

...because open source matters

Joomla! 1.5

Installation Manual

Author: Andy Wallace

Joomla! User Documentation Team

Version 0.4

25 September 2007

Acknowledgements & License

Acknowledgements

I would like to pay tribute to the Developers for their continued efforts in putting together the remarkable Content Management System that is Joomla! 1.5.

Furthermore, the same tribute is to be paid to the many other Work Group members, past and present, who have played their part in getting Joomla! to where it is today.

The tribute also goes out to all the everyday Joomla! Community members who have played their part in testing, reporting issues and, more importantly, workable solutions to the Project.

Finally,I would like to single out a couple of people who have made the work on the User Documentation Team possible for the 1.5 release:

Chad McKissick and Leandro Bergantiños without whom the work would be further behind than it already is! Amy Stephen for some last minute reading and suggestions.

License

This document is released under the <u>Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported</u> license.

Additional License Rider

I am happy for the document to be translated.

I am happy for the document to be used on Community, Translation, and other NFP (not for profit) Web sites that utilise Google Ads or similar, to fund their Web sites or other Joomla! related activities.

I am happy for the document to be sold in printed hard copy or reproduced on other media such as CD's or DVD's provided it is **only** the cost of the media and materials that are charged for, and **not** the original work itself, any translations, or any amendments that may have been carried out upon it, whilst ensuring this license and these riders are always reproduced in full.

Andy Wallace

Feedback

We would appreciate any constructive feedback on this document. Please let us have your Suggestions, Corrections, or Modifications in the forum. Or send me (humvee) a personal message from the forums.

Documentation the same as the Joomla! Project as a whole is an evolutionary process, so if you have ideas let us know about them. If you would like to contribute in some way then again use the forum or PM me.

Changelog

Version 0.4 – 25 September 2007 – Release and Help Site conversion

Version 0.3 - 21 September 2007 – Conversion to Help Site Documentation commenced

Version 0.2 - 16 September 2007 - Sorted page numbering added extra material to Acknowledgements & License section, made minor alterations/additions on suggestions from Wilco Jansen.

Version 0.1 - 16 September 2007 - First Release

Table of Contents

Acknowledgements & License	ii
Acknowledgements	ii
License	ii
Additional License Rider	ii
Feedback	
Changelog	iii
Introduction	
Minimum System Requirements	2
Localhost or Remote Host Installations	2
Obtaining Joomla!	
Final Preparation	7
Transferring the files	7
A bit more preparation	7
MySQL Details	7
FTP account details	8
Secure Password Thinking	9
Installation	10
Web Browser Installation	10
Step 1 - Language Choice	
Step 2 - Pre-installation Check	
Step 4 - Database Configuration	
Step 5 - FTP Configuration	
Step 6 - Main Configuration	
Installing the Default Sample Data	
Installing a Compatible SQL Script File	
Installing a Migration SQL Script File from an earlier Joomla! version 1.0.x installation	
Step 7 - Finish	
Manual Installation	
Step 1 – Create and edit the configuration file	
Step 2 – Edit the SQL file	
Step 3 – Upload the files to the Web server	
Step 4 – Create the database and import the joomla.sql data	
Step 5 – Create the primary administrator user account	
Step 6 – Import the sample_data.sql data (optional)	
Step 7 – Delete the installation directory	
Known Issues & Error Handling	
Help Us to Help You	
Further Reference	マつ

Introduction

Well you have made the most important choice so far, by selecting Joomla! 1.5 as your choice of Content Management System (CMS).

Joomla! is currently one of the most popular and effective Open Source projects and has won a number of prestigious awards in its short, but illustrious existence.

Joomla! 1.5 is the second, main incarnation of the Joomla! series of releases. The original Joomla! 1.0 series being a direct derivative of the Mambo CMS which many of the current Joomla! Developers helped create. Joomla! 1.5 is a major step forward from 1.0, with many new features and a far more integrated framework.

This manual seeks to provide you with the necessary information you need in order to safely install the basic core package onto an existing, fully operational, Web server.

We will, by necessity, touch upon the essential needs for setting Joomla! up but this manual is not a detailed guide on how to build and configure a Web server or database. You are essentially expected to have these in operation already.

We will take you through:

- the general steps of obtaining Joomla!
- ensuring your Web server meets the minimum requirements needed
- how to deal with both a straight forward and slightly more complex installation of the software
- possible problems that you may encounter along the way and the resolution of many of these
- together with additional resources and information that is available to you

We trust you will enjoy the process and can then look forward to tailoring Joomla! to your own specific requirements.

Installing and using Joomla! is generally straight forward, getting your perfect Web site takes a lot more effort but there is much, as you will discover, that has been done to make the process easier along the way.

Minimum System Requirements

To successfully install and use Joomla! you must have a fully operational Web server (Apache is the optimum), a database (MySQL is the optimum) and the server side scripting language PHP together with specific modules that are activated within PHP for MySQL, XML, and Zlib functionality. The minimum versions of the various constituent parts of these server components that are required are as follows:

Software	Min Version	Recommended	Latest Versions	Web Site
PHP	4.3.x	4.4.3 or above	5.x series	http//php.net
MySQL	3.23.x or above		5.x series	http://dev.mysql.com/downloads/mysql/5.0.html
Apache	1.3 or above		2.2 series	http://.httpd.apache.org
mod_mysql				
mod_xml				
mod_zlib				

You must ensure that you have the MySQL, XML, and Zlib modules functionality enabled within your Apache Web server installation. These are controlled within the php.ini file.

Caution: Do not use PHP 4.4.2 or PHP 5.0.4;

Localhost or Remote Host Installations

A **localhost** is a Web server and associated database that is set up directly on your computer or that may be on a local network either within your home or business environment. You have direct easy access to the machine upon which the software is situated

A **remote host** is one that you access via the internet it may be owned by you or you may rent it from a dedicated hosting company. In this case there are different flavours such as managed, dedicated, virtual, or shared hosting. But in simple terms the computer that houses the software is remote from you. The scope and detailed explanation of each of these flavours is outside of the boundaries of this manual but whichever option you select you must ensure that they meet your expected requirements together with the minimum specifications detailed above.

In respect of the *localhost* option there are a number of ready made packages that put all the necessary software together (excluding Joomla!) in one easily installable package that generally allow you to have your own personal Web server and database without really knowing too much about how they work.

The following are the more readily available, and popular, varieties of these packages and the operating systems for which they are designed.

Warning: With the exception of the LAMP packages, none of the others should be used for *live* Web sites they are only intended for development/localhost servers. The LAMP packages when used in conjunction with the Linux security measures are generally the same for localhost and live site situations.

The AMP elements within the following package names stand for Apache, MySQL, and PHP.

Package Name	Operating System	Web Site	Documents
WAMP	Windows	http://www.wampserver.com/en/	http://www.wampserver.com/wamp5.chm
MAMP	Apple Mac OSX	http://www.mamp.info/en/mamp.html	http://www.mamp.info/en/help. html
LAMP	Linux (and other Unix)	Distribution Dependant	
XAMPP	Multi-platform –Mac Windows, Linux, Solaris,	http://apachefriends.org	http://www.apachefriends.org/en/faq-xampp.html

In respect of Linux systems - most distributions these days come with the requisite components available within their own repositories, or even within the basic distribution software download that you get. There will often be different ways of activating the functionality so you would need to check the documentation of your own particular distribution choice. The individual distributions compile the necessary dependencies, links, and changes as a part of the installation process, be it RPM, YUM, or one of the other bespoke installers.

Alternatively, on any OS platform you can download and configure the individual components from the various Web sites listed (as you generally would need to do for a live Web site if your hosting provider did not cater for these) and create your own servers, but these packages do provide an easier, integrated solution.

Most of the packages will also usually contain some form of database administration program as well such as PHPMyAdmin or MySQLAdmin to enable effective management of the database, if not, you will find it advantageous to install such a program if you intend doing any sort of database editing work.

The remainder of this Manual assumes for the most part, that you have a fully functioning Web server.

Caution: We would strongly recommend testing Joomla! and its functionality on a *localhost* installation in the first instance to get a feel for the software and what it can offer you.

On remote, hosted or dedicated servers the configuration and availability of these applications will depend on the host provider or the operating system that is installed upon the server. It would be a wise move to determine their current versions as well as the host's policy regarding updating the software. The variation that can occur between providers and OS can be significant and is outside the scope of this brief instruction. If you encounter a problem with your host provider and the use of Joomla! check the forums to see if other users have experienced the particular issue and what their solution was.

Joomla! can be used with alternative Web servers such as Microsoft© Internet Information Service (IIS) as well as alternative database models (database work is very much in its infancy though), but these are not paths we intend exploring in this manual as Joomla! Is primarily developed for use on the AMP combinations already stated.

There are discussions and work under way to expand the platforms upon which Joomla! will operate without significant issue, but this is in its early stages of development. For particular issues, or to see if a combination of programs meet the necessary criteria, check the forums to see if anyone else has succeeded with a particular task or indeed whether you can contribute to one of the ongoing projects.

Once you have completed the necessary installation of your server software it is worth running a quick test to ensure that all the necessary, minimum requirements are met.

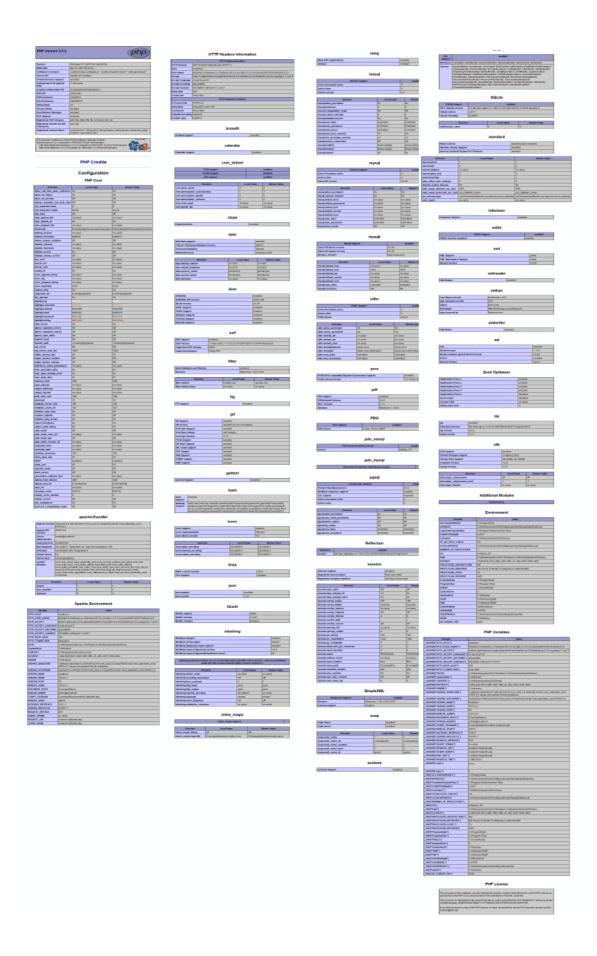
Warning!: Remove the phpinfo.php file from your Web root as soon as you have the necessary information. Leaving it in situ is a security risk. Your Joomla! installation has a built in version of the same script in the Help Menus for future reference.

You can do this very simply by creating a basic PHP script:

```
<?php
// Show all information
phpinfo();
?>
```

Save this as phpinfo.php for example, and save the file to the root of your Web site, then simply enter the address of your Web site into your browser as follows: http://www.yourdomain.com/phpinfo.php or http://localhost/phpinfo.php and you should receive a detailed summary and state of all the PHP compilation options and extensions (such as the Zlib, XML, and MySQL modules), the PHP version in use, server information and environment (if t is compiled as a module), the PHP environment, Operating System version information, paths, master and local values of configuration options, HTTP headers, and the PHP License. See the next page for a (very) compressed view of the information that this script outputs. For a full description of all the elements that are output, visit the explanatory page at http://uk3.php.net/phpinfo.

Once you are satisfied that your server is ready for the installation to proceed, the next step is to obtain a copy of the latest release of Joomla!



Obtaining Joomla!

Getting hold of Joomla! could not be easier; simply point your mouse to the Main Joomla! page http://joomla.org and click the latest release identified in the special Module in the left-hand menu – referenced by the box highlighter. You will note that both the 1.0.x and the latest 1.5.x releases are available but we are only interested in the 1.5.



Joomla! Main page displaying the download Module

Click the 1.5 icon and you will be redirected to the download page for the Joomla! Project within the http://joomlacode.org developer repository.

You will be presented with a screen similar to the following:



Joomla! Code project page displaying the download options for the latest Joomla! version.

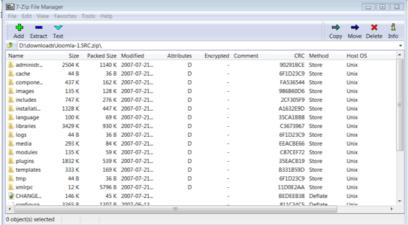
The box highlighter is showing the .zip variant of the three available compression types of download; in addition there are .tar.gz and .tar.bz2 types. Just select the one appropriate for your operating system.

A download pop-up will appear, and you should save the file to an appropriate location on your hard drive.



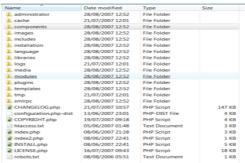
Joomla! Code screen with download pop-up displayed

Open the file on your local hard drive using the appropriate compression program for the type of file. If you do not already have such a program there are many open source programs available for free, download from different locations such as Source Forge. In this instance we are using 7-ZIP File Manager, but they all operate in much the same way (at least on Windows). on Linux systems the same tasks can be achieved from the command line, or once again, through the use of a separate program. Mac OSX has a number of options also including the command line, and The Unarchiver has a good reputation or the default, built-in utility BOMArchiveHelper.app.



7-Zip File Manager displaying the files contained within the Joomla! 1.5 core compressed file.

Uncompress (**Extract**) the package to a suitable location - it is not important where this happens to be so long as you can find the files again when it comes to installing them onto the Web server. The resulting list of directories and files that you will have within your directory will be similar in appearance to the following:



The uncompressed Joomla! 1.5 distribution file pack

Final Preparation

Transferring the files

The first task is to upload the uncompressed collection of files that you created during the last section to your Web server. If you are installing on a localhost - for example the computer you are working on – then it is simply a case of copying and pasting (or moving) the files into the root folder (or a sub-folder) of the Web server. If however you are running the server on a remote host, then this process will involve the use of a FTP (File Transfer Protocol) client program or the control panel of your host provider, if one is available.

The root folder is located in different places depending upon the operating system/distribution and Web server package you are using and it might be called *htdocs, httpd, or www,* but we would be here a long while if we tried to detail every possible combination of OS, distribution, package, and directory structure. So, establishing this is up to you! In some cases it will be possible – as well as quicker and easier - on remote hosted servers to upload the compressed file via your FTP client and to then unzip or uncompress the file directly into the root directory. This will most often be the case with Linux based Web servers where command line access is available. Some hosting companies incorporate a file management system within their bespoke control panels which will include an FTP program.

If you get completely stuck then ask at the forums for assistance **after** first doing a search in case someone else has already asked the same question.

A bit more preparation...

You are now, almost, ready for the final leap-of-faith and the installation of Joomla! but we would recommend gathering together some final bits of information that will be needed to complete the task and it is better to have them to hand from the beginning rather than scrabble around for them whilst proceeding with the installation itself.

MySQL Details

Warning!: Make sure that the database is configured with the UTF-8 MySQL collation
--

•	the host name for your database – if you are installing locally or on a dedicated, remote host – this host name is likely to be <i>localhost</i> . If you are installing remotely to a shared hosting Web server and database it is likely that your host provider has their own way of identifying a particular customer's database, and you must make sure you have this information to hand if you are to successfully complete the installation.					
	0	Your host name:				
•	you set sof you	u are installing locall tings or a name and tware. The default u	sword of the database root user – your access keys to the database. Again if y or to a dedicated remote host these are likely to either be the default password that you had previously entered during installation of the database sername is typically <i>root</i> , although you can change this for something else if ure you keep a note of it. See the next section Secure Password Thinking for			
	0	Your username:				
	0	Your password:				
•	ded ser	dicated remote serve	which you are identifying the database for this Web site. For a localhost or er you will be able to set this to what you want but on shared or virtual hosted in be set by the host company. ne:			
min	al D	y dofault the standa	ed installation of MySOL doos not use a password, it is blank. This will be			

Warning! By default the standard installation of MySQL does not use a password - it is blank. This will be accepted by Joomla! but it is not a particularly wise security habit to get into. You should ensure that you have set a password up within the my.ini file which is the configuration file of MySQL.

FTP account details

Joomla!'s new FTP Layer feature has been introduced to overcome perennial problems that have been experienced by many Users in the past where there are file write permission issues with the Users Host Provider particularly on Shared Hosting servers. This can significantly affect the installation of new Extensions or writing to the configuration.php file.

Using the FTP layer eliminates the need to make directories and files writable and thus improves overall security of the installation and server. It also makes the site administrators job a lot easier!

Note: The FTP layer is not required on Windows based host services as the file write protection is handled differently.

Localhost installations do not require the FTP details to be included, although if you subsequently intend moving your site to a remote server, it may be as well to complete them now.

If you do not want, or are unable, to complete these details at this stage they can be added through the **Control Panel->Site Menus->Global Configuration** screens at a later time.

It will also be advisable if you are intending on using the new FTP layer facility of Joomla! to have your FTP details available. These are:

username – The name you enter to actually access your Joomla! Web site root directory through an

FTP client program. For a Web site on a remote hosting server the host may have provided you was a specific ID related to your account. This will be for the whole of your Web server and you should set up a separate account for access to this Joomla! site root directory only.					
O Your FTP username:					
 password – the password you enter to confirm your identity and therefore access the Joomla! Web site root directly with the FTP client program. This should be different to that which may have been set by your hosting company for the main Web server, where applicable. 					
Your FTP password:					
 host – the URL address of the FTP server for access to your Web site. If you are running this on a local machine (non-Windows only) then this address will typically be 127.0.0.1. If you are using a remote host it may be a specific address that the host sets or a URL related to your Web site 					
O Your FTP host:					
 port – generally most FTP servers utilise port 21 and this is the default setting that Joomla! Assumes 					
O Your FTP port:					
 root – this is the Joomla! root directory within your Web server that the FTP client is required to open into by default. Obtain the full path detail to this directory. 					
Your FTP root pathway:					
Caution: It is important to note that if you run more than one Web site on your server that the pathway to the root directory will change for each site – the other four settings will not necessarily have, or on shared					

Once these details are collated you are ready to proceed with the installation.

hosting likely be able, to change.

Secure Password Thinking

Any password you create for Joomla!, MySQL, Apache, or in fact any passwords you ever create should be made as secure as possible.

Typically this would mean:

- using a minimum of 6 characters -the more the better but 8-10 should be an ideal
- a mixture of upper and lower case alphabet characters, numbers, and permitted special characters for example -, _, *, \$, !, %, although the use of these may be governed by the host settings on shared or virtual hosted, remote servers
- do not use easily identifiable passwords for example, birthdays, children's or family names or words that could be easily associated with you
- in fact try not to use real words at all, replace letters with their numeric *equal* so the word ocean could become 0c34n (yes I know it is a real word and there are only 5 characters but it is just an example) try 0c34n!c and no do not now use that either
- another way is to think entirely off-the-wall. Think of a favourite novel for example, <u>The Hitch-hikers</u> <u>Guide to the Galaxy</u>, and then take say the first and last letter from each word giving a sequence of letters (as indicated by the underscores):

tehsgetotegy

(the spaces are included just for clarity) this clearly means absolutely nothing but it could still be traced – eventually – by a determined cracker so let us mix it up a bit more:

T3h\$93t0T3gY

(again ignore the spaces) but you can now see that it would be a pretty *illogical* logic that would need to be applied to even come close to cracking that and when the additional security features of the various platforms is then laid over the top of this – we would not want to say it is impossible to crack, but they would take a very long time, and of course you should regularly change your passwords anyway.

- if you keep a written record of your passwords always ensure they too are kept secure and safely out
 of the way of prying eyes
- despite the temptation, try to avoid using the same password for all your various access requirements, both at home and at work

Installation

We are now ready to proceed with the actual installation of the Joomla! program onto the Web server.

There are two ways of installing Joomla! The first – Web *Browser Installation* - can be considered easier than the second - *Manual Installation* - really as a result of the number of steps that are required.

Either will work with a little patience and concentration to detail.

Web Browser Installation

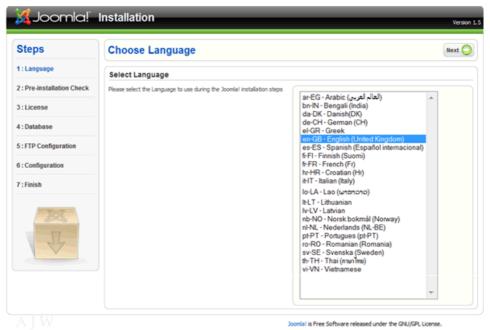
The browser installation method of installing Joomla! is the far straighter forward of the two methods and is what is hoped to be a typical installation. Whilst it is relatively easy it is only a semi-automatic method as you do still have to enter some details during the process. However, the "hard" work is done for you by the installer software itself.

Assuming you have already uploaded the Joomla! core pack of files to your Web root directory, be it on your local machine or a remote host, the next step is to start your Web browser and enter the URL to your Web site. There are a number of options open to you in this process:

- This may simply be http://localhost/joomla for a local installation, or http://www.yourdomain.com for a remote installation.
- If you have installed Joomla! in a sub directory of your Web root then you will need to add that directory to the end of the address for example http://localhost/joomla/test or http://www.yourdomain.com/joomla.
- If you have installed Joomla! as a sub-domain on a remote host this might appear as http://www.joomla.yourdomain.com.

Step 1 - Language Choice

Whichever of these scenarios fits your particular situation, once you hit the **enter** key you should be presented with the following screen:



The Language Selection page of the Joomla! Installation Process

You should notice that **en-GB – English(United Kingdom)** is selected. This is the default language used for all Joomla! Core development. Simply select your preferred language for the installation process. If your own language does not appear in the list you may consider assisting in the translation of the core for other people in the same position. Visit the Translation Forums for further details.

The language files included in the core only relate to the installation process itself and do not affect the Front-end or Back-end displays of Joomla! and by default these are only installed in en-GB. This happens simply, as to include all the translations for the core files would make the download an unmanageable beast in size. Individual languages into which Joomla! has been translated are carried on the Joomla! Code repository site. Full details of the language packs currently available can be found within the Joomla! Developer Network site in the Menu Module on the left of the page.

Reproduced below for convenience:

Copyright & Licence explained Accredited Translations / Translation Partners Translation Policy Translation Manual

Accredited translations are those that have been approved by Joomla!.

Translation Partners are international groups who have developed Web sites that carry translations of the Help Screens and other official documentation and have entered into an agreement with Joomla!.

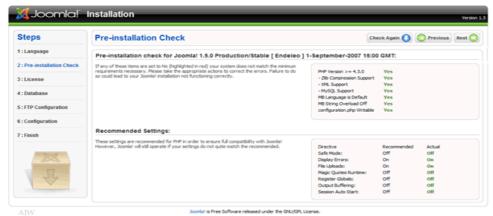
If you wish to contribute to the translation effort contact the co-ordinator of an existing project listed on the Accredited Translations page.

Language packs can be uploaded and installed using the Installation Manager in the **Control Panel- Extensions** Menu. There are separate files for the Site Front-end and the Administrator Back-end.

Once you are happy with your language selection click **Next**.

Step 2 - Pre-installation Check

The next screen is Joomla!'s confirmation of what you hopefully already know if you followed the earlier advice of using phpinfo(). The screen shows whether your server meets all the necessary criteria to successfully complete the installation.



Pre-installation Check Screen

If any of the responses in the first section are set to No you should rectify the situation before attempting to continue with the process as these represent the essential requirements for the installation. Failure to do this may cause your Joomla! Web site to function incorrectly, or require you to carry out additional procedures at the end of the standard browser installation. The most common error that Users encounter is that the <code>configuration.php</code> file is not writable. See the section on Error Handling for details on how to correct this issue later in the guide.

The second block of settings indicate certain specific settings within the PHP code base configuration. Whilst these are recommended, Joomla! will still install but there will be more to do later on and there is a risk that your Web site would be open to malicious assault if you did not rectify them These settings may be adjusted at any time. The first column shows the recommended settings and the second those that are identified within your server.

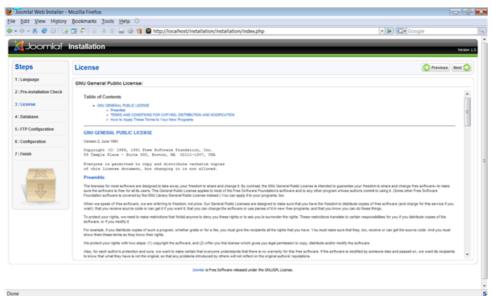
Note: We will detail some of the common problems and solutions in the Error Handling section at the back of this manual rather than blur the picture at this stage.

You do not have to exit the installer in order to change a setting. Once you have made a change simply click the Check Again button to reassess the situation. It is also possible to return to the Language Choice screen by clicking the Previous button.

When everything is set as required, click the **Next** button.

Step 3 - License

There is nothing to actually enter or change on the License screen, however, it is recommended that you read, understand, and agree to the terms and conditions under which Joomla! is released. Please note that whilst there is no specific agreement option (nor indeed a registration process) within this screen, by using Joomla!, you are confirming your agreement.



The GNU GPL Version 2. License

The license under which all Joomla! releases have been made to date is the GNU GPL v2 license. GNU is the organisation responsible for maintaining the license and GPL stands for General Public License. If you have any Joomla! specific questions regarding licensing visit the Legal Forums.

Once you have read the license click the Next button.

Step 4 - Database Configuration

We now enter the final, and you could say, most important stages of the browser installation. This step establishes the information Joomla! requires in order to communicate with your database.



The Database Configuration Stage Screen

You now require the information you (hopefully) secured earlier in this guide.

Select the database type from the drop down list, which includes **mysql** and **mysqli** by default. Typically you will select **mysql** for your database choice. There may be subsequent changes that require the use of **mysqli** but such speculation is outside the scope of this document.

Further Information: If you would like to read more about the difference between the two types visit http://dev.mysgl.com/downloads/connector/php/ where you will find some basic details.

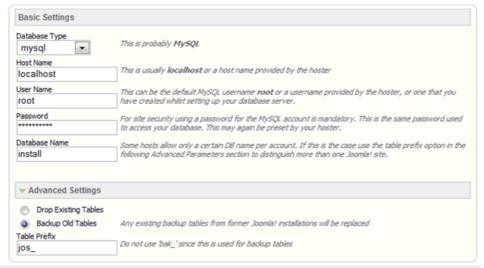
Thereafter, enter the Host Name, User Name, Password, and Database Name for your database.

The Additional Settings fields allow for further definition of your database. If, for example, you have had a previous, but no longer required, database of the same name as you have entered in the field above, you have the options to either drop (delete) the tables within the existing database or create full backups of the tables and therefore retain the information just in case you need to step back from the current installation utilising this backup.

You can also change the Table Prefix that Joomla! will use for all the tables in your database. You may want this facility if you are running more than one Joomla! Web site from within the same database. Never use the prefix *bak* as this is used by Joomla! specifically for back-ups of tables within the database.

Always ensure the inclusion of the single underscore character following the prefix you choose otherwise the prefix will simply "run into" the table name. The default prefix is *jos_*.

Your Database Configuration will now look similar to the following:



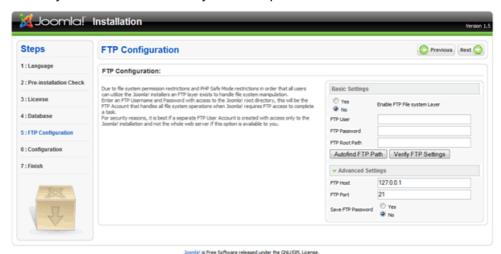
Completed Basic and Advanced Settings of the Database Configuration page

Once all the necessary settings have been entered correctly, click Next.

Note: We will detail some of the common problems and solutions in the Error Handling section at the back of this manual rather than blur the picture at this stage.

Step 5 - FTP Configuration

Due to file system permission and PHP Safe Mode restrictions on certain server hosts, a facility has been introduced in Joomla! 1.5 that will allow all authorised Users to utilize the various Joomla! install & upload processes available within the Control Panel. These include the Media Manager as well as the Installation Manager. The FTP layer exists to handle file system manipulation.



Step 5 - The FTP Configuration Screen

Enter the FTP username and password established during the preparatory section of this guide. This should only have access to the Joomla! root directory, this will be the FTP Account that handles all file system operations when Joomla! requires FTP access to complete a task.

Warning! For security reasons, it is best if a separate FTP User Account is created with access only to the Joomla! installation and not the whole Web server if this option is available to you.

It is not generally necessary to worry about the FTP Configuration page for a localhost installation of Joomla! , although the exception to this might be on a local network.

Note: The settings for the FTP Configuration can be entered, or edited after installation, within the Global Configuration screen in the Control Panel->Site menu or through the Quick Icon on the Control Panel workspace.

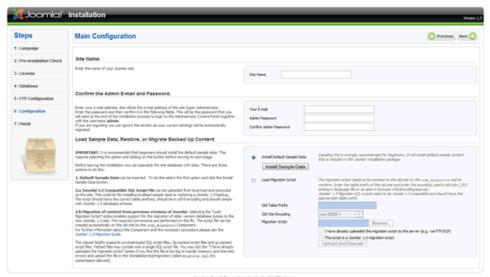
Once you have completed the required information, as necessary or, if you do not require the FTP Configuration to be entered, click Next.

Note: We will detail some of the common problems and solutions in the Error Handling section at the back of this manual rather than blur the picture at this stage.

Caution: It is important to note that if you run more than one Web site on your server that the pathway to the root directory will change for each site – the other four settings will not necessarily have, or on shared hosting likely be able, to change.

Step 6 - Main Configuration

The Main Configuration screen allows the setting of three critical elements for the installation of Joomla! to your Web server.



The Main Configuration screen of the Joomla! installation process

There are three sections to the Main Configuration screen; the first of which is the Site Name. Whilst this may appear obvious it does bear pointing out that this is also the name that will be used when site e-mails are issued, or when error or access warning messages are issued from the Front-end of the Web site. Unlike in earlier releases of Joomla!, and its predecessor, the Site Name will not appear in the User's browser title bar. This entry can be edited at a later time in the *Global Configuration->Site* page of the Control Panel.

The second section relates to key information concerning the primary Super Administrator, you!

Enter your e-mail address, or the one that you want all site warnings, messages, and e-mails to be sent from and that incoming contact methods will be directed to. It will appear as the *From* address on all Site outgoing e-mail messages. There are also two text fields into which you should enter and confirm the password that you will (as the primary Super Administrator) use to login to the Web site, in combination with the default username, for the primary Super Administrator, of admin.

Note: If you are migrating data from an existing Joomla! 1.0 installation, or uploading a **full** SQL back-up from an existing Joomla! 1.5 installation, you do not need to complete these first two sections as the information will be automatically transferred within the migration script or back-up file.

An additional security suggestion that you might consider is to change the User admin to something less obvious once the installation is completed. This can be done (along with any subsequent changes you wish to make to the password) in the Control Panel->Site menu->User Manager screen of the Administrator Backend.

The third and final section relates to the data that you may or indeed may not want to include in the installation process. Essentially you have three choices:

- 1) enter the default sample data that Joomla! provides within the core distribution,
- 2) Migrate the data from an earlier version of Joomla! using the migration tools available, or
- 3) do neither of these and start a completely fresh and empty installation of Joomla!. In addition it is also possible to upload existing data from perhaps a back-up that has been created from another Web site although there is no specific procedure in this section to undertake this. Looking at these options one at a time:

Installing the Default Sample Data

The sample default data is a collection of Sections, Categories, Articles, Web Links, News Feeds, and various other examples of content that have been written simply to demonstrate some of the functionality of Joomla! (much of the content is also quite informative and useful). The data is contained in an SQL file within the core installation.

By default the Install Default Sample Data radio button is selected, but in order to complete the installation of the Sample Data you must also click the adjacent *Install Sample Data* button. Provided all goes well you will notice that this button transforms into a confirmatory message box stating that the Sample Data Installed Successfully; you are then ready to complete this section by clicking *Next*.

Warning! It is not possible to simply do an SQL back-up of a 1.0.x version Web site and upload this to a 1.5 version installation as a result of the significant changes that have taken place with regard to the framework of Joomla!.

Installing a Compatible SQL Script File

There may be situations where for example you have your own localised – in language terms – version of the Sample Data, or a back-up of data from an existing Joomla! 1.5 Web site that you wish to restore/install into the new Web site you are creating. You should complete the Old Table Prefix, and Migration Script items below.

Installing a Migration SQL Script File from an earlier Joomla! version 1.0.x installation

There is a separate and detailed guide on migrating content from earlier Joomla! installations available from the Joomla! Help Site regarding the Migrator Component.

If you are migrating or restoring data select the Load Migration Script radio button. You will notice that this then enables the additional fields for *Old Table Prefix*, *Old Site Encoding*, and *Migration Script*.

Old Table Prefix: This is the prefix used in the database from which the data is being transferred. For example, it may be **mos_** from a default Joomla! 1.0 installation or, if uploading from a core SQL file **#_**

Old Site Encoding: Refers to the Language Encoding used by the donor MySQL database also known as the Collation. Joomla! 1.5 must be encoded with the UTF-8 language. The Old Site Encoding details can be obtained by referring (in PHPMvAdmin) to the *Databases* tab of the main page.

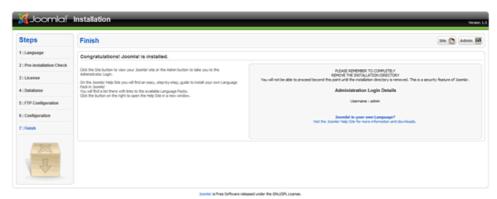
Migration Script: Browse to the Migration Script SQL data file you want to upload from a Joomla! 1.0.x installation that has been created using the Migrator Component.

Warning: The Migrator Component clearly cannot compensate (add) data to any new fields that have been added by the Joomla! 1.5 development (it's good but not magical) therefore it is recommended that you check all migrated data and complete any missing fields that require such action. The most prevalent of these will be the *Alias* field of Sections, Categories, and Articles.

I have already uploaded...: Select this check box if you find that the SQL file is too big to handle (memory and time limit errors) and upload the file in the joomla_root/installation/sql/migration/ called migrate.sql (no compression allowed).

This script is a Joomla! 1.0 migration script: Check this box if (and only if) you are migrating data from an earlier Joomla! 1.0 Web installation, having used the <code>com_migrator</code> Component. This will enable the built in automatic process to complete the transformation of the data to a compatible format with the Joomla! 1.5 framework.

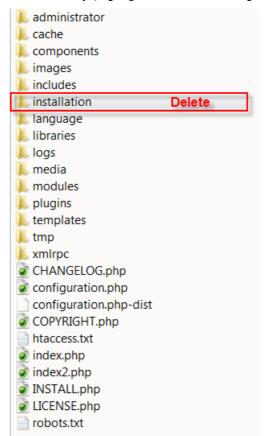
Step 7 - Finish



The Finish page of the installation process

Well, if you have successfully got to this page, then you have passed the first test. Congratulations!

Before proceeding to view the results of your efforts you need to open the root directory of your Joomla! installation and delete the Installation Directory (highlighted in the following image)



. Directory $\&\ {\it File}\ {\it listing}\ {\it highlighting}\ {\it installation}\ {\it file}\ {\it to}\ {\it be}\ {\it deleted}$

Joomla! has been configured that until this directory is removed you will not be able to proceed beyond this point and therefore complete the installation.

WARNING! An administrative error in the preparation of the Joomla! V1.5 RC2 release meant that this safety measure was disabled and therefore anyone using this release is able to complete the installation without deleting the directory. We apologise for this oversight and strongly recommend that you still remove the directory for the security of your Web site.

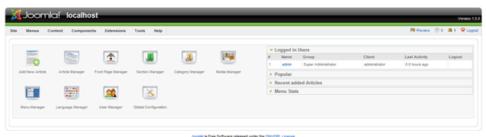
Once you have deleted the installation directory you can either click the Site or the Admin buttons. The former will open the Site Front-end view of your new Joomla! Web site and the latter will take you to the Administrator Back-end login screen:



Joomal is Free Software released under the GNU/GPL License. The Administrator Login Screen

Enter the username **admin** and the password you entered in Step 6 of the installation process, before clicking Login.

You will then enter the Administrator Back-end:



The Administrator Back-end - Control Panel

...and that is it! You are now ready to Joomla!. Enjoy your experience and we hope you will be able to develop your Web site to its full potential for the purpose you desire.

Good Luck!

Manual Installation

In certain circumstances there might be a problem with using the standard Browser Installation method described, but all is not lost. It is possible to install Joomla! in a more complex, but never-the-less straightforward process provided it is completed in sequence.

Step 1 – Create and edit the configuration file

Open the local directory where you uncompressed the Joomla! Core distribution directories and files and copy the file configuration.php-dist.

Rename the copied file to configuration.php, and open it in your code editor.

Edit the following fields in particular, prior to saving the file in the joomla_root directory of the installation. The remaining fields can be edited through the Global Configuration screen of the Control Panel->Site Menus. See the image on the next page for a highlighted reference to these particular fields.

```
var $sitename = 'your Web site name';
var $dbtype = 'mysql';
var $host = 'localhost';
var $user = 'your database username';
var $password = 'your database password';
var $db = 'database name';
var $dbprefix = 'jos_'; // This is the default database table prefix. Change this to whatever you change
the MySQL table prefix to in Step 2.
var $secret = 'FBVtgglk5lAzEU9H'; //Change this to a random mixture of upper and lower
alphanumeric characters. This is an important security feature and should not be neglected.
var $ftp host = '127.0.0.1'; //This is the default localhost address reference. Your Web host may have
set this differently.
var $ftp port = '21'; // Port 21 is the default FTP port on most operating systems, but may have been
configured differently by your host provider.
var $ftp user = 'your ftp username';
var $ftp pass = 'your ftp password';
var $ftp root = 'the absolute path of the directory that the ftp client should open within';
 $ftp enable = '1'; Set to '1' to enable the FTP layer facility.
                   = '/tmp'; //The absolute path to the tmp directory within the root directory of your
Joomla! installation. This should not be confused with the same named directory of your Web server.
var $log path = '/var/logs'; //The absolute path to your Web server log directory.
var $mailfrom = 'your e-mail address';
var $fromname = 'your Web site name for example';
```

```
1 <?php
2 /**

          * If you are installing Joomla manually i.e. not using the web installer * then rename this file to configuration.php e.g.
          * UNIX -> mv configuration.php-dist configuration.php
* Windows -> rename configuration.php-dist configuration.php
           * Now edit this file and configure the parameters for your site and \star database.
           class JConfig (
                      * Site configuration section
                    */
/* Site Settings */
* Site Setting = '0';
                      /* Site Settings -/
var Soffline = '0';
var Soffline message = 'This site is down for maintenance.<br /> Please check back again soon.';
var Soffline_message = 'This site is down for maintenance.<br /> Please check back again soon.';
var Soffline_message = 'This site is down for maintenance.<br /> Please check back again soon.';
                 var $sitename = 'Joomla!';
var $editor = 'tinymce';
var $list_limit = '20';
var $legacy = '0';
                    * Database configuration section
                                                                                                                See the section in the Browser Installation regarding the database setting s for reference of the entries required here
// Normally mysql
                     /* Database Settings */
var $dbtype = 'mysql';
var $host = 'localhost';
var $user = '';
var $gassword = '';
var $db = '';
                                                                                                                           // Normally mysq1
// This is normally set to localhost
// MySQL username
// MySQL password
// MySQL database name
// Do not change unless you need to!
                     var $dbprefix = 'jos_';
                    /* Server Settings */
var $secret = 'FBVtggIk5lAzEU9H';
var $gzip = '0';
                                                                                                                    secret word, however this is clearly not possible during the manual configuration of this file therefore you should replace this with a random sequence of alphanumerics in upper and lower case.
                     var Serror_reporting = '-1'; ran
var Shelpurl = 'http://help.joomla.org';
var Skmlrpc_server = '1';
                    var Stmltpc_server = '1';
var Sttp_host = '';
var Sttp_base = '';
var Sttp_base = '';
var Sttp_noot = '';
var Sttp_noot = '';
var Sttp_enable = '';
var Stmp_path = '/tmp';
var Stog_path = '/var/logs';
var Soffset = '0';
                                                                                                              Refer to the Web Browser Installation method for details of the required entries for these fields.

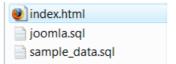
Enter the details within the pairs of single quote marks.

The only additional field is the var Sftp enable = ' '; - to enable this simply enter the numeric 1 between the single quote marks.
                                                                                                                The var Stmp_path is the absolute path to the tmp folder in the
                                                                                                               |comia_root directory.
The var $log_path is the absolute path to your web server's log file
directory.
// Session time
                    /* Session settings */
var $lifetime = '15';
var $session_handler = 'database';
 69
                    /* Mail Settings */
var $mailer = 'mail';
var $mailfrom = '';
var $fromname = '';
var $fromname = '';
var $sendmail = '/usr/sbin/sendmail';
var $smtpauth = '0';
var $smtpauth = '0';
var $smtpause = '';
var $smtppass = '';
var $smtppass = '';
var $smtppass = 'localhost';
                      /* Cache Settings */
                    var $caching = '0';
var $cachetime = '900';
var $cache_handler = ':
                     /* Debug Settings */
var $debug = '0';
var $debug_db = '0';
var $debug_lang = '0';
                     /* Meta Settings */
var $MetaDesc = 'Joomla! - the dynamic portal engine and content management system';
var $MetaReys = 'joomla, Joomla';
var $MetaTitle = '1';
                     var $MetaAuthor = '1';
                    var $sef = '0';
var $sef_rewrite = '0';
                     /* Feed Settings */
```

Default configuration.php created from configuration.php-dist

Step 2 – Edit the SQL file

Open the directory installation->sql->mysql. You will be presented with the following files:



Contents of installation->sql->mysql directory

Open the file <code>joomla.sql</code> in your editor and edit the database table prefix. Use the **Find and Replace** command of your editor and enter **#__** (hash double-underscore) in the Find field and **jos_** in the Replace field and select **Enter**. Save the file ensuring this is done with utf-8 NO BOM encoding only. This is extremely important for the operability of the installation. This file will create the table structure of your Joomla! Database.

If you want to add the Sample Data to your database you need to follow the same procedure with the sample data.sql file, again ensuring it is saved with UTF-8 NO BOM encoding only.

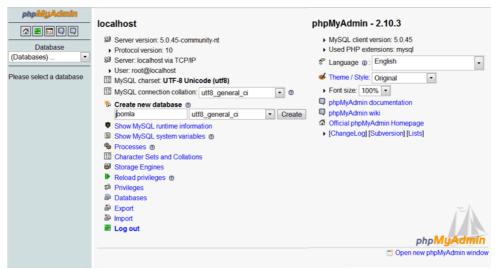
Further Information: The BOM (Byte Order Marker) adds a line of code to the top of a data stream - much like a signature. Joomla! does not require this signature and accordingly you must always ensure that the editor you use does not add it. Windows Notepad for example, adds this code amongst other things and should always be avoided.

Step 3 – Upload the files to the Web server

Upload the Joomla! Core Distribution directories and files as previously described, to the Web root directory or named sub-directory of your Web server, including the newly created <code>configuration.php</code> file, using an FTP client program or your Web hosts control panel if provided. If the installation is on your local computer you can simply copy or move the files to the Web server directory.

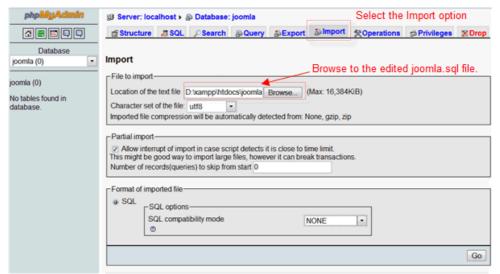
Step 4 – Create the database and import the joomla.sql data

Access your database server using your preferred MySQL control system, we are going to use PHPMyAdmin and create the database with the name you entered in the configuration.php file at Step 1. If you are on a shared hosting, remote server you will probably have been given a specific Database name and do not therefore need to take this action.



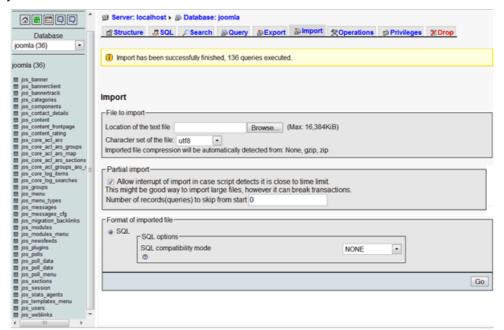
Create a new database

Select the Import tab in PHPMyAdmin and then browse to the correct directory from the **joomla_root**/installation/sql/mysql directory and select the edited <code>joomla.sql</code> file. Click Go and the data is imported into the database to create the table structure of the installation. Replace **joomla_root**/installation with the correct path to the file on your installation.



Importing joomla.sql file into prepared database

After the data is successfully installed you will notice that the Tables are now displayed in the left hand pane of the PHPMyAdmin interface.



Successful Import of joomla.sql into the database displaying newly created Tables

Congratulations, you have now successfully manually created your Joomla! Web site. To verify this open your browser and enter the address (in our demonstration examples' case) *localhost/joomla* (replace localhost/joomla with the full URL if the installation is on a remote server) and you will see your new Web site all-be-it it will look pretty bare. You will not be able to access the site to log in and the Administrator Back-end will not be accessible as you do not yet have an admin user.



Basic Joomla! Web site view after completion of database and Table creation

By default Joomla! creates the Main Menu with the associated Home Menu Item, but that is all that is available.

Proceed to the next step to Create an administrator user account Step 5.

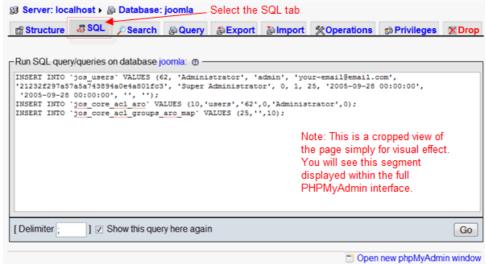
Step 5 – Create the primary administrator user account

In order to create the first administrator user you must enter the following Query into the database using the MySQL administration panel (or command line). This will set the initial username as **admin** and the password as **admin**.

Warning!: You must edit this password immediately you complete the installation particularly on a public/live Web site otherwise your whole Web site will be vulnerable to anyone who guesses the password

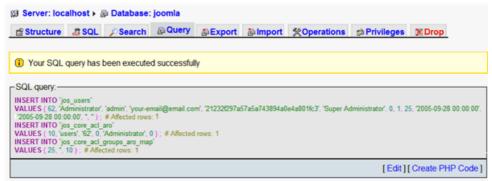
INSERT INTO 'jos_users' VALUES (62, 'Administrator', 'admin', 'your-email@email.com', '21232f297a57a5a743894a0e4a801fc3', 'Super Administrator', 0, 1, 25, '2005-09-28 00:00:00', ", ");
INSERT INTO 'jos_core_acl_aro' VALUES (10,'users','62',0,'Administrator',0);
INSERT INTO 'jos core acl_groups aro map' VALUES (25,",10);

Use the data in the code box above to create an Administrator account by Running an SQL Query within the PHPMyAdmin interface.



Run SQL Query view prior to running the Query

Select the SQL tab of PHPMyAdmin and enter the code in the Query window. When ready click the **Go** button. After a few seconds you should receive a confirmation that the query was successful as follows:



MyPHPAdmin Confirmation screen of successful Query execution

If all goes according to plan you will now be able to access the Administrator Back-end of your Joomla! Web site.

WARNING!: You must delete the **installation**/ directory from your **joomla_root**/ directory. This is an essential security measure and must not be overlooked.

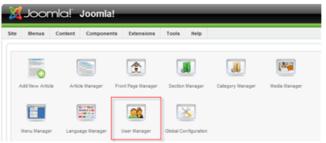
Enter *localhost/yoursitename/administrator* into the address box of your browser (replace localhost/yoursitename/ with the full URL if the installation is on a remote server), and the following screen will be displayed:



The Administrator Login page of your Web site

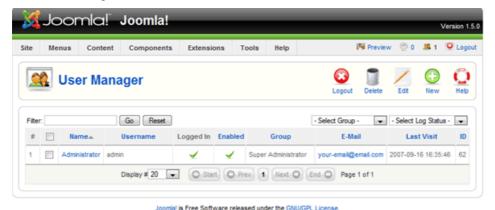
Enter the username **admin** and the password **admin** and click the Login button.

Your first task must be to edit the User **admin**. Open the User Manager by clicking the Quick Icon on the Control Panel.



Select the User Manager Quick Icon

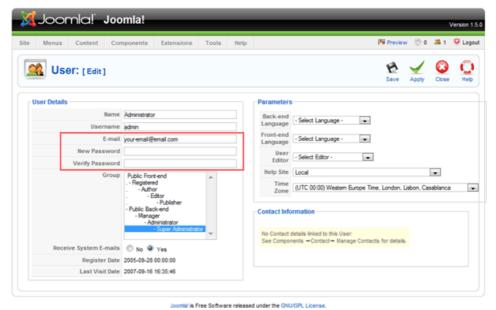
This will open the User Manager:



The User Manager access screen

continued...

Click on the Administrator name and edit the details to your own preferences paying particular attention to the password and the e-mail address.



The User: [Edit] screen with the e-mail and password fields highlighted

You can select and change any of the other details as you wish to at this stage, but you probably could do with a cup of tea (or something stronger!).

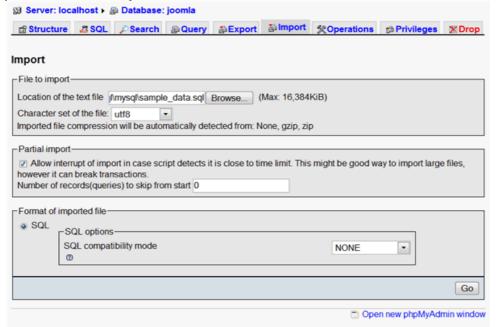
Congratulations, you now have access to your basic, clean installation of Joomla!.

If this is the first time you have used Joomla! and want to see how it all could look with a bit of effort you will want to install the sample data. Proceed to Step 6 - Install Sample Data.

If, however, you are now satisfied with what you have created and wish to develop the site yourself proceed to Stage 7 – Delete the installation directory

Step 6 – Import the sample data.sql data (optional)

If you require the sample data to be installed to the database you must complete a further Import process. Select the Import tab in the PHPMyAdmin interface and browse to the renamed installation



Import screen ready for the instruction to proceed with import

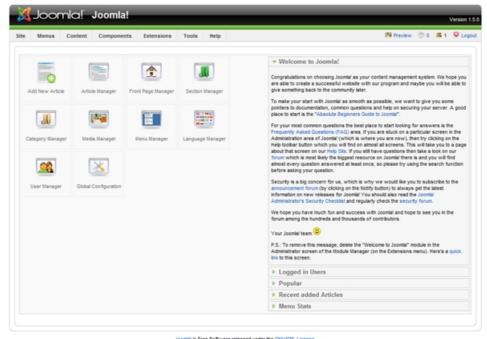
Once the file is selected from the browser click Go.

If all goes according to plan you will receive a confirmation message.

i Import has been successfully finished, 210 queries executed.

Confirmation message for successful Import of the sample_data.sql

When you next Login to the Administrator Back-end (or refresh your browser if already there) you will now see the Back-end has been fully populated by the Sample Data.



Administrator Back-end – The Control Panel with Sample Data installed

It is now advisable to scout around the functions of the Control Panel and see what everything can do and getting used to the Joomla! way of doing things.

The Front-end display also looks considerably healthier with the Sample Data installed. Spend some time navigating around and getting a feel for Joomla!

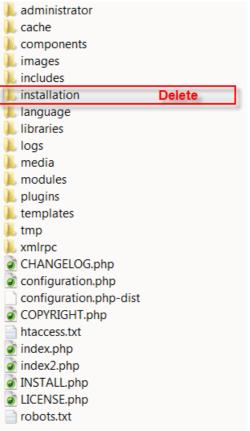


You can Login to the Front-end using the same username and password as you do for the Back-end. A more secure alternative is to have a separate username and password for Front-end access.

To complete the installation proceed to Step 7 – Delete the installation directory.

Step 7 – Delete the installation directory

As with the Web Browser Installation process the final major step is to delete the installation directory from the Web site root directory.



Step 7 - Delete the installation directory

WARNING! It is essential that the installation directory is removed as soon as you have completed the installation. Failure to do so will leave a significant security risk for your Web site. As you have already found, unlike the browser installation you are able to access the site without taking this step and the consequences could be catastrophic further down the time line!

Well, that is it all finished. We hope you enjoy using Joomla! and invite you to become an active part of the ever-expanding Community that makes Joomla! so special.

If you have been helped by this guide, let others know about it. If you have any comments or suggestions to make on the content or coverage that we provide, please visit the User Documentation forums.

If you would like to assist in the preparation of additional documentation for Joomla! please let us know, again on the forums. We are always on the look-out for new contributors.

Known Issues & Error Handling

We are generally holding off on compiling this section until the final release of Joomla! 1.5 is made. We will add obvious repetitive issues that have a common thread in the forums as they arise, or are identified by the Developers and Quality and Testing Work Groups.

Help Us to Help You

A few simple facts to start things off:

- · Joomla! is not a commercial business
- · there are no paid employees
- everyone within the Core Team gives their time freely and for free
- · everyone within the various Work Groups give their time freely and for free
- everyone is a VOLUNTEER;
- everyone involved with the development and support of the Project have real lives, jobs, and families outside of Joomla!
- to many Joomla! is far more than a just a hobby, it is a passionate extension of and addition to their normal existence.
- Joomla! is released as Open Source software this means the code is provided and you can change
 it, add to it, copy it, develop it further and none of this will cost you a penny! We do insist that you
 retain the copyright notices within the code and that you abide by the GNU GPL v2.0 license under
 which the software is released.
- the essence of Joomla! is the massive Community that has developed in a very short (in relative terms) period of time be a part of it and help it move forward
- There is a major ethos within the Community which most work to and that is "pay it forward"...what this means is that where you may have asked for help in the past and been supported by existing members in the Community, you in turn do the same for others seeking help when you are able to.

If you want to know something check to see whether your question has already been asked and answered in the forums by doing a search before you ask a new question. The current built-in forum search is known to be less than effective and we recommend that you run a Google search for "joomla" and then add key words by using "+" sign ahead of a specific word to find within the results. Alternatively use the Advanced Search facility of Google. If, after running a search or two, changing the words or phrases used, you cannot find the answer start a new topic in the forum.

- When seeking help in the forums always:
 - ensure you post in the correct forum (not always easy if it is something you are new to)
 - · use a descriptive title
 - state the Joomla! version number you are asking (this helps avoid confusion)
 - explain the problem you are experiencing and explain what you have attempted to do in order to resolve the problem/difficulty you are experiencing
 - ideally state your system setup. What is your operating system, which version of PHP, MySQL, and Apache you are using
 - · explain how someone can replicate the same situation
 - do not "bump" your post if someone does not answer it it may well be that the question has been asked and answered so many times before that you should really have done a proper search of the forums, Help Site, FAQ's, before asking. It may also be that it is such an unusual issue that the majority of Users do not know the answer, in which case it could be a bit of a waiting game until the individual who can help you gets to see the post
 - if you solve the issue yourself, make a note of what you did on your own post of the steps you took to rectify it. This may help someone else in the future
 - once your issue has been solved, modify your original post as solved by selecting this setting from the drop down list of options available
- Please follow the Forum Rules at all times they are there for a reason

Further Reference

Details will be added in due course to this section. Typically this will comprise links to resources within the				
Details will be added in due course to this section. Typically this will comprise links to resources within the Joomla! Sphere of operations, plus external resources of general use.	Ť			