

“PEAR hands on”

international php conference 2005

Lukas Kahwe Smith
smith@poteeweet.org



Agenda:

- What is PEAR?
 - PEAR Website
 - PEAR Mailing Lists
 - PEAR Installer
 - Practical I
 - PEAR CVS
 - PEAR Packages
 - PEAR Error Handling
 - Practical II
-
-

What is PEAR:

Overview

- Collection of high quality PHP components founded by Stig in 1999
 - 100% open source
 - Apache, BSD, LGPL license
 - Standardization institution
 - Plus packages bundled since PHP 4.3!
 - Almost 500 packages and growing fast
 - More than 250 package maintainers
 - Over 17 million total downloads
-
-

What is PEAR:

Features

- Installer
 - Install, update, uninstall, dependency handling, post install, remote install ..
 - Set of infrastructure classes
 - PEAR, PEAR_Error, PEAR_ErrorStack..
 - Code repository
 - Generic packages of PHP code
 - Avoiding code redundancy
 - Packaged by functionality
 - Object oriented
 - Flexible and extensible APIs
-
-

***PEAR Website:
Lets Check It Out***

Surfing <http://pear.php.net>



PEAR Website: Overview

- News – latest information
 - QA Team – quality assurance team
 - Group – steering committee
 - Manual – end user documentation
 - FAQ – frequently asked questions
 - Support – support resources
 - Downloads - packages
 - Bug tracking system – bug reporting
 - PEPr – new package proposals
 - Search – site, mailing lists, developers
-
-

PEAR Website:

Finding packages

- Browsing by category
 - Third party channels
 - Package homepage contains:
 - Summary, license, description, homepage
 - Maintainers
 - Download links and statistics
 - Link to manual and API docs (all releases)
 - Link to bug tracker
 - Change log and dependencies for every release ever made
 - External homepage
-
-

PEAR Website: Manual

- PEAR Manual
 - Multiple languages (English*, French, Japanese, Hungarian, Dutch, Russian)
 - *English is the primary language
 - HTML (download and online), .chm
 - DocBook based
 - Not all packages are contained



PEAR website: Bug Tracker

- Bug reporting
- Feature requests
- <http://pear.php.net/bugs>
- <http://pear.php.net/bugs/stats.php>
- Paste are link patches here
 - Don't send patches to the mailing list



PEAR Website

PEPr - PEAR Proposal System

- Package and RFC proposals
 - Phases of a proposal:
 - draft
 - proposed
 - call for votes
 - finished
 - Voting (open to all pear-dev members)
 - Anyone can get a pear proposal account
 - Check to find functionality currently missing in PEAR
 - Often contain fairly mature code
-
-

PEAR Website: Support

- All mailing lists and archives
- IRC channel on efnet: #pear
- Tutorials
- Presentation slides
- No official forum
 - <http://pear-forum.de>
- PEAR logos :-)



PEAR Mailing Lists: Important Mailing lists

- pear-general@lists.php.net
 - All user questions go here
 - Not all package maintainers are subscribed
 - pear-dev@lists.php.net
 - Most PEAR package maintainers subscribed
 - Not for user questions
 - pear-qa@lists.php.net
 - QA related discussions
 - pear-cvs@lists.php.net
 - All commits to the CVS repository
-
-

PEAR Mailing Lists: Additional Mailing Lists

- pear-doc@lists.php.net
 - All discussions about the manual
 - pear-core@lists.php.net
 - Discussion about the PEAR infrastructure
 - Pearweb, PEAR core classes, PEAR installer
 - pear-webmaster@lists.php.net
 - PEAR website administrators
 - pear-sys@php.net
 - PEAR webservers administrators
 - pear-group@php.net
 - PEAR steering committee
-
-

PEAR installer:

Overview

- Installer for PHP code and extensions
 - Shipped with PHP since 4.3.0
 - Or obtain installer through
 - <http://go-pear.org>
 - Different interfaces available:
 - CLI, Web, GTK
 - Key features
 - Install, update, list
 - Local dependency resolution
 - Channels
 - Binary support (beta)
-
-

PEAR installer: Basic Commands

- Important PEAR Installer commands
 - \$> pear [un]install [Channel/][Package]
 - \$> pear upgrade[-all] [Package]
 - Use -f option to force action
 - Instead of [Package] point to URL or package.xml/tar.gz in the file system
 - \$> pear list[-upgradeable]
 - \$> pear config-show
 - \$> pear config-set
 - \$> pear package[-validate] [package.xml]
-
-

Practical I: *Lets Play with the Installer*

Get the installer via:
<http://go-pear.org>
Lets try some commands ..



PEAR CVS: Checking Out The Latest Code

- Latest development version in CVS
- Anonymous checkout possible

```
cvs -d :pserver:cvsread@cvs.php.net:/repository login  
cvs -d :pserver:cvsread@cvs.php.net:/repository  
checkout pear
```

Password: phpfi

- CVS web interface at <http://cvs.php.net>
 - Flat package structure in CVS
 - Every package has its own directory
 - Used to better control code ownership
-
-

PEAR Packages: Structure

- Package structure:
 - PEAR/ (php_dir setting)
 - PEAR/docs/ (doc_dir setting)
 - PEAR/docs/[..]examples/
 - PEAR/tests/ (test_dir setting)
 - PEAR/data/ (data_dir setting)
 - Find out your settings with:
 - `$> pear config-show`
 - Inside the package sources
-
-

PEAR Packages: Finding a Package

- Search and index browsing
 - Check package homepage
 - Change log history
 - Documentation
 - Check open bugs in the bug tracker
 - Bug stats for the package and maintainers
 - Check maintainer activity on mailing lists
 - CVS source
 - Install package
 - Check out examples
 - Check out test suite
-
-

PEAR Error Handling: Overview

- PEAR_Error
 - Current standard
 - Global error handler; overwrite locally
 - PEAR_ErrorStack
 - Flexible use of PEAR_Error, Exceptions
 - Can be used for Warnings
 - PEAR_Exception
 - Based on native exceptions but adds
 - Nestable Exceptions
 - More context information
 - Pretty output
-
-

Practical II: *Lets Look at Some Code*

So lets get our fingers into the code!
Want to look at a specific package?
Specific feature you are looking for?



References:

- These slides
 - http://pooeteeweeet.org/files/phpconf05/PEAR_hands_on.pdf
 - PEAR website
 - <http://pear.php.net/>
 - Other PEAR talks
 - http://www.backendmedia.com/PEAR/PEAR_introduction.pdf
 - http://www.backendmedia.com/PEAR/PEAR_5_years.pdf
-
-

Thank you for listening ..
Comments? Questions?

smith@poteeweet.org
