## **Akeeba Ticket System User's Guide**

Nicholas K. Dionysopoulos

### Akeeba Ticket System User's Guide

Nicholas K. Dionysopoulos Copyright © 2011-2021 Akeeba Ltd

#### **Abstract**

This book covers the use of the Akeeba Ticket System component which allows you to easily create a support ticket system area in your Joomla!<sup>TM</sup>-powered web site.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license can be found on-line at http://www.gnu.org/licenses/fdl.html.

## **Table of Contents**

User's Guide	
1. Introduction and installation	
1. Introducing Akeeba Ticket System	
2. Requirements and compatibility	
3. Installing Akeeba Ticket System	
3.1. Installing or manually updating the component	. 6
3.1.1. Install from URL	
3.1.2. Upload and install.	
3.1.3. Manual installation	
4. Upgrading from Core to Professional	
5. Automatic updates	
5.1. Troubleshooting the update	
5.1.1. Addressing server issues	
5.1.2. Check the validity of your Download ID	
5.1.2.1. Check your subscription status	
5.1.2.2. Multiple Professional edition Akeeba extensions with different	12
Download IDs	13
5.1.2.3. Entering or changing your Download ID after an update is available	
5.1.2.3. Updates are showing after installing the latest version	
5.1.4. Updates not showing despite having an older version	
5.1.4.1. Check the update site	
5.1.4.1. Check the update site	
5.1.4.2. Refresh the update cache	
5.1.5.1. The update fails to download	
5.1.5.2. Updating with a third party service fails	
5.1.5.3. Manual update	
5.1.5.4. Update installation problems	
7. Requesting support and reporting bugs	
8. Uninstallation	
2. Overview and Quick Setup	
1. Overview	
2. Quick Setup	
3. The Component	
1. The Control Panel page	
2. Options	
3. Custom fields	
4. Categories	
5. Tickets	
5.1. Editing a ticket	
6. Canned Replies	
7. Credits	
8. Email Templates	
8.1. Editing e-mail templates	
8.2. E-mail Keys	
8.3. Allowed variables in e-mails	
9. Off-line schedule	
10. Auto-replies	
11. User tagging	
12. Buckets	
13. Guest tickets	57

14. The menu item types	58
15. Front-end ticket management for support staff	59
16. Customising the front-end layout	62
17. Custom module positions in the front-end	64
4. The plugins	66
1. The "ats" plugins	66
1.1. Akeeba Subscriptions integration	66
1.2. Automatically close old tickets	66
1.3. Automatic replies	67
1.4. Custom fields	
1.5. Delete Manager Notes on ticket close / unpublish	
1.6. EasySocial avatar integration	68
1.7. GeoLocation support	68
1.8. Gravatar integration	
1.9. Fetch Email	69
1.9.1. GMail / G Suite Initial Configuration	
1.9.2. Troubleshooting	
1.9.3. Frequently asked questions	
1.10. New post notification emails	
1.11. Remove Obsolete Attachments	
1.12. Social "Like" buttons	
1.13. Joomla! User Groups integration	
2. The ATS InstantReply plugins	
2.1. Akeeba DocImport Articles	
2.2. Akeeba Ticket System public tickets	
3. The "finder" plugins	
3.1. Akeeba Ticket System	
4. The "search" plugins	
4.1. Akeeba Ticket System	
5. The "user" plugins	
5.1. Akeeba Ticket System	
5.2. Content - ATS Credits	
5.3. sh404SEF plugin	
5.4. Installer plugin	
6. Other plugins	
6.1. Action Log plugin	
5. Automation and CRON scripts	
1. CLI script for CRON jobs	
2. URL for CRON jobs	
3. CRON commands	
II. Appendices	
A. GNU Free Documentation License	. 107

## Part I. User's Guide

## **Table of Contents**

1. Introduction and installation	4
1. Introducing Akeeba Ticket System	4
2. Requirements and compatibility	<i>6</i>
3. Installing Akeeba Ticket System	<i>6</i>
3.1. Installing or manually updating the component	6
3.1.1. Install from URL	
3.1.2. Upload and install.	
3.1.3. Manual installation	
4. Upgrading from Core to Professional	
5. Automatic updates	
5.1. Troubleshooting the update	
5.1.1. Addressing server issues	
5.1.2. Check the validity of your Download ID	
5.1.2.1. Check your subscription status	
5.1.2.2. Multiple Professional edition Akeeba extensions with different	
5.1.2.3. Entering or changing your Download ID after an update is available.	
5.1.3. Updates are showing after installing the latest version	
5.1.4. Updates not showing despite having an older version	
5.1.4.1. Check the update site	
5.1.4.2. Refresh the update cache	
5.1.5. Miscellaneous troubleshooting and information	
5.1.5.1. The update fails to download	
5.1.5.2. Updating with a third party service fails	
5.1.5.2. Opdating with a tillid party service rails	
5.1.5.4. Update installation problems	
6. Entering your Download ID	
7. Requesting support and reporting bugs	
8. Uninstallation	
2. Overview and Quick Setup	
1. Overview	
2. Quick Setup	
3. The Component	
1. The Control Panel page	
2. Options	
3. Custom fields	
4. Categories	
5. Tickets	
5.1. Editing a ticket	
6. Canned Replies	
7. Credits	
8. Email Templates	
8.1. Editing e-mail templates	
8.2. E-mail Keys	
8.3. Allowed variables in e-mails	
9. Off-line schedule	
10. Auto-replies	
11. User tagging	
12. Buckets	
13. Guest tickets	
14. The menu item types	
15. Front-end ticket management for support staff	59

#### User's Guide

	16. Customising the front-end layout	. 62
	17. Custom module positions in the front-end	. 64
4.	The plugins	
	1. The "ats" plugins	. 66
	1.1. Akeeba Subscriptions integration	. 66
	1.2. Automatically close old tickets	. 66
	1.3. Automatic replies	. 67
	1.4. Custom fields	
	1.5. Delete Manager Notes on ticket close / unpublish	. 68
	1.6. EasySocial avatar integration	68
	1.7. GeoLocation support	68
	1.8. Gravatar integration	. 69
	1.9. Fetch Email	
	1.9.1. GMail / G Suite Initial Configuration	. 72
	1.9.2. Troubleshooting	92
	1.9.3. Frequently asked questions	. 94
	1.10. New post notification emails	. 96
	1.11. Remove Obsolete Attachments	96
	1.12. Social "Like" buttons	. 96
	1.13. Joomla! User Groups integration	. 96
	2. The ATS InstantReply plugins	. 97
	2.1. Akeeba DocImport Articles	
	2.2. Akeeba Ticket System public tickets	. 97
	3. The "finder" plugins	98
	3.1. Akeeba Ticket System	
	4. The "search" plugins	. 98
	4.1. Akeeba Ticket System	. 98
	5. The "user" plugins	. 99
	5.1. Akeeba Ticket System	. 99
	5.2. Content - ATS Credits	. 99
	5.3. sh404SEF plugin	
	5.4. Installer plugin	
	6. Other plugins	
	6.1. Action Log plugin	
5.	Automation and CRON scripts	
	1. CLI script for CRON jobs	
	2. URL for CRON jobs	
	3. CRON commands	

## Chapter 1. Introduction and installation

## 1. Introducing Akeeba Ticket System

Akeeba Ticket System is a component which allows you to create a support ticket system area in your website. The users will be able to create public or private tickets which can only be replied to by themselves or designated support staff. Integration with Joomla!<sup>TM</sup>'s access control allows you to fine tune who can create public or private tickets (or not allowed to post any tickets all), who can provide attachments and who is member of the support staff.

#### Key features:

- Deep integration with Joomla!<sup>TM</sup> ACL (access control).
- Nested categories at an infinite depth, using Joomla's native Category management system.
- Meaningful and predictable SEF URLs with automatic canonical URL redirection without the need for a third party SEF component.
- An interface built around our bespoke CSS framework, using modern CSS 3 (Grid and Flexbox), integrating perfectly with most Joomla 3 templates without the need for template overrides.
- Optional Dark Mode, always on or automatically enabled based on browser settings.
- Custom module positions, allowing you to easily customise front-end pages.
- You can turn off replies / new tickets with an optional message e.g. for holidays or planned maintenance periods.
- Automatic HTML sanitisation to prevent XSS exploits and other security issues.
- Private and public tickets.
- Attachments support. Optionally make attachments only visible to and downloadable by the ticket owner and the support staff, even on public tickets.
- Users can set their signature in the Joomla! user profile.
- Manager notes, for keeping private notes visible only to support staff and store them encrypted in your database.
- Pre-filled new ticket body, customisable per support category, guiding the user to enter all the necessary information you need to help them.
- Email notifications of new, replied to and edited tickets with customisable, HTML templates..
- Receive new tickets or ticket replies via email.
- Credits system: charge per ticket type or per reply, integrating with Akeeba Subscriptions.
- Integrates with standard Search and Smart Search, making *public* tickets searchable.
- · Automatically displays related public tickets when the user files a new support ticket, reducing your support load.
- Automatically displays related Akeeba DocImport<sup>3</sup> articles when the user files a new support ticket, reducing your support load ("FAQ" functionality).
- Optional guest tickets (tickets filed by users who do not yet have a user account on your site).
- Assign multiple tickets to a "bucket" and send mass replies to all of them.

- Saved replies ("canned replies") your support staff can easily use when replying to tickets.
- Automatic replies based on rules including ticket age, who has replied to it, content etc.
- Automation for common administrative tasks using either a real, CLI-based CRON system or by accessing a specific URL.
- Custom ticket statuses when the default (Open, Pending and Closed) are not enough for your use case.
- Time cards, i.e. how much time each member of the support staff has spent replying to tickets over a specific period of time.

#### **Important**

Some features are only available in the for-a-fee Akeeba Ticket System Professional edition. They are not present in the Akeeba Ticket System Core edition.

### What Akeeba Ticket System is NOT

The term "ticket system" may mean different things to different people. Before we discuss what Akeeba Ticket System is not, let us explain the context in which Akeeba Ticket System is designed.

A ticket system, as implemented in Akeeba Ticket system, means that you have customers creating tickets in different categories. Each category typically represents a particular skill set, area of expertise or product your company or organisation offers support for. You have teams of support people for each of these categories. Any one of them can answer any ticket in the category. On most tickets only one person will handle each ticket and if they have to escalate they will assign it to someone more apt to the task, implemented by assigning the ticket to the other person.

If a ticket would only be visible to support staff if someone else (let's call them an "admin") assigned it to them then the support staff would not answer any tickets unless that "admin" went first and dispatched tickets. That's quite the opposite concept to a ticket system. If you need something like that stop looking for a support ticket system and start looking for CRM software. What we described in this paragraph is one of the main tenets of a Customer Relationship Management (CRM) solution.

Akeeba Ticket System is not a CRM, nor are we interested in making it possible to be used as a CRM. This design goal has some very important corollaries:

- You cannot have different administrative / concierge staff and support staff. If someone can assign tickets to someone else they can also themselves be assigned tickets and reply to them. Conversely, if someone can be assigned and reply to tickets they can also assign tickets to someone else.
- You cannot have predefined escalation paths (workflows). The status of a ticket can be changed to any other status any time by any member of the support staff. Escalation paths (e.g. an Open ticket must first go to first level support before being tagged as "needs review by supervisor") is something that a CRM can handle and requires separate roles for the staff which, as we explained, is something that will not be implemented in ATS.
- The support staff cannot see only the tickets assigned to them. They will see all open tickets with the Latest Open Tickets view, even if they are assigned to other members of the support staff.
- Any member of the support staff can reply to any ticket, even if that ticket is assigned to a different member of the support staff. In our experience, when doing support you will frequently need the combined experience of two or more members of your support staff to handle complex cases.
- You cannot display the total time spent per client. You can pull a list of their tickets and see the time spent on each
  one, but you definitely cannot print a cumulative report or, most importantly, display a report per week, month, year
  or other time period. This is what a CRM or a project management software does.

- You cannot handle client invoicing through Akeeba Ticket System. This is what a CRM sometimes does (and definitely what an invoicing application is designed to do).
- You cannot have an FAQ section inside Akeeba Ticket System. This is a feature that's best implemented using Joomla! itself. FAQ sections are a relic of support ticket system software which runs outside of a CMS (Content Management System) like Joomla!. Since you'd need a way to provide organised content for the FAQ section they implemented a miniature CMS. But Akeeba Ticket System runs inside one of the most advanced Content Management Systems out there: Joomla!. It is simply against reason trying to duplicate the functionality of Joomla! inside a Joomla! component when you can simply use Joomla! itself to handle content.

If you need any of the above features the Akeeba Ticket System is NOT for you. You would become frustrated with it and ultimately not be able to use it.

If you are unsure if something you want is possible please ask us a pre-sales question. We always reply to pre-sales questions honestly. If your use case is not compatible with the existing features and / or design goals of Akeeba Ticket System we will tell you upfront. We prefer to lose a sale than having a frustrated user because we recommended that they use software unsuitable for their use case.

## 2. Requirements and compatibility

Akeeba DocImport requires the following server-side configuration:

- Joomla!<sup>TM</sup> and PHP version compatibilities are detailed in our Version Compatibility matrix [https://www.akeeba.com/compatibility.html].
- MySQL 5.5 or later. Earlier database server versions will not be supported. Do note that earlier releases of MySQL are obsolete and not supported any more by Oracle (the company who controls the development of MySQL).

As far as the browser is concerned, you can use any modern version (i.e. published within the last year) of Microsoft Edge, Safari, Opera, Firefox or Google Chrome. We no longer support Internet Explorer; our software will display incorrectly or not work at all on this old, buggy and obsolete browser.

In any case, you must make sure that JavaScript is enabled on your browser for the administration interface to work. If you are using AVG Antivirus, please disable its Link Checker feature (and reboot your computer) as it is known to cause problems with several JavaScript-based web applications, including Akeeba Backup and its tools.

You are very strongly advised to disable or properly configure Internet firewalls, antivirus applications and browser extensions which interfere with the site's loading such as script blockers (such as NoScript) and ad blockers (such as AdBlockPlus) only for your site's domain name to ensure that the administration interface (both in the backend and the frontend of the site, the latter if you are logged in as a ticket system staff member) is displayed correctly. Remember that these applications and browser extensions are designed to protect you against third party sites. As a result they are very aggressive and WILL break your own sites. We can't do anything about it: your computer and your browser are under your control alone.

## 3. Installing Akeeba Ticket System

Installing Akeeba Ticket System is no different than installing any other Joomla!<sup>TM</sup> extension on your site. You can read the complete instructions for installing Joomla!<sup>TM</sup> extensions on the official help page [http://help.joomla.org/content/view/1476/235/]. Throughout this chapter we assume that you are familiar with these instructions and we will try not to duplicate them.

### 3.1. Installing or manually updating the component

Just like with most Joomla! extensions there are three ways to install or manually update Akeeba Ticket System on your site:

- Install from URL. This works only with the Professional release of our component. It is the easiest and fastest one, if your server supports it. Most servers do support this method.
- Upload and install. That's the typical extension installation method for Joomla! extensions. It rarely fails.
- Manual installation. This is the hardest, but virtually fail-safe, installation method.

Please note that installing and updating Akeeba Ticket System (and almost all Joomla! extensions) is actually the same thing. If you want to update Akeeba Ticket System please remember that you **MUST NOT** uninstall it before installing the new version! When you uninstall Akeeba Ticket System you will lose all your settings. This is definitely something you do not want to happen! Instead, simply install the new version on top of the old one. Joomla! will figure out that you are doing an update and will treat it as such, automatically.

#### Tip

If you find that after installing or updating Akeeba Ticket System it is missing some features or doesn't work, please try installing the same version a second time, without uninstalling the component. The reason is that very few times the Joomla! extensions installer infrastructure gets confused and fails to copy some files or entire folders. By repeating the installation you force it to copy the missing files and folders, solving the problem.

#### 3.1.1. Install from URL

The easiest way to install Akeeba Ticket System Professional is using the Install from URL feature in Joomla!.

#### **Important**

This Joomla! feature requires that your server supports fopen() URL wrappers (allow\_url\_fopen is set to 1 in your server's php.ini file) or has the PHP cURL extension enabled. Moreover, if your server has a firewall, it has to allow TCP connections over ports 80 and 443 to www.akeeba.com and cdn.akeeba.com. If you don't see any updates or if they fail to download please ask your host to check that these conditions are met. If they are met but you still do not see the updates please file a bug report in the official Joomla! forum [http://forum.joomla.org/]. In the meantime you can use the manual update methods discussed further below this page.

First, go to our site's download page for Akeeba Ticket System [https://www.akeeba.com/download/ats.html]. Make sure you are logged in. If not, log in now. These instructions won't work if you are not logged in! Click on the Take me to the downloads for this version button of the version you want to install. Please note that the latest released version is always listed *first* on the page. On that page you will find both Akeeba Ticket System Core and Professional. Next to the Professional edition's Download Now button you will see the DirectLink link. Right click on it and select Copy link address or whatever your browser calls this.

Now go to your site's administrator page and click on Extensions, Extension Manager. If you have Joomla! 3.x click on the Install from URL tab. Clear the contents of the Install URL field and paste the URL you copied from our site's download page. Then click on the Install button. Joomla! will download and install the Akeeba Ticket System update.

If Joomla! cannot download the package, please use one of the methods described in this section of the documentation. If, however you get an error about copying files, folder not found or a cryptic "-1" error please follow our installation troubleshooting instructions [https://www.akeeba.com/documentation/troubleshooter/abinstallation.html].

### 3.1.2. Upload and install.

You can download the latest installation packages our site's download page for Akeeba Ticket System [https://www.akeeba.com/download/ats.html]. Please note that the latest version is always on top. If you have an older version

of Joomla! or PHP please consult our Compatibility page [https://www.akeeba.com/compatibility.html] to find the version of Akeeba Ticket System compatible with your Joomla! and PHP versions. In either case click on the version you want to download and install.

If you are not a subscriber, click on the Akeeba Ticket System Core to download the ZIP installation package of the free of charge version.

If you are a subscriber to the Professional release, please make sure that you have logged in first. You should then see an item on this page reading Akeeba Ticket System Professional. If you do not see it, please log out and log back in. Click on the Professional item to download the ZIP installation package.

All Akeeba Ticket System installation packages contain the component and all of its associated extensions. Installing it will install all of these items automatically. It can also be used to upgrade Akeeba Ticket System; just install it *without* uninstalling the previous release.

In any case, do not extract the ZIP files yet!

#### Warning

**Attention Mac OS X users!** Safari, the default web server provided to you by Apple, is automatically extracting the ZIP file into a directory and removes the ZIP file. In order to install the extension through Joomla!'s extensions installer you must select that directory, right-click on it and select Compress to get a ZIP file of its contents. This behaviour was changed in Mac OS X Mountain Lion, but people upgrading from older versions of Mac OS X (Mac OS X Lion and earlier) will witness the old, automatic ZIP extraction, behaviour.

Log in to your site's administrator section. Click on Extensions, Manage link on the top menu. If you are on Joomla! 3.x please click on the Upload Package File tab. Locate the Browse button next to the Package File (Joomla! 2.5, 3.0 and 3.1) or Extension package file (Joomla! 3.2 and later) field. Locate the installation ZIP file you had previously downloaded and select it. Back to the page, click on the Upload & Install button. After a short while, Joomla!<sup>TM</sup> will tell you that the component has been installed.

#### Warning

Akeeba Ticket System is a big extension (over 2Mb for the Professional release). Some servers do not allow you to upload files that big. If this is the case you can try the Manual installation or ask your host to follow our installation troubleshooting instructions [https://www.akeeba.com/documentation/troubleshooter/abinstallation.html] under "You get an error about the package not being uploaded to the server".

If you have WAMPServer (or any other prepackaged local server), please note that its default configuration does not allow files over 2Mb to be uploaded. To work around that you will need to modify your php.ini and restart the server. On WAMPserver left-click on the WAMP icon (the green W), click on PHP, php.ini. Find the line beginning with upload\_max\_filesize. Change it so that it reads:

```
upload_max_filesize = 6M
```

Save this file. Now, left-click on the WAMP icon, click on Apache, Service, Restart Service and you can now install the component. Editing the php.ini file should also work on all other servers, local and live alike.

If the installation did not work, please take a look at our installation troubleshooting instructions [https://www.akeeba.com/documentation/troubleshooter/abinstallation.html] or try the manual installation described below.

#### 3.1.3. Manual installation

Sometimes Joomla!  $^{TM}$  is unable to properly extract ZIP archives due to technical limitations on your server. In this case, you can follow a manual installation procedure.

You can download the latest installation packages our site's download page for Akeeba Ticket System [https://www.akeeba.com/download/ats.html]. Please note that the latest version is always on top. If you have an older version of Joomla! or PHP please consult our Compatibility page [https://www.akeeba.com/compatibility.html] to find the version of Akeeba Ticket System compatible with your Joomla! and PHP versions. In either case click on the version you want to download and install.

If you are not a subscriber, click on the Akeeba Ticket System Core to download the ZIP installation package of the free of charge version.

If you are a subscriber to the Professional release, please make sure that you have logged in first. You should then see an item on this page reading Akeeba Ticket System Professional. If you do not see it, please log out and log back in. Click on the Professional item to download the ZIP installation package.

All Akeeba Ticket System installation packages contain the component and all of its associated extensions. Installing it will install all of these items automatically. It can also be used to upgrade Akeeba Ticket System; just install it without uninstalling the previous release.

Before doing anything else, you have to extract the installation ZIP file in a subdirectory named akeeba on your local PC. Then, upload the entire subdirectory inside your site's temporary directory. At this point, there should be a subdirectory named akeeba inside your site's temporary directory which contains all of the ZIP package's files.

If you are unsure where your site's temporary directory is located, you can look it up by going to the Global Configuration, click on the Server tab and take a look at the Path to Temp-folder setting. The default setting is the tmp directory under your site's root. Rarely, especially on automated installations using Fantastico, this might have been assigned the system-wide /tmp directory. In this case, please consult your host for instructions on how to upload files inside this directory, or about changing your Joomla! temporary directory back to the default location and making it writable.

Assuming that you are past this uploading step, click on Extensions, Manage link on the top menu. If you are on Joomla! 3.x please click on the Install from Directory tab. Locate the Install Directory edit box. It is already filled in with the absolute path to your temporary directory, for example /var/www/joomla/tmp. Please append /akeeba to it. In our example, it should look something like /var/www/joomla/tmp/akeeba. Then, click on the Install button.

If you still can't install Akeeba Ticket System and you are receiving messages regarding unwritable directories, inability to move files or other similar file system related error messages, please consult our installation troubleshooting instructions [https://www.akeeba.com/documentation/troubleshooter/abinstallation.html]. If these instructions do not help please do not request support from us; we are unlikely to be able to help you. These errors come from your site set up and can best be resolved by asking your host for assistance or by asking other users in the official Joomla!<sup>TM</sup> forums [http://forum.joomla.org].

## 4. Upgrading from Core to Professional

Upgrading from Akeeba Ticket System Core to Akeeba Ticket System Professional is by no means different than installing the component. You do not have to uninstall the previous version; in fact, you MUST NOT do that. Simply follow the installation instructions to install Akeeba Ticket System Professional over the existing Akeeba Ticket System Core installation. That's all! All your settings are preserved.

#### **Important**

When upgrading from Core to Professional you usually have to install the Professional package **twice**, without uninstalling anything in between. Sometimes Joomla! does not copy some of the files and folders the first time you install it. However, if you install the package again (without uninstalling your existing copy of Akeeba Ticket System) Joomla! copies all of the necessary files and performs the upgrade correctly.

## 5. Automatic updates

Akeeba Ticket System can be updated just like any other Joomla! extension, using the Joomla! extensions update feature. Please note that Joomla! is fully responsible for discovering available updates and installing them on your site. Akeeba Ltd does not have any control of the update process.

#### Note

This Joomla! feature requires that your server supports fopen() URL wrappers (allow\_url\_fopen is set to 1 in your server's php.ini file) or has the PHP cURL extension enabled. Moreover, if your server has a firewall, it has to allow TCP connections over ports 80 and 443 to www.akeeba.com and cdn.akeeba.com. If you don't see any updates or if they fail to download please ask your host to check that these conditions are met. If they are met but you still do not see the updates please file a bug report in the official Joomla! forum [http://forum.joomla.org/]. In the meantime you can use the manual update methods discussed further below this page.

#### Warning

Akeeba Ticket System Professional needs you to set up the Download ID before you can install the updates. Please consult the Entering your Download ID documentation section for more information.

You can access the extensions update feature in different ways depending on your Joomla version:

- Joomla 3: From the icon your Joomla! administrator control panel page. You will find the icon in the left-hand sidebar, under the Maintenance header. When there are updates found for any of your extensions you will see the Updates are available message. Clicking on it will get you to the Update page of Joomla! Extensions Manager.
- Joomla 3 (alternate method): From the top menu of your Joomla! administrator click on Extensions, Manager. From that page click on the Update tab found in the left-hand sidebar. Clicking on it will get you to the Update page of Joomla! Extensions Manager.
- Joomla 4: From the icon your Joomla! administrator control panel page. By default you will find the icon in the right-hand modules area, under the Update Checks header. When there are updates found for any of your extensions you will see the Updates are available message. Clicking on it will get you to the Update page of Joomla! Extensions Manager.
- Joomla 4 (alternate method): From the sidebar of your Joomla! administrator click on System. On the new page find the Update area towards the bottom of the middle column and click the Extensions link. This takes you to the Update page of Joomla! Extensions Manager.

If you do not see the updates try clicking on the Find Updates button in the toolbar. If you do not see the updates still you may want to wait up to 24 hours before retrying. This has to do with the way the update CDN works and how Joomla! caches the update information.

If there is an update available for Akeeba Ticket System tick the box to the left of its row and then click on the Update button in the toolbar. Joomla! will now download and install the update.

If Joomla! cannot download the package, please use one of the manual update methods described below. If, however you get an error about copying files, folder not found or a cryptic "-1" error please follow our installation troubleshooting instructions [https://www.akeeba.com/documentation/troubleshooter/abinstallation.html].

If you get a white page while installing the update please try either the Built-in method (described above) or the manual update method (described below).

### **Updating manually**

As noted in the installation section, installing and updating Akeeba Ticket System is actually the same thing. If the automatic update using Joomla!'s extensions update feature does not work, please install the update manually following the instructions in the installation section of this documentation.

#### Important

When installing an update manually you MUST NOT uninstall your existing version of Akeeba Ticket System. Uninstalling Akeeba Ticket System will always remove all your settings. You definitely not want that to happen!

Sometimes Joomla! may forget to copy some files when updating extensions. If you find Akeeba Ticket System suddenly not working or if you get a warning that your installation is corrupt you need to download the latest version's ZIP file and install it *twice* on your site, *without* uninstalling it before or in-between these installations. This will most certainly fix this issue.

If the error occurs again after a while, without you updating our software, please contact your host. Some hosts will delete or rename files automatically and without any confirmation as part of a (broken and unfit for purpose) "malware scanner / antivirus". Unfortunately, these scanners return a lot of false positives -innocent files mistakenly marked as malicious- but rename / delete them nonetheless, breaking software installed on the server. If you are on such a host we very strongly recommend that you move to a decent host, run by people who actually know what they are doing. It will be far less headache for you and would actually improve your site's security.

### 5.1. Troubleshooting the update

Like most Joomla extensions, our software relies on Joomla's built-in extensions updater. In simple terms, code written by the Joomla project, shipped with Joomla itself and running on your site is responsible for retrieving information about the latest available versions, determining whether an update is available, downloading the update package and installing it on your site. Akeeba Ltd has no control over that code.

Despite this not being our code, we do understand that our clients do come across problems with updates and need our help. The way the Joomla built-in extensions updater is written makes it prone to some easily preventable, common errors. Its error reporting ranges from unhelpful to non-existent. In an effort to help you, we've compiled and condensed all the troubleshooting we've done for years on our sites and our clients' sites.

We do understand that the instructions in this section are convoluted and complicated. We are afraid that this is the *simplest* form they can be reduced to. We'd like to assure you that they do not reflect on the quality of software *we* can produce. These instructions are necessitated by and reflect the way Joomla itself works.

If you were using our software between 2009 and 2016 you might remember that we were using our own code, Akeeba Live Update, to find, download and install updates to our software. It was a much better solution and much easier to troubleshoot; it would tell you exactly what to fix and ask you to click a button to let it verify the fix. Unfortunately, the Joomla Extensions Directory (JED) made it impossible to use ouw own updater code, even as an alternative to the Joomla built-in extensions updater, in 2016. Doing otherwise is a violation of JED's terms of service and would result in all of our extensions being unlisted. That's why we are now using the Joomla built-in extensions updater even though we know it's nowhere near as good as what we used to have. Sorry, folks.

### 5.1.1. Addressing server issues

In some cases you will see that Joomla cannot retrieve the latest version information or update package for our software, reporting it cannot connect to cdn.akeeba.com (extensions released after August 2020) or cdn.akeebabackup.com (extensions released before August 2020). Related to that, Joomla may report that it's unable to download the Professional edition's update package, saying it's unable to connect to our site www.akeeba.com (extensions released

after August 2020) or www.akeebabackup.com (extensions released before August 2020). This can mean a few different things which all have to do with how your host is set up.

Our CND and our site are accessible over HTTPS and use a valid, signed TLS certificate. At the time of this writing the TLS certificates are issued by Let's Encrypt and Amazon Web Services. The TLS certificates used for HTTPS on our CDN and site use the recommended SHA-256 hashing algorithm and the servers only support modern versions of the TLS protocol (at the time of this writing it's TLS 1.2 and later). If your host has an out of date Certification Authority cache or compiled PHP against an old TLS library which does not support modern versions of TLS your site will be unable to connect to our servers.

If this is not the case, please be aware that some hosts run a proxy server or a firewall which can either prevent or cache *outgoing* connections in front of their servers. Depending on how this is implemented it can cause two distinct types of problems.

The first problem is that your site might be unable to connect to our CDN and our server to retrieve the latest version information and the update package itself respectively. If this happens you need to ask your host to allow connections to TCP/IP port 443 (HTTPS) for www.akeeba.com and cdn.akeeba.com. If they ask you for an IP address please ask them to resolve these domain names from their server. The latter is a Content Delivery network (CDN) with hundreds of servers, powered by Amazon CloudFront, meaning that its IP address depends on where you are accessing it from.

The second problem is that when Joomla tries to retrieve the latest version information or an update file from our servers your host's proxy gets in the way and returns information it has cached. We explicitly ask for that information not to be cached, using standard HTTP headers, but some hosts choose to ignore web standards and do their own thing. Also worth noting is that your host should not interfering with HTTPS (encrypted) traffic, so all the more reason to be worried about their implementation in this case. Unfortunately, we have caught a few hosts doing that over the years.

None of these issues can be addressed by you or us. You will need to contact your host about them. Before you assume any of these issues are in play and if you are using the Professional edition of our software please do check that your Download ID is valid first.

#### 5.1.2. Check the validity of your Download ID

#### Note

The information in this section only applies to the Professional edition. If you are using the Core edition you can skip over it.

If you are using the Professional version of our software we need to verify that you have an active subscription that gives you access to downloads of the software you are trying to update. We do that by means of a Download ID which has the format 0123456789abcdef0123456789abcdef (Main Download ID) or 12345:0123456789abcdef0123456789abcdef (Add-on Download ID). In and by itself the Download ID does not carry any information about your subscription status. It is an identifier linked to your account on our site.

First, you need to check that you are using a valid Download ID. **Do not assume that your Download ID** is entered at all, or that it is valid. This kind of false assumption accounts for half of the update issues we are asked to help our clients with. Always check on our site. Log into our site and go to Add-on Download IDs from the top menu. Copy the Download ID and paste it to our extension's Options page in the Download ID box, under the Update tab.

If you had to enter or change the Download ID but Joomla was already reporting an updated version you need to follow the instructions in the Entering or changing your Download ID after an update is available section. Otherwise installing the update will NOT work at all due to the way Joomla caches update information in its database.

#### 5.1.2.1. Check your subscription status

As noted above, the Download ID itself does not carry any information about whether you are allowed to download an update. This check is done on our server when it receives the Download ID along with Joomla's request to download

an update. The check performed is simple: do you have an *active* subscription which gives you access to the software you are trying to download?

Do not assume that your subscription is active. It is possible that you missed an email warning you about the subscription expiring and a manual action to renew it being required on your part. This may even happen when you have a recurring subscription if our reseller, Paddle, cannot automatically charge your credit card / PayPal account for any reason. Or you may have simply let your manually renewing subscription lapsed or canceled your recurring subscription.

Always log into our site and go to the My Subscriptions page to check your subscription status. If your subscription has expired you can renew it. Once the payment is complete and accepted by our reseller you will be able to download the updates within the next 20' or less (typically: within seconds).

## 5.1.2.2. Multiple Professional edition Akeeba extensions with different Download IDs

It's possible that you have more than one of our Professional extensions but you want to use different Download IDs for each one of them. For example, if each extension was bought by a different company working on your site or if you are trying to migrate to a new user account on our site.

In this case you need to unpublish the following plugins on your site:

- Installer Akeeba Backup Professional
- Installer Akeeba Ticket System Professional
- Installer Admin Tools Professional

Do remember to check the Download IDs for each and every of our extensions.

#### 5.1.2.3. Entering or changing your Download ID after an update is available

If you had to enter or change a Download ID after Joomla finds an update for it you will need to jump through a few hoops. This happens because of the way Joomla caches update information and some design choices in the Joomla extensions updater which prevent it from working smoothly in this case.

Please follow all of the steps below in the exact order presented from a single browser tab without having any other tabs or windows to your site open. Please follow all of the steps even if you think that something is redundant or repetitive; it's not and there is a reason we tell you to do it. We understand that the process outlined below is gruelling. Unfortunately it is necessary because of how Joomla itself works. This code is NOT under our control. If it was our code you wouldn't have to do anything at all; we know how to write software with better UX than this...

#### For Joomla 3:

- 1. Go to the backend of your site
- 2. Go to our software's main page e.g. click on Components and then on Akeeba Backup or Admin Tools or Akeeba Ticket System Professional depending on which of our software you have.
- 3. Click on Options in the top right corner. This opens Joomla's com\_config component showing the settings for our software.
- 4. Clear your Download ID.
- 5. Click on Save & Close.

- 6. Click on Options in the top right corner again.
- 7. Enter your Download ID.
- 8. Click on Save & Close.
- 9. If you have more than one Professional version of our software installed repeat the process from the beginning until here for each one of: Akeeba Backup Professional, Admin Tools Professional, Akeeba Ticket System Professional.
- 10.Go to Extensions, Manage, Update.
- 11.Click on Clear Cache.
- 12.Go to System, Clear Cache
- 13.From the dropdown select Administrator
- 14.Click on Clear All even if the list is empty. Joomla has a hidden query cache which screws up updates if you don't clear it.
- 15.Go to Extensions, Manage, Update.
- 16.Click on Clear Cache again.
- 17.Click on Find Updates.
- 18. You should now be able to perform the updates to our software

#### For Joomla 4:

- 1. Go to the backend of your site.
- 2. Go to the System menu item, find the Update section and click on Update Sites.
- 3. Click on the update site for our software, e.g. Akeeba Backup Professional, Akeeba Ticket System Professional or Admin Tools Professional depending on which of our software you have.
- 4. Enter your Download ID in the Download Key box.
- 5. Click on Save & Close.
- 6. If you have more than one Professional version of our software installed repeat the process from the beginning until here for each one of: Akeeba Backup Professional, Admin Tools Professional, Akeeba Ticket System Professional.
- 7. Go to the System menu item, find the Update section and click on Extensions.
- 8. Click on Clear Cache.
- 9. Go to the System menu item, find the Maintenance area, click the Clear Cache link.
- 10.Click on the Delete All button even if the list is empty.
- 11.Go to the System menu item, find the Update area, click the Extensions link.
- 12.Click on the Clear Cache button in the toolbar again.
- 13.Click on the Find Update button.

14. You should now be able to perform the updates to our software

#### 5.1.3. Updates are showing after installing the latest version

Sometimes you might see that Joomla reports that the version you have installed or even a previous version is available as an update. This can mean three things:

- Joomla's update cache is stuck. See the information on resetting Joomla's update cache.
- You have a server issue connecting to our CDN. See the information on addressing server issues.
- You have found a bug in Joomla's built-in extensions updater. You need to contact the Joomla! forum [https://forum.joomla.org]. Unfortunately there is nothing we can do about Joomla core bugs.

### 5.1.4. Updates not showing despite having an older version

Sometimes you may see that Joomla refuses to report the availability of a new version of our software. This can mean three things:

- The update site for our software is disabled. See the information on checking the update site.
- Joomla's update cache is stuck. See the information on resetting Joomla's update cache.
- You have a server issue connecting to our CDN. See the information on addressing server issues.
- You have found a bug in Joomla's built-in extensions updater. You need to contact the Joomla! forum [https://forum.joomla.org]. Unfortunately there is nothing we can do about Joomla core bugs.

#### 5.1.4.1. Check the update site

First we are going to check if the Update Site is disabled. Go to the backend of your site. On Joomla 3 go to the Extensions, Manage, Update Sites menu item. On Joomla 4 go to the System menu item, find the Update area and click on the Update Sites link.

On that page you will see a list of the update sites for the extensions you have installed on your site. If you see our software in that list – you may have to search for it – make sure it's published, i.e. there's a green checkmark in the Status column. If it's not already published publish it now. If you had to publish the Update Site you also need to follow the instructions under Refresh the update cache for your updates to work.

If our software does not appear on that list you will need to click on Rebuild. Watch out! Using Rebuild **removes** all Download IDs and Download Keys from all installed extensions on your site and will cause extension installation to fail. You will also need to follow the instructions under Check the validity of your Download ID for your updates to work.

#### 5.1.4.2. Refresh the update cache

Joomla does not download the latest version information every time you ask it to tell you if there's a new version available for an extension. This would be too slow and bog down the servers of the third party developers providing this update information. Instead, it caches the updates for 1 to 24 hours (configurable), with the default being 6 hours. In very rare cases this updates cache may get "stuck" beyond this time limit and needs to be manually refreshed.

First try the normal way to get the update cache refreshed. Please follow all of the steps below in the exact order presented from a single browser tab without having any other tabs or windows to your site open. Please follow all of the steps even if you think that something is redundant; it's not and there is a reason we tell you to do it.

On Joomla 3:

- 1. Go to the backend of your site.
- 2. Go to the Extensions, Manage, Update menu item.
- 3. Click on the Clear Cache button in the toolbar.
- 4. Click on the Find Update button.

#### On Joomla 4:

- 1. Go to the backend of your site.
- 2. Go to the System menu item, find the Update area, click the Extensions link.
- 3. Click on the Clear Cache button in the toolbar.
- 4. Click on the Find Update button.

This will tell Joomla to get the up-to-date information about available versions for all extensions installed on your computer. If you do not see anything changing to the better you have hit a rare issue which involves another Joomla cache that is invisible even to the Super Users: the Joomla database query cache. Please follow all of the steps below in the exact order presented from a single browser tab without having any other tabs or windows to your site open. Please follow all of the steps even if you think that something is redundant or repetitive; it's not and there is a reason we tell you to do it.

#### On Joomla 3:

- 1. Go to the backend of your site.
- 2. Go to the Extensions, Manage, Update menu item.
- 3. Click on the Clear Cache button in the toolbar.
- 4. Go to the System, Clear Cache menu item.
- 5. From the dropdown select Administrator.
- 6. Click on the Delete All button even if the list is empty.
- 7. Go to the Extensions, Manage, Update menu item.
- 8. Click on the Clear Cache button in the toolbar again.
- 9. Click on the Find Update button.

#### On Joomla 4:

- 1. Go to the backend of your site.
- 2. Go to the System menu item, find the Update area, click the Extensions link.
- 3. Click on the Clear Cache button in the toolbar.
- 4. Go to the System menu item, find the Maintenance area, click the Clear Cache link.
- 5. Click on the Delete All button even if the list is empty.
- 6. Go to the System menu item, find the Update area, click the Extensions link.

- 7. Click on the Clear Cache button in the toolbar again.
- 8. Click on the Find Update button.

If you still cannot retrieve updates for our software you need to check if you have a server issue. If that's not the case you need to check the update site since it might have been automatically unpublished by Joomla.

#### 5.1.5. Miscellaneous troubleshooting and information

#### 5.1.5.1. The update fails to download

If you are trying to update a Professional edition please check your Download ID. Typically you will get an error message telling you that an error 403 or 500 was received when trying to download the update package. Whether you see that message or a generic download failure message depends on the version of Joomla you have installed on your site.

If this doesn't help you need to check if you have a server issue.

#### 5.1.5.2. Updating with a third party service fails

Typically, third party site management services ask Joomla to provide the update information and install update on your behalf. Therefore the troubleshooting information in this section would solve both in-site and remote (via a service) extension updates.

If you can install an update by logging into your site's backend but NOT through a service you need to contact the third party site management service and report this issue. Unfortunately we cannot help with it. Third party services DO NOT ask us for permissions to implement an updater for our software.

#### 5.1.5.3. Manual update

As noted earlier in the documentation, a manual update is the same as installing the extension. Download the latest version from our site and install it on your site **without** uninstalling our extension.

#### 5.1.5.4. Update installation problems

If your update does download but fails to install try the manual update method (installing the new version on top of the old one). If that fails, too, you should follow the instructions on the installation troubleshooting section you can read earlier in this documentation.

## 6. Entering your Download ID

#### Note

If you are using Akeeba Ticket System Core, the free of charge edition of Akeeba Ticket System, you do not need to and must not enter a Download ID. The Download ID is only required for the for-a-fee Akeeba Ticket System Professional edition.

Akeeba Ticket System Professional is the for-a-fee edition of Akeeba Ticket System with additional features. Downloading it, either for installation from scratch or as an update to an already installed but older version on your site, requires confirming that you have an active subscription which gives you access to Akeeba Ticket System Professional downloads. When you download the installation ZIP file from our site this means that you need to log in to our site first. However, when downloading updates through Joomla you really don't want to and usually cannot be asked to log in to our site.

### Using your Download IDs on your clients' sites

Our software license allows you to use your Download IDs on the sites of your clients. However, you must tell your clients that:

- Downloads and support for the software covered by the Download ID is provided by you, not Akeeba Ltd.
- If they want to receive support and / or downloads directly from Akeeba Ltd they need to purchase a qualifying subscription on our site. In this case they do not qualify for the renewal discount.
- They are not allowed to use the Download ID on any other site or use the Download ID to download the software for
  any reason other than updating or reinstalling the covered software on the same site the Download ID was entered
  in. In other words, they cannot use the Download ID to install or update our software on any other site.

If you are no longer administering a site where you have entered a Download ID you must revoke or regenerate that Download ID. You need to do the same if you believe that your Download ID is being used by third parties in an unauthorized manner. Please note that unauthorized use of Download IDs could have consequences on your subscription with us.

### Finding your Download ID

Download IDs come in two flavors, your main Download ID and Add-on Download IDs.

You can find your main Download ID in the My Subscriptions [https://www.akeeba.com/my-subscriptions.html] page of our site. We recommend using this Download ID only on your own site(s). This Download ID cannot be revoked, it can only be regenerated. If it's regenerated you will need to enter the new Download ID on all of your sites which can be a significant hassle.

You can generate an unlimited number of Add-on Download IDs without additional charge in the Add-on Download IDs [https://www.akeeba.com/download/add-on-dlid.html] page. Unlike the main Download ID you can revoke (disable) any Add-on Download ID at any time. As long as you only use one Add-on Download ID per site revoking or regenerating it will not affect the other sites' ability to download and install updates.

# Entering your Download ID on a newly installed copy of Admin Tools

If you just installed Akeeba Ticket System on your site go to Components, Akeeba Ticket System. You will be shown a message at the top of the page that you need to enter your Download ID. The message includes a link to a page on our site where you can find and copy your main Download ID. After entering either your main Download ID (NOT recommended) or an Add-on Download ID (recommended) click on the Apply button to save it.

If Akeeba Ticket System or Joomla! was already showing you that an update for Akeeba Ticket System is available please follow the steps under "Further steps if a download was available before entering a new Download ID" below.

### Enter or view your Download ID on Joomla 3

If your site is built on Joomla! 3 go to Components, Akeeba Ticket System and click on the Options button in the toolbar.

Click on the Live Update tab.

Enter your main or Add-on Download ID in the Download ID are and click on Save & Close on the toolbar.

If Akeeba Ticket System or Joomla! was already showing you that an update for Akeeba Ticket System is available please follow the steps under "Further steps if a download was available before entering a new Download ID" below.

### Enter or view your Download ID on Joomla 4

If your site is built on Joomla! 4 DO NOT use the Options method above. It will not work. Joomla! 4 provides a centralised download key management interface.

From the main administrator page of your site click on System on the sidebar.

Click on the Update Sites link towards the bottom of the middle column on the System page.

Find the Akeeba Ticket System Professional entry on the list and click on it to open the edit page.

Enter your main or Add-on Download ID in the Download Key area. Click on the Save & Close button on the toolbar to apply the Download ID.

If Akeeba Ticket System or Joomla! was already showing you that an update for Akeeba Ticket System is available please follow the steps under "Further steps if a download was available before entering a new Download ID" below.

# Further steps if a download was available before entering a new Download ID

Joomla applies the Download ID when it *is looking for* updates, not when it tries to download updates. This is a weird implementation detail that dates back to design decisions made before Joomla 1.6 was released, back in 2009. Unfortunately, this means that entering a new Download ID after Joomla shows that updates are available does NOT apply the new Download ID immediately and causes updates to fail. You need to follow all of the steps outlined below, in this specific order, without doing anything else on your site's administrator area in between to let Joomla see the new Download ID. Please do not file support tickets or bug reports about this with us; extension updates are managed by Joomla core code and we have no influence over it.

• Go to Joomla's extension update page.

On Joomla 3: From the top menu of your Joomla! administrator click on Extensions, Manager. From that page click on the Update tab found in the left-hand sidebar.

On Joomla 4: From the sidebar of your Joomla! administrator click on System. On the new page find the Update area towards the bottom of the middle column and click the Extensions link.

- Click on the Clear Cache button in the toolbar.
- Next up, we need to clear the Joomla administrator cache. This is required because Joomla caches the database
  queries which retrieve the Download ID in its administrator cache. If you do not clear the cache it won't see the
  new Download ID.

On Joomla 3: From the top menu of your Joomla administrator click on System, Clear Cache. In the drop-down menu above the list choose Administrator (by default the other option, Site, is selected). Click on Delete All in the toolbar.

On Joomla 4: From the sidebar of your Joomla! administrator click on System. On the new page find the Maintenance area towards the top of the left column and click the Clear Cache link. Unfortunately, Joomla 4 makes it impossible to easily select just the administrator cache so we'll be deleting all cached content. Click on Delete All in the toolbar.

• Go back to to Joomla's extension update page.

On Joomla 3: From the top menu of your Joomla! administrator click on Extensions, Manager. From that page click on the Update tab found in the left-hand sidebar.

On Joomla 4: From the sidebar of your Joomla! administrator click on System. On the new page find the Update area towards the bottom of the middle column and click the Extensions link.

- Click on the Clear Cache button in the toolbar again, even if you don't see any update items. The page should be empty. If it's not empty repeat all of these instructions from the beginning. Sometimes Joomla does not clear the cache when you tell it to so you need to do this entire weird dance all over again. Sorry, it's not something that has to do with us, it's a core Joomla code issue.
- Click on the Find Updates button in the toolbar again.
- You should now see the update to our software and be able to install it.

### Troubleshooting updates to the Professional release

If you still cannot install our software please check that the Download ID is entered correctly. If it's not entered correctly enter the correct Download ID and follow all of these instructions again.

If the Download ID is entered correctly but it's not active in the Add-on Download IDs page you will need to enable it. After enabling it you will be able to download and install the update *without* having to follow these instructions again.

If the Download ID is correct please make sure that you have an *active* qualifying subscription on our site. If your subscription has expired you need to purchase a renewal on our site. Once the renewal is active you will be able to download and install the update *without* having to follow these instructions again, as long as you have not changed your Download ID.

If you still cannot download updates despite having the correct Download ID and an active subscription try waiting for 24 to 48 hours. In very rare cases Joomla's update cache gets stuck despite following the instructions above and you just need to wait until Joomla decides it has to reload it.

If the updates are still not downloading please make sure that you are using a version of Joomla and PHP that is supported by the new version of our software. If you are not sure please consult our Compatibility page [https://www.akeeba.com/compatibility.html].

If you've followed all these troubleshooting steps and the update is not downloading at all you need to contact your host and ask them to allow traffic to www.akeeba.com and cdn.akeeba.com over port TCP 443 (HTTPS), make sure that the PHP cURL module is installed and activated on the version of PHP your site is using and that finally the libcurl and libssl system libraries the cURL module is compiled against are up-to-date versions. If your host cannot help you with any of these requests (despite this being literally what you are paying them to do) you can install updates manually. Kindly note that Akeeba Ltd is not responsible for your hosting environment and that the requirements for downloading updates from our site are met by server software released roughly 5 years ago. If your host cannot provide 5 year old software and open ports in their firewall you should probably be migrating your site to a more up-to-date, competent host.

## 7. Requesting support and reporting bugs

Since July 7th, 2011, support is provided only to subscribers. If you already have an active subscription which gives you access to the support for Akeeba Ticket System you can request support for it through our site. You will need to log in to our site and go to Support, Akeeba Ticket System and click on the New Ticket button. If you can't see the button please use the Contact Us page to let us know of the ticket system problem and remember to tell us your username.

If you want to report a bug, please use the Contact Us page of our site. You don't need to be a subscriber to report a bug. Please note that unsolicited support requests sent through the Contact Us page will not be addressed. If you believe you are reporting a bug please indicate so in the contact form.

#### **Important**

Support cannot be provided over Twitter, Facebook, email, Skype, telephone, the official Joomla! forum, our Contact Us page or any other method except the Support section on our site. We also cannot take bug reports over any other medium except the Contact Us page and the Support section on our site. Support is not provided to non-subscribers; if you are using the Core version you can request support from other users in the official Joomla! forum or any other Joomla!-related forum in your country/region. We have to impose those restrictions in support to ensure a high level of service and quality. Thank you for your understanding.

### 8. Uninstallation

Akeeba Ticket System can be uninstalled just like any other Joomla extension.

#### Warning

Uninstalling Akeeba Ticket System will delete your tickets and attachments. This process is **IRREVERSIBLE**. If you lose your support tickets by uninstalling Akeeba Backup we cannot help you retrieve them, they are gone forever.

Uninstalling Akeeba Ticket System will NOT remove the categories you create for the support ticket system. This is a limitation / bug of Joomla's category management system. You need to delete the categories yourself before uninstalling Akeeba Ticket System.

First, go the extensions manager page.

- Joomla 3: From the top menu of your Joomla! administrator click on Extensions, Manage. From the left-hand sidebar choose Manage.
- Joomla 4: From the sidebar of your Joomla! administrator click on System. On the new page find the Manage area towards the top of the middle column and click the Extensions link.

In the Search box type Akeeba Ticket System package. It will show you a single item called "Akeeba Ticket System package" whose Type is Package.

#### **Important**

Only ever try to uninstall the Package type extension. DO NOT try to uninstall the component, its plugins or module individually. It will leave stuff behind.

Select the item's checkbox and click on the Uninstall button in the toolbar. The extension and all its dependencies will be automatically uninstalled.

### Information about FOF

All of our software, as well as some third party software, installs our FOF framework version 3 or 4. This is automatically removed when the last extension to use it is being uninstalled.

Please **DO NOT** try to uninstall the file\_fof30 or file\_fof40 File type extension manually. Joomla will let you do that even when it's not safe, meaning that your site may become inaccessible.

Furthermore, please note that Joomla 3 (but NOT Joomla 4) comes with a similarly named FOF extension of the Library type installed. This is an ancient (last updated April 2015), no longer supported version (2.4.3) of our FOF framework that's bundled with Joomla itself. It is NOT part of Akeeba software. Moreover, it cannot be uninstalled it's a protected extension. Please do not ask us for assistance about this extension, it's part of Joomla itself.

Finally, if you had a *really* old version of our software installed you might find an extension named F0F (ef zero ef). That was an updated version of FOF 2.x, named in a way that does not conflict with Joomla's copy of FOF 2 (it's complicated...). We have not used this framework since mid-2015 so you should be able to safely remove it as long as no third party extension still uses it. Since it's been so many years since we last updated it or used it in our software we will no longer answer inquiries about it. Thank you for your understanding.

## Chapter 2. Overview and Quick Setup

### 1. Overview

#### Note

Some of the features described in this Overview and Quick Setup chapter may only apply to the for-a-fee Akeeba Ticket System Professional edition.

Akeeba Ticket System (ATS) is a support ticket system component. It allows users of your site to submit support tickets. Typically it's used to provide support for software and hardware sales, but it can also be used for a plethora of other uses such as providing paid expert opinions (consultancy), answering pre-sales requests in any business sector (even in retail) and so on. The key difference to a forum is who gets to view the request and who gets to reply. With a typical forum everyone with access to a forum category can see and reply to all posts. With a ticket system only the user who filed the ticket can view it, unless it is public (public tickets are readable by everyone). In any case, only the user who filed the ticket and the designated support staff on your site can reply to tickets. This allows for finer control than a forum when an authoritative reply is required to the request.

In fact, we developed Akeeba Ticket System because of the limitations we kept on bumping on with several forum systems. The major limitation was that everyone could reply to a thread. This had the usual outcome that User A was talking about Problem X and, on the same thread, User B was talking about Problem Y. This had historically led to great deals of frustration for users and support staff alike. Akeeba Ticket System solves this by incorporating the concept of ticket ownership (the user who submitted the ticket get posting access to it, other users who are not member of the support staff don't).

In order for this to work, ATS is deeply integrated with Joomla! ACLs (access control lists). This is a very powerful feature and requires a little bit of reading to get it right. If your ACL setup is flawed, ATS will behave as told which would be completely different than what you intend. We have assembled a short list of very useful, free documentation on Joomla! ACL which will help you understand how the Joomla! ACL system works and how to make the best possible setup:

- ACL concepts overview [http://magazine.joomla.org/issues/issue-jan-2012/item/637-Joomla-1-6,-1-7,-and-2-5-ACL-Concepts-Overview] (beginners)
- Joomla! ACL: Access Levels [http://magazine.joomla.org/issues/issue-feb-2012/item/639-Joomla-ACL-Access-Levels] (beginners; scroll all the way down for a very good video)
- A case for role-based ACL [http://magazine.joomla.org/issues/Issue-Aug-2012/item/825-A-Case-for-Role-Based-ACL] (advanced)
- Implementing role-based ACL [http://magazine.joomla.org/issues/Issue-Sept-2012/item/856-Implementing-Role-Based-ACL] (advanced)
- ACL Manager [http://www.aclmanager.net/] is a third party commercial component which can help you effectively managing ACLs on complex sites.

Continue reading on for a sample, albeit very simple, setup of a ticket system.

## 2. Quick Setup

#### **Note**

Some of the features described in this Overview and Quick Setup chapter may only apply to the for-a-fee Akeeba Ticket System Professional edition.

Before beginning please make sure that you have read the information and related links about Joomla access control. In this chapter we will implement a site using the following specifications:

- We will have two ticket categories. Pre-Sales Requests will be accessible to all users which have a user account on your site. Customer Support will only be available to users who belong in the Customers group.
- Support in the Pre-Sales Requests category will be provided by Super Administrators and users in the Sales Staff group.
- Support in the Customer Support category will be provided by Super Administrators and users in the Tech Support group.
- We will create a single menu item for the support ticket system which will be accessible be all registered users. Naturally, only the customers will see the Customer Support category thanks to Joomla's access control.

In order to implement these specifications we will have to create Joomla user groups, Joomla viewing access levels and ATS categories.

We will begin by creating the Joomla! User Groups requires for all of the above. Go to Users, Groups in the back-end of your site and click on New. Create three user groups:

- Customers with parent group Public
- Sales Staff with parent group Public
- Tech Support with parent group Public

Please take care to select the correct parent group! Using the Public group as the parent decouples the Akeeba Ticket System privileges from the account type. This is very important!

Then go to Users, Access Levels. You have to create one new viewing access level:

• Customer Support Access, selecting the user groups Customers and Tech Support.

The idea is that if you are a customer or a member of the tech support team you will be granted access to the Customer Support ticket category.

Now go to Components, Akeeba Ticket System and click on the Categories tab. You will need to create two categories.

The first category has a title of Pre-Sales Requests. Find the Access drop-down and set it to Registered. In the Category Permissions tab click on the Registered group and give it the following permissions:

- · Support Staff: Inherited
- Create: Allowed Enables the users to submit new tickets
- Delete: Inherited
- · Edit: Inherited
- · Edit State: Inherited
- Create Private: Allowed Enables the users to submit private tickets
- Create Attachment: Allowed Enables the users to submit attachments (files) with their tickets

DO NOT set any permission to Denied. If a user belongs to a group where a permission is Denied or that has a group in any parent level that has this permissions Denied then you can never, ever give that permission to this user. This

is the most common mistake. If you want to deny a permission there's a 99% chance that the Inherited option is what you really need.

Then click on the Sales staff group and give them the following permissions:

- Support Staff: Allowed Makes them managers of this Akeeba Ticket System category, enabling special actions and notifications on new posts
- · Create: Allowed
- Delete: Allowed Allows the managers to delete tickets and posts
- Edit: Allowed Allows the managers to edit posts
- Edit State: Allowed Allows the managers to publish/unpublish posts and entire tickets
- · Create Private: Allowed
- · Create Attachment: Allowed

Save this category and create a new category with a title of Customer Support. Find the Access drop-down and set it to Customer Support Access. In the Category Permissions tab click on the Customers group and give it the following permissions:

- · Support Staff: Inherited
- Create: Allowed Enables the users to submit new tickets
- · Delete: Inherited
- · Edit: Inherited
- · Edit State: Inherited
- Create Private: Allowed Enables the users to submit private tickets
- · Create Attachment: Allowed Enables the users to submit attachments (files) with their tickets

DO NOT set any permission to Denied. If a user belongs to a group where a permission is Denied or that has a group in any parent level that has this permissions Denied then you can never, ever give that permission to this user. This is the most common mistake. If you want to deny a permission there's a 99% chance that the Inherited option is what you really need.

Then click on the Tech Support group and give them the following permissions:

- Support Staff: Allowed Makes them managers of this Akeeba Ticket System category, enabling special actions and notifications on new posts
- · Create: Allowed
- Delete: Allowed Allows the managers to delete tickets and posts
- Edit: Allowed Allows the managers to edit posts
- Edit State: Allowed Allows the managers to publish/unpublish posts and entire tickets
- · Create Private: Allowed
- · Create Attachment: Allowed

Do note that now the Support Staff doesn't have access to the Customer Support category and the Tech Support users don't have access to the Pre-Sales requests.

Now let's create the menu item. Go to the Menus menu and select the menu you want to create a link to Akeeba Ticket System. Create a new menu item of the type Akeeba Ticket System, Categories. Make sure the Access is set to Registered.

That's it! You now have to assign users to groups and you're ready to start offering support services through your site:

- Add your customers to the Customers group.
- Add the support staff to answer pre-sales requests to the Sales Staff group.
- Add the support staff to answer customer support requests to the Tech Support group.

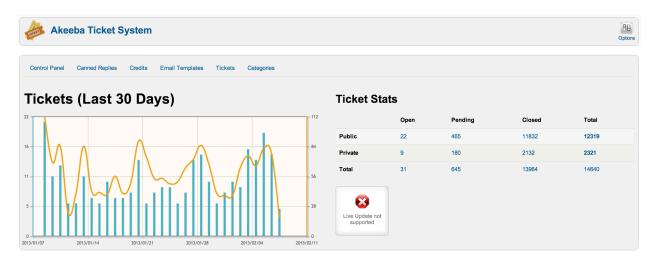
A user may belong to many groups at once. For example if Alice needs to be able to answer both pre-sales and customer support requests she must be assigned to both the Sales Staff and Tech Support groups.

## **Chapter 3. The Component**

## 1. The Control Panel page

Accessible through the back-end Components, Akeeba Ticket System menu item.

#### Akeeba Ticket System's Control Panel



The Control Panel page is the main hub of Akeeba Ticket System's management. On this page you get some very useful information:

- A graph of your tickets and posts for the last 30 days. The bars represent the number of new tickets per day, the orange line the number of posts per day. Hovering your mouse (or tapping, on a touch display) the graph will show you the date and number of tickets / posts at that point.
- The support quality leaderboard, if you have enabled the user feedback feature in the Options of the component. This shows the average support quality score of each member of the support staff over the last week (7 days), month (30 days), year (365 days) and overall.
- Your ticket statistics. This is a break-down of open, pending, closed and total public and private tickets. Clicking
  on a number will open the Tickets page with the respective filter applied. For example, if you click the number of
  Open and Public tickets the Tickets page will open with the filters set to display only open and public tickets.

You can navigate between the backend pages of the component by using the links at the top of the page, right below the component's title. You can access the component options by clicking on the Options button in the toolbar.

### 2. Options

#### **Note**

Some of the features described may only apply to the for-a-fee Akeeba Ticket System Professional edition.

The Options page is accessible through the back-end Components, Akeeba Ticket System menu item and then clicking on the Options button in the component's toolbar. These options define how Akeeba Ticket System behaves. This page has several sections.

## Are you missing some options?

Starting with Akeeba Ticket System 3.2.0 the options formerly in the CLI Automation and Reply by Email sections have been moved into the plugins in the ats folder following the substantial overhaul of the Akeeba Ticket System automation. Please refer to the respective plugins for these options, namely:

- · Akeeba Ticket System Automatically close old tickets
- Akeeba Ticket System Automatic Replies
- · Akeeba Ticket System Fetch Email

#### **Permissions**

In this section you can determine the default permissions of each Joomla! User Group for all Akeeba Ticket System categories. If you prefer to define these settings per category remember to NEVER use a Deny rule here. A Deny rule here will override Allow in children user groups and categories. If you want to deny access just leave the default value, Inherited. Inherited (denoted by a faded "no entry" symbol next to it) is also known as a "soft deny" and will deny access unless you provide an explicit Allow in a child User Group or a category.

On top of the regular Joomla! permissions meanings, the permissions also have a special meaning to Akeeba Ticket System:

Configure The user is part of your Support Staff and can reply to all tickets.

Access The user is part of your Support Staff and can reply to all tickets.

Administration Interface

Create The user can create new public tickets

Delete The user can delete tickets, posts and attachments

Edit The user can edit the existing tickets and posts submitted by other users

Edit Own The user can edit the posts he submitted himself (the limits set in the Frontend options do not

apply to these users)

Edit State The user can publish/unpublish any ticket, post or attachment, no matter who submitted it

Create Private The user is allowed to create private tickets

Create The user is allowed to upload attachments Attachment

Support Staff This privilege is only available when you're configuring the permissions of categories. It gives the

same privileges as "Access Administration Interface" but it is only applied to a specific category. If you want to have support staff which has administrative privileges across all categories please

give the user group the "Access Administration Interface" privilege.

### **Updates**

These options modify the way the integrated Live Update works

Download ID

Only applies to the Professional version. This is your Akeeba Download ID. This can be found on our site, in the My Subscriptions page. You need to enter it to receive updates. Without it you will see that new versions are available but you will not be able to download them.

Enable anonymous PHP, MySQL and Joomla! version reporting When enabled (default) you allow us to collect anonymous data about the PHP, MySQL and Joomla! version used on your site. We DO NOT record your site's IP address, domain name or any other personally identifiable information. Information is sent at most once a week and only when you visit Akeeba Ticket System's Control Panel page in the backend of your site. The only data sent is a randomly generated, (hopefuly) unique ID issued per site which CAN NOT be deanonymized (this means that it CAN NOT be traced back to a specific site, subscription or person), the PHP version you are using, the MySQL version you are using and the Joomla! version you are using. This information is used by us to make decisions about future development of our software, i.e. which old versions to drop.

#### Common

These are options which determine how various aspects of ATS will work.

Crossbrowser Emoji compatibilty Different browsers and operating systems have varying support for Emoji [https://en.wikipedia.org/wiki/Emoji]. In most cases they are displayed as full color pictures, in some cases they are displayed as monochrome outlines and in some cases they are not displayed at all. This lends to an inconsistent user experience, especially when the person writing a post and the person reading it are using different Operating Systems and browsers. For example, the US flag Emoji will indeed appear as a US flag to someone using Safari on macOS but to someone using Chrome on Windows 10 it will appear as the two letters U and S enclosed in squares.

Akeeba Ticket System can load the third party Twemoji library, created by Twitter, to replace Emoji everywhere in the ticket system with images thus providing a consistent user experience. The Twemoji library is loaded from MaxCDN -- the recommended source which is used by other sites as well -- meaning that it will load very fast if it's not already in your client's browser cache.

This option controls when to load the Twemoji library. None (default) means that it will never be loaded, therefore the browser is responsible for rendering Emoji correctly. The two options Frontend and Backend will only load the Twemoji library either in the site's public frontend or administrative backend respectively. The Both option will load the Twemoji library in both the site's public frontend and administrative backend.

Filtering method

When you are using the WYSIWYG editor your users get to submit arbitrary HTML. If left unfiltered there's a very high chance that someone will exploit this to launch an XSS (Cross Site Scripting) attack in order to hack you. ATS deals with it by filtering the incoming HTML. There are three filtering options:

HTML Purifier (best protection)

This uses the third party HTML Purifier library. It's slower but provides the very best protection you can get.

Joomla!

This uses Joomla!'s own HTML sanitiser. It's good, it's fast, it's not meant for this kind of user data and may fail miserably. We don't really recommend this option.

I want my site to be hacked (no protection) This option is reserved for people who want their site to get hacked and developers who believe they've found a better filtering method than HTML Purifier and don't mind being hacked to disprove their point. No joking here. This option turns off all filtering. It's like jumping off a plane without a parachute. DON'T DO IT! It's not a question of whether you're going to get hacked. It's a simple question of when you'll get hacked.

## Alternate HTML Purifier inclusion

Enable if you are using a PHP code cache or you are not sure what a PHP code cache is. As a rule of thumb: always set to Yes unless you know very well what you are doing. White pages lurk ahead if you set it to No when you shouldn't.

## HTML Purifier allowed tags

For advanced users only. You get to specify which tags and attributes will be kept by the HTML Purifier filter. The default value is:

p,b,a[href],i,u,strong,em,small,big,span[style],font[size],font[color],ul,ol,li,br,img[src],img[width],img[height],coc

Do not change unless you know what you are doing. If you remove everything from the list the default value will be used (otherwise all posts would end up blank).

## Allow unsafe uploads

Joomla 3.5 and later automatically blocks certain uploads which might be unsafe for public consumptions, e.g. executable code. This might not be desirable if your ticket system is used to provide software support and uses the Private Attachments setting described below. In this case you might want to allow unsafe uploads so you can inspect them.

USE WITH EXTREME CAUTION. If you enable this option the security checks are indeed turned off and malicious code can be uploaded to your site.

As a precaution, ATS always renamed uploaded files to a random name without an extension, therefore ensuring that your site is not going to accidentally serve or execute any malicious code uploaded as an attachment.

If you are not sure keep this option DISABLED.

## URL transliteration

A comma separated list of transliteration pairs, used to convert ticket titles to URLs. This is only used when Unicode Aliases is set to Off in your site's Global Configuration page. The transliteration pairs are given in the form: international character, followed by a pipe symbol, followed by the ASCII transliteration (unaccented Latin character(s) a-z). For example:  $\pi|p$  is used to convert Greek letter pi to "p" and  $\beta|s$  is used to convert the German eszett (sharp S) to its double s transliteration. The default value covers adequately most of European languages, including those based on Greek and Cyrillic character sets.

## Enable ticket priorities

When enabled it allows the front-end users (your clients) to define the priority of the ticket, i.e. Low, Medium, High

#### Do not email non-assigned managers

When this option is enabled and a ticket is assigned to some member of the support staff the other members of the support staff are not being sent an email notification for the replies to the ticket.

## Custom ticket statuses

You can create up to nine extra ticket statuses on top of the default three (Open, Pending and Closed). In this text area you have to enter one custom status per line in the format number, followed by equals sign, followed by the custom status description. For example 1=In Progress creates a new custom status with the title "In Progress". Custom statuses are shown in their numeric order. If you put a numeric key without a title or a title without a numeric key it will be ignored.

## Attachments folder

Enter a folder where ATS will save ticket attachments.

You should not need to change the default path in most use cases. This option is meant for advanced customization by expert users. If you do not understand what this option does please do not change it. Your site will be fine with the default value.

The folder you enter here is sought on your server in the following order:

1. As a subdirectory of your site's media folder.

- 2. As a subdirectory of your site's installation root.
- 3. As an absolute path on your server.

If the folder cannot be found in any of these ways ATS will use the default directory media/com\_ats/attachments under your site's root.

#### **Important**

If you change this folder after attachments have been created, existing attachments will NOT be transferred to the new folder. You will have to do that manually. If you do not do that, the attachments will be unavailable for download.

#### **Frontend**

These options define how the front-end of ATS will behave.

Post edit timeout

All users are allowed to edit their posts. We have observed that very few users abuse this feature and edit the same post dozens of times instead of posting a reply. This, of course, screws up the entire concept of a ticket system. After all the post editing feature is supposed to be used for small corrections (like a mistyped word, a badly phrased part of the request and so on), not posting replies. In order to prevent users from abusing post editing you can use the Post edit timeout. This determines the maximum amount of time (in minutes) after a post's submission that the user is allowed to edit his/her post. The default value of 15 minutes seems to be the "sweet spot" between usability and preventing abuse.

Enter 0 to allow only people with the Edit Own privilege to edit their posts. These users are not affected by this limit.

Private attachments

When enabled attachments will only be visible to and can only be downloaded by to the user who created the ticket and the support staff, even in public tickets. When disabled, attachments in public tickets will be visible to and can be downloaded by everyone on the Internet.

No new tickets

When this option is enabled no user is allowed to create a new ticket. Users are still allowed to reply to existing tickets unless No New Replies is also enabled.

No new replies

When this option is enabled no user is allowed to reply to his existing tickets. Users are still allowed to file new tickets unless No New Tickets is also enabled.

Show credits information

When enabled Credits information will be shown in the front-end. Credits are the ATS "currency". Depending on your settings users will be charged credits to create or reply to their tickets.

Time spent field mandatory

When enabled the Time Spent field will be mandatory. This means that support staff won't be able to submit a ticket reply unless they fill in a non-zero time spent answering the ticket.

Enable user feedback

When enabled the users will be able to rate the quality of the support they received on the ticket from 1-5 when they choose to close the ticket. The aggregate results will be shown in the leaderboard in the back-end Control Panel page of the component.

Enable AJAX replies

When enabled, replies to component in the front-end will be submitted using AJAX which means that the page won't have to reload (much less bandwidth consumption and much faster system response time). If your user's browser doesn't support this feature ATS will automatically show the regular submission form. If you have trouble submitting tickets that way please set this option to No and ATS will use the regular submission form which reloads the page upon the submission of a reply.

Instant replies day limit

The InstantReply feature will display related results from old public tickets when a user is trying to submit a new ticket. The tickets which will be showed are all *public* tickets which either have a status of Closed irrespective of how old they are OR have any other status but are older than X days. This option defines the X in the previous statement.

Show site template in InstantReply results This options defines how the InstantReply reults are displayed to the user in the pop-up modal dialog when they click on the View button on each InstantReply result. When this option is set to Yes the site's template, including menus and modules, is displayed inside the modal box. When this is set to No the site's template is not displayed.

#### Note

The template display is turned off by passing the tmpl=component parameter to the URL. Your template needs to support this. Most templates do, but they might be using a different CSs stylesheet. As a result the display of the results when this option is turned off might not be the same as when viewing the relevant ATS ticket / DocImport article on your site.

Show CAPTCHA when filing Guest tickets

Only applies to Akeeba Ticket System categories which allow the Create privilege to the Guest (not logged in user) group. If this option is enabled (default) and a Guest user tries to file a new ticket they will have to solve a CAPTCHA for their ticket to be accepted. This is a good way to deter spam in ticket submissions by Guest users.

This feature will only work if you have enabled one or more plugins in the "captcha" group in Joomla's Plugins page and you have selected a default CAPTCHA method in Joomla's Global Configuration. The CAPTCHA shown to Guest users will be the one defined in Joomla's Global Configuration. Please note that the CAPTCHA plugin MUST have its Access set to Public or Guest. Any other access level will make it impossible for Joomla! to display a CAPTCHA to Guest users and it may make it impossible to file tickets as a Guest.

Force user creation when filing Guest tickets Only applies to Akeeba Ticket System categories which allow the Create privilege to the Guest (not logged in user) group. When this option is disabled (default), Akeeba Ticket System will abide by the Options of Joomla's Users component. If you have disabled user registration Guests will not be able to file new tickets. If you have allowed user registration but require account activation (either by the users themselves or by an administrator) the relevant activation emails will be sent out. When, however, this option is enabled Akeeba Ticket System will *ignore* Joomla's settings. Filing tickets as a Guest will always result in a new, activated user being created.

Load Akeeba FEF Akeeba Ticket System uses HTML markup compatible with the Akeeba Frontend Framework (Akeeba FEF) CSS framework. If you do not load FEF your ticket system will appear unstyled and some of its interface elements, such as dropdowns and tabs, will not work. This setting controls when to load Akeeba FEF's CSS and JavaScript files.

We strongly recommend keeping this option to Both.

The only time you might want to change it is if you are using Joomla! template overrides [https://docs.joomla.org/How\_to\_override\_the\_output\_from\_the\_Joomla!\_core] to output HTML compatible with the CSS framework used by your template. Please note that in this case you need to make sure that you also override the JavaScript files, otherwise your ticket system will not operate correctly.

Load CSS reset with Akeeba FEF

Only applies when Akeeba FEF is loaded per the previous setting.

Our CSS framework includes a feature called CSS reset, removing any third party styling from interface elements (such as input boxes) before applying its own CSS rules. It is recommended to enable it for consistency.

If you are writing custom CSS and find that the CSS reset gets in your way you can disable it by changing this options.

#### Dark Mode in backend and Dark Mode in frontend

Only use when also loading Akeeba FEF per the Load Akeeba FEF option notes above.

Akeeba Ticket System normally comes with a "light mode" stylesheet that uses dark text on light background. Most sites use a light theme so that makes sense.

However, if your site uses a "dark mode" stylesheet (light text on a dark background) this can have a jarring effect on your site's visitors. To this end, we created a Dark Mode stylesheet which can be optionally loaded.

These two settings determine if and when Akeeba Ticket System's Dark Mode stylesheet will be loaded in the administrative backend and public frontend respectively.

The Auto setting loads the Dark Mode stylesheet based on the browser's preferences. Namely, when the browser recommends the use of dark mode we load the Dark Mode stylesheet. Otherwise the Light Mode stylesheet is used. If you have a site template which automatically switched between Light and Dark stylesheets based on browser settings this is the setting you should use.

The Never setting means that ATS will always load the Light Mode stylesheet. This is what most sites need.

The Always setting means that ATS will always load the Dark Mode stylesheet. This should only be used if your site's template is using a Dark Mode (light text on dark background) stylesheet.

## **Credits**

Credits are the ATS "currency". Depending on your settings users will be charged credits to create or reply to their tickets. These options determine how credits management will work in special cases.

Refund on unpublish ticket

If enabled, the credits charged for a ticket will be refunded if a member of the support staff unpublishes (disables) the ticket. Otherwise you will have to manually refund the user's credits (if you want).

Refund on delete ticket

If enabled, the credits charged for a ticket will be refunded if a member of the support staff deletes the ticket. Otherwise you will have to manually refund the user's credits (if you want).

Refund on unpublish post

If enabled, the credits charged for a post will be refunded if a member of the support staff unpublishes (disables) the post. Otherwise you will have to manually refund the user's credits (if you want).

Refund on delete post

If enabled, the credits charged for a post will be refunded if a member of the support staff deletes the post. Otherwise you will have to manually refund the user's credits (if you want).

## **Automation**

These options modify the way the CRON URL works.

We strongly recommend using the CLI-based CRON script ats-cron.php instead of the CRON URL whenever possible. If you are only using the CLI-based CRON script you do not need to change any of the options here.

Secret Key

Enter a secret key that consists of letters a-z (without accents or diacritics) and numbers 0-9. Make sure it's at least 24 characters long. This key will need to be present in the CRON URL for it to work.

If unsure, you can use the Random.org password generator [https://www.random.org/passwords/? num=1&len=24&format=html&rnd=new] to create a truly random secret key.

## Warning

Do not use special characters, such as those delivered by pressing SHIFT and the numbers keys at the top of a US layout keyboard (e.g. !, @, # and so on). These characters don't work well in URLs and may cause your CRON URL to not work.

CRON URL time limit

The execution of CRON commands using the CRON URL will be limited to approximately no more than this many seconds. The default value, 10, is good enough for most sites. If you get server errors when accessing the CRON URL set this lower, e.g. 5. ANythign below 3 is practically unusable.

Do note that the **mailfetch** command may take more than this many seconds. After retrieving all unread email it will process at least one email before checking the time limit. This might be longer than the time limit defined here and it's deliberate. Fetching email may take a few or several seconds. If the time limit was checked before processing at least one email and the time limit had already been reached while fetching email messages you'd end up never processing any email at all. This would make the new ticket by email and reply by email feature essentially non-functional.

## 3. Custom fields

This is accessible through the back-end Components, Akeeba Ticket System menu item and then clicking on the Custom Fields link below the component's toolbar.

Custom fields allow you to collect additional information from your user in an organised and efficient way. Custom fields can only be entered when the user files a new ticket and cannot be edited later on. Each custom field can be shown to one or more categories.

The parameters for each custom field are:

Title The display title of the field.

Slug The internal name of the field. It should consist of only lowercase, unaccented letters (a-z) and

numbers (0-9). This is used internally to tell custom fields apart and should be unique.

When to Show Fields can be shown for all categories or for a specific category only.

Category If you set the option above to Specific category this defines for which categories the

field will be displayed. When the When to show option is set to All categories this will

be ignored.

Field Type Chose the type of the field. The available options are:

• Checkbox. Creates a single tick box.

- Calendar. Creates a date picker field. The user will be able to type in a date or select a date using the standard Joomla! pop-up date picker.
- **Drop-down**. Creates a drop-down selection field. Ideal for selecting between short descriptions or a lengthy list. You can define the available options in the Options field below.
- **Mutliple selection list**. Creates a multiple selection list. You can define the available options in the Options field below.

- Password box. Creates a simple password entry box.
- Radio buttons. Creates a one-of-many selection field using vertically stacked radio buttons.
   Ideal for selecting between a few, described in great length, options. You can define the available options in the Options field below.
- Text box. Creates a simple text entry box.
- **Text area**. Creates a plain text area. You can specify the number of rows and columns in the Options field below.

#### **Options**

Its function depends on the field type:

- **Text and password box**. Anything you type in here will be shown as a placeholder (gray text which disappears when you start typing) inside the box.
- Text area. You can enter the rows and columns of the text area like this:

```
rows=10 cols=70
```

- Checkbox. Anything you type in Options is ignored.
- Everything else. For all other field types this is how you define options and their labels. The format is VALUE=LABEL, on pair per line. For example:

```
1=One
10=Ten
100=A hundred
1000=A thousand
```

With the example above, a drop=down list would show you the options One, Ten, A hundred and A thousand. The value stored, depending on your selection, would be 1, 10, 100 or 1000.

To make it clear: Each line defines one option to be shown to the user. Anything to the left of the equals sign is saved in the database and is made available to you when you display the contents of the field. Anything to the right of the equals sign is what your client sees in the front-end new ticket page.

#### Default value

The default value the field is set to. It depends on the field type:

- Text and password box. The contents of the box.
- **Checkbox**. Use ON, TRUE, 1 or ENABLED to have the checkbox checked by default. Anything else will result in the checkbox being cleared (unchecked) by default
- Everything else. Enter the value (left-hand part) of an option you defined in the Options above.

#### Allow Empty

If checked the custom field is allowed to be left empty / unchecked by your client. If it's not checked (default), Akeeba Ticket System will not allow your subscriber to submit the new ticket form unless he fills in / checks the field.

#### Valid Field Label

If Allow Empty above is NOT checked, the contents of this field are shown next to your custom field when it's valid (filled in / checked).

#### Invalid Field Label

If Allow Empty above is NOT checked, the contents of this field are shown next to your custom field when it's invalid (not filled in / checked).

# 4. Categories

#### Note

Some of the features described may only apply to the for-a-fee Akeeba Ticket System Professional edition.

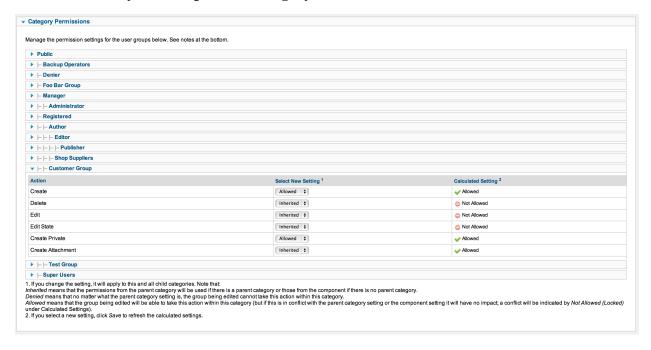
This is accessible through the back-end Components, Akeeba Ticket System menu item and then clicking on the Categories link below the component's toolbar.

#### **Akeeba Ticket System's Options - Categories**



The basic organisational element of your ticket system is the Categories. Tickets are created inside a category and the category's ACL options define who can do what in the category and it's sub-categories. Akeeba Ticket System integrates with and extends the core Joomla! category management, much like Joomla!'s own core components –like Banners, Contacts and Newsfeeds– do. This means that the category management is the familiar interface you have throughout Joomla!.

#### **Akeeba Ticket System's Options - Category Permissions**



Each ATS category, just like any other Joomla! category, allows you to define Category Permissions (ACL permissions). These permissions work in the same way discussed in the Options page's documentation section. Please note that Joomla! follows an inheritance scheme for ACL permissions. The permissions in the Options are inherited by each category; the permissions of a parent category are inherited by its sub-categories. It is VERY IMPORTANT to remember that whenever you define an explicit Deny for a particular permission you cannot reverse it further down the permissions inheritance tree. Simply put: if you explicitly Deny a permission in the Options page or a Category, all Categories under it will ALWAYS have this permission denied even if you set it to Allow. Deny always wins Allow. The correct way to set it up is use Inherited (also called a "soft deny") –which, by default, doesn't grant a user the permission– in the Options page and parent Categories, then use explicit Allow rules in subcategories where this permission needs to be allowed.

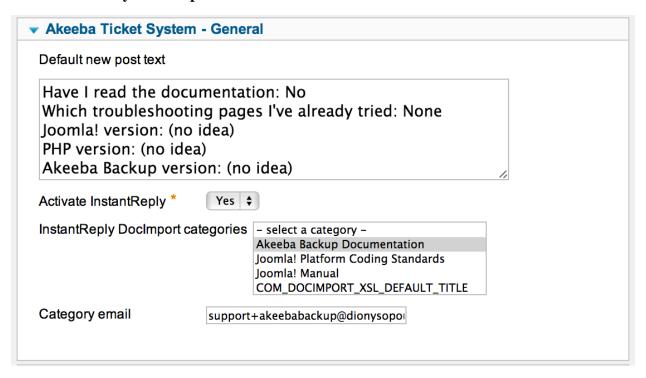
#### **Important**

We have assembled a collection of links explaining how ACLs work in the Overview section of our documentation. Please read them before trying to set up your ticket system. Joomla! ACLs are extremely powerful and very easy to misuse. Even experienced users like our developers resort to planning groups and permissions using pen and paper before working on a site. As Joomla! co-founder Brian Teeman puts it, Joomla! begins with a P! [http://brian.teeman.net/joomla/786-joomla-begins-with-a-p].

Each ATS category has some options which are specific to ATS. You can find these options in the sidebar (Joomla! 2.5) or the tabs at the top of the page (Joomla! 3.0 and later). There you can find the following sections / tabs:

## **Ticket Options**

#### Akeeba Ticket System's Options - General



In this section you can find options regarding the overall behaviour of Akeeba Ticket System as far as this particular Category is concerned.

Default new post The default text to show in the post area when a new ticket is being filed. text

Category email

This is used with the Reply By Email and New Ticket By Email features of Akeeba Ticket System. You must either leave it blank (if you are not using these features) or specify a different email per category. Something like support-myCategoryAlias@example.com works best. Make sure all these email addresses end up being delivered to the same mailbox (e.g. set them up as aliases of a single email address).

#### **Important**

There are two ways to set up the Reply by Email / New Ticket by Email features of ATS:

- 1. All email replies are delivered in the same email address. All new tickets are created in the Default Category specified in ATS' Options page. In this case you must leave the Category Email option blank and your users will be replying to the Email From address set up in your site's Global Configuration.
- 2. Email replies are sent to a different email address per category. Replies sent to the wrong email address will be ignored. New tickets will be created in a category based on the email address they were sent to. If you have multiple categories sharing the same email address, new tickets will be created in the first category with that Category Email address.

Auto-select Private When enabled and the user has the Private privilege (he can post private tickets) the default (preselected) new ticket visibility will be Private. In any other case the default new ticket visibility will be Public.

Allow only

Sometimes you want to only allow Public or Private tickets in a category, but not both. If leave this setting to the default value (- Select -) then both Public and Private tickets can be created in the category. Otherwise only public or only private tickets will be possible in this category, as per your setting here.

Notify managers

If left empty or the All Managers option is selected all managers of this category will receive email notifications about new tickets and replies posted in this category. If you don't want that select one or more managers to be notified.

## InstantReply

This tab controls the behavior of the InstantReply feature of Akeeba Ticket System. When a user is filing a new ticket ATS will look into certain sources of information (e.g. old tickets, one or more FAQ content categories on your site, Akeeba DocImport<sup>3</sup> documentation categories etc) and find the ten most relevant articles that appear to be matching keywords in the ticket's subject line. These are presented to the user. Based on our experience this reduces the number of tickets opened by users because they get an instant reply that addresses their question. It also improves the quality of the tickets filed since the user has a better idea of similar issues and / or documented steps to resolve their problem. Overall, it makes your life easier.

The sources of InstantReply answers are controlled by the ATS InstantReply plugins (plugin type atsinstantreply). These plugins may render more options in the InstantReply tab and are documented in each plugin's documentation page.

Activate InstantReply When enabled, the title of every new ticket's title is automatically fed to the InstantReply engine as it's typed.

InstantReply looks at the keywords in the new ticket's title as they are typed and will find the 5 most relevant public tickets and DocImport articles based on those keywords. They will be presented to the user right below the title field. When clicked, the pages will open in a popup lightbox, allowing the user to browse through all the related tickets/articles without leaving the new ticket page. Our

experience with this system is that it reduces the volume of submitted tickets by 30%, as the users find a solution to most common questions instantly, without having to post their ticket.

#### **Credits**

#### Akeeba Ticket System's Options - Credits

▼ Akeeba Ticket System - Credits	
New public ticket	0
Reply to public ticket	0
New private ticket	0
Reply to private ticket	0

These options determine how many credits will be charged for new tickets and new posts. Use this only if you intend to enable the credits system in Akeeba Ticket System and enable an integration with a third party extension (e.g. Akeeba Subscriptions) which will allow your users to buy credits. If a user doesn't have enough credits he won't be able to post a new ticket or reply to his existing tickets.

New public ticket How many credits will be charged when the user files a new public ticket in this category.

#### **Important**

On top of that, the "Reply to public ticket" credits amount will also be charged when the user is filing a new public ticket.

Reply to public ticket

How many credits will be charged when the user submits a new post (reply) to their existing public ticket in this category.

New private ticket

How many credits will be charged when the user files a new private ticket in this category.

## **Important**

On top of that, the "Reply to private ticket" credits amount will also be charged when the user is filing a new private ticket.

Reply to private ticket

How many credits will be charged when the user submits a new post (reply) to their existing private ticket in this category.

Modifier low priority

How many credits to add or subtract when the ticket is marked as low priority. This is added on top of the first four options and accepts positive (add) or negative (subtract) values. For example, if this is -2 and the New public ticket value is 5 then only 3 credits (5 - 2) will be charged for a low priority new public ticket.

Modifier normal priority

How many credits to add or subtract when the ticket is marked as normal priority. This is added on top of the first four options and accepts positive (add) or negative (subtract) values. For example, if this is 1 and the New public ticket value is 5 then 6 credits (5 + 1) will be charged for a normal priority new public ticket.

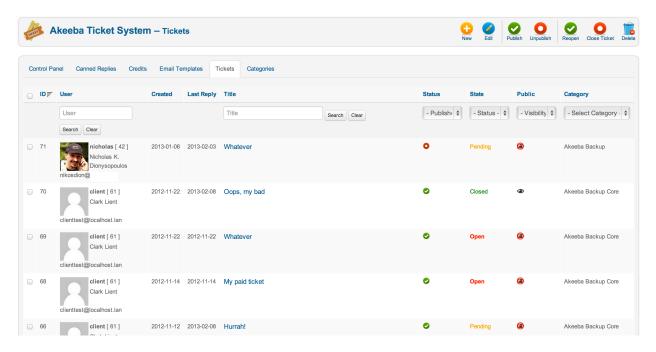
Modifier high priority

How many credits to add or subtract when the ticket is marked as high priority. This is added on top of the first four options and accepts positive (add) or negative (subtract) values. For example, if this is 4 and the New public ticket value is 5 then 9 credits (5 + 4) will be charged for a high priority new public ticket.

## 5. Tickets

This is accessible through the back-end Components, Akeeba Ticket System menu item and then clicking on the Tickets link below the component's toolbar.

#### **Tickets**



This is the most important page in Akeeba Ticket System. This is where you can review, manage and reply to your tickets from your site's back-end.

#### Note

You can always also reply to the tickets from the front-end. Replies from the back-end is a convenience feature, not the recommended practice.

The fields you see on each ticket are:

ID	The numeric ticket ID. This is the unique identifier of every ticket and is always shown in the component's front-end.
User	The username, numeric user ID, full name and email address of the user who created the ticket. The avatar image is supplied by plugins in the ats plugin group. By default, the Gravatar plugin is enabled and displays user avatars based on their email address.
Created	The date when the ticket was created. The date is always shown in GMT timezone.
Last Reply	The date of the last reply of the ticket. The date is always shown in GMT timezone.

Title

The title of the ticket, as entered by the user who created the ticket.

Above the title you can see the ticket assignment information. You may see one or more of the following:

- A blue flag icon. Clicking on it will assign the ticket to you.
- A red flag icon. Clicking on it will unassign the ticket.
- A gray badge reading "Unassigned". It means that this ticket is not assigned to any member of the support staff.
- A blue badge reading the name of a member of the support staff. This means that the ticket is assigned to that member of the support staff.
- The blue Assign to drop down list button. Clicking on it displays a drop-down with people in the support staff. Click on a name to assign the ticket to that person.

The ticket assignment is currently for internal information purposes, allowing your support staff to know who's working on which ticket.

Time

Shows the total minutes of support time spent answering the tickets, as long as your support staff fills in the time spent box when replying to the ticket.

Status

The status of the ticket. A red circle with a white spot means that the ticket is unpublished and not shown in the component's front-end. A green circle with a white checkmark means that the ticket is published and will be shown in the component's front-end. You can toggle the status by clicking on the icon.

State

The state of the ticket. A ticket can be Open (the last reply was posted by the user who opened it), Pending (the last reply was posted by a member of the support staff) or Closed (the ticket is closed and the user who opened it can no longer reply to it).

If you have defined custom statuses in the component's Options page you may see the name of such a custom status here. Use the Status drop-down button to select the status you want to assign the ticket to.

Public

A black eye icon means that the ticket is public and visible by everyone (depending on your menu item setting, this usually means that it's visible even by guest users). A black eye with a red circle and diagonal line means that the ticket is private. Only support staff and the user who filed the ticket can view it. You can toggle the Public state by clicking on the icon.

Category

The category the ticket is filed under.

The toolbar contains the icons which allow you to manage your tickets:

New

In this version of Akeeba Ticket System creating new tickets from the back-end is not allowed. Clicking on this button will produce an error message reading "You can not create new tickets from the back-end". This feature will be added in a later version of ATS.

Edit

Edit the first ticket you have selected in the list

**Publish** 

Set the selected tickets' Status to Published. They will be visible in the component's front-end.

Unpublish

Set the selected tickets' Status to Unpublished. They will no longer be visible in the component's front-end.

Reopen Set the selected tickets' State to Open. This allows you to re-open a ticket you or your user

accidentally closed.

Close ticket Set the selected tickets' State to Closed. This allows you to manually close many tickets at once.

Delete Completely remove the ticket from the database.

## Warning

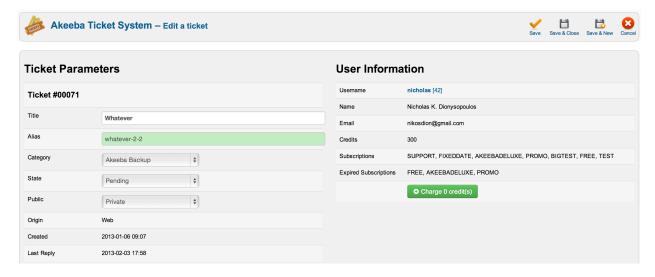
Use with extreme caution! Deleted tickets cannot be restored. There is no "Trash can" feature in Akeeba Ticket System. We strongly recommend unpublishing the ticket instead.

Export as CSV Exports the currently filtered list to a CSV file. You can import CSV files to Excel, Google Docs, Numbers or other third party systems.

## 5.1. Editing a ticket

Clicking on a ticket's title or checking its checkbox at the far left-hand side and clicking on the Edit button opens the ticket editor page.

#### Edit a ticket



At the top of the page you have two areas with the basic information for a ticket.

On the left, you can find the Ticket Parameters area. The options there are:

Title The title of the ticket, to be shown in the component

Alias This is the alias of the ticket which, together with the ticket ID (shown in big, bold letters at the top of the ticket editor page) will be part of the URL to this ticket. The alias is automatically defined based on the ticket's title if left blank and when the ticket is created in the front-end.

#### **Important**

If you get a blank page, a 403 Forbidden error page or a 406 Not Acceptable error page when you try accessing a ticket in the front-end the alias is the most likely culprit.

Many servers use the mod\_security2 Apache module. This is a kind of firewall which blocks requests based on several information they carry with them. Some words in the URL such as "MySQL", "drop", "table", "permissions", "grant", "wget" and "curl" in certain combinations can trigger mod security2's protection and throw an error page when trying to access it. If the ticket's title contains such words, the alias (therefore: the URL) will contain them and cause mod\_security2's protection to be triggered. In this case you have to go to the back-end of Akeeba Ticket System, edit the ticket and change its Alias to something different. This is not an issue with Akeeba Ticket System; it's how mod security2 is configured on your server. We know that because we have the same kind of protection on our servers and have seen a few such cases over the first few months the component was in private beta, used on our own servers.

Category The category this ticket belongs to

State The state of the ticket (Open, Pending, Closed)

Public Is this ticket Private or Public?

Ticket priority The priority of the ticket, if you've enabled that feature in the component's Options page.

Assign to The member of the support staff that's assigned to this ticket.

Bucket The bucket this ticket belongs to. Buckets allow you to mass reply to tickets filed by different

users about the same issue (see the relevant section in this documentation).

Origin (read only) How was this ticket submitted. Web means that is was submitted through the front-

end of your site. E-mail means it was created by an email sent by your client to the Category

E-mail address.

Created (read only) The date and time the ticket was created. The date and time is always shown in the

UTC timezone.

Last Reply (read only) The date and time the ticket was last updated, usually this is the date and time of the

last reply. The date and time is always shown in the UTC timezone.

On the right you can find the User Information area with the following read-only fields:

Username The username and numeric user ID of the user who has created this ticket. You can click on the

username to open the Joomla! User Editor page for that user.

Name The full name of the user who has created this ticket.

**Email** The email address of the user who has created this ticket.

Credits How many credits the user who has created this ticket has left.

Subscriptions The active Akeeba Subscriptions subscriptions of the user who has created this ticket.

Note

You obviously need to have Akeeba Subscriptions installed to see this field.

**Expired** The inactive (expired or cancelled) Akeeba Subscriptions subscriptions of the user who has subscriptions

created this ticket.

#### Note

You obviously need to have Akeeba Subscriptions installed to see this field.

Moreover you will see one of the following buttons:

Charge X
Credit(s)

If no credits have been charged to the user for creating this ticket, clicking on this button will charge him the amount of credits you've specified in the Category page.

Refund X
Credit(s)

If credits have been charged to the user for creating this ticket, clicking on this button will refund credit(s)

him the amount of credits he has been charged.

Right below you will find two tabs.

#### **Edit a ticket - Conversation tab**



The Conversation tab contains the ticket thread which both you (the support staff) and the user see. Each post has some or all of the following buttons:

Publish / Unpublish

Change the status of each post to published or unpublished. Unpublished posts are not seen in the front-end unless you are a member of the support staff. Members of the support staff and backend users will see unpublished tickets in a light red background, together with a notice that the post is unpublished.

Edit

Opens a post editor page where you can edit the text contained in the post. Very useful when a user accidentally publishes a password in a public ticket.

Delete

Completely deletes the post.

## Warning

Deleting a post is irreversible. Use with extreme caution. You should unpublish the post instead.

Charge credits / Refund X

Allows you to charge / refund credits for this post.

Credit(s)

If you also have an attachment to your ticket you will see the following buttons next to it:

Publish / Unpublish

Changes the published state of the attachment. Unpublished attachments are only visible to the

support staff.

Delete

Completely deletes an attachment (both the database record and the file on the disk)

#### Warning

Deleting an attachment is irreversible. Use with extreme caution. You should unpublish the attachment instead.

Below the conversation you will find the Post a reply area where you can enter a reply to the user and an optional attachment. Use the Post your reply button below it to submit your reply (and send an email to the user, if the respective plugin is enabled).

#### Edit a ticket - Manager Notes tab



The other tab is called Manager Notes. Manager notes are internal communication between the support staff and can also double as private notes. Only support staff can see them. The users cannot see the manager notes.

They work just like the Conversation view with a few differences:

- You can not post attachments to Manager Notes.
- Manager Notes are only seen by the support staff, not the users.
- Other support staff does not receive an email when you post a new Manager Note.

# 6. Canned Replies

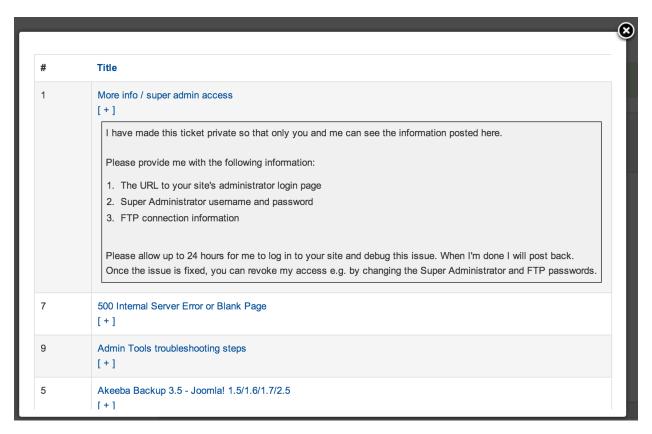
#### Note

This feature is NOT available on Akeeba Ticket System Core. Even though you can add Canned Replies you have no access to them from the front-end of the component.

This is accessible through the back-end Components, Akeeba Ticket System menu item and then clicking on the Canned Replies link below the component's toolbar.

When doing support you will often see the same question repeated over and over again by several different people. It doesn't matter if you've put it with big, bold letters in your FAQ page or if InstantReply offers older ticket pages which contain the reply to this question. It's a simple fact of life that some users will arrogantly ignore your documentation, FAQ, suggested pages and common sense, submitting a ticket nevertheless. Instead of wasting your time typing the same reply over and over again you can set up canned replies.

#### The front-end canned reply lightbox



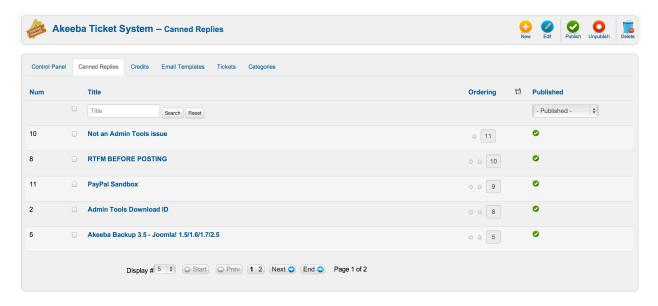
A canned reply is, essentially, a preset text you can paste in your reply with two clicks. Your WYSIWYG editor renders a Joomla additional editor button either below the editor area or as a button in the editor itself which allows you to Insert a canned reply. This buttons will open the Canned Replies lightbox. You can click on the title of a canned reply and its contents are entered in the reply area, directly where your cursor is. By repeating these steps you can insert several canned replies in a single reply to a user. If you want to preview the contents of a canned reply just click on the [+] link below its title. A grayish area will expand below with the contents of the canned reply. This is a very powerful tool and comes in very handy as your support volume increases.

Since Akeeba Ticket System 1.3.0 this lightbox is keyboard aware. Select a reply using the  $\mathbf{j}$  (move selection up) and  $\mathbf{k}$  (move selection down) keys. The currently selected reply is marked with a light green background. Press the + key to show / hide the full contents of the canned reply. Use **ENTER** to insert the currently selected canned reply into the reply area or **ESC** to close the lightbox.

#### Note

Canned replies are only available when you are replying to a user from the front-end of your site.

#### The back-end Canned Replies page



The back-end Canned Replies page is where you will define your canned replies. The canned replies which are published are going to be shown in the front-end in the order specified in the Ordering field.

## 7. Credits

#### Note

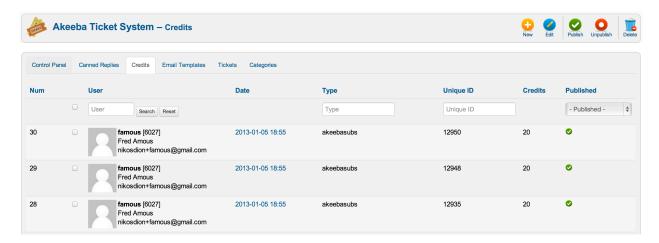
This feature is NOT available on Akeeba Ticket System Core. Even though you can add Credits to users they are not taken into account when creating / replying to tickets.

Credits are the "currency" of Akeeba Ticket System. If you want, you can set up the necessary options so that each category requires the user to spend a specific amount of credits to submit or reply a new ticket. You can even set them up to require a different amount of credits depending on whether the ticket is public or private. But you somehow need to assign users the credits they will be spending.

Typically you will be using an integration with a third party system which will allow users to buy credits, or award credits to the users based on some kind of activity. Akeeba Subscriptions does come with such an integration which allows you to award credits to subscribers when they subscribe to specific subscription levels and expire those credits when their subscription expires. The other way you can assign credits is manually, through Akeeba Ticket System's back-end. Both types of credits can be managed in this page.

Before explaining how credits are managed, we need to explain a little about how credits work. What you see in the back-end Credits page are actually credit records. Each credit record provides the user with an allotment of credits. As long as the credits record is published, the user can use these credits to post tickets and replies to Akeeba Ticket System. Each ticket's and post's credit consumption is charged against one of those credits records. If there is no published credit record with enough credits left Akeeba Ticket System will now allow the user to post anything. For example, if you have one credit record with 2 credits left and another one with 3 credits left the user will not be able to post a ticket that costs 5 credits. This is because his 5 credits are "fragmented" between different credit records. This is a known limitation of the system and cannot be worked around.

#### **Credits**



Each credit record displayed on the page shows the following fields:

Num The internal numeric ID of the credits record

User The user information of the owner of those credits

Date When the credits were assigned to this user. The date and time are always shown in the UTC timezone.

Type The source of these credits. For example, akeebasubs means that these credits were assigned by

Akeeba Subscriptions, when a user bought a subscription. When you want to manually assign credits

to a user please use the value manual in this field.

Unique ID This is a unique identifier, used by integration plugins. In the case of the akeebasubs type, this is

the subscription ID. When you manually assign credits to a user please use the current date and time

as your unique ID, e.g. 2013-02-10-17-52-00.

Credits The amount of credits given to the user.

Published When a credits record is published, the credits are available for consumption. When the credits record

is disabled, the credits are not available for consumption.

#### **Editing Credits**



Even though you can edit any existing credits record we strongly recommend that you do not do so. Only edit credits records where the type is set to manual. Modifying a credits record created by an integration plugin may have unforeseen consequences.

The fields in the credits editor are the same as the fields in the list page. No further explanation should be required.

# 8. Email Templates

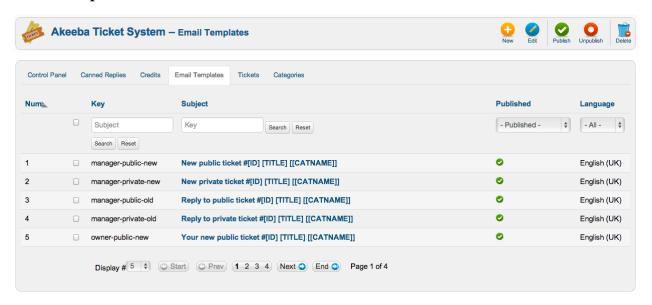
#### Note

This feature is NOT available on Akeeba Ticket System Core. Even though you can edit email templates they have no effect: no emails are sent by the free version.

This is accessible through the back-end Components, Akeeba Ticket System menu item and then clicking on the Email Templates link below the component's toolbar.

Akeeba Ticket System allows you to customise the email messages which are sent in various occasions, e.g. the new ticket notification sent to support staff and users, or the notifications sent by the Email-to-Ticket feature. Even better, Akeeba Ticket System allows you to define rich HTML email templates with an optionally different template per language.

#### **Email Templates**



An email message is identified by its Key and Language. The Key defines the exact occasion on which the particular email template is going to be used. The exhaustive list of keys can be found in the E-mail Keys section of our documentation. The Language defines which language this email template is written in. Akeeba Ticket System will try to select the best available language template based on your site's language, the user's language preference and which languages are available for this email Key in the Email Templates page. The preference order is:

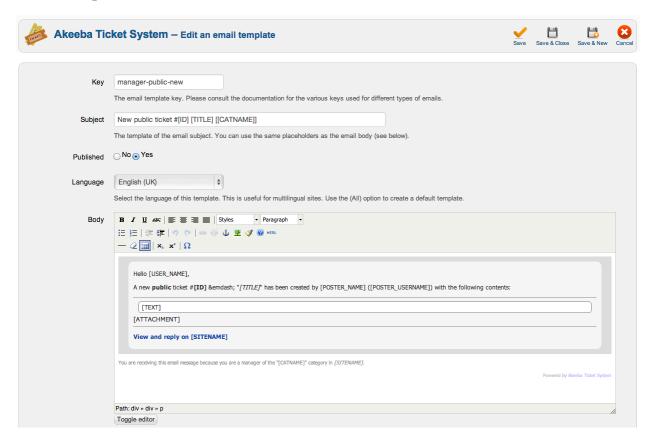
- 1. An email template where the Language matches the recipient's language in his Joomla! user profile
- 2. An email template where the Language matches the site's default language. Please note that on multilingual sites this may not always be a language the user understands.
- 3. An email template where the Language is set to All (\*).
- 4. An email template where the Language is set to "English (UK)".
- 5. The plain-text email template defined in the translation strings of the plugin sending the email, for the language which matches the recipient's language in his Joomla! user profile

- 6. The plain-text email template defined in the translation strings of the plugin sending the email, for the site's current language. The same note as #2 applies.
- 7. The plain-text email template defined in the translation strings of the plugin sending the email, for the "English (UK)" language.

The first email template which matches will be used. If no template is found, no email will be sent. By default, ATS comes with e-mail templates for the "English (UK)" language already set up, therefore stopping the processing at rule #4. If you delete or unpublish them without providing a replacement the translation strings will be used with usually very unsatisfactory results.

## 8.1. Editing e-mail templates

#### **Email Templates**



Each email template allows you to define the following parameters:

Key The e-mail key for this email template.

Subject The subject line of the email address. You may use e-mail variables to customise it.

Published The email template will only be used if its Published status is set to Yes.

Language The language this email template will be used with. Use "All" to use this email template for all languages on your site. This only makes sense in multilingual websites, of course.

Body The HTML body text of your email message. You may use e-mail variables to customise it.

#### Note

Any images you link to will be included as inline attachments in the generated email message to avoid security warnings in your clients' email applications.

#### Warning

Due to security and implementation restrictions on most email and webmail applications (e.g. Outlook, Windows Live Mail, Apple Mail, GMail, Yahoo! Mail and so on) you are advised to refrain from using fancy CSS, especially float attributes. If you want to define a custom layout we suggest that you use HTML tables instead. Yes, tables were the standard in 1998 and the web has gone a long way but most email clients forbid the use of floating elements to protect their users against clickjacking and other nefarious techniques used by hackers. Live with it. It's hard and, yes, we *do* feel your pain!

In the toolbar you will see a button called Test email. Clicking on it will send you an email with this email template (using demo / fake data) to your email address so that you can see how it looks in a mail client. Please remember to save your email template before clicking this button!

## 8.2. E-mail Keys

As explained before, the email Keys define in which occasion an email template will be used. The email keys are ALWAYS written in lowercase, without spaces, exactly as defined below in bold type. The following e-mail keys are currently used.

# Keys for the "Akeeba Ticket System - New post notification emails" plugin

These emails are sent whenever a new ticket or new post is created.

submitted the ticket.

manager-public-A new public ticket was created. This email is sent to the support staff. new manager-private-A new private ticket was created. This email is sent to the support staff. new manager-public-An existing public ticket received a reply by another member of the support staff or the user who old submitted the ticket. This email is sent to the support staff. manager-private-An existing private ticket received a reply by another member of the support staff or the user who old submitted the ticket. This email is sent to the support staff. A manager assigned a ticket to another staff member. This email is sent to the support staff member managerassignedticket who was assigned the ticket. owner-public-A new public ticket was created. This email is sent to the user who submitted the ticket. new A new private ticket was created. This email is sent to the user who submitted the ticket. owner-privatenew owner-public-old An existing public ticket received a reply by the support staff. This email sent to the user who owner-privateold An existing private ticket received a reply by the support staff . This email sent to the user who submitted the ticket.

## Keys for the Reply by Email and New Ticket by Email features

These emails are sent whenever a ticket or post is attempted to be created from an email but an error occured while processing the email message. The emails below are sent to the email address of the email message which generated the error.

mailgateway-The email address does not belong to a user registered on the site and cannot be processed. invaliduser mailgateway-The email address belongs to a user registered on the site but the user does not have posting noaccess privileges to the Akeeba Ticket System category. New ticket creation is suspended using the "No new tickets" options in the component's Options mailgatewaynonewtickets page. mailgateway-Reply creation is suspended using the "No new replies" options in the component's Options page. nonewreplies The creation of a new ticket failed for an unspecified reason (e.g. database error) mailgatewaynewticketfailed mailgateway-The creation of a new reply (post) failed for an unspecified reason (e.g. database error) newpostfailed mailgateway-New ticket creation by email has been disabled in the component's Options newticketdisabled mailgateway-Reply by email has been disabled in the component's Options newreplydisabled The email is missing the reply line which is used by Akeeba Ticket System to determine which mailgatewaynoreplyline ticket this email reply refers to mailgateway-The user does not have enough credits to submit a new ticket nocredits-ticket mailgateway-The user does not have enough credits to submit a new reply (post)

## 8.3. Allowed variables in e-mails

Email templates wouldn't be worth anything if you couldn't include useful information about the ticket, the post and the user in them. You can do so by using "variables". The variables are ALWAYS written in all-uppercase letters, surrounded by square brackets, without spaces, exactly as defined below. The available variables are:

[USER\_NAME] The name of the email recipient.

[USER\_USERNAME] ne username of the email recipient.

[ID] The numeric ticket ID

[TITLE] The ticket's title

nocredits-post

[POSTER\_NAME] The full name of the person who posted the ticket / reply

[POSTER\_USERNAIM Experiment of the person who posted the ticket / reply

[TEXT] The post text

[ATTACHMENT] A link to the attachment (text and URL), left blank if there is no attachment

[URL] The URL of the ticket on your site

[CATNAME] Ticket category name

[SITENAME] The name of your site

[AVATAR] URL of the avatar image of the user who posted the ticket / reply

[ORIGIN] The origin of the post (e.g. web or email)

[ASSIGNED\_TO] The full name of the support staff assigned to the ticket, or the text "Unassigned" when nobody

is assigned yet.

[MODIFIED\_BY] The full name of the last person who modified the ticket. This is the same as the

[POSTER\_NAME] on most email templates. On the assigned ticket email it is the person who

assigned the ticket to another member of the support staff.

## Special considerations for the use of variables

• The only variables available for the mailgateway-invaliduser key is [SITENAME]

• The ticket variables ([ID] through [CATNAME] and [ORIGIN]) are only available for the "Akeeba Ticket System - New post notification emails" plugin's Keys.

## 9. Off-line schedule

## Warning

If you have at least one published off-line scheduling definition your "No new tickets" and "No replies" preferences in the Options page of the component will be automatically modified and not "stick" when you set them. This is not a bug; it's how Off-line schedule is supposed to work.

Sometimes it's desirable to have the ticket system not accept replies and/or new tickets based on a pre-set schedule, e.g. every weekend or during holidays. This requires you to log in to your site, go to ATS' Options page and set the relevant options ("No replies" and "No new tickets" respectively). This is tiresome and prone to mistakes, e.g. forgetting to reset these options when your ticket system should be ready to accept new replies / tickets again. To this end we created the off-line schedule feature. As the name implies it allows you to set pre-defined rules which will activate the No Replies and/or No New Tickets options of ATS. When no rule is fulfilled ATS will revert back to setting both of these options to No, therefore allowing your users to use ATS normally.

Each off-line schedule has the following options:

Title This is used for your convenience, to remind you what this rule does

No new tickets When selected and this schedule is activated no new tickets will be allowed to be created in the

ticket system

No replies When selected and this schedule is activated no replies to existing tickets will be allowed to be created

in the ticket system

Status If you want to temporarily disable a definition but not delete it, set it to Unpublished

Time start The time of the day when this rule becomes active. The time is given in 24 hour format, e.g. 01:00:00 means 1 a.m. and 13:00:00 means 1 p.m. Times are always given in the GMT timezone.

Time end The time of the day when this rule becomes inactive. The time is given in 24 hour format, e.g. 01:00:00 means 1 a.m. and 13:00:00 means 1 p.m. Times are always given in the GMT timezone.

Weekdays Select which days of the week this definition applies to. You can select \* for all. You can also select multiple values by holding down CTRL (Windows, Linux) or CMD (Mac OS X) when clicking on the values.

Days Select which days of the month this definition applies to. You can select \* for all. You can also select multiple values by holding down CTRL (Windows, Linux) or CMD (Mac OS X) when clicking on the values.

Months Select which months this definition applies to. You can select \* for all. You can also select multiple values by holding down CTRL (Windows, Linux) or CMD (Mac OS X) when clicking on the values.

Years Select which years this definition applies to. You can select \* for all. You can also select multiple values by holding down CTRL (Windows, Linux) or CMD (Mac OS X) when clicking on the

Please note that there is a 24 hour limit in schedule definitions. If you want to take the ticket system off-line, say, from 6 p.m. Friday to 8 a.m. Monday you will have to create three rules:

- Every Friday from 18:00:00 to 23:59:59
- Every Saturday and Sunday from 00:00:00 to 23:59:59
- Every Monday from 00:00:00 to 08:00:00

# 10. Auto-replies

#### Note

This feature is NOT available on Akeeba Ticket System Core. Even though you can set auto-replies they have no effect.

You will often want to send an automatic reply to your users without human interaction. Some practical examples (non-inclusive list!):

- Thanking a user for filing a ticket and letting them know that a human agent will reply to them shortly, or inform them about any holidays / vacation time which may adversely effect the response time.
- Send a notification to a user after a certain amount of time since your support staff last replied to them (an automatic follow up post)
- Remind the user to attach a file if they forgot to do so; practical cases are when log files / screenshots are needed
  for software support or if you are running something like a digital print agency which requires the user to upload
  their artwork.
- · Send an automatic reply to most frequently asked questions, based on keywords in the title or body of the ticket.
- Send an warning to users who have sent too many posts in a ticket, informing them that every time they post on their ticket they end up at the bottom of the reply queue.

This feature consists of three parts:

- 1. The automatic reply rules. This is what you define in this page. It determines the conditions for sending an automatic reply and the content of the reply.
- 2. The automatic reply bot usernames. This is defined in the component's Options, under CLI Automation. Please refer to the Options documentation for more information.
- 3. A CLI script which must be manually scheduled by you, using CRON, to run the rules and send the replies. Please refer to the CRON scripts documentation for more information.

#### Warning

If you do not create a CRON script for this feature no automatic reply will ever be sent!

Each auto-reply rule has the following settings:

Title The title of this auto reply rule. This is only visible to you.

Categories Which ticket categories this rule applies to. Select the first option ("- Select a category") to apply

the rule to all categories.

Manager reply Apply this auto-reply rule depending on whether a human member of the support staff has already posted a reply to this ticket:

• If not replied. Only send the auto-reply if a human member of the support staff has not posted yet to this ticket.

• If already replied. Only send the auto-reply if a human member of the support staff has already posted to this ticket.

• Always. It doesn't matter if a human member of the support staff has already posted to this ticket or not, send the auto-reply anyway.

No of posts The minimum number of total posts in the ticket before this rule is triggered. Leave empty or set to 0 to send the auto-reply irrespective of the number of total posts on the ticket.

Min. after How many minutes must elapse after the ticket was first filed before sending this auto-reply. Set to 0 to ignore this option.

Run if the Apply this auto-reply rule depending on the existence of an attachment in any of the posts in this attachment ticket:

• is not present. Send this auto-reply only if there are no attachments in any of the posts in this ticket.

• is present. Send this auto-reply only if there are attachments in any of the posts in this ticket.

• always. Send this auto-reply without caring about the existence of attachments.

Status Set to Unpublished to disable the rule without deleting it.

Ticket title Enter a list of keywords or phrases which must be present in the ticket title for this auto-reply to

be sent. Type one keyword or phrase per line.

Ticket text Enter a list of keywords or phrases which must be present in the ticket body (the posts of the user)

for this auto-reply to be sent. Type one keyword or phrase per line.

Bot reply Enter the automatic reply to be sent when this rule matches the ticket.

Please note that there are some important quirks regarding the operation of this feature that you should be aware of:

- · Only Open tickets are taken into account. If the ticket is in any other status it will be ignored.
- Only one auto-reply will ever be sent per ticket.
- The ordering of the rules matters. The first rule to match the ticket will send an auto-reply. All other rules will be ignored for that ticket.
- If a user is a manager in Category A and posts to Category B where he is not a manager the "Manager reply" option will consider him as a manager anyway. This means that auto-replies will never be sent to tickets owned by managers of ANY category on your site if the "Manager reply" option is set to "If not replied". Granted, this is a very rare case, but you should be aware that this is by design and not a bug.

# 11. User tagging

Oftentimes there are those clients who need special handling: the boss' nephew; the polite but constantly babbling guy; this lady who always sends freaked out messages as if the end of the world has come; that guy who always posts in a foreign language spoken by just one person in the company; that bully client from hell. You get the picture. These are the clients you have to live with, but which could take an unsuspecting support agent by surprise, in the negative sense of the word. We've all been there, done that, got the t-shirt so to speak.

For this reason you need an effective way to tag these "special" user accounts. This will serve as a reminder to the old-timers of the support staff and a warning to the new agents. It's special handling instructions, invisible to the clients themselves.

The options for each user tag are simple and self-documenting:

Title A very short title which will appear to managers in the front-end of your site. Try sticking to 1-2

words here. Example: Customised version

Description A slightly longer description which will appear as a tooltip in the front-end. Example: User has

customised version of our software. Documentation doesn't apply.

Published If set to No the tag will no longer appear in the front-end.

## **Important**

Even though the tags' titles and descriptions are only shown to managers and not the users themselves, you are advised to refrain from using derogatory terms and strong language. You can never know who might share an accidental screenshot.

## 12. Buckets

#### Note

This feature is NOT available on Akeeba Ticket System Core. Even though you can view Buckets from the back-end you can not add tickets to a bucket from the front-end.

A few times there is a fairly large amount of clients reporting the same issue in the span of a few hours to a few days. While issuing a standard reply that you are working on a solution is easy to provide, notifying everyone of the available fix is usually very hard and requires keeping a spreadsheet with ticket numbers and URLs. Even if you do that, sending the actual mass reply to all those people is cumbersome and takes a disproportionate amount of time. This is where ticket Buckets come to play.

You can put as many tickets as you want inside a ticket bucket. A reply you send to a bucket will be posted automatically and at the same time to all of the tickets in the bucket. You may also mass-change the status of the tickets in the bucket. When you're done with a bucket you can dispose of (delete) it. In so many words, a ticket bucket allows you to mass reply to tickets.

The first time you create a new Bucket, using the Add button in the Buckets page, you have to enter the following information:

Title The title of the bucket. This is for your reference.

State The default state of all tickets added to the bucket

When editing an existing bucket you will then see two more tabs, the Reply and Tickets. In the Reply tab you can enter a reply and it will be posted to all tickets in the bucket. You can see the tickets in the bucket by clicking on the Tickets tab.

You can add a ticket to a bucket through the ticket page, either in the back-end or the front-end of your site.

#### Note

Buckets can only be created from the back-end but you can add tickets to them either from the front- or the back-end.

## 13. Guest tickets

Since Akeeba Ticket System 2.4.1 we allow -under certain conditions- Guest users to file tickets. Guest users, in Joomla! lingo, are visitors who are not logged in, i.e. they do not have a user account yet. Please make sure you understand the "How does this feature work?" section below before trying to use this feature. It tells you how this feature works and which settings, in ATS and Joomla! itself, will conflict with it and make it not work as you think it should.

If you do not want this feature, you don't need to do anything. Guest tickets will only be allowed if you set up one or more ATS categories to allow Guest users to create tickets.

## How does this feature work?

Unregistered (Guest) users can create tickets as long as the ATS category has the Create privilege for the Guest user group. Joomla's user registration must be enabled in the Options of the Users component in the backend; or the Force user creation when filing Guest tickets option in Akeeba Ticket System's Options page must be set to Yes.

The users will need to provide an email address and a name when filing a ticket from the web. If the Show CAPTCHA when filing Guest tickets option in Akeeba Ticket System's Options page is also set they will be asked to solve a CAPTCHA as well. This is a good idea since it will cut down on spam ticket submissions. Please note that you must have one or more plugins in the "captcha" group activated in Joomla's Plugins page. Moreover, you must have selected a default CAPTCHA plugin in Joomla's Global Configuration page. If any of these three conditions is not met a CAPTCHA will not be shown to Guest users trying to file a new ticket. Also note that, obviously, the CAPTCHA will not apply to tickets created by sending an email.

If you have enabled the Credits feature and have a non-zero credits charge for creating new tickets Guest users will, of course, be unable to create tickets. The reason is that a new user account would be created for them which has zero credits. They would simply receive a message which lets them know that they don't have enough credits to post a new ticket.

When filing a ticket by email we obviously already have their email address. If they have provided their full name as part of the From address of their email we will use that. Otherwise we will also use the email address as the user's

full name. Akeeba Ticket System will create a Joomla! username derived from the user's full name or, if that's not possible, their email address. Users can change their email address and full name in Joomla's user profile edit page whenever they want, as long as you've provided such a page in your site's frontend. Users cannot change their username themselves; this is a restriction of Joomla! itself, not Akeeba Ticket System.

As implied above, a new user account is created for the guest user and assigned to the ticket. That user account has a random password. The username and the password are both emailed to the user by Joomla! itself. Please note that if you have configured Joomla! to not send the password to the user then the user will very obviously not receive their password which makes it impossible for them to log in. In this case they will either have to use the Forgot Password feature of Joomla! itself or contact you and ask for a password to be issued. For this reason we recommend that you configure Joomla! to send the password to new users over email.

The user account may need to be activated by the user, per the Options in Joomla's backend. If, however, you have enabled Force user creation when filing Guest tickets the user registration settings of Joomla! will be ignored and the user account will be activated. As noted above, enabling this option will also allow Akeeba Ticket System to create new Joomla! users even if you have disabled user registration in the Options page of Joomla's Users component.

The user will need to log into your site with the created user account to reply to the ticket or file more tickets. If they try to file a ticket as a Guest with an email address already in use by a user account on the site they will be asked to log in to file a new ticket.

## Affected template overrides

If you are using template overrides, the files (in your template's html/com\_ats directory) need to be modified as of Akeeba Ticket System 2.4.1

NewTickets/form.php

# 14. The menu item types

Akeeba Ticket System only defines a handful of menu item types you can use to create new menu items in your Joomla! site:

Assigned Tickets Displays the tickets that are assigned to the currently logged in support staff member.

## Warning

This is supposed to be used on menu items which are only visible by registered, logged in users who are members of the support staff (they are set up as managers to the component or as support staff to one or more categories). Do not assign this to the Public or Guest viewing access level or to a viewing access level accessible by regular users. If you do your visitors will get a 403 Forbidden error message. This is by design.

Ticket Buckets Displays a list of ticket buckets.

#### Note

This feature is NOT available on Akeeba Ticket System Core.

## Warning

This is supposed to be used on menu items which are only visible by registered, logged in users who are members of the support staff (they are set up as managers to the component or as support staff to one or more categories). Do not assign this to the Public or Guest

viewing access level or to a viewing access level accessible by regular users. If you do your visitors will get a 403 Forbidden error message. This is by design.

Categories

This is the main view that you want to include in a menu item on your site. It displays all the available support ticket categories and allows the user to navigate into them, create new tickets and so on.

#### **Important**

You MUST always have a menu item with this menu type, even in a hidden menu (a menu which is not published) per language. I fyou don't the SEF URL router shipped with Akeeba Ticket System will not work correctly and you will end up with strange URLs and/or routing issues (displaying the wrong category or ticket).

Category

This menu item type allows you to create a menu item which displays the tickets inside a specific category and allows users to post new tickets only to that category.

My Tickets

This is a convenient way to allow your users to view a list of all the tickets they have filed on your site. It will display all tickets submitted by the currently logged in user.

#### Warning

This is supposed to be used on menu items which are only visible by registered, logged in users. Do not assign this to the Public or Guest viewing access level. If you do your visitors will get a 403 Forbidden error message. This is by design. A non-logged-in user can't be shown "his" or "her" tickets because they cannot own any tickets!

Latest Open

Shows all the open tickets, private and public, across all categories sorted by last reply date descending (oldest on top). This is only available to the support staff, i.e. users with the Access Administration Interface privilege or the Support Staff privilege.

# 15. Front-end ticket management for support staff

#### **Note**

Some features described here are NOT available on Akeeba Ticket System Core.

Unlike most support ticket components, Akeeba Ticket System is designed to be primarily used from the front-end of your site. You will sparingly need to use the back-end of the site to manage your tickets. This convenience is provided by means of several controls on the ticket page itself when you are logged in and have the required access control privileges.

At the top of the page you will see some of the following buttons and controls:

Printer-friendly view

Open a printer-friendly view of the ticket in a new window. You can use it to prepare printouts / PDF copies of an entire ticket. This comes in handy when a client requests a printout / PDF of the ticket to show to their boss, without their boss having to log in to the ticket system.

## **Important**

Only managers see the printer-friendly view button. Your clients will have to ask you for a printout, they cannot produce one themselves.

#### Make Public / Make Private

Toggle between a public and private ticket.

#### Tip

Private tickets show a notice with a green background, informing the person viewing it that it's safe to include sensitive information such as passwords. Public tickets will show a notice in yellow background, warning the person viewing it that it's not safe to include sensitive information.

Disable / Enable

This button changes the published status of a ticket. When you disable a ticket only members of the support staff can see it (if they have the direct URL or through the back-end) and the ticket is no longer displayed in the tickets list of the category.

Close Ticket / Reopen Ticket Changes the status of the ticket between Open and Closed. It's a good idea to close resolved tickets.

Category list

This is a drop-down showing the category the ticket is in. Choose a different category and click on the right arrow button next to it to move the ticket to the selected category. Very useful for misplaced tickets (which is all too common with tickets created from an email).

Assign to

Select which member of the support staff to assign this ticket to. The current assignment is shown in a badge above this drop-down button.

Charge X credits / Refund credits

Charge or refund credits for this ticket. It's the same thing as what you can do in the back-end of the component.

Each post's header displays two important pieces of information. The icon on the left-hand side shows the origin of the post: a globe for posts submitted through the web site, an envelope for posts submitted via email. Next to it you will see the exact date and time the post was submitted, followed by the timezone. Akeeba Ticket System will try to use the currently logged in user's preferred timezone to display the post date and time. Please note that the timezones are shown in the default PHP format. For example EST means Eastern Standard Time, CET means Central European Time, EET means Eastern European Time and so on. The date and time is not there just for decoration. It's also the permalink to that post! Yes, it's a link pointing to the exact post of the current ticket. In the far right of this header area you will see the real (full) name of the user.

On the right hand side of each post you can find the user information. From top to bottom you will see the user's avatar, the username and the currently active Akeeba Subscriptions subscriptions of the user (if Akeeba Subscriptions is installed). Avatars are rendered by means of plugins. The first release of ATS only comes with a Gravatar integration plugin, but more will follow in the future. Please note that the real (full) name of the user is shown above this area, in the header.

The main area of each post contains the post's text. Below it you will see the user's signature. Users can define their signature by editing their Joomla! user profile. Please remember to publish the "User - Akeeba Ticket System" plugin which allows users to define and edit their signature.

If there are any attachments, you will see the word Attachment and the name of the attachment file below it. Clicking on the attachment filename will download the attachment. Next to it you will find two buttons:

Publish / Unpublish

Delete

Shows / hides the attachment. Only members of the support staff will be able to see it.

Removes the attachment. Be careful! This process is irreversible.

At the bottom of each post you will see the control buttons for this post:

Publish / Change the status of each post to published or unpublished. Unpublished posts are not seen in the Unpublish front-end unless you are a member of the support staff. Members of the support staff and back-

front-end unless you are a member of the support staff. Members of the support staff and backend users will see unpublished tickets in a light red background, together with a notice that the

post is unpublished.

Edit Opens a post editor page where you can edit the text contained in the post. Very useful when a

user accidentally publishes a password in a public ticket.

Delete Completely deletes the post.

#### Warning

Deleting a post is irreversible. Use with extreme caution. You should unpublish the post instead.

Charge credits /
Refund X
Credit(s)

Allows you to charge / refund credits for this post.

Below everything else you will see the Post a reply area. Depending on the editor you chose there is an Insert a canned reply button either below the editor area or as a button in the editor area itself. This is provided by a Joomla editors-xtd (additional editor buttons) plugin shipped with Akeeba Ticket System.

In both cases clicking the button will open a lightbox allowing you to insert a canned reply.

Similarly, there is a Buckets button which allows you to add tickets to a Bucket. In the lightbox which opens up select the checkbox next to each Bucket you want to add the ticket to and then press the Add tickets to bucket button. Please note that managing buckets or removing tickets from buckets is only possible from the back-end of the component.

Below that you will find the Time spent (optional) text area. This allows managers to record the time they spent answering a post, in minutes. This information is shown in the backend of the component.

Below that you can find the attachment area (click the Browse button to find an attachment) and the Send your reply button which submits the post.

## **Important**

Attachment uploading is bound by the rules for attachments you've set up in Joomla!. Where? In the backend of your site go to Content, Media, Options. This is where you can set the legal extensions, maximum size, upload restriction, MIME type checking and so forth.

**EXTREMELY IMPORTANT!** Since Joomla! 3.7.1 you MUST set Restrict Uploads to No in the aforementioned page. Despite what the description of that options reads, its actual behavior is "When this is enabled all non-admin users can ONLY upload images files, as defined by the Legal Image Extensions (File Types) option below". Unfortunately even though the functionality changed the description didn't, causing massive confusion among Joomla! users.

## Warning

The maximum size of an attachment is determined by the **minimum** of the "Maximum Size (in MB)" you set up in Joomla!'s Media Manager options and your PHP maximum upload size as defined in your server's php.ini. Akeeba Ticket System *tries* to figure it out and inform you with a message right below the attachment selection field. As we just said it tries, it doesn't mean it will always guess right. Moreover you need your media/com\_ats folder to be writable, PHP to properly support file uploads and the file extension to be one of the allowed ones for the attachment to succeed.

## Good to know

When viewing the Latest Open page you can use the **J** and **K** keys on your keyboard to select the previous or next ticket respectively. The active ticket is highlighted. Pressing **ENTER** will open the ticket.

When you submit a reply to a ticket but a reply from the user or another manager has already come in in the meantime your reply will not be sent, you will receive a notice about it and the reply area will contain the reply text you tried to submit (do note: your upload, if any, will not be there). This allows you to review your reply and probably edit it, or scrap it altogether, depending on the replies which came in while you were typing.

If the ticket is assigned to a different member of the support staff there will be a notice shown above the reply area, warning you that this ticket is assigned to a different user. If the ticket is not assigned to anyone, as soon as you submit your reply the ticket becomes assigned to you.

As a member of the support staff you can reply to all tickets, even when they are closed. When the ticket is closed you will be shown a warning above the reply area. You can also reply to tickets when No Replies or Off-line Schedule is activated. In this case no warning is shown. Be careful, in this case the client will see your reply but won't be able to reply back to you until the No Replies option or Off-line Schedule is disabled.

As a member of the support staff you can file a ticket on behalf of a user in the front-end. Just click the New Ticket button in the category you want the ticket to be filed in. In the new ticket page you will now see a field called User. Use the Select User button next to it to select the user you're filing this ticket on their behalf. This allows you to add support requests received by other means (in person, email, phone, SMS, fax, RFC 1149 networks...) to the ticket system.

# 16. Customising the front-end layout

Layout customisation usually involves either changing just the CSS or changing both the CSS and HTML output of the component. Both can be accomplished with template overrides. We will explain the two procedures below.

## Warning

Newer versions of the component may introduce changes to the base CSS and/or Javascript files or the HTML output. We recommend you to review your overridden files every time you upgrade Akeeba Ticket System. We will not accept bug reports or provide any hsupport if you are using template or media files overrides on your site as you are no longer running our tested code against our tested layout and our tested Javascript. If you want our help please make sure you can reproduce the issue without any template or media overrides.

## **Customising the CSS**

- 1. Find your current template's subdirectory in your site's root, under the templates directory. In this example, we will assume it is templates/mytemplate
- 2. Create a new directory templates/mytemplate/media/com\_ats/css This is your media files overrides directory.
- 3. Copy the CSS files you want to modify from media/com\_ats/css into the templates/mytemplate/media/com\_ats/css directory. From now on, Akeeba Ticket System will load these new CSS files instead of the files found under media/com\_ats/css.
- 4. Edit the CSS files in templates/mytemplate/media/com\_ats/css replacing or adding CSS rules so that the design matches your desired style

Please don't ask us for CSS or design ideas. We are good developers and horrid designers. You can ask us, however, regarding any issues you might experience overriding our CSS files.

## **Customising the Javascript**

- 1. Find your current template's subdirectory in your site's root, under the templates directory. In this example, we will assume it is templates/mytemplate
- 2. Create a new directory templates/mytemplate/media/com\_ats/js This is your media files overrides directory.
- 3. Copy files from media/com\_ats/js into the templates/mytemplate/media/com\_ats/js directory. From now on, Akeeba Ticket System will load these new files instead of the files found under media/com\_ats/js.
- 4. Edit the files in templates/mytemplate/media/com\_ats/js and adjust the JS code to your liking.

## **Customising the HTML output**

Sometimes it's not enough modifying the CSS. In order to achieve your desired styling you may also have to add some extra div or span elements in the HTML output. When this happens you need to perform template overrides for our view template PHP files, a process called Template Overrides in Joomla! jargon. Instead of reinventing the wheel by writing lengthy instructions, we think it's better for you to read the official Joomla! documentation on the subject [http://docs.joomla.org/How\_to\_override\_the\_output\_from\_the\_Joomla!\_core].

Please note that Akeeba Ticket System is using the updated view template locations introduced with Joomla 4, even when used on older Joomla versions (it has its own compatibility layer). You will find the view template files inside the components/com\_ats/tmpl/ViewName folder where ViewName is the name of the view. These files need to be copied to templates/mytemplate/media/com\_ats/html/ViewName. Older versions of Akeeba Ticket System had their view template files inside the components/com\_ats/tmpl/ViewName folder. The view template override logic remains the same. The renaming of the main view templates folder of the component does not have any impact on your template overrides.

Akeeba Ticket System 3 and later uses the Blade template language instead of straight-up PHP view templates. You can read more about Blade in the Wiki page of our framework [https://github.com/akeeba/fof/wiki/Blade-Templates]. Blade templates have the extension .blade.php and are compiled to PHP on-the-fly. The whole point of using Blade is that the view templates are easier to read and modify by front-end developers.

On top of the regular Blade syntax, ATS uses the following Blade extensions:

@atsTicketStatusSelShows a dropdown to select the ticket status (e.g. Open, Pending, Closed), typically used for applying filters in the front-end.

@atsCategorySelectShows a dropdown to select a ticket category, typically used for applying filters in the front-end.

@atsPrioritySelect Shows a dropdown to select the ticket priority (e.g. low, medium, high), typically used when filing a new ticket.

@atsFormatDate Format a generic GMT date string.

@atsFormatDateTZ Format a generic date string, displaying the result in the user's timezone, as set up in their Joomla! user profile.

@jsLang Makes a language string visible to the JavaScript of the page.

@parseBBCode Echoes the input after parsing it for bbCode. Used whenever content stored as bbCode in the

database needs to be displayed on the page as HTML. This is used for legacy content which used to be stored as bbCode. ATS no longer uses a bbCode editor and doesn't store bbCode (it stores

HTML content).

You should normally not have to modify what is between the parentheses following any of these extensions. Moreover, you MUST NOT add line breaks between the parentheses; that would make it impossible to render them.

## Overriding the loading of FEF

Akeeba Ticket System uses the Akeeba Frontend Framework (FEF) to render its interface. This is a CMS-agnostic framework which is designed to work well inside pretty much any third party template. If you want to completely override the layout of Akeeba Ticket System and replace all the FEF-specific markup with your own (e.g. Bootstrap or something specific to your template) you should also not load FEF. You can control that with the component options. DO NOT try to override the FEF CSS and JS. This can have unpredictable results on your site!

Please note that in this case you should override both the view template and the JavaScript on every page. Most of our JavaScript is written on the assumption that the markup on the page is written for FEF and uses the FEF JavaScript libraries as well.

It is typically much easier writing custom CSS rules in your site's template, targeting the HTML output of ATS, than overriding the HTML, CSS and JavaScript of the component. As with all of our frontend components, we wrap the component's output in a DIV element with classes which let you target the component, a particular view and / or task, even a particular Joomla version. We try to include HTML classes and IDs in all other elements useful for targeting CSS rules consistently. We use our own software on our own sites where we need to apply some custom CSS to make everything look nice. We understand how site integrators' work and try to make your life easier.

# 17. Custom module positions in the front-end

Akeeba Ticket System allows you to customise its pages by publishing modules in its predefined module positions. These module positions are not related to those used by your template. Below you will find out what each custom module position is and where/when it is shown.

ats-top	At the top of each page of the component
ats-categories-top	At the top of the categories list page, below ats-top
ats-mytickets-top	At the top of the My Tickets page, below ats-top
ats-newticket-top	At the top of the new ticket page, below ats-top
ats-posts-top	At the top of the post page, below ats-top
ats-tickets-top	At the top of the tickets in a category list, below ats-top
ats-categories- none-top	Above the "no categories" message when no categories are found, below ats-categories-top
	This module position is only shown when there are no categories defined in Akeeba Ticket System or when the privileges of the currently logged in user do not allow him to access any of the Akeeba Ticket System categories.
ats-mytickets- none-top	Above the "no tickets" message when no tickets are found in the My Tickets view, below atsmytickets-top
	This module position is only shown when there are no tickets submitted yet by the currently logged in user.
ats-tickets-none-	Above the "no tickets" message when no tickets are found in the tickets in category list, below ats-tickets-top

	This module position is only shown where there are no tickets posted yet in a category or when all the tickets posted in the category are private and not visible by the currently logged in user
ats-categories- none-bottom	Below the "no categories" message when no categories are found, above ats-categories-bottom
	This module position is only shown when there are no categories defined in Akeeba Ticket System or when the privileges of the currently logged in user do not allow him to access any of the Akeeba Ticket System categories.
ats-mytickets- none-bottom	Below the "no tickets" message when no tickets are found in the My Tickets view, above atsmytickets-bottom
	This module position is only shown when there are no tickets submitted yet by the currently logged in user.
ats-tickets-none- bottom	Below the "no tickets" message when no tickets are found in the tickets in category list, above ats-tickets-bottom
	This module position is only shown where there are no tickets posted yet in a category or when all the tickets posted in the category are private and not visible by the currently logged in user
ats-categories- bottom	Below the categories list page, above ats-bottom
ats-mytickets- bottom	Below the My Tickets page, above ats-bottom
ats-newticket- bottom	At the bottom of the new ticket page, above ats-bottom
ats-posts-bottom	At the bottom of the post edit page, above ats-bottom
ats-tickets- bottom	At the bottom of the tickets in a category list, above ats-bottom
ats-bottom	At the bottom of each page of the component
ats-replyarea- overlay	Overlaid on top of the message area when composing a new post or replying to an existing one. If "No new tickets" or "No new replies" is enabled in the component's Options page it will also be shown above the ats-nonewtickets and the ats-noreplies positions respectively.
ats-nonewtickets	Shown instead of the New Post page when "No new tickets" is enabled in the component's Options page.
ats-noreplies	Shown instead of the reply area are when "No new replies" is enabled in the component's Options page.

# Chapter 4. The plugins

#### Note

None of the plugins are availabe in Akeeba Ticket System Core.

Akeeba Ticket System is a modular system, allowing you to easily extend it by means of plugins. It comes with several plugins out of the box for features ranging from sending emails to integrating with Joomla! search and user profiles. In this chapter you will learn what each plugin does and how to configure it.

The plugins can be found in the Joomla! plugins manager (Extensions, Manage Plugins at the back-end of your site). The plugins are placed in different groups, depending on the kind of functionality they perform. This chapter is organised by plugin group.

# 1. The "ats" plugins

## 1.1. Akeeba Subscriptions integration

#### **Note**

This plugin is NOT availabe in Akeeba Ticket System Core.

#### Note

The Akeeba Subscriptions component is no longer available as an installable download, meaning it's no longer suitable for end users. This plugin is maintained only for internal use in Akeeba Ltd's site and for those developers who can build and use Akeeba Subscriptions from its public repository.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Akeeba Subscriptions integration

This allows you to integrate the Akeeba Subscriptions component (version 7) with Akeeba Ticket System. Each Akeeba Subscriptions subscription level can be assigned to a number of credits. When the subscription becomes active these credits are added to the user's Akeeba Ticket System credit count. When the subscription becomes inactive you can choose whether to keep the credits or expire them (meaning any unused credits will no longer be available to the user).

## 1.2. Automatically close old tickets

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Automatically close old tickets

This plugin allows you to automatically close tickets with a Pending status which have not received a reply from either the client or the support staff for a specific amount of time. It makes the autoclose CRON command available.

This plugin replaces the obsolete ats-autoclose-tickets CLI script.

The idea behind this plugin is that some clients will see the reply from the support staff which addresses their issue but will neither reply nor close their ticket. Over time your support ticket system will show too many tickets as pending a reply from the client which makes it really hard for you to understand how many support cases are really open, making

it potentially difficult to schedule your support staff. This plugin automatically closes stale tickets which are most likely resolved or for which the client has otherwise lost interest.

The plugin has the following options:

Maximum inactive ticket age

Open / Pending tickets older than this many days (but newer than the "Silent close period") will be set to Closed status by the ats-autoclose-tickets.php CRON script, posting a notification that the ticket is closed because it's inactive.

Silent close period

Open / Pending tickets older than this many days will be set to Closed status by the ats-autoclose-tickets.php CRON script, without posting a notification.

## 1.3. Automatic replies

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Automatic replies

This plugin allows you to send automatic replies to tickets, either instantly (when they are filed) or on a schedule. It makes the <code>autoreply</code> CRON command available when set up to do so.

This plugin replaces the obsolete ats-autoclose-tickets CLI script.

The plugin has the following options:

Run on ticket creation

Should I automatically reply to newly created tickets? This applies to tickets created either from the site itself (frontend or backend) or by processing email.

Please note that for new tickets created by email the automatic replies are processed before InstantReplies. Therefore if this plugin sends an automatic reply to a new ticket created by email the InstantReplies will NOT be sent.

Make available as a CRON task

When enabled, it makes the autoreply CRON command available to the CLI CRON script and the CRON URL of ATS. This command processes all the Auto-Replies rules for open tickets and sends the corresponding emails.

Bot usernames

When you are using the auto-reply feature in Akeeba Ticket System you need one or more users to appear as the senders of the reply text. This is where you specify their usernames, one per line.

## **Important**

The users must already exist in your Joomla! site. If you have not created them already, go to Users, User Manager in the back-end of your site and create one or more users. Then put their usernames in the Bot usernames setting inside the Options page of Akeeba Ticket System.

## 1.4. Custom fields

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Custom fields

You must enable this plugin when using the custom fields feature of Akeeba Ticket System. This plugin is used by ATS to render the custom fields when filing a new ticket and displays the custom fields when viewing the ticket.

## 1.5. Delete Manager Notes on ticket close / unpublish

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Delete Manager Notes on ticket close / unpublish

This plugin allows you to delete the manager notes from tickets when they get closed or unpublished. It makes the deletnotes CRON command available when set up to do so.

This might be a requirement for EU GDPR compliance. If you collect personally identifiable or confidential information in Manager Notes -- such as social security numbers, login credentials etc -- you have to delete them when you no longer need them to fulfil the request of your client. Obviously, when a ticket is closed or unpublished we can reasonably assume that the request of the client has been fulfilled therefore there is no legal basis for keeping this information in the ticket system. This plugin can automatically delete that information either immediately at ticket close / unpublish or after the fact for all closed / unpublished tickets.

The options for this plugin are:

Run on ticket creation

Should I automatically delete the Manager Notes as soon as a ticket is closed or unpublished?

Make available as a CRON task

When enabled, it makes the deletenotes CRON command available to the CLI CRON script and the CRON URL of ATS. This command will delete the Manager Notes from all tickets which are

already closed or unpublished, in batches of 100 tickets.

## 1.6. EasySocial avatar integration

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - EasySocial avatar integration.

This plugin allows ATS to display the user's avatar using the EasySocial component. If you have EasySocial installed on your site and want to use the avatars provided by it for Akeeba Ticket System enable this plugin. DO NOT enable this plugin if you do not have EasySocial already installed on your site.

## 1.7. GeoLocation support

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - GeoLocation support.

This plugin allows you to record the geographic coordinates (location) of your users when they are filing a ticket and display that on a map for the support staff.

## Warning

It may be illegal for you to collect this information, with or without explicit consent. Please consult with your lawyer.

The options are:

Use W3C Geolocation API When enabled, ATS will use the browser's geolocation feature. This is the preferred method on smartphones and other devices which have a built in GPS chip or otherwise can determine the user's exact location. Please note that due to browser restrictions this will only work if your site is using HTTPS and it will ask your users for explicit permission to share their location.

Use GeoIP

When this is enabled, IP geolocation will be used as a fallback when the W3C Geolocation API is disabled above, not available on the user's browser or the user has declined sharing their location. This gets a rough location based on the IP address the user is accessing your site from.

Maximum accepted accurace (metres)

All geolocation methods report their accuracy, i.e. the radius from the returned point on the map where the user may actually be. If the radius is above this value the location will be discarded. Use something really big, such as 500000, to practically accept any result.

GeoIP source

How should I convert IPs to geographic location when the Use GeoIP option is enabled? You can either use a free only service or the Akeeba GeoIP Provider Plugin. The latter requires one of our other GeoIP-capable software (Akeeba Release System, Admin Tools Professional) to update the GeoIP database.

Display map to

Who should see the map with the user's location? It can be just the support staff (default), both the staff and the ticket owner or everyone (NOT recommended!).

Display map with

Which service should we use to render the map? Please note that Google Maps requires paying them to get a Google Maps API key you need to enter below.

Google Maps API Key If you are using the Google Maps display method you need to enter the API key for Google Maps here. Please note that you need to pay Google for this key.

Internal field name

Under the hood, the geolocation is stored as an ATS "extra field" attached to the ticket. Enter the field name here. The default is *geolocation* and should be fine unless you already have a field by the same name.

## 1.8. Gravatar integration

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Gravatar integration.

This plugin allows ATS to display the user's avatar using the Gravatar [https://en.gravatar.com/] service. We recommend leaving this plugin enabled at all times as it provides an excellent fallback if any other avatar methods do not return an avatar picture.

#### Note

In the original ATS release this was the only available avatar method.

## 1.9. Fetch Email

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Fetch Email

This plugin allows your site to retrieve email from a mail server and create new tickets or replies to existing tickets based on your settings. It makes the mailfetch CRON command available.

## **Important**

This plugin only provides the infrastructure required to retrieve emails but **does not automate the process**, i.e. publishing it is required byt NOT sufficient to retrieve emails.

You will need to create a CRON job, either using the CRON CLI script or the CRON URL. Please note that the System - Akeeba Ticket System reply by email plugin has been removed because it had inherent consistency issues when fetching email.

If you are creating a CRON job use the mailfetch CRON command to retrieve emails.

These are the parameters which allow users to reply or create new tickets by sending emails to your site. Please remember to enable the respective plugin or the CRON job script.

#### Note

Starting with Akeeba Ticket System 3.2.0 we are no longer using the legacy PHP IMAP extension to retrieve and parse email because it has not been maintained since the late 2000's and is no longer up to the task. Instead, we are using the Horde IMAP library which is written in pure PHP and does not require any PHP extensions. It's also faster and much more reliable. Nothing changes from your perspective.

Unless you are using Gmail / G Suite. Because of changes made by Google to their server we can no longer offer the I am using GMail option and you can not keep on using Gmail / G Suite accounts over IMAP with regular password authentication either. This is NOT because of the library change explained above but because Google decided to discontinue support for a web standard. The reason we are now using the Horde library is that it's the only way we could support the only authentication method Google supports. It is very complicated to set up.

Reply by email	When enabled allows users to reply to their tickets by email.

Only for	When enabled the Reply by email feature is only available for managers
managers	

Create ticket by email

When enabled allows users to create new tickets by emails. Obviously, the user needs to send the email from the email address he used to register on your site.

## Warning

This is dangerous! A user with an auto-reply may cause an endless amount of tickets being created all the time. We strongly recommend NOT using this option.

Track email UID When enabled Akeeba Ticket System will track the unique identifier of each email message it has processed to prevent double posting of tickets e.g. when an error occurs after a new ticket is created but before it's marked as read / deleted. This is recommended to be enabled on production sites.

Text version only When enabled Akeeba Ticket System will try to retrieve the plain text version of the email and use it as the post content. If the user's mail client only sends an HTML version of the email this could cause empty tickets to be posted.

Default category 
The category where the new tickets created by the "Create ticket by email" feature will be placed.

Mail server type Your incoming mail server type (IMAP, POP3 or GMail).

If you are using a GMail / G Suite mail account please refer to the "GMail / G Suite Initial Configuration" section of this documentation.

Mail server host The hostname or IP address of your mail server

Port The port of your mail server

Use SSL If your server uses SSL set this to Yes

Use TLS If your server uses TLS set both this to either When Available or Always and also set Use SSL

to Yes

Validate If you have enabled Use SSL and Use TLS select this option to have ATS verify the SSL certificates presented by your mail server. If the certificates are self-signed this WILL fail. We

recommend using this option only when your mail server is using a commercial SSL certificate.

Username The username you use to connect to your incoming mail server. Usually this is either your email

address or the part of your email address before the @ sign. Please consult your email provider.

Password The password you use to connect to your incoming mail server.

Mail folder If you have an IMAP/GMail/G Suite mail server select the folder where the messages are stored.

This is usually INBOX (all capital letters)

API Client ID Only applies if you are using a GMail / G Suite mail account. Please refer to the "GMail / G Suite

Initial Configuration" section of this documentation.

API Secret Key Only applies if you are using a GMail / G Suite mail account. Please refer to the "GMail / G Suite

Initial Configuration" section of this documentation.

Authorize GMail Only applies if you are using a GMail / G Suite mail account. Please refer to the "GMail / G Suite

Initial Configuration" section of this documentation.

Access Token Only applies if you are using a GMail / G Suite mail account. Please refer to the "GMail / G Suite

Initial Configuration" section of this documentation.

Refresh Token Only applies if you are using a GMail / G Suite mail account. Please refer to the "GMail / G Suite

Initial Configuration" section of this documentation.

Delete after post

creations

Should the retrieved email messages be deleted from the server after the post/ticket has been created? If this is set to No then the emails are only marked as read. If you set this option to No

we strongly advise that you set Track email UID to Yes.

InstantReply on new ticket

Only applies when Create ticket by email is enabled. This feature will NOT send any replies if a plugin has already sent a reply to the ticket, e.g. the Akeeba Ticket System - Automatic Replies

with the Run on ticket creation option enabled.

When this feature is enabled ATS will evaluate the InstantReply suggestions for the new ticket. If there is at least one InstantReply suggestion it will send a reply to the ticket using the virtual

"System Task" user with a list of the InstantReply suggestions and a prompt to consider them first.

You can control the text that will be added before and after the list of InstantReply suggestions through the language strings COM\_ATS\_INSTANTREPLY\_EMAIL\_BEFORE and COM\_ATS\_INSTANTREPLY\_EMAIL\_AFTER. You can customise these language strings

using Joomla's language override feature. Make sure you override them for both the front- and the backend of your site.

This feature is enabled by default. Even though the effect of an immediate reply to a ticket may be slightly jarring to some users it also reduces the amount of work for the support staff and increases the likelihood that the user will be able to resolve their own issue faster, without help from a human.

Please note that tickets filed by email which are sent an InstantReply post through this feature DO NOT count as "Spared tickets" in the graph appearing in the Control Panel page of Akeeba Ticket System.

## 1.9.1. GMail / G Suite Initial Configuration

Starting March 2020 we have removed the I am using Gmail checkbox from our software due to a change in Google's Gmail and G Suite email services.

If you want to use a Gmail or G Suite email account with Akeeba Ticket System you will need to undergo the following process *once per site and email address you want to use with Akeeba Ticket System*.

Please keep in mind that this is not a limitation of Akeeba Ticket System. It is a consequence of changes effected by Google without prior notice or an easier alternative, as explained in detail in the Frequently Asked Questions below.

#### Overview

Akeeba Ticket System needs to retrieve your emails from the mail server and process them for the Reply by Email and New Ticket by Email features to work. The standard way to do that is connecting to your mail server with either the IMAP or the POP3 protocol using a username and a password for authenticating (logging into) the server. For most mail server the username is your email address and the password is, well, the password you use to login to your email account.

Starting in the early 2010's, Google introduced Two Factor Authentication (TFA) for its Gmail and G Suite Mail accounts (collectively called "Gmail" in this documentation). Due to the higher security standard inherent to TFA it was no longer possible to use your password for IMAP / POP3 authentication. They introduced application-specific passwords.

Starting in 2019 and enforced throughout 2020, Google completely discontinues standard IMAP password authentication, either with a regular password (for non-TFA accounts) or an application-specific password (for TFA accounts). Instead, they have migrated to a proprietary authentication method called XOAUTH2.

Instead of entering your email address and your password / application-specific password you need to instead login to your Google account associated with your Gmail mail account in your browser. Google will send back to your site two long pieces of text called **tokens**.

The [Definition: Access Token] is what is used for authenticating to IMAP. It is also set to expire frequently, approximately once every hour. The second token is called the [Definition: Refresh Token] and can be used to request a new Access Token when the current Access Token has expired.

What this oversimplified overview doesn't address is that tokens *are not issued for your Gmail user account* in general. In other words, they are not like app-specific passwords which were valid for any and all applications accessing Gmail. They are issued *for* your Gmail user account *to* an OAuth2 API application registered with Google – and only this application can ever use these tokens. This is meant to be a double assurance measure. On one hand, the Gmail user can revoke the API application's access to their Gmail account whenever they see fit, without having to change their Gmail password and disturb *every other* connected application. On the other hand, Google has a tight control over who can ask Gmail users for access to their email account.

#### Creating an OAuth2 API application

For reasons explained in the Frequently Asked Questions below it is ultimately not possible for Akeeba Ltd to create an API application which allows you to connect your Gmail account to your site without having to undergo this complicated process. You will need to create an API application yourself, free of charge, in Google Cloud Platform [https://console.cloud.google.com]. You can then have Akeeba Ticket System use the connection information of that API application to request access to your Gmail account. This process only needs to be carried over once per Gmail account / G Suite organization.

## **Important**

The information under the "Creating an OAuth2 API application" section are provided for information purposes only. They are not meant to be definitive. They are subject to change without prior notification by Google. If you find that the steps have significantly changed since the publication of this document please contact Google for support. Google requests that third parties, like us, do not provide support for its products. As a result we are NOT allowed to help you with your Google Cloud Platform issues.

#### Creating an OAuth2 API application

First, you need to go to Google Cloud Platform [https://console.cloud.google.com]. Make sure that you are logged in with the correct user account, depending on what you want to connect to your Akeeba Ticket System installation:

- If you are going to connect **your Gmail account** (@**gmail.com**) you must be logged in with the same Gmail account you are going to connect.
- If you are going to connect a G Suite email account you must be logged in as an *administrator* of the same G Suite organization where the email you want to connect is registered with.

Check the currently logged in account the same way as you do in all Google web products, from the icon at the top right corner of your screen.

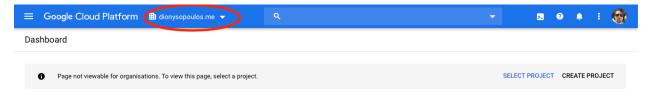
#### **Enable Google Cloud Platform for your Google account**

This is described in Google's Getting Started page [https://cloud.google.com/apis/docs/getting-started]. The takeaway is that you may have to enable billing *even though what you are going to be using is free of charge*. That's a weird requirement of Google and is ABSOLUTELY NOT under Akeeba Ltd's control. Thank you for your understanding.

#### Create an API project

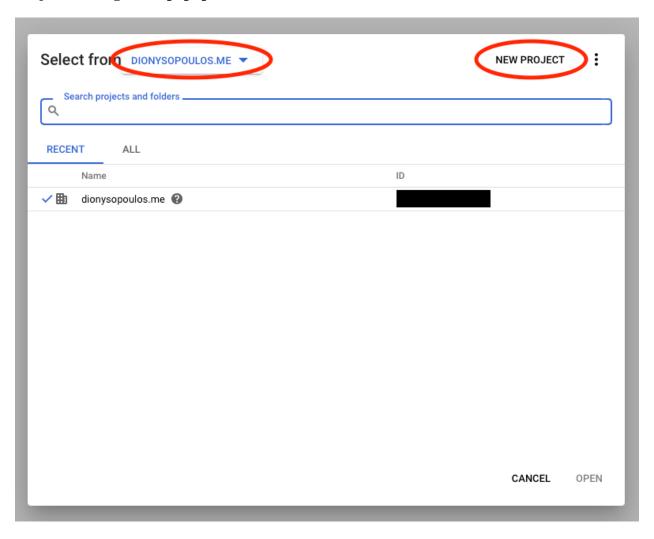
From the top of the page, next to the "Google Cloud Platform" text, there is a dropdown with your projects.

#### Show the projects management popup



Click on it to display the projects management popup.

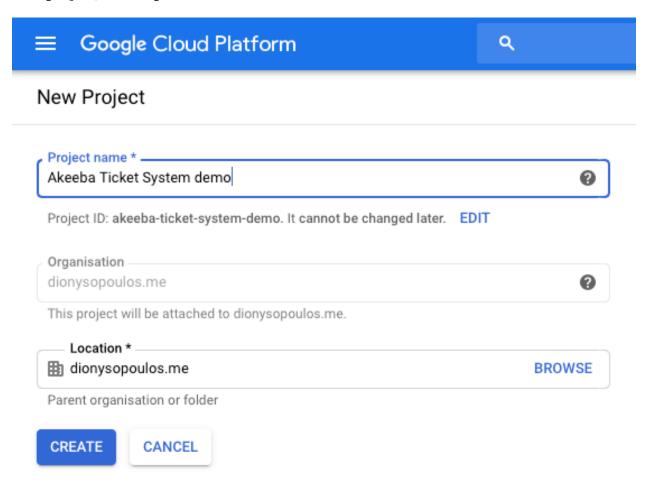
## **Projects management popup**



From the leftmost popup make sure that you select your G Suite organization. This does not apply if you are using your personal Gmail account.

Then click on the NEW PROJECT button in the top, right hand corner of the page.

## New project, first step



In the Project name field enter something descriptive, e.g. "Support System Integration". This is just for you. Keep it short.

Click on the blue CREATE button.

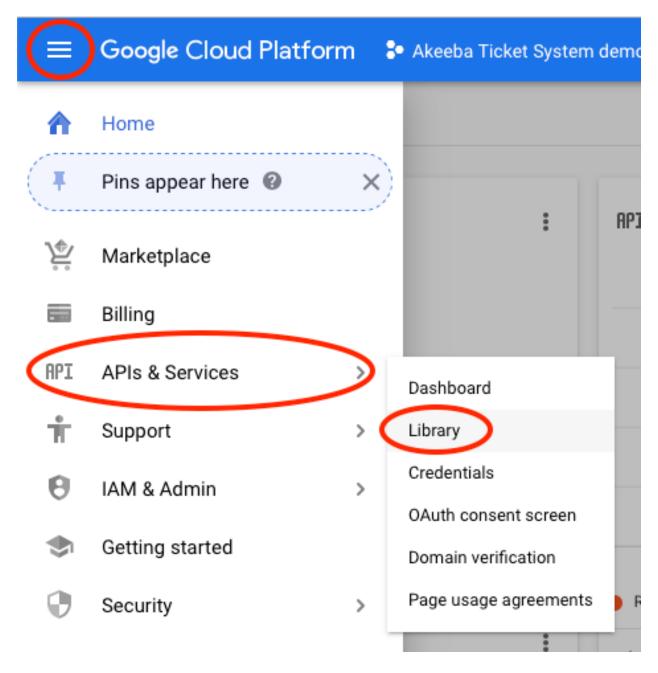
Wait for a few seconds until Google informs you that the project has been created.

#### Enable the Gmail API on your API project

#### Note

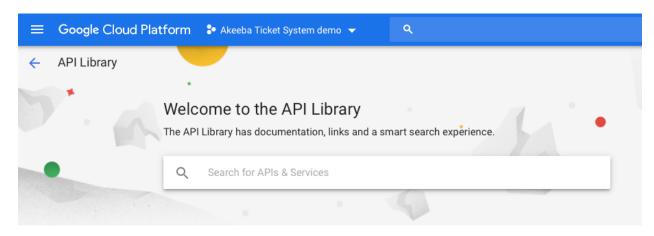
Yes, this also applies if you are using G Suite. As far as Google is concerned, Gmail and G Suite email are one and the same.

## Navigating to the APIs & Services Library



From the new page click on the hamburger menu icon, hover over APIs & Services and click on Library.

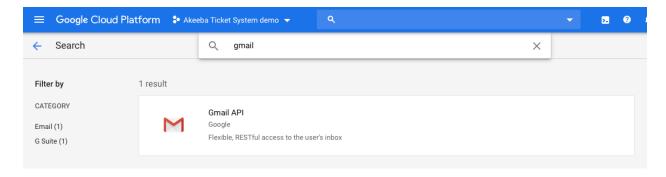
## The APIs & Services Library page



In the APIs & Services Library page click on the "Search for APIs & Services" and type gmail

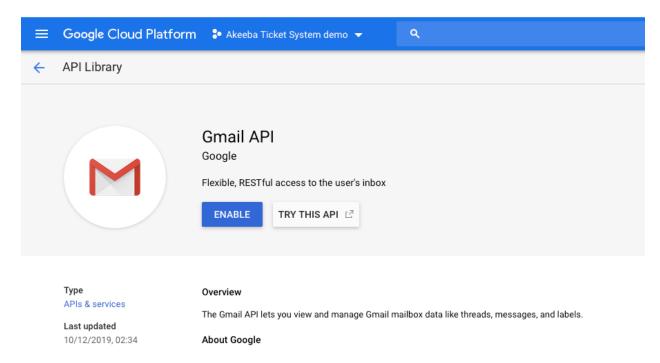
After a few moments you will see only one result called "Gmail API".

## The Gmail API result



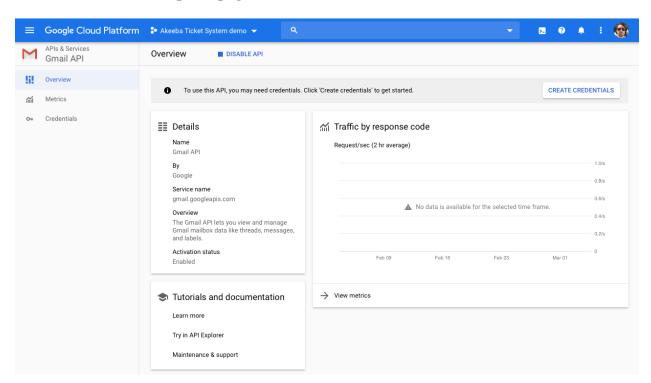
Click on it.

## The Gmail API page



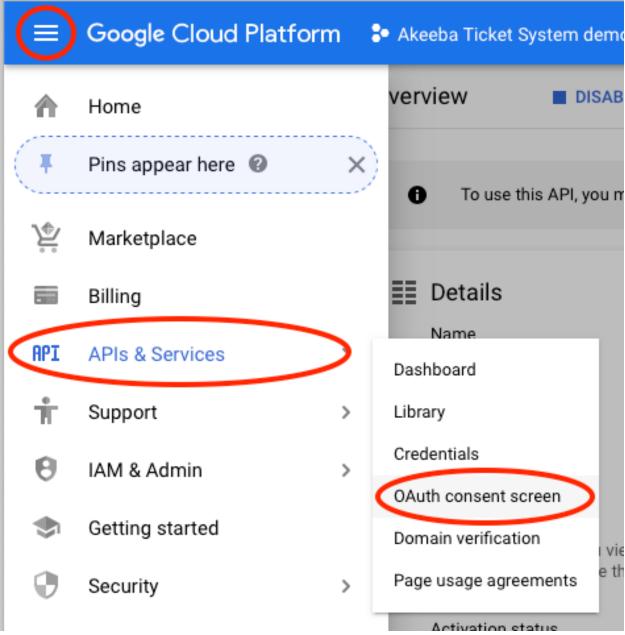
Wait a few moments for the ENABLE button to appear. Then click on the ENABLE button and wait until its control panel page appears.

## The Gmail API control panel page



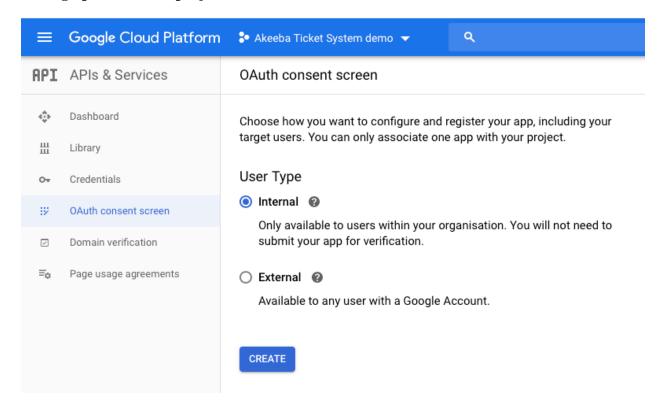
#### Create an OAuth2 consent screen

#### Navigating to the APIs & Services Consent Screen



From the new page click on the hamburger menu icon, hover over APIs & Services and click on OAuth Consent Screen.

#### Setting up an Internal project



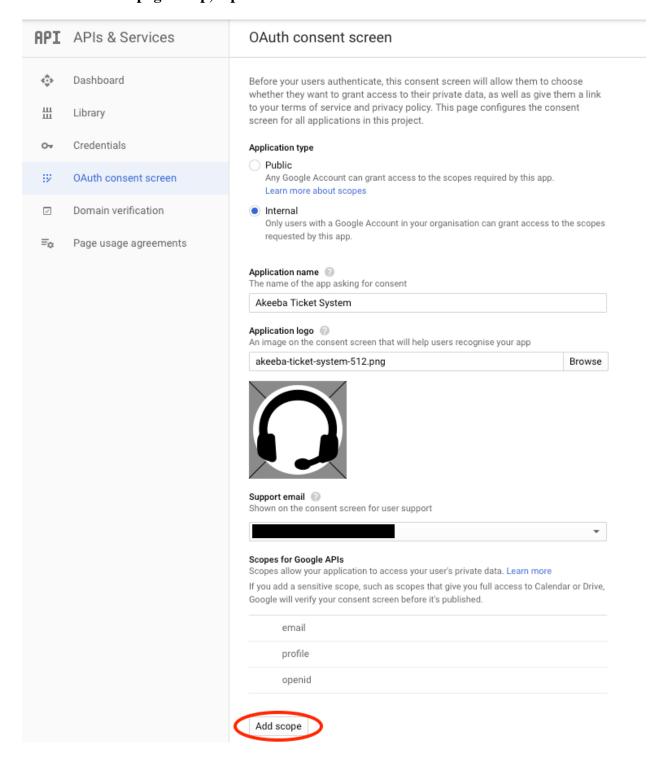
In the new page select **Internal** as your project type.

## **Important**

You MUST select Internal. This project type only allows your personal Gmail address / any email address in your G Suite organization to be authorized. This is what you want and the only way that you will not need to go through Google's verification process. If you accidentally select External you will need to go through the verification process which will take a massive amount of time and effort on your part only to be \_declined\_ since you don't have a valid use case for an External project that allows anyone, with any Gmail / G Suite email address, to authorize your application to access their account.

Click on the blue CREATE button to proceed.

#### OAuth2 consent page setup, top section

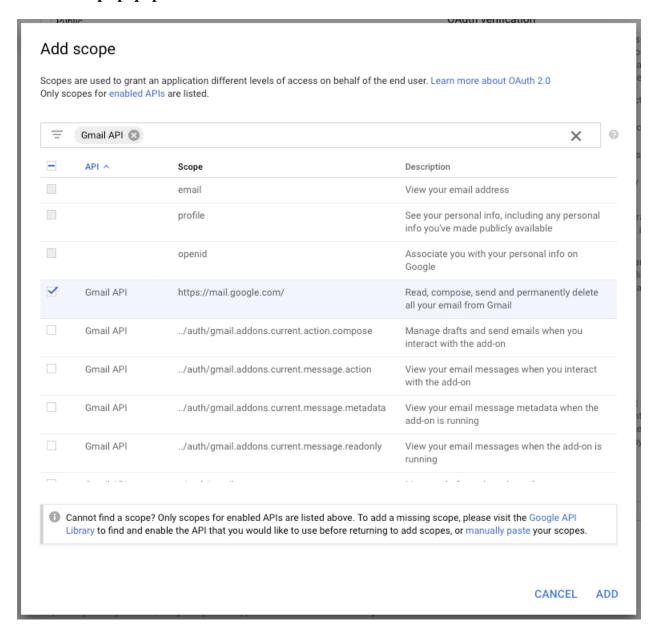


In the new page enter an Application Name. This will be displayed when authorizing Akeeba Ticket System to your Gmail account. We recommend entering something along the lines of "ATS on example.com" where example.com is the domain name of your site.

In the Application Logo select any square image over 128x128 pixels. You can use your logo, for example.

Then click on the Add scope button. This opens a popup dialog.

#### OAuth2 scope popup



In the search box at the top enter Gmail API to filter the results.

From the list below select the Gmail API entry with the Scope https://mail.google.com/

#### Note

Yes, this also applies if you are using G Suite. As far as Google is concerned, Gmail and G Suite email are one and the same.

Click on the ADD button.

#### OAuth2 consent page setup, bottom section

#### Scopes for Google APIs

Scopes allow your application to access your user's private data. Learn more

If you add a sensitive scope, such as scopes that give you full access to Calendar or Drive, Google will verify your consent screen before it's published.



Add scope

#### Authorised domains (2)

To protect you and your users, Google only allows applications that authenticate using OAuth to use Authorized Domains. Your applications' links must be hosted on Authorized Domains. Learn more



Type in the domain and press Enter to add it

#### Application Homepage link

Shown on the consent screen. Must be hosted on an Authorized Domain.

https://www.

#### Application Privacy Policy link

Shown on the consent screen. Must be hosted on an Authorized Domain.

https://www.

#### Application Terms of Service link (Optional)

Shown on the consent screen. Must be hosted on an Authorized Domain.



Under Authorized Domains enter your site's domain name. It is VERY important that the domain name you enter here matches EXACTLY the site you are going to be using to link Akeeba Ticket System with your email address. Do remember that www.example.com and example.com are different domains.

#### Note

If you have not yet linked the domain name to your Google Cloud Platform account you will be asked to do so. The easiest way is to be using Google Analytics on your site.

In the Application Homepage Link enter the URL to your site. It is VERY important that the domain name in this URL matches EXACTLY one of the Authorized Domains you set up above. Do remember that www.example.com and example.com are different domains.

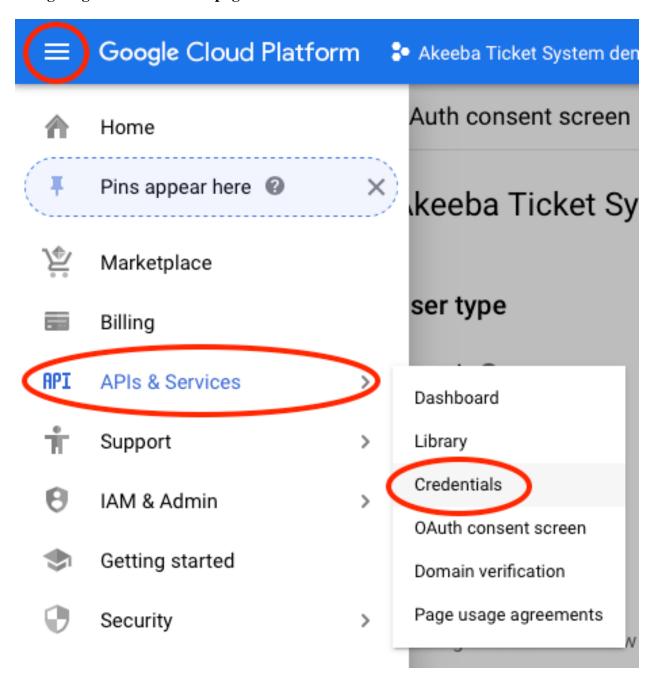
In the Application Privacy Policy Link enter a URL on your site. This can be a dummy page, as long as it doesn't return a 404. It is VERY important that the domain name in this URL matches EXACTLY one of the Authorized Domains you set up above. Do remember that www.example.com and example.com are different domains.

You don't need to enter an Application Terms of Service Link.

Finally click on the Save button.

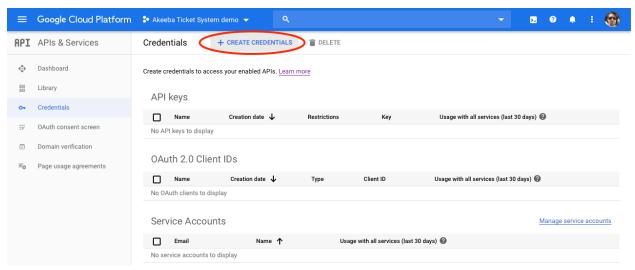
#### **Get your API credentials**

#### Navigating to the credentials page



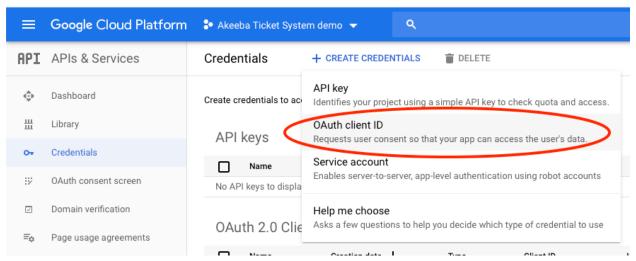
From the new page click on the hamburger menu icon, hover over APIs & Services and click on Credentials.

## The credentials page



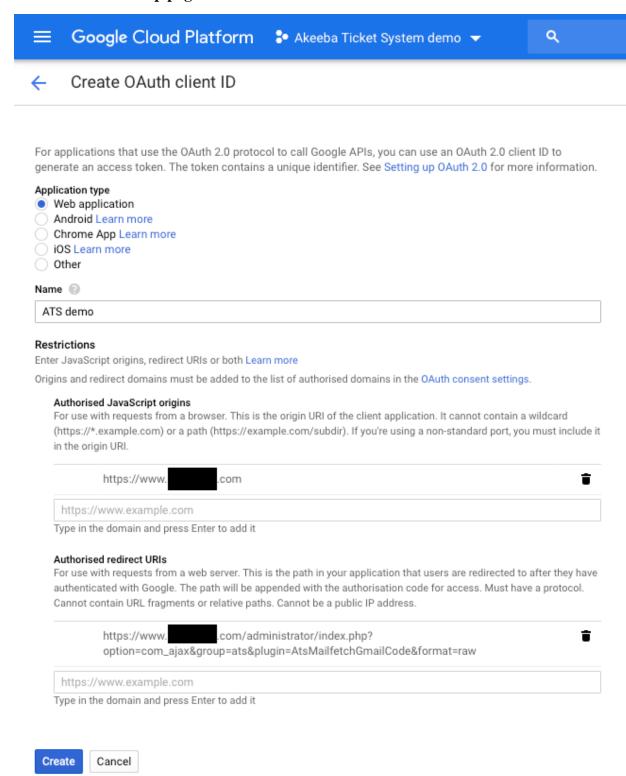
On the credentials page click on CREATE CREDENTIALS at the top of the page.

### New credentials popup



From the drop-down, select OAuth client ID.

#### New credentials setup page



Select the Web Application under Application Type.

Enter any Name you want; this is only for your convenience.

Under Authorized JavaScript origins enter your site's URL, e.g. https://www.example.com. It is VERY important that the domain name in this URL matches EXACTLY one of the Authorized Domains you set up in the OAuth consent page setup earlier. Do remember that www.example.com and example.com are different domains.

Authorized Redirect **URIs** the most important be It URL needs to your site plus /administrator/index.php? process. option=com ajax&group=ats&plugin=AtsMailfetchGmailCode&format=raw

For example, if your site is http://www.example.com/mysite you would need to enter

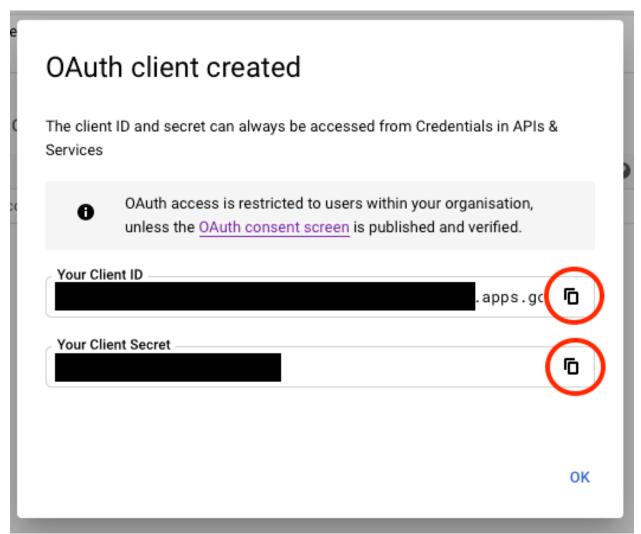
http://www.example.com/mysite/administrator/index.php? option=com\_ajax&group=ats&plugin=AtsMailfetchGmailCode&format=raw

## Warning

If you get this URL wrong you will NOT be able to connect Akeeba Ticket System to your email address. You will get an error 400 from Google. If that happens to you, you will need to come back to this page and fix the Redirect URI.

Click on Create.

#### The API credentials popup



You will now see a popup with your API credentials. Before doing anything else **copy these credentials to a safe place**. You need to copy BOTH the Client ID AND Client Secret. Use the copy buttons next to each one to copy them to your clipboard, do NOT try to highlight them (you cannot highlight the entire Client ID).

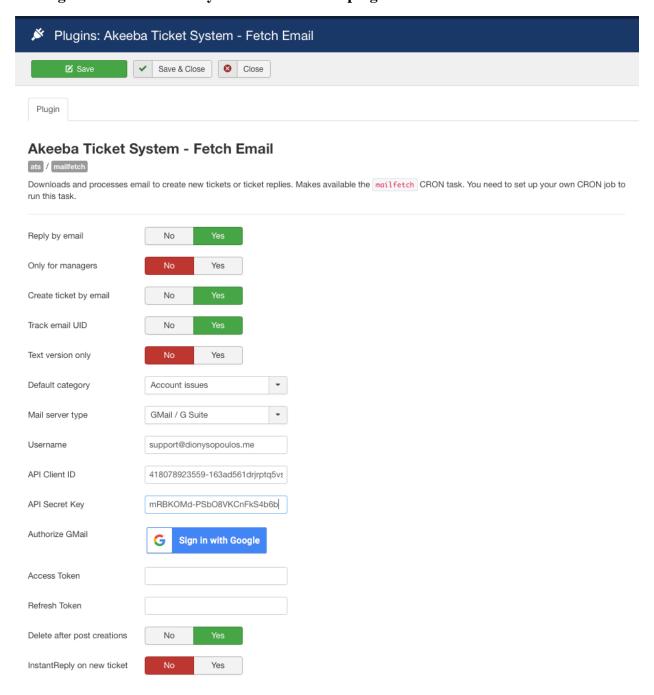
#### Use your API credentials in Akeeba Ticket System

Go to your site's administrator backend.

Click on Extensions, Plugins from the top menu.

Find and click on the Akeeba Ticket System - Fetch Email plugin.

### Editing the Akeeba Ticket System - Fetch Email plugin



On the screen, under Mail server type please choose  ${\tt GMail}\ /\ {\tt G}\ {\tt Suite}$ 

Under Username enter your email address.

## **Important**

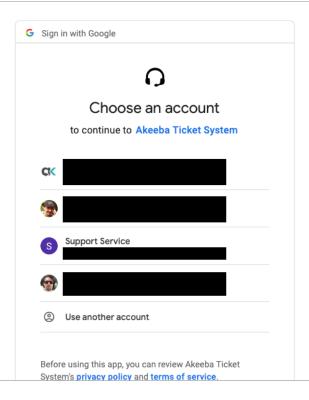
The email address you enter here MUST be the same one you will be authorizing in the next couple of steps. Otherwise ATS will be unable to retrieve any email.

In the API Client ID field paste the Client ID you copied from Google Cloud Console in the steps further above.

In the API Secret Key field paste the Secret Key you copied from Google Cloud Console in the steps further above.

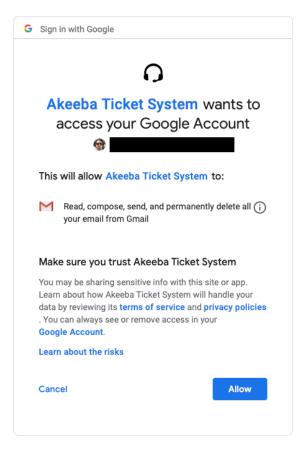
Next to Authorize GMail there is a Sign in with Google button. Click on it. A popup opens.

### Gmail popup, select an account



Select the email account you want to link to Akeeba Ticket System. It must match exactly the email address you typed in the Username field in the plugin configuration page.

#### Gmail popup, final authorization



Click on Allow to complete the link.

The popup will redirect back to your site and you will see a "One moment please" message momentarily. The popup will automatically close and the Access Token and Refresh Token fields will be filled in.

Now click on Save & Close in the toolbar. You are done.

## **Important**

If you have multiple sites DO NOT copy the Access Token and Refresh Token between them. It will NOT work.

## 1.9.2. Troubleshooting

## Possible error on the popup: You are not authorized to view this resource

Have you entered the Client ID and Secret Key before clicking the Login with Google button?

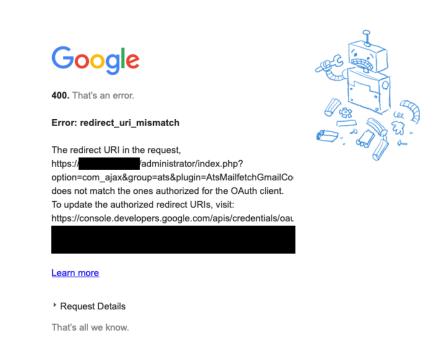
Are the Client ID and Secret Key correct, created for a web application OAuth2 flow as described above and they really, **REALLY** belong to the API application you created on Google Cloud Platform? Before dismissing this question as too basic – these are examples of mistakes made writing this documentation.

Has the user you are currently logged in with adequate Joomla privileges to edit the plugin options?

If you answered yes to all of the above then probably your Joomla session is broken. Log out from Joomla, log back in and try again.

#### Possible error on the popup: Google error 400

#### Error 400 on the popup



If you receive an error 400 \_from Google\_ when the popup first opens the problem is that you have not entered the correct Authorized Redirect URIs as explained under "Get your API credentials".

Please correct the redirect URL and try again.

## Possible error on the popup: 403, 404 or Joomla error page

You might get an error 403 or 404 or a Joomla error page in the popup after you confirm that you want to link your email address to your application.

The problem is that your server is rejecting Google's redirection URL because it contains the URL parameter scope=https://mail.google.com/. As you can see, Google includes a full, unencoded URL which might trigger the server's protection.

If you are using our Admin Tools software and its .htaccess Maker, NginX Conf Maker or Web.config Maker feature please go to Components, Admin Tools, click on the .htaccess Maker, NginX Conf Maker or Web.config Maker button (depending on what you are using on your site) and set Protect against common file injection attacks to No. Then click on Save and Create .htaccess. Now you can retry linking your mail account to Akeeba Ticket System. After you're done you can set that option back to Yes if you want.

If you are not using Admin Tools or that did not help please contact your host. They might have to make a server configuration change, e.g. disable an Apache ModSecurity2 server protection rule.

## 1.9.3. Frequently asked questions

**1.9.3.1.W**hy did you remove the old Gmail integration? It seemed to work fine.

Yes, it *did* work fine. However, Google decided to phase out the IMAP password authentication for Gmail and G Suite mail. This means that starting June 2020 it no longer works fine – it doesn't work *at all*. Implementing XOAUTH2 is a requirement imposed by Google, not Akeeba Ltd. If you are unhappy with that please let them know; we have done so already.

**1.9.3.1.2** ther applications don't require me to go through that process to login to Gmail / G Suite. They just show a consent page. Why didn't you implement something like this?

This is exactly the approach we initially pursued. However, Google wouldn't allow us to do it.

As explained earlier, Access and Refresh Tokens are issued to an API application registered with Google. There are two kinds of applications. An Internal application – like the one created with the process explained above – only allows getting tokens for an email account that is the same as the one creating the account (Gmail) or belongs to the same organisation (G Suite). This wouldn't work for our clients. This meant that we had to create the other kind of API application, an External one. The External application is able to request tokens for any Gmail or G Suite account. However, External applications need to be verified by Google.

Normally, External applications are used for desktop applications, mobile apps or hosted web services. Akeeba Ticket System is none of the above. It's a self-hosted web application meant to be installed on your sites. The tokens are meant to be stored on our clients' sites, not our server. The emails are retrieved directly by our clients' sites, not through our server. However, Google requires us to host an application on our domain to retrieve the Access Token and, when it expires, exchange the Refresh Token with a new Access Token.

The only solution to that is something similar to what desktop / mobile apps like Thunderbird or Microsoft Outlook for Android do – or like what we are already doing in Akeeba Backup to integrate with Google Drive: a "mediator" application. That's a barebones application hosted on our site which handles the OAuth2 consent flow, retrieves the Access and refresh Tokens and conveys them to your site, without storing them on our server. This guarantees your privacy.

We wrote and tested that code and submitted our External API application to Google for verification. Unfortunately, Google decided to decline the verification of our Extenal API application on the grounds that the site processing the email is not the same as the domain name registered with the application. Therefore they are rejecting the use case of a self-hosted ticket system using an easy method for authenticating to Gmail / G Suite.

Google gave us only one alternative: have an unverified application which could be whitelisted by G Suite administrators manually. This alternative is bad for two reasons. First and foremost, it makes it impossible for Gmail clients (with an @gmail.com email address) to use Akeeba Ticket System; that's the majority of our clients interested in connecting Akeeba Ticket System with a mail account hosted by Google. Second, the manual whitelisting process is just as complicated as creating your own Internal API application.

This left us with two options. One, we would have to stop supporting Gmail / G Suite in Akeeba Ticket System. Two, we would have to make you create your own Internal API applications with Google since they do not require going through the verification process. We chose the latter as the lesser of two evils.

We are fully aware that this process is complicated and hostile to the users. We did raise that point with Google, repeatedly, throughout the onerous verification process. Unfortunately, Google does not want to consider software like Akeeba Ticket System as valid consumers of email. In other words, email accounts hosted by Google come with artificial limitations imposed by Google. They are not real email accounts that can be used for any purpose their owners see fit. They are crippled by anti-features which are controlled by a commercial entity's opaque and arbitrary decision making process.

We strongly recommend not using a Google-controlled, crippled email account whenever possible. If your organisation / client is tied to G Suite then you will have to go through the complicated process of creating an Internal API application. Unfortunately, we can't be of much help because Google doesn't want third parties providing support for its products either. Worse, yet, because of the nature of an Internal API application we cannot perform that process for you, not for free or even for a fee; it would require administrator access to your Gmail / G Suite account that you cannot reasonably provide and we cannot possibly accept to be given for reasons that have to do with GDPR and similar privacy legislation.

**1.9.3.1.B** am not a G Suite admin (e.g. I am a site integrator working on behalf of my client). Can I set up Akeeba Ticket System to use the G Suite account?

No, you can't. That's a limitation due to Google's decision not to authorize our External project as described above.

**1.9.3.1.4.**do not have access to my client's Gmail account. Can I set up Akeeba Ticket System to use their Gmail account?

No, you can't. That's a limitation due to Google's decision not to authorize our External project as described above.

1.9.3.1.5believe there is an easier way to connect to Gmail / G Suite email

Yes, you are right, there is. Unfortunately, Google denied verification for it. See the long explanation above.

**1.9.3.1.6** Who was about the security, privacy and GDPR compliance of this integration?

Your OAuth2 API application information (client ID and secret key) and your access and refresh tokens are \*\*only\*\* stored on your own site, as plugin parameters. They are NOT shared with Akeeba Ltd or any other third party, nor do they ever leave your site. This means that you have perfect privacy of your support tickets.

Regarding security, your information is as secure as your Joomla! site itself. If your site gets hacked you should unlink your email address from your API application, disable the OAuth2 API credentials of your API application and create new ones, then relink ATS to your email account. A more secure alternative is forwarding your emails to a non-Gmail, non-G Suite email account that's accessible over regular IMAP with password authentication. In case of compromise you can simply change the password of that account and be done with it.

As for GDRP, CCPA and similar privacy legislation – please ask your lawyer. We cannot give a legal opinion. Our non-legal advice is that you should disclose that the emails sent to a particular email address are automatically processed by software running on your site for the purpose of creating new support tickets or replies to existing ones. If that has other privacy implications, e.g. third parties employed by / affiliated with your site have access to the ticket system, that should be disclosed as well. Again, it's best to ask a qualified lawyer.

**1.9.3.1.** Can I forward my Gmail / G Suite emails to a different account and access that account over IMAP / POP3 instead?

Yes, of course you can. Google has documented the automatic mail forwarding process already [https://support.google.com/mail/answer/10957?hl=en].

Once you set up your automatic forwarding to a regular email account, e.g. one provided by your hosting company, you can connect ATS to that email account over IMAP / POP3.

## 1.10. New post notification emails

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - New post notification emails.

This is a very important plugin. It is responsible for sending emails whenever a new ticket is created or a reply is sent to an existing ticket. Unless you have a very serious reason not to, we strongly recommend keeping this plugin published at all times.

## 1.11. Remove Obsolete Attachments

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Remove Obsolete Attachments

This plugin allows you to automatically delete attachments a certain amount of time after they are sent. It makes the removeattachments CRON command available when set up to do so.

This plugin replaces the obsolete ats-remove-attachments CLI script.

The options for this plugin are:

Only closed When enabled only attachments which are old enough and belong to already closed tickets will

be removed. Otherwise all attachments, even from open tickets, will be removed if they are old

enough.

Maximum attachment age

Attachments older than this many days will be deleted by the ats-remove-

attachments.php CRON script

(days)

## 1.12. Social "Like" buttons

#### **Note**

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Social buttons.

This plugin allows visitors of your site to "like" and share your public tickets on various social networks including Facebook, Google+, Twitter and Pinterest. This is a handy feature to allow your users to easily share the public tickets with obvious SEO value.

## 1.13. Joomla! User Groups integration

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Joomla! user groups integration

This plugin displays to your support staff the user groups each user belongs to. This information is printed under the username displayed along each ticket post.

## 2. The ATS InstantReply plugins

Akeeba Ticket System has a handy feature called InstantReply. When a user is trying to file a new ticket, Akeeba Ticket System will use the content of the ticket subject line, as it's being typed, to search sources of relevant information and display the ten most relevant links to the user.

Based on our experience this has a doubly beneficial effect. Between a third and half of all tickets are duplicates, i.e. it's a question that has been asked and answered in the near past. Presenting the user with a similar, solved case (as long as it'a a *public*, closed ticket) makes it extremely likely that they will apply the same solution to their own issue. Their question is addressed practically instantly which means that the user didn't lose time waiting for a ticket reply and a ticket has not been filed which saves time and resources for the support staff. Everyone is happier.

Moreover, the relevant InstantReply links tend to improve the quality of the tickets being filed. The user has already been presented and hopefully read FAQ pages, replies to similar issues etc. As a result they have a better understanding of how their issue compares to similar cases and what information was ultimately required for the support staff to provide assistance. Therefore they are more likely to provide more relevant information upfront, making it easier and faster for the support staff to help them.

The sources of information being searched are controlled by the plugins of the atsinstantreply type. This section documents these plugins and their options.

## 2.1. Akeeba DocImport Articles

Displayed in the Joomla! Plugin Manager as ATS InstantReply - Akeeba DocImport articles

This plugin provides InstantReply answers by looking into related articles in the specified categories of the Akeeba DocImport<sup>3</sup> documentation component. Akeeba DocImport<sup>3</sup> uses DocBook XML files to automatically generate software documentation page. It is what we use on our own site for our Documentation section.

## **Plugin Configuration**

The plugin has no configuration parameters.

## **Category InstantReply options**

The plugin provides the following options in the InstantReply tab when editing an ATS Category:

InstantReply DocImport categories

Select the DocImport categories which will be searched by InstantReply. If you do not wish this ticket category to provide links to DocImport articles leave this setting blank.

## 2.2. Akeeba Ticket System public tickets

Displayed in the Joomla! Plugin Manager as ATS InstantReply - Akeeba Ticket System public tickets

This plugin provides InstantReply answers by looking into already closed, public tickets filed in the same Akeeba Ticket System category as the one the new ticket is being filed.

## **Plugin Configuration**

The plugin offers the following configuration parameters:

Maximum ticket age

When set to 0 all closed, public tickets in the same Akeeba Ticket System category will be searched when retrieving InstantReply answers. Depending on the phrasing of the new ticket's title, it's possible that the best matching reply will be a ticket that's many months or years old. Tickets that old may no longer be relevant and could confuse or frustrate users.

Setting this option to a non-zero value will limit the tickets being searched for InstantReply answers to public tickets which were closed at most this many days ago.

For example, setting this option to 30 will only search tickets closed the last month (30 days) when retrieving InstantReply answers.

According to our experience values between 60 and 180 work best for most software support purposes.

## **Category InstantReply options**

The plugin does not provide any options in the InstantReply tab when editing an ATS Category.

## 3. The "finder" plugins

## 3.1. Akeeba Ticket System

Displayed in the Joomla! Plugin Manager as Smart Search - Akeeba Ticket System.

This plugin integrates Akeeba Ticket System with Joomla!'s Smart Search feature (a.k.a. "Finder"). In short, it allows Smart Search to index and search public tickets. Please note that private tickets are never indexed. If you make a public ticket private it will be immediately removed from Smart Search's index.

#### Note

No, we cannot have private tickets indexed and their results shown only to the ticket owner. This is a limitation of Smart Search, not Akeeba Ticket System. In order to do that we would have to create a separate Joomla! user group and a viewing access level for each and every Joomla! user. That would render your site completely unusable.

## 4. The "search" plugins

## 4.1. Akeeba Ticket System

Displayed in the Joomla! Plugin Manager as Search - Akeeba Ticket System.

This plugin integrates Akeeba Ticket System with Joomla!'s search feature. Please note that this is the integration with the legacy search feature, not the modern search engine-like "Smart Search" feature of Joomla!. This plugin allows search to display public tickets in its results.

#### Note

No, we cannot have private tickets indexed and their results shown only to the ticket owner. This is a limitation of Joomla!'s Search, not Akeeba Ticket System.

## 5. The "user" plugins

## 5.1. Akeeba Ticket System

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as User - Akeeba Ticket System.

As said elsewhere in this documentation, users of Akeeba Ticket System can set up their **signature**. But where? This is what this plugin is for. Your users will be able to edit their signature in their Joomla! user profile page. This plugin adds a full HTML editor area called "Ticket system signature". We recommend leaving this enabled at all times.

#### Note

Yes, all users can set up their signature, even if they do not have access to the ticket system. Doing otherwise would require doing N+1 time consuming queries to the Joomla! access control system, where N is the number of Akeeba Ticket System categories. Several of our users have dozens of categories. Therefore these queries would make the profile edit page extremely slow, frustrating users.

The other functionlaity offered by this plugin is allowing end users to define **additional email addresses for notifications**. These email addresses will be CC'ed every time ATS is sending an email to the user. Furthermore, the user will be able to created and reply to tickets by email (if this feature is enabled in ATS) using any of these email addresses.

## 5.2. Content - ATS Credits

#### Note

This plugin is NOT availabe in Akeeba Ticket System Core.

Displayed in the Joomla! Plugin Manager as Content - Akeeba Ticket System Credits Left.

Allows you to display the amount of ATS credits the user has left in their account in content. Use the {atscredits} plugin code in your content to display the number of credits left for the current user.

You can use this in Joomla articles, Custom HTML modules (as long as you have set Prepare Content to Yes) or any other place that supports Joomla's standard content preparation mechanism that replaces plugin codes.

## 5.3. sh404SEF plugin

This plugin is only displayed in sh404SEF. It is used to provide better SEF URLs when you are using sh404SEF.

## 5.4. Installer plugin

#### **Note**

This plugin is NOT availabe in Akeeba Ticket System Core.

This plugin is used by the Professional version of our software to make it possible to download updates even when Joomla's extensions updater has "forgotten" the Download ID. This can happen, for example, if you use the Rebuild button in Joomla's Update Sites page.

This plugin is only required for the Professional version of our software and only on Joomla 3.

## 6. Other plugins

## 6.1. Action Log plugin

Displayed in the Joomla! Plugin Manager as Action Log - Akeeba Ticket System Log User Actions.

This plugin integrates with Joomla's User Actions Log, recording significant events performed by users in the Akeeba Ticket System installation on your site.

# Chapter 5. Automation and CRON scripts

#### Note

Akeeba Ticket System Core does not include the CLI CRON scripts. While it includes the CRON feature, it does not include any of the plugins which implement the CRON (automation) tasks. Therefore, for all intents and purposes, Akeeba Ticket System Core can be said to not include any automation features.

Akeeba Ticket System is a complex system which requires a number of administrative tasks to be executed periodically, depending on the complexity of your installation. While most tasks can be executed manually, automation is definitely the best path.

There are two ways Akeeba Ticket System can help you automate tasks:

- CLI scripts for CRON jobs. If your server gives you access to real CRON jobs, executing command line scripts periodically, this is the preferred method. Automated tasks execute outside of your web server and are not bound to the same time limitations as loading pages on your site. Moreover, since the web server and most of Joomla is not loaded they tend to be more memory efficient and faster than any other method.
- URLs for CRON jobs. Starting with Akeeba Ticket System 3.2.0 there's a special, password-protected URL you can use to execute maintenance tasks automatically. Since they run outside the context of a visitor accessing your site they do not slow your visitors down. However, since they are still accessed through your site, they are bound by the same time limits as any other page load of your site. Furthermore, third party plugins loading on your site may cause unintended effects, increase the memory consumption and slow down the execution of ATS CRON tasks executed this way. This is only recommended when your host does not allow you to create real CRON jobs. You can uses the URLs with pseudo-CRON (access a URL at specified intervals) either provided by your host or a third party service such as WebCRON.

In all of the above cases the CRON commands executing are the same. They are provided by plugins in the **ats** group. A cheatsheet with the available CRON commands and links to the respective plugins' documentation can be found at the end of this chapter.

## **Upgrading from Akeeba Ticket System 3.1.0 or earlier**

Akeeba Ticket System 3.1.0 and earlier provided one CLI script for each CRON task. These CLI scripts are deprecated. They will continue to work until version 4.0 but when you execute them they will remind you to use the atscron.php script instead.

A list of the new CRON commands, the plugin that implements them and the CLI script they replace can be found in the CRON Commands section further below.

The System - Akeeba Ticket System Reply By Email plugin has been removed. You need to use the CLI script or URL method to automate the <code>emailfetch</code> task instead.

## 1. CLI script for CRON jobs

#### Note

This feature is only available in Akeeba Ticket System Professional.

This is the recommended method for scheduling Akeeba Ticket System CRON tasks on your site.

## The big picture

Setting up a CLI script for a CRON job is generally a fairly simple task. You need to know the path to your PHP CLI executable and the path to your site.

The command line script you need to execute to perform CRON tasks is stored under your site's cli directory and is called ats-cron.php. Therefore you need to enter a command line similar to the following to your server's CRON job manager:

/usr/local/bin/php /home/USER/webroot/cli/ats-close.php --command=CRONTCommandName

where /usr/local/bin/php is the path to your PHP CLI executable and /home/USER/webroot is the absolute path to your web site's root. You can get this information from your host.

The CRONCommandName is the name of the CRON command. Please consult the CRON Commands section of this documentation for a list of available CRON command names.

## **Important**

We cannot know the path to your PHP CLI executable or the absolute path to your web site's root. This is the kind of information that only the people who have set up your server (your host) can possibly know.

## Warning

Sometimes hosts will give you the path to the PHP CGI binary. This will NOT work properly with CLI scripts. CGI (Common Gateway Interface) and CLI (Command Line Interface) are a world apart. The former is designed to run scripts which will be served as web pages. The latter is designed to run command line scripts, usually for use with CRON.

If your host only gives you the path the CGI executable

## Setting up a CRON job in cPanel

Go to your cPanel main page and choose the CRON Jobs icon from the Advanced pane. In the Add New CRON Job box on the page which loads, enter the following information:

Common Settings Choose the frequency of your backup, for example once per day.

Command Enter your CRON command as explained above. For example:

/usr/local/bin/php /home/USER/webroot/cli/ats-close.php --command=CRONCommand

Finally, click the Add New Cron Job button to activate the CRON job.

## 2. URL for CRON jobs

This is an alternative method for scheduling Akeeba Ticket System CRON tasks on your site. Use it only if the CLI script method cannot be used on your site.

## **Initial configuration**

Akeeba Ticket System protects the URL for CRON jobs with a password. This prevents unauthorized users from triggering CRON jobs on your site too frequently, something which could have unpredictable results or even bring your site down.

First go to Akeeba Ticket System in your site's administrator backend. Click on the Options button to view the Options page. Select the Automation tab.

Find the Secret Key option and enter a secret. Please only use lowercase letters a-z without accents or diacritics, numbers 0-9, dashes and underscores. Make this long, ideally over 24 characters. You can create a truly random secret key in the Random.org site [https://www.random.org/passwords/?num=1&len=24&format=html&rnd=new].

This will be your SecretKey noted below.

## Running CRON tasks through the URL

You can execute the CRON tasks with the following URL:

https://www.example.com/index.php?option=com\_ats&view=Cron&key=SecretKey&command=CRONComma

where https://www.example.com is the URL to your site, SecretKey is your secret key as explained above and CRONCommandName is the name of the CRON command you want to execute. Please consult the CRON Commands section of this documentation for a list of available CRON command names.

## Results

Akeeba Ticket System communicates the status of the CRON task execution through HTTP status code headers.

200 OK	The CRON task executed successfully
500 Internal Server Error	The CRON task failed to execute or Joomla crashed before the task executed
501	The command you specified was not found. Did you forget to publish the respective plugin?
503	You have not configured a Secret Key yet.
403	You have entered the wrong Secret Key. If your Secret Key contains any characters other than the ones we described above you need to URL encode it first.

## 3. CRON commands

CRON commands for Akeeba Ticket System are made available by plugins in the ats group. At the time of this writing the following CRON commands are available:

mailfetch	You need to	publish the Akeeba	Ticket System -	- Fetch Email	plugin for thi	is command to work.

Downloads and processes email to create new tickets and ticket replies.

This command replaces the obsolete ats-mail-fetch.php CLI script which was used in

Akeeba Ticket System 3.1.0 and earlier.

autoclose You need to publish the Akeeba Ticket System - Automatically close old tickets plugin for this

command to work.

Automatically closes tickets open without activity for longer than a specified amount of time.

This command replaces the obsolete ats-autoclose-tickets.php CLI script which was

used in Akeeba Ticket System 3.1.0 and earlier.

autoreply

You need to publish the Akeeba Ticket System - Automatic Replies plugin and enabled its Make available as a CRON task option for this command to work.

Automatically replies to tickets based on the Auto-Replies rules set up in the Akeeba Ticket System component.

This command replaces the obsolete ats-auto-reply.php CLI script which was used in Akeeba Ticket System 3.1.0 and earlier.

deletenotes

You need to publish the Akeeba Ticket System - Delete Manager Notes on ticket close / unpublish plugin and enabled its Make available as a CRON task option for this command to work.

Removes the Manager Notes from all closed and unpublished tickets. This may be required by GDPR and similar privacy protection laws if you are storing personally identifiable or sensitive information (e.g. service connection information, social security numbers, ...) in Manager Notes.

removeattachments You need to publish the Akeeba Ticket System - Remove Obsolete Attachments plugin for this command to work.

Automatically deletes attachments a certain amount of time after they were first submitted.

This command replaces the obsolete ats-remove-attachments.php CLI script which was used in Akeeba Ticket System 3.1.0 and earlier.

## Part II. Appendices

## **Table of Contents**

A.	GNU Free Documentation License		107
Α.	GNU Free Documentation License	• • • • • • • • • • • • • • • • • • • •	107

# Appendix A. GNU Free Documentation License

Copyright (C) 2000, 2001, 2002 Free Software Foundation, Inc. 51 Franklin St , Fifth Floor, Boston, MA 02110-1301 USA . Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

## 0. PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document "free" in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondarily, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of "copyleft", which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

## 1. APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The "Document", below, refers to any such manual or work. Any member of the public is a licensee, and is addressed as "you". You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors

or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

A section "Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as "Acknowledgements", "Dedications", "Endorsements", or "History".) To "Preserve the Title" of such a section when you modify the Document means that it remains a section "Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

## 2. VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

## 3. COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-

network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

## 4. MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

- A. Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.
- B. List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.
- C. State on the Title page the name of the publisher of the Modified Version, as the publisher.
- D. Preserve all the copyright notices of the Document.
- E. Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.
- F. Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.
- G. Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
- H. Include an unaltered copy of this License.
- I. Preserve the section Entitled "History", Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.
- J. Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.
- K. For any section Entitled "Acknowledgements" or "Dedications", Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.
- L. Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.
- M.Delete any section Entitled "Endorsements". Such a section may not be included in the Modified Version.
- N. Do not retitle any existing section to be Entitled "Endorsements" or to conflict in title with any Invariant Section.

#### O. Preserve any Warranty Disclaimers.

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled "Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties--for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

## 5. COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled "History" in the various original documents, forming one section Entitled "History"; likewise combine any sections Entitled "Acknowledgements", and any sections Entitled "Dedications". You must delete all sections Entitled "Endorsements".

## 6. COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

# 7. AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an "aggregate" if the copyright resulting from the compilation

is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

## 8. TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled "Acknowledgements", "Dedications", or "History", the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

## 9. TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided for under this License. Any other attempt to copy, modify, sublicense or distribute the Document is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

## 10. FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. See <a href="http://www.gnu.org/copyleft/">http://www.gnu.org/copyleft/</a> [http://www.gnu.org/copyleft/].

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation.

# **ADDENDUM:** How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

Copyright (C) YEAR YOUR NAME.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.2 or any later version published by the Free Software

Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the "with...Texts." line with this:

with the Invariant Sections being LIST THEIR TITLES, with the Front-Cover Texts being LIST, and with the Back-Cover Texts being LIST.

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.