



# PEAR Workshop

PHP Quebec Conference 2005

Welcome!

Welcome to the PEAR workshop!

I hope you will have fun  
and see some interesting stuff.

## Agenda

Introduction

What is PEAR?

Project institutions

Obtaining PEAR

The PEAR installer

Using PEAR

Distributing own packages

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## Tobias Schlitt

PEAR developer since 2002

PEAR Website Team and Core QA Team

Maintainer of Net\_FTP, Image\_Text, Image\_Tools,  
Services\_Trackback

Student / Independent IT Consultant

(former Software Architect at Deutsche Bank AG)

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And who are you?

Please tell us a little sentence about you!

What is your name?

What is your line of work?

How well do you know PEAR?

Do you use PEAR?

If yes what packages?

What interests you in PEAR?

Anything else we should know?

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## What is PEAR?

Collection of high quality PHP components

Nearly 300 packages and growing fast

Almost 200 package maintainers, 500 developers

100% open source (PHP, Apache, BSD, LGPL license)

Standardization institution

Founded by Stig S. Bakken in 1999

## Components?

Generic packages of PHP code

Avoiding code redundancy

Packaged by functionality

Object oriented

Flexible and extensible APIs





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High quality?

1000 eyes principle

Development standards

Proposal process

BC breakage prohibited

QA team



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## Conclusion

**PEAR is sexy.**

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## PEAR Website

<http://pear.php.net>

Package Browsing

Manual

Support

Bug tracking system

PEPr



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## PEAR Website II

Excuse to the PEAR website....

(as long as the WiFi works... ;)



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## PEAR Mailinglists

[pear-general@lists.php.net](mailto:pear-general@lists.php.net)

Support

User-2-user help

[pear-dev@lists.php.net](mailto:pear-dev@lists.php.net)

Technical discussions

Project coordination

[pear-qa@lists.php.net](mailto:pear-qa@lists.php.net)

Quality assurance

[pear-doc@lists.php.net](mailto:pear-doc@lists.php.net)

Documentation team

[pear-webmaster@lists.php.net](mailto:pear-webmaster@lists.php.net)

Website & Co.

IRC:  
#pear@EFNet



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## PEAR Group

PEAR steering committee

Mailinglist: [pear-group@php.net](mailto:pear-group@php.net)

Handles outside relations

Mediates on problems within PEAR

Reserves a veto on all decisions, however does not have any real power beyond the trust the PEAR community has for them

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## Obtaining PEAR

PEAR installer shipped with PHP since 4.3.0

Automatically installed on Windows

Per default activated when compiling on \*nix  
(do not use "--without-pear")

For earlier PHP versions bootstrap from <http://go-pear.org>

On \*nix try `lynx -source http://pear.php.net/go-pear | php -q`

On Windows, save source and call PHP manually

Tip: Ensure, that your PEAR path is added to the `include_path` directive in `php.ini`!

## PEAR in shared envs

Possibly no real installation possible (no shell access).

Installation can be faked easily:

- Install all necessary packages locally to your machine.

- Upload (FTP) the complete PEAR/ directory containing all unpacked sources.

- Add this directory to your `include_path` (using `ini_set()`, `.htaccess` or similar).

Upcoming PEAR version 1.4 will support remote-installation by default.

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## The PEAR Installer

Different interfaces:

- Console (build in)

- Web

- GTK

Easy usage

Perform a lot of actions on packages:

- List local/remote

- Install/Uninstall/Upgrade directly from the web

- Get package information

- Dependencies

- Package packages

- Test packages

## PEAR Installer Commands

### Important PEAR Installer commands

```
$> pear [un]install [PackageName]
```

```
$> pear upgrade[-all] [PackageName]
```

Use -f option to force action

Instead of PackageName point to package.xml  
or tar.gz in the filesystem or URL

```
$> pear list[-upgradeable]
```

```
$> pear config-show
```

```
$> pear config-set
```

```
$> pear package[-validate] [package.xml]
```



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## PEAR Installer Live

Live demonstration of the PEAR installer.

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## Basics on using PEAR

Important precondition:

`include_path` must contain the correct path to PEAR!

Packages contain a main file, which has to be included (no others).

Package names map to their location in PEAR:

DB            -->    DB.php  
Net\_FTP      -->    Net/FTP.php

...

Class names map to package names:

DB            -->    DB()  
Net\_FTP      -->    Net\_FTP()

(attention, most packages do not use direct instantiation)





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## PEAR in action

So, let's finally look at some code! :)

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## Distributing your own packages

Structure of a package:

```
/
  package.xml
  YourPackage.php
  YourPackage/
    MoreSources.php
  tests/
  doc/
  ...
```

Simply bundled inside a TGZ package.  
Usable through the PEAR Installer and without it.



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## A look at package.xml

Let's look at an example for a package.xml.

## Packaging

Simple through the PEAR installer

Move to the base directory of your package.

Validate your package.xml

```
$> pear package-validate
```

Fix possible errors.

Package

```
$> pear package
```

Test installation

```
$> pear install Your_Package-X.Y.Z.tgz
```

Simply upload your package to the web and:

```
$> pear install http://yourweb.com/Your_Package-X.Y.Z.tgz
```

Tip: PEAR\_PackageFileManager package! :)

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The end

## Outlook

PEAR 1.4 is currently in alpha stadium with exciting new features:

- Channel support

- Automatic dependency resolving

- Remote-installation support

- New package.xml format

...

Hopefully ready by the end of May.

(do not count on that, you know, it's open source)

## Final conclusion

PEAR offers you:

- A huge collection of high quality PHP components to make your development:

- ... more comfortable

- ... more secure

- ... much faster

- A unified backend to install PHP classes and C extensions.

- A distribution way for your PHP code.

- Standards for PHP development.

- A lot of PHP knowledge bundled in one place.



## Discussion

Do you have:

Questions?  
Critics?  
Ideas?  
Comments?

Please state them now!

Thank you for...

- ... listening 3 hours to my bad English.
- ... your interest in PEAR and PHP in general.
- ... coming to the PHP Quebec Conference 2005

I hope you enjoyed the workshop  
and wish you much fun here at the Conference!

Tobias Schlitt <[toby@php.net](mailto:toby@php.net)>



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## Usefull links

These slides online:

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

The PHP Quebec website:

<http://www.phpquebec.com>

Actual PHP news:

<http://www.planet-php.net>