

# WADF Workstation HOWTO

## How to set up WADF on a workstation to deploy "end" applications

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### Introduction

This document shows how to set up a fairly simple WADF installation, using the default config file, on a workstation to deploy web applications.

For the purposes of illustration It makes a few assumptions:

- your web applications are stored in an SVN server whose URL is `svn+ssh://svn@svn.example.com/` with a structure of "apps/appref/trunk" (for the trunk)
- optionally, you have an organisational PEAR server at `pear.example.com` with your own PEAR-packaged libraries

These instructions are aimed at machines running Fedora/CentOS/Mac OS X (with MAMP) but are fairly generic.

All the lines in this document that begin with "\$" mean "Run this from the command line"

"~/ " means "your home directory" which is typically (but not always) `/home/[username]` on Linux and `/Users/[username]` on Mac OS X.

### Acknowledgements

Thanks to Matt Rosenquist for the Mac OS X/MAMP setup information.

Step	Fedora Linux, CentOS and similar	Mac OS X with MAMP
<b>Set up local copy of PEAR</b>		
Make sure you have a global copy of PEAR installed and it is in your path	Test you can run "pear" from the command line. Do "yum install php-pear" if not.	Install MAMP from <a href="http://sourceforge.net/projects/mamp/files/mamp/">http://sourceforge.net/projects/mamp/files/mamp/</a>
Decide on a path to your local PEAR installation. Although not strictly necessary, it's simpler if this ends in "pear", because the pear "config-create" command assumes this. We will call this "[pearpath]" below.	e.g. ~/pear	Is installed with MAMP, in /Applications/MAMP/bin/php5/bin (the "pear" command line tool) and /Applications/MAMP/bin/php5/lib/ (the rest of PEAR)
Create PEAR config	<pre>\$ pear config-create [pearpath, without the trailing "pear"] ~/.pearrc</pre> <p>This will create a bare PEAR config called .pearrc in your home directory which has most of the PEAR paths set to [pearpath].</p>	N/A
Set PEAR config options for older installations (Only for CentOS 4, CentOS 5, Fedora <=6)	<p>Older installations (only) require the following otherwise they are set to system directories which are read-only (see PEAR bug #11517)</p> <pre>\$ pear config-set download_dir [pearpath]/download \$ pear config-set cache_dir [pearpath]/cache</pre>	N/A

Step	Fedora Linux, CentOS and similar	Mac OS X with MAMP
Set PEAR config options (only if you bootstrapped from PEAR < 1.7.0)	PEAR 1.7.0+ has some new config options, <code>cfg_dir</code> and <code>www_dir</code> . If the system-installed PEAR that you bootstrapped from is older than 1.7.0 then you will need to set these:  <pre>\$pear config-set cfg_dir [pearpath]/cfg \$pear config-set www_dir [pearpath]/www</pre>	N/A; MAMP comes with a newer version
Now you need to set up your local PEAR installation. Install the base PEAR package:	<pre>\$ pear install PEAR</pre> Check that PEAR got installed:  <pre>\$ pear list Installed packages, channel pear.php.net: ===== Package           Version State Archive_Tar       1.3.2  stable Console_Getopt    1.2.3  stable PEAR               1.7.1  stable Structures_Graph 1.0.2  stable</pre> Make sure you have PEAR 1.7.1+	N/A
Add PEAR to your command line path (and the MAMP-installed binaries for Mac users)	Edit <code>~/.bash_profile</code> .  Edit the line which says <code>PATH=[stuff]</code> and change it to:  <pre>PATH=[pearpath]:[stuff]</pre>	Edit <code>~/.profile</code>  Edit the line which says <code>PATH=[stuff]</code> and change it to:  <pre>PATH=/Applications/MAMP/bin/php5 /bin:/Applications/MAMP/Library/ bin:[stuff]</pre>

<b>Step</b>	<b>Fedora Linux, CentOS and similar</b>	<b>Mac OS X with MAMP</b>
Set up PHP command line config. This isn't strictly necessary for PEAR or WADF, but is useful for things (often command line tools) that depend on libraries installed using the PEAR installer and included via require().	Edit ~/.bash_profile  Add to the end : <pre>export PHPRC=\$HOME</pre> This means that when you run "php" from the command line, it will read the config file ~/php-cli.ini	Edit ~/.profile  Add to the end : <pre>export PHPRC=\$HOME</pre> This means that when you run "php" from the command line, it will read the config file ~/php-cli.ini
	Create ~/php-cli.ini containing: <pre>include_path=[pearpath]/php</pre>	Create ~/php-cli.ini containing: <pre>include_path=/Applications/MAMP/bin/php5/lib/php</pre>
Ensure all the aliasing and configs take effect	Fully log out of your desktop/SSH session and log back in	
<b>WADF setup</b>		
Discover Tim Jackson's PEAR channel	\$ pear channel-discover pear.timj.co.uk	
Install WADF	\$ pear install timj/Tools_WADF-beta	
Create a directory for WADF to put configurations in	\$ mkdir ~/.wadf	

Step	Fedora Linux, CentOS and similar	Mac OS X with MAMP
Set basic WADF options	Create a file called <code>~/.wadf/config</code> containing the following: <pre data-bbox="801 284 2018 815"> [local] ; The SVN path to applications we are going to deploy vc_base = svn+ssh://svn@svn.example.com/apps  ; Uncomment if you wish to use the shared (in your account) installed ; version of PEAR with your web application. ;dep_pear_deploy_path =  ; If you have a PEAR channel (optional), this is useful ; Username and password are also optional dep_pear_base_channel = username:password@pear.example.com  ; If you use PEAR dependencies, you might need this to select the ; "stability" of the PEAR packages (it just sets the PEAR option ; "preferred_stability") dep_pear_preferred_stability = beta </pre>	
If you are running on a standalone workstation without wildcard DNS, enable write access to <code>/etc/hosts</code> (this is undesirable but necessary if you want WADF to automatically add hostnames for your deployed applications to <code>/etc/hosts</code> )	<pre data-bbox="801 834 1240 858">sudo chmod 666 /etc/hosts</pre>	
Set Mac OS X/MAMP-specific options where required	N/A	Add the following to <code>~/.wadf/config</code> : <pre data-bbox="1507 1098 2074 1262"> deploy_dns_hosts_file_format = 2  webserver_restart_cmd = /Applications/MAMP/bin/apache2/b in/apachectl graceful </pre>
<b>MySQL setup</b>		

<b>Step</b>	<b>Fedora Linux, CentOS and similar</b>	<b>Mac OS X with MAMP</b>
Check you have a local MySQL server running (ask your system administrator) and get the root password.	<code>service mysqld start</code>	Start MAMP via the graphical interface
Avoid a common MySQL permission problem	Log into MySQL as root and do:  <pre>USE mysql; DELETE FROM user WHERE user=''; FLUSH PRIVILEGES;</pre>	
<b>Deploying a web application</b>		
Deploy the app	<pre>\$ wadf-deploy [appref]</pre> <p>where "appref" is the module name in version control, e.g. "mywebsite"</p> <p>Choose "y" to redeploy the database if this is the first time round.</p>	

Step	Fedora Linux, CentOS and similar	Mac OS X with MAMP
<p>If the app is set up properly, it should be up and running!</p>	<p>Somewhere in the middle of the output you just saw, you will have been prompted for an e-mail address as WADF tries to start a local HTTP server.</p> <p>Then at the end of the deployment you should have seen something like:</p> <pre>WADF HTTPD instance is running (pid XXXX) Configured for the following applications:  [appref]: (/path/to/working-copy)    http://  [appref].localhost.localdomain:10080</pre> <p>The Apache HTTPD error logs will be in <code>~/.wadf/httpd.error_log</code> if you need them.</p>	<p>The MAMP webserver should have been restarted.</p>
<p>You can find the helpful documentation here :-)</p>	<p>[pearpath]/docs/Tools_WADF/wadf.txt</p>	<p>/ Applications/MAMP/bin/php5/lib/php/doc/Tools_WADF/wadf.txt</p>
<p>You can also find out more about the (many) available configuration options in the well-commented master config file, which is here</p>	<p>[pearpath]/cfg/Tools_WADF/wadf.conf.</p>	<p>/ Applications/MAMP/bin/php5/lib/php/cfg/Tools_WADF/wadf.conf</p>