator email address is configured. You can use such hosting client websites as templates for adding new hosting client websites by copying a template hosting client website.
- **Clients**  
All hosting client websites.
- **Clients Group/Type**  
Hosting client websites for the selected hosting client website group/type.
- **Status**  
Hosting client websites with the selected status.
  - Pending - lists hosting client websites, which have not been activated yet.
  - Active – lists activated hosting client websites.
  - Expiring – lists hosting client websites, which have been notified and are about to expire.
  - Expired - lists hosting client websites, which have expired.



### 3.1 Defining Hosting Client Packages and Default Websites

Typically, you will create a number of standard hosting client website packages, which you copy to create a new hosting client websites.

As a web hosting service provider you may want to create a number of standard packages such as:

- Different Asbru Web Content Management system editions and add-on modules:
  - Personal
  - Personal with E-Commerce Add-On module
  - Professional
  - Professional Suite
- Default website content customised specially for different types of clients:
  - Small business website
  - Medium-sized business website
  - Non-profit organisation website
  - Club website
  - Personal website
  - Family website
  - Local authority website
  - School website
  - etc.

For hosting within a larger organisation you may want to create a number of standard packages such as:

- Division website
- Brand website
- Campaign website
- Department intranet website



- Project intranet website
- Partner extranet website

Simply create such hosting client website packages in the same way as ordinary hosting client websites and use the Asbru Web Content Management system to customise the configuration and content of each website package. Leave the superadmin email address blank to list the websites as “templates” in the Hosting Clients administration section.

### **3.2 Index**

The main page of the Hosting Clients administration section lists your currently configured hosting client websites with access to open, view, update and delete each of them as well as access to add new hosting client websites.

Each hosting client website must have its own unique Internet address, which may be an IP-number (i.e. 127.0.0.1), a fully qualified domain name (i.e. www.asbrusoft.com) or a sub-domain name (i.e. johndoe.asbruweb.com). Each hosting client website may also have any number of additional Internet addresses, which point to the same hosting client website.

The Move To button and Group and Type lists located under the list of hosting client websites can be used to move selected hosting client websites to another group and/or type.

#### **3.2.1 List paged**

Hosting client websites are always ordered alphabetically by the Internet address. Select the First, Previous, Next, Last and page number links or use the scrollbar to browse through the hosting client websites.

All text may not be visible in the default width columns. The full text is displayed by the web browser when the cursor is held over the text. Alternatively, the column widths can be resized by dragging the space between the column headers left and right.

#### **3.2.2 List all**

Select any of the index listing column heading texts such as Group, Type, Status and Website to sort the listed hosting client websites by the selected column.



### 3.3 Website

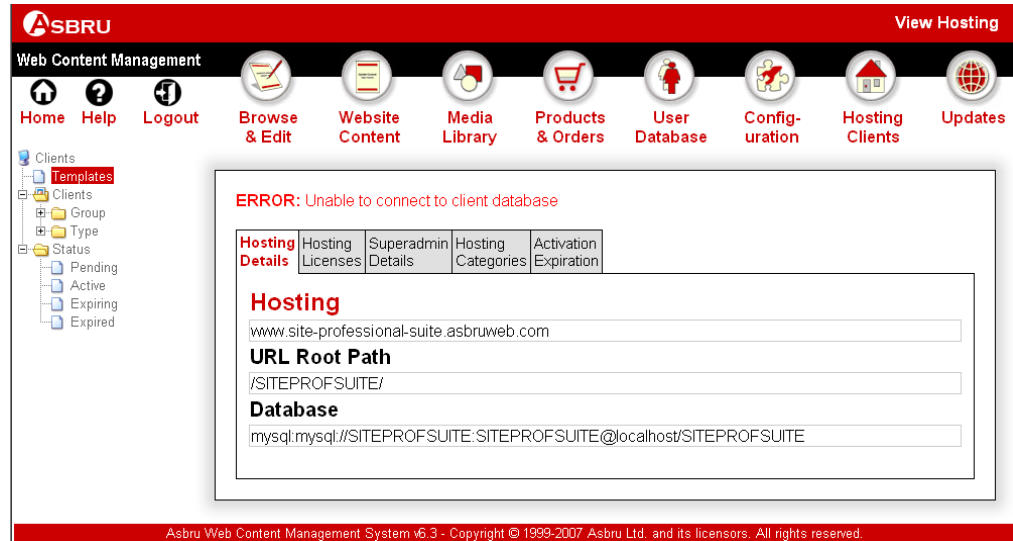
Select Website from the Hosting Clients administration section main page to open and view the hosting client website in a new web browser window.

### 3.4 Webadmin

Select Webadmin from the Hosting Clients administration section main page to access the web content management system administration pages for the hosting client website in a new web browser window.

### 3.5 View

Select View from the Hosting Clients administration section main page to view the current configuration for a hosting client website. Please see 3.8 Add New for details on the configuration attributes.



### 3.6 Update

Select Update from the Hosting Clients administration section main page to update the configuration for a hosting client website. Please see 3.8 Add New for details on the configuration attributes.

Please note that changing the URL Root Path and/or Database configuration attributes does not rename/move the existing data to the new locations/names entered, but configures the hosting client website to use the entered locations/names and their contents instead of the existing locations/names.

(You can customize the Hosting API to rename/move the existing data instead. You can also customize the Hosting API to automatically send an email notification to the hosting client website superadmin administrator when their website is updated; or to automatically send configuration changes to your back-end systems; etc. Please see 6 Hosting API for details).



ASBRU Update Hosting

Web Content Management

Home Help Logout Browse & Edit Website Content Media Library Products & Orders User Database Configuration Hosting Clients Updates

Clients

- Templates
- Clients
  - Group
  - Type
  - Status
    - Pending
    - Active
    - Expiring
    - Expired

Save

ERROR: Unable to connect to client database

Hosting Details	Hosting Licenses	Superadmin Details	Hosting Categories	Activation Expiration
-----------------	------------------	--------------------	--------------------	-----------------------

Hosting

www.site-professional-suite.asbruweb.com

URL Root Path

/SITEPROFSUITE/

Database

mysql:mysql://SITEPROFSUITE:SITEPROFSUITE@localhost/SITEPROFSUITE

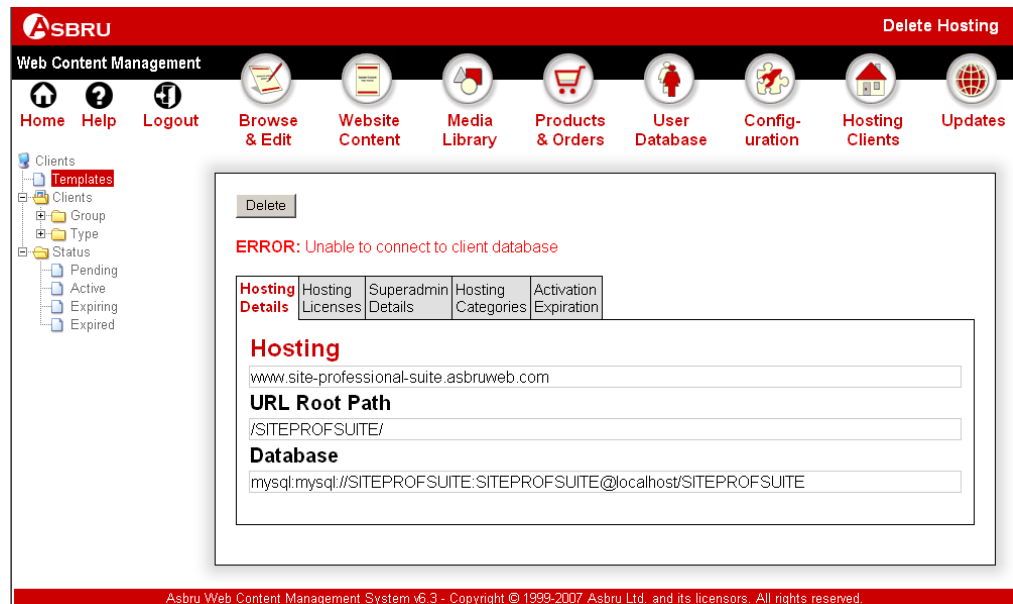
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### 3.7 Delete

Select Delete from the Hosting Clients administration section main page to delete a hosting client website. Please see 3.8 Add New for details on the configuration attributes.

Please note that depending on your server setup the actual hosting client database instance may not automatically be deleted when the hosting client website is deleted. (For example, the database files may be “locked” by other processes so they cannot be deleted).

(You can customize the Hosting API to automatically delete the database instance. You can also customize the Hosting API to automatically send an email notification to the hosting client website superadmin administrator when their website is deleted; or to automatically send configuration changes to your back-end systems; etc. Please see 6 Hosting API for details).



### 3.8 Add New

Select Add New from the Hosting Clients administration section main page to add a new hosting client website. When adding a new hosting client website you also select if you want to add a new “– blank –” website or if you want to copy the hosting client website configuration attributes from an existing hosting client website.

Please note that depending on your server setup you may need to manually create a new database instance for the hosting client, first. (Microsoft Access database files as available for the .NET and JSP and PHP versions of the Asbru Web Content Management system on a Microsoft Windows server and MySQL databases on a Microsoft Windows or Linux/Unix server are created/copied automatically).

(You can customize the Hosting API to automatically create a new database instance for the new hosting client website. You can also customize the Hosting API to automatically send the configuration data to your back-end systems; etc. Please see 6 Hosting API for details).

Typically, you will create a number of standard hosting client website packages, which you copy to create a new hosting client websites. Please see 3.1 Defining Hosting Client Packages and Default Websites for details.

For example, select “www.site-professional-suite.asbruweb.com” and Add New from the Hosting Clients administration section main page to add a new website for a new hosting client as a copy of the existing “www.site-professional-suite.asbruweb.com” hosting client website package.

#### 3.8.1.1 Hosting Details

The configuration attributes for the existing “www.site-professional-suite.asbruweb.com” hosting client website are displayed and must be changed for the new hosting client website:



- Internet address – Must be changed from “www.site-professional-suite.asbruweb.com” to a unique Internet address for the new hosting client website (i.e. “johndoe.asbruweb.com”).
- URL Root Path – Must be changed from “/SITEPROFSUITE/” to a unique folder name for the new hosting client website (i.e. “/johndoe/”).
- Database – Must be changed from “mysql:mysql://SITEPROFSUITE:SITEPROFSUITE@localhost/SITEPROFSUITE” to a unique database name for the new hosting client website (i.e. “mysql:mysql://johndoe:jd834hudi@localhost/ johndoe”).

The screenshot shows the Asbru Web Content Management System interface. The top navigation bar includes links for Home, Help, Logout, Browse & Edit, Website Content, Media Library, Products & Orders, User Database, Configuration, Hosting Clients, and Updates. A sidebar on the left shows a tree view of the system structure, including Clients, Templates, and various status categories. The main content area displays a form for configuring a new hosting client. The form has a 'Save' button at the top left. Below it, a red error message states: 'ERROR: Unable to connect to client database'. The form contains three input fields: 'Hosting Details' (with a value of 'www.site-professional-suite.asbruweb.com'), 'URL Root Path' (with a value of '/SITEPROFSUITE/'), and 'Database' (with a value of 'mysql:mysql://SITEPROFSUITE:SITEPROFSUITE@localhost/SITEPROFSUITE'). The form also includes a table with tabs for 'Hosting Details', 'Hosting Licenses', 'Superadmin Details', 'Hosting Categories', and 'Activation Expiration'. The footer of the page reads: 'Asbru Web Content Management System v6.3 - Copyright © 1999-2007 Asbru Ltd. and its licensors. All rights reserved.'

### 3.8.1.2 Hosting Licenses

Hosting license keys must be configured for each hosting client website to activate the various Asbru Web Content Management system editions and add-on modules. The license keys must be the license keys issued to you by Asbru Ltd. (or authorized Asbru Ltd. partners) or unique license keys issued by yourself as authorized by Asbru Ltd. (or authorized Asbru Ltd. partners).

The license key input fields show the license keys issued and configured for the hosting client website by you (stored in your main web content management system database). For comparison and verification, the license keys in actual use on the hosting client website are displayed below each of the license key input fields).

Please note that new unique hosting client licenses can be generated, configured and used immediately, but all issued hosting client licenses must be reported to and purchased from Asbru Ltd. within 30 days (or as agreed) to be valid.

Alternatively, all license keys may be deleted and left blank for the new hosting client





website. This will give the new hosting client a single page business card website, which does not require any license from Asbru Ltd.

ASBRU Add New Hosting

Web Content Management

Home Help Logout Browse & Edit Website Content Media Library Products & Orders User Database Configuration Hosting Clients Updates

Clients

Templates

Clients

Group

Type

Status

Pending

Active

Expiring

Expired

Save

ERROR: Unable to connect to client database

Hosting Details	Hosting Licenses	Superadmin Details	Hosting Categories	Activation Expiration
-----------------	------------------	--------------------	--------------------	-----------------------

**License** **Generate**

Personal Edition

Professional Edition

Enterprise Edition

Hosting Edition

**Add-On Modules**

E-Commerce

Community

Databases

Statistics

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Select “Generate” to open a new web browser window with access to generate new unique hosting client license keys:

- Product – Select which Asbru Web Content Management System or Add-On Module to generate a license for.
- Owner – Enter a unique id such as the website address or email address for the new hosting client.
- License Key – Select “Generate License Key” and copy the generated license key to the relevant License field for the new hosting client website to be created.



The screenshot displays the Asbru Web Content Management System interface. At the top is a red header bar with the 'ASBRU' logo on the left and a 'License' button on the right. Below the header is a navigation bar with icons and labels for Home, Help, Logout, Browse & Edit, Website Content, Media Library, Products & Orders, User Database, Configuration, Hosting Clients, and Updates. On the left side, there is a tree view under 'Clients' with sub-items: Templates (highlighted in red), Clients, Group, Type, and Status (with sub-items: Pending, Active, Expiring, Expired). The main content area is titled 'Generate License Key' and contains a 'Product License' section. This section has a table with two columns: 'Asbru Web Content Management System' and 'Add-On Module'. The table lists three editions: Personal Edition, Small Business Edition, and Professional Edition, each with a radio button and a list of add-on modules. Below the table are input fields for 'Owner' and 'License Key'. At the bottom of the page, a red footer bar contains the text: 'Asbru Web Content Management System v6.3 - Copyright © 1999-2007 Asbru Ltd. and its licensors. All rights reserved.'

Asbru Web Content Management System	Add-On Module
<input type="radio"/> Personal Edition	<input type="radio"/> Personal Edition Community <input type="radio"/> Personal Edition Databases <input type="radio"/> Personal Edition E-Commerce <input type="radio"/> Personal Edition Statistics
<input type="radio"/> Small Business Edition	<input type="radio"/> Small Business Edition Community <input type="radio"/> Small Business Edition Databases <input type="radio"/> Small Business Edition E-Commerce <input type="radio"/> Small Business Edition Statistics
<input type="radio"/> Professional Edition	<input type="radio"/> Professional Edition Community <input type="radio"/> Professional Edition Databases <input type="radio"/> Professional Edition E-Commerce <input type="radio"/> Professional Edition Statistics

Owner

License Key

### 3.8.1.3 Superadmin Details

Superadmin details for login to the hosting client website web content management system administration pages as the superadmin administrator should be configured:

- Superadmin Username – May be kept as “admin” or be changed to something else.
- Superadmin Password – May be kept as “admin” or be changed to something else. (If kept as “admin” the hosting client should be advised to change it to something else. Otherwise other Internet users may easily guess the password and gain unauthorized access to the Asbru Web Content Management system for the hosting client website).
- Superadmin Email – Should be changed to the hosting client’s email address (i.e. “johndoe@asbruweb.com”).



ASBRU Add New Hosting

Web Content Management

Home Help Logout Browse & Edit Website Content Media Library Products & Orders User Database Configuration Hosting Clients Updates

Clients

- Templates
- Clients
  - Group
  - Type
- Status
  - Pending
  - Active
  - Expiring
  - Expired

Save

ERROR: Unable to connect to client database

Hosting Details Hosting Licenses Superadmin Details Hosting Categories Activation Expiration

**Superadmin**

Username

Password

Email

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### 3.8.1.4 Hosting Categories

For effective administration of larger numbers of hosting client websites, they can be organised into a number of groups and/or types:

- Group – May be set to one of the configured hosting client groups (configured through Configuration / Hosting / Groups).
- Type – May be set to one of the configured hosting client types (configured through Configuration / Hosting / Types).

ASBRU Add New Hosting

Web Content Management

Home Help Logout Browse & Edit Website Content Media Library Products & Orders User Database Configuration Hosting Clients Updates

Clients

- Templates
- Clients
  - Group
  - Type
- Status
  - Pending
  - Active
  - Expiring
  - Expired

Save

ERROR: Unable to connect to client database

Hosting Details Hosting Licenses Superadmin Details Hosting Categories Activation Expiration

**Hosting Categories**

Group

Type

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### 3.8.1.5 Activation & Expiration

Use these Activation & Expiration attributes to schedule when each hosting client website should be activated and/or expired, or leave blank to activate the hosting client website immediately and permanently (until updated or deleted). Optionally, activation and/or expiration emails can be sent to the hosting client website superadministrator when the hosting client website is activated and/or expires. Sending of a notification email when a hosting client website is about to expire can also be scheduled.

The activation and expiration dates/times must be entered in the format "YYYY-MM-DD hh:mm:ss" - for example "2000-12-31 23:59:59" for 1 second to midnight on New Year's Eve 2000.

*Please note that sending of activation, notification and expiration emails happens the first time your website is accessed after the scheduled dates/times, so depending on how busy your website is the emails may be sent some time after the scheduled dates/times. For guaranteed email delivery shortly after the scheduled dates/times, you may need/want to setup automated periodical access of your website.*

### 3.8.1.6 Save & Create

Select "Save" to add the new hosting client website.

This will automatically create the new website folder and database instance for the new hosting client website as a copy of the existing website folder and database instance. An email notification with the new hosting client website details will also automatically be sent to the new hosting client superadmin email address as well as the default Hosting Edition website superadmin email address.



The new hosting client website is now ready for use and can be accessed at the configured hosting client website Internet address – for example:

- “http://johndoe.asbruweb.com” – The public Internet website.
- “http://johndoe.asbruweb.com/webadmin/” – The Asbru Web Content Management system for the new hosting client website.
- “http://johndoe.asbruweb.com/bizcard/” – The Asbru Web Content Management system business card website administration page for the new hosting client website. Please see 3.9 Business Card Website Administration for details.

#### **3.8.1.7 Hosting API**

The Add New functionality as described above depends on the implementation of the Asbru Web Content Management system Hosting API. As default the Hosting API supports automated creation of Microsoft Access and MySQL databases for a simple “virtual” web server setup. This is fully customisable to suit your requirements and server setup and eventually integrate with your back-end and other systems. Please see 4 E-Commerce Add-On Automated Product Delivery and 6 Hosting API for details.

To add a new hosting client website you need to (manually or automatically through customization of the Hosting API):

- Obtain and configure the unique Internet address (IP-number, domain name or sub-domain name) to be used to access the new hosting client website.
- Configure your web server to respond to the address for the new hosting client website and direct requests to the Asbru Web Content Management system.

Create a web folder for the new hosting client website where its images and other data files are to be stored. Typically, you would create this as a sub-folder of your website root folder where the Asbru Web Content Management system is installed.

(Alternatively, you may create a “link” from your website root folder to a hosting client website folder located somewhere else on your server if your server platform supports this. Finally, you may have chosen a setup with separate website root folders for each hosting client website. Please see 2 Hosting Clients Configuration for details).

- Create a database instance for the new hosting client website where its content etc. are to be stored.
- Optionally, initialise and pre-configure the Asbru Web Content Management system for the new hosting client website.
- Notify the new hosting client of their website details including the Internet address, username and password to access their new website and the Asbru Web Content Management system.

### **3.9 Business Card Website Administration**

Instead of web sites with access to the full Asbru Web Content Management system, you may setup single page business card websites for your hosting clients.

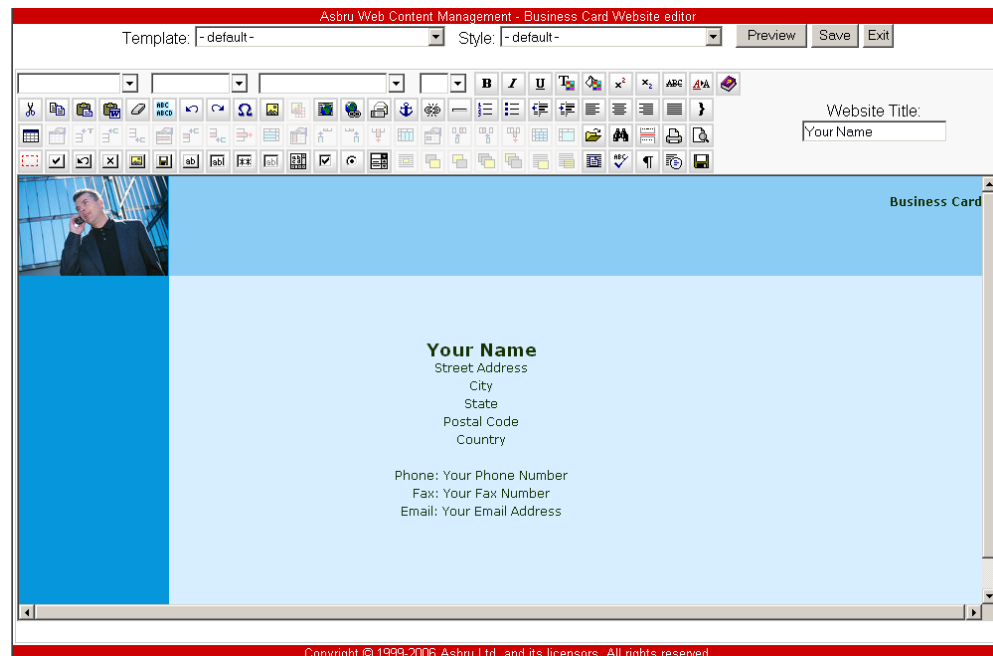


Hosting clients may access the Asbru Web Content Management system business card website administration by opening the website address “http://127.0.0.1/bizcard/” where “127.0.0.1” must be replaced with the address of their hosting client website address. The hosting client’s username and password is required to access the business card website administration.

The business card website administration gives hosting clients access to update the content of their business card website using the web content editor and by selecting a template and a style sheet.

Hosting clients may use the web content editor to insert hyperlinks and images on their business card website, but images can only be selected from the existing images for their website. Additional images cannot be uploaded to their business card website.

Finally, changes may be previewed before they are saved.





## 4 E-Commerce Add-On Automated Product Delivery

When a Hosting Edition license is configured, the E-Commerce Add-On module is also automatically activated for self-service ordering and payment for hosting client websites and for automated product delivery of hosting client websites and databases creation, initialisation and configuration.

### 4.1 Product Delivery Configuration

Additional Product Delivery attributes are added on the E-Commerce Product Delivery configuration page in the Configuration section of the web content management system:

- **Hosting Client Websites**  
Settings for automatically created hosting client websites.
  - **Min. Sub-domain Length**  
Minimum permitted length of sub-domain names (entered by customers when ordering a hosting client website).
  - **Max. Sub-domain Length**  
Maximum permitted length of sub-domain names (entered by customers when ordering a hosting client website).
  - **Blocked Sub-domains**  
List of blocked sub-domains separated by blanks. Blocked sub-domains entered by customers when ordering a hosting client website will be ignored and replaced with an automatically issued sub-domain name.
  - **Prefix For Automatically Issued Sub-Domains**  
Prefix text followed by random number to be used for automatically issued hosting client website sub-domain names (if no available/valid sub-domain name is entered by the the customers when ordering a hosting client website).
  - **WWW Domain Name Prefix**  
Prefix to be added before the sub-domain – for example to use “www.” for the hosting client website.
  - **Domain Name**  
The default base domain name to be used for all hosting client websites. All hosting client websites will be created as sub-domains of this domain name. (Additional alternative domain names for the hosting client website can be configured separately).
  - **Database Connection**  
The database connection string template to be used for all hosting client websites. A number of special codes can be used in the database connection string:
    - `@@@domain@@@` will be replaced by the hosting client website sub-domain name.



- @@@username@@@ will be replaced by the hosting client website sub-domain name.
- @@@password@@@ will be replaced by a random 8 digit number.
- @@@random@@@ will be replaced by a random 32 digit number.

For Microsoft Access databases the database connection string can be something like:

.NET:

```
access:DRIVER={Microsoft Access Driver (*.mdb)}; DBQ=D:/  
Asbru\Web Content  
Management/webadmin/database.@@@domain@@@.@@@random  
@@@.mdb
```

JSP:

```
sun.jdbc.odbc.JdbcOdbcDriver::@jdbc:odbc:DRIVER={Microsoft  
Access Driver (*.mdb)}; DBQ=D:/Asbru/Web Content  
Management/webadmin/database.@@@domain@@@.@@@random  
@@@.mdb
```

PHP:

```
access:odbc://TCP()DRIVER={Microsoft Access Driver (*.mdb)};  
DBQ=D:\Asbru\Web Content  
Management/webadmin/database.@@@domain@@@.@@@random  
@@@.mdb
```

For MySQL databases the database connection string can be something like:

.NET:

```
mysql:Driver={MySQL ODBC 3.51 Driver};SERVER=localhost;  
DATABASE=@@@subdomain@@@;UID=@@@username@@@;P  
WD=@@@password@@@;Extended Properties='OPTION=16387'
```

JSP:

```
mysql:com.mysql.jdbc.Driver:@@@username@@@:@@@password  
@@@@jdbc:mysql://localhost/@@@subdomain@@@
```

PHP:

```
mysql:mysql://@@@username@@@:@@@password@@@localhost/  
@@@subdomain@@@
```

Please see the Configuration Guide and Website Administrator Guide for details.





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Settings for automatic digital product delivery.

User Database Usernames

Min. Username Length

Max. Username Length

4

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Blocked Usernames

Prefix for automatically issued usernames (followed by random number)

user

Hosting Client Websites

Min. Sub-domain Length

Max. Sub-domain Length

4

20

Blocked Sub-domains

Prefix for automatically issued sub-domains (followed by random number)

website

WWW Domain Name Prefix

Domain Name

www.

asbruweb.com

Database Connection

mysql:mysql://@@@username@@@password@@@localhost@@@dt

Domain Name Registration (www.enom.com)

Username

Password

Domain Name Registration URL

☐ http://resellertest.enom.com/

☐ http://reseller.enom.com/

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## 4.2 Domain Name Registration

Additional Product Delivery attributes for integrated domain name registration functionality are also added on the E-Commerce Product Delivery configuration page in the Configuration section of the web content management system:

- Domain Name Registration (www.enom.com)  
Settings for integrated domain name registration and configuration.
  - Username  
Your www.enom.com reseller username.
  - Password  
Your www.enom.com reseller password.



- Domain Name Registration URL  
The domain name registration URL to be used.
  - <http://resellertest.enom.com/>  
For testing only with no actual domain name registrations and payments. The domain name is not actually registered and configured to point to the hosting client website. Payments for domain name registrations are only charged to your [www.enom.com](http://www.enom.com) reseller test account.
  - <http://reseller.enom.com/>  
Live domain name registrations and payments. Payments for domain name registrations are charged to your [www.enom.com](http://www.enom.com) reseller account.

Integrated domain name registration is supported through a reseller account with [www.enom.com](http://www.enom.com). To use the integrated domain name registration you must sign up for a [www.enom.com](http://www.enom.com) reseller account.

The integrated domain name registration functionality is intended for use with hosting client website products – not for standalone domain name registration services.

When the Domain Name Registration configuration settings have been configured and a hosting client website product with “hosting:subdomain” and “hosting:domain” Product Details attributes is purchased, the entered “hosting:domain” Product Details attribute domain name will be registered (if available) and it will be configured to point to the “hosting:subdomain” hosting client website. Please see 4.3 Product Attributes for details.

As default only “.com”, “.net” and “.org” top level domains can be registered. If a “hosting:domain:tld” Product Details attribute has been defined with a list of top level domains for the purchased product then only domain names for the given top level domains can be registered. As the domain name registration costs for different top level domains differ, you may want to have different products with different “hosting:domain:tld” product options. Please see 4.3 Product Attributes for details.

The registered domain name will also be configured to forward all emails to the hosting client’s email address. The registered domain name and the created hosting client website should be ready for use within a few minutes.

The @@@availability@@@ special code should be added to the shopping cart item used to list each product in the shopping cart. This special code will display if the entered domain name is available and if all the personal data required for domain name registrations have been entered etc.

Please see the Website Administrator Guide and the Website Developer Guide for details.



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Product Delivery

Settings for automatic digital product delivery.

User Database Usernames

Min. Username Length

4

Max. Username Length

20

Blocked Usernames

Prefix for automatically issued usernames (followed by random number)

user

Hosting Client Websites

Min. Sub-domain Length

4

Max. Sub-domain Length

20

Blocked Sub-domains

Prefix for automatically issued sub-domains (followed by random number)

website

WWW Domain Name Prefix

www.

Domain Name

asbruweb.com

Database Connection

mysql:mysql://@@@username@@@password@@@localhost@@@dt

Domain Name Registration (www.enom.com)

Username

Password

Domain Name Registration URL

☐ http://resellertest.enom.com/

☐ http://reseller.enom.com/

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### 4.3 Product Attributes

Additional Product Delivery attributes are added for products in the Products & Orders section of the web content management system:

- **Hosting Client Website Template**  
The hosting client website to be copied to create a new hosting client website for the customer upon successful order and payment completion.

Please see the Website Administrator Guide for details.



The screenshot displays the Asbru Web Content Management System interface. At the top, there is a red header bar with the Asbru logo and the text 'Web Content Management' and 'Update'. Below this is a navigation bar with icons and labels for Home, Help, Logout, Browse & Edit, Website Content, Media Library, Products & Orders, User Database, Configuration, Hosting Clients, and Updates. On the left side, there is a search bar and a sidebar menu with options like E-Commerce, Products, Group, Type, Version, Status, and Orders. The main content area shows the 'Product Delivery' configuration page. It includes a 'Save & Close' button, a 'Save' button, and a 'Preview' button. There are also links for 'Email editors', 'Email publishers', and 'Email administrators'. A 'Restore' button and a dropdown menu for 'current' are visible. The page has a tabbed interface with tabs for Revision History, Product Details, Product Delivery (selected), Primary Content, Content Presentation, Additional Content, Meta Information, Advanced Scripting, Content Categories, Content Version, Access Restrictions, Content Relations, and Content Dependencies. The 'Product Delivery' tab is active, showing the title 'Product Delivery' and the subtitle 'Automatic digital product delivery details'. Below this, there are several sections with dropdown menus and buttons: 'New', 'Renew', 'Add-On', 'Send Email' (with a 'Select' button), 'Display Page' (with a '- none -' dropdown and a 'Select' button), 'Custom Extension Program' (with a '- none -' dropdown), 'User Template' (with a dropdown showing 'hostingcustomer (13)'), and 'Hosting Client Website Template' (with a dropdown showing 'www.site-professional-suite.asbruw.com'). At the bottom of the page, there is a red footer bar with the text 'Asbru Web Content Management System v6.3 - Copyright © 1999-2007 Asbru Ltd. and its licensors. All rights reserved.'

Additional Product Details attributes are also available for automated configuration of hosting client websites. In relation to automated product delivery a number of special Product Options with the following names can be defined:

- **hosting:subdomain**  
Placeholder for sub-domain name entered by customers when ordering a hosting client website. Important: This should always be the first product option for products with automated delivery of hosting client websites.
- **hosting:domain**  
Placeholder for optional full domain name alias entered by customers when ordering a hosting client website. Important: This should always be the second product option for products with automated delivery of hosting client websites.
- **hosting:domain:tld**  
List of top level domains which are allowed for the “hosting:domain” if the integrated domain name registration functionality is used. If no “hosting:domain:tld” product option is added, the default “hosting:domain:tld” is “com,net,org”. For example, to also allow registration of “.uk” domain names a “hosting:domain:tld” product option with the value “com,net,org,uk” should be added; or to only allow registration of “.uk” domain names a “hosting:domain:tld” product option with the value “uk” should be added. Please see 4.2 Domain Name Registration for details.
- **hosting:group**  
Defines the hosting group under which the hosting client website is created. This



overrides the hosting group defined for the copied hosting client website.

- **hosting:type**  
Defines the hosting type under which the hosting client website is created. This overrides the hosting type defined for the copied hosting client website.
- **hosting:password**  
Sets the superadmin password for the created hosting client website to the given value. This overrides the superadmin password defined for the copied hosting client website.
- **hosting:personal**  
Sets the Personal Edition license key for the created hosting client website to the given value. This overrides the Personal Edition license key defined for the copied Product Delivery Hosting Client Website Template.
- **hosting:professional**  
Sets the Professional Edition license key for the created hosting client website to the given value. This overrides the Professional Edition license key defined for the copied Product Delivery Hosting Client Website Template.
- **hosting:community**  
Sets the Community Add-On license key for the created hosting client website to the given value. This overrides the Community Add-On license key defined for the copied Product Delivery Hosting Client Website Template.
- **hosting:databases**  
Sets the Databases Add-On license key for the created hosting client website to the given value. This overrides the Databases Add-On license key defined for the copied Product Delivery Hosting Client Website Template.
- **hosting:ecommerce**  
Sets the E-Commerce Add-On license key for the created hosting client website to the given value. This overrides the E-Commerce Add-On license key defined for the copied Product Delivery Hosting Client Website Template.
- **hosting:statistics**  
Sets the Statistics Add-On license key for the created hosting client website to the given value. This overrides the Statistics Add-On license key defined for the copied Product Delivery Hosting Client Website Template.
- **hosting:publish**  
Sets the Scheduled Publish date/time for the created hosting client website to the given value instead of using the value from the copied Product Delivery Hosting Client Website Template.
- **hosting:publish\_email**  
Sets the Scheduled Publish Email page id for the page to be emailed to the created hosting client website's superadministrator to the given value instead of using the value from the copied Product Delivery Hosting Client Website Template.



- `hosting:notify`  
Sets the Scheduled Notify date/time for the hosting client website to the given value instead of using the value from the copied Product Delivery Hosting Client Website Template.
- `hosting:notify_email`  
Sets the Scheduled Notify Email page id for the page to be emailed to the created hosting client website's superadministrator to the given value instead of using the value from the copied Product Delivery Hosting Client Website Template.
- `hosting:unpublish`  
Sets the Scheduled Expiration date/time for the hosting client website to the given value instead of using the value from the copied Product Delivery Hosting Client Website Template.
- `hosting:unpublish_email`  
Sets the Scheduled Expiration Email page id for the page to be emailed to the created hosting client website's superadministrator to the given value instead of using the value from the copied Product Delivery Hosting Client Website Template.

Please see the Website Administrator Guide for details.



The screenshot displays the Asbru Web Content Management System interface. At the top, there is a red header bar with the Asbru logo and the text "Web Content Management" and "Update". Below the header is a navigation bar with icons and labels for Home, Help, Logout, Browse & Edit, Website Content, Media Library, Products & Orders, User Database, Configuration, Hosting Clients, and Updates. A search bar is located on the left side. The main content area shows the "Product Details" page for a hosting product. The page includes a table with tabs for Revision History, Product Details (selected), Product Delivery, Primary Content, Content Presentation, Additional Content, Meta Information, Advanced Scripting, Content Categories, Content Version, Access Restrictions, Content Relations, and Content Dependencies. The "Product Details" tab is active, showing fields for Order Code, Price per Item, In Stock, and Comment. Below these fields are sections for Product Options, including hosting:subdomain, hosting:domain, hosting:group, and hosting:type, each with a text input field and a "Delete" button. An "Add New" button is at the bottom of the options section. The footer of the page contains the text "Asbru Web Content Management System v6.3 - Copyright © 1999-2007 Asbru Ltd. and its licensors. All rights reserved."

#### 4.4 Order Pages

The Hosting Edition example website includes a number of special order pages for ordering hosting client website products. For hosting client website products single-step order pages are recommended instead of using multi-step shopping cart and checkout pages.

The Hosting Edition example website order pages use the standard E-Commerce Add-On features with the following notable differences:

`<input type="text" name="add" value="123">` is the unique product id from the web content management system for the ordered product.

`<input type="text" name="add_1" value="">` is used for customers to enter their preferred sub-domain name when ordering a new hosting client website, or to enter their existing sub-domain for their existing hosting client website when ordering add-on products such as



additional domain name aliases and add-on module license keys. The “1” refers to the first product option defined for the ordered product. As suggested above the first product option for hosting client website products should always be “hosting:subdomain”.

`<input type="text" name="add_2" value="">` is used for customers to enter their preferred full domain name alias (if any) when ordering a new hosting client website, or when ordering an additional domain name alias for an existing hosting client website. The “2” refers to the second product option defined for the ordered product. As suggested above the second product option for hosting client website products should always be “hosting:domain”.

`<input type="hidden" name="complete" value="complete">` defines that the order should be confirmed/completed immediately instead of using multi-step shopping cart and checkout pages.

`<input type="hidden" name="email_confirmation" value="no">` can be used to not send a confirmation email to the customer.

`<input type="hidden" name="email_confirmation" value="123">` can be used to send the page with the given id as a confirmation email to the customer instead of using the default email confirmation page configured for your website.

`<input type="hidden" name="email_notification" value="no">` can be used to not send a notification email to your e-commerce order administrator.

`<input type="hidden" name="email_notification" value="123">` can be used to send the page with the given id as a notification email to your e-commerce order administrator instead of using the default email notification page configured for your website.

Please see the Hosting Edition example website and the Website Developer Guide for details.





## 5 Web Server And Hosting Client Websites Setup

The default Asbru Web Content Management Hosting API implements a simple “virtual hosting client” setup. However, you may customise the Hosting API if you prefer another setup for your hosting client websites such as a more advanced “dedicated hosting client” setup or something completely different. You may also want to customise the Hosting API for additional automation and integration with back-end systems etc. Please see 6 Hosting API for details.

Each hosting client website needs its own:

- Internet address IP-number and/or domain name for accessing it.
- Website folder for storing the website content images and other files.
- Database instance for storing the website content.

### 5.1 Internet Address and Web Server

Each hosting client website needs its own unique Internet address for accessing it. The Internet address may be an IP-number, domain name or sub-domain name. You need to acquire and configure these to point to your web server before the Asbru Web Content Management system can use them.

You must also configure your web server to respond to each of the hosting client website Internet addresses and direct requests to the Asbru Web Content Management system.

- The simplest way to do this is to configure your web server to respond to any Internet address and direct everything to the folder where your Asbru Web Content Management system is installed.
- Alternatively, you may need/want to configure separate web server instances for each hosting client website. All web server instances should still direct everything to the folder where your Asbru Web Content Management system is installed. Depending on your web server this may be necessary to configure separate log files and restrictions etc. for each hosting client website.
- Finally, you may need/want to configure separate web server instances for each hosting client website with separate “root” folders. This may be necessary to enable hosting clients to install their own additional web applications. Please see 5.4 “Dedicated” Hosting Clients Websites for details.

If you use the first, simple setup where a single web server instance responds to any Internet address no additional web server configuration is needed when a new hosting client website is added to the Asbru Web Content Management system.

Otherwise, a new web server instance must be configured for each new hosting client website added to the Asbru Web Content Management system. You may customise the Asbru Web Content Management system Hosting API to automate this. Please see your operating system and web server documentation and 6 Hosting API for details.



## 5.2 Website Folder

Each hosting client website also needs its own web server folder for storing the website content images and other files.

- The simplest way to do this is to create a sub-folder for each hosting client website under your website “root” folder.
- Alternatively, you may need/want to create a “link” for each hosting client website under your website “root” folder with each “link” pointing to each hosting client website’s real folder.
- Finally, you may need/want to configure separate web server instances for each hosting client website with separate “root” folders. Please see 5.4 “Dedicated” Hosting Clients Websites for details.

If you use the first, simple setup where each hosting client website has its own sub-folder under your website “root” folder no additional server configuration may be needed when a new hosting client website is added to the Asbru Web Content Management system.

Otherwise, a new web server folder must be created and configured for each new hosting client website added to the Asbru Web Content Management system. You may customise the Asbru Web Content Management system Hosting API to automate this. Please see your operating system and web server documentation and 6 Hosting API for details.

## 5.3 Database Instance

Finally, each hosting client website needs its own database instance with a unique identifier/name for accessing it. How these are created and configured depends on which database platform you have selected for your setup.

- The simplest way is to use Microsoft Access database files on a Microsoft Windows server. Microsoft Access databases are simple files, which the Asbru Web Content Management system can copy and configure on its own.
- Alternatively, you may need/want to use one of the other supported database servers and create a separate database instance for each hosting client website. Each database instance should have its own unique identifier/name as well as username and password for accessing it. Please see your database server documentation for details. The Asbru Web Content Management system Hosting Edition includes support for MySQL databases on both Linux/Unix and Microsoft Windows.

## 5.4 “Dedicated” Hosting Clients Websites

The Asbru Web Content Management system Hosting Edition is primarily designed and implemented to enable web hosting service providers to offer easy to use websites with full web content management to clients who create and maintain their website exclusively through the web content management system (and other pre-installed standard web applications) in a controlled environment.

You may need or prefer a setup that enables individual hosting clients to develop and install additional web applications. To support such a setup as described below you may customise



the Asbru Web Content Management system Hosting API. Please see 6 Hosting API for details.

However, instead of using a setup with dedicated hosting client websites for such clients, it may be a better solution to upgrade the clients to their own full Personal Edition or Professional Edition installation of the Asbru Web Content Management system. This is recommended if the hosting clients need full “shell” access to their website folder, or you should ensure that hosting clients do not have access to the Asbru Web Content Management system configuration files (“/webadmin/ini.aspx”, “/webadmin/ini.jsp” and “/webadmin/ini.php”) and program files etc.



## 6 Hosting API

The default implementation of the Hosting API included with the Hosting Edition of the Asbru Web Content Management system is implemented to be ready to use for a server setup with simple virtual hosting client websites using Microsoft Access or MySQL databases. Please see 2 Hosting Clients Configuration for details.

The .NET and JSP and PHP versions of the Hosting API implements automated setup of hosting client websites with simple Microsoft Access database files on a Microsoft Windows server. These versions may be used as they are without any customisation.

On other operating systems than Microsoft Windows the Asbru Web Content Management system does not support simple Microsoft Access database files. Instead, the .NET and JSP and PHP versions of the Hosting API implements automated setup of hosting client websites with MySQL databases on a Linux/Unix server (as well as on a Microsoft Windows server). This version needs simple configuration of the location of MySQL database folders/files and database superadmin username and password) before it can be used. Please see 2 Hosting Clients Configuration for details.

However, the Hosting API may be customised for other server setups as well as additional automation and integration with back-end systems etc.

The Hosting API consists of a single program file: “/webadmin/Hosting\_api.aspx”, “/webadmin/Hosting\_api.php” and “/WEB-INF/classes/HardCore/HostingAPI.java” depending on which version of the Asbru Web Content Management system you are using.

The Hosting API program file contains a number of program functions, which are used by the Asbru Web Content Management Hosting Clients administration section before and after hosting client websites are created, updated and deleted.

### 6.1 hosting\_pre\_create

The “hosting\_pre\_create” function is called when the Add New form/page is saved but before the Asbru Web Content Management system configures the new hosting client website. If an error message is returned from this function the Asbru Web Content Management system will simply display the error message(s) instead of adding the new hosting client website.

As default this function:

- Validates the format of the entered data for the new hosting client website.
- Validates that the entered Internet address is not already configured for a hosting client website.
- Checks if the entered Database and URL Root Path data for the new hosting client website are already used for a hosting client website – if they are the new hosting client website is simply added as an alias for the existing hosting client website instead of creating a new hosting client website.



- Creates the website sub-folder for the new hosting client website.
- Creates “file”, “image” and “upload” sub-folders for the new hosting client website – and copies the files from the existing hosting client website if an existing hosting client website is copied to create the new hosting client website.
- Creates a Microsoft Access or MySQL database for the new hosting client website by copying the original default Asbru Web Content Management system database file or by copying the database file/data from the existing hosting client website if an existing hosting client website is copied to create the new hosting client website.

Please note that only Microsoft Access database files and MySQL databases are created automatically as default. Other databases must be created manually before adding a new hosting client website. However, you may also customise this Hosting API function to automatically create and initialise other databases for your server setup.

## 6.2 hosting\_post\_create

The “hosting\_post\_create” function is called when the Add New form/page is saved and after the Asbru Web Content Management system has configured the new hosting client website. If an error message is returned from this function the Asbru Web Content Management system will display the error message(s) instead of returning to the hosting clients administration index page.

As default this function:

- Validates the connection to the database for the hosting client website.
- Emails a notification with the new hosting client website details to the new hosting client with a copy to the Hosting Edition superadmin administrator as well.

“From” and “Subject” are defined in the Hosting API program file as the variables: “hosting\_api\_email\_sender” and “hosting\_api\_email\_subject”. The default content of the email sent to the new hosting client is the contents of the “/webadmin/hardcore.email” file.

Alternatively, different email messages may be created for different hosting client packages. If a new hosting client website is added as a copy of an existing “PROFESSIONAL.asbruweb.com” hosting client website and an “/webadmin/hardcore.PROFESSIONAL.asbruweb.com.email” file exist, the content of that file will be emailed to the new hosting client instead of the default content.

## 6.3 hosting\_pre\_update

The “hosting\_pre\_update” function is called when the Update form/page is saved but before the Asbru Web Content Management system updates the hosting client website. If an error message is returned from this function the Asbru Web Content Management system will simply display the error message(s) instead of updating the hosting client website.

As default this function:

- Validates the format of the entered data for the hosting client website.



#### 6.4 hosting\_post\_update

The “hosting\_post\_update” function is called when the Add New form/page is saved and after the Asbru Web Content Management system has updated the hosting client website. If an error message is returned from this function the Asbru Web Content Management system will display the error message(s) instead of returning to the hosting clients administration index page.

As default this function:

- Validates the connection to the database for the hosting client website.

#### 6.5 hosting\_pre\_delete

The “hosting\_pre\_delete” function is called when the Delete form/page is saved but before the Asbru Web Content Management system deletes the hosting client website. If an error message is returned from this function the Asbru Web Content Management system will simply display the error message(s) instead of deleting the hosting client website.

As default this function:

- Validates the format of the entered data for the hosting client website.

#### 6.6 hosting\_post\_delete

The “hosting\_post\_delete” function is called when the Delete form/page is saved and after the Asbru Web Content Management system has deleted the hosting client website. If an error message is returned from this function the Asbru Web Content Management system will display the error message(s) instead of returning to the hosting clients administration index page.

As default this function:

- Checks if the deleted Database and URL Root Path data is still used by another hosting client website – if it is the deleted hosting client website was simply an alias for another hosting client website.
- Deletes the Microsoft Access database file or MySQL database for the deleted hosting client website (unless the deleted hosting client website was simply an alias for another hosting client website).
- Deletes the website sub-folder for the deleted hosting client website (unless the deleted hosting client website was simply an alias for another hosting client website).

Please note that only Microsoft Access database files and MySQL databases are deleted automatically as default. Other databases must be deleted manually after deleting a hosting client website. However, you may also customise this Hosting API function to automatically delete other databases for your server setup.