



The PHP Company

# Installation Guide **Zend Debugger**

By Zend Technologies, Inc.

The Zend Debugger is the PHP extension that should be installed on your Web server in order to perform remote debugging and profiling using [Zend Studio](#) or [Adobe Flash Builder for PHP](#).

This [debugging](#) functionality allows you to test your files and applications and detect errors in your code. The debugger allows you to control the execution of your program using a variety of options including setting breakpoints, stepping through your code, and inspecting your variables and parameters.

The [Zend Profiler](#) displays a breakdown of executed PHP code in order to detect bottlenecks in scripts by locating problematic sections of code. The Profiler provides you with detailed reports that are essential to optimizing the overall performance of your application.

The Zend Debugger comes bundled with [Zend Server](#), which is a complete, enterprise-ready Web Application Server for running and managing PHP applications that require a high level of reliability, performance and security on Linux, Windows or IBM i. If you're using Zend Server as the PHP server for your development process, the Zend Debugger does not need to be installed separately.

The Zend Debugger can also be downloaded as a standalone package and installed onto your server.



**To install /upgrade the Zend Debugger on your server:**

1. Download the Studio Web Debugger package that corresponds to your operating system from <http://www.zend.com/en/products/studio/downloads>.
2. Extract the Zend Debugger package to a temporary folder.
3. Locate the ZendDebugger.so (Unix) or ZendDebugger.dll (Windows) file in the directory which corresponds to your version of PHP (e.g. 4.3.x, 4.4.x, 5.0.x, 5.1.x, 5.2.x).
4. Copy the file to your Web server in a location that is accessible by the Web server.

5. To load the Zend Debugger, add the following line (which corresponds to your operating system) to your php.ini file:

```
Linux and Mac OS X: zend_extension=<full_path_to_ZendDebugger.so>  
Windows: zend_extension_ts=<full_path_to_ZendDebugger.dll>  
Windows non-thread safe:  
zend_extension=<full_path_to_ZendDebugger.dll>
```

**Note:**

The Windows non-thread safe binary is only used with Zend Core 2.0.

6. To authorize your Zend Studio to access the Zend Debugger, add the following lines to your php.ini file:

```
zend_debugger.allow_hosts=<host_ip_addresses>  
zend_debugger.expose_remotely=always
```

7. Replace <host\_ip\_addresses> with the IPs of the hosts which will be allowed to initiate debug sessions (this should be the IPs of the machines on which Zend Studio is installed).

**Note:**

<host\_ip\_addresses> should be entered in the format X.X.X.X (e.g. 10.1.2.21). Multiple IP addresses should be separated by commas.

You can also use a net mask to denote 'wild card' IP addresses (e.g. 10.1.2.0/24 would include all IP addresses with the prefix 10.1.2).

8. The zend\_debugger.expose\_remotely directive determines whether the debugger will expose itself (i.e. signal its presence) to remote clients. This is required if you want the Zend Studio Browser Toolbar to automatically detect pages that can be debugged. Select 'always', 'never', or 'allowed\_hosts' (this only exposes the hosts in the allowed host list)
9. Copy the dummy.php file from the extracted Zend Debugger directory to your document root directory.
10. Restart your Web server.

Once you have the Zend Debugger installed on your server, go to [Setting Up Remote Debugging](#) for more information on setting up remote debugging with Zend Studio or Adobe Flash Builder for PHP.