

Zero-configuration Web Application Debugging with Xdebug and PhpStorm

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This tutorial describes how to get started with PHP web application debugging in PhpStorm IDE using Xdebug. Configuration for Zend Debugger is very similar (just follow [Zend Debugger installation guide](#) and proceed from [step 2](#) of this tutorial).

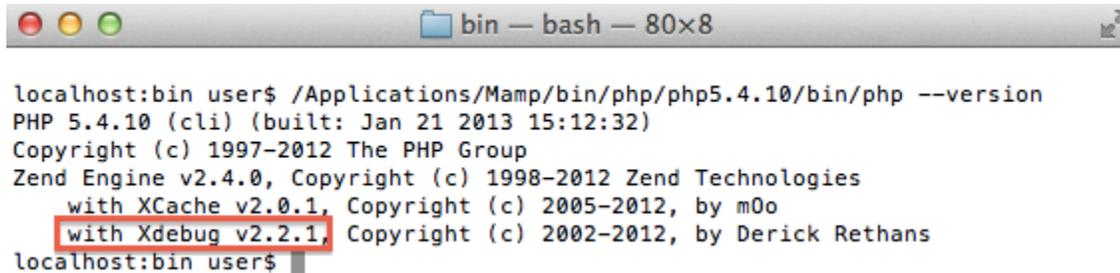
- 1. Install Xdebug
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1. Install Xdebug

To use Xdebug with PhpStorm for debugging PHP applications, you need to have a PHP development environment configured with Xdebug extension installed. This task is beyond PhpStorm's control. More information on configuring PHP development environment can be found in [our web help](#).

Make sure that you have Xdebug installed properly. Please note that your Xdebug version should fit the PHP version you have (mind the PHP version number and thread-safe/non-thread-safe option) and installed as `zend_extension`. Don't forget to set the `xdebug.remote_enable` setting to `1` in `php.ini` file. Detailed information on installing and configuring Xdebug can be found [here](#). You can download the latest version of the Xdebug plugin at its [official website](#). Recommended stable versions are 2.2.1 or 2.1.3.

You can check the configuration by executing `php --version` in the terminal



```
localhost:bin user$ /Applications/Mamp/bin/php/php5.4.10/bin/php --version
PHP 5.4.10 (cli) (built: Jan 21 2013 15:12:32)
Copyright (c) 1997-2012 The PHP Group
Zend Engine v2.4.0, Copyright (c) 1998-2012 Zend Technologies
  with XCache v2.0.1, Copyright (c) 2005-2012, by m0o
  with Xdebug v2.2.1, Copyright (c) 2002-2012, by Derick Rethans
localhost:bin user$
```

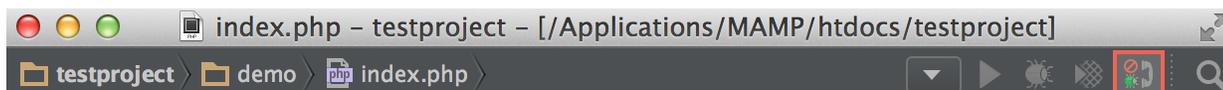
Alternatively, execute a page with `phpinfo()`; PHP function and make sure that you have Xdebug extension enabled. The xdebug section of the document with the installed version should be available.

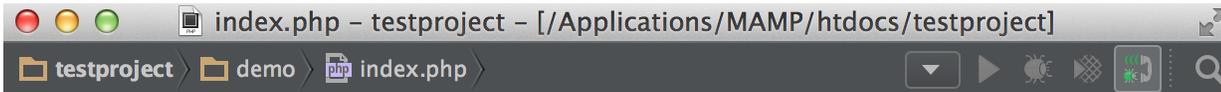
xdebug

xdebug support	enabled
Version	2.2.1
IDE Key	PHPSTORM

2. Prepare PhpStorm

Toggle the "Start Listening for PHP *Debug Connections*" button. Don't use any run configurations.





Once you've installed and configured Xdebug, you can use the **Validating Your Debugging Configuration** tool to confirm that the configuration of Xdebug and PhpStorm are compatible.

3. Set a breakpoint in the source code

```
$smarty->assign("Name","Fred Irving Johnathan Bradley Peppergill",true);  
$smarty->assign("FirstName",array("John","Mary","James","Henry"));  
$smarty->assign("LastName",array("Doe","Smith","Johnson","Case"));  
$smarty->assign("Class",array(array("A","B","C","D"), array("E","F","G","H"),  
    array("I","J","K","L"), array("M","N","O","P")));  
$smarty->assign("contacts", array(array("phone" => "1", "fax" => "2", "cell" => "3"),  
    array("phone" => "555-4444", "fax" => "555-3333", "cell" => "760-1234")));  
  
$smarty->assign("option_values", array("NY","NE","KS","IA","OK","TX"));  
$smarty->assign("option_output", array("New York","Nebraska","Kansas","Iowa","Oklahoma","Te.  
$smarty->assign("option_selected", "NE");
```

Apart from setting the breakpoint manually, you can use the option *Run | Break at first line in PHP scripts* to have an automatic breakpoint at the first line of every PHP script you debug.

4. Activate debugger on server

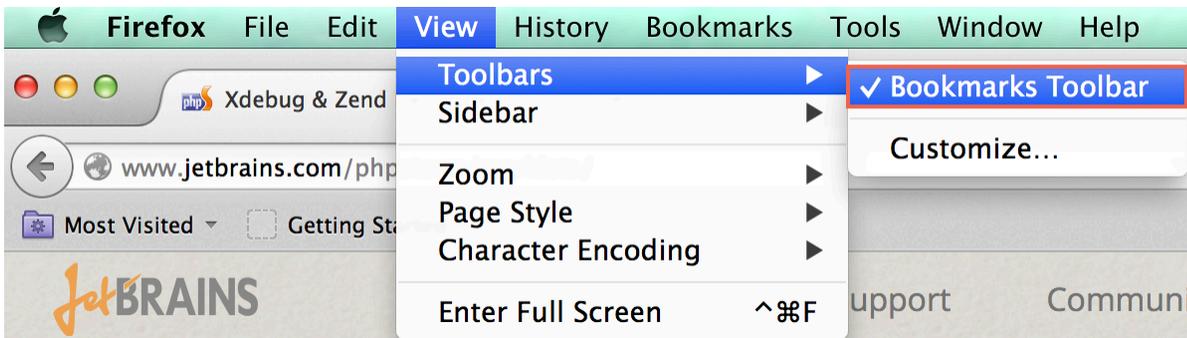
In order to activate the debugger, you need to set a special GET/POST or COOKIE parameter ([click here for details](#)). You can do it manually, but it is much more convenient to use one a special tool such as [browser toolbar](#) or [bookmarklet](#) for that.

Try our [PhpStorm bookmarklets generator](#) and get bookmarklets which will work in any modern browser and allow you to start/stop a debugging session by controlling the Xdebug cookie.

- How to add "Start/Stop Debugging" bookmarklets to your browser bookmarks toolbar

Names of menus and options may vary depending on your Internet browser. This section uses Firefox.

4.1. Enable your Bookmarks Toolbar (*View | Toolbars | Bookmarks Toolbar*)



4.2. Go to <http://www.jetbrains.com/phpstorm/marklets/>

4.3. Click the **Generate** button under the **Xdebug** section, then drag the links **"Start debugger"** and **"Stop debugger"** from the **Debug** section that appears to the **Bookmarks Toolbar**.

Xdebug & Zend Debugger ...

www.jetbrains.com/phpstorm/marklets/

Overview What's New Features & Screenshots Docs & Demos Quickstart

Xdebug

IDE key:

1

Zend De

Port:

IP:

Bookmark these links for future use

Debug:

- [Start debugger](#)
- [Stop debugger](#)
- [Debug this page](#)

2

Profile:

- [Start profiler](#)
- [Stop profiler](#)

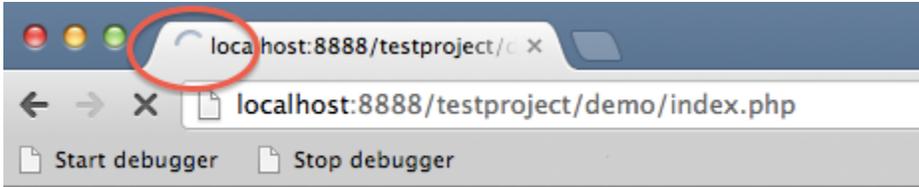
5. Start a debug session in browser

Test Page

localhost:8888/testproject/demo/index.php

[Start debugger](#) [Stop debugger](#)

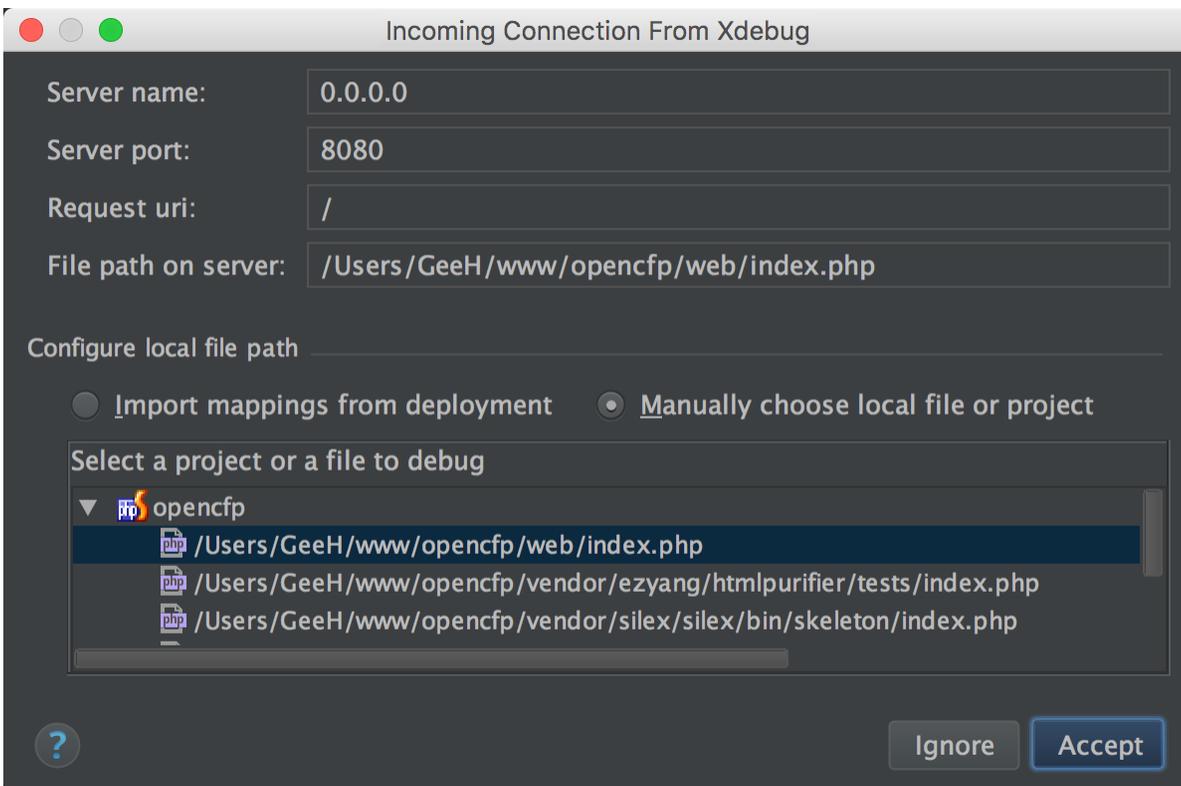
6. Reload the current page



7. Set initial path mappings

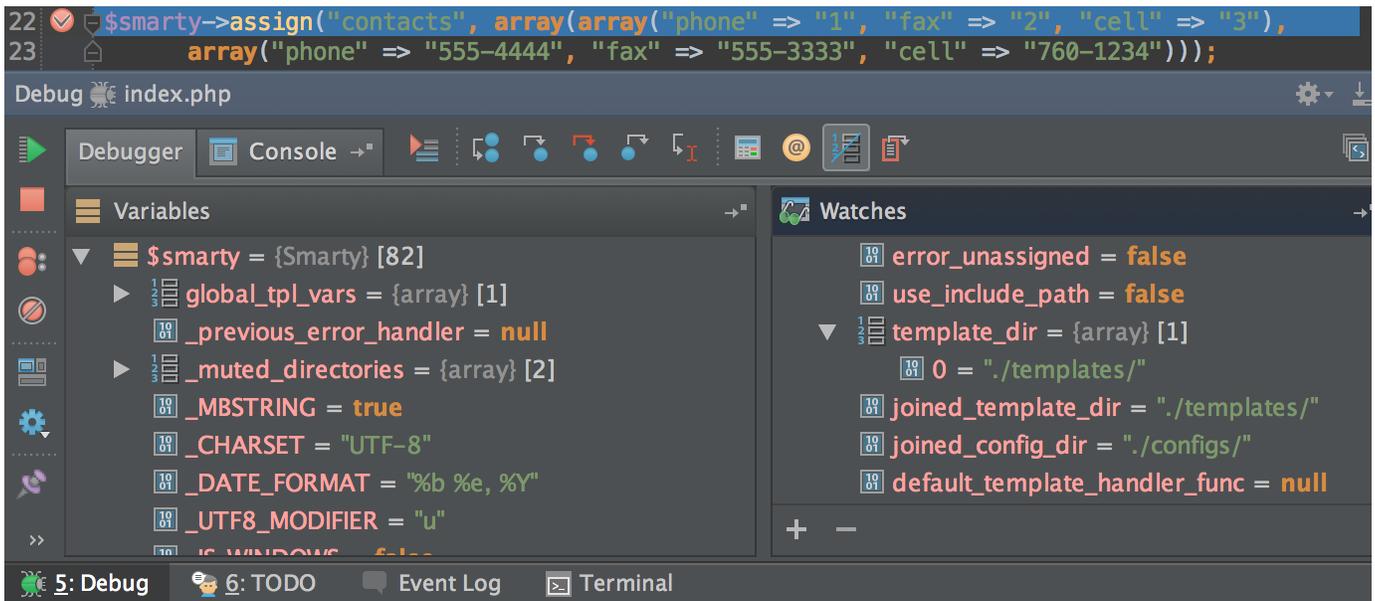
Switch to PhpStorm; you'll see the **Incoming Connection From Xdebug** dialogue. You'll now need to select the path mappings so that PhpStorm can map the remote files on the web server to the local files in your project. If you have a deployment configured, then PhpStorm will offer to configure the mappings based on the paths you've already set in that deployment.

If you have no deployment configured (or if the file mappings in the deployment are different), then you can select a manual file to use for this incoming debugger session.



8. Debug!

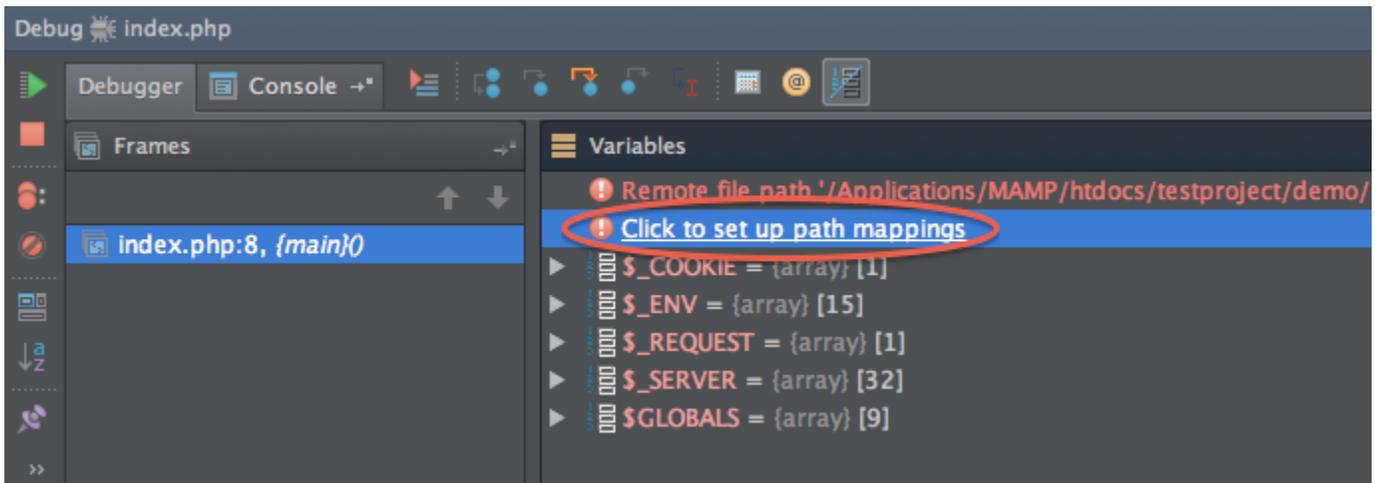
After reaching the breakpoint the debugger is suspended. Now let's investigate the application.



Troubleshooting

The first thing to check is that the Xdebug configuration is compatible with PhpStorm's configuration, you can do that using the [Validating Your Debugging Configuration](#) tutorial.

In some cases you may get the error message "Remote file path 'path/to/script/on/the/server.php' is not mapped to any file path in project" or "The script 'path/to/script/on/the/server.php' is outside the project." This means that PhpStorm is not sure which local file corresponds to the specified remote file path.



You can solve this problem quickly. Just set up the necessary path mappings by clicking the relevant link.

Resolve Path Mapping Problem

File path on server:
/Applications/MAMP/htdocs/testproject/demo/index.php

File path in project:
undefined

Use path mappings (select if the server is remote or symlinks are used)

File/Directory	Absolute path on the server
Project files	
▼ /Applications/MAMP/htdocs/testproject	
▶ .idea	
▶ demo	/Applications/MAMP/htdocs/testproject/demo
▶ docs	/Applications/MAMP/htdocs/testproject
▶ img	/Applications/MAMP/htdocs
▶ js	/Applications/MAMP
▶ less	/Applications
▶ libs	
.DS_Store	
.gitignore	
.travis.yml	
CONTRIBUTING.md	

⚡ Remote file path '/Applic...object/demo/index.php' is not mapped to any file path in project

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