

Zend Framework: Getting Started

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About Me

- Wrote the first line of code for the Zend Framework and built its website
- Coauthor of the Zend PHP 5 Certification
- Professional software engineer for over ten years at some large companies
- Dynamic language advocate: PHP Developer (about 4 years), Python Developer (6 years), Ruby Developer (1.5 year)
- Left Zend to start a new consulting company, Maintainable Software LLC.

Agenda

- Get a basic overview of the Zend Framework and how to start using it
- Learn about some useful components you might want to try in your applications
- Get some general tips on using ZF and learn about a few trouble spots you might want to avoid for smoother development

Agenda

- Overview
- Download and Install
- Useful Libraries
- Trouble Spots
- Wrap Up
- Q&A Discussion

Overview

Overview

- Open-source, Commercial-friendly License
- Collection of PHP 5 libraries that may be useful for building web applications
- Zend's "PHP Collaboration Project" is their way of giving back to the community by dedicating resources to development
- Supported by Zend, some of its partners, and the Zend Framework community

License

- Uses the new BSD License so commercial use is not restricted
- Contributors must submit an Apache-style License Agreement (CLA) to ensure IP rights of others are not violated

Development

- PHP 5 Only
- File structure and naming conventions compatible with PEAR
- Mostly the same coding standards as PEAR.
- Provides requirements for testing and documentation
- Guided by Zend through their proposal process

Real World Usage

- framework.zend.com
- devzone.zend.com
- phpdeveloper.org
- IBM's QEDWiki Project
- Others?

ZF is designed by committees rather than extracted from existing applications. Interest in ZF has been high but real world adoption is still relatively slow. Various sites seem to use a few libraries from ZF, particularly the Lucene port, but don't adopt the entire "framework".

Support

- Nine mailing lists*
- Nice documentation (DocBook) available to download or read online
- Community Wiki (Confluence)
- Issue Tracker (JIRA)
- Zend! It is nice of them to donate their resources to an open source project.

*Community members try to answer questions on the mailing lists. Often, dedicated Zend resources will also participate and try to provide help.

Development Trees

- **Core** - Released somewhat frequently in .zip and .tar.gz format, includes bundled documentation and tests
- **Incubator** - Less stable, more frequent changes, intended to be moved to Core once API stabilizes, tests completed, and documentation written
- **Laboratory** - Code being proposed to Incubator or miscellaneous developer-supported code not destined for Core

Core

- Zend_Cache
- Zend_Config
- Zend MVC*
- Zend_Db*
- Zend_Feed
- Zend_Filter
- Zend_Http_Client
- Zend_Json
- Zend_Log
- Zend_Mail
- Zend_Pdf
- Zend_Search
- Zend Services
- Zend_XmlRpc

* Trouble Spot

Incubator

- Zend_Acl
- Zend_Calendar
- Zend_Console
- **Zend MVC***
- Zend_Currency
- Zend_Date
- Zend_Db_Xml
- Zend_Form
- **Zend_Http_Client***
- Zend_Locale
- **Zend_Mail***
- Zend_Measure
- Zend Servers
- Zend Services

* Rewrite or significant change of an existing Core component.

Laboratory

- Nothing significant yet
- May grow in the future as more proposals are developed

Download and Install

Download

- Available only in its entirety and not as individual library downloads
- Not available for automatic installation with PEAR Installer (yet)
- Core is available in “stable” releases or nightly builds
- Everything else is available for anonymous checkout from the Subversion repository
- <http://framework.zend.com/download>

Install

- “Officially” requires PHP 5.1.4. Most libraries work with earlier versions but dependencies are not tracked anywhere
- Some extensions may be required, such as GD for Zend_Pdf
- Install the files into your PEAR directory (preferable) or any directory in your include_path

Useful Libraries

Useful Libraries*

- Zend_Cache
- Zend_Feed
- Zend_Mail
- Zend_Pdf
- Zend_Search_Lucene
- Zend Services
- Zend_XmlRpc

*There are many libraries in the Zend Framework that you may find useful. This is a selection that I have used and think you might find to be useful.

Zend_Cache

- Written by the authors of the successful PEAR caching package, Cache_Lite
- Provides several forms of fragment and page caching through a flexible frontend interface system
- Many storage backends including APC, File system, Memcached, and SQLite
- Extensive unit tests and good documentation

Zend_Feed

- Swiss Army Knife for reading feeds
- Won't build the next Bloglines or Feedster but provides many useful features
- PHP 5 object overloading provides a convenient, SimpleXML-like interface to feed data
- Supports modifying feed and entity structures.
- Supports Atom Publishing Protocol

Zend_Mail

- Simplifies creating and sending email
- Simplifies dealing with attachments and MIME types
- SMTP transport available now, IMAP and other transports being developed

Zend_Pdf

- Able to both create new PDFs and also modify existing ones
- Supports drawing shapes, fills, rotations
- Able to insert JPEG, TIFF, and PNG images
- Text support including experimental TrueType font support

Zend_Search_Lucene

- Reads and writes the same index file formats as Java Lucene 1.9 (mostly)
- Completely implemented in PHP - no C or Java components required
- Supports term, multi-term, and phrase queries. More queries being developed.
- Pluggable analysis, scoring, and storage containers

Zend_Service_*

- Amazon
- Flickr
- Yahoo
- More being developed

Zend_XmlRpc

- Brings the convenience of PHP 5's SOAP extension to XML-RPC clients
- Automatic type conversion between PHP native types and their XML-RPC equivalents, casting with type hints
- `Zend_XmlRpc_Server` available in the Incubator

Trouble Spots

Trouble Spots

- Zend Framework is not yet stable, so the API changes between releases and your code may break as a result.
- Certain components appear to receive quicker maintenance than others.
- You might want to check the bug tracker history before deciding to use a component.
- Zend and the community are working hard to smooth out the rough edges.

Trouble Spots

- Zend_Filter implementation is still incomplete and this might not be obvious when you start using it. Check the source for unimplemented functions first.
- Zend_Mail works fine for simple mail but has some issues with MIME types, multipart email, and character encodings. It's currently being reworked in the Incubator.

Zend_Db

- Accounts for over 25% of all bugs in the issue tracker. The last significant bug fix was quite a while ago. Can you help them?
- It works for many common tasks but will probably give you grief. The PDO-based adapters are reasonably stable, best to avoid the others for now.
- Solar_Sql* predates Zend_Db and continues to mature. It is extremely similar but fixes almost all of the Zend_Db problems while providing additional features.
- AdoDB and PEAR's MDB2 are both excellent alternatives that are well tested and supported.

*http://solarphp.com/index.php/docs/read/Solar_Sql

Zend MVC

- Zend “MVC” consists of Zend_Controller and Zend_View (no Model)
- Zend_Controller is presently being completely rewritten by a committee, it might be best to wait for that to finish first. It’s slated for completion in about two weeks.
- Zend_View works well but hasn’t been updated in months and its helper library is very weak. Consider Smarty, Solar_View (Savant), or others as an interim solution.

Wrap Up

Wrap Up

- Visit <http://framework.zend.com> for more information and to download
- Both Zend Developer Zone and the Wiki have links to ZF tutorials and articles
- php|architect's April 2006 Issue
- Consider subscribing to the fw-general mailing list but especially the SVN commit list

Questions?

Thank You

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