

PHP selber bauen

PHP User Group Frankfurt 31.03.2011

Walter Ebert



Willkommen bei den anonymen PHPlern

Mein Name ist Walter
und ich kompiliere mir PHP selber

*Nicht immer,
aber immer öfter*
Gogglor-Handzeigen



PHP 5.3.0 Release Announcement

The PHP development team is proud to announce the immediate release of PHP 5.3.0. This release is a major improvement in the 5.X series, which includes a large number of new features and bug fixes.

The key features of PHP 5.3.0 include:

- Support for [namespaces](#)
- [Late static binding](#)
- [Lambda Functions and Closures](#)
- Syntax additions: [NOWDOC](#), [ternary short cut "?:"](#) and [jump label](#) (limited goto), [__callStatic\(\)](#)
- Under the hood performance improvements ←
- Optional [garbage collection](#) for cyclic references
- Optional [mysqlnd](#) PHP native replacement for libmysql ←
- Improved [Windows](#) support including VC9 and experimental X64 binaries as well as portability to other supported platforms
- More consistent float rounding
- Deprecation notices are now handled via E_DEPRECATED (part of E_ALL) instead of the E_STRICT error level
- Several enhancements to enable more [flexibility in php.ini](#) (and ini parsing in general)
- New bundled extensions: [ext/phar](#), [ext/intl](#), [ext/fileinfo](#), [ext/sqlite3](#), [ext/enchant](#)
- Over 140 bug fixes and improvements to PHP, in particular to: [ext/openssl](#), [ext/spl](#) and [ext/date](#)

This release also drops several extensions and unifies the usage of internal APIs. Users should be aware of the following known backwards compatibility breaks:


- Parameter parsing API unification will cause some functions to behave more or less strict when it comes to type juggling
- Removed the following extensions: [ext/mhash](#) (see [ext/hash](#)), [ext/msql](#), [ext/pspell](#) (see [ext/enchant](#)), [ext/sybase](#) (see [ext/sybase_ct](#))
- Moved the following extensions to PECL: [ext/ming](#), [ext/fbsql](#), [ext/ncurses](#), [ext/fdf](#)
- Removed [zend.ze1_compatibility_mode](#)

For users upgrading from PHP 5.2 there is a migration guide available [here](#), detailing the changes between those releases and PHP 5.3.0.

For a full list of changes in PHP 5.3.0, see the [ChangeLog](#).

- Fixed a possible memory corruption in substr_replace().
- Fixed a possible memory corruption in addcslashes().
- Fixed a possible stack exhaustion inside fnmatch().
- Fixed a possible dechunking filter buffer overflow.
- Fixed a possible arbitrary memory access inside sqlite extension.
- Fixed string format validation inside phar extension.
- Fixed handling of session variable serialization on certain prefix characters.
- Fixed a NULL pointer dereference when processing invalid XML-RPC requests (Fixes CVE-2010-0397, bug #51288).
- Fixed SplObjectStorage unserialization problems (CVE-2010-2225).
- Fixed possible buffer overflows in mysqlnd_list_fields, mysqlnd_change_user.
- Fixed possible buffer overflows when handling error packets in mysqlnd.

Key enhancements in PHP 5.3.3 include:

- Upgraded bundled sqlite to version 3.6.23.1.
- Upgraded bundled PCRE to version 8.02.
- Added FastCGI Process Manager (FPM) SAPI. 
- Added stream filter support to mcrypt extension.
- Added full_special_chars filter to ext/filter.
- Fixed a possible crash because of recursive GC invocation.
- Fixed bug #52238 (Crash when an Exception occurred in iterator_to_array).
- Fixed bug #52041 (Memory leak when writing on uninitialized variable returned from function).
- Fixed bug #52060 (Memory leak when passing a closure to method_exists()).
- Fixed bug #52001 (Memory allocation problems after using variable variables).
- Fixed bug #51723 (Content-length header is limited to 32bit integer with Apache2 on Windows).
- Fixed bug #48930 (__COMPILER_HALT_OFFSET__ incorrect in PHP >= 5.3).

For users upgrading from PHP 5.2 there is a migration guide available on <http://php.net/migration53>, detailing the changes between those releases and PHP 5.3.

For a full list of changes in PHP 5.3.3, see the [ChangeLog](#).

Distributions: Please Don't Cripple PHP or Red Hat: Stop Fucking Around

Barcelona, Spain

Wednesday, February 4th 2009, 16:40 CET

A friend of me pointed me to an issue in the Agavi issue tracker titled "[Fucking Debian fucking ruined their fucking PHP package once again, and now we need to waste fucking time to fucking fix it](#)". The issue is quite related to earlier discussions with the Red Hat folks about bundling a timezone database with PHP. Red Hat thought it'd be wise to create a patch to use the system provided timezone database instead. We (the PHP development team) thought that to be a bad idea because of several reasons. Among them is that it removes control from PHP's users about which database is, decreased performance, and some missing functionality. On top of that I [mentioned](#) that although the bundled timezone database is a concatenation of the system provided timezone database files, that might not necessarily be like that in the future. PHP does of course support means of upgrading the timezone database. For every release of the [Olson](#) database, there is now a bundled timezone database available through [PECL](#).

Because of these reasons, we didn't want to accept Red Hat's patch to disable the bundled timezone database. The most *important* thing however for users of PHP that *PHP works the same on every system*. We, the PHP developers, see this as a much more important thing as a tiny bit of annoyance by distributions' maintainers to have to package the timezone database for PHP separately. Unfortunately the Red Hat PHP package maintainer proceeded to deploy this patch in RHEL and Fedora. SuSE, Debian and Ubuntu have since then picked up on it as well. So instead the Agavi issue's title should be "*Fucking Red Hat fucking ruined their fucking PHP package and every other distribution once again, and now we need to waste fucking time to fucking fix it*". Unfortunately, this is not where it stops.

But first we go back on how PHP determines which timezone to use and what a timezone is. For PHP, a

Life Line

Fixed the Alice House and added other buildings/house numbers in that block.

[51.53° N, 0.20° W](#) — [osm](#) — Feb 2nd, 13:13 UTC

On my way to the BBC Broadcasting House for witnessing another recording session

[twitter](#) — Feb 1st, 17:50 UTC

Look ma, I'm on TV!: <http://techportal.ibuildings.com/2011...>
(Book authors interview)

[51.54° N, 0.20° W](#) — [twitter](#) — Feb 1st, 16:03 UTC

RT [@xdebug](#): As a side-note, Xdebug in SVN has quite some performance optimisations, as well as the setting `xdebug.coverage_enable=1` for ...

[twitter](#) — Feb 1st, 12:43 UTC

RT [@xdebug](#): Why you shouldn't run Xdebug in production: Benchmarking Xdebug <http://tinyurl.com/6bt5kxy> /via [@harrierverveer](#)

[twitter](#) — Feb 1st, 12:41 UTC

If you're going to the PHP UK Conference, you get £20 discount through: <http://www.phpconference.co.uk/regist...>

[51.54° N, 0.20° W](#) — [twitter](#) — Feb 1st, 11:02 UTC

Dear [@tripit](#), can I import my [@dopplrhq](#) data into you automatically?

[51.54° N, 0.20° W](#) — [twitter](#) — Feb 1st, 10:26 UTC

Java's turn to deal with the x87 register issue (the floating point DOS issue in PHP)- <http://goo.gl/6GNvb> /via [@rasmus](#)

[51.54° N, 0.20° W](#) — [twitter](#) — Feb 1st, 10:24 UTC

RT [@dshafik](#): Wow, I hope [@DellCares](#) is proud of this,

Kompatibilität / Features

Du musst zum Beispiel:

- eine alte PHP Version unterstützen
- mehrere PHP Versionen bzw.

PHP4 irgendwer?

Konfigurationen testen

- proprietäre Extensions nutzen die nur mit bestimmten PHP Versionen funktionieren
- die letzte Entwickler-Version testen (trunk)



チュアブルタイプ
VITAMIN-C

ビタミンC
Vitamin C is one of the most
We cannot produce it intern
It is necessary to take this o

Ko





```
./configure  
make  
sudo make install
```

<http://www.php.net/downloads.php>



```
./configure  
make  
make test  
sudo make install
```

Linux
Unix
Mac OS X
~~Windows~~

-> benutze einfach die binaries

oder wenn man wirklich muss; besuche:

<http://wiki.php.net/internals/windows/stepbystepbuild>



\ = escape linebreaks

```
sudo apt-get install \  
automake autoconf gcc \  
libtool binutils subversion \  
libxml2-dev libcurl4-dev \  
libfreetype6-dev libjpeg-dev libpng-dev
```

packages fuer debian / ubuntu



```
./configure --help
```

```
Usage: configure [options] [host]
```

```
Options: [defaults in brackets after descriptions]
```

```
Configuration:
```

```
--cache-file=FILE      cache test results in FILE
--help                  print this message
--no-create             do not create output files
--quiet, --silent      do not print `checking...' messages
--version               print the version of autoconf that created con
```

```
Directory and file names:
```

```
--prefix=PREFIX        install architecture-independent files in PREF
[/usr/local]
--exec-prefix=EPREFIX  install architecture-dependent files in EPREFI
[same as prefix]
--bindir=DIR           user executables in DIR [EPREFIX/bin]
--sbindir=DIR         system admin executables in DIR [EPREFIX/sbin]
--libexecdir=DIR      program executables in DIR [EPREFIX/libexec]
--datadir=DIR         read-only architecture-independent data in DIR
[PREFIX/share]
--sysconfdir=DIR      read-only single-machine data in DIR [PREFIX/e
--sharedstatedir=DIR  modifiable architecture-independent data in DI
[PREFIX/com]
--localstatedir=DIR  modifiable single-machine data in DIR [PREFIX/
--libdir=DIR          object code libraries in DIR [EPREFIX/lib]
--includedir=DIR     C header files in DIR [PREFIX/include]
```



```
./configure \  
--with-apxs2 \  
--with-mysql=mysqlnd --with-mysqli=mysqlnd \  
--with-pdo-mysql=mysqlnd \  
--with-curl \  
--with-gd \  
--with-jpeg-dir=/usr --with-png-dir=/usr \  
--with-freetype-dir=/usr
```

Fuer Apache: `sudo apt-get install apache2-prefork-dev`



```
./configure \  
--enable-fpm \  
--with-gettext --enable-zend-multibyte \  
--enable-mbstring --with-mcrypt \  
--enable-soap --enable-wddx --with-xsl \  
--with-curl --with-openssl \  
--with-zlib-dir=/usr --with-bz2 --enable-zip \  
--with-gd --with-jpeg-dir=/usr \  
--with-png-dir=/usr --with-freetype-dir=/usr \  
--enable-exif \  
--with-mysql=mysqlnd --with-mysqli=mysqlnd \  
--with-pdo-mysql=mysqlnd \  
--with-pgsql=/usr --with-pdo-pgsql \  
--without-sqlite --without-sqlite3 \  
--without-pdo-sqlite \  
--with-mm=/usr
```



System	Linux www 2.6.34.7-0.7-pae #1 SMP 2010-12-13 11:13:53 +0100 i686
Build Date	Mar 21 2011 12:33:09
Configure Command	./configure '--enable-fpm' '--with-gettext' '--enable-zend-multibyte' '--enable-mbstring' '--with-mcrypt' '--enable-soap' '--enable-wddx' '--with-xsl' '--with-bz2' '--enable-zip' '--with-curl' '--with-openssl' '--with-gd' '--with-jpeg-dir=/usr' '--with-png-dir=/usr' '--with-zlib-dir=/usr' '--with-freetype-dir=/usr' '--enable-exif' '--with-mysql=mysqlnd' '--with-mysqli=mysqlnd' '--with-mysql=mysqlnd' '--with-pdo-mysql=mysqlnd' '--with-pgsql=/usr' '--with-pdo-pgsql' '--without-sqlite' '--without-sqlite3' '--without-pdo-sqlite' '--with-mm=/usr'
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/usr/local/lib
Loaded Configuration File	/usr/local/lib/php.ini
Scan this dir for additional .ini files	(none)
Additional .ini files parsed	(none)
PHP API	20090626
PHP Extension	20090626
Zend Extension	220090626
Zend Extension	API2200000626.NTS



```
./configure
```

```
...
```

```
checking whether to build shared libraries... no  
checking whether to build static libraries... yes
```

```
creating libtool  
appending configuration tag "CXX" to libtool
```

```
Generating files
```

```
updating cache ./config.cache  
creating ./config.status  
creating php5.spec  
creating main/build-defs.h  
creating scripts/phpize  
creating scripts/man1/phpize.1  
creating scripts/php-config  
creating scripts/man1/php-config.1  
creating sapi/cli/php.1  
creating main/php_config.h  
creating main/internal_functions.c  
creating main/internal_functions_cli.c
```

```
+-----+  
| License: |  
| This software is subject to the PHP License, available in this |  
| distribution in the file LICENSE. By continuing this installation |  
| process, you are bound by the terms of this license agreement. |  
| If you do not agree with the terms of this license, you must abort |  
| the installation process at this point. |  
+-----+
```

```
Thank you for using PHP.
```



make

```
/bin/sh /home/walter/Downloads/php-5.3.5/libtool --silent
--preserve-dup-deps --mode=compile gcc -Iext/date/lib -Iext/date/
-I/home/walter/Downloads/php-5.3.5/ext/date/ -DPHP_ATOM_INC
-I/home/walter/Downloads/php-5.3.5/include
...
-lxml2 -lxml2 -lcrypt -lxml2 -lxml2 -lxml2 -lcrypt -o sapi/cli/php
Generating phar.php
Generating phar.phar
PEAR package PHP_Archive not installed: generated phar will require
PHP's phar extension be enabled.
directorygraphiterator.inc
directorytreeiterator.inc
clicommand.inc
invertedregexiterator.inc
pharcommand.inc
phar.inc

Build complete.
Don't forget to run 'make test'.
```

make test



```
=====
PHP           : /home/walter/Downloads/php-5.3.5/sapi/cli/php
PHP_SAPI      : cli
PHP_VERSION   : 5.3.5
ZEND_VERSION  : 2.3.0
PHP_OS       : Linux - Linux LM-U200 2.6.35-25-generic #44-Ubuntu SMP
INI actual    : /home/walter/Downloads/php-5.3.5/tmp-php.ini
```

...

WARNED TEST SUMMARY

```
-----
via [ext/pdo_sqlite/tests/common.phpt]
  SQLite PDO Common: Bug #34630 [inserting streams as LOBs][ext/pdo
via [ext/sqlite/tests/pdo/common.phpt]
  SQLite2 PDO Common: Bug #34630 [inserting streams as LOBs] [ext/s
Bug #39863 [file_exists()] silently truncates after a null byte] [ext/
=====
```

You may have found a problem in PHP.

We would like to send this report automatically to the PHP QA team, to give us a better understanding of how the test cases are doing. If you don't want to send it immediately, you can choose "s" to save the report to a file that you can send us later.

Do you want to send this report now? [Yns]:

```
sudo make install
```



```
Generating phar.php
```

```
Generating phar.phar
```

```
PEAR package PHP_Archive not installed: generated phar will
```

```
directorygraphiterator.inc
```

```
directorytreeiterator.inc
```

```
clicommand.inc
```

```
invertedregexiterator.inc
```

```
pharcommand.inc
```

```
phar.inc
```

```
Installing PHP SAPI module:          fpm
```

```
Installing PHP CLI binary:          /usr/local/bin/
```

```
...
```

```
Installing man pages:              /usr/local/man/man1/
```

```
  page: phpize.1
```

```
  page: php-config.1
```

```
Installing PEAR environment:       /usr/local/lib/php/
```

```
[PEAR] Archive_Tar      - installed: 1.3.7
```

```
[PEAR] Console_Getopt  - installed: 1.2.3
```

```
[PEAR] Structures_Graph- installed: 1.0.3
```

```
[PEAR] XML_Util        - installed: 1.2.1
```

```
[PEAR] PEAR            - installed: 1.9.1
```

```
Warning! a PEAR user config file already exists from a previous
```

```
Wrote PEAR system config file at: /usr/local/etc/pear.conf
```

```
You may want to add: /usr/local/lib/php to your php.ini include_path
```

```
/home/walter/Downloads/php-5.3.5/build/shtool install -c ext/phar/ph
```

```
ln -s -f /usr/local/bin/phar.phar /usr/local/bin/phar
```

```
Installing PDO headers:            /usr/local/include/php/ext/pdo/
```



```
sudo cp php.ini-development /usr/local/lib/php.ini
```

oder

```
sudo cp php.ini-production /usr/local/lib/php.ini
```

Mit der neuesten Entwickler-Version

Entweder:

```
wget http://snaps.php.net/php-trunk-latest.tar.bz2
```

Oder:

```
svn checkout http://svn.php.net/repository/php/php-src/trunk/ trunk
cd trunk
./buildconf
./configure
make
sudo make install
```

Standard aktivierte Extensions

(in php 5.3)

Core	ctype	date
dom	ereg	fileinfo
filter	hash	Iconv
json	libxml	pcre
PDO	pdo_sqlite	Phar
posix	Reflection	session
SimpleXML	SPL	SQLite
sqlite3	standard	tokenizer
xml	xmlreader	xmlwriter

```
./configure --disable-simplexml --without-sqlite3
```

Populäre PHP Extensions

- APC, xCache, eAccelerator
- Memcache, memcached
- Xdebug
- PostgreSQL, mongoDB, OCI8, SQLSRV
- Sphinx, xapian, mnogosearch, solr
- Suhosin

PECL



```
sudo pecl install apc
```

<http://pecl.php.net/>

Extensions kompilieren



```
phpize  
./configure  
make  
sudo make install
```

phpize gibt es ab php 5.3.6 auch fuer windows



`/usr/local/lib/php.ini`

`[apc]`

`extension=apc.so`

`[xdebug]`

`zend_extension="/usr/local/lib/php
/extensions/no-debug-non-zts-
20090626/xdebug.so"`



⌘ PHP Manual

^ PHP-Handbuch

- Copyright
- PHP-Handbuch
- Einführung
- **Installation und Konfiguration**
- Sprachreferenz
- Sicherheit
- Features
- Funktionsreferenz
- PHP im Kern: Das Entwicklerhandbuch für die Zend Engine
- FAQ
- Appendices

«Und weiter?»

[Generelle Überlegungen»](#)

view this page in

Last updated: Fri, 25 Feb 2011

Installation und Konfiguration

- [Generelle Überlegungen](#)
- [Installation auf Unix-Systemen](#)
 - [Apache 1.3.x auf Unix-Systemen](#)
 - [Apache 2.0 auf Unixsystemen](#)
 - [Lighttpd 1.4 on Unix systems](#)
 - [Sun, iPlanet and Netscape servers on Sun Solaris](#)
 - [CGI and command line setups](#)
 - [HP-UX specific installation notes](#)
 - [OpenBSD installation notes](#)
 - [Solaris specific installation tips](#)
 - [Debian GNU/Linux-Installationshinweise](#)
- [Installation unter Mac OS X](#)
 - [Verwendung von Paketen](#)
 - [Das enthaltene PHP verwenden](#)
 - [Kompilieren von PHP unter Mac OS X](#)
- [Installation on Windows systems](#)
 - [Windows Installer \(PHP 5.1.0 and earlier\)](#)
 - [Windows Installer \(PHP 5.2 and later\)](#)
 - [Manual Installation Steps](#)
 - [ActiveScript](#)
 - [Microsoft IIS](#)

Walter Ebert *Web Development*

@wltrd

walterebert.de

blog.walterebert.com

slideshare.net/walterebert

Search Meetup Frankfurt (12.4.)

searchmeetupfrankfurt.de