

# Saurus CMS Installation Guide

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# System requirements

The easiest way to check all criteria at once is to [download Check Requirements script](#) and place it to your website.

## 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 5.0.0 until 5.2.11.
- Database: MySQL 4.x until 5.1.35.
- Free software Zend Optimizer must be installed in server, this is necessary for decoding PHP scripts. Download Zend Optimizer from: <http://www.zend.com/en/products/guard/downloads>. At least version 3.3.9 is required when the PHP version is 5.2.10+), minimum version of ZO is 3.3.0.
- 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>) must be installed to use Gallery module.
- 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.
- PHP PCRE library (configure option --with-pcre-regex), <http://www.php.net/pcre>
- PHP mbstring library, Multibyte String Functions <http://www.php.net/mbstring>

## Used LGPL and other 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.
- jQuery JavaScript framework is used under the MIT license (<http://www.opensource.org/licenses/mit-license.php>). See: <http://jquery.com/>.
- Prototype JavaScript framework is used under the MIT license (<http://www.opensource.org/licenses/mit-license.php>). See: <http://www.prototypejs.org/>.
- Thickbox JavaScript component is used for admin pages under the MIT license (<http://www.opensource.org/licenses/mit-license.php>). See: <http://jquery.com/demo/thickbox/>.
- jQuery UI Date Picker component is used for Calendar displaying under the MIT license (<http://www.opensource.org/licenses/mit-license.php>). See: <http://kelvinluck.com/assets/jquery/datePicker/v2/demo/>.
- PclZip library is used for handling ZIP archives licensed under the LGPL (Lesser GPL, <http://www.gnu.org/copyleft/lesser.html>).
- jQuery lightBox plugin is used for Saurus 4 default gallery templates, licensed under CC Attribution-No Derivative Works 2.5 ([http://creativecommons.org/licenses/by-nd/2.5/br/deed.en\\_US](http://creativecommons.org/licenses/by-nd/2.5/br/deed.en_US)). See: <http://leandrovieira.com/projects/jquery/lightbox/>.
- JQuery ScrollTo plugin is used by the File Manager under the MIT license (<http://www.opensource.org/licenses/mit-license.php>). See: <http://flesler.blogspot.com/2007/10/jqueryscrollto.html>
- SWFUpload is used for multiple file uploads under the MIT license (<http://www.opensource.org/licenses/mit-license.php>). See: <http://swfupload.org/> .
- Services\_JSON library is used for encoding JSON strings, licensed under BSD License (<http://www.opensource.org/licenses/bsd-license.php>). See: <http://pear.php.net/pepr/pepr-proposal-show.php?id=198> .

## 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.

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

## Linux installation (using shell)

1. Unpack the downloaded Full Installation package to the folder where web server can access them. Eg:

```
mkdir saurus  
tar -xvzf SaurusCMS-4.6.0.tgz -C saurus/
```

2. Execute the following shell commands within unpacked folder:

```
cd install/  
bash ./pre_install.sh
```

Script pre\_install.sh will temporarily change file permissions for config.php.

3. Open the web browser and go to the URL of the website, e.g.:

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

Installation script will install the database and the config.php file will be adjusted with the required database access variables.

4. After successfully finishing install.php steps, execute the following shell command within install/ folder:

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

Script post\_install.sh will remove temporary writing permissions for the config.php files and delete installation file install.php and install/ folder.

5. Be sure that the following upload directories have write permissions for the web server:

**public/** - files used for content management  
**shared/** - files used for content management  
**extensions/** - Saurus extensions  
**classes/smarty/cache/** - Saurus API templates cache  
**classes/smarty/templates/** - Saurus API templates

**classes/smarty/templates\_c/** - Saurus API compiled templates code

## Installation using FTP

Having shell 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 Installation package file. The website folder will be created.
2. Use binary mode (not ascii mode!) for file transfer and upload created folder to your website server using FTP.
3. Using FTP program set temporary read & write permission for everybody (666) for following files:
  - config.php
  - config-old.php
4. Run the web-based installation script <http://www.yoursite.com/install.php>.

In case of web hosting you probably have received your MySQL account information from your hosting company. During the installation you will be asked for database's name, username and password.

5. Delete install.php file and install/ folder from your website folder.
6. Using FTP program change file permissions back to normal: read & write to owner, read to everybody (644) for files:
  - config.php
  - config-old.php
7. Your website is now installed and accessible on URL <http://www.yoursite.com>

8. Be sure that the following upload directories have write permissions for the web server:
  - public/** - files used for content management
  - shared/** - files used for content management
  - extensions/** - Saurus extensions
  - classes/smarty/cache/** - Saurus API templates cache
  - classes/smarty/templates/** - Saurus API templates
  - classes/smarty/templates\_c/** - Saurus API compiled templates code

## Windows installation

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-4.6.0.exe

2. When choosing the components to install, choose "Saurus CMS, Apache+MySQL+PHP" package. It will install all the necessary components needed to run Saurus CMS and create website folder.
3. The installed website will open in your browser automatically. Default administrator account is: **admin/saurus**.

## Windows installation 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 according to system requirements before you continue.

1. Execute the self-extracting installation file:

SaurusCMS-4.6.0.exe

2. When choosing components to install, choose "Only Saurus CMS" package. Installation will create a new website folder.
3. Open your browser and go to the URL where the website you unpacked is, e.g:

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

4. Follow instructions on the page. The database will be installed and the config.php will be adjusted with the required database server variables.

5. Be sure to delete the file "**install.php**" and **install/** folder from your website root directory.
6. Be sure that the following upload directories have write permissions for the web server:
  - public/** - files used for content management
  - shared/** - files used for content management
  - extensions/** - Saurus extensions
  - classes/smarty/cache/** - Saurus API templates cache
  - classes/smarty/templates/** - Saurus API templates
  - classes/smarty/templates\_c/** - Saurus API compiled templates code

## Required PHP settings

Saurus CMS uses default PHP settings.

Required values for PHP settings are:

```
file_uploads – On
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)
```

## Required .htaccess directives

Usage of .htaccess files may be prohibited by webserver configuration or by service provider's security policy. Depending on server environment rules you may have limited access to use some commands in the .htaccess files.

Saurus CMS uses .htaccess directives for following purposes:

- securing upload directories, code libraries and templates

In case you are not allowed to use these directives by yourself, you should ask your system administrator or service provider to add them to your virtual host configuration.

Default .htaccess files in Full Installation package:

**/ (website root)**

```
DirectoryIndex index.php index.html
```

**public/**

```
<Files *>  
SetHandler default-handler  
</Files>
```

**shared/  
classes/  
classes/smarty/templates/**

```
deny from all
```

## Installation troubleshooting

- If you have trouble with the installation then run script **check\_requirements.php** in the install/folder. This script will check if your server meets the minimum requirements.
- **Technical FAQ** can be found on page <http://www.saurus.info/technical-faq>

# Version upgrade

## Version upgrade in Linux (using shell)

1. Download version upgrade package **SaurusCMSupdateX.X.X.tgz** and unpack it to the temporary folder (outside of the website folder):

```
tar -xzvf SaurusCMSupdateX.X.X.tgz
```

Following files will be unpacked:

saurus\_cms\_updX.X.X.tgz

README

CHANGELOG

2. **Unpack** file saurus\_cms\_updX.X.X.tgz to your website folder:  

```
tar -xpvzf saurus_cms_updX.X.X.tgz -C /path/to/your/website/root/
```
3. Open browser and run web-based upgrade script  
**<http://www.yoursite.com/install.php>**. Follow instructions.
4. **Delete** file **install.php** from your website folder after successful upgrade.
5. **Delete** version upgrade **package** from the temporary folder.

## Version upgrade using FTP

1. On your desktop computer unzip the downloaded **SaurusCMSupdateX.X.X.zip** package.

Following files will be unpacked:

saurus\_cms\_updX.X.X.zip

README

CHANGELOG

2. **Unpack** file saurus\_cms\_updX.X.X.zip
3. Use binary mode (not ascii mode!) for file transfer and upload created files (from saurus\_cms\_updX.X.X.zip) to your website server using FTP.
4. Open browser and run web-based upgrade script  
**<http://www.yoursite.com/install.php>**. Follow instructions.

5. **Delete** file **install.php** from your website folder after successful upgrade.
6. **Delete** version upgrade **package** from your desktop computer.

## Version upgrade in Windows

1. Download update package **SaurusCMSupdateX.X.X.zip** and unzip it to the temporary folder (outside of the website folder).

Following files will be unpacked:

saurus\_cms\_updX.X.X.zip  
README  
CHANGELOG

2. Unpack file saurus\_cms\_updX.X.X.zip to your website folder.
3. Open browser and run web-based upgrade script  
**http://www.yoursite.com/install.php**. Follow instructions.
4. **Delete** file **install.php** from your website folder after successful upgrade.
5. **Delete** version upgrade **package** from the temporary folder.

# Configuring

## Configuring Alias module

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

```
Options +SymLinksIfOwnermatch

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.php?mod_rewrite=/&cmd=$1 [L,PT,QSA]

# 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!** This block must be placed outside of <Directory> directives block.

**NB!** In case you have any additional 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.

## Using subfolder

If your website is located in a subfolder, eg <http://www.yoursite.com/web/> then the subfolder name must be added to rewrite conditions:

```
Options +SymLinksIfOwnermatch

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.php?mod_rewrite=/web&cmd=$1 [L,PT,QSA]

# 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
```

# More information

## Saurused OÜ

Official website

<http://www.saurus.info>

Product support pages

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

User forum

<http://forum.saurus.info>