

Saurus CMS Installation Guide

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System requirements

Server Platforms

Saurus CMS is currently available for following server platforms:

- Operating Systems: Linux, Microsoft Windows NT/2000/XP. For testing purposes it runs also on Windows 98.
- Web Server Software: Apache.
- Program language: PHP 4.3.0 until 5.0.4.
- Database: MySQL 3.23.x until 4.1.14.
- Free software Zend Optimizer must be installed in server, this is necessary for decoding PHP scripts. Download suitable version of Zend Optimizer from: <http://www.zend.com/store/products/zend-optimizer.php>
- Hardware platform: i386.

Saurus CMS should be able to run on any web server which is supported by PHP. Saurus CMS is officially tested and supported with Apache running on Linux and Windows. Other platforms might also work but they are currently untested and unsupported.

Note: When using Apache it is not recommended to run PHP as a CGI binary, use the Apache module instead. The Apache module is not only faster, but it also causes less load on the server.

Note: PHP Safe mode is not officially supported.

Other requirements

- GD library (<http://www.php.net/gd>) or Imagemagick software (<http://www.imagemagick.org/>) must be installed to use Gallery module. We suggest using GD library that shippes with PHP starting from version 4.3.
- Apache URL Rewrite Engine module (mod_rewrite) must be installed to use Saurus CMS Alias module. See more in section "Configuring the Alias module".
- PHP zlib extension (configure option --with-zlib) is required if you want to use GZIP compression feature for the webpages.

Used LGPL components

- Smarty template engine is used for creating Saurus API templates. Smarty is licensed under the LGPL (Lesser GPL, <http://www.gnu.org/copyleft/lesser.html>),

The unmodified source is included in the Saurus CMS package. See:

<http://smarty.php.net/>

- Text editor uses FCKeditor that is licensed under the LGPL. The unmodified source is included in the Saurus CMS package. See: <http://www.fckeditor.net/>
- PHP libraries for creating MS Excel files are used, libraries are licensed under the LGPL, the unmodified source is included in the Saurus CMS package.
- ADODB Library that is licensed under the LGPL, the unmodified source is included in the Saurus CMS package. See: <http://adodb.sourceforge.net/>

Supported Web Browsers

- For website visitors: any HTML 4.0-compliant web browser with CSS 2 support (including Macintosh, Unix, and Windows environments).
- For editors and administrators: Internet Explorer 6.0+ and Mozilla Firefox 1.0+ web browsers with JavaScript support on PC, Linux and Mac OS workstations.

Disk space requirements

- Saurus CMS itself takes up approximately 15 MB of disk space. For a full Windows installation i.e. "Saurus CMS, Apache+MySQL+PHP" approximately 115 MB is required.

Licensing

Free edition

Saurus CMS Free users do not need to register the product or obtain a license key. Internet connection to Saurus server is needed during version upgrade, initial installation can be done offline.

Commercial versions

For Saurus CMS SE, Saurus CMS and commercial add-ons and extensions, a license must be obtained for each website installation, for a one-time license fee. Licenses are not limited by time or user volume. Please check with your local distributor for pricing and possible discounts.

Normally, the Saurus CMS installation will automatically ask your permission to download the license from a Saurus server. If there are problems or you are not connected to the Internet during the installation process, you can always finish the installation process and download the license later.

The first time you are asked to download a license, you will also be asked for your License key and website URL, where the license will be used. The license will be created for that URL strictly. Once your license has been approved, you can always download it later as many times as you wish, but URL is fixed from there on. If you mistyped your website URL and downloaded license key or wish to migrate your website to a different URL, please contact your local Saurus CMS distributor.

Installation

Installation of Saurus CMS is simple: using the web-based installer you have to answer few questions and the rest will be handled automatically. No need to edit configuration files or manually set up the database. Follow the instructions below and you will have a working website in minutes.

Linux

Make sure you have PHP, MySQL and Zend Optimizer installed before you continue.

1. Unpack the downloaded Full-Install package to directory where the web server can access them.
2. Execute the following command within this directory:

```
bash ./pre_install.sh
```

This script will unpack the program files, it also gives temporary writing permission for all users for the file config.php: `chmod 666 config.php`.

3. Be sure to allow the use of .htaccess files in your Apache configuration.
4. Open your web browser and go to the URL of the website you just unpacked, e.g.:

<http://www.yoursite.com/web/install.php>

This script will install the database and the config.php file will be adjusted with required database connection variables.

Troubleshooting: If you have trouble with the installation (e.g. if install.php displays a blank page), then run script `check_requirements.php`. This script will check if your server has all the necessary requirements.

5. After successfully finishing installation, execute the following command:

```
bash ./post_install.sh
```

This script will remove the writable attribute for the config.php files and delete file "install.php".

6. Be sure that the following upload directories have write permissions on the web server:

public/ - upload directory, public folder and subfolders are accessible by everyone.

shared/ - upload directory, shared folder and subfolders have limited access depending on given permissions.

classes/smarty/cache/ - Saurus API templates cache

classes/smarty/templates/ - Saurus API templates

classes/smarty/templates_c/ - Saurus API compiled templates code

Windows

In case you don't have any web server installed previously on your computer (for example when you want to try Saurus CMS on your desktop), proceed with the following instructions.

1. Execute the self-extracting installation file:

SaurusCMS.exe

2. When choosing the components to install, choose "Saurus CMS, Apache+MySQL+PHP" package. It will install all necessary components needed to run SaurusCMS and create 2 directories in destination folder:

web/ – your website root directory

data/ – default database data in sql-file

3. The installed website will open in your browser automatically.

Windows with a previously installed web server

In case you already have Apache web server installed, proceed with following instructions. Please make sure you have PHP, MySQL and Zend Optimizer installed before you continue.

1. Execute the self-extracting installation file:

SaurusCMS.exe

2. When choosing components to install, choose "Only Saurus CMS" package. Installation will create 2 directories in destination folder:

web/ – your website root directory

data/ – default database data in sql-file

3. Be sure that you allow to use .htaccess files in your Apache configuration.
4. Open your browser and go to the URL where the website you unpacked is, e.g:

<http://www.yoursite.com/web/install.php>

Troubleshooting: If you have trouble with the installation (e.g. if install.php displays a blank page), run script check_requirements.php. This script will check if your server has all the necessary requirements.

5. Follow instructions on the page. The database will be installed and the config.php will be adjusted with the required database server variables.
6. Be sure to delete the file "**install.php**" from your website root directory.
7. Be sure that the following upload directories have write permissions for the web server:
 - public/** - upload directory, public folder and subfolders are accessible to everyone.
 - shared/** - upload directory, shared folder and subfolders have limited access depending on given permissions.
 - classes/smarty/cache** - Saurus API templates cache
 - classes/smarty/templates** - Saurus API templates
 - classes/smarty/templates_c** - Saurus API compiled templates code

Installing using only FTP access

Having SSH access on the server is the easiest way to install Saurus CMS, but if you have only FTP access, follow the instructions below:

1. On your desktop computer: unzip the downloaded Full-Install package file. The directory "data/" and some files are created.
2. On your desktop computer the file "**web.zip**" (for Windows) and "**web.tgz**" (for Linux) will be unpacked, now unzip one of them – depending on your. The directory "web/" should be created.
3. Use binary mode for file transfer and upload following directories to your website server using FTP:
 - data/

- web/
4. Using FTP program change permission rights temporarily to 666 (read & write permission to everybody) for these files:
 - config.php
 - config-old.php
 5. Run the web-based installation script
<http://www.yoursite.com/web/install.php>.

Troubleshooting: If you have trouble with the installation (e.g. if install.php displays a blank page), then run the script check_requirements.php. This script will check if your server has all the necessary requirements.

6. Delete install.php from your website directory.
7. Using FTP program change permission rights back to normal 644 (read & write to owner, read to everybody) for these files:
 - config.php
 - config-old.php
8. Your website is now installed and accessible on URL
<http://www.yoursite.com/web/>.
If you wish to make your website accessible from URL "http://www.yoursite.com" right away, just move content of web/ one directory level up. Delete data/ directory and delete an empty web/ directory.
8. Be sure that the following upload directories have write permissions by the web server:
 - public/** - upload directory, public folder and subfolders are accessible to everyone.
 - shared/** - upload directory, shared folder and subfolders have limited access depending on given permissions.
 - classes/smarty/cache/** - Saurus API templates cache
 - classes/smarty/templates/** - Saurus API templates
 - classes/smarty/templates_c/** - Saurus API compiled templates code

Updating Saurus CMS

Linux

1. Unpack saurus_cms_updX.X.X.tgz to your website directory:

```
tar -xzf saurus_cms_updX.X.X.tgz -C /path/to/your/website/root/dir/
```

2. Open your browser and go to the URL of your website, e.g.:
<http://www.yoursite.com/install.php>.
3. Follow the instructions on screen.
4. Delete the file "install.php" from your website root directory after successful installation.

Windows

1. Unpack saurus_cms_updX.X.X.zip to your website directory.
2. Open your browser and go to the URL of your website, e.g.:
<http://www.yoursite.com/install.php>.
3. Follow the instructions on screen.
4. Delete the file "install.php" from your website root directory after successful installation.

Configuring

Configuring Alias module

1. Install Apache URL Rewrite Engine module (mod_rewrite), see: http://httpd.apache.org/docs/mod/mod_rewrite.html.
2. Open the Apache configuration file and add following lines to your virtual host configuration:

```
RewriteEngine On
RewriteCond %{DOCUMENT_ROOT}%{REQUEST_FILENAME} !-d
RewriteCond %{DOCUMENT_ROOT}%{REQUEST_FILENAME} !-f
RewriteCond %{REQUEST_FILENAME} !^/admin
RewriteCond %{REQUEST_FILENAME} !^/classes
RewriteCond %{REQUEST_FILENAME} !^/editor
RewriteCond %{REQUEST_FILENAME} !^/extensions
RewriteCond %{REQUEST_FILENAME} !^/js
RewriteCond %{REQUEST_FILENAME} !^/public
RewriteCond %{REQUEST_FILENAME} !^/px
RewriteCond %{REQUEST_FILENAME} !^/px_custom
RewriteCond %{REQUEST_FILENAME} !^/shared
RewriteCond %{REQUEST_FILENAME} !^/styles
RewriteCond %{REQUEST_FILENAME} !^/map
RewriteRule ^/(.*)$ /map?mod_rewrite=/&cmd=$1 [L,PT]

# RewriteLogLevel 0 will disable logging, we suggest set it to 2 for debugging problems
RewriteLogLevel 0

# set correct log file path here, we suggest set it only when debugging problems:
# RewriteLog /var/log/httpd/rewrite.log
```

NB! In case you have any extra directories or files under your website root directory, which are not part of the CMS installation, you should exclude them in the alias configuration. Add following lines for each directory or file:

```
RewriteCond %{REQUEST_FILENAME} !^/notcmsdir
```

We suggest to keep the logging level at "0" on the production/live sites, because of remarkable space usage. Set RewriteLogLevel to "2" when developing the new site and debugging aliases.

Note: If your website is located in a sub-directory, eg <http://www.yoursite.com/web/> then the sub-directory string must be added to rewrite conditions:

```
RewriteEngine On

RewriteCond %{REQUEST_FILENAME}    ^/web
RewriteCond %{DOCUMENT_ROOT}%{REQUEST_FILENAME}    !-d
RewriteCond %{DOCUMENT_ROOT}%{REQUEST_FILENAME}    !-f
RewriteCond %{REQUEST_FILENAME}    !^/web/admin
RewriteCond %{REQUEST_FILENAME}    !^/web/classes
RewriteCond %{REQUEST_FILENAME}    !^/web/editor
RewriteCond %{REQUEST_FILENAME}    !^/web/extensions
RewriteCond %{REQUEST_FILENAME}    !^/web/js
RewriteCond %{REQUEST_FILENAME}    !^/web/public
RewriteCond %{REQUEST_FILENAME}    !^/web/px
RewriteCond %{REQUEST_FILENAME}    !^/web/px_custom
RewriteCond %{REQUEST_FILENAME}    !^/web/shared
RewriteCond %{REQUEST_FILENAME}    !^/web/styles
RewriteCond %{REQUEST_FILENAME}    !^/web/map
RewriteRule ^/(.*)$    /web/map?mod_rewrite=/web&cmd=$1 [L,PT]

# RewriteLogLevel 0 will disable logging, we suggest set it to 2 for debugging problems
RewriteLogLevel 0

# set correct log file path here, we suggest set it only when debugging problems:
# RewriteLog /var/log/httpd/rewrite.log
```

PHP settings

Saurus CMS uses default PHP settings, with the exception of "magic_quotes_gpc" (must be off).

Required values for PHP settings are:

```
allow_url_fopen – On
file_uploads – On
magic_quotes_gpc – Off
register_globals – Off
safe_mode – Off
short_open_tag - On
```

Recommended values for PHP settings are:

```
post_max_size – 16M
upload_max_filesize – 16M
memory_limit – 16M (if memory limit is enabled in PHP)
```

Frequently Asked Questions

1. Why I only see strange symbols when I open file install.php during installation process?

You must install Zend Optimizer as part of your PHP setup. The Zend Optimizer is available for free at the Zend Store, <http://www.zend.com/store/>.

2. Why do I get an error message if I try to add pictures or files into article in the content editor environment?

Make sure that the directories "public/" and "shared/" in your website root has write permissions for everybody or for the web server.

3. How can I change the connection details for connecting my website to the database?

Normally, this data is asked during installation process, but if you want to change the data later, you must open the file "config.php" in your website root directory and make the necessary replacements.

4. Why do I see a blank page when I open the file install.php during the installation process?

Probably Zend Optimizer has been incorrectly installed. Check the error logs and try to install Zend Optimizer again.

5. Why do I see a blank page when I open my site after a successful installation?

PHP errors may be causing this, to view the error messages add "&error_reporting=7" to the end of your URL.

6. When I open an article in the editor-window, why I see the word "undefined" instead of the real contents of article?

It is caused by PHP setting "magic_quotes_gpc" is set to "on", it should be "off" for proper operation. (This setting is always changed to the correct value during the Saurus CMS installation process)

Be sure that .htaccess files are allowed on your site and that the file ".htaccess" on your website root directory has following line:

```
php_flag magic_quotes_gpc off
```

7. Why can't I upload big files into file manager during content creation?

This is caused by the PHP settings "upload_max_filesize" and "post_max_size", which defaults to "2M" (2MB). You have to change these values to increase the size of the files you are able to upload.

Be sure that .htaccess files are allowed on your site and add the following line to the file ".htaccess" on your website root directory:

```
php_value upload_max_filesize 10M
```

```
php_value post_max_size 10M (NB! Prior to version PHP 4.2.x, this parameter could only be changed in "php.ini")
```

If memory limit is enabled by your PHP configure script, then the memory_limit also affects file uploading. Starting from Saurus CMS ver 3.1.23 you can change the memory limit on the admin-page System | Configuration.

8. During the installation process (install.php) i am sent abruptly back to Step 1 when i click the "Next" button at Step3

Please make sure that the option "file_uploads" in the php.ini file is set to "On". In some versions of PHP the POST variables would get lost on multipart forms when this option has a blank or Off value.

9. Installation script (install.php) hangs at Step4

Please make sure that the option "short_open_tag" in the php.ini file is set to "On".

10. Setting the database port to anything else than 3306 doesn't work

First be sure you have Saurus CMS version 3.1.29 or later. If it doesn't help, then if you are using an mysql server on a different port e.g. 3307 instead of 3306, using "localhost" as "dbhost" parameter will override the "dbport" value and use the default port 3306. Specify the computer host or domain name instead. This is a bug in the mysql client.

11. I get "500 Internal Server Error" when trying to run installation script and "Invalid command php_flag" error in the server log.

If you are having Red Hat Linux 8.0 default installation then it comes with faulty PHP version. More details: http://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=78586. If this is not the reason, check if command "php_flag" is allowed for your website. Some hosting companies don't allow this by default.

12. I get "Unable to connect Saurus License Server!" when entering license number.

Please make sure that the option "allow_url_fopen" in the php.ini file is set to "On".

13. How to make a private key to use for the e-commerce module?

The private key is necessary for using internet bank payment ability in your e-shop. In Linux type server follow this steps (Open-SSL must be installed in server):

1) mkdir private

2) openssl req -new -x509 -keyout private/cakey.pem -out cacert.pem -days 365

You will be asked for your 'Country Name' (e.g. 'EE'), 'State or Province Name' (e.g. 'Harjumaa'), 'Locality Name' (e.g. Tallinn), 'Organization Name' (e.g. Firma OÜ), 'Organizational Unit Name' (leave empty), 'Common Name' (e.g. John Doe), 'Email

Address' (e.g. john@doe.ee) and a password. (NB! Remember this password). Now you have made an encrypted private key. This needs to be converted to 'raw' format.

3) cp private/cakey.pem private/cakey.pem.enc

4) openssl rsa -in private/cakey.pem.enc -out private/cakey.pem

You have to type your password to make the key. 'private/cakey.pem' is now the private key to use for the E-commerce module.

NB! Remember to keep your private key secret! (Don't show it to anyone). Never hold the private key in some folder under the webserver document root!

14. When submitting a feedback form I get the message "Error! Receiver e-mail in mail form has been changed by unautohorized persons."

This message is displayed when a non authorized person tries to send an email through the form submit. This is a security feature for preventing sending any malicious e-mails using Saurus CMS. Because of that you shouldn't change any e-mail addresses in the HTML-view, but with the WYSIWYG editor. To fix the problem open article containing the feedback form, click on the e-mail field, click Properties button and change the field value.

15. Although I have defined the right character set, the text on the site displays the wrong symbols.

This might occur when "AddDefaultCharset" (e.g. AddDefaultCharset ISO-8859-1) is defined in the Apache config file. In this case Apache will override any <META> tags you have defined. To solve this problem comment the line with "AddDefaultCharset".

16. Why doesn't my alias work?

An alias can not contain dots (.), question marks (?) and symbols found in urls (&,#,etc..). You should only use alphanumeric characters, underscore (_) or slashes (/) as a alias name.

17. Backslashes "\" appear in articles after saving

Please refer to the question #7.

18. The download dialog opens several times after one another

When pressing "save" in the file dialog, it opens several times again. There is a bug in Microsoft Internet Explorer 4.01 that prevents this from working (handling Content-Disposition in header). There is no workaround. There is also a bug in Microsoft Internet Explorer 5.5 that interferes with this, which can be resolved by upgrading to Service Pack 2 or later.

19. I get "ERROR! This license key is already used by another website!" when accessing my website administration area

In case you have entered and verified the correct license key but website still keeps asking for it, then you should check your virtual host parameters in the Apache's configuration file:

1. "ServerName" must be correct - same value you see in your browser address bar

2. "UseCanonicalName Off/On" - this determines how Apache constructs self-referencing URLs and the SERVER_NAME and SERVER_PORT variables. When set "Off", Apache will use the Hostname and Port supplied by the client. When set "On", Apache will use the value of the ServerName directive. This setting may cause automatic URL replacements by Apache, eg user enters URL "www.mysite.com " but it is changed "mysite.com" automatically.

Since your license key is assigned to the one URL only, you get an error message "ERROR! This license key is already used by another website!" every time accessing website administration area from different URL.

Note: Saurus CMS license check is based on the Apache's environmental variable "SERVER_NAME", which is visible in the php info page.

More information

Saurused OÜ

Official website

<http://www.saurus.info>

Product support pages

<http://www.saurus.info/support>

User forum

<http://forum.saurus.info>