“PEAR hands on”
international php conference 2005

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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
- 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](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: Let's Look at Some Code

So let's get our fingers into the code! Want to look at a specific package? Specific feature you are looking for?
References:

• These slides
  - http://pooteeweat.org/files/phpconf05/PEAR_hands_on.pdf
• PEAR website
  - http://pear.php.net/
• Other PEAR talks
  - http://www.backendmedia.com/PEAR/PEAR_5_years.pdf
Thank you for listening..
Comments? Questions?

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