

# **Akeeba Kickstart 3.0 User's Guide**

**Nicholas K. Dionysopoulos**

---

# **Akeeba Kickstart 3.0 User's Guide**

Nicholas K. Dionysopoulos

Publication date June 2010

## **Abstract**

This book covers the use of the Akeeba Kickstart web-based archive extraction software. It includes reference for its interface, as well as instructions for automating its operation.

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 is included in the appendix entitled "The GNU Free Documentation License".

---

# Table of Contents

1. Introduction .....	1
1. Overview .....	1
2. Why do we need Kickstart, anyway? .....	1
3. What Kickstart is and what it's not .....	1
4. About the name .....	2
2. Before using Kickstart .....	3
1. Getting Kickstart .....	3
2. Requirements .....	3
3. Using Kickstart .....	4
1. Preparing for the extraction .....	4
2. Kickstart's interface .....	5
2.1. Initial dialogue .....	5
2.2. The setup page .....	6
2.2.1. Troubleshooting .....	9
4. Advanced features .....	11
1. Automating Kickstart .....	11
A. GNU Free Documentation License .....	13

---

# Chapter 1. Introduction

## 1. Overview

Kickstart is a PHP executable file ( *script* ) use to automate the steps required before and after the restoration of site backed up with Akeeba Backup in a great extent. It can be used as a simple and efficient method of extracting the Akeeba Backup archives directly on the target server, or even used to extract other archive files including CMS and script installation files (e.g. Joomla!™, WordPress, Drupal, phpBB), update packages (Joomla! and WordPress can especially benefit from this use) or even archives containing large amounts of files you need to get on your server, fast.

When used with backup archives, Kickstart streamlines the archive extraction - uploading - restoration - post-restoration workflow by allowing you to omit unnecessary steps. As a matter of fact, you only need to upload Kickstart and the backup archive on the server you want to restore your site to. Kickstart will extract (i.e. "unzip") the archive *right on the server*, rename your `.htaccess` and `php.ini` files and give you a button to start the restoration script included in the backup archive (for example, Akeeba Backup Installer). When you're done with the restoration script, you click on the new button appearing on the Kickstart interface and it will rename back your `.htaccess` and `php.ini` files, remove the installation directory, delete the backup archive and finally remove itself as well. Housekeeping is taken care of itself!

Kickstart is also localisable, meaning that it can display itself in your own language. All you have to do is to upload your language's translation INI file in the same directory as `kickstart.php`.

## 2. Why do we need Kickstart, anyway?

Even though Akeeba Backup is designed as an effortless way of backing up your site, it is only good up to the point of having a backup archive. Restoring it is a pretty much different story.

At first, you have to download the file to your PC. Then extract it. Then upload all the files, via FTP, to you site (and, man, this is slow or what?). Then rename `.htaccess` to `htaccess.txt` and `php.ini` to `php.ini.bak` in order to avoid any conflicts. Go through the restoration process, which is the easy part. Then remove the installation directory. Finally, rename `htaccess.txt` to `.htaccess` and `php.ini.bak` to `php.ini`.

Did you notice something? Most of this is a common predefined procedure. The only human intervention truly required is for the restoration process part. Moreover, FTP'ing all those 3000+ files of even the smallest full site backup is an overkill. Because of all of this, Kickstart was born.

Kickstart works in conjunction with the ZIP / JPA archives, directly on the target server. Nothing else is required. You just upload `kickstart.php` and your archive to the server, visit `http://www.yourdomain.com/kickstart.php`, select the archive, wait, go through the restoration process, click the cleanup button and presto! Your site is up and running; the `kickstart.php`, the backup archive and the installation folder all gone, automatically. Even the `.htaccess` and `php.ini` renaming took care of itself. Isn't this too good to be true?

Well, almost. You actually need to either turn off PHP Safe Mode, or make sure the target folder is owned by the same user as the one your web server runs on: this is a PHP limitation we can't overcome. Alternatively, you can supply FTP connection information and Kickstart will use the - much slower - FTP mode to write the extracted files to your site.

## 3. What Kickstart is and what it's not

Kickstart is an interactive archive extraction script and a clean-up tool. Counter-intuitively, it is *not* a site restoration utility per se. Kickstart performs the steps required before and after site restoration, whereas the site restoration procedure itself is carried out by the installer script which was included in your backup archive at backup time. To make it crystal clear, here is the flow of a Kickstart-powered site restoration procedure:

- Uploading files. This is done manually. You upload `kickstart.php` and the backup archive (ZIP or JPA format) to the intended site's root.
- **Archive extraction** . This is done by Kickstart. The backup archive is extracted. At this point your site is not yet ready to work.
- Restoration process. This is done by installer which was included in the archive and now extracted on your server. You are asked some questions, the database dump data is restored to the new database and the new CMS configuration file is written on the disk. At this point, your site may or not be ready to work, depending on the reliance upon a `.htaccess` file.
- **Restoration of `.htaccess` and `php.ini`** . This is done by Kickstart. The automatically renamed copies of your original `.htaccess` and `php.ini` files are renamed back to their proper names to allow correct site operation.
- **Cleanup of unnecessary files**. This is done by Kickstart. The backup archive, the installation directory and `kickstart.php` are no longer needed and therefore deleted.

As you can see, Kickstart is a very generic tool, not strictly limited to restoring Akeeba Backup backup archives. As a matter of fact, we have used it to easily upgrade our sites to newer CMS versions without the hassle of uploading tons of PHP files!

### Tip

The correct way to see Kickstart is as a generic, interactive, web-based archive extraction script which can also clean up after itself.

## 4. About the name

The naming of this script is a small tribute to one of the first computing platforms I came to know: the Amiga 500. The initial boot loader, pretty much responsible for initializing the operating system's boot process was called Kickstart. This script has an analogous function in the restoration process of Akeeba Backup-generated backup archives: it takes care of everything up to the point the actual restoration process starts.

---

# Chapter 2. Before using Kickstart

## 1. Getting Kickstart

Kickstart is part of the Akeeba Backup release system. As such, it can be downloaded from our site, <http://www.akeebabackup.com>. All packages are named `kickstart-VERSION.zip`, where `VERSION` is the version number. Each package contains `kickstart.php` itself, as well as all the available translation files. You have to extract this archive and upload `kickstart.php` and any translation INI files you may need to your site.

The latest Kickstart version can be always retrieved by visiting <http://www.akeebabackup.com/latest>.

## 2. Requirements

Kickstart is a PHP 5 application. It will not work with PHP 4. The full list of required server configuration is:

- PHP 5.2 or greater. It will throw a Fatal Error if you are using PHP 4.
- Apache 1.3 or above. It should also work with IIS, but it hasn't been tested.
- PHP `mod_zlib` available. This is available by default.
- PHP Safe Mode disabled, or correct directory ownerships, or FTP connection parameters must be entered

The last requirement must be further explained. PHP with Safe Mode enabled will refuse to create folders inside another folder which is not owned by the same user as the one the web server (Apache) runs under, even if the folder is otherwise writable. Kickstart will fail in this case. Alternatively, if you supply the FTP connection information, Kickstart will try to use FTP to connect to your site and write the extracted files.

### Important

If you use the FTP mode, Kickstart will require the specified temporary directory to be directly writable by PHP (usually, `0777` permissions help) or it will attempt to create a temporary directory of its own. If this procedure fails, Kickstart will notify you that the temporary directory is not writable.

Moreover, if you already have a site installed on the target server you have to ensure that all folders and files are writable. If not, Kickstart will fail and leave your site in a possibly broken state.

Finally, if your server doesn't support base64 decoding (e.g. the `base64_decode` function is disabled) you need an Internet connection. Normally, the required jQuery library is fetched from a base64 encoded resource inside the `kickstart.php` file. If the decoding is not possible, Kickstart will fall back to loading it from Google's AJAX API Library CDN, which requires an Internet connection and access to Google's CDN not be restricted by your firewall or Internet security suite.

---

# Chapter 3. Using Kickstart

## 1. Preparing for the extraction

The first step is to download the latest release of Kickstart. It can be always retrieved by visiting <http://www.akeebabackup.com/latest>. It comes as a ZIP package. *Do not* try to install it in Joomla!. Instead, you'll have to unzip it first. The extracted files are `kickstart.php` and a series of INI files. The `kickstart.php` file is required for Kickstart's operation and self-contained, i.e. it doesn't need any other files (or Joomla!) to be installed on your server. The INI files are translation files. You only need them if you want Kickstart to appear localized in your language. You can safely delete any INI files which represent languages you do not understand.

The second step is uploading those files to your server. Upload `kickstart.php` and any translation INI files you may need to the server path you want the restored site to be installed. If you want the site to be extracted to your domain's root (something like <http://www.example.com>) you'll have to locate your web root. On most servers it appears as a directory named `public_html`, `httpdocs`, `htdocs`, `www` or something similar when you connect to your account by FTP. If unsure, ask your host. They know which directory it is without having to guess.

The third step is getting your archive file to the server. This can be currently performed only by having you manually upload the archive by FTP to the same directory as the one `kickstart.php` is in.

Two words of caution:

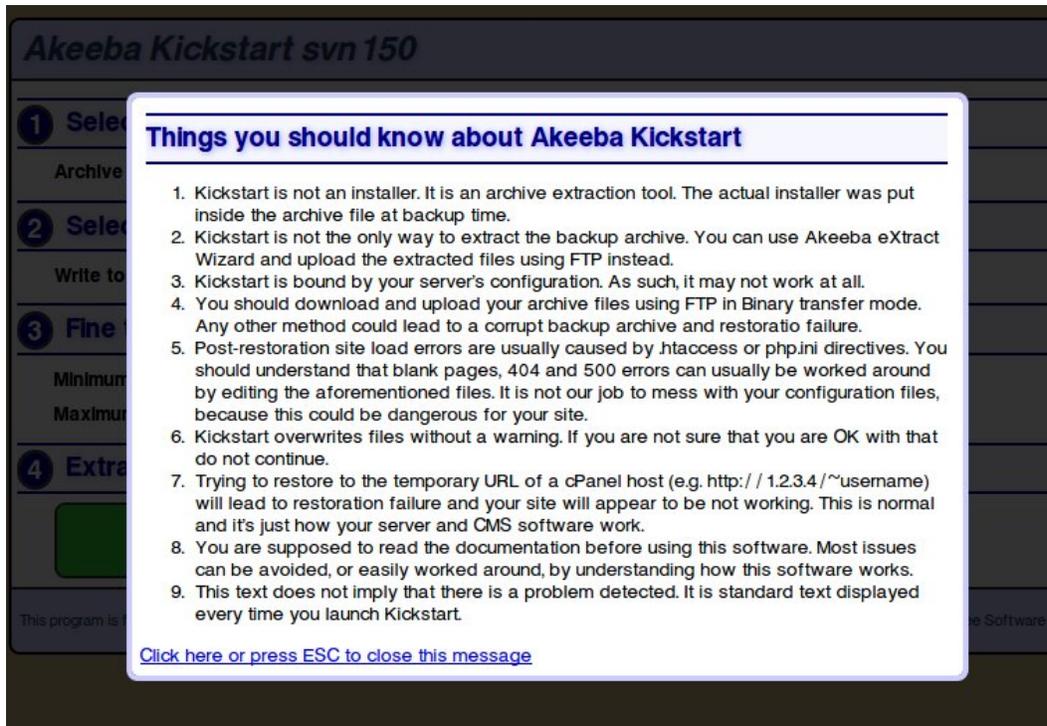
1. Always, no matter what, use the Binary transfer mode to upload your backup archives by FTP. If you are using FileZilla you can do so by clicking on the Transfer menu, then the Transfer Type submenu and making sure that Binary is selected. If you do not do that, most FTP software will fall back to ASCII file transfers which will corrupt the backup archive and cause extraction issues.
2. If you had created a multi-part archive you have to transfer all files. In the case of a JPA file they have the same name and extensions of `.jpa`, `.j01`, `.j02` etc. In the case of a ZIP file they have the same name and extensions of `.zip`, `.z01`, `.z02` etc. If any of the parts is missing, an extraction error will occur.

Do note that the installer is included in the beginning of the archive. Even in the event of a partial restoration you will most likely be able to start the restoration procedure but your site *will not work properly* as many crucial files will be missing!

When you are done, you can launch Kickstart by visiting its URL. It usually has the form of <http://www.example.com/kickstart.php>.

## 2. Kickstart's interface

### 2.1. Initial dialogue



Once you launch Kickstart, you'll first get a standard notice regarding the top things that you should be aware about:

1. Kickstart is not an installer. It is an archive extraction tool. The actual installer was put inside the archive file at backup time.
2. Kickstart is not the only way to extract the backup archive. You can use Akeeba eXtract Wizard and upload the extracted files using FTP instead.
3. Kickstart is bound by your server's configuration. As such, it may not work at all.
4. You should download and upload your archive files using FTP in Binary transfer mode. Any other method could lead to a corrupt backup archive and restoration failure.
5. Post-restoration site load errors are usually caused by .htaccess or php.ini directives. You should understand that blank pages, 404 and 500 errors can usually be worked around by editing the aforementioned files. It is not our job to mess with your configuration files, because this could be dangerous for your site.
6. Kickstart overwrites files without a warning. If you are not sure that you are OK with that do not continue.
7. Trying to restore to the temporary URL of a cPanel host (e.g. `http://1.2.3.4/~username`) will lead to restoration failure and your site will appear to be not working. This is normal and it's just how your server and CMS software work.
8. You are supposed to read the documentation before using this software. Most issues can be avoided, or easily worked around, by understanding how this software works.
9. This text does not imply that there is a problem detected. It is standard text displayed every time you launch Kickstart.

Once you have read all of the above and you feel comfortable with this information, please press the ESC key to close this dialog box.

## 2.2. The setup page

**Akeeba Kickstart svn 150**

**1 Select a backup archive**

Archive file:

**2 Select an extraction method**

Write to files:

**3 Fine tune**

Minimum execution time:  seconds per step

Maximum execution time:  seconds per step

**4 Extract files**

**Start**

Copyright © 2008–2010 Nicholas K. Dionysopoulos / Akeeba Backup. All legal rights reserved.  
This program is free software; you can redistribute it and/or modify it under the terms of the [GNU General Public License](#) as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

The setup page contains of four steps.

The first step is selecting a backup archive. Kickstart automatically scans the directory it's in for JPA and ZIP archives, populating the drop-down list with these results. If there are multiple archives present, please click on the drop down list and select the one you would like to use.

The second step is the selection of the extraction method. There are two supported methods:

**Directly** With this method, Kickstart will try to write directly to files. This is the ideal method if your server is using suPHP or if you have no Joomla! site installed yet. Since Kickstart runs in PHP, which in turn might run with your web server's privileges, you have to ensure that there are adequate permissions to write to the directory Kickstart is in and any existing files and directories with the same name as files and directories in the archive. If you are not sure, first try to remove everything except `kickstart.php` and the backup archive from your server. If you still get errors regarding the inability to write to files, you'll have to use the FTP mode.

**Use FTP** In this mode, Kickstart tries to extract the files in a temporary directory, then use FTP to "upload" them to their final location. The ability to run Kickstart in this mode depends on your server setup. For example, some servers have a very strange firewall setup which doesn't allow Kickstart to connect to your site's FTP. Also note that Kickstart support FTP and FTPS (FTP over implicit SSL). It does not support the SFTP protocol, widely known as Secure FTP or FTP over SSH, as it is an entirely different protocol with very poor PHP support on commercial hosts.

The only implication in using the FTP mode is that you need a writable temporary directory. More on that later.

When you choose this option, a list of several options will expand underneath it. You have to fill them in for Kickstart to be able to work.

## Important

Kickstart 3.1 or later, when extracting any ZIP archive or JPA archives created by Akeeba Backup 3.1 (or later), will also try to restore the last file modification time to match that of the source server. If you activate the FTP mode this will not be possible, as FTP does not support "touching" (changing the modification date and time) of files.

The FTP options which get to be displayed, should you choose the FTP mode, are:

- FTP Host Name** If you are using the FTP mode, this defines the address of the FTP server used for uploading the files. Do note that you must enter only the domain or IP address, without the protocol. This means that `ftp.example.com` is correct usage, while `ftp://ftp.example.com` is *incorrect*.
- FTP Port** The TCP/IP port of the FTP server to use. Normally you want to use port 21 (default plain FTP port). Only use something different if your host tells you so, or if you are using FTPS (FTP over SSL).

## Warning

If your host tells you to use port 22, their connection mode is not compatible with Kickstart. Port 22 is used by the SFTP protocol, which is entirely different than the supported FTP and FTPS protocols. In this case you have to ask your host for plain FTP access to your site.

- Use FTP over SSL (FTPS)** Check the box if you want to use the FTPS (FTP over SSL) protocol. The default is unchecked which means that Kickstart will use an unencrypted connection. Do note that Kickstart *does not support* SFTP, as it is an entirely different protocol than FTPS. The names look alike, but the protocols have nothing to do with each other.
- Use FTP Passive Mode** Check the box to use the FTP Passive mode (default), or uncheck it to use the FTP Active mode. Most probably you want to use the default value (checked), as it is the only way to work around the firewall of your host. A very small minority of hosts require the Active mode, but they will tell you so in their FTP connection instructions.
- FTP User Name** The FTP username.
- FTP Password** The FTP password.
- FTP Directory** The *absolute FTP path* to your restored site's root. **THIS IS NOT THE SAME AS THE FILE SYSTEM PATH TO YOUR SITE'S ROOT!!!** The easiest way to figure this out is to use FileZilla. Connect to your target FTP server with FileZilla. Navigate to the web server's root (usually it's a subdirectory named `httpdocs`, `htdocs`, `public_html`, `http_docs` or `www`). Above the right-hand folder pane you will see a text box with a path. Copy this path and paste it to this setting.
- Temporary Directory** As PHP can't directly upload files while they are being extracted, Kickstart is extracting them to a temporary directory using direct file writes first, then uploads them to their final destination using FTP. Normally, Kickstart will try using the directory it's stored in to extract the temporary files. Many web hosts configure their servers in such a way that this is not possible. Using this option you can customise the location of the temporary directory to somewhere with adequate permissions. You can use either an absolute or a relative (to Kickstart's directory) path for this setting.

If unsure, you can follow an easy workaround. Create a directory named `kicktemp` in your site's root using FTP and give it `0777` permissions (or world-write privileges, e.g. full control to the

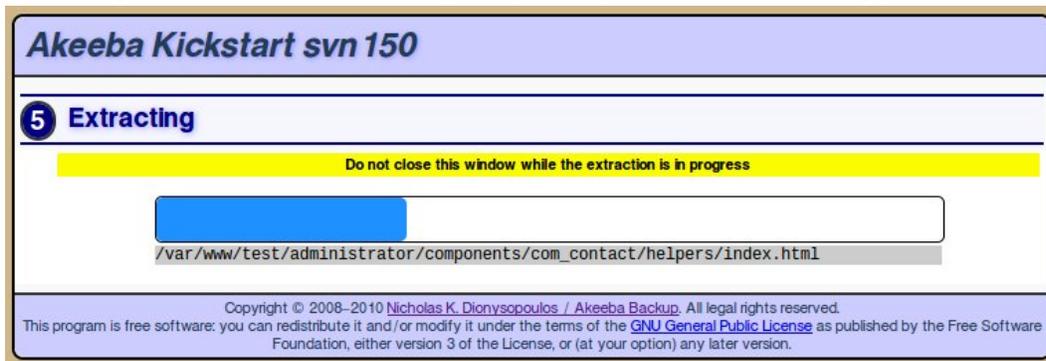
Everybody pseudo-user, if you are using a Windows server). Then type in kicktemp as this option.

The third step is the Fine-Tuning of the extraction engine. You have to understand how it works first. Kickstart will start extracting files until the Maximum execution time threshold is reached. In fact, Kickstart allows for a 20% uncertainty of the accuracy of the elapsed time measurements, so the real duration may be somewhat less than that. If there are more files to extract, it will continue extraction in the next step. This approach allows it to work around the PHP time limit imposed by all hosts. However, if a step takes too little time, it is possible that your host mistakenly identifies this behaviour as a Denial of Service attack. As a result, Kickstart will force each step to last at least as much as the Minimum execution time value is. These two settings are expressed in seconds and can be perceived as a combined "from-to" step duration setting.

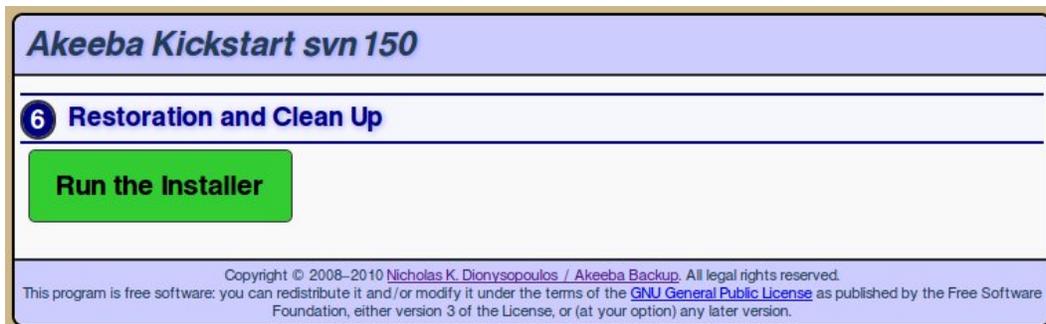
Finally, you will find the options for the Stealth Mode in the Fine Tuning pane. The Stealth Mode allows you to display a static HTML page (optionally with images and SWF animation) to all visitors to the web site except yourself while you perform the restoration and only works with Apache or any other server supports mod\_redirect functionality using .htaccess sites (even some versions of IIS with third party add-ons do). This will prevent accidental disclosure of sensitive information while the restoration is in progress. This is performed by directing all traffic not coming from your IP address to the page you define in here. The first, obvious, setting is the Stealth mode check box. When you tick it, the stealth mode will be activated. The HTML file to show to web visitors option allows you to define the name of the static HTML page to show to your visitors. The file and its resources (images, CSS, Javascript files) must reside inside your to-be-restored site's root. You must only define the name of the file to use, not its URL. This means that `offline.html` is a valid setting, whereas `http://www.example.com/offline.html` is INVALID and will result in a 404 error thrown to your visitors.

## Tip

If you are worried about SEO, fear not. The redirection happens with a "temporary redirection" HTTP status code, which will instruct search engines to revisit your site in a later time. As a result, you are not penalized for duplicate content or otherwise negatively affect your SEO while restoring your site.

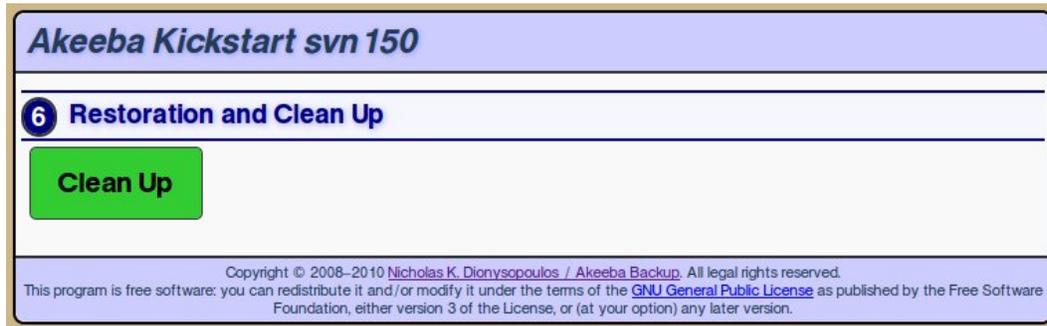


The fourth step is the fun part. Just click on the big, friendly Start button and sit back while Kickstart extracts your archive.



When the extraction is complete, you will be presented with an option to launch the installer. Clicking on the large green button will launch the `installation/index.php` relative URL to a new window. If you were extracting a backup archive taken with Akeeba Backup, this will cause the Akeeba Backup Installer (ABI) which was included in your archive and just extracted to be launched. Technically, you will not be running Kickstart at that point, so you have to refer to the Akeeba Backup documentation for more information on how the restoration script works. **Please do not close Kickstart's window.** You will need it later.

After you have completed your site's restoration and you close the installation script's window, you will get back to Kickstart. The interface has changed slightly in the meantime:



Just click on the Clean Up button. The following actions will be performed:

- The `installation` directory is removed as it is no longer required.
- If you had a `.htaccess` and/or `php.ini` files in your backed up site's root, these files have been extracted under the temporary names of `htaccess.bak` and `php.ini.bak` respectively. At this point, the temporary named files are renamed back to their original names.
- The backup archive (and all its parts, if it is a multi-part archive) is removed.
- `kickstart.php` itself and all of its translation INI files, if present, are removed.



At this point you can simply close Kickstart's window. Alternatively, you click on either button (or both!) to open the respective area of your site to a new browser window/tab.

## 2.2.1. Troubleshooting

**I am getting an AJAX error...**

**Kickstart tells me that this is not a valid JPA archive?**

First, ensure that you have downloaded and uploaded the backup archive using FTP in Binary transfer mode. If not, do it now. This is the most common cause of issues. Then, make sure that you have tried both file writing modes (direct

file writing and FTP mode) and neither works on your site. The next step would be lowering the Maximum execution time setting to 2 or 3 seconds and setting the Minimum execution time to 1 second. If you are still getting this error message, please take a screenshot of the entire message (*do not downscale it*, we'll need to be able to read it) and post it in a post on our support forum [<http://www.akeebabackup.com/forum.html>]. Please include as much information as you can regarding the error condition, how you took your backup, which *EXACT* version of Akeeba Backup you were using ("latest" means nothing, something like 3.0.rc1 does), which *EXACT* version of Kickstart you were using and the PHP version of your host. Remember that the less information you give us, the more time it will take us to figure out what's going wrong and the less happy you'll feel about our support. We need you to help us help you.

### **I am getting "Can't open xyz for writing" or "Can't create directory xyz" error messages**

The first thing you have to check, even though it sounds silly, is that you have enough free disk space. Most probably you have an account quota limit. Since you are extracting an archive, you must have at least as much as 2-3 times free space as your backup archive. This means that if you have a backup archive weighing 100Mb, you need another 150-200Mb to extract it. In total, you'd need 250-300Mb of free disk space before you begin uploading files and extracting the archive with Kickstart.

## **Important**

Some hosts claim "unlimited" disk space. Sadly, this is not always the case. Most hosts have "hidden" limits, such as the amount of files you can host under one account. If you go over that limit, you'll get extraction errors. Another thing is that you "unlimited" host is physically bound to the size of their hard drives. If their hard drive was close to completely filling up, trying to extract your site will also lead to a restoration failure. If nothing else helps with this kind of errors, do contact your host and ask them if you are hitting a file count limitation or their hard drive is full.

Moreover, some hosts have a limitation on the maximum file size PHP can create. For example, Strato allows PHP to create files of only up to 10Mb. Trying to extract bigger files from the archive will lead to such an error. Do note that you might be able to upload large files, such as your site's backup archive, through FTP. However, if you try to extract a large file from the archive (e.g. a large non-split database dump, a large video or music file, etc) it will fail. Your *ONLY* way to perform the restoration is to extract the archive on your local PC, e.g. using Akeeba eXtract, and uploading all the extracted files by FTP. All you'll have to do next is visiting the restoration URL which is in the form of <http://www.yoursite.com/installation/index.php>. Please refer to Akeeba Backup's documentation (the chapter on restoring your site) for more information.

Finally, it may be a classic case of wrong or mixed file and directory permissions (a "permissions hell" situation). This is very easy to happen if you are restoring to a host with an existing installation of Joomla! which doesn't use suPHP, i.e. the majority of hosts. You might want to try using the FTP mode. If this still doesn't work for you, try removing all existing files and directories from your server before restoring the backup archive. It's very easy to mix up ownerships and permissions on a shared host, effectively entering into a "permissions hell" which is virtually impossible to work around unless you have root privileges on an SSH console or, more easily, removing all files from the account. Do note that removing files might require using both an FTP program and your host's control panel, or raising a ticket with your host.

---

# Chapter 4. Advanced features

## 1. Automating Kickstart

Kickstart's automation is part of our 1-click site restoration initiative. The only prerequisite is that your backup archive must be created using the "Akeeba Backup Installer" (a.k.a. ABI) embedded restoration script. This is the default and only option, as of Akeeba Backup 3.0.

The automation procedure covers the entirety of the extraction/restoration process. Once you start Kickstart, it will extract the archive, call the ABI restoration script, it will automatically proceed through all of its pages and then allow you to click on the final Kickstart button which removes `kickstart.php`, the archive file and the installation directory.

Everything is controlled by the contents of a single file which must be named `abiautomation.ini` and located in the same directory as `kickstart.php`. So, you only need to upload three files: `kickstart.php`, the archive and `abiautomation.ini`. If you do that, accessing `kickstart.php` from your browser will result in a fully restored site, without any user intervention (unless an error happens; in this case the process will halt for you to review and correct the error).

The INI file is comprised of different sections. The section named `[kickstart]` is where all Kickstart-related parameters are stored.

```
[kickstart]
kickstart.setup.sourcefile=backupfile.jpa
kickstart.tuning.min_exec_time=1
kickstart.tuning.max_exec_time=5
kickstart.procengine=ftp
kickstart.ftp.host=ftp.example.com
kickstart.ftp.port=21
kickstart.ftp.ssl=0
kickstart.ftp.passive=1
kickstart.ftp.user=myuser
kickstart.ftp.pass=mypass
kickstart.ftp.dir=/public_html
kickstart.ftp.tempdir=/var/www/mysite/public_html/kicktemp
```

All those variables correspond to the options you are presented with when running Kickstart.

`kickstart.setup.sourcefile` **REQUIRED.** The name of the backup archive to extract. You can enter a relative or absolute pathname.

`kickstart.tuning.min_exec_time` **The minimum** time each extraction step may last, in seconds. Defaults to 1 second. It is advisable not to modify this parameter.

`kickstart.tuning.max_exec_time` **The maximum** time each extraction step may last, in seconds. Defaults to 5 seconds. If you are getting timeout errors or HTTP 500 errors, you might want to lower this.

`kickstart.procengine` How to write the extracted files to the disk. It can either be `direct` or `ftp`. In direct mode, all files are written using PHP file writing. In FTP mode, the files are first extracted to a temporary directory, then "uploaded" using FTP to their final location. The FTP mode is much slower, but it might be the only way for Kickstart to work on many servers.

`kickstart.ftp.host` If you are using the FTP mode, this defines the address of the FTP server used for uploading the files. Do note that you must enter only the domain or IP address, without the protocol. This means that `ftp.example.com` is correct usage, while `ftp://ftp.example.com` is *incorrect*.

`kickstart.ftp.port` The TCP/IP port of the FTP server to use. Normally you want to use port 21 (default plain FTP port). Only use something different if your host tells you so, or if you are using FTPS (FTP over SSL).

### Warning

If your host tells you to use port 22, their connection mode is not compatible with Kickstart. Port 22 is used by the SFTP protocol, which is entirely different than the supported FTP and FTPS protocols. In this case you have to ask your host for plain FTP access to your site.

`kickstart.ftp.ssl` Set it to 1 if you want to use the FTPS (FTP over SSL) protocol. The default value is 0 which means that Kickstart will use an unencrypted connection. Do note that Kickstart *does not support* SFTP, as it is an entirely different protocol than FTPS. The names look alike, but the protocols have nothing to do with each other.

`kickstart.ftp.passive` Set to 1 to use the FTP Passive mode (default), or use 0 to use the FTP Active mode. Most probably you want to use the default value of 1, as it is the only way to work around the firewall of your host. A very small minority of hosts require the Active mode, but they will tell you so in their FTP connection instructions.

`kickstart.ftp.user` The FTP username.

`kickstart.ftp.pass` The FTP password.

`kickstart.ftp.dir` The *absolute FTP path* to your restored site's root. **THIS IS NOT THE SAME AS THE FILE SYSTEM PATH TO YOUR SITE'S ROOT!!!** The easiest way to figure this out is to use FileZilla. Connect to your target FTP server with FileZilla. Navigate to the web server's root (usually it's a subdirectory named `htdocs`, `public_html`, `http_docs` or `www`). Above the right-hand folder pane you will see a text box with a path. Copy this path and paste it to this setting.

`kickstart.ftp.tempdir` As PHP can't directly upload files while they are being extracted, Kickstart is extracting them to a temporary directory using direct file writes first, then uploads them to their final destination using FTP. Normally, Kickstart will try using the directory it's stored in to extract the temporary files. Many web hosts configure their servers in such a way that this is not possible. Using this option you can customise the location of the temporary directory to somewhere with adequate permissions. You can use either an absolute or a relative (to Kickstart's directory) path for this setting.

If unsure, you can follow an easy workaround. Create a directory named `kicktemp` in your site's root using FTP and give it `0777` permissions (or world-write privileges, e.g. full control to the Everybody pseudo-user, if you are using a Windows server). Then type in `kicktemp` as this option.

Do note that defining Kickstart's parameters in `abiautomation.ini` is the first step to automating the restoration procedure. There are more sections for the `abiautomation.ini` file described in Akeeba Backup's documentation, under the "Automating the Akeeba Backup Installer" section.

---

# 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.