

Preface

Chances are, you've seen the acronym **PEAR** at some point in your use of PHP, whether it was in passing or when installing and using a package from `pear.php.net`. If you've investigated, you've probably heard of popular software provided by PEAR, such as the DB database abstraction package, or the `HTML_QuickForm` package. What you may not realize is that PEAR is much more than just a collection of packages that you can use. PEAR also contains the most versatile installation program for PHP, the PEAR installer.

With the PEAR installer, you can do much more than just install packages from `pear.php.net`. You can install packages from other PEAR channels, distribute your own software projects using your own PEAR channel, and even maintain a complex web project, all using the PEAR installer. Surprised? Well read on, as this book reveals the intimate secrets of the PEAR installer and how it will revolutionize your everyday development with the PHP programming language!

What This Book Covers

Chapter 1 introduces you to the PEAR installer. We begin with a look at the traditional unzip-and-go method of distributing PHP software and compare its advantages and disadvantages to the PEAR installer's package-based method of distributing PHP software. You will see the innovation of PEAR channels, take a peek inside how the PEAR installer installs files from packages, and learn how it knows where to install them. Finally, you will see the many ways to acquire the PEAR installer and even how to install PEAR remotely onto a web host that does not provide shell access.

Chapter 2 is a must-read for all PHP developers, as it explains the basic workings of `package.xml`, the heart of the PEAR installer. `package.xml` is used to control almost everything the PEAR installer can do. You will learn about the importance of versioning in controlling the quality of packages installed, the importance of

dependencies, and how the PEAR installer manages this important link between libraries and applications. You will also learn how `package.xml` organizes package metadata such as the package name, authors, release notes, and changelog, and has critical installation data such as files, dependencies, and versioning organized.

Chapter 3 goes further in depth for developers who want to take advantage of the full application-support features introduced in `package.xml` version 2.0.

Chapter 4 takes a break from looking at the details of the PEAR installer, and dives into using the PEAR installer to develop and to maintain a complicated and rapidly evolving website.

Chapter 5 covers PEAR channels. Channels are designed to make it easy to install packages from any location, but difficult to compromise your system in the process, following a basic security principle: always design things so that the easiest way to do them is the most secure.

Channels open up `pear.php.net`'s monopoly over the PEAR installer to the entire Internet. Custom-built packages distributed through your channel can even be sold and made available to specific users while co-existing peacefully with publicly available open-source packages.

Chapter 6 teaches you how to embed the PEAR installer to create a plug-in manager. The chapter creates a fake blog application that provides the ability to seamlessly query a remote PEAR channel server designed to distribute templates. Using the internal classes of the PEAR installer, our blog web application intelligently installs and upgrades templates with all of the sophistication expected from the PEAR installer.

Conventions

In this book, you will find a number of styles of text that distinguish between different kinds of information. Here are some examples of these styles, and an explanation of their meaning.

There are three styles for code. Code words in text are shown as follows: "Next, you need to create a configuration file for the remote machine using the `config-create` command."

A block of code will be set as follows:

```
<file name="blah.php" role="php">
  <tasks:replace from="@DATABASE-URL@" to="database_url"
    type="pear-config" />
</file>
```


When we wish to draw your attention to a particular part of a code block, the relevant lines or items will be made bold:


```
if (is_object($infoplugin)) {
    $bag = new serendipity_property_bag;
    $infoplugin->introspect($bag);
    if ($bag->get('version') == $data['version']) {
        $installable = false;
    } elseif (version_compare($bag->get('version'),
        $data['version'], '<')) {
        $data['upgradable'] = true;
        $data['upgrade_version'] = $data['version'];
        $data['version'] = $bag->get('version');
    }
}
```

Any command-line input and output is written as follows:

```
$ pear -c pear.ini remote-install -o DB_DataObject
```

New terms and **important words** are introduced in a bold-type font. Words that you see on the screen, in menus or dialog boxes for example, appear in our text like this: "clicking the **Next** button moves you to the next screen".

 Warnings or important notes appear in a box like this.

 Tips and tricks appear like this.

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