



MAMP PRO
manage your websites locally

MAMP PRO



1.1.1 March 2007

MAMP PRO

User Guide

Standard 1.1.1
March 2007

© 2007 living-e AG
All rights reserved.

Printed in Germany

living-e AG does not extend any guarantee or warranty concerning the accuracy and correctness of any information contained in this manual. This manual may not be reproduced by any means, either electronically or mechanically, photocopied, recorded, reproduced or transferred by information storage or information retrieval systems by the purchaser, for purposes other than private use without the express written consent by living-e AG. The purchaser is authorized to make one backup copy of the software. A copy of this software can be requested from living-e AG at any time or it can be downloaded at www.living-e.de. Neither living-e AG nor suppliers of living-e AG shall be held liable for any damage (this shall include, without restriction, any damage arising from lost profits, operation breakdowns, loss of business information or data or any other financial losses), which arise from the use of this product or from the inability to use this product, even in the event that living-e AG has been informed of the possibility of such damage. In any case of damage, liability of living-e AG shall be limited to the amount you have actually paid for the product.

Microsoft Windows and Explorer are trademarks of Microsoft Corporation. Macintosh and Apple are trademarks of Apple Computer Inc. UNIX is a trademark of UNIX System Laboratories. All other trademarks are the property of their respective owners.

Contents

1 MAMP Pro - Help 7

- Installation 7
 - Installation requirements 7
 - Installation process 7
 - Updating MAMP 7
 - Uninstall 7
- First Steps 8
 - Overview 8
 - WebStart 8
 - Start / Stop 8
 - Status 8
 - Factory Settings 9
 - Revert 9
- Server 9
 - General 9
 - Ports 9
 - Start Apache / MySQL as user 9
 - Autostart Options 9
 - Apache 10
 - MySQL 10
 - PHP 10
 - Dynamic DNS 11
 - Postfix 12
- Hosts 12
 - General 12
 - Advanced 13
- Advanced functions 14
 - Log files 14
 - Edit configuration files 14
 - Settings 14
- Background 14
 - File owner 14
 - File permissions 15

2 FAQ 17

- With which editor can I edit PHP files? 17
- Where can I find PHP classes? 17
- Where exactly are the MAMP PRO files created or changed? 17
- Can I use "MAMP Standard" at the same time as MAMP PRO? 18

3 Glossary 19

Index 21

1 MAMP Pro - Help

1.1 Installation

1.1.1 Installation requirements

MAMP PRO is a configuration tool and frontend for the MAMP. To use the MAMP PRO, your system must meet the following requirements:

- A working MAMP installation (MAMP can be downloaded directly with the MAMP PRO installation package)
- Operating system: Apple Mac OS X, version 10.4.0 or later

1.1.2 Installation process

Download the MAMP PRO disc image from <http://www.mamp.info>. Open the image and drag MAMP PRO into your *Applications* folder.

Note: You need administrator permissions to install MAMP PRO!

If MAMP has not been installed yet, please download and install it. The MAMP, too, has to be installed in your *Applications* folder!

1.1.3 Updating MAMP

MAMP PRO needs a current version of the MAMP. If an older version of MAMP is currently installed, please perform an update.

Procedure 1 MAMP update

- 1 Rename the current program folder MAMP to MAMP_OLD
- 2 Load the installation image of MAMP from <http://mamp.info> and open it
- 3 Drag the MAMP folder from the installation image to your "Applications" folder
- 4 Copy the directories "htdocs" and "db" from your MAMP_OLD folder into the MAMP folder. It contains your personal HTML files and database contents. Overwrite the folders in the new MAMP folder
- 5 Check whether all data has been transferred correctly
- 6 The MAMP_OLD folder can now be deleted. You may however keep it, so you can fall back to your original setup

1.1.4 Uninstall

MAMP PRO saves its settings per user. The resulting configuration files are preserved after deleting the MAMP folder and MAMP PRO application. To completely remove MAMP PRO including all configuration files, please use the Uninstaller, which you can find in the installation image of MAMP PRO.

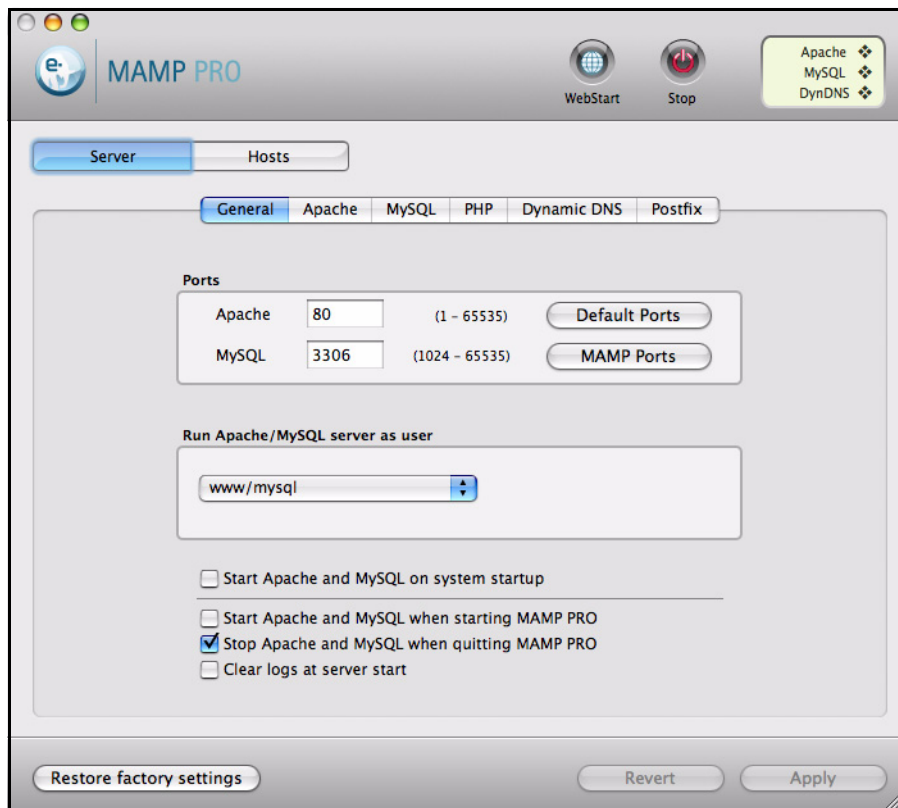
1.2 First Steps

After successful installation you can launch your local web server. Start MAMP PRO and click on the Start button in the title bar of MAMP PRO. In the status display on the top right, the launch status of the server is displayed. Should you not be logged in as administrator, you are asked at this point for the administrator's password. The web server starts by default on port 8888. This port must be specified when calling the local web page in the browser, e.g.: `http://localhost: 8888!` Now you can start creating additional virtual servers. How to accomplish this is explained in Section 1.4, "Hosts,".

1.2.1 Overview

Start MAMP PRO. The program window opens. Here you have access to all configuration options of your server(s).

Figure 1 MAMP PRO program window



1.2.2 WebStart

This button will open the start page of your local webserver. You can change the start page in the menu bar *MAMP PRO* > *Preferences*.

1.2.3 Start / Stop

This button starts or stops the services of the MAMP PRO server.

1.2.4 Status

The status display in the upper right corner shows the started services (Apache, MySQL and DynDNS)

1.2.5 Factory Settings

This button restores the factory settings of MAMP PRO. Individual configurations will be lost. Simultaneously, all services will be restarted with the default settings.

1.2.6 Revert

This button discards all changes, which have not already been confirmed with *Apply*.

1.3 Server

1.3.1 General

Configure the most important settings for the MySQL database and the Apache webserver.

1.3.2 Ports

Server programs, when addressed via the network, need to be allocated to a certain network port. This way, multiple diverse server programs may run on one machine. Every service has a default port, which initializes the program. For example, a webserver is initialized on port 80, the MySQL database server utilizes port 3306. MAMP PRO allows you to determine which ports the server should respond to for incoming connections. MAMP does not utilize the standard ports in its factory setting. That way, the MAMP servers can run additional to standard web and MySQL servers already installed on your Mac OS X. Should ports 8888 and 8889 be in use by a different application, please change the values accordingly.

The button Default Ports will set the ports to the value commonly used on the internet. This can be useful, if you want to access the webserver of your MAMP PRO installation with DynDNS from the outside.

The button MAMP Ports will reset the ports for Apache and MySQL to 8888 and 8889.

If the services of MAMP PRO should be accessible from the internet, please make sure the ports in your firewall are opened accordingly.

1.3.3 Start Apache / MySQL as user

Every program will be executed with a certain user of the OS. Generally, it is www for the webserver and mysql for the MySQL database server. If the files are to be edited with other programs, such as HTML editors, it might be more comfortable to start the servers with your own user name, since this will avoid problems with access rights. Choose from the select box, with which user the servers should be started.

Note: You should only start the servers with your own user name, if the machine is adequately protected against malicious attacks from the internet, because some scripts on the server might enable unlimited access to your personal data.

1.3.4 Autostart Options

Start Apache and MySQL at system start: Apache and MySQL are started during startup of the OS, this means that the services are available before a user has logged into the system. This can be convenient if you have configured an automatic reboot after an

power outage for your machine and want to make sure that the services are available at all times, even if no user has logged on.

- Starting Apache and MySQL at startup of MAMP PRO: The services will start automatically at startup of MAMP PRO
- Stopping Apache and MySQL at shutdown of MAMP PRO: The services will be stopped automatically when MAMP PRO shuts down.
- Delete log files at server startup: The log files will be emptied before startup of the services. That way only current entries will be in the log files.

1.3.5 Apache

Apache Modules: The webserver functions can be upgraded with the installation of modules. PHP is one of those modules. Select the modules which should be loaded. Module Description will provide information pertaining to features and functions of the selected module.

Log file: If any errors occur at startup or during execution of the Apache server, the messages will be saved in a log file. You can select a location to which the log file should be saved to with the *Choose* button.

View log: Display the current content of the log file.

1.3.6 MySQL

MySQL root password: A root password exists for the MySQL server for access through a database administrator. This user has unlimited access to all databases.

Change MySQL root password: Set a new root password. Attention: The password of the factory settings is also 'root'. If your MAMP PRO is accessible from the internet, we recommend the use of an individual password, which only you know.

Allow local access only: If the checkbox for “Allow local access only” is ticked, network access to the database is prohibited. In this case, only programs installed locally (localhost) on the machine, can use the database.

Launch phpMyAdmin: phpMyAdmin is a web-based administrative tool for the database. It allows you to change data and perform administrative duties like creating new databases.

Log File: If any errors occur at startup or during execution of the MySQL server, the messages will be saved in a log file. You can select a location to which the log file should be saved to with the *Choose* button.

- "Choose": Location of the saved log file.
- "View Log File": Display current content of the log file.

1.3.7 PHP

PHP Version: Choose whether PHP 4 or PHP 5 should be used. The exact PHP version depends on the installed MAMP version. For more information, please consult the MAMP version history.

Error handling: Determine how PHP should react if an error occurs during the execution of a PHP script.

1. Determine which error types should be reported.

2. Determine if these errors should be recorded in a logfile and / or displayed in the browser.

- All errors and warnings: All errors will be reported.
- Errors: Script errors that make the further execution of the current PHP script impossible.
- Warnings: General errors in the PHP environment.
- Notices: Possible problems, that do not concern PHP, but which could be a notice of an error in a script.
- Other: Report further error types through constants. Please turn to the PHP documentation for further information.
- Display: Display errors in the browser
- Log: Save errors to a log file

Log File

- Choose: Select a location where the log file should be saved.
- View: Show current content of the log file

1.3.8 Dynamic DNS

If you would like to make your MAMP PRO server accessible from the internet, you will need a host name, which refers to the Internet address(IP) of your connection(i.e. DSL). In most cases, the IP will be reset with every connection to your provider. Services like DynDNS.com provide a dynamic allocation between your IP and a host name. For this to work, DynDNS.com needs to be informed about your current IP. MAMP PRO can do this for you.

Note: To use this function, you will need to register with one of the providers of such a service. This is independent of MAMP PRO and is not a service provided by living-e AG.

User: Enter the user name that was given to you by the provider of the dynamic DNS.

Password: Enter the password that was given to you by the provider of the dynamic DNS.

Off: Deactivate the "Dynamic DNS" service.

Start and stop with Apache: Starts the "Dynamic DNS" service with the start of the Apache service.

Start on system startup and run all the time: Starts the "Dynamic DNS" service with the operating system.

Log: All the events of the Dynamic DNS service will be recorded. Determine where this should happen.

- **Choose:** Select a location where the log file should be saved
- **View:** Show current content of the log file.

1.3.9 Postfix

Determine the parameters for sending of E-Mails from PHP scripts in this part of the general server configuration. Postfix, which is already installed with Mac OS X on your machine, will be used for this.

Domain of outgoing mail: Select the domain which will be displayed as part of the sender address.

Smart Host: Many spam filters will identify mails sent through dynamic IP's as spam. To avoid this, you can select a SMTP server with static IP that will cover the actual sending process of the E-Mail for you. To do so, please activate Smart Host. Host, user name, password and authentication method correspond with the SMTP server data. In some cases, you can get this information from your provider.

1.4 Hosts

Mark the virtual host in the table for which you would like to change the settings. You can create another virtual host with the plus-button. You can delete the marked host with the minus-button.

Note: The server name in combination with the port must be unique within MAMP PRO and may only contain letters, numbers as well as "-" but may not begin or end with "-". The manner of writing (upper case and lower case) does not matter.

1.4.1 General

Server name: Determine the virtual host name for the entry marked in the table. This name corresponds with the domain, you enter in the browser.

Local name resolution: This entry will be made to the /etc/hosts of your machine. That way, you can access the host name directly in your browser.

Port: Determine the port with which the virtual host is accessible.

Dynamic DNS: Determines, if this virtual host is accessible with the Dynamic DNS service from the internet.

Disc location: Determine the location of the documents(HTML/PHP files etc.) of your virtual host(Document Root).

- Choose: location of your virtual host (Document Root)

Note: The user, whose account runs the web server must possess at least read permissions for the selected folder. The field may not be empty. The following folders can not be used:

- /Developer
- /Applications
- /Library
- /Network
- /Volumes
- /bin
- /cores
- /dev
- /etc
- /mach
- /private
- /sbin
- /tmp
- /usr
- /var
- /System (incl. subfolders)

- Permissions: Define the access permissions and owner rights for your files on the virtual host.

Aliases: Aliases are additional names for your virtual host. The same settings apply to these additional names as to the host itself. Add aliases with the plus-button. Delete selected aliases with the minus-button.

1.4.2 Advanced

These are advanced options that can be set for the selected virtual host in the table. These options are security relevant!

Indexes: Activates or deactivates "directory browsing". If there is no index.html, index.php, etc in the document root, the content of the folder is displayed when this option is enabled. Without this option, nothing will be displayed or an error message will appear.

Includes: Allows the use of Server Side Includes (SSI).

FollowSymLinks: Allows the use of symbolic links as reference to documents in other directories. This is an elegant feature if you would like to reference to objects, that are

outside of the directory tree (i.e. protocol files of the webserver), but know you want to avoid the hiding of objects through the URL tree.

SymLinksIfOwnerMatch: Restricted version of "FollowSymLinks". Allows reference to objects via symboli links only if the owner matches.

Exec-CGI: Allows the definition of your own CGI directories.

Multi-Views: Allows the use or disabling of dynamic documents depending on the language.

1.5 Advanced functions

1.5.1 Log files

The MAMP server records events like errors and timestamps each start and stop of the servers in text files - so-called logfiles. Use the MAMP PRO menu to display the content of these files.

1.5.2 Edit configuration files

The configuration files are generated from the settings made within MAMP PRO. MAMP PRO uses templates for this purpose where further configuration options are included. You can edit these templates from the menu item *File > Edit template*. Here, you have access to options which are not accessible from the MAMP PRO user interface.

Note 1: Edition errors in the templates of the configuration files can cause the servers not to start up any more. This could mean that you will have to reset the settings for MAMP PRO, and you may lose all your other custom settings. You should edit these templates only if you are familiar with the exact syntax and meaning of the options.

Note 2: If you remove the MAMP PRO tags from the templates, the settings for MAMP PRO may not be saved correctly and thus have no effect. This can mean that you must reset MAMP PRO and lose all your other settings.

1.5.3 Settings

Access the program settings from the menu item *MAMP PRO > Settings*. Here you can specify which address should be opened with the click on the button "WebStart" in the browser. In the default configuration, this is `"/MAMP /"`.

1.6 Background

1.6.1 File owner

Everybody who accesses a server, no matter whether locally or externally, by FTP, SHH or similar, requires a user account on the server. Each of these user accounts is associated to a group. Examples of groups which can often be found on a web server would be "daemons", "user", "root", "nobody". Often there is a separate group for the Apache web server in which only the Apache or the Apache and the FTP users are located. Important: Everything done on a system and every program which is launched is executed under a certain username. The web server, too, accesses files with a user account.

When you create a new file, it is assigned to your account as file owner. At the same time the group "user" is also assigned to the file. Every file belongs to a system user and to a system group.

1.6.2 File permissions

Now it is determined who may do what with this file. Basically there are the options "Read", "Write", "Execute". The permission "execute" is mostly of no interest on a web server (at least not with PHP Scripts, because these are only read by the web server). Now these permissions can be set for the owner, the group and for all the others. The permissions are usually written as numbers. The numbers for the permissions:

- 1 = may execute
- 2 = may write
- 4 = may read

If we want to set, e.g. that an owner may read, write (also delete) and execute a file, all the others, however, may only read the file, this would be: Owner = $1 + 2 + 4 = 7$, group = 4, others = 4. Because the permissions are always written in this order the usual style of writing is 0744 ("0" at the beginning states that it concerns "octale" figures and shows no real value).

2 FAQ

2.1 With which editor can I edit PHP files?

You can edit PHP scripts basically with every text editor. Nevertheless, the special editors which also offer highlighting of PHP code and Type-Ahead are more comfortable. Some editors:

- Zend Studio Client (<http://www.zend.com>)
- PHPEclipse (<http://www.phpeclipse.de>)

Also most HTML editors like Dreamweaver offer (<http://www.adobe.com>) a support for PHP.

2.2 Where can I find PHP classes?

Many classes for standard requirements can be found in the web, e.g., under <http://pear.php.net>

2.3 Where exactly are the MAMP PRO files created or changed?

The following list contains all files which are created and changed by MAMP PRO and are not located within the MAMP PRO folder.

- MAMP PRO Settings
 - /Library/Application Support/living-e/MAMP PRO
 - ~/Library/Application Support/living-e/MAMP PRO
 - ~/Library/Preferences/de.living-e.mamppro.plist
- MAMP
 - /Applications/MAMP/db
 - /Applications/MAMP/bin/startMysql.sh (port)
 - /Applications/MAMP/bin/stopMysql.sh (mysql root password)
 - /Applications/MAMP/bin/mamp

Note: These files are no longer changed by MAMP PRO. A copy is created when MAMP PRO starts up, at: /Library/Application Support/living-e/MAMP PRO

- /Applications/MAMP/logs
- /Applications/MAMP/Library/logs

- Local name resolution
 - /etc/hosts
- Dynamic DNS
 - /Library/LaunchDaemons/de.living-e.mamp_dyndns.plist
 - ~/Library/LaunchAgents/de.living-e.mamp_dyndns.plist
- Autostart at system start
 - /Library/StartupItems/MAMP/MAMP
 - /Library/StartupItems/MAMP/StartupParameters.plist

Changes to an existing postfix installation will be performed after backing up the affected files to `/etc/postfix/MAMP_backup`

2.4 Can I use “MAMP Standard” at the same time as MAMP PRO?

MAMP PRO is a configuration tool for MAMP. Your MAMP installation will run whenever MAMP PRO is active, as well as after uninstalling MAMP PRO. However, sporadic problems may occur if you try to continue running MAMP after uninstalling MAMP PRO, because MAMP does not know some configuration options of MAMP PRO.

3 Glossary

Apache

The Apache web server is the most-common web server in the Internet. It is freely available, and is part of the installation-package MAMP. See also "web server"

Dynamic DNS

Dynamic DNS is a system which allows the domain name data held in a name server to be updated in real time. The most common use for this is in allowing an Internet domain name to be assigned to a computer with a varying (dynamic) IP address. This makes it possible for other sites on the Internet to establish connections to the machine without needing to track the IP address themselves. A common use is for running server software on a computer that has a dynamic IP address.

Host

A "host" is to be equated in general with a "computer". In connection with web sites, a host is the computer on which the web site is saved. If several separated web sites are on a physical computer one speaks of "virtual hosts".

IP-address

An unique number consisting of four number blocks. Every computer connected to the Internet (host) has such an unique address. Example: "123.231.32.84"

MySQL

The MySQL server is an efficient database server. It is part of the "Community edition" of the installation-package MAMP.

Name resolution

Every computer in the Internet receives an unique address which consists of four number blocks, the "IP address". Example: "123.132.1.67". Because these numbers are hard to remember, there is, in addition, the "domain name system", briefly "DNS". Thereby it becomes possible to use nearly any domain names instead of the IP address. If e.g., the domain `www.example.com` is entered in the browser, the DNS server is asked at which IP address the corresponding web server is accessible, and thereafter the browser sends its inquiries to this numerical IP address. So before a domain name can be used, it must be entered on a domain name server.

PHP

PHP (PHP: Hypertext Preprocessor) is a reflective programming language originally designed for producing dynamic Web pages and remote application software.[1] PHP is used mainly in server-side scripting, but can be used from a

command line interface or in standalone graphical applications. For more information, visit <http://www.php.net>

Port

Server programs which are accessed from the network must be associated to a certain network port. Thus, several different server programs can be run on a single machine. For every service there are standard ports on which these are usually provided. For instance, a web server is ordinarily run on port number 80; the MySQL database server uses port 3306. MAMP PRO allows you to change the ports the servers should listen to. By default, MAMP uses non-standard ports. The MAMP servers can be thereby operated in addition to already installed web and MySQL servers. Should the ports 8888 and 8889 be already used by another application, you will need to change these values accordingly.

Virtual Host

A shared web hosting service or virtual hosting service is a form of web hosting service where more than one instance of the same web service is hosted on a single physical server. This is generally the most economical option for hosting, as many people share the overall cost of server maintenance.

Webserver

1. A computer that is responsible for accepting HTTP requests from clients, which are known as Web browsers, and serving them HTTP responses along with optional data contents, which usually are Web pages such as HTML documents and linked objects (images, etc.).

2. A computer program that provides the functionality described in the first paragraph.

Website

A website (or Web site) is a collection of web pages, typically common to a particular domain name or subdomain on the World Wide Web on the Internet. A web site can of course be accessible with several different domain names.

Index

A

access database server 10
Apache Modules 10
Autostart 9

D

Dynamic DNS 11, 12
Dyndns 11

E

error handling 11
Exec-CGI 14

F

Factory settings 9
FollowSymLinks 13

I

Includes 13
Indexes 13

L

local name resolution 12
Log File 10
Log file 11

M

Multi-Views 14

P

PHP Version 10
phpMyAdmin 10
Ports 9
Postfix 12

R

Revert 9
Root password 10

S

Servname 12
Smart Host 12
Start / Stop 8
starting Apache as user 9
starting MySQL as user 9
SymLinksIfOwnerMatch 14

W

Webstart 8

MAMP PRO

User Guide

Standard 1.1.1
March 2007
Printed in Germany

© 2007 living-e AG
All rights reserved.

