



# **ARTIO JoomSEF Documentation**

Michal Unzeitig  
David Jozefov

---

# **ARTIO JoomSEF Documentation**

ARTIO

Publication date: 25.7.2013

Version: 2.0.0

## **Abstract**

This document described ARTIO JoomSEF component for Joomla, it functionality, installation procedure and usage.

---

# Table of Contents

1. JoomSEF Introduction .....	1
1.1. What is JoomSEF .....	1
1.2. Software Requirements .....	1
1.3. Software License .....	1
1.4. Main Features .....	2
2. Installing JoomSEF .....	4
2.1. Obtaining JoomSEF .....	4
2.2. Starting Installation .....	4
2.3. Installation .....	4
2.4. Uninstallation .....	11
3. How It Works .....	12
3.1. URL Rewriting .....	12
3.2. Support by components .....	12
4. Control Panel .....	14
4.1. Action buttons tabs .....	14
4.2. Informative panels .....	18
5. Configuring JoomSEF .....	21
5.1. Beginner and Professional mode .....	21
5.2. Basic Configuration Options .....	21
5.3. Advanced Configuration Options .....	23
5.4. Cache Configuration Options .....	27
5.5. Title and Meta Tags Configuration Options .....	28
5.6. SEO Configuration Options .....	29
5.7. SiteMap Configuration Options .....	30
5.8. Language related Configuration Options .....	31
5.9. Google Analytics Options .....	34
5.10. Subdomains Configuration .....	34
5.11. 404 Page Options .....	35
5.12. Registration Options .....	36
6. Working with URLs .....	37
6.1. URLs Management .....	37
6.2. URLs Meta Tags .....	41
6.3. URLs Cache .....	43
6.4. Purging, Deleting and Updating URLs .....	43
6.5. Errors Log .....	44
7. JoomSEF Extensions .....	46
7.1. Extensions Management Page .....	46
7.2. Extension Installation and Uninstallation .....	48
7.3. Extension Parameters .....	48
8. 301 Redirects .....	57
8.1. Internal 301 Redirects .....	57
8.2. 301 Redirects using .htaccess .....	58
8.3. SEF URLs Aliases .....	58
9. SiteMap .....	59
9.1. SiteMap Manager .....	59
10. Extra features .....	61
10.1. Edit .htaccess file .....	61
10.2. Internal links .....	62
10.3. Statistics .....	65

10.4. Website Crawler .....	66
10.5. Cron Tasks .....	68
11. Upgrades .....	71
11.1. Upgrading JoomSEF .....	71
11.2. Upgrading JoomSEF Extensions .....	73
12. Usage Tips .....	74
12.1. Using JoomSEF on multilanguage website .....	74
13. Troubleshooting .....	76
A. Appendix A. Transliteration of Cyrillic alphabet .....	77

# Chapter 1. JoomSEF Introduction

***Introduction of ARTIO JoomSEF component functionality, compatibility and licensing.***

## 1.1. What is JoomSEF

**ARTIO JoomSEF** is a **Joomla!** component that generates and allows creation of *search engine friendly (SEF)* URLs, manages and generates *HTTP document meta-data*, such as description, keywords, title; returns proper 404 status code for missing content, provides logging of 404 errors, helps to manage 301 redirects, etc.

To provide maximum functionality, JoomSEF uses plug-in system, that allows SEO support for many popular Joomla! components. The pieces of plug-in code that provides the support for specific 3rd party component is called **JoomSEF extension**. Some of these extensions are available for free download, some are available under commercial licence. If you are missing a support for your favourite component, ARTIO may develop it on request.

This document describes how to install and setup ARTIO JoomSEF Joomla! component. You can view this documentation again by selecting the "ARTIO JoomSEF Documentation" button from the ARTIO JoomSEF Control Panel.

## 1.2. Software Requirements

JoomSEF is a component for Joomla! CMS, therefore it requires Joomla! to run. It is available in two editions:

1. JoomSEF 3.x is compatible with Joomla 1.5
2. JoomSEF 4.x is compatible with Joomla 1.6, 1.7 and 2.5

In both cases, JoomSEF is compatible with web servers that support URL rewrite functionality.

- Apache with mod\_rewrite module installed and activated
- IIS 6 with ISAPI rewrite module installed (we recommend using Helicon's ISAPI Rewrite v3), or IIS 7 (includes own URL Rewriting, no need to install any modules)
- other webservers with URL rewriting capabilities

There are also some other requirements that need to be met:

- PHP 5.2.x
- JSON extension - since PHP 5.2.0 it is enabled by default
- cURL or OpenSSL - needed for connecting to Google Analytics

## 1.3. Software License

The most actual version of the ARTIO JoomSEF licensing conditions can be found at ARTIO website.

By installing and using this software, you agree to bind to the mentioned license conditions.

## 1.4. Main Features

### 1.4.1. URL Rewriting

JoomSEF's main functionality is to rewrite Joomla! standard URLs in a form of `domain.tld/index.php?option=com_content&view=article&id=2&Itemid=5` to the more human readable and search engine understandable form of `domain.tld/article-category/article-title`. You can easily manage these URLs and make them look anything you like.

### 1.4.2. Meta Tags management

You can very easily set description, keywords and other meta tags for each URL separately, so you have maximum control of your meta tags. JoomSEF can also generate the meta tags for the most favourite components automatically for you.

### 1.4.3. Multilanguage support

JoomSEF 3 supports JoomFish (provides multilingual content) from its very first versions and since then it has many options to create multilingual SEF URLs.

JoomSEF 4 supports Joomla's native multilanguage management model or the FaLang component for multilingual content.

### 1.4.4. 301 Redirects

If you ever want to change your URLs that are already well indexed by search engines, or when you migrate website to Joomla, you will need to set the 301 redirects from the old URLs to the new ones, so the old URLs remain functional without a penalization from search engines. Using JoomSEF you have three options to do this:

1. The 301 Redirects feature - you can manually create individual redirects one by one; JoomSEF also creates these redirects automatically when you manually change some SEF URL, so the old one will still work
2. The URL Aliases feature - for each SEF URL you can set list of aliases which will be redirected to it
3. The .htaccess redirects feature - JoomSEF allows you to easily add 301 redirects directly to your .htaccess file without a need of fully understanding its syntax

### 1.4.5. SiteMap management

The XML Sitemap file is used to tell the search engines which pages on your web site you want to be indexed, what priority each of your pages has, how often the content of the pages changes and when was the page changed the last time, so search engines can optimize their indexing strategy based on this information. Using JoomSEF you can easily control all of this information without a need to write a single XML line.

### 1.4.6. Internal links

This feature allows you to create a set of words with assigned URLs. JoomSEF then automatically hyperlinks any appearance of these words in your pages content to their corresponding assigned URLs.

### **1.4.7. Automatic upgrades and extensions installation**

Keeping your JoomSEF and its extensions up-to-date has never been simpler. On one page you can see what versions you have currently installed and what are the newest versions and you can automatically upgrade your JoomSEF or any of its installed extension with a single click. Moreover you can see a list of your components without a JoomSEF extension installed and if the extension is available on our server, you can get it again with a single click - the free extensions are installed right away and paid versions will redirect you to our e-shop.

# Chapter 2. Installing JoomSEF

## 2.1. Obtaining JoomSEF

You can obtain JoomSEF by downloading it from ARTIO webpage. The method of obtaining it may differ on whether you want to use free or paid edition.

Free edition of JoomSEF can be downloaded directly in Downloads section of the ARTIO website.

To download a paid version, you need a *Download ID* that you will receive by email when your payment for the component has been confirmed. Then you can download the component by clicking the link in the same email or by entering the Download ID at the Download Area of the ARTIO webshop.

JoomSEF is distributed as installable Joomla! ZIP package.

## 2.2. Starting Installation

Checklist before install:

1. make sure the rewrite module is installed and available at your webserver
2. check the write permissions on Joomla directories, see *Help* → *System Info* → *Directory permissions*
3. also check that directory */libraries/joomla/installer/adapters* is writeable

To start installation:

1. log-in to your Joomla! backend with Super Administrator privileges
2. go to *Extensions* → *Install/Uninstall*
3. under tab *Install*, in *Upload package file* select the distribution ZIP package and click *Upload File & Install*
4. follow the installer instructions and check for any error

## 2.3. Installation

JoomSEF installation is fully automated in most cases. It will install:

1. the main JoomSEF component (in *components/com\_sef* and *administrator/components/com\_sef*)
2. JoomSEF system plugin (in *plugins/system*)
3. language files (in *administrator/languages*)
4. installer adapter that will enable installing JoomSEF extensions via standard Joomla installer (in *libraries/joomla/installer/adapters*)
5. database tables (*#\_\_sefaliases*, *#\_\_sefexts*, *#\_\_sefexttexts*, *#\_\_seflog*, *#\_\_sefmoved*, *#\_\_sefurls*, *#\_\_sefurlword\_xref*, *#\_\_sefwords*, *#\_\_sef\_statistics*, *#\_\_sef\_subdomains*)



Except copying component files, JoomSEF will also check for .htaccess file in the root of your Joomla site or create it if needed. (this only applies to Apache web servers) It will also attempt to determine your site base URL and based on its value set the RewriteBase value in the .htaccess file automatically.

If the installer fails to detect the Joomla! site base URL correctly or the .htaccess file is not writeable or cannot be created, you may need to create/adjust the file after the component is installed. If something went wrong during installation, you will mostly notice that by seeing 500 Internal server error on your front page, or by getting 404 Page not found error after clicking any link on the homepage.

## 2.3.1. URL Rewriting

The process of URL Rewriting is crucial for JoomSEF to run. Depending on the web server you are running, read one of the following sections.

### 2.3.1.1. Apache Server

On the Apache server it is important that mod\_rewrite is installed and activated and that the usage of .htaccess file to override some server's configuration is allowed (please contact your web host if you're not sure if these are available on your server).

The .htaccess file includes rules that are needed for Joomla to "understand" and handle the SEF URLs - JoomSEF cannot work without it (please note that the directives included in .htaccess file can also be part of the web server global configuration).

Except set of *RewriteCond* and *RewriteRule* directives, that make sure the processing of SEF URLs is handed to Joomla!, it includes following directives:

**Table 2.1. .htaccess directives**

<b>RewriteEngine on</b>	Activates the URL rewrite feature of the web server, it needs to be activated.
<b>RewriteBase value</b>	<p>Identifies the site base URL relatively to domain root. This means that if your site is placed directly into the domain root, the value shall be just /. If so, in some cases, the whole directive can be left out completely (however, this does not work with every server setup).</p> <p>If the site base is not same as domain root, but e.g. <i>http://www.mysite.com/subfolder</i>, then the value need to equal the path part of the URL, i.e. <i>/subfolder</i>, in the given example.</p> <p>Wrong setting of the value will lead to situation, when click to any link in SEF format will go to <i>404 - Page not Found</i> error message. So if this is your case, make sure the value is really correct.</p>
<b>Option FollowSymLinks</b>	This directive is important only in cases, when your site uses symbolic links to point to specific content (available only on Linux/Unix systems), so in most cases, it is not needed. On the other hand, usage of the <i>Option</i> directive in .htaccess file <b>is often prohibited</b> by global server config. In

such case, the presence of the directive will lead to *500 - Internal Server Error* message. (in so, try to comment this line out)

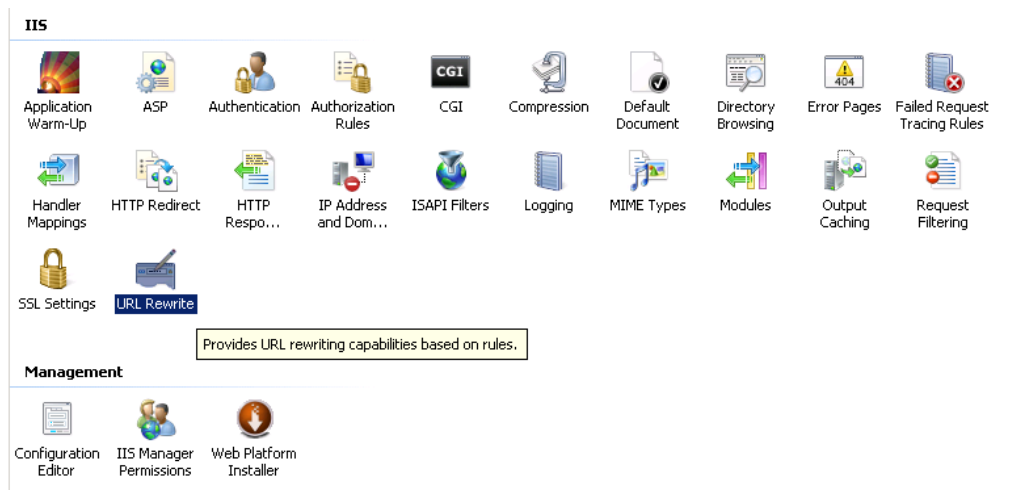
Editing .htaccess file is possible through JoomSEF editor (if writeable for Joomla) in paid version of JoomSEF, using FTP client or using Joomla component that allows editing files, such as eXplorer. When using FTP client, make sure that showing of hidden files is on, as files starting with "." are considered hidden at Unix/Linux systems.

### 2.3.1.2. IIS 7 Server

The IIS server version 7 includes its own URL Rewrite module, so there's no need to install anything else. To configure the IIS 7 server properly, please follow these steps:

1. In your IIS Manager select your web site and open the URL Rewrite.

**Figure 2.1. URL Rewrite in IIS 7**



2. Create the rule called Common Exploit Blocking and set the following options (as shown in the figure):

Requested URL	Matches the pattern
Using	Regular Expressions
Pattern	<code>^(.*)*\$</code>
Logical Grouping	Match Any
Conditions	Create the following conditions:

**Table 2.2. Common Exploit Blocking Conditions**

Input	Type	Pattern
{QUERY_STRING}	Matches the pattern	<code>mosConfig_[a-zA-Z_]{1,21}(= \%3D)</code>

Input	Type	Pattern
{QUERY_STRING}	Matches the pattern	base64_encode.* \ (.*\)
{QUERY_STRING}	Matches the pattern	(\&lt;  %3C).*script.*(\>  %3E)
{QUERY_STRING}	Matches the pattern	GLOBALS(= \[ \ %[0-9A-Z] {0,2})
{QUERY_STRING}	Matches the pattern	_REQUEST(= \[ \ \%[0-9A-Z] {0,2})

Action Type                      Redirect

Redirect URL                      index.php

Append query string              (unchecked)

Redirect Type                      See Other (303)

**Figure 2.2. Common Exploit Blocking**

### Edit Rule

**Name:**  
Common Exploit Blocking

**Match URL**

**Requested URL:** Matches the pattern **Using:** Regular Expressions

**Pattern:** ^(.\*)\$ [Test pattern...](#)

Ignore Case

**Conditions**

**Logical Grouping:** Match Any

Input	Type	Pattern	Add...
{QUERY_STRING}	Matches the pattern	mosConfig_[a-zA-Z]{1,21}(=	Edit...
{QUERY_STRING}	Matches the pattern	base64_encode.*(.*?)	Remove
{QUERY_STRING}	Matches the pattern	(\&lt; %3C).*script.*(\> %3E	Move Up
{QUERY_STRING}	Matches the pattern	GLOBALS(= [\ }%[0-9A-Z]{0,2	Move Down
{QUERY_STRING}	Matches the pattern	_REQUEST(= [\ }%[0-9A-Z]{0	

**Action**

**Action Type:** Redirect

**Action properties**

**Redirect URL:** index.php

Append query string

**Redirect type:** See Other (303)

3. Create the rule called Joomla Main Rewrite Rule and set the following options (as shown in the figure):

Requested URL Matches the pattern

Using Regular Expressions

Pattern `^(.*)$`

Logical Grouping Match All

Conditions Create the following conditions:

**Table 2.3. Joomla Main Rewrite Rule Conditions**

Input	Type	Pattern
{REQUEST_FILE}N/A	File	N/A
{REQUEST_FILE}N/A	Directory	N/A
{URL}	Matches the pattern	(/ \.\php  \.html  \.html  \.feed  \.pdf  \.raw / [^\.]*)\$


Action Type Rewrite

Rewrite URL `index.php`

Append query string (checked)

Stop processing of subsequent rules (checked)

Figure 2.3. Joomla Main Rewrite Rule

 **Edit Rule**

Name:  
Joomla Main Rewrite Rule

Match URL

Requested URL:  
Matches the pattern

Using:  
Regular Expressions

Pattern:  
(.\*)

Ignore Case

Conditions

Logical Grouping:  
Match All

Input	Type	Pattern
{REQUEST_FILE...}	Is not a File	N/A
{REQUEST_FILE...}	Is not a Directory	N/A
{URL}	Matches the pattern	(/{ \.php \.html \.htm \.feed )

Add...  
Edit...  
Remove  
Move Up  
Move Down

Action

Action Type:  
Rewrite

Action properties

Rewrite URL:  
index.php

Append query string

Stop processing of subsequent rules

- After both the rules are created, the URL Rewriting should be working on your IIS 7 server.

### 2.3.1.3. IIS 6 Server

The IIS 6 server does not include its own URL Rewriting mechanism, so you need to install some ISAPI rewrite module - we recommend using the Helicon's ISAPI Rewrite which can be obtained at [http://www.helicontech.com/isapi\\_rewrite/](http://www.helicontech.com/isapi_rewrite/). It can be used with the standard .htaccess syntax known from the Apache server.

For more information on how to configure your IIS 6 server for URL rewriting, please refer to the documentation of ISAPI rewrite module of your choice.

Some more information on Joomla! and IIS compatibility may also be found in Joomla!'s documentation at <http://docs.joomla.org/Category:IIS>.

### 2.3.2. Activating Joomla! SEO

For JoomSEF to be active, two settings in Joomla! *Global Configuration* need to be switched **on**:

**Search Engine Friendly URLs** and **Use Apache mod\_rewrite (Use URL rewriting in Joomla 1.6 and above)**.

These can be enabled either from *JoomSEF Control Panel* in the *SEF Status* box or in (menu) *Site* → *Global Configuration* → (tab) *Site* → (box) *SEO Settings*

## 2.4. Uninstallation

- Joomla 1.5:
  1. log-in to your Joomla! backend with Super Administrator privileges
  2. go to *Extensions* → *Install/Uninstall*
  3. under *Components* tab select the *SEF* component and click *Uninstall* button in the toolbar
  4. uninstallation should complete automatically
- Joomla 1.6 and above:
  1. log-in to your Joomla! backend with Super Administrator privileges
  2. go to *Extensions* → *Extensions Manager* → *Manage*
  3. find the *ARTIO JoomSEF* component, select a checkbox next to it and click the *Uninstall* button in the toolbar
  4. uninstallation should complete automatically

Uninstallation will remove all the parts installed during Installation, however it will not remove the tables from the database, but will add the *\_bak* suffix to their names instead, so you won't lose any data stored in JoomSEF.

# Chapter 3. How It Works

## 3.1. URL Rewriting

Even though it is not the only function of JoomSEF anymore for quite some time now, the URL rewriting still remains its main feature. The standard Joomla! URL has the form of `domain.tld/index.php?option=com_content&view=article&id=2&Itemid=5`, which we call *non-SEF URL*. This tells Joomla!, that it should call the Content component (*option* variable) and select the menu item with *Itemid* 5. The other variables are meant directly for the Content component - they tell it to display single article (*view* variable) with *id* 2. This form is very easy for web server to understand, but it's not very informative for people or search engines, so JoomSEF translates this non-SEF URL to a more readable form of `domain.tld/article-category/article-title`. From this *SEF URL* you can easily tell what the page will be about and search engines may guess the website structure to better understand it and provide more relevant search results.

The reason why JoomSEF generated URLs are nicer than those generated by standard Joomla! SEF function is that JoomSEF stores the original Joomla URL in the database with the corresponding SEF URL. Standard Joomla! SEF does not use database, so all the variables needed for Joomla! have to be somehow encoded in the URL so Joomla! can parse all of them correctly. On the other hand, JoomSEF generated SEF URL can be anything you like and the variables needed for Joomla! are correctly taken from the database.

Each SEF URL is created when its non-SEF equivalent is first encountered on the web site so when someone opens the frontpage for the first time, only the URLs present on that page are created. When some of these URLs are then clicked and the new page is opened, more URLs present on the new page are created, so it takes some time until all the URLs of your web site are created in the database.

The process of converting non-SEF URL to SEF one is unfortunately not easy because every component uses its own variables and needs different SEF URL structure. To handle every component's URLs correctly JoomSEF uses small add-ons called *JoomSEF Extensions* that take care of converting URLs to SEF for individual components. So when converting some Joomla! URL to SEF, JoomSEF looks at the *option* variable to know which component this URL links to. Then it searches the installed JoomSEF Extensions and tries to use the corresponding extension, so every component you have installed in your Joomla! needs to have the JoomSEF Extension also installed so the URLs are converted to SEF correctly. If the JoomSEF Extension is not installed for the component, you can still use JoomSEF's basic rewriting (which creates SEF URL by storing individual variables values in URL separated by slash - ie. `domain.tld/content/article/2`) or there is still chance that the component comes with the standard Joomla! router, which can also be used with JoomSEF. If you don't want or can't use any of these, you can set JoomSEF not to SEF URLs for this particular component.

JoomSEF comes with the JoomSEF Extensions for standard Joomla! components preinstalled. You can get JoomSEF Extensions for other components from ARTIO website - some of them are free and some are paid. You can find the complete list of JoomSEF Extensions available from ARTIO [here](#). You can also sometimes find JoomSEF Extensions made by 3rd party or directly by component's developers.

## 3.2. Support by components

The very important thing is that every component in Joomla! has to support SEF correctly, so all the links visible to users are sent to JoomSEF so it can rewrite them to SEF. As this is not always the case, Joomla! offers the way to handle this in a form of System - SEF plugin, so if you experience problems with some links not being SEF, check if the System - SEF plugin in Joomla! is enabled.



Another thing is, that when using SEF, URLs often look like `domain.tld/menu/category/article` so the web browsers think that the current directory on the web server is `/menu/category`, so it is important for the components to use absolute links when displaying images and using AJAX. Joomla! and JoomSEF offer the usage of `base` tag in your web site which can sometimes fix these problems, however if you use many components with such problems, it is often very difficult to find the configuration which would fix everything.

# Chapter 4. Control Panel

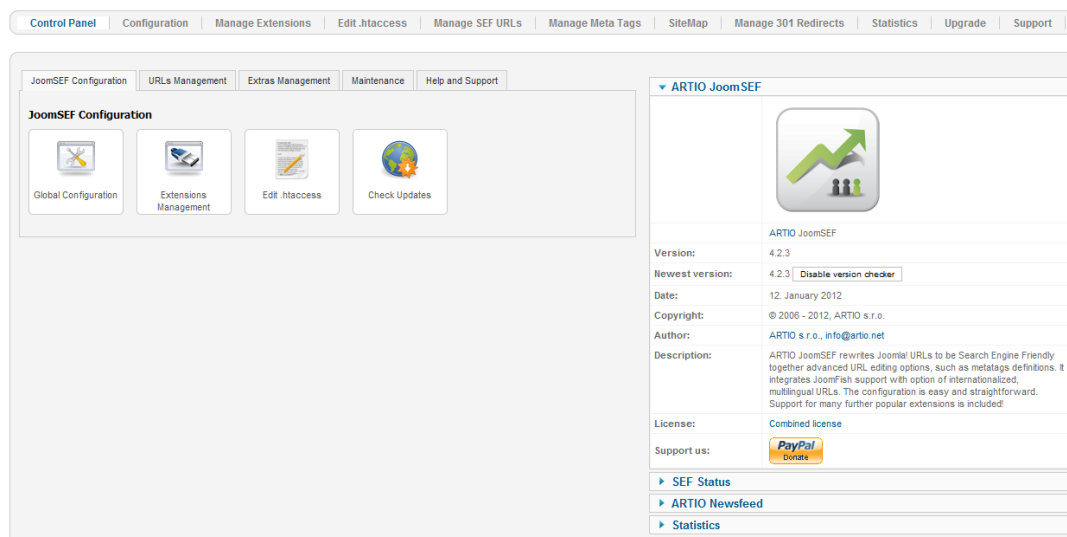
Menu path: *Components* → *ARTIO JoomSEF* (→ *Control Panel*)

The control panel is the main page of JoomSEF's administration from which you can control all of JoomSEF's functionality. It is divided into three sections:

1. Top - navigation menu and informative or error messages
2. Left - action buttons grouped to tabs
3. Right - informative panels

The following sections will describe action buttons and informative panels.

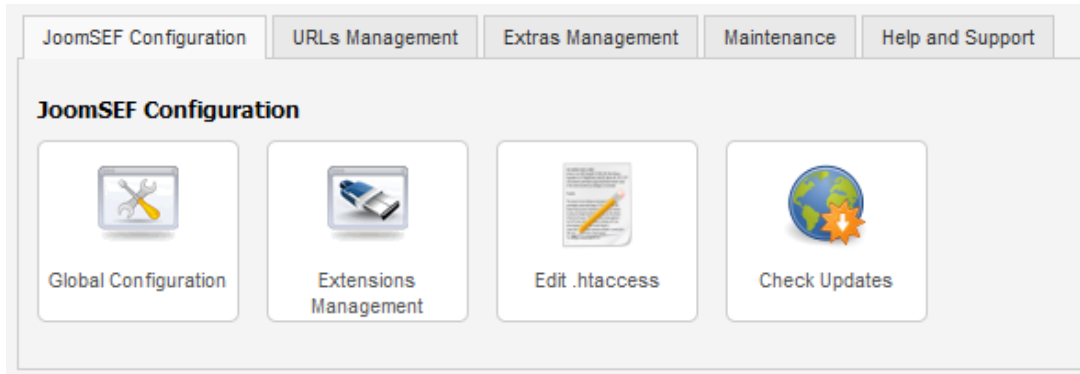
**Figure 4.1. Control panel**



## 4.1. Action buttons tabs

### 4.1.1. JoomSEF Configuration tab

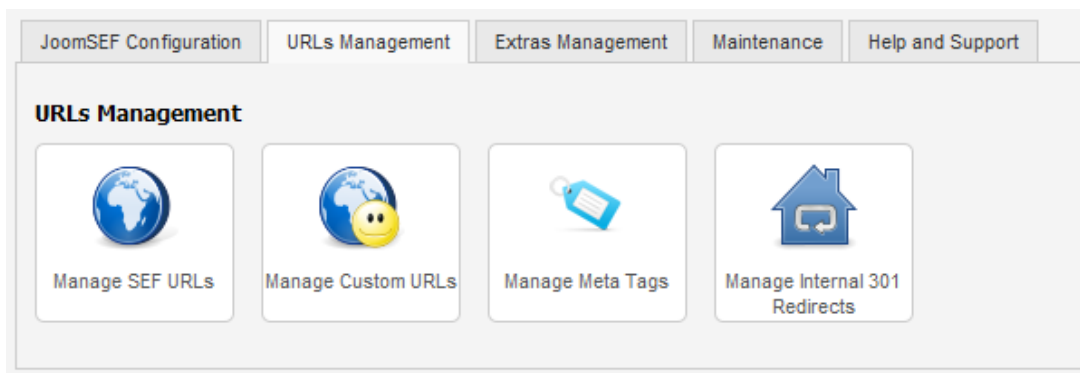
Allows access to main component configuration sections.

**Figure 4.2. JoomSEF Configuration tab**

Global Configuration	Opens the <i>Global Configuration</i> page. See <i>Configuring JoomSEF</i> chapter.
Extensions Management	Opens the <i>Extensions Management</i> page. See <i>JoomSEF Extensions</i> chapter.
Edit .htaccess	Opens the <i>.htaccess Editor</i> . See <i>Edit .htaccess</i> section.
Check Updates	Opens the <i>Upgrade</i> page. See <i>Upgrades</i> chapter.

### 4.1.2. URLs Management tab

Allows you to manage your SEF URLs, their meta tags and 301 redirects.

**Figure 4.3. URLs Management tab**

Manage SEF URLs	Opens the <i>URLs Manager</i> page for all the SEF URLs. See <i>URLs Management</i> section.
Manage Custom URLs	Opens the <i>URLs Manager</i> page with only the Custom URLs displayed. See <i>URLs Management</i> section.
Manage Meta Tags	Opens the <i>Meta Tags Manager</i> page. See <i>URLs Meta Tags</i> section.

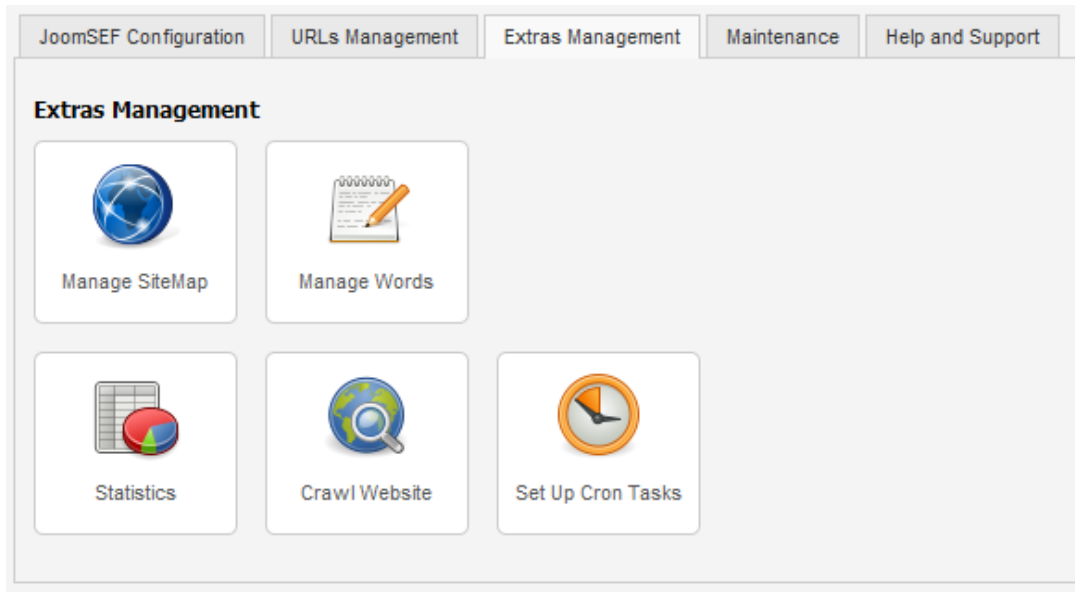
Manage Internal 301 Redirects

Opens the *301 Redirects Manager* page. See Internal 301 Redirects section.

### 4.1.3. Extras Management tab

Allows access to some more advanced features in JoomSEF.

**Figure 4.4. Extras Management tab**



Manage SiteMap

Opens the *SiteMap Manager* page. See SiteMap chapter.

Manage Words

Opens the *Words Manager* page. See Internal Links section.

Statistics

Opens the *Statistics* page. See Statistics section.

Crawl Website

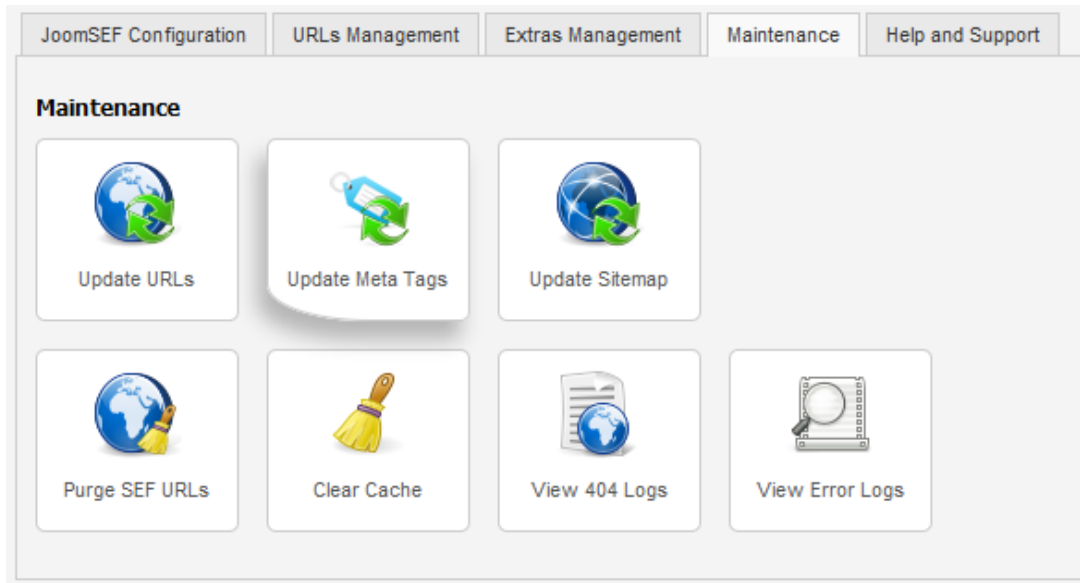
Opens the *Website Crawler* page. See Website Crawler section.

Set Up Cron Tasks

Opens the *Set Up Cron Tasks* page. See Cron Tasks section.

### 4.1.4. Maintenance tab

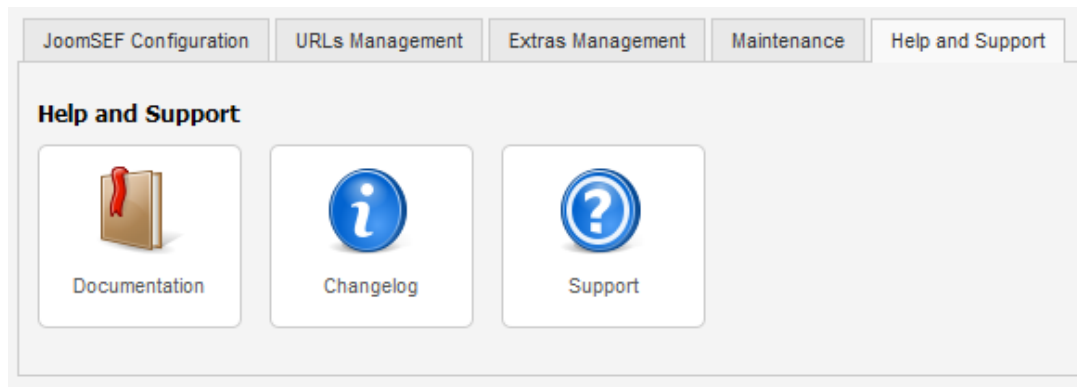
Offers tasks to maintain your SEF URLs and watch for errors.

**Figure 4.5. Maintenance tab**

Update URLs	Runs <i>Update URLs</i> process for all automatically generated SEF URLs that are not Locked. See the Updating URLs section.
Update Meta Tags	Runs <i>Update Meta Tags</i> process for all automatically generated SEF URLs that are not Locked. See the Updating URLs section.
Update Sitemap	Runs <i>Update Sitemap</i> process for all automatically generated SEF URLs that are not Locked. See the Updating URLs section.
Purge SEF URLs	Purges all automatically generated SEF URLs that are not Locked. See the Purging URLs section.
Clear Cache	Clears the SEF URLs disk cache. See URLs Cache section.
View 404 Logs	Opens the <i>URLs Manager</i> page in the <i>404 Log</i> display mode. See URLs Management section.
View Error Logs	Opens the <i>Error Logs</i> page. See Errors Log section.

### 4.1.5. Help and Support tab

Provides information about using JoomlaSEF and support options.

**Figure 4.6. Help and Support tab**

Documentation      Opens the online page with this documentation.

Changelog          Opens the *Changelog* page with informations about changes in current and previous versions.

Support             Opens the *Support* page with various support options from ARTIO.

## 4.2. Informative panels

### 4.2.1. ARTIO JoomSEF panel

Provides basic information about the currently installed version of JoomSEF with its description and links to ARTIO website, license and donation through PayPal. It also shows the newest version available, if version checker is enabled.

**Figure 4.7. ARTIO JoomSEF panel**

▼ ARTIO JoomSEF	
	
	ARTIO JoomSEF
Version:	4.2.3
Newest version:	4.2.3 <input type="button" value="Disable version checker"/>
Date:	12. January 2012
Copyright:	© 2006 - 2012, ARTIO s.r.o.
Author:	ARTIO s.r.o., <a href="mailto:info@artio.net">info@artio.net</a>
Description:	ARTIO JoomSEF rewrites Joomla! URLs to be Search Engine Friendly together advanced URL editing options, such as metatags definitions. It integrates JoomFish support with option of internationalized, multilingual URLs. The configuration is easy and straightforward. Support for many further popular extensions is included!
License:	<a href="#">Combined license</a>
Support us:	

## 4.2.2. SEF Status panel

Shows the status of SEF related configuration on your website with buttons to enable or disable them, so you can control all the most important configuration at one place.

**Figure 4.8. SEF Status panel**

▼ SEF Status	
Global SEF URLs	<input checked="" type="button" value="Enabled"/> <input type="button" value="Disable"/>
Apache mod_rewrite	<input checked="" type="button" value="Enabled"/> <input type="button" value="Disable"/>
JoomSEF	<input checked="" type="button" value="Enabled"/> <input type="button" value="Disable"/>
JoomSEF plugin	<input checked="" type="button" value="Enabled"/> <input type="button" value="Disable"/>
Creation of new URLs	<input checked="" type="button" value="Enabled"/> <input type="button" value="Disable"/>

## 4.2.3. ARTIO Newsfeed panel

Shows the JoomSEF related newsfeed directly from ARTIO server.

**Figure 4.9. ARTIO Newsfeed panel**

**▼ ARTIO Newsfeed**

**New JoomSEF 4.2.0 and 3.9.0!**  
 Ostrava, 28.11.2011 - We are releasing new major version of both JoomSEF 4 and 3. These version include several brand new and exciting features, such as **3rd level domain support for individual components**, direct access to **Google analytics with Flash charts**, full-featured sitemaps, web-crawl functions, ...

**JoomSEF Updates October 2011**  
 Ostrava, 9.10.2011 - New releases both of JoomSEF 3 for Joomla 1.5 and JoomSEF 4 for Joomla 1.6/1.7 was just released. Actual version are 4.1.1 and 3.8.3. Several new extensions for both these versions were also released.

**JoomShopping extension for JoomSEF**  
 Ostrava, 13.7.2011 - New JoomSEF extension for JoomShopping component was released. Available both JoomSEF 3 and 4 (Joomla 1.5 and 1.6).

**JoomSEF 4.0.6 Release**  
 Ostrava, 9.7.2011 - New version of JoomSEF v4.0.6 was just released. This version addresses especially some of the known problems related to Joomla 1.6 language plugin.

## 4.2.4. Statistics panel

Shows the information about number of URLs stored in JoomSEF's database.

**Figure 4.10. Statistics panel**

<b>▼ Statistics</b>	
<b>Automatic SEF URLs:</b>	30
<b>Custom SEF URLs:</b>	0
<b>404 URLs:</b>	0
<b>Moved URLs:</b>	45
<b>Total URLs:</b>	75
<b>Disabled URLs:</b>	0
<b>Not SEFed URLs:</b>	0
<b>Locked URLs:</b>	0
<b>Cache entries:</b>	0
<b>Errors logged:</b>	0



# Chapter 5. Configuring JoomSEF

Most of the JoomSEF configuration is done by clicking the "Global Configuration" button on JoomSEF Control Panel or selecting the *Components* → *ARTIO JoomSEF* → *Configuration* menu. This will lead to a page with several configuration tabs, each of them described in a separate subchapter that follows. You can configure JoomSEF on global level here, but some of the settings can be overridden per component using the Manage Extensions page described in another chapter.

## 5.1. Beginner and Professional mode

By default, JoomSEF operates in the **Beginner** mode. In this mode the whole Advanced Configuration tab and some configuration options in other tabs are hidden. If you need access to those options, you need to first enable the **Professional** mode using the *Enable Professional mode* option in Basic Configuration tab and save the configuration.

In the following sections, configuration options visible only in Professional mode will be marked with asterisk (\*).

## 5.2. Basic Configuration Options

Options in this tab control JoomSEF's basic functions and basic SEF URL's appearance.

JoomSEF Enabled	This option controls whether JoomSEF will be used to process non-SEF URLs on your site. If disabled, the standard Joomla! core SEF will be used.  Default value: Yes
Disable creation of new SEF URLs	If this option is set to Yes, JoomSEF won't create any new SEF URLs and will use only the ones already created.  It is useful if you have a web site with static content and all of your URLs are created correctly, so you can be sure that no new URL will be created.  Default value: No
Enable Professional mode	When enabled, some more advanced configuration options along with the whole Advanced tab will be displayed. Please note that you need to save the configuration first for this option to take effect.  Default value: No
File suffix	Use this option to set suffix for URLs. It is recommended to leave it blank or use common .html suffix to simulate static pages.  Default value: <i>blank</i>
Use Title or Alias	You can set Title and Alias for most items in Joomla! (articles, categories etc). Using this option you can select globally what

	will be used to create corresponding URLs. This option can be overridden and set separately for each component.
	Default value: Full Title
All lowercase	If set to Yes, whole URL will be converted to lowercase. Default value: Yes
www and non-www domain handling	Use this option to set how to handle domains with and without www.
	Don't handle    JoomSEF will leave domain as it is.
	Always use www domain    Any domain without www used to access the site will be redirected to the same domain with www.
	Always use non-www domain    If a domain with www is used to access the site it will be redirected to the same domain without www.
	Default value: Always use www domain (if domain with www was used when installing JoomSEF) / Don't handle (otherwise)
Number duplicate URLs (*)	If set to No, duplicate URLs will be stored in database and only one of them will be used. JoomSEF tries to choose the best one, but that is not always possible. If there are many duplicates for one SEF URL, the links probably won't work correctly.  If set to Yes, duplicates will be numbered, so the correct URL will be always used.  Default value: No
Replacement character (*)	This character will be used to replace unknown characters in the URL.  Default value: -
Page spacer character (*)	This character will be used to separate the page number from the rest of the URL when <i>Number duplicate URLs</i> option is enabled.  Default value: -
Strip characters (*)	These characters will be replaced by <i>Replacement character</i> in the URL. Separate the characters with   (pipe character).  Default value: ,~! @ % ^*( )+ < > : { } [] _ . - . .

Trim friendly characters (*)	<p>These characters will be removed only from the beginning and the end of the URL.</p> <p>Default value: - .</p>
Page text (*)	<p>This text will be appended to URL for individual pages in listings. %s in the Page text will be replaced with a page number.</p> <p>Default value: JText::_('PAGE')-%s</p>

## 5.3. Advanced Configuration Options

The Advanced tab is used to configure some more advanced JoomSEF's functionality related to creating and processing of SEF URLs. It is separated into several boxes described in the following sub-chapters.

Please note that the whole Advanced tab is visible only when the Professional mode is enabled, so its options won't be marked with asterisk individually.

### 5.3.1. Advanced Configuration

Allow UTF-8 characters in URL	<p>If set to Yes, all the characters except <i>Strip Characters</i> will be allowed in URLs. However, the <i>Non-ascii char replacements</i> are still applied.</p> <p>Default value: No</p>
Non-ascii char replacements	<p>Here you can set the character pairs for replacement - the first character in a pair is replaced by the second one in the URL.</p> <p>Characters in the pair are separated by   (pipe character) and pairs are separated by comma.</p> <p>Default value: Á A, Â A, Ã A, Ä A, Å A, Æ A, Ç C, Ç C, Ć C, Ć C, Đ D, É E, Ê E, Ë E, Ì I, Í I, Î I, Ï I, Ñ N, Ñ N, Ò O, Ó O, Ô O, Õ O, Ø O, Ò O, Ó O, Ô O, Õ O, Æ A, Ç C, Š S, Š S, Ť T, Ú U, Ú U, Ú U, Ú U, Ú U, Ý Y, Ž Z, Ž Z, á a, â a, ã a, ä a, å a, æ a, ç c, ĉ c, ĉ c, ĉ c, đ d, đ d, é e, ê e, ë e, ë e, è e, ê e, ì i, í i, î i, ï i, ñ n, ñ n, ñ n, ò o, ó o, ô o, õ o, ø o, š s, š s, ř ř, ř ř, ť ť, ů u, ú u, ů u, ů u, ů u, ý y, ž ž, ž ž, ` - , ß ss, Å A, μ u, å a, È E, ž ž, Ž Z, ĺ l, ĺ L, A A, a a, B B, b b, V V, v v, Γ G, γ g, Д D, д d, E E, e e, Ж Zh, ж zh, З Z, з z, И I, и i, Ў U, ў u, К K, к k, Л L, л l, М M, м m, Н N, н n, O O, o o, П P, п p, P R, p r, C S, c s, T T, т t, У U, у u, Ф F, ф f, X Kh, x kh, Ц Tc, ц tc, Ч Ch, ч ch, Ш Sh, ш sh, Щ Shch, щ shch, Ы Y, ы y, Э E, э e, Ю Iu, ю iu, Я Ia, я ia, Ъ  , ъ  , Ь  , ь  , È E, è e</p>
Be tolerant to trailing slash	<p>If enabled, both URL versions (with and without the trailing slash) will work. Otherwise only one version (the one stored in the database) will work.</p> <p>Default value: Yes</p>

Remove trailing slash	<p>If enabled, URLs with trailing slash will be redirected to the same URL without the trailing slash.</p> <p>Default value: No</p>								
Parse Joomla SEO links	<p>If set to Yes, JoomSEF will try to use core Joomla! SEF router to parse SEF URLs which JoomSEF couldn't find in database.</p> <p>Default value: Yes</p>								
Set page base href value	<p>Controls the way the base href value is generated. May be used to fix some problems like images not shown correctly when using SEF URLs.</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;">Yes - always use only base URL</td> <td>The base href will be generated using the website's root URL.</td> </tr> <tr> <td style="vertical-align: top;">Yes - always use full SEO URL</td> <td>The base href will be generated using the current SEF URL.</td> </tr> <tr> <td style="vertical-align: top;">No - disable base href generation</td> <td>The base href won't be generated at all.</td> </tr> <tr> <td style="vertical-align: top;">No - leave original</td> <td>JoomSEF leaves the original Joomla! base href.</td> </tr> </table> <p>Default value: Yes - always use only base URL</p>	Yes - always use only base URL	The base href will be generated using the website's root URL.	Yes - always use full SEO URL	The base href will be generated using the current SEF URL.	No - disable base href generation	The base href won't be generated at all.	No - leave original	JoomSEF leaves the original Joomla! base href.
Yes - always use only base URL	The base href will be generated using the website's root URL.								
Yes - always use full SEO URL	The base href will be generated using the current SEF URL.								
No - disable base href generation	The base href won't be generated at all.								
No - leave original	JoomSEF leaves the original Joomla! base href.								
Fix index.php links	<p>If enabled, the index.php will be removed from non-SEF URLs, thus removing duplicates.</p> <p>Default value: Yes</p>								
Fix document format	<p>If enabled, fixes the document format when using PDF or feed links. Enable only if you are experiencing problems with them, may interfere with other plugins.</p> <p>Default value: No</p>								

### 5.3.2. Working with URLs

Ask before saving URL to 301 Redirects	<p>If enabled, when you manually change some SEF URL using the <i>Manage SEF URLs</i> page, you will be asked whether to automatically create the corresponding 301 redirect.</p> <p>Default value: Yes</p>
Autolock created URLs	<p>If enabled, all the created SEF URLs will be automatically locked.</p> <p>Default value: No</p>

Auto update URLs

If enabled, SEF URLs for articles and categories will be automatically updated when corresponding article or category is modified, and appropriate 301 redirects will be created.

Default value: No

### 5.3.3. Debugging URL errors

These features are used to identify wrong URLs on your website and store relevant information about their origin in the database along with the URL. It may be helpful to find out where the strange URLs are coming from.

Enable errors logging

If enabled, errors in URLs like non-existent articles or categories will be logged. Works only with extensions that support this feature.

Default value: No

Enable URL source tracing

Whether the SEF URL's source should be traced and stored in the database. The information stored are:

- URL of page that the SEF URL was generated on
- The page's referrer
- The user agent (useful to find out whether the URL was generated by a user or a bot)
- The stack trace (list of functions in the PHP code that invoked the URL generation)

Default value: No

Tracing depth

How many function calls should be traced back.

Default value: 3

### 5.3.4. Non-SEF URLs and variables

Redirect nonSEF URLs to SEF

If enabled, when accessing the site using the non-SEF URL you will be redirected to the correct SEF URL.

Note: As a security measure, only links that already have the corresponding SEF URL created in the database will be redirected - no new SEF URLs will be created using this feature.

Default value: Yes

Append non-SEF variables to URL

If enabled, frequently changing variables are not stored in database, but they are appended to URLs as non-SEF variables instead. This reduces database usage and also helps preventing duplicates in some extensions.

Default value: Yes

Prevent non-SEF variables from overwriting the parsed ones	<p>If enabled, the parsed variables from SEF URL won't be overwritten by the same non-SEF variable appended to the SEF URL.</p> <p>Default value: Yes</p>
Custom non-SEF variables	<p>List of variables to be globally considered non-SEF if <i>Append non-SEF variables to URL</i> option is enabled. Separate variables by semicolon.</p> <p>Default value: <i>blank</i></p>
Automatic canonical link generation	<p>If enabled, when the page is accessed using the SEF URL with some non-SEF variables appended, the canonical link will be automatically generated using the SEF URL only.</p> <p>Default value: Yes</p>
SEF URLs using component template	<p>If enabled, the URLs with <code>tmpl=component</code> will be SEFed. This may interfere with some components using AJAX, so enable only if you need it.</p> <p>Default value: No</p>
Handle query variables as non-SEF	<p>If enabled, non-SEF variables from visited SEF URL will be considered non-SEF for all other URLs on the page. This may prevent polluting the database. Disable if causing problems.</p> <p>Default value: Yes</p>

### 5.3.5. Variables filtering

Filter variable values	<p>If set to Yes, all variables in URLs will be checked and won't be SEFed if containing some of the potentially dangerous words.</p> <p>Default value: Yes</p>
Filter these words	<p>Set the words to be considered dangerous using the <i>Filter variable values</i> option. Separate each word by space.</p> <p>Default value: <code>http:// http:// https:// https:// www. @</code></p>
Variables to exclude from filtering	<p>Set variables to be excluded from <i>Filter variable values</i> option. Separate each variable by ; (semicolon).</p> <p>Default value: <i>blank</i></p>
Filter system variables	<p>If enabled, system variables (Itemid, tmpl, option, format, layout) will be filtered to contain only allowed values.</p> <p>Default value: Yes</p>

### 5.3.6. Itemid handling

Exclude source info (Itemid)	If set to Yes, the Itemid variable will not be stored with URLs in the database. It is usually used together with <i>Reappend source (Itemid)</i> option when you are experiencing problems with modules not showing where they should.
	Default value: No
Reappend source (Itemid)	Can only be used with <i>Exclude source info (Itemid)</i> option enabled. If set to Yes, the removed Itemid variable is appended back to URL as non-SEF variable.
	Default value: No
Ignore multiple sources (Itemids)	If enabled, only one SEF URL will be created for links that differ only by the Itemid variable (same pages linked by different menu items). Helps preventing duplicates, but links sometime don't work as expected.
	Default value: Yes

## 5.4. Cache Configuration Options

The Cache tab is used to control the URLs Cache behaviour. The cache is described in more detail in the URLs Cache section.

Use cache	Whether the URLs Cache functionality should be enabled.
	Default value: Yes
Maximum cache size (*)	How many SEF URLs may be stored in the cache. No more URLs are stored in cache when this limit is reached.
	Default value: 1000
Minimum cache hits count (*)	How many times the SEF URL needs to be visited before it's stored in the cache.
	Default value: 10
Record hits for cached URLs (*)	Whether to record hits count for URLs that are already stored in cache. This saves some database queries if set to No, but you can't keep track of how many times the cached URLs were really visited.
	Default value: No
Display error if cache gets corrupted (*)	Whether to display the error message in the frontend when the cache file gets corrupted.
	Default value: No

## 5.5. Title and Meta Tags Configuration Options

### 5.5.1. Title and Meta Tags Configuration

These options are used to control how the SEF URLs Meta Tags will be shown in the page.

Enable Meta Tags management	Whether the meta tags set for SEF URLs will be shown in the website's <code>head</code> section. If disabled, the standard Joomla! meta tags will be shown.
	Default value: Yes
Metadata auto-generation	Controls when the meta tags will be automatically generated and stored in database along with new SEF URL.
	Only if original empty      Meta tags will be generated only if the original ones are empty.
	Always      Meta tags will always be generated.
	Never      Meta tags will never be generated.
	Default value: Only if original empty
Prefer JoomSEF titles	Whether JoomSEF should control the page title's appearance or not. If set to No, the standard Joomla! page title will be used.
	Default value: Yes
Use sitename in page titles	Defines how the site name is used in page titles. The site name is set in Joomla!'s Global configuration.
	Yes - before page title      The site name will be prepended to the page title.
	Yes - after page title      The site name will be appended to the page title.
	No      The site name will not be used in the page title.
	Default value: Yes - after page title
Sitename separator	The character that will be used to separate the site name and the page title if site name is to be added to page title.
	Default value: -
Meta-keywords preference	Controls how to handle meta keywords if they're defined both by Joomla and JoomSEF.



	Prefer original	Use only meta keywords set in Joomla.
	Prefer JoomSEF	Use only meta keywords set in JoomSEF.
	Join both	Original Joomla keywords will be appended to keywords from JoomSEF.
	Default value: Prefer JoomSEF	
Meta-description preference	Controls how to handle meta description if it's defined both by Joomla and JoomSEF.	
	Prefer original	Use only meta description set in Joomla.
	Prefer JoomSEF	Use only meta description set in JoomSEF.
	Join both	Original Joomla description will be appended to description from JoomSEF.
	Default value: Prefer JoomSEF	
Prevent sitename duplicity	Whether to prevent duplicity if the site name is the same as page title and site name is to be added to page title.	
	Default value: Yes	

## 5.5.2. Global Meta Tags Configuration

You can set meta tags that will be globally shown on every page of your web site here.

Some predefined meta tags can be set in the *Standard Meta Tags* box - these include the generator tag and the meta tags with authentication keys for Google Webmaster Tools, Live.com Webmaster Central and Yahoo Site Explorer.

You can also set your own meta tags using the Custom Meta Tags box - just click the *Add Meta tag* button and set the name and content of the meta tag. To remove the meta tag, click the *Remove Meta tag* button.

## 5.6. SEO Configuration Options

The options available on the SEO tab is used to control the Internal Links functionality.

Nofollow external links	If enabled, JoomSEF will try to find all the external links (URLs to other domain) on your site and will add the <code>rel="nofollow"</code> to them, so search engines shouldn't crawl those links from your site.
	Default value: No

Enable Internal links	Whether the Internal links functionality should be enabled. Default value: Yes
Nofollow internal links	If enabled, the links created by the Internal links feature will have the <code>rel="nofollow"</code> added, so search engines shouldn't crawl those links. Default value: No
Open links in new window	Whether the links created by the Internal links feature should be opened in new browser window. Default value: No
Maximum links for each word	How many occurrences of each word should be replaced by internal links assigned to it. Default value: 1

## 5.7. SiteMap Configuration Options

You can control the behaviour of the SiteMap feature using the SiteMap tab.

### 5.7.1. SiteMap Configuration

XML file name	The Sitemap XML file name. This file will be generated in the website's root. Default value: sitemap
Default Indexed	The default Indexed field value for the newly created SEF URLs. Default value: No
Default Change frequency	The default Change frequency field value for the newly created SEF URLs. Default value: weekly
Default Priority	The default Priority field value for the newly created SEF URLs. Default value: 0.5
Show Date in sitemap	Whether the Date field (the <code>lastmod</code> tag) should be shown in the generated Sitemap XML file. Default value: Yes
Show Change frequency in sitemap	Whether the Change frequency field (the <code>changefreq</code> tag) should be shown in the generated Sitemap XML file. Default value: Yes

Show Priority in sitemap Whether the Priority field (the `priority` tag) should be shown in the generated Sitemap XML file.

Default value: Yes

## 5.7.2. Ping Configuration

The Sitemap XML file can be automatically pinged to Google, Yahoo! and Bing every time you generate the new Sitemap XML file. You can also set the Ping services (see [http://en.wikipedia.org/wiki/Ping\\_\(blogging\)](http://en.wikipedia.org/wiki/Ping_(blogging)) for more information) which may be pinged manually from the Sitemap Manager page.

Ping after XML generation If enabled, Sitemap XML file will be automatically pinged to Google, Yahoo! and Bing each time you generate the new Sitemap XML file.

Default value: Yes

Yahoo! Application ID This needs to be set in order for Yahoo! ping to work correctly.

Default value: *blank*

Ping services The list of Ping services (each on a separate line) to be pinged by the Ping Services button in the Sitemap Manager. The list of available Ping services may be found on the internet.

Default value: `http://blogsearch.google.com/ping/RPC2,`  
`http://rpc.pingomatic.com/`

## 5.8. Language related Configuration Options

The Language tab lets you configure JoomSEF's handling of URLs on multilingual websites. For Joomla 1.5 the multilingual content from JoomFish is supported and for Joomla 1.6 and above both the native Joomla multilanguage content and the FaLang component are supported. For more information on correct configuration see Using JoomSEF on multilanguage website section.

Enable JoomSef language management Enables the JoomSEF's language management. This option has to be enabled if you want to use multilingual content along with JoomSEF's SEF URLs.

Default value: No

Language integration Determines how the language code will be integrated into the SEF URL.

include in path

The language code will be the first part of the SEF URL, for example:  
`www.artio.net/en/news`

use different domains

Each language will use its own domain. These

		domains can be set in the Domain configuration section of the page.
	add as suffix (JoomSEF 3 only)	The language code will be appended to the end of the SEF URL, for example: <code>www.example.com/news_en</code>
	do not add (JoomSEF 3 only)	The language code will not be added to SEF URL. This may be useful when each SEF URL is different for all languages (when you have all the articles correctly translated), so the URLs are not duplicated.
	Default value: include in path	
Always use language		If set to Yes, the <code>lang</code> variable will always be stored with the URL. If set to No, some URLs without the <code>lang</code> variable specified will show the page in an unspecified language.
	Default value: Yes	
Add language to multilanguage content (JoomSEF 4 only)		If set to Yes, the <code>lang</code> variable will be stored with URLs for content that is used for all languages. This option is available only for native multilanguage content in Joomla 1.6 and above.
	Default value: Yes	
Translate URLs		Whether the titles in the SEF URLs should be translated to match the language. If set to No, you shouldn't use the <i>do not add</i> option in Language integration setting, because there would be no way to determine the language that should be shown.
	Default value: Yes	
	(Please note that this option is not available when you use native multilanguage content in Joomla 1.6 and above.)	
Get language from browser setting		Whether the language should be taken from user's browser setting if the language is not specified by the URL (for example for the frontpage).
	Default value: Yes	
Save language to cookie		Whether the last used language should be stored in the cookie, so when user opens your page again, the same language as last

	time will be used. This is also useful when some component uses redirections without the <code>lang</code> variable set - in such case, the page will not change the language randomly, but the current language is preserved.						
	Default value: Yes						
Main language	Language that will be used when home page is opened and the language is not determined from browser setting or cookie. In JoomSEF 3, SEF URLs for selected language will not have the language code integrated.						
	Default value (JoomSEF 3): (none)						
	Default value (JoomSEF 4): (website's default language)						
Domain configuration	In this section you can set the domain for each language if <i>use different domains</i> option is selected for Language integration setting. Only the domain should be set in the field (without <code>http://</code> or any slashes), for example: <code>www.example.com</code> for English and <code>www.example.cz</code> for Czech.						
	Default value: each language has the current domain set						
Incorrect domain handling	Controls the way how mismatch between languages determined from domain and SEF URL should be handled.						
	<table border="0"> <tr> <td>Redirect to correct domain</td> <td>Page will be redirected to correct domain according to language from SEF URL.</td> </tr> <tr> <td>Show 404 page</td> <td>The 404 Not found page will be displayed.</td> </tr> <tr> <td>Do nothing</td> <td>Normal content for given SEF URL will be displayed, regardless of domain used. This setting may cause duplicate content errors.</td> </tr> </table>	Redirect to correct domain	Page will be redirected to correct domain according to language from SEF URL.	Show 404 page	The 404 Not found page will be displayed.	Do nothing	Normal content for given SEF URL will be displayed, regardless of domain used. This setting may cause duplicate content errors.
Redirect to correct domain	Page will be redirected to correct domain according to language from SEF URL.						
Show 404 page	The 404 Not found page will be displayed.						
Do nothing	Normal content for given SEF URL will be displayed, regardless of domain used. This setting may cause duplicate content errors.						
	Default value: Redirect to correct domain						
Enable/Disable Jfrouter plugin (JoomSEF 3)	You can use this button to simply enable or disable the Jfrouter plugin. More information about JoomSEF 3 configuration with Jfrouter plugin may be found in JoomSEF 3 subsection of <i>Using JoomSEF on multilanguage website</i> usage tip.						
Disable Plug-in (JoomSEF 4)	In Joomla 1.6 and above you need to have the System - Language Filter plugin disabled for JoomSEF to work properly. If it's enabled, none of the above options are displayed and only the button that let's you disable the plugin is present. More information on configuring JoomSEF 4 to work on multilanguage						

website can be found in JoomSEF 4 subsection of *Using JoomSEF on multilanguage website* usage tip.

## 5.9. Google Analytics Options

Google Analytics configuration options may be used to automatically add the Google Analytics tracking code to your page and to easily access the Google Analytics statistics information directly from JoomSEF's interface.

Google e-mail	Login e-mail for your Google Analytics account.
Google password	Password for your Google Analytics account.
Web ID	Your website's ID in the form of UA-12345678. This is required if you want to have the Google Analytics tracking code automatically inserted to the page.
Google API key	Your Google API key for the Page Speed service. This is only required if you want to be able to check your website's speed on the JoomSEF's Statistics page.  Use the <a href="https://code.google.com/apis/console">https://code.google.com/apis/console</a> page to generate the API key and enable access to Page Speed Online API.
Enable google Analytics	If enabled, the Google Analytics JavaScript tracking code will be automatically added to your website.
Exclude from tracking by IP address	Set the list of IP addresses that won't be tracked by Google Analytics. Set one IP address per line.
Exclude from tracking by user account level	Select user account access levels that won't be tracked by Google Analytics. Use CTRL key to select multiple access levels.
Exclude by cookie	If you set the cookie, access to your website from your current web browser won't be tracked by Google Analytics. Use the <i>Set/Remove cookie</i> button to set or remove the cookie.

## 5.10. Subdomains Configuration

The Subdomains feature allows you to use different subdomains for specific parts of your website. Please note that this feature is not available on JoomSEF 3 when you have JoomFish installed and the whole tab is hidden.

Use the *Add subdomain* and *Remove subdomain* buttons to add or remove subdomains. You can have as many subdomains configured as you need. If you use multiple languages, you can configure subdomains for each language separately.

Each subdomain consists of three configuration options:

Subdomain	The subdomain to be used. Set only the subdomain of your main domain.
Menu	Select menu items that you want to use this subdomain. Use CTRL key to select multiple menu items.

Title page      Select which of the menu items will be used as a home page for this subdomain.

## 5.11. 404 Page Options

You can set how JoomSEF should respond when someone tries to access some non-existent page on your web site using the options on the 404 Page tab.

### 5.11.1. 404 Page

In the 404 Page box you can set the basic options for displaying the 404 error page.

404 Page	What page should be displayed when 404 Not found error is detected.
	<p>(Custom 404 Page)      The Custom 404 Page will be shown. This page can be edited in the Custom 404 Page box on the same page. It is the automatically created uncategorized article with the <i>404</i> title.</p> <p>(Front Page)      The web site's front page will be shown.</p> <p>(Joomla! Error Page) (JoomSEF 3 only)      The standard Joomla!'s error page will be shown.</p> <p>(other options) (JoomSEF 3 only)      You may select any other uncategorized article you have created to be shown as a 404 page.</p> <p>Default value: (Custom 404 Page)</p>
Show 404 Message	<p>If enabled, the standard Joomla! message will also be shown on the 404 page.</p> <p>Default value: No</p>
Show Joomla! Template (JoomSEF 3 only)	<p>Whether the 404 page should be shown with the selected Joomla! template. If disabled, the <i>component</i> template will be used.</p> <p>Default value: Yes</p>
Record 404 page hits	<p>Whether the non-existent URLs should be stored in the 404 Log. If disabled, the number of SQL queries may be decreased, but you won't be able to see hits to non-existent pages (you may use the Google Webmaster Tools for this).</p> <p>Default value: No</p>

### 5.11.2. Default 404 Page - Itemid

Use this box to select the menu item to be used when the 404 page is displayed.

Use Itemid for Default 404 Page

If disabled, you won't be able to select which modules should be shown on the 404 page. If you want to be able to choose which modules should be shown on the 404 page, enable this option.

Default value: No

Select Itemid

Use this option to select the menu item which should be used for the 404 page. The modules assigned to this menu item will be displayed on the 404 page. You can also create a fake menu that is not displayed anywhere on your web site and select its menu item - that way you can have different modules displayed on the 404 page than anywhere else on your web site.

Default value: *nothing selected*

### 5.11.3. Custom 404 Page

You can use this box to edit your Custom 404 Page article. You can also use the Joomla!'s Article Manager for this - the Custom 404 Page is the uncategorized article with the *404* title.

## 5.12. Registration Options

The Registration tab includes options for better integration with ARTIO services.

### 5.12.1. ARTIO JoomSEF Registration

If you have purchased the paid version of ARTIO JoomSEF, enter your Download ID in the *JoomSEF Download ID* field. The ID is used to identify your copy during online updates.

### 5.12.2. ARTIO User Account

Here you may enter your account information for ARTIO web site if you have one. This may be used for better integration with technical support or providing relevant information to you. No information except these two fields are sent from your website.

### 5.12.3. ARTIO News

Display ARTIO Newsfeed

Whether the ARTIO Newsfeed panel will be shown on the JoomSEF's Control panel page.

Default value: Yes

Check for newer versions

Whether the newest version available will be checked in the ARTIO JoomSEF panel on the JoomSEF's Control panel page.

Default value: Yes



# Chapter 6. Working with URLs

JoomSEF generates SEF URLs automatically but sometimes you may want to adjust them a little bit. This chapter describes the options available to manage SEF URLs in JoomSEF's database.

## 6.1. URLs Management

The JoomSEF URL Manager can be opened from the *Components* → *ARTIO JoomSEF* → *Manage SEF URLs* menu or by clicking the *Manage SEF URLs* or *Manage Custom URLs* on the *URLs Management* tab or *View 404 Logs* button on the *Maintenance* tab in JoomSEF Control panel - each of these buttons opens the same page with different view mode selected. The URL Manager allows you to view, create, modify, delete, update, import or export the SEF URLs in JoomSEF's database. The following sections describe the main JoomSEF URL Manager page and various tasks you can do with it.

### 6.1.1. Browsing SEF URLs

When you open JoomSEF URL Manager using the Manage SEF URLs menu item or JoomSEF control panel button, you will see the following list of the URLs stored in JoomSEF's database.

Figure 6.1. List of URLs

Num	<input type="checkbox"/>	Hits	SEF URL	Real Url	Trace	Enabled	SEF	Locked	Active	Cached
1	<input type="checkbox"/>	0		index.php?option=com_content&lang=cs&view=frontpage&Itemid=1						
2	<input type="checkbox"/>	0	about-joomla/	index.php?option=com_content&id=4&lang=cs&view=section&Itemid=37						
3	<input type="checkbox"/>	0	anahita/account	index.php?option=com_socialengine&lang=cs&view=account&Itemid=87						
4	<input type="checkbox"/>	0	anahita/applications	index.php?option=com_socialengine&lang=cs&view=applications&Itemid=91						
5	<input type="checkbox"/>	0	anahita/dashboard	index.php?option=com_socialengine&lang=cs&view=dashboard&Itemid=88						
6	<input type="checkbox"/>	0	anahita/hledat	index.php?option=com_socialengine&lang=cs&view=search&Itemid=93						
7	<input type="checkbox"/>	0	anahita/people	index.php?option=com_socialengine&lang=cs&view=people&Itemid=89						

The columns are described in the following table.

- Hits**            Number of times the URL has been clicked.
- SEF URL**        The SEF URL visible on the page.
- Real URL**        The standard Joomla! URL that will be used when SEF URL is clicked.
- Trace**            The tracing information. This column is only visible if URL Source tracing is enabled. You can use this when debugging to find out how some bad SEF URL has been created - the page where the URL was created, Referer, User agent and backtrace of PHP functions to the specified level are stored here.
- Enabled**         If a SEF URL is disabled, then it is displayed on the web site as usual, but it shows the 404 - Not found page when clicked.
- SEF**             If you disable SEF for some URL, then its Real URL form will be shown on the web site.
- Locked**         If some URL is locked, it cannot be deleted in any way, so if you have some custom URL created, you can lock it so it can't be deleted accidentally.
- Active**          If there are some duplicate URLs (URLs with the same SEF URL but different Real URL) JoomSEF doesn't know which one of the Real URLs to use when the SEF URL is

clicked. By making one of them Active, you tell JoomSEF which one it should always use.

**Cached** Shows whether the URL is currently stored in JoomSEF's cache or not. This column is only visible when JoomSEF Cache is enabled.

You can also use the set of filters to filter displayed URLs by various criteria.

### Figure 6.2. URLs Filters

The ViewMode filter offers the following options:

Show All Redirects	Shows all the SEF URLs stored in database.
Show Custom Redirects	Shows only SEF URLs marked as custom.
Show SEF URLs	Shows only the automatically created SEF URLs (URLs not marked as custom).
Show Links to Homepage	Shows only URLs linking to the homepage.
Show 404 Log	Shows the 404 URLs log.
Show Duplicities	Shows only duplicate SEF URLs.

Please note that in JoomSEF 3 the ViewMode filter is replaced with the tabs.

The Hits and Itemid filters are straightforward.

Filtering URLs by their SEF URL or Real URL can be based on textual match or by a regular expression - if you put a text directly, any URL containing that text will be matched, but if you use the 'reg:' prefix, then the regular expression search will be used. For example if you want to display only the URLs starting with home you can use the filter `reg:^home`.

The Component and Language filters are again straightforward, however the Language filter is only available if the multilanguage management is enabled.

The Reset button resets the filters.

If the Show Links to Homepage view mode is selected, then there is also the Create links to homepage button visible in the Filters box. You can use it to create the URLs linking to homepage in every available language if they were not created automatically.

## 6.1.2. Using 404 URLs log

If the Record 404 page hits option is enabled in JoomSEF's configuration then all the URLs accessed on your site that returns the 404 error are logged in the database. You can browse this log by selecting the Show 404 Log view mode in JoomSEF URL Manager.

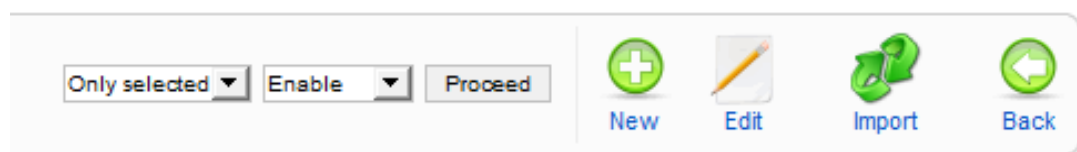
The layout is very similar to other view modes, however there is one special action available for logged 404 URLs - for each 404 URL you can directly create the 301 Redirect using the Create 301 button in

the toolbar. This is very useful when for example some of the pages on your web site is not available any more, but it is still indexed by search engines or some users have it saved in their bookmarks. Using the 404 log you can find this out that some 404 URL is accessed many times and simply create the 301 Redirect to the new page, so users won't see the Not found error.

### 6.1.3. Using the toolbar

As in any other Joomla! component the toolbar contains buttons you can use to perform various tasks with the URLs. However, there were too many buttons for the actions affecting more than one URL at once, so we've decided to use a little different approach - as you can see on the following figure, there are two select boxes and a Proceed button in our toolbar.

**Figure 6.3. JoomSEF URL Manager toolbar**



The first select box is used to set if only the selected URLs (Only selected option) or all the URLs currently displayed (All filtered option) should be affected. When the All filtered option is selected and there is more than one page of displayed URLs, then **ALL** the displayed URLs will be affected, not only the ones displayed on the first page.

In the second box you can select the action to perform with the URLs.

By clicking the Proceed button the selected action will be performed.

### 6.1.4. Creating and modifying URLs

You can create new URL by clicking the New button in the toolbar. To modify existing URL you can either click the corresponding SEF URL in the list, or select the corresponding check box and click the Edit button in the toolbar. When creating or modifying the URL you will see the following page.

**Figure 6.4. SEF URL page**

### 6.1.4.1. URL

On the URL tab you can set the basic parameters of the URL:

New SEF URL	The SEF URL to be displayed on the web site. The URL must be relative to the web site's root and cannot contain the leading slash.
Old non-SEF URL	The Real URL to be passed to Joomla! when this URL is accessed. This URL needs to start with the <code>index.php</code> and may not contain the <code>Itemid</code> variable which is set separately.
Itemid	The <code>Itemid</code> variable of the Real URL.
Save as Custom Redirect	Whether this URL should be marked as Custom.
Enabled	Whether this URL is enabled.
SEF	Whether this URL should be displayed as SEF.
Locked	Whether this URL is locked.
Trace Information	Shows the trace information stored with the current URL. This field is only visible when URL Source tracing is enabled.

### 6.1.4.2. Aliases

On the Aliases tab you can set the list of aliases to be assigned to this URL. Each alias will be 301 redirected to this URL. This feature is described in more detail in the SEF URLs Aliases section.

### 6.1.4.3. Meta Tags

The Meta Tags tab lets you set the meta tags that should be generated in the `head` section of your web site when this URL is accessed. This feature is described in more detail in the URLs Meta Tags section.

### 6.1.4.4. SiteMap

The SiteMap tab lets you set sitemap related parameters for this URL. This feature is described in more detail in the SiteMap chapter.

### 6.1.4.5. Internal Links

On the Internal Links tab you can create a list of words that should link to this URL. This feature is described in more detail in the Internal Links section.

## 6.1.5. Importing and Exporting URLs

By using the import and export functions you can easily backup your SEF URLs, transfer them to another web (for example from the development to the production web site) or migrate your SEF URLs from another SEF component to JoomSEF or from Joomla 1.0 to Joomla 1.5.

### 6.1.5.1. Exporting URLs

The export functionality is implemented as one of the actions you can do with URLs from the toolbar, so you can just choose which URLs you want to export using the first select box in the toolbar, select

the Export action in the second box and click the Proceed button. The SQL file with the exported URLs will be generated and offered for you to save.

### 6.1.5.2. Importing URLs

When you click the Import button in the toolbar you will be taken to the Import URLs page.

**Figure 6.5. Import URLs**

The screenshot shows two sections of the 'Import URLs' interface. The first section, titled 'Import URLs From File', contains a text box with instructions: 'You can select exported file from JoomSEF, sh404SEF or AceSEF - the format will be recognized automatically and imported correctly. When importing from sh404SEF, please, first import the URLs and then the meta tags.' Below this is an 'Import File:' label, an empty text input field, a 'Vybrat...' button, and an 'Import URLs' button. The second section, titled 'Import URLs From Database', contains a text box with instructions: 'JoomSEF has detected former installation of another SEF component. You can automatically import SEF URLs from it using the following button.' Below this are two buttons: 'Import URLs from AceSEF table' and 'Import URLs from sh404SEF table'.

To import the URLs from a file with previously exported URLs use the Import URLs From File box - just select the file in the Import File field and click the Import URLs button. Using this function you can import URLs exported from any previous version of JoomSEF or even from sh404SEF or AceSEF components - the file format will be recognized automatically and imported correctly. When importing URLs from JoomSEF version 2.x or earlier the Joomla 1.0 URLs will be automatically updated to the Joomla 1.5 format. When importing URLs from sh404SEF make sure to first import the URLs and then the meta tags.

If you've had sh404SEF or AceSEF previously installed you can use the Import URLs From Database box to import the URLs directly from their database - just click the Import URLs from AceSEF table or Import URLs from sh404SEF table button.

### 6.1.6. URLs Trash

Please note that the URLs Trash is currently supported only in JoomSEF 3.

URLs Trash is used when you want to update your SEF URLs to match current settings, without losing their associated meta tags, aliases and other data. When you trash some URL, none of its associated data are deleted, but when its non-SEF URL is encountered during browsing your website, the whole record is restored from trash except the SEF URL, which is newly generated according to current settings.

When you Purge URLs, they're also not deleted, but only moved to trash, so none of their meta tags are lost. In time when your website is being browsed, new SEF URLs are being generated but your old meta tags are still used.

So if you want to remove some URL completely along with its meta tags, trashing it is not enough - you need to delete it.

## 6.2. URLs Meta Tags

Each URL in the JoomSEF's database may have the following meta data assigned:

Title	The individual page title (title tag) and title meta tag.
Description	The description meta tag.
Keywords	The keywords meta tag.
Content-Language	The lang meta tag.
Robots	The robots meta tag.
Googlebot	The google meta tag.
Canonical Link	The canonical link tag.

When someone opens the SEF URL, JoomSEF sets the meta data for the page according to the meta tags set and according to settings on Title & Meta Tags tab in JoomSEF's Configuration. If any of the meta tags is not set, JoomSEF does not use an empty value, but it keeps the default meta tags provided by Joomla! instead. Some JoomSEF Extensions can generate the meta tags for SEF URLs automatically from the pages content.

There are two ways to manage the meta tags described in following sections.

### 6.2.1. URL Manager

You can use the URL Manager to set all of the predefined meta tags or define your own custom meta tags (JoomSEF 3 only) for each URL individually. This can be achieved using the SEF URL page (as described in Creating and modifying URLs section) on Meta Tags tab.

There's also the *Use sitename in Title* option which can be used to override the global setting from *Title and Meta Tags* tab in JoomSEF's Configuration.

**Figure 6.6. Meta Tags tab**

### 6.2.2. Meta Tags Manager

The Meta Tags Manager can be used to set the Title, Description and Keywords meta tags for multiple URLs at once. You can open the Meta Tags Manager using the Manage Meta Tags menu item or Manage Meta Tags button in the JoomSEF's Control panel.

**Figure 6.7. Meta Tags Manager**

Filters				
Use RE <input type="checkbox"/>		Filter SEF Urls: Use RE <input type="checkbox"/>		Filter Real Urls: <input type="text"/>
				(All) (All) (All) (All) <input type="button" value="Reset"/>
Component: <input type="text"/>		Language Name: <input type="text"/>		
Num	SEF Url / Real Url	Meta Title	Meta Description	Meta Keywords
1	index.php?option=com_content&lang=cs&view=frontpage&temid=1			
2	43-example-pages-and-menu-links.html index.php?option=com_content&id=43&lang=cs&view=article&temid=43		This page is an example of content that is uncategorized; that is, it does not belong to any Section or Category. You will	menu, links, content, page, types, manager, >, section, Joomla!, includes, installation, included, components, default, give
3	46-404.html index.php?lang=cs		404: not Found Sorry, but the content you requested could not be found	requested, content, found sorry, 404

Here you can see the list of URLs with their Title, Description and Keywords meta tags. You can change these meta tags for all the URLs displayed on the page and then save them all at once by clicking the Save or Apply button in the toolbar.

You can also use the Filters box to display only the URLs you want to manage meta tags for.

## 6.3. URLs Cache

Even when all the URLs on the page have their SEF form already created, each non-SEF URL that should be converted to SEF when browsing the page still requires one query to the database to look it up, which may sum up to many queries for each page display if there are many URLs on the page. The database load can be decreased by using the URLs caching.

Everytime someone opens some SEF URL in his browser, the hits count of the URL is increased by one. When the hits count exceeds the predefined threshold the URL is stored in the cache file on the disk. Everytime the URL needs to be converted from non-SEF form to SEF, the cache is checked first and if the URL is found there, there's no need to query the database. The whole cache file is loaded from disk to memory only once when the page is opened, so the cache lookup is very fast.

You can control the URLs cache parameters in the JoomSEF's configuration on the Cache tab. The settings are described in the Cache Configuration Options section.

If you use the cache, don't forget to clear it every time you make some changes to your SEF URLs, otherwise your modifications won't be reflected on the website. To clear the cache use the *Clear Cache* button in JoomSEF's Control Panel on the Maintenance tab.

## 6.4. Purging, Deleting and Updating URLs

Because of the way how JoomSEF works (see How It Works chapter), whenever you change some configuration that affects SEF URLs generation, you need to make sure that your URLs are regenerated with the new configuration taken into account. There are several ways to achieve this.

### 6.4.1. Purging URLs

Purging the URLs basically deletes all the automatically created SEF URLs that are not marked as Locked from the database. No URLs saved as Custom or Locked are deleted. The deleted URLs are then created again when browsing the page with the new configuration.

You can purge the URLs using the *Purge URLs* button in JoomSEF's Control panel on the Maintenance tab. Please note that in JoomSEF 3 purging doesn't delete URLs, it only moves them to trash (see URLs Trash section).

## 6.4.2. Deleting URLs

If you don't want to purge all the URLs, for example if you change the URLs generation settings only for one component, you can use the URLs Manager and using the Filters or manual selection delete (or trash) only those SEF URLs that need to be recreated.

More information about the URLs Manager can be found in the URLs Management section.

## 6.4.3. Updating URLs

By purging or deleting the URLs you make sure that whole URLs are regenerated from scratch. But for example, what if you don't want to lose your custom meta tags during the process? Or vice versa, what if you have your SEF URLs customized but you would like to automatically regenerate their meta tags?

There are three actions that you may use, described in following subsections. All of them are accessible from the URLs Manager toolbar or the Maintenance tab of JoomSEF's Control Panel. When using the Control Panel buttons, actions are run for all automatically created SEF URLs (not set as Custom) that are not Locked.

### 6.4.3.1. Update URLs

Thanks to the URLs Trash feature present only in JoomSEF 3, the Update URLs action regenerates only the SEF URL part of the database record and leaves the meta tags, aliases, sitemap settings and assigned internal links intact.

Unfortunately in JoomSEF 4 the URLs Trash is not available yet, so the Update URLs action regenerates the URLs completely, along with their meta tags and other configuration.

### 6.4.3.2. Update Meta Tags

The Update Meta Tags action regenerates only the meta tags stored with URLs, leaving other fields unchanged.

### 6.4.3.3. Update Sitemap

The Update Sitemap action updates only the sitemap settings stored with URLs according to current configuration.

## 6.5. Errors Log

The Errors Log page displays logged problems encountered when your URLs were processed to the SEF form. These errors are logged only by extensions that support it. Because after some time the Errors Log could get quite huge, it's disabled by default - you can enable this feature in JoomSEF's Advanced Configuration options page.

The Errors Log page can be accessed using the *View Errors Log* button from JoomSEF's Control Panel on the Maintenance tab.



**Figure 6.8. Errors Log**

Filters					
		Log Message:	URL:	Page:	Component:
		<input type="text"/>	<input type="text" value="view=manufacturer"/>	<input type="text" value="VirtueMart"/>	<input type="text" value="VirtueMart"/>
					<input type="button" value="Reset"/>
Num	Date	Log Message	URL	Page	Component
1	2011-12-29 18:45:07	Manufacturer with ID 1 not found.	index.php?option=com_virtuemart&view=category&virtuemart_manufacturer_id=1&Itemid=518&lang=cs	http://j17/?option=com_virtuemart&view=manufacturer&virtuemart_manufacturer_id=1&tmpl=component&Itemid=518	com_virtuemart
2	2011-12-29 18:44:39	Manufacturer with ID 1 not found.	index.php?option=com_virtuemart&view=category&virtuemart_manufacturer_id=1&Itemid=518&lang=cs	http://j17/?option=com_virtuemart&view=manufacturer&virtuemart_manufacturer_id=1&tmpl=component&Itemid=518	com_virtuemart
3	2011-12-27 22:11:26	Manufacturer with ID 1 not found.	index.php?option=com_virtuemart&view=category&virtuemart_manufacturer_id=1&Itemid=518&lang=cs	http://j17/?option=com_virtuemart&view=manufacturer&virtuemart_manufacturer_id=1&tmpl=component&Itemid=518	com_virtuemart

Every record logs the date and time it was encountered, text message of the error, URL that triggered the error, page the URL was encountered on and the component it belongs to. You can use the fields in Filters box to filter records by various criteria.

The Errors Log can help you find URLs that link to non-existent content. When you don't need the logged errors anymore, use the *Clear Log* button in the toolbar to delete all the records in the Error Log.

# Chapter 7. JoomSEF Extensions

As was explained in the How It Works chapter, each component you have installed in Joomla! needs its own JoomSEF Extension installed in JoomSEF for SEF URLs to be created correctly for the component.

JoomSEF comes with the preinstalled extensions for the following standard Joomla! components:

- Banners
- Contacts
- Content
- Mail To
- News Feeds
- Search
- User
- Web Links
- Wrapper

You can get JoomSEF Extensions for other components from ARTIO website - some of them are free and some are paid. You can find the complete list of JoomSEF Extensions available from ARTIO here. You can also sometimes find JoomSEF Extensions made by 3rd party or directly by component's developers.

## 7.1. Extensions Management Page

The Extensions Management page can be opened using the Extensions Management button in the JoomSEF's Control panel or the Manage Extensions menu item. There are two lists on the page - the top list shows the installed JoomSEF Extensions and the bottom list shows the installed Joomla! components without the JoomSEF Extension installed.

### 7.1.1. Installed JoomSEF Extensions List

Figure 7.1. Installed JoomSEF Extensions





SEF Extension	Component	Author	Version	Date	Newest version	Type	Upgrade	Active Handler
<input type="checkbox"/> AdslManager	AdslManager	<a href="#">ARTIO s.r.o.</a>	2.0.2	29. October 2009	2.0.4	Paid	<input type="button" value="Upgrade"/>	JoomSEF extension
<input type="checkbox"/> AlphaContent	AlphaContent	<a href="#">ARTIO s.r.o.</a>	2.0.1	6. January 2009	2.0.3	Free	<input type="button" value="Upgrade"/>	JoomSEF extension
<input type="checkbox"/> Banners	Banners	<a href="#">ARTIO s.r.o.</a>	2.0.2	7. October 2009	-	-	-	JoomSEF extension
<input type="checkbox"/> Bookmarks	- Not installed -	<a href="#">ARTIO s.r.o.</a>	2.0.0	12. February 2010	2.0.0	Paid	Up to date	JoomSEF extension
<input type="checkbox"/> Contacts	Contacts	<a href="#">ARTIO s.r.o.</a>	2.0.2	7. October 2009	-	-	-	JoomSEF extension

The Installed JoomSEF Extensions list contains the following fields:

SEF Extensions	The name of the JoomSEF Extensions.
Component	The name of the component the extension belongs to.
Author	Author of the extension.
Version	The currently installed extension version.
Date	The date when the currently installed extension version has been released.
Newest version	The newest version of the extension available on the ARTIO Upgrade server. The dash means that this extension is not available on ARTIO Upgrade server.
Type	Whether the extension on ARTIO Upgrade server is Free or Paid.  If the extension is Paid, the key icon can be used to enter your extension download ID. If the key icon is in grayscale, the download ID is not set. If the key icon is gold, the download ID is set (however, the key icon color does not mean that the download ID is valid).
Upgrade	If there is newer version available on the ARTIO Upgrade server, the Upgrade button can be used to directly upgrade your installed extension.
Active Handler	The currently active handler of the component. These are described in the Component Handlers section.

## 7.1.2. Components Without JoomSEF Extension Installed List

**Figure 7.2. Components without JoomSEF Extension installed**

Components without SEF Extension installed				
Component	Extension Availability	Installation	Active Handler	Parameters
AdsManager	 Paid	<input type="button" value="Get Extension"/>	JoomSEF default handler	
AlphaContent	Free	<input type="button" value="Get Extension"/>	Component's router	
Appointment Booking Pro	-	-	JoomSEF default handler	

The list of components without JoomSEF Extension installed contains the following fields:

Component	The name of the component.
Extension Availability	Whether the extension for this component is available on ARTIO Upgrade server and whether it's Free or Paid.  If the extension is Paid, the key icon can be used to enter your extension download ID. If the key icon is in grayscale, the download ID is not set. If the key icon is gold, the download ID is set (however, the key icon color does not mean that the download ID is valid).
Installation	If the extension is available on the ARTIO Upgrade server, the Get Extension button can be used to directly install it. If the extension

is paid and the download ID is not set, you will be taken to the ARTIO E-Shop page instead.

Active Handler

The currently active handler of the component. These are described in the Component Handlers section.

Parameters

The Parameters icon can be used to open the component's URL creation parameters. These are described in the Extension Parameters section.

## 7.2. Extension Installation and Uninstallation

### 7.2.1. Installation

The JoomSEF Extensions use the standard Joomla! ZIP installation package format. There are three ways to install the JoomSEF Extension:

1. The fastest and easiest way is to use the Get Extension button in the Extensions Management page described in the previous Components Without JoomSEF Extension Installed List section.
2. If you already have the installation ZIP package downloaded, you can use the standard Joomla! installer to install the JoomSEF Extension like any other Joomla! extension. The installer can be accessed from the *Extensions* → *Install / Uninstall* menu.
3. If for some reason the standard Joomla! installer does not work for you (either you use an old version of JoomSEF which does not support it, or there was some error during the JoomSEF installation), you can use the Install SEF Extension page. This can be accessed by clicking the Install button in the Extensions Management page toolbar.

### 7.2.2. Uninstallation

Even though the standard Joomla! installer can be used to install the JoomSEF Extension, it is not the standard Joomla! extension, so the Joomla! installer cannot be used to uninstall it. The only way to uninstall the JoomSEF Extension is by following these steps:

1. Open the Extensions Management page in JoomSEF.
2. Select the radio button next to the JoomSEF Extension in the list you want to uninstall.
3. Click the Uninstall button in the toolbar.

## 7.3. Extension Parameters

You can control the form of the URLs generated for each component using the Extension parameters. These can be easily accessed by clicking the extension or component name in the list on the Extensions Management page.

There are several groups of parameters each on the separate tab described in the following sections.

### 7.3.1. Extension tab

Figure 7.3. Extension tab

Parameters

Extension | Meta Tags | Common | Registration | Variables filtering

Handle pagination as non-SEF	<input checked="" type="radio"/> No <input type="radio"/> Yes
Guess Itemid	<input checked="" type="radio"/> No <input type="radio"/> Yes
Compatibility mode	<input checked="" type="radio"/> No <input type="radio"/> Yes
<hr/>	
URL Settings	
<hr/>	
Show Category	<input type="radio"/> No <input checked="" type="radio"/> Yes
Show Section	<input checked="" type="radio"/> No <input type="radio"/> Yes
Title URL part	Use global config ▼
Category URL part	Use global config ▼
Section URL part	Use global config ▼
Add layout to URL	Never ▼
Default layout	Default ▼
<hr/>	
Google News Settings	
<hr/>	
Google News numbering	Don't use ▼
Article ID digits	1
Custom date format	yyyymmdd
ID and date separator	
ID and date ordering	Date, ID ▼
Number position	Append ▼

The Extension tab contains the parameters that are specific for the current extension. It is the main extension parameters tab where you can set the appearance of the URLs generated for the component. This tab is available only for components that have the corresponding JoomSEF Extension installed. You can see the example of this tab for Content extension in the figure above.

## 7.3.2. Meta Tags tab

Figure 7.4. Meta Tags tab

Parameters

Extension	Meta Tags	Common	Registration	Variables filtering
-----------	-----------	--------	--------------	---------------------

---

Add category to page title	<input checked="" type="radio"/> No <input type="radio"/> Yes
Generate description	<input type="radio"/> No <input checked="" type="radio"/> Yes
Description length	<input type="text" value="250"/>
Generate keywords	<input type="radio"/> No <input checked="" type="radio"/> Yes
Minimum keyword length	<input type="text" value="3"/>
Number of keywords	<input type="text" value="15"/>
Blacklist	<input type="text" value="a, able, about, above, abroad, according, accordingly, across, actually, adj, after, afterwards, again, against, ago, ahead, ain't, all, allow, allows, almost, alone, along, alongside, already,"/>

The Meta Tags tab is also available only for components with JoomSEF Extension installed and only if the extension supports JoomSEF's automatic meta tags generation feature. The options are also specific for the component. You can set how the meta tags should be generated for the selected component here.

### 7.3.3. Common tab

Figure 7.5. Common tab

Parameters

Extension Meta Tags **Common** Registration Variables filtering

Number duplicate URLs  Use global config  No  Yes

Automatic canonical link generation  Use global config  No  Yes

Ignore multiple sources  Use global config  No  Yes

Itemid handling  Use global config  Override

Override Itemid

Ignore Itemids

Use site name  No  Yes

Custom site name

Items per page

---

Handling

Show Menu Title  No  Yes

Custom Menu Title

---

Custom non-SEF variables

Do not SEF URLs matching regular expression

The Common tab contains the options that are common for all the components. These options are:

Number duplicate URLs	You can either use the configuration from JoomSEF's Global configuration or override it specifically for this component.  Default value: Use global config
Automatic canonical link generation	You can either use the configuration from JoomSEF's Global configuration or override it specifically for this component.  Default value: Use global config
Ignore multiple sources	You can either use the configuration from JoomSEF's Global configuration or override it specifically for this component.  Default value: Use global config
Itemid handling	If set to Use global config, the Exclude source info (Itemid) and Reappend source info (Itemid) options from JoomSEF's Glob-

	<p>al configuration will take effect. If set to Override, the Itemid won't be excluded from URL.</p> <p>Default value: Use global config</p>
Override Itemid	<p>If the Itemid handling is set to Override, here you can set the custom Itemid which will always be used for this component URLs. If left blank, the original Itemid from the URL will be used.</p> <p>Default value: <i>blank</i></p>
Ignore Itemids	<p>A comma separated list of Itemids that will be ignored, so if JoomSEF encounters one of these Itemids in the URL, it will handle it as if Ignore multiple sources is enabled. So if you have two menu items linking to the same content, you can set one of them to be ignored and the other one will be always used.</p> <p>Default value: <i>blank</i></p>
Use site name	<p>Whether to show the site name in the page title for this component.</p> <p>Default value: Yes</p>
Custom site name	<p>Here you can set custom site name to be used in the page title for this component instead of the default one. Default site name will be used if left blank.</p> <p>Default value: <i>blank</i></p>
Items per page	<p>If you have problems with pagination, you can manually set number of items per page for this component here. If left blank, this option won't have any effect.</p> <p>Default value: <i>blank</i></p>
Handling	<p>Use this option to set the URLs handler for this component. The URL handlers are described in detail in Component Handlers section.</p> <p>Default value: JoomSEF handler</p>
Show Menu Title	<p>Whether the menu item title should be present in the URL.</p> <p>Default value: Yes</p>
Custom Menu Title	<p>Here you can set the custom menu item title to be used in all URLs for this component. If left blank, the default menu item title will be used.</p> <p>Default value: <i>blank</i></p>
Custom non-SEF variables	<p>A semicolon separated list of variables that should be treated as non-SEF for this component. You can use this if you have</p>



problems with some URLs not generated correctly and creating duplicates in the database, for example if the new version of the component is installed that is not supported by installed JoomSEF Extension yet, and there are some duplicate SEF URLs created in the database that differ in Real URLs only by some variable, or there is some variable which value is unique for each user visiting the site (for example `download_id` in VirtueMart), you can set this variable as non-SEF so it won't be stored in the Real URLs in the database and will be added as non-SEF to the SEF URL (for example: `/shop/download?download_id=123456789`).

Default value: *blank*

Do not SEF URLs matching regular expression

Every URL for this component will be checked against the regular expression pattern set here and if it matches it, the URL won't be converted to SEF. Can be useful if some URLs of the component are not working correctly with JoomSEF, so you can specifically exclude them from being SEFed.

Default value: *blank*

### 7.3.3.1. Component Handlers

Each component can have its own handler set in JoomSEF which controls how the URLs for this component are treated. The available options are:

JoomSEF handler

This is the default handler for every component. First it tries to use the installed JoomSEF Extension for the component. If there is no extension installed, then it tries to use the component's own Joomla! router. If the component doesn't come with the Joomla! router then it just creates the SEF URLs using the menu item title used for the component.

JoomSEF basic rewriting

This handler is better than JoomSEF default handler if there is neither a JoomSEF extension nor a Joomla! router available for the component. It creates the SEF URL by taking values of all the variables in the original non-SEF URL and joining them using slashes. Only the `lang`, `option` and `Itemid` variables are handled differently - `lang` is handled according to Joomla-Fish related configuration and the menu item title is used instead of `option` and `Itemid`. So for example the `index.php?option=com_virtuemart&category_id=7&lang=en&page=shop.k` non-SEF URL would be converted to something like `/en/shop/shop-browse/7`.

Default Joomla! router

If this handler is active, JoomSEF will redirect and URL for this component to be processed by the standard Joomla! SEF router.

Don't SEF

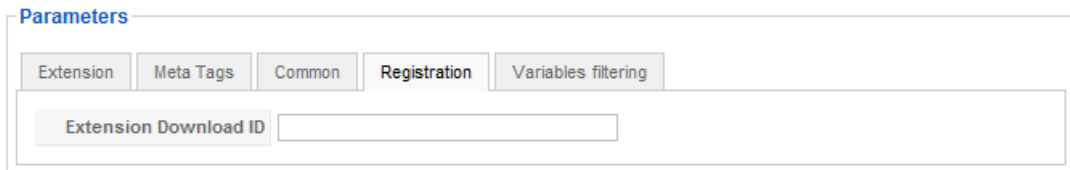
When this option is selected, no URL for this component will be converted to SEF and the original non-SEF URLs will be used.

If the JoomSEF handler is selected, the Active Handler column in the lists on the Extensions Management page will show either JoomSEF extension, Component's router or JoomSEF default handler

according to which one is currently available for the component. Based on the JoomSEF handler priorities, only JoomSEF extension can be shown in the Installed SEF Extensions list (since the JoomSEF Extension has highest priority and it is installed) and only the Component's router or JoomSEF default handler can be shown in the Components without SEF Extension installed list depending on the availability of component's own router (because the JoomSEF Extension is not installed for the component).

### 7.3.4. Registration tab

Figure 7.6. Registration tab



The screenshot shows a 'Parameters' window with five tabs: 'Extension', 'Meta Tags', 'Common', 'Registration', and 'Variables filtering'. The 'Registration' tab is selected and active. Below the tabs, there is a single input field labeled 'Extension Download ID'.

The Registration tab is used only to set the extension's Download ID for the JoomSEF Extensions that are paid. You need to set the Download ID for the paid extensions here so you can use the Upgrade feature for them.

## 7.3.5. Variables Filtering tab

Figure 7.7. Variables Filtering tab

**Parameters**

Extension   Meta Tags   Common   Registration   **Variables filtering**

**Usage**

Step 1: Create a regular expression filter using the **Add rule** section.  
 Step 2: Select rule in the **Rules** list.  
 Step 3: Add variables you want to filter using the selected rule from **Available variables** list to **Assigned variables** list.  
 If you want to add own variable, you can do so in **Filter variables** field.

**Add rule**

Regular expression:  negate this rule

(Don't forget to use ^ at the beginning and \$ at the end of your regular expression if you want to make sure the whole variable value matches the pattern)

**Rules**

```
^[0-9]*$
^[a-zA-Z]+$
^[0-9]+(:[a-zA-Z0-9_-]+)?$
```

**Assigned variables**

```
task
type
view
```

**Available variable**

```
catid
filter
id
limit
limitstart
month
sectionid
showall
year
```

**Options**

**Filter variables**

**Accept only filtered variables**  No  Yes

**URLs that fail the variable filter test**

The Variables filtering feature is used as a security measure. You can use it to set which variables are only allowed in the URLs for the component and what are their allowed values using the regular expression rules. This is very useful as a protection from duplicate content penalization and from some attacks on your web site.

The usage is:

1. Set the variables you want to filter in the Filter variables field and click the Apply button in the toolbar. Only variables present in this field are shown in the Available variables list above.
2. In the Add rule section create the regular expression for the variable filter test. Check the Negate this rule box if the variable must NOT contain the value described by the regular expression. Click the Add rule button.
3. Select the rule in the Rules list and add variables that should be tested with this rule from the Available variables list to the Assigned variables list.
4. Repeat steps 2 and 3 until all your filters are created. Then click the Save or Apply button in the toolbar.

You can find the example of Variables filtering usage in the Content extension parameters.

The options available on this tab are:

Filter variables	A semicolon separated list of variables that should be present in the Available variables list.	
	Default value: <i>blank</i>	
Accept only filtered variables	If set to Yes, any variable not present in the Filter variables list will cause the URL to fail the variable filter test. Otherwise, the variables not present in the Filter variables list just won't be tested.	
	Default value: No	
URLs that fail the variable filter test	Specify what to do when the URL fails the variable filter test:	
	Don't SEF variable	Only the variable that failed the test will not be included in SEF URL and will be appended as non-SEF variable.
	Don't SEF URL	The whole URL won't be SEFed, but it will still work when clicked.
	Don't process at all	The whole URL won't be SEFed and will display the 404 error when clicked.
	Default value: Don't SEF URL	

# Chapter 8. 301 Redirects

The 301 redirects are proper way to redirect one URL to another if the latter one should always be used instead of the first one, for example when automatically redirecting non-SEF URLs to SEF ones the 301 code tells search engines, that non-SEF URL should not be used and the SEF URL should be used instead, thus eliminating some problems with duplicate content penalization when using Joomla!.

Apart from the automatic redirections there are also three options in JoomSEF to manually set your own 301 redirects, described in the following sections.

## 8.1. Internal 301 Redirects

The main purpose of these redirects is not to lose the position in search engines when you already have SEF URLs indexed and you want to manually change some of them, so the old indexed SEF URL should still work and be redirected to the new SEF URL. For these redirects to work, the *Use Moved Permanently redirection table* option has to be enabled in JoomSEF's Configuration on the Advanced tab. These redirects are then created automatically anytime you change some SEF URL stored in the database using the SEF URLs Manager.

Because of the original purpose of this feature the Internal 301 Redirects work only for SEF URLs without any non-SEF variables and only for one domain (they cannot be used to redirect to another web site - that's why they're called *Internal*).

### 8.1.1. Managing Internal 301 Redirects

You can browse the Internal 301 Redirects either by using the Manage 301 Redirects menu item or the Manage Internal 301 Redirects button from JoomSEF's Control panel.

**Figure 8.1. Internal 301 Redirects Manager**

Num	Moved from URL	Moved to URL	Last used
1	about-joomla	license	Never
2	adv-admin	advanced-config	2010-07-13 22:16:53

The fields in the manager are very straightforward:

Moved from URL      The original old SEF URL which should be redirected from.

Moved to URL        The new SEF URL which should be redirected to.

Last used            The date and time the old URL has been last accessed and redirected to the new URL.

When creating new Internal 301 Redirect or modifying the existing one the following page is shown:

**Figure 8.2. Internal 301 Redirect page**

URL

Moved from URL      about-joomla

Moved to URL        license

As explained above, both the Moved from URL and Moved to URL need to be the correct SEF URLs without any domain or non-SEF variables.

## 8.2. 301 Redirects using .htaccess

301 Redirects using .htaccess file are described in the Edit .htaccess file section.

## 8.3. SEF URLs Aliases

SEF URLs Aliases are basically different URLs for existing SEF URLs. By accessing any of the SEF URL alias you will be redirected with the 301 code to the corresponding SEF URL. Each SEF URL may have any number of aliases assigned. The big advantage of using aliases is that they can be any URL, not just the SEF one, for example the URLs from your old web site that was using some non-SEF variables that you need to migrate to Joomla! with completely SEF URLs.

### 8.3.1. Managing SEF URL Aliases

The SEF URL Aliases can be set when creating new SEF URL or modifying the existing one using the SEF URL Manager - the aliases can be set on the Aliases tab:

**Figure 8.3. SEF URL Aliases**



You can enter one SEF URL Alias per line in the Alias list field. The aliases must be relative without the leading slash (so they cannot contain the domain part) and they may contain non-SEF variables. Some correct examples are: `old-url.html` or `article.php?id=10`. Incorrect aliases are: `www.domain.tld/something.htm` (is not relative) or `/something.php` (contains the leading slash).

# Chapter 9. SiteMap

JoomSEF allows you to generate the Sitemap XML file that you can use to tell search engines which URLs you want to index on your web site. The default Sitemap file configuration options can be found in JoomSEF's Configuration and are described in the Sitemap Configuration Options section.

The Sitemap XML format is fairly simple, but JoomSEF provides graphical interface to further simplify the task of managing your Sitemap XML file. If you're interested, you can find more information about the Sitemap XML file format at <http://en.wikipedia.org/wiki/Sitemaps>.

## 9.1. SiteMap Manager

The graphical SiteMap Manager can be opened using the SiteMap menu item or the Manage SiteMap button in JoomSEF's Control panel.

**Figure 9.1. SiteMap Manager**

Filters						
Use RE <input type="checkbox"/>	Filter SEF Urls Use RE <input type="checkbox"/>	Filter Real Urls: <input type="text"/>	Indexed: <input type="text"/>	Change Frequency: <input type="text"/>	Priority: <input type="text"/>	Component: <input type="text"/>
		(All) <input type="text"/>	(All) <input type="text"/>	(All) <input type="text"/>	(All) <input type="text"/>	(All) <input type="text"/>
Reset						
Num	SEF Url	Real Url	Indexed	Date	Change Frequency	Priority
1	<input type="checkbox"/>	index.php?option=com_content&lang=cs&view=frontpage&Itemid=1	<input type="checkbox"/>	2010-07-14	daily	0.2
2	<input type="checkbox"/>	43-example-pages-and-menu-links.html	<input type="checkbox"/>	2010-07-14	daily	0.2
3	<input type="checkbox"/>	46-404.html	<input type="checkbox"/>	2010-07-09	daily	0.2
4	<input type="checkbox"/>	46-404/pdf.html	<input type="checkbox"/>	2010-07-14	daily	0.2
5	<input type="checkbox"/>	about-joomla-alias/default.html	<input type="checkbox"/>	2010-07-14	daily	0.2
6	<input type="checkbox"/>	anahita/account.html	<input type="checkbox"/>	2010-07-07	daily	0.2

Here you can see the list of all your SEF URLs and their assigned Sitemap properties. The fields are:

- SEF URL**                      The SEF URL.
- Real URL**                    The Real URL for the SEF URL.
- Indexed**                     Whether the URL will be present in the Sitemap XML file.
- Date**                         The date that the file was last modified.
- Change Frequency**        How frequently the page is usually changed.
- Priority**                      The priority of the URL relative to other URLs on the site.

### 9.1.1. Using the SiteMap Manager

The usage of the SiteMap Manager is easy, but it can be a little confusing for the beginners. Before the Sitemap XML file may be created, you first need to select which URLs should be present in it and what are their parameters. To do this, follow these steps:

1. On the first page of URLs, check the box in the Indexed field for those you want to be present in the Sitemap XML file.
2. Set the desired Date, Change Frequency and Priority values for the selected URLs.

3. Click the Apply button in the toolbar - this is very important, since the selected values are not stored when switching to another page!
4. Go to next page and repeat the steps, until all the URLs you want to be present in the Sitemap XML file are selected as Indexed.

To simplify the task of selecting the URLs as Indexed, you may use the Filters fields to display only the URLs you want to index. You can also use the Action fields in the toolbar to set the properties for multiple URLs at once.

When you have all the URLs selected as Indexed and their properties are set correctly, just click the Generate XML button in the toolbar and the Sitemap XML file will be created for you according to the options set in the JoomSEF's Configuration on the SiteMap tab. When the XML file is generated, it can be either pinged automatically to Google, Yahoo, Bing or some other services, or you can ping them manually using the buttons in the toolbar. You can also use the file for example in the Google Webmaster Tools.



# Chapter 10. Extra features

This chapter describes some features that are not the main part of JoomSEF's functionality, but may be very useful.

## 10.1. Edit .htaccess file

JoomSEF offers you the graphical interface to edit your .htaccess file directly in your Joomla! administration area. In order for this function to work correctly the .htaccess file needs to be writable by your web server, for example when using Apache the .htaccess file either needs to be owned by www-data user (or any other user used by your Apache server) or needs to have the 0666 access rights set.

To edit your .htaccess file you can use one of the two modes available - Simple and Advanced. These are described in the following sections.

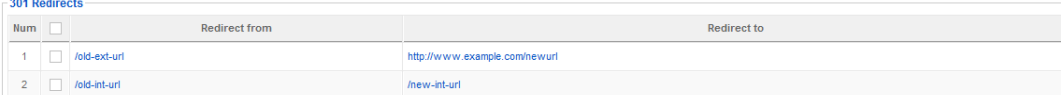
### 10.1.1. Simple View

The Simple view can be accessed by clicking the Edit .htaccess menu item or the Edit .htaccess button in JoomSEF's Control panel. It lets you very easily manage the 301 Redirects and the main options available in your .htaccess file.

#### 10.1.1.1. 301 Redirects

You can use the 301 Redirects in the .htaccess file to redirect one SEF URL to another URL. Unlike the Internal 301 Redirects the .htaccess 301 Redirects can be used to redirect some URL to a different domain. In the Simple view you can see the list of your .htaccess 301 Redirects:

**Figure 10.1. .htaccess 301 Redirects**



Num	Redirect from	Redirect to
1	/old-ext-uri	http://www.example.com/newurl
2	/old-int-uri	/new-int-uri

You can very easily manage these redirects using the New, Edit and Delete buttons in the toolbar. The fields of the redirects are as follows:

**Redirect from**      The original SEF URL that should be redirected. This URL must be relative to your web site root (without the domain) and must start with the slash.

**Redirect to**        The new URL that should be redirected to. This URL doesn't need to be SEF and it can either be the full absolute URL (with domain part) or the URL relative to your web site root but starting with the slash.

#### 10.1.1.2. RewriteBase Option

You can enable (which is recommended) or disable and set the value for the RewriteBase option here. This is important to be set correctly for correct functionality of JoomSEF.

Set RewriteBase to / if your site is located in domain root (i.e. `http://www.sitename.com`) or use relative path, i.e. `/joomlashop` if your site is located in domain's subfolder (i.e. `http://www.sitename.com/joomlashop`).

### 10.1.1.3. FollowSymLinks Option

You can enable or disable the FollowSymLinks option here. Enabling this option can cause 500 Internal error if it's not allowed in global web server configuration. For most sites that do not use symbolic links having this option enabled is not needed.

## 10.1.2. Advanced View

When in Simple view click the Advanced Edit button in the toolbar to access the Advanced view. In this mode you can basically just edit your .htaccess file manually like you were using any text editor, but you don't need to leave the Joomla! administration area. But be aware that any incorrect change in your .htaccess file can make your website inaccessible!

**Figure 10.2. Edit .htaccess - Advanced view**

```

Edit your .htaccess file:
DirectoryIndex index.php
RewriteEngine On
RewriteBase /

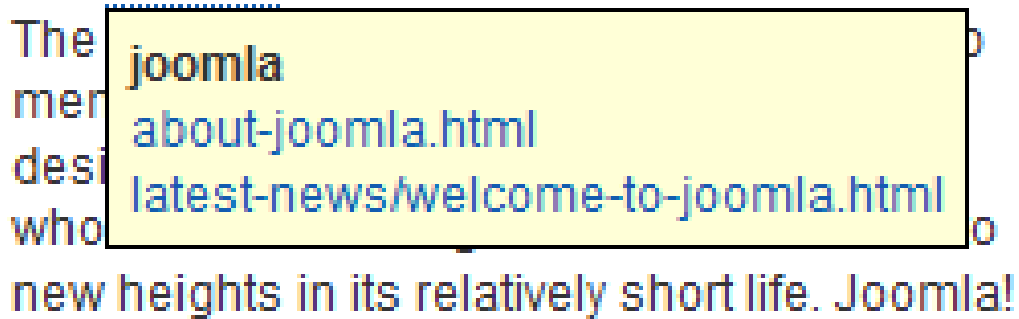
##### Begin - Rewrite rules to block out some common exploits
## If you experience problems on your site block out the operations listed below
## This attempts to block the most common type of exploit `attempts` to Joomla!
#
# Block out any script trying to set a mosConfig value through the URL
RewriteCond %{QUERY_STRING} mosConfig_[a-zA-Z]{1,21}(=|\%3D) [OR]
# Block out any script trying to base64_encode crap to send via URL
RewriteCond %{QUERY_STRING} base64_encode.*%\(.*\) [OR]
# Block out any script that includes a tag in URL
RewriteCond %{QUERY_STRING} (\|%3E) [NC,OR]
# Block out any script trying to set a PHP GLOBALS variable via URL
RewriteCond %{QUERY_STRING} GLOBALS(=|\\[|\\%[0-9A-Z]{0,2}) [OR]
# Block out any script trying to modify a _REQUEST variable via URL
RewriteCond %{QUERY_STRING} _REQUEST(=|\\[|\\%[0-9A-Z]{0,2})
# Send all blocked request to homepage with 403 Forbidden error!
RewriteRule ^(.*)$ index.php [F,L]
#
##### End - Rewrite rules to block out some common exploits

RewriteCond %{REQUEST_FILENAME} !-f
RewriteCond %{REQUEST_FILENAME} !-d
RewriteCond %{REQUEST_URI} !^/index.php
RewriteCond %{REQUEST_URI} (/|\.php|\.html|\.htm|\.feed|\.pdf|\.raw|/[\^\.\*\?])$ [NC]
RewriteRule (.*) index.php
RewriteRule .* - [E=HTTP_AUTHORIZATION:%{HTTP:Authorization},L]

```

## 10.2. Internal links

The Internal links feature allows you to assign words to SEF URLs - these words then will be found in the articles text on your site and made link to the selected URL. For example you can assign the word `license` to URL of your Licensing policy and every `license` word in your articles will automatically link to your Licensing policy site. If there is more than one SEF URL assigned to one word, the popup with all the links available will be shown when the word is clicked on the site:

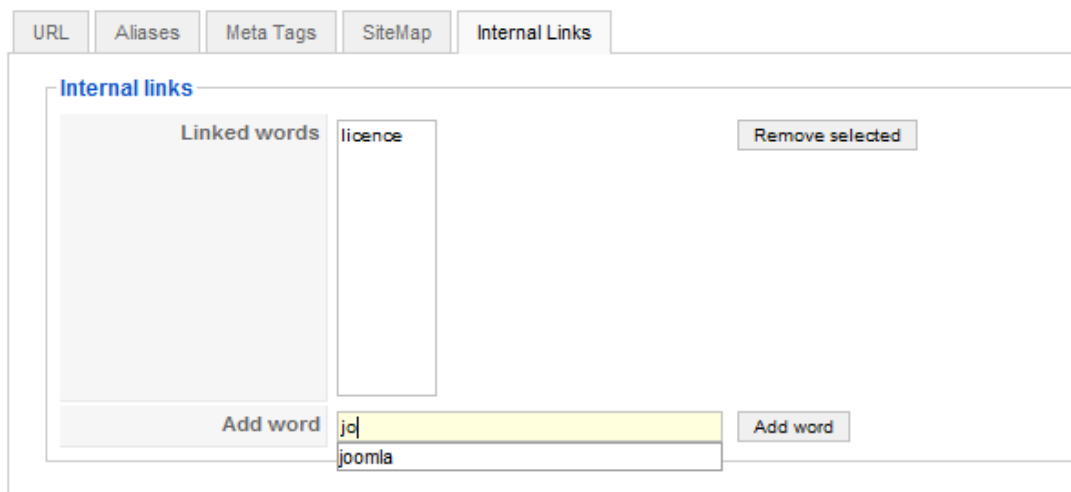
**Figure 10.3. Multiple SEF URLs assigned to one word**

The Internal links feature can be configured in JoomSEF's Configuration on the SEO tab - the options are described in the SEO Configuration Options section.

Since you can assign more than one words to point to one URL and one word can point to more than one URL, there are two places to manage Internal links - in the SEF URL Manager you can assign words to individual URLs and in the Words Manager you can assign URLs to individual words. Both methods are described in the following sections.

### 10.2.1. Assigning words to URLs

The words can be assigned to SEF URL using the SEF URL Manager when you edit the individual SEF URL on the Internal Links tab.

**Figure 10.4. Internal Links tab**

The fields available are:

**Linked words** The list of words that currently link to the selected SEF URL. You can remove a word from this list using the Remove selected button.

**Add word** Use this field to add a new word to the Linked words list. When you type in the field, the words already stored in the Words Manager are suggested as you type,

so you can either select the already known word or type a new one. The word is added by clicking the Add word button.

## 10.2.2. Assigning URLs to words

You can assign the existing SEF URLs to words using the Words Manager, which can be opened using the Manage Words button on the JoomSEF's Control panel.

**Figure 10.5. Words Manager**

Num	<input type="checkbox"/>	Words	Associated SEF URLs
1	<input type="checkbox"/>	joomla	about-joomla.html latest-news/welcome-to-joomla.html
2	<input type="checkbox"/>	licence	the-project/joomla-license-guidelines.html
3	<input type="checkbox"/>	license	the-project/joomla-license-guidelines.html

You can use the Words Manager to create, edit or delete the words which have SEF URLs assigned. The Word Edit page is very similar to the Internal Links tab in the SEF URL Edit page:

**Figure 10.6. Word Edit page**

Word

joomla

Linked URLs

about-joomla.html  
 latest-news/welcome-to-joomla.html

Add URL

joomla  
 about-joomla.html  
 banners/joomla-extensions.html  
 banners/joomla-promo-books.html  
 banners/joomla-promo-shop.html  
 banners/joomla-shop.html  
**banners/joomla.html**  
 banners/joomla-code.html  
 en/about-joomla-alias/default.html  
 en/banners/joomla-extensions.html  
 en/banners/joomla-promo-books.html

Add URL

The fields are:

**Word**            The word. You can change it here.

**Linked URLs**    The list of URLs currently linked by the selected word. You can use the Remove selected button to remove URLs from the list.

**Add URL** Use this field to add SEF URL to the Linked URLs list. When you type the list of available SEF URLs is displayed. You can only add the existing SEF URL, so you need to select the URL from the list and then click the Add URL button.

## 10.3. Statistics

The Statistics page can help you with Search Engine Optimization by providing you with easy access to usage statistics of your website. You can access it using the *Statistics* button in JoomSEF's Control Panel on Extras Management tab.

The page displays different information in two tabs described in more detail in following sections.

### 10.3.1. Statistics tab

The Statistics tab can be used to easily obtain data on how well individual pages of your website are indexed by Google, how fast they're loading and if they conform to W3C standards.

**Figure 10.7. Statistics tab**

Filter SEF UrIs:	Filter Real UrIs:	Component: (All)						
<input type="checkbox"/>	URL	Google PageRank	Page Speed Factor	Indexed on Google	Page popularity	Indexed on Facebook	Indexed on Twitter	Validity
<input type="checkbox"/>	rss							
<input type="checkbox"/>	atom							
<input type="checkbox"/>	mobile-games/towers-of-hanoi	0	93/100 Show graph	0	0	0	0	Errors
<input type="checkbox"/>	mobile-games/3210	0	92/100 Show graph	0	0	0	0	Errors
<input type="checkbox"/>	desktop-games/firefighters-whatever-4-takes	0	94/100 Show graph	0	0	0	0	Errors
<input type="checkbox"/>	mobile-games/quit-smoking-arkanoid	0	90/100 Show graph	0	0	0	0	Errors
<input type="checkbox"/>	jobs	0	90/100 Show graph	0	0	0	0	Errors
<input type="checkbox"/>	private-area							
<input type="checkbox"/>	developer-blog/rss							

When you open the Statistics tab, you can see a list of your SEF URLs stored in JoomSEF with no data at all. In order to get the data from Google, first select URLs that you want to obtain the data for and then click the *Update Statistics* or *Update Validity* button in toolbar. You will be redirected to Update statistics or Update validity page that will query Google for the desired data. Once the update process is completed, click the *Finish* button to get back to the Statistics page.

Because Google and W3C limit number of queries they will respond to we recommend updating maximum of 20 URLs a day. Obtained data are cached with your URLs until next update.

You can obtain following data:

**Google PageRank**

Google PageRank for the page.

**Page Speed Factor**

Google's score for the page's speed. You can obtain this information only if you have the Google API Key configured and you have enabled access to Page Speed Online API. See Google Analytics Configuration options for more information.

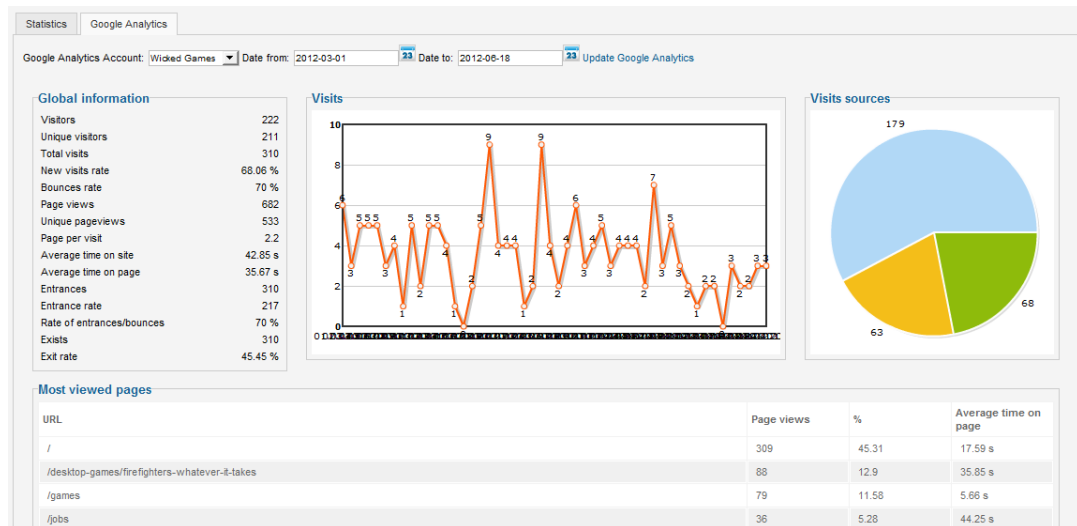
The *Show Graph* link displays a graph of various elements of your page and how they contribute to the page's loading time.

Indexed on Google	How many pages linked by your page are indexed by Google.
Page popularity	How many pages that link to your page are indexed by Google.
Indexed on Facebook	How many times your page is linked from Facebook.
Indexed on Twitter	How many times your page is linked from Twitter.
Validity	Whether your page conforms to the W3C standards.

### 10.3.2. Google Analytics tab

The Google Analytics tab allows instantaneous access to the most essential usage statistics from your Google Analytics account.

**Figure 10.8. Google Analytics tab**



You need to set your Google e-mail and Google password in Google Analytics Configuration options first before you can use the Google Analytics tab to access your usage statistics, otherwise an error message will be displayed.

Once your access credentials are correctly configured all the websites registered with your account are displayed in the *Google Analytics Account* dropdown box. Choose a website and dates range you are interested in and click the *Update Google Analytics* link to update the tab with website usage statistics from your account.

### 10.4. Website Crawler

As described in How It Works chapter, when a SEF URL is once created, no configuration changes will affect it and it will be used until you manually make JoomSEF to regenerate it. This can be done either by updating the URLs manually (see Updating URLs section) or by deleting them, so they will be recreated automatically once they're encountered when the website is being browsed. But what if you don't want to wait until all your SEF URLs are generated this way, for example if you want to check whether your URLs will be created correctly after a configuration change?

The Website Crawler can help you with that by automatically crawling your website and thus generating all the SEF URLs and saving you a lot of time. You can access this feature by clicking the *Crawl Website* button in JoomSEF's Control Panel on Extras Management tab.

**Figure 10.9. Website Crawler page**

The screenshot shows the 'Website Crawler Settings' interface. It is divided into two main sections. The top section, 'Website Crawler Settings', contains two input fields: 'Root URL' with the value 'http://j17/' and 'Max Crawl Level' with a dropdown menu set to '5'. The bottom section, 'Website Crawler Status', displays the current state: 'Status: Not running', 'Current level: 0', and 'Crawled URLs: 0 / 0'. A 'Start Crawl' button is located at the bottom left of the status section.

Before you start the crawler, you can specify following options:

- |                 |   |
|-----------------|---|
| Root URL        | The URL that should be used as a starting page from which the crawling will begin. By default the crawling starts from your website's homepage. |
| Max Crawl Level | How deeply nested URLs should be crawled. This depends on your website's structure, but the default value should be fine for most websites.     |

Once you click the *Start Crawl* button your website will be crawled using AJAX and the progress will be reported in the Website Crawler Status box. Please don't close or refresh the page when the crawler is running, otherwise the process will be interrupted! If you want to stop the process, use the *Cancel* button.

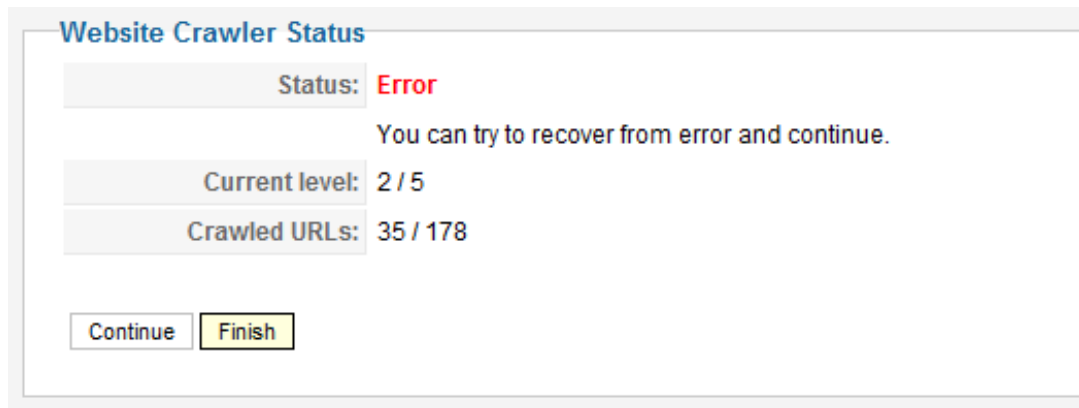
**Figure 10.10. Website Crawler running**

The screenshot shows the 'Website Crawler Status' interface during a crawl. The 'Status' is 'Running', indicated by a circular loading spinner. Below it, it says 'Last response from server: 6 seconds'. The 'Current level' is '2 / 5' and 'Crawled URLs' are '36 / 181'. A 'Cancel' button is located at the bottom left.

Once crawler checks all the URLs the *Status* field will change to **Success** and the *Cancel* button will change to *Finish* button. Clicking it will take you back to JoomSEF's Control Panel.

If some problem is encountered during the process (for example your server will not respond in specified time limit - this may happen on large websites with many URLs) the **Error** status will be reported and crawling will stop. Two buttons will be displayed in this case - *Continue* and *Finish*. By clicking the *Continue* button, Website Crawler will try to recover and continue from URL that was browsed when the error occurred. If you click the *Finish* button you will be taken back to JoomSEF's Control Panel.

**Figure 10.11. Website Crawler error**



## 10.5. Cron Tasks

The *Set Up Cron Tasks* page allows you to have some maintenance tasks run automatically in specified time period using the cron scheduler in Unix-like operating systems. You can use this feature to easily generate the crontab file that you can install on your web server. Please note that this is an advanced feature recommended to be used by advanced users and server administrators only.

Cron Tasks feature can be accessed by clicking the *Set Up Cron Tasks* button in JoomSEF's Control Panel on Extras Management tab.



**Figure 10.12. Set Up Cron Tasks page**

**Cron Tasks Settings**

Enable cron tasks:  No  Yes

Only local access:  No  Yes

Secret key:

---

**Generate crontab file**

Update URLs:  No  Yes

Update Meta Tags:  No  Yes

Update Sitemap:  No  Yes

Crawl Website:  No  Yes

Max Crawl Level:

Run:

Because the cron tasks are run from Joomla! frontend, there are some security settings to be configured:

Enable cron tasks	This option enables the cron tasks to be run. They're disabled by default, but you need to enable it if you want to use the scheduled cron tasks.
Only local access	If this option is enabled, the cron tasks can be run only from the same server that runs Joomla!. Disable this only if you really need to run cron tasks from different server.
Secret key	The key that you set in this option needs to be present in the request made from crontab in order for cron tasks to be run. A random key is generated for you by default, but you can set your own.

When the Cron Tasks Settings are set, you can configure your cron tasks and generate the crontab file in the *Generate crontab file* section of the page. Available settings are:

Update URLs	When enabled, your SEF URLs will be updated when cron tasks are run. See Updating URLs section for more information.
Update Meta Tags	When this option is enabled, Update Meta Tags and Update Sitemap tasks are not available.
Update Meta Tags	When enabled, meta tags for your SEF URLs will be updated when cron tasks are run. See Updating URLs section for more information.

	This task is not available when Update URLs task is enabled.
Update Sitemap	When enabled, sitemap options for your SEF URLs will be updated when cron tasks are run. See Updating URLs section for more information.
	This task is not available when Update URLs task is enabled.
Crawl Website	When enabled, your website will be crawled when cron tasks are run. See Website Crawler section for more information.
Max Crawl Level	If the Crawl Website task is enabled, this option specifies how deeply nested URLs should be crawled. See Website Crawler section for more information.
Run	Specifies the time period how often you want selected tasks to be run.

Once the desired cron tasks are selected and configured, click the *Generate* button and the resulting crontab file will be offered for download to you. When you download it you can install it on your server to automatically run selected tasks.

Don't change the *Cron Tasks Settings* when you have your crontab installed, otherwise the cron tasks will stop being run.

# Chapter 11. Upgrades

JoomSEF offers very comfort way to upgrade both the component itself and its extensions using one simple Upgrade page. You can access the Upgrade page using the Upgrade menu item or Check Updates button in JoomSEF's Control panel. Furthermore JoomSEF 4 supports Joomla!'s native update system.

The options of upgrade process are described in the following sections.

## 11.1. Upgrading JoomSEF

There are two ways to upgrade JoomSEF - either by using the downloaded installation ZIP package or by automatically upgrading from ARTIO server.

### 11.1.1. Upgrade from installation ZIP package

You can use this option if you have JoomSEF's installation ZIP package downloaded. Select the package in the Package File field of the Upload Package File box and click the Upload File & Install button:

**Figure 11.1. Upload Package File box**



The screenshot shows a form titled "Upload Package File". Below the title, there is a label "Package File:" followed by a text input field. To the right of the input field is a button labeled "Vybrat...". Further to the right is another button labeled "Upload File & Install".

The package file needs to contain the same or newer version of JoomSEF than the one currently installed. If the package file with the same version is used, the reinstall is initiated (only the files are rewritten, so you won't lose any of your configuration or SEF URLs).

Be aware of using the correct package - if you have paid version of JoomSEF installed and you select the package with free version to upgrade to, your paid version will be changed to free one. This also works in the opposite way - if you have free version installed, and you purchase and download the paid package, you can use it to change your free version to paid one without losing any configuration and SEF URLs.

For JoomSEF 4 you can also install the installation ZIP package directly in Joomla!'s *Extension Manager: Install* page - your currently installed version will be automatically updated with the ZIP package version.

### 11.1.2. Upgrade from ARTIO server

JoomSEF can also be upgraded automatically from the ARTIO Upgrade server. This function can be used to upgrade your JoomSEF or to reinstall it if you already have the newest version installed. Just be aware to set your Download ID correctly in JoomSEF's Configuration on the Registration tab if you are using the paid version of JoomSEF, otherwise your version will be changed to free one when using this feature. It can also be used in the opposite way - if you have free version of JoomSEF installed and you've purchased the paid version, just set your Download ID in JoomSEF's Configuration and use this feature to change your version to paid one. You won't lose any of your configuration or the SEF URLs when using this function.

According to the Download ID set, there are two options how the Upgrade page can look like:

1. Download ID not set or not valid (the warning is also shown in this case)

**Figure 11.2. Upgrade without Download ID set**

**JoomSEF**

**Version Info**

Installed version:	3.6.5
Newest version:	3.6.6

**Upgrade From ARTIO Server**

**Upload Package File**

Package File:

2. Download ID set and valid

**Figure 11.3. Upgrade with Download ID set**

**JoomSEF**

**Version Info**

Installed version:	3.6.5
Newest version:	3.6.6

**Registration Info**

Registered to:	David Jozefov
Free upgrades available until:	16 July 2011

**Online Upgrade to Paid Version**

**Upload Package File**

Package File:

Furthermore, if your JoomSEF is already up to date, there is the Reinstall button instead of the Upgrade button available:

**Figure 11.4. Online JoomSEF reinstall**

**JoomSEF**

**Version Info**

Installed version: 3.6.6  
Newest version: 3.6.6

**Reinstall from ARTIO Server**

[Reinstall from ARTIO Server](#)

**Upload Package File**

Package File:  [Vybrat...](#) [Upload File & Install](#)

In Joomla! 2.5 you can also use its native *Extension Manager: Update* page to search for available JoomSEF 4 version and update it directly.

## 11.2. Upgrading JoomSEF Extensions

On the bottom of the Upgrade page there is a list of installed JoomSEF Extensions shown:

**Figure 11.5. JoomSEF Extensions Upgrade**

SEF Extension	Installed version	Newest version	Type	Upgrade
JomSocial	2.1.3	2.1.4	Paid	<a href="#">Upgrade</a>
Community Builder	2.0.0	2.0.0	Free	Not available
Custom Properties	2.0.1	2.0.2	Free	<a href="#">Upgrade</a>
mosets Hot Property	2.1.0	2.1.0	Paid	Not available

For every extension, there are the currently installed version, the newest version available on the ARTIO Server and the type of the extension displayed. If there is a newer version available, the Upgrade button is shown in the Upgrade column for the extension.

Free extensions can be upgraded using the Upgrade button right away. For the paid extensions, the valid Download ID needs to be set in the extension's parameters on the Registration tab. This is signaled by the color of the key icon next to the Paid word - if the key is gray, the Download ID is not set, otherwise the key is gold. You can click the key icon to directly set the Download ID for the extension.

JoomSEF Extensions can also be upgraded in a similar way directly on the Extensions Management page.

In Joomla! 2.5 you can also use its native *Extension Manager: Update* page to search for available JoomSEF 4 extensions updates and update them directly.

# Chapter 12. Usage Tips

## 12.1. Using JoomSEF on multilanguage website

### 12.1.1. JoomSEF 3

The only way supported in JoomSEF 3 to have multilanguage website is to use the JoomFish component.

The best way to use JoomSEF with JoomFish is to disable the *System - Jfrouter* plugin in your Joomla's Plugin Manager. JoomSEF will then take care of all the language recognition.

If for any reason you want to have the JoomFish router enabled, JoomSEF is capable of working together with it if you have JoomFish version at least 2.0.3 or newer installed, but you must follow a few rules to configure JoomSEF properly for this. When JoomFish router is enabled, there are some restrictions for using the options in the JoomSEF's Configuration on the JoomFish tab:

Language integration	This option must match the setting set in the JoomFish router parameters - only the <i>include in path</i> and <i>use different domains</i> options are available.
Always use language	This option should be enabled.
Translate URLs	There is no restriction for this option.
Get language from browser setting	This option is not available, since JoomFish router controls this.
Save language to cookie	This option is not available, since JoomFish router controls this.
Main language	This option does not work when JoomFish router is enabled, so it must be set to <i>(none)</i> .
Domain configuration	This is not available, since JoomFish router controls the domains used.

If you set the options properly according to these rules and to match the settings made in the JoomFish router parameters, JoomSEF should work with JoomFish router enabled.

### 12.1.2. JoomSEF 4

JoomSEF 4 supports two ways of generating multilanguage content in Joomla! - native Joomla! multilanguage capabilities and using the FaLang component. For both ways the following conditions have to be met:

1. *System - Language Filter* plugin needs to be **disabled**. JoomSEF provides its own language filtering.
2. *System - ARTIO JoomSEF* plugin needs to be as high as possible in ordering of system plugins.
3. *Enable JoomSef language management* option in JoomSEF's Configuration on Language tab needs to be **enabled**.

4. Set your desired language integration options in JoomSEF's Configuration on Language tab, **not** in Joomla!'s or FaLang's system plugins.

When all the above conditions are met, JoomSEF should work correctly on your multilanguage website generating and translating SEF URLs according to your configuration.

---

## Chapter 13. Troubleshooting

You can find the information about common problems encountered when using JoomSEF in our FAQ at <http://www.artio.net/faqs>.



# Appendix A. Appendix A.

## Transliteration of Cyrillic alphabet

When JoomSEF is installed on a website which uses Cyrillic alphabet, the non-Latin characters are by default converted to their ASCII equivalents according to new 2010 system for transliteration of names in Russian passports (see Wikipedia for more information). The transliteration process can be customized in JoomSEF's Configuration. This is the complete transliteration table for Cyrillic characters used by JoomSEF:

**Table A.1. Cyrillic transliteration**

Cyrillic uppercase	Cyrillic lowercase	ASCII
А	а	a
Б	б	b
В	в	v
Г	г	g
Д	д	d
Е	е	e
Ё	ё	e
Ж	ж	zh
З	з	z
И	и	i
Й	й	i
К	к	k
Л	л	l
М	м	m
Н	н	n
О	о	o
П	п	p
Р	р	r
С	с	s
Т	т	t
У	у	u
Ф	ф	f
Х	х	kh
Ц	ц	tc
Ч	ч	ch
Ш	ш	sh
Щ	щ	shch

<b>Cyrillic uppercase</b>	<b>Cyrillic lowercase</b>	<b>ASCII</b>
Ъ	ъ	-
Ы	ы	y
Ь	ь	-
Э	э	e
Ю	ю	iu
Я	я	ia