

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

**Nicholas K. Dionysopoulos**

---

# Akeeba Ticket System User's Guide

Nicholas K. Dionysopoulos

Publication date December 2013

Copyright © 2013 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!™-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

I. User's Guide .....	1
1. Introduction and installation .....	4
1. Introducing Akeeba Ticket System .....	4
2. Requirements and compatibility .....	5
3. Installing Akeeba Ticket System .....	5
3.1. Installing or manually updating the component and language files .....	5
3.1.1. Install from URL .....	6
3.1.2. Upload and install .....	6
3.1.3. Manual installation .....	7
4. Upgrading from Core to Professional .....	8
5. Automatic updates .....	8
6. Requesting support and reporting bugs .....	10
7. Uninstallation .....	11
2. Overview and Quick Setup .....	12
1. Overview .....	12
2. Quick Setup .....	12
3. The Component .....	16
1. The Control Panel page .....	16
2. Options .....	16
3. Custom fields .....	24
4. Categories .....	26
5. Tickets .....	30
5.1. Editing a ticket .....	32
6. Canned Replies .....	35
7. Credits .....	37
8. Email Templates .....	39
8.1. Editing e-mail templates .....	40
8.2. E-mail Keys .....	41
8.3. Allowed variables in e-mails .....	42
9. Off-line schedule .....	43
10. Auto-replies .....	44
11. User tagging .....	46
12. Buckets .....	46
13. The menu item types .....	47
14. Front-end ticket management for support staff .....	48
15. Customising the front-end layout .....	50
16. Custom module positions in the front-end .....	52
4. The plugins .....	54
1. The "ats" plugins .....	54
1.1. Alpha User Points integration .....	54
1.2. Custom fields .....	54
1.3. Gravatar integration .....	54
1.4. New post notification emails .....	54
1.5. Social "Like" buttons .....	55
2. The "finder" plugins .....	55
2.1. Akeeba Ticket System .....	55
3. The "search" plugins .....	55
3.1. Akeeba Ticket System .....	55
4. The "system" plugins .....	55
4.1. Akeeba Ticket System reply by email .....	55
5. The "user" plugins .....	56

5.1. Akeeba Ticket System .....	56
5. CRON scripts .....	57
1. Setting up CRON jobs, in general .....	57
2. Automatically close tickets .....	58
3. Fetch e-mail for replies and new tickets .....	59
4. Remove attachments .....	59
5. Automatic reply bot .....	59
6. Information for developers .....	60
II. Appendices .....	61
A. GNU Free Documentation License .....	63

---

# **Part I. User's Guide**

---

---

# Table of Contents

1. Introduction and installation .....	4
1. Introducing Akeeba Ticket System .....	4
2. Requirements and compatibility .....	5
3. Installing Akeeba Ticket System .....	5
3.1. Installing or manually updating the component and language files .....	5
3.1.1. Install from URL .....	6
3.1.2. Upload and install .....	6
3.1.3. Manual installation .....	7
4. Upgrading from Core to Professional .....	8
5. Automatic updates .....	8
6. Requesting support and reporting bugs .....	10
7. Uninstallation .....	11
2. Overview and Quick Setup .....	12
1. Overview .....	12
2. Quick Setup .....	12
3. The Component .....	16
1. The Control Panel page .....	16
2. Options .....	16
3. Custom fields .....	24
4. Categories .....	26
5. Tickets .....	30
5.1. Editing a ticket .....	32
6. Canned Replies .....	35
7. Credits .....	37
8. Email Templates .....	39
8.1. Editing e-mail templates .....	40
8.2. E-mail Keys .....	41
8.3. Allowed variables in e-mails .....	42
9. Off-line schedule .....	43
10. Auto-replies .....	44
11. User tagging .....	46
12. Buckets .....	46
13. The menu item types .....	47
14. Front-end ticket management for support staff .....	48
15. Customising the front-end layout .....	50
16. Custom module positions in the front-end .....	52
4. The plugins .....	54
1. The "ats" plugins .....	54
1.1. Alpha User Points integration .....	54
1.2. Custom fields .....	54
1.3. Gravatar integration .....	54
1.4. New post notification emails .....	54
1.5. Social "Like" buttons .....	55
2. The "finder" plugins .....	55
2.1. Akeeba Ticket System .....	55
3. The "search" plugins .....	55
3.1. Akeeba Ticket System .....	55
4. The "system" plugins .....	55
4.1. Akeeba Ticket System reply by email .....	55
5. The "user" plugins .....	56
5.1. Akeeba Ticket System .....	56

5. CRON scripts .....	57
1. Setting up CRON jobs, in general .....	57
2. Automatically close tickets .....	58
3. Fetch e-mail for replies and new tickets .....	59
4. Remove attachments .....	59
5. Automatic reply bot .....	59
6. Information for developers .....	60

---

# 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!™'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!™ ACL (access control)
- Nested categories at an infinite depth
- Beautiful SEF URLs with automatic URL canonicalisation without the need for a third party SEF component
- Bootstrap / jQuery based interface, integrates perfectly with most Joomla! 2.5 and 3.0 templates
- Custom module positions, allows you to easily customise front-end pages
- You can turn off replies / new tickets (with an optional message)
- Select between a BBcode editor (forum-style) or your favourite WYSIWYG editor (e.g. JCE, JoomlaCK Editor, TinyMCE and so on)
- Automatic HTML sanitisation to prevent XSS exploits
- Private and public tickets
- Attachments support
- Users can set their signature in the Joomla! user profile
- Manager notes, for keeping private notes visible only to support staff
- 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 and optional support for creating/replying to tickets 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)

### Important

Some features are planned but not implemented yet, such as: ticket priorities, create new ticket on behalf of user, custom fields, stashes (reply to many related tickets at once), select individual users who should



be emailed per category, more avatar plugins, assign a specific support person to a ticket, user feedback, "kudo" system. When rating the component please take into account that these are planned features, just not yet implemented.

## 2. Requirements and compatibility

Akeeba DocImport requires the following server-side configuration:

- Joomla!™ and PHP version compatibilities are detailed in our Version Compatibility matrix [<https://www.akeebabackup.com/compatibility.html>].
- MySQL 5.0.41 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).

## 3. Installing Akeeba Ticket System

Installing Akeeba Ticket System is no different than installing any other Joomla!™ extension on your site. You can read the complete instructions for installing Joomla!™ 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.

### Note

The language (translation) files are NOT installed automatically. You can download and install them from our language download page [<http://cdn.akeebabackup.com/language/ats/index.html>]. Do note that you will have to install both the component and the language packages for the component to work.

As noted on that page, Akeeba Ltd only produces the English and Greek language files. All other languages are contributed by third parties. If you spot an error please do not contact Akeeba Ltd; we will be unable to help you. Instead, please go to the translation project page [<https://www.transifex.com/projects/p/akeeba-ticket-system/>] to find the contact information of the translator. Abandoned languages will show the maintainer being our staff member "nikosdion". In this case you're out of luck; if you want to fix the language package you will need to volunteer to take over the translation project for that language.

### 3.1. Installing or manually updating the component and language files

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.akeebabackup.com` and `cdn.akeebabackup.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.akeebabackup.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.akeebabackup.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.akeebabackup.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.akeebabackup.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!™ 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.akeebabackup.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.akeebabackup.com/documentation/troubleshooter/abinstallation.html>] or try the manual installation described below.

### 3.1.3. Manual installation

Sometimes Joomla!™ 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.akeebabackup.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.akeebabackup.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.akeebabackup.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!™ 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

### Checking for the latest version and upgrading

You can easily check for the latest published version of the Akeeba Backup component by visiting <http://www.akeebabackup.com/latest>. The page lists the version and release date of the latest Akeeba Ticket System release. You can check it against the data which appear on the right-hand pane of your Akeeba Ticket System Control Panel. If your release is out of date, simply click on the Download link to download the install package of the latest release to your PC.

## Updating automatically with the Joomla! extensions update feature

### Warning

This method IS NOT supported on Joomla! 2.5.18 or earlier and Joomla! versions 3.0.0 up to and including 3.2.0. If you are using these versions you MUST update manually (see further down this page)

### 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.akeebabackup.com` and `cdn.akeebabackup.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.

Akeeba Ticket System can be updated just like any other Joomla! extension, using the Joomla! extensions update feature. Joomla! is responsible for finding the updates, downloading them and installing them on your server. You can access the extensions update feature in two different ways:

- From the icon your Joomla! administrator control panel page. On Joomla! 3 you will find the icon in the left-hand sidebar, under the Maintenance header. It has an icon which looks like an empty star. On Joomla! 2.5 you will find it in the main area of the control panel page, under Quick Icons. 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.
- From the top menu of your Joomla! administrator click on Extensions, Extensions Manager. From that page click on the Update tab found in the left-hand sidebar on Joomla! 3 and the top navigation bar in Joomla! 2.5. Clicking on it will get 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. Unfortunately we can't do anything about it, especially in Joomla! 3 (there is no way to forcibly clean the updates cache).

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.

### Warning

Akeeba Ticket System Professional needs you to set up the Download ID before you can install the updates. You can find your main download ID or create additional Download IDs on our site's Add-on Download IDs [<http://akee.ba/downloadid>] page. Then go to your site's administrator page and click on Components, Akeeba Ticket System, and click on the Options button in the toolbar. Click on the Live Update tab and paste your Download ID there. Finally, click on Save & Close.

On Joomla! 2.5.19 and all later versions in the 2.5.x range (but not Joomla! 3.x or later) you also need the Installer - Akeeba Ticket System plugin to be installed and published on your site. This plugin is automatically installed and published when you install Akeeba Ticket System. If you are not sure, please go to your site's administrator, click on Extensions, Plug-in Manager and verify that this plugin is installed and published. If

this plugin is not installed or not published you will see the updates but you will NOT be able to install them. Instead you will see an error message telling you about a 403 or 404 error message received. If you do not see the plugin on your site please update manually, with the method described below.

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.akeebabackup.com/documentation/troubleshooter/abinstallation.html>].

## 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!

## Live update (versions 1.0 up to and including 1.3.3)

### Note

This method was removed in Akeeba Ticket System 1.4.0

On older versions of Akeeba Ticket System there is a different update method, if your server supports it. It is called the "Live Update" feature. Whenever you visit the Akeeba Ticket System Control Panel, it will automatically check for the existence of an updated version and it will notify you. Clicking on the notification allows you to perform a live update without further interaction. Do note that if your server is protected by a firewall you'll have to enable port 80 and 443 TCP traffic to [www.akeebabackup.com](http://www.akeebabackup.com) and [cdn.akeebabackup.com](http://cdn.akeebabackup.com) for this feature to work properly.

## 6. 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.

## 7. Uninstallation

You can uninstall the component just like any other Joomla! component. In your site's back-end, just go to Extensions Manager, click on Uninstall, select Akeeba Ticket System and click on Uninstall. This will completely remove Akeeba Ticket System including all plugins, modules and ticket information.

---

# Chapter 2. Overview and Quick Setup

## 1. Overview

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

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 by 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:

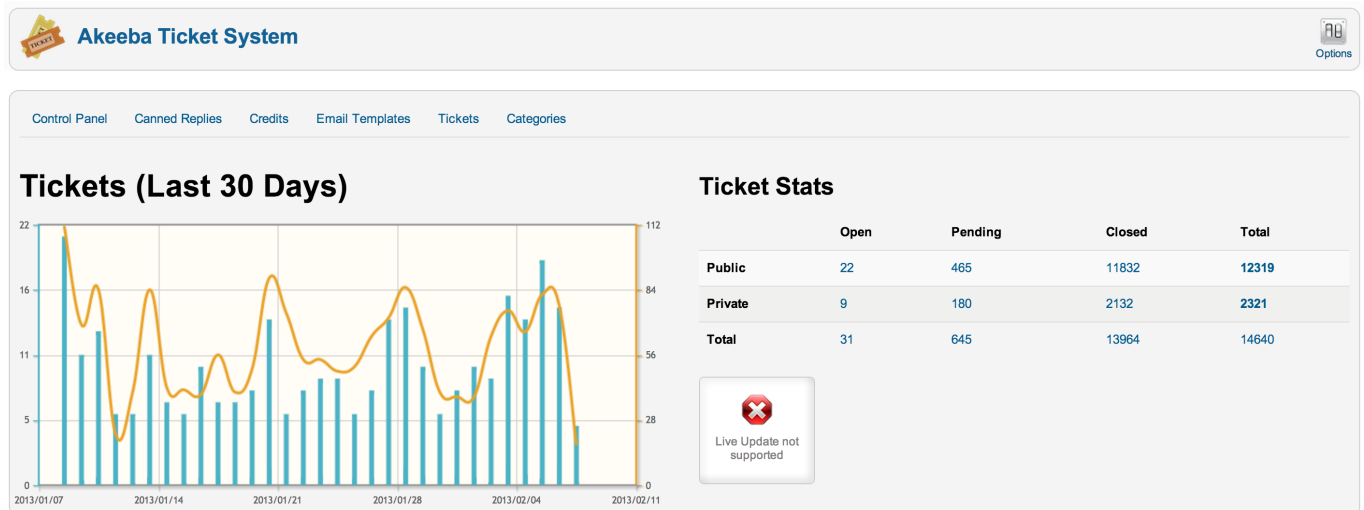
- Add your customers to the Customers group.
- Add the support staff to answer pre-sales requests to the Sales Staff group.
- Add the support staff to answer customer support requests to the Tech Support group.

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.



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.
- The Live Update status. Live Update allows you to easily update Akeeba Ticket System when new versions are released.

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

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

## Permissions

 **Configure Akeeba Ticket System**
Save Save & Close Cancel

Permissions Updates Common Frontend Credits CLI Automation Reply By Email

Default permissions used for all content in this component.

Manage the permission settings for the user groups below. See notes at the bottom.

- Public
- Backup Operators
- Denier
- Foo Bar Group
- Manager
- Administrator
- Registered
- Author
- Editor
- Publisher
- Shop Suppliers
- Customer Group

Action	Select New Setting <sup>1</sup>	Calculated Setting <sup>2</sup>
Configure	Inherited	Not Allowed
Access Administration Interface	Inherited	Not Allowed
Create	Inherited	Not Allowed

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 Administration Interface	The user is part of your Support Staff and can reply to all tickets.
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 Attachment	The user is allowed to upload attachments
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

 **Configure Akeeba Ticket System**
Save Save & Close Cancel

Permissions Updates Common Frontend Credits CLI Automation Reply By Email

Defines the parameters necessary to automatically update the component


Download ID

Minimum stability Alpha (unstable)

These options modify the way the integrated Live Update works

Download ID	This is your AkeebaBackup.com 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.
Minimum stability	The minimum stability level of new update you will be notified for. We recommend only using Stable on production sites. If you want to help us test new versions of the software please use a lower stability level, e.g. Alpha or Beta, knowing that these are unstable versions which might break in unpredictable ways (usually they don't, but then again they are not stable and well tested)

## Common

 **Configure Akeeba Ticket System**
Save Save & Close Cancel

Permissions Updates Common Frontend Credits CLI Automation Reply By Email

Settings used throughout the component and its accompanying extensions

Editor WYSIWYG (Joomla!'s visual editor)

Forced BBcode editor UAs : Android,iPad,,iPhone,,; Windows Phone OS,Windows

Filtering method HTML Purifier (best protection)

Alternate HTML Purifier inclusion Yes

HTML Purifier allowed tags p,b,a[href],i,u,strong,em,small,big,span[style],font[si

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

Editor	Select the kind of editor you want to use for the post area. There are two options:
--------	---

- **BBcode (form code).** This is a lightweight plain text editor which allows optional formatting using BBcode, the same thing you use in various Internet forums. For example, [b]hello[/b] will print hello in bold letters.
- **WYSIWYG (Joomla!'s visual editor).** This is the most advanced option. ATS will use the WYSIWYG (Joomla! visual editor) specified in the user's profile. That's the same editor you're using to edit Joomla! articles in the back-end. Such editors are TinyMCE (included with Joomla!), JCE, JoomlaCK and so on. This makes editing tickets much easier but it doesn't work very well on most tablets and many mobile devices. Which is why we have the next option below.

Forced BBcode editor UAs

As we said, the visual editor is very convenient but barely usable on most tablets and mobile devices. If you want to experience what frustration really means try posting a ticket reply using TinyMCE on an iPad or Nexus tablet. So, we came up with a workaround. Even if you have selected the WYSIWYG editor option above you can force certain devices to always use the lightweight BBcode editor. The filtering is done based on the User Agent string sent to your server by these devices' browser. Use a list of User Agent string parts separated by commas. The default string is:

```
; Android,iPad,,iPhone;; Windows Phone OS,Windows Phone;; Windows CE,BlackBerry;; Blazer;; BOLT/,SymbianOS,(Symbian),Fennec/,GoBrowser/,Iris/,Maemo Browser,MIB/,Minimo/,NetFront/,Opera Mobi/,Opera Mini/,SEMC-Browser/,Skyfire/,TeaShark/,Teleca Q,uZardWeb/
```

As you can see it includes the User Agent signature of virtually every mobile device to hit the market at the time of this writing. We strongly suggest to leave it as it is unless you really want to frustrate your users.

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],cod
```

	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).
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: # p is used to convert Greek letter pi to "p" and ß ss 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.

## Frontend

 **Configure Akeeba Ticket System**
Save Save & Close Cancel

Permissions Updates Common **Frontend** Credits CLI Automation Reply By Email

Options for the front-end display of the component

Post edit timeout

No new tickets ☒ No ☐ Yes

No new replies ☒ No ☐ Yes

Show credits information ☐ No ☒ Yes


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.
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.
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 <i>public</i> 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.

## Credits


**Configure Akeeba Ticket System**
Save Save & Close Cancel

Permissions Updates Common Frontend Credits CLI Automation Reply By Email

Preferences for credits management

Refund on unpublish ticket ☐ No ☒ Yes

Refund on delete ticket ☐ No ☒ Yes


Refund on unpublish post ☐ No ☒ Yes

Refund on delete post ☐ No ☒ Yes

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).

## CLI Automation

 **Configure Akeeba Ticket System**
Save Save & Close Cancel

Permissions Updates Common Frontend Credits CLI Automation Reply By Email

Parameters for the optional CLI scripts. You have to create your own CRON jobs for the CLI scripts to run and these settings have any effect!

Maximum attachment age (days)

Maximum inactive ticket age

Silent close period


These options modify the way the CRON job scripts work.

Maximum attachment age (days)	Attachments older than this many days will be deleted by the <code>ats-remove-attachments.php</code> CRON script
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 <code>ats-autoclose-tickets.php</code> 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 <code>ats-autoclose-tickets.php</code> CRON script, without posting a notification.
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.

# Reply by email


**Configure Akeeba Ticket System**

Save
Save & Close
Cancel

Permissions
Updates
Common
Frontend
Credits
CLI Automation
Reply By Email

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.

Reply by email ☐ No ☒ Yes

Only for managers ☒ No ☐ Yes

Create ticket by email ☐ No ☒ Yes

Default category

I am using GMail ☐ No ☒ Yes

Mail server type ☐ POP3 ☒ IMAP

Mail server host

Port

Use SSL ☐ No ☒ Yes

Use TLS ☐ Never ☐ When Available ☒ Always

Validate certificates ☒ No ☐ Yes

Username

Password

Mail folder

Delete after post creations ☒ No ☐ Yes

Maximum check frequency (minutes)

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.

Reply by email	When enabled allows users to reply to their tickets by email.
Only for managers	When enabled the Reply by email feature is only available for 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.

Default category	The category where the new tickets created by the "Create ticket by email" feature will be placed.
I am using GMail	If you are using GMail set this to Yes. The rest of the options (except Username and Password) are ignored.
Mail server type	Your incoming mail server type (IMAP or POP3)
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 and Use SSL to Yes
Validate certificates	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.
Password	The password you use to connect to your incoming mail server.
Mail folder	If you have an IMAP mail server select the folder where the messages are stored. This is usually INBOX (all capital letters)
Delete after post creations	Should the retrieved email messages be deleted from the server after the post/ticket has been created?
Maximum check frequency (minutes)	The minimum time between email checks.

### Warning

Setting a value too low will result in double posts. We recommend setting this to at least 5 minutes.

## 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 <code>Specific category</code> this defines for which categories the field will be displayed. When the When to show option is set to <code>All categories</code> this will be ignored.
Field Type	Chose the type of the field. The available options are: <ul style="list-style-type: none"> <li>• <b>Checkbox.</b> Creates a single tick box.</li> <li>• <b>Calendar.</b> 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.</li> <li>• <b>Drop-down.</b> 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.</li> </ul>

- **Multiple 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

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.

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!.

1. If you change the setting, it will apply to this and all child categories. Note that: *Inherited* means that the permissions from the parent category will be used if there is a parent category or those from the component if there is no parent category. *Denied* means that no matter what the parent category setting is, the group being edited cannot take this action within this category. *Allowed* means that the group being edited will be able to take this action within this category (but if this is in conflict with the parent category setting or the component setting it will have no impact; a conflict will be indicated by *Not Allowed (Locked)* under Calculated Settings).

2. If you select a new setting, click Save to refresh the calculated settings.

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:

## Akeeba Ticket System - General

Akeeba Ticket System - General

Default new post text

Have I read the documentation: No

Which troubleshooting pages I've already tried: None

Joomla! version: (no idea)

PHP version: (no idea)

Akeeba Backup version: (no idea)

Activate InstantReply \*

Yes

InstantReply DocImport categories

- select a category -

Akeeba Backup Documentation

Joomla! Platform Coding Standards

Joomla! Manual

COM\_DOCIMPORT\_XSL\_DEFAULT\_TITLE

Category email

support+akeebabackup@dionysopo

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 text	The default text to show in the post area when a new ticket is being filed. Please note that the text in this field must be entered using BBcode notation.
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.

InstantReply DocImport categories	If you have Akeeba DocImport <sup>3</sup> installed on your site, please select the DocImport categories which will be searched by InstantReply. If you are not using DocImport or do not wish this category to provide links to DocImport articles just ignore this setting.
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 (pre-selected) 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.



## Akeeba Ticket System - Credits

### ▼ Akeeba Ticket System - Credits

New public ticket	<input type="text" value="0"/>
Reply to public ticket	<input type="text" value="0"/>
New private ticket	<input type="text" value="0"/>
Reply to private ticket	<input type="text" value="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.

ID	User	Created	Last Reply	Title	Status	State	Public	Category
71	nicholas [ 42 ] Nicholas K. Dionysopoulos nikosdion@	2013-01-06	2013-02-03	Whatever		Pending		Akeeba Backup
70	client [ 61 ] Clark Lient clienttest@localhost.lan	2012-11-22	2013-02-08	Oops, my bad		Closed		Akeeba Backup Core
69	client [ 61 ] Clark Lient clienttest@localhost.lan	2012-11-22	2012-11-22	Whatever		Open		Akeeba Backup Core
68	client [ 61 ] Clark Lient clienttest@localhost.lan	2012-11-14	2012-11-14	My paid ticket		Open		Akeeba Backup Core
66	client [ 61 ] Clark Lient clienttest@localhost.lan	2012-11-12	2013-02-08	Hurrah!		Pending		Akeeba Backup Core

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 <code>ats</code> 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.

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 some-

thing 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. <code>Web</code> means that it was submitted through the front-end of your site. <code>E-mail</code> 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 subscriptions	The inactive (expired or cancelled) Akeeba Subscriptions subscriptions of the user who has created this ticket.
-----------------------	---

### Note

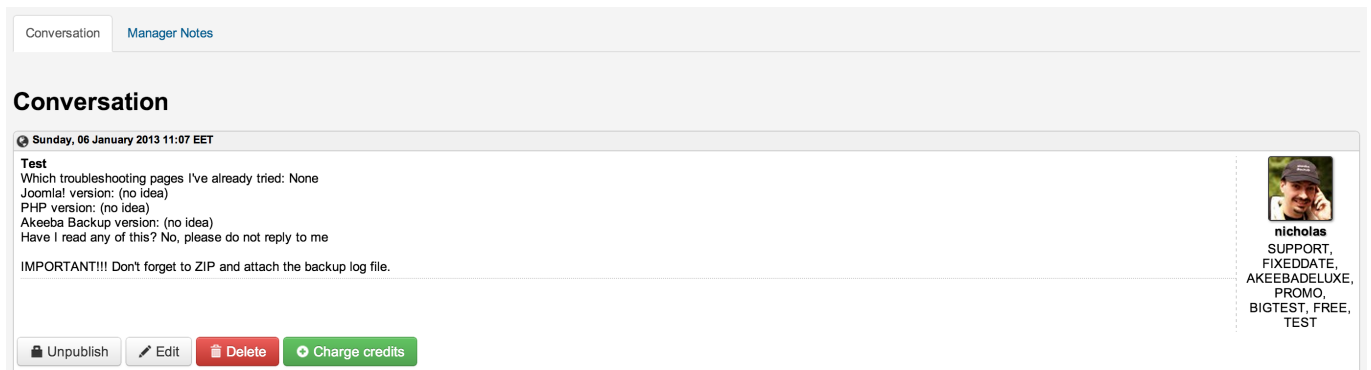
You obviously need to have Akeeba Subscriptions installed to see this field.

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 him the amount of credits he has been charged.
--------------------	---

Right below you will find two tabs.



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 back-end 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.
-------------------------------------	--

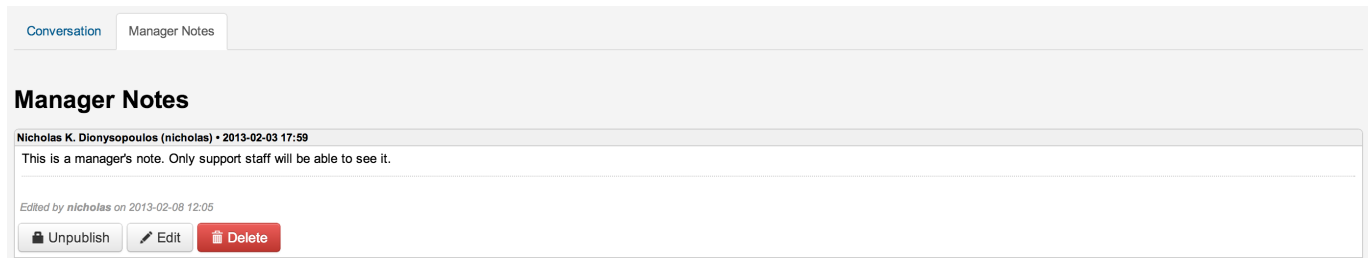
If you also have an attachment to your ticket you will see the following buttons next to it:

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).



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

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.

#	Title
1	<a href="#">More info / super admin access</a> [ + ] <div> <p>I have made this ticket private so that only you and me can see the information posted here.</p> <p>Please provide me with the following information:</p> <ol style="list-style-type: none"> <li>1. The URL to your site's administrator login page</li> <li>2. Super Administrator username and password</li> <li>3. FTP connection information</li> </ol> <p>Please allow up to 24 hours for me to log in to your site and debug this issue. When I'm done I will post back. Once the issue is fixed, you can revoke my access e.g. by changing the Super Administrator and FTP passwords.</p> </div>
7	<a href="#">500 Internal Server Error or Blank Page</a> [ + ]
9	<a href="#">Admin Tools troubleshooting steps</a> [ + ]
5	<a href="#">Akeeba Backup 3.5 - Joomla! 1.5/1.6/1.7/2.5</a> [ + ]

A canned reply is, essentially, a preset text you can paste in your reply with two clicks. If you're using the BBcode editor, the last button on the toolbar (keyboard shortcut: CTRL-K on Windows and Linux, CMD-K on Mac OS X and iOS). If you're using the WYSIWYG editor there is a button under the text edit area reading Insert a canned reply. These 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 **j** (move selection up) and **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.



**Akeeba Ticket System – Canned Replies**

Control Panel | Canned Replies | Credits | Email Templates | Tickets | Categories

Num	Title	Ordering	Published
10	Not an Admin Tools issue	11	✓
8	RTFM BEFORE POSTING	10	✓
11	PayPal Sandbox	9	✓
2	Admin Tools Download ID	8	✓
5	Akeeba Backup 3.5 - Joomla! 1.5/1.6/1.7/2.5	5	✓

Display # 5 | Start | Prev | 1 | 2 | Next | End | Page 1 of 2

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.

## Note

You will always have to enter canned replies using the BBcode editor. This is by design and cannot be changed. While BBcode can be easily converted into HTML (and used in the WYSIWYG editor), HTML cannot be easily converted to BBcode. As a result we have to ask you to enter the canned reply in BBcode so that the canned reply is compatible with both BBcode and WYSIWYG editors in the site's front-end.

## 7. Credits


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.

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.



Akeeba Ticket System – Credits

New

Edit

Publish

Unpublish

Delete

Control Panel







Canned Replies

Credits

Email Templates

Tickets

Categories

Num	User	Date	Type	Unique ID	Credits	Published
<input type="checkbox"/>	<div>User</div> <div><div>Search</div><div>Reset</div></div>		<div>Type</div>	<div>Unique ID</div>		<div>- Published -</div> <div></div>
30	<input type="checkbox"/> <div><div></div><div><b>famous</b> [6027] Fred Amous nikosdion+famous@gmail.com</div></div>	2013-01-05 18:55	akeebasubs	12950	20	<div></div>
29	<input type="checkbox"/> <div><div></div><div><b>famous</b> [6027] Fred Amous nikosdion+famous@gmail.com</div></div>	2013-01-05 18:55	akeebasubs	12948	20	<div></div>
28	<input type="checkbox"/> <div><div></div><div><b>famous</b> [6027] Fred Amous nikosdion+famous@gmail.com</div></div>	2013-01-05 18:55	akeebasubs	12935	20	<div></div>

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.

**Akeeba Ticket System – Edit a Credits Record**

User

Date

Type

Unique ID

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

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.

**Akeeba Ticket System – Email Templates**

Control Panel Canned Replies Credits **Email Templates** Tickets Categories

Num	Key	Subject	Published	Language
	<input type="checkbox"/> Subject	Key <input type="text"/> <input type="button" value="Search"/> <input type="button" value="Reset"/>	- Published -	- All -
1	<input type="checkbox"/> manager-public-new	New public ticket #[ID] [TITLE] [[CATNAME]]	✓	English (UK)
2	<input type="checkbox"/> manager-private-new	New private ticket #[ID] [TITLE] [[CATNAME]]	✓	English (UK)
3	<input type="checkbox"/> manager-public-old	Reply to public ticket #[ID] [TITLE] [[CATNAME]]	✓	English (UK)
4	<input type="checkbox"/> manager-private-old	Reply to private ticket #[ID] [TITLE] [[CATNAME]]	✓	English (UK)
5	<input type="checkbox"/> owner-public-new	Your new public ticket #[ID] [TITLE] [[CATNAME]]	✓	English (UK)

Display # 5   1 2 3 4 Next  Page 1 of 4

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. This is especially true for the Email-to-Ticket feature when you're using the "System - Akeeba Ticket System reply by email" plugin as this plugin may be triggered from a page which is currently in a different language than what your 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.

- 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

**Akeeba Ticket System – Edit an email template**

Save Save & Close Save & New Cancel

**Key**

The email template key. Please consult the documentation for the various keys used for different types of emails.

**Subject**

The template of the email subject. You can use the same placeholders as the email body (see below).

**Published** ☐ No ☒ Yes

**Language**

Select the language of this template. This is useful for multilingual sites. Use the (All) option to create a default template.

**Body**

Rich text editor toolbar: Bold, Italic, Underline, Text Color, Background Color, Bulleted List, Numbered List, Indent, Outdent, Link, Unlink, Image, Table, HTML.

Body content:

Hello [USER\_NAME],

A new **public** ticket #[ID] &dash; "[TITLE]" has been created by [POSTER\_NAME] ([POSTER\_USERNAME]) with the following contents:

[TEXT]

[ATTACHMENT]

[View and reply on \[SITENAME\]](#)

You are receiving this email message because you are a manager of the "[CATNAME]" category in [SITENAME].

Powered by Akeeba Ticket System

Path: div > div > p

Toggle editor

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.

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

## Keys for the "System - Akeeba Ticket System reply by email" plugin

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

mailgateway-in-validuser	The email address does not belong to a user registered on the site and cannot be processed.
mailgate-way-noaccess	The email address belongs to a user registered on the site but the user does not have posting privileges to the Akeeba Ticket System category.
mailgate-way-nonewtickets	New ticket creation is suspended using the "No new tickets" options in the component's Options page.
mailgate-way-nonewreplies	Reply creation is suspended using the "No new replies" options in the component's Options page.
mailgate-way-newticket-failed	The creation of a new ticket failed for an unspecified reason (e.g. database error)
mailgate-way-newpost-failed	The creation of a new reply (post) failed for an unspecified reason (e.g. database error)
mailgate-way-newticket-disabled	New ticket creation by email has been disabled in the component's Options
mailgate-way-newreply-disabled	Reply by email has been disabled in the component's Options
mailgate-way-noreplyline	The email is missing the reply line which is used by Akeeba Ticket System to determine which ticket this email reply refers to
mailgateway-no-credits-ticket	The user does not have enough credits to submit a new ticket
mailgateway-no-credits-post	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.
[ID]	The numeric ticket ID
[TITLE]	The ticket's title

[POSTER_NAME]	The full name of the person who posted the ticket / reply
[POSTER_USERNAME]	Username 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
[SUBSCRIPTIONS]	A list of the active Akeeba Subscriptions subscription levels for the user who posted (if you have Akeeba Subscriptions installed)
[ORIGIN]	The origin of the post (e.g. web or email)

## 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

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	<p>Apply this auto-reply rule depending on whether a human member of the support staff has already posted a reply to this ticket:</p> <ul style="list-style-type: none"> <li>• If not replied. Only send the auto-reply if a human member of the support staff has not posted yet to this ticket.</li> <li>• If already replied. Only send the auto-reply if a human member of the support staff has already posted to this ticket.</li> <li>• 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.</li> </ul>
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 attachment	<p>Apply this auto-reply rule depending on the existence of an attachment in any of the posts in this ticket:</p> <ul style="list-style-type: none"> <li>• is not present. Send this auto-reply only if there are no attachments in any of the posts in this ticket.</li> <li>• is present. Send this auto-reply only if there are attachments in any of the posts in this ticket.</li> <li>• always. Send this auto-reply without caring about the existence of attachments.</li> </ul>
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. Use BBCode to write your reply.

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: <code>Customised version</code>
Description	A slightly longer description which will appear as a tooltip in the front-end. Example: <code>User has customised version of our software. Documentation doesn't apply.</code>
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

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. 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.

## 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. If you 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.

# 14. Front-end ticket management for support staff

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

Delete	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 / 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 back-end 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 one of two buttons:

- In the BBCode editor the last button is used to insert a canned reply (shortcut: CTRL-K on Windows / Linux and CMD-K on Mac OS X)

- In the WYSIWYG editor there is a button labelled Insert a canned reply below the editor area.

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 back-end of your site go to Content, Media Manager, Options. This is where you can set the legal extensions, maximum size, upload restriction, MIME type checking and so forth.

## 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 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.

# 15. 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 support 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](http://docs.joomla.org/How_to_override_the_output_from_the_Joomla!_core)].

## Overriding the loading of Bootstrap / jQuery

Akeeba Ticket System uses the Akeeba Strapper library to load its own copies of Bootstrap and jQuery on Joomla! 2.5 or its Bootstrap overrides in Joomla! 3. If you have a Joomla! 2.5 site which uses Bootstrap 2.x or a Joomla! 3 site which doesn't use Bootstrap 2.x (e.g. it uses Foundation Zurb, Bootstrap 3.x or something in the like) or if you

are loading jQuery on your own (e.g. from a CDN) you **MUST** tell Akeeba Strapper what to load and when. You can do this through media overrides.

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/akeeba_strapper` This is your Strapper media override directory.
3. Copy the file `media/akeeba_strapper/strapper.ini` into the `templates/mytemplate/media/akeeba_strapper` directory. From now on, Akeeba Strapper will consult this new `strapper.ini` file instead of the file found under `media/akeeba_strapper` to decide what to load.
4. Edit the `templates/mytemplate/media/akeeba_strapper/strapper.ini` file and change the Bootstrap and jQuery loading rules.

## Important

These settings apply for all components using Akeeba Strapper. This includes all components with a front-end part released by Akeeba Ltd (e.g. Akeeba Subscriptions, Akeeba Ticket System or Akeeba DocImport) as well as a few third party components (e.g. Twentronix Cookie Confirm).

## Overriding the CSS or JS loaded by Akeeba Strapper

Akeeba Strapper also loads its own CSS and Javascript files. You can override them as explained in the "Customising the CSS" and "Customising the Javascript" sections above. The source directories for Akeeba Strapper's files can be found under `media/akeeba_strapper`.

## 16. 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.

<code>ats-top</code>	At the top of each page of the component
<code>ats-categories-top</code>	At the top of the categories list page, below <code>ats-top</code>
<code>ats-mytickets-top</code>	At the top of the My Tickets page, below <code>ats-top</code>
<code>ats-newticket-top</code>	At the top of the new ticket page, below <code>ats-top</code>
<code>ats-posts-top</code>	At the top of the post page, below <code>ats-top</code>
<code>ats-tickets-top</code>	At the top of the tickets in a category list, below <code>ats-top</code>
<code>ats-categories-none-top</code>	Above the "no categories" message when no categories are found, below <code>ats-categories-top</code>  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.
<code>ats-mytickets-none-top</code>	Above the "no tickets" message when no tickets are found in the My Tickets view, below <code>ats-mytickets-top</code>



	This module position is only shown when there are no tickets submitted yet by the currently logged in user.
ats-tickets-none-top	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 ats-mytickets-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

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. Alpha User Points integration

Displayed in the Joomla! Plugin Manager as Akeeba Ticket System - Alpha User Points integration

This allows you to integrate the third part Alpha User Points component with Akeeba Ticket System. When Akeeba Ticket System detects that the user has run out of ATS credits it will consume Alpha User Points and give the user Akeeba Ticket System credits in return. The conversion (how many AUP points are consumed and how many ATS credits are credited) are specified in the options.

The options you can specify are:

- Give this many credits. The option defines how many ATS credits will be given to the user when AUP user points are consumed.
- Consume this many points. This option defines how many AUP points will be consumed to award the number of ATS credits specified above.

Please note that if you install the Alpha User Points component after you've installed Akeeba Ticket System you **MUST** install ATS again, without uninstalling it first, for this integration to work correctly.

### 1.2. 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.

### 1.3. 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 is the only available avatar method.

### 1.4. New post notification emails

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.

## 1.5. Social "Like" buttons

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.

## 2. The "finder" plugins

### 2.1. 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.

## 3. The "search" plugins

### 3.1. 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.

## 4. The "system" plugins

### 4.1. Akeeba Ticket System reply by email

Displayed in the Joomla! Plugin Manager as System - Akeeba Ticket System reply by email.

In order for the "reply by email" feature of Akeeba Ticket System to work you need a way to have ATS periodically check for new email. There are two ways: a proper CRON job (discussed in the CRON scripts chapter) and this plugin. You **MUST** always enable only one of them, not both!

This plugin implements a pseudo-CRON. As long as there is adequate traffic on your site it will periodically fetch email and process it. Due to its nature it has some MAJOR shortfalls:

- You need adequate traffic. If there is not enough traffic hitting your web server 24/7 this will NOT work. As a result it doesn't work very well (or at all) when you are using a CDN or caching on your site.
- It will slow your site down. How much depends on your mail server. Visitors on your site will experience a delay in their page load times when this plugin is activated and checking for email.

## 5. The "user" plugins

### 5.1. Akeeba Ticket System

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 line. 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 text 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. This is intentional.

---

# Chapter 5. CRON scripts

Akeeba Ticket System is a complex system. It needs to be able to run some optional tasks periodically. While system plugins do provide a degree of automation they also require a lot of traffic on your site to even work *and* they slow down your site. To this end, most of the optional tasks you can run for Akeeba Ticket System are available through standard CRON jobs. These are command line PHP scripts which are supposed to run through PHP CLI, not over the web.

## Warning

Many hosts claim to offer "CRON jobs" where they only allow you to enter a URL. THESE ARE NOT CRON JOBS! These hosts are lying. When we are talking about CRON jobs we mean the real thing: being able to run command-line scripts based on a schedule. If you are on a host which doesn't provide real CRON jobs—or, worse, asks you an exorbitant amount of money to enable them for you—please change hosts. You wouldn't know it, but real CRON jobs (and excellent performance) is offered by many low- to mid-priced hosts, like our site's host, Rothen (from about \$8 per month per site on shared hosting). Besides them there are literally dozens of hosts with real CRON job support and sensible prices. Just shop around; you don't need to raid your wallet, you just need to shop smart.

Full disclosure: Rothen provides our site's hosting for free. We are not affiliated in any other way with Rothen and we do not receive any reward (money or otherwise) for referring clients to them.

The following sections not only describe what each CRON script provided with Akeeba Ticket System does but also gives some generic information on setting up CRON jobs on your server. That said, each server may have a different way for setting up CRON jobs. We cannot know the particulars of all hosting services out there. If you are not sure how to set up a CRON job, please do ask your host. They should be able to help you, point you to the right documentation page or even do it for you.

## 1. Setting up CRON jobs, in general

### The big picture

Setting up 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. All command line scripts you can use with CRON are stored under your site's CLI directory. Assuming the CRON script you need to run is called `example.php` you need to enter the following CRON command line:

```
/usr/local/bin/php /home/USER/webroot/cli/example.php
```

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.

### 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. If they claim that they don't know you have to switch hosts. Lack of such knowledge would mean that your host has no idea how their servers are set up. Would you trust your site's security on people who have no idea how their business works?

### Warning

Sometimes hosts will give you the path to the PHP CGI binary. This will NOT work 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. Some hosts seem oblivious to this fact and will try to persuade you that they are the same thing and your developer doesn't know what he's doing / has a programming error (bug) in his code. These hosts are not only incompetent, they are liars as well. If you come across such a host do yourself a favour and switch hosts. Simply put, do you want to trust your site with people who don't understand how their business works?

## 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 backup command. Usually, you have to use something like:

```
/usr/bin/php5-cli /home/myusername/public_html/cli/example.php
```

where *myusername* is your account's user name (most probably the same you use to login to cPanel). Do note the path for the PHP command line executable: `/usr/bin/php5-cli`. This is the default location of the correct executable file for cPanel 11 and later. Your host may use a different path to the executable. If the command never runs, ask them. We can't help you with that; only those who have set up the server know the changes they have made to the default setup.

Finally, click the Add New Cron Job button to activate the CRON job.

## Special considerations for HostGator

The location of the PHP CLI binary is `/usr/bin/php-cli`. This means that your CRON command line should look like:

```
/usr/bin/php-cli /home/myusername/public_html/cli/example.php
```

## 2. Automatically close tickets

While many tickets are closed either by support staff or the users after a solution is found to the problem, we have observed that most tickets remain in Pending status. In the majority of such cases the user did get the support he was looking for but never bothered to reply back, confirming that everything is working for them. If you are like us, you don't want to see hundreds of tickets in Pending status but would rather get them automatically closed.

That's what the `ats-autoclose-tickets.php` script does. It will automatically close old tickets which haven't received a reply in ages. In fact, you can specify two time thresholds. Tickets older than the first threshold (called "Maximum inactive ticket age ") will be closed and a message will be posted, notifying the user that the ticket has been automatically closed due to inactivity. Tickets older than the second threshold (called "Silent close period") will be closed without a message. This second threshold is useful for closing tons of older messages without burdening your mail server.

You can configure the behaviour of the script in the component's Options page. For details you may want to consult the documentation of the Options page.

The CRON command line you need to use is like this:

```
/usr/local/bin/php /home/USER/webroot/cli/ats-autoclose-tickets.php
```

For details regarding the paths please consult our "Setting up CRON jobs, in general" documentation page.

## 3. Fetch e-mail for replies and new tickets

Allowing users to create new tickets or reply to existing ones via email requires Akeeba Ticket System to somehow periodically check for new email and process it. One way is using the system plugin discussed in a previous section, with all the downsides discussed there. The other way –and much more reliable– is using the `ats-mail-fetch.php` script in a CRON job.

### Warning

Only enable one of the two methods. Don't enable both, it will cause double posts and unforeseen issues with your site.

The CRON command line you need to use is like this:

```
/usr/local/bin/php /home/USER/webroot/cli/ats-mail-fetch.php
```

For details regarding the paths please consult our "Setting up CRON jobs, in general" documentation page.

## 4. Remove attachments

While allowing your users to post attachments is an invaluable tool for letting them clarify the issue they're requesting support for it has a major drawback: attachments take up space on your server. We have observed that the space taken by attachments on a busy support ticket system –like the one we have on AkeebaBackup.com– may easily grow to over 100Mb per month and soon become a huge burden for your site. To this end you need a way to automatically remove old attachment files which are no longer relevant.

That's what the `ats-remove-attachments.php` script does. It will remove all attachments which are older than "Maximum attachment age (days)", as set in the component's Options page. For details you may want to consult the documentation of the Options page.

The CRON command line you need to use is like this:

```
/usr/local/bin/php /home/USER/webroot/cli/ats-remove-attachments.php
```

For details regarding the paths please consult our "Setting up CRON jobs, in general" documentation page.

## 5. Automatic reply bot

This CRON script is used with the automatic reply bot feature of Akeeba Ticket System. It allows you to send automatic replies to your users based on different criteria, for example: has a manager already replied to them; do they have an attachment; keywords in the title or body of their support ticket; etc. The replies are not sent automatically; they are sent by the `ats-auto-reply.php` CRON script.

The CRON command line you need to use is like this:

```
/usr/local/bin/php /home/USER/webroot/cli/ats-auto-reply.php
```

For details regarding the paths please consult our "Setting up CRON jobs, in general" documentation page.

---

# Chapter 6. Information for developers

This section has not been written yet.



---

## **Part II. Appendices**

---

---

# Table of Contents

A. GNU Free Documentation License .....	63
---	----

---

# 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. Secondly, 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-net-

work 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 <http://www.gnu.org/copyleft/> [<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 Foun-

dation; 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.