

Xdebug 3

Interessengemeinschaft PHP e.V.

Derick Rethans

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<https://derickrethans.nl/talks/xdebug-phpig20>

<https://xdebug.org>

About Me

Derick Rethans

- I'm European, living in London
- PHP 7.4 **Release Manager**
- **Xdebug** & PHP's Date/Time support
- Host of **<https://phpinternals.news>** podcast
- I ♥🌐 maps, I ♥🍺 beer, I ♥🥃 whisky
- twitter: @derickr



The Xdebug Experience

Xdebug is 18 years old, and has plenty of issues:

- **Configuration Confusion**

65 configuration settings: pointless, duplicated, or incompatible at the same time

- **Unproductive Usability**

port 9000, missing breakpoints, education (networking)

- **Poor Performance**

- **Lagging Behind**

Xdebug for PHP 7.3 was 4 months late

Configuration Settings

- x.auto_trace
- x.cli_color
- x.collect_assignments
- x.collect_includes
- x.collect_params
- x.collect_return
- x.collect_vars
- x.coverage_enable**
- x.default_enable
- x.dump.COOKIE
- x.dump.ENV
- x.dump.FILES
- x.dump.GET
- x.dump.POST
- x.dump.REQUEST
- x.dump.SERVER
- x.dump.SESSION
- x.dump_globals
- x.dump_once
- x.dump_undefined
- x.extended_info**
- x.file_link_format

- x.filename_format
- x.force_display_errors
- x.force_error_reporting
- x.gc_stats_enable
- x.gc_stats_output_dir**
- x.gc_stats_output_name**
- x.halt_level
- x.idekey
- x.max_nesting_level
- x.max_stack_frames
- x.overload_var_dump
- x.profiler_aggregate
- x.profiler_append
- x.profiler_enable**
- x.profiler_enable_trigger
- x.profiler_enable_trigger_value
- x.profiler_output_dir**
- x.profiler_output_name**
- x.remote_addr_header
- x.remote_autostart
- x.remote_connect_back
- x.remote_cookie_expire_time

- x.remote_enable**
- x.remote_handler**
- x.remote_host
- x.remote_log
- x.remote_mode
- x.remote_port
- x.remote_timeout
- x.scream
- x.show_error_trace
- x.show_exception_trace
- x.show_local_vars
- x.show_mem_delta**
- x.trace_enable_trigger
- x.trace_enable_trigger_value
- x.trace_format
- x.trace_options
- x.trace_output_dir**
- x.trace_output_name**
- x.var_display_max_children
- x.var_display_max_data
- x.var_display_max_depth

Missed Breakpoints

```

1 <?php
2 function demo($a, $b, $c, $d)
3 {
4     if ( // breakpoint here
5         $a
6         && $b
7         && ($c || $d)
8     ) {
9         echo "It's true!";
10    }
11 }
12
13 demo(true, true, true, false);

```

```

function name:  demo
number of ops:  14
compiled vars:  !0 = $a, !1 = $b, !2 = $c, !3 = $d
line    #*  op              return  operands
   2      0  EXT_NOP
          1  RECV              !0
          2  RECV              !1
          3  RECV              !2
          4  RECV              !3
   5      5  EXT_STMT
          6  JMPZ              !0, ->12
   6      7  JMPZ              !1, ->12
   7      8  JMPNZ             !2, ->10
          9  JMPZ              !3, ->12
   9     10  EXT_STMT
          11  ECHO              'It%27s+true%21'
  11     12  EXT_STMT
          13  RETURN             null

```

Missed Breakpoints

```

1 <?php
2 function demo($a, $b, $c, $d)
3 {
4     if ( // breakpoint here
5         $a
6         && $b
7         && ($c || $d)
8     ) {
9         echo "It's true!";
10    }
11 }
12
13 demo(true, true, true, false);

```

```

function name:  demo
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line    #*  op              return  operands
   2      0  EXT_NOP
          1  RECV              !0
          2  RECV              !1
          3  RECV              !2
          4  RECV              !3
   5      5  EXT_STMT
          6  JMPZ              !0, ->12
   6      7  JMPZ              !1, ->12
   7      8  JMPNZ             !2, ->10
          9  JMPZ              !3, ->12
   9     10  EXT_STMT
          11  ECHO              'It%27s+true%21'
  11     12  EXT_STMT
          13  RETURN             null

```

Performance Woes



Dustin Fraker @dustin_fraker · Jan 11

Replying to @derickr @Xdebug @laravelphp

True, but code coverage reports are **slow** too. I have a separate command to run tests with coverage that doesn't remove **xdebug**.



2



Tom Jowitt @tommyjowitt · Jan 8

Replying to @jordanthoff @calebporzio

Interesting. I didn't know about this. We currently calculate coverage in a midnight CI run as **XDebug** is so painfully **slow**.



1



1



Cody Covey @ccovey14 · Jan 6

Replying to @GeeH

I got similar responses when I mentioned we couldn't run our symfony app with **xdebug** enabled because **xdebug** caused the app to be too **slow**.



Larachat Slack @larachatslack · 19 Dec 2018

Speed up PHPUnit Code Coverage Analysis – Nicolas Cabot – Medium PHPUnit Code Coverage Analysis is often used with **xdebug** as the coverage data source. But it has one major drawback: it can become very **slow**. As you ca...

LaraChat - Speed up PHPUnit Code Coverage Analysi...

Copy-cats

9000	Yes		SonarQube Web Server ^[281]	Unofficial
	Yes		DBGp	Unofficial
	Yes		SqueezeCenter web server & streaming	Unofficial
		Yes	UDPCast	Unofficial
	Yes		Play! Framework web server ^[282]	Unofficial
	Yes		Hadoop NameNode default port	Unofficial
	Yes		PHP-FPM default port	Unofficial
	Yes		QBittorrent 's embedded torrent tracker default port ^[283]	Unofficial

PHP-FPM picked the same port as Xdebug (DBGp) ☹️

The Xdebug Experience: Solutions

- Setting up CI (with PHP 7.4/8.0 nightlies)
- The **Big Refactor** project
- Education
Networking, settings, how Xdebug interacts
- Performance analysis and improvements for specific features

I can't do that all in my spare time

The Xdebug Experience: The Plan

Xdebug 2.8

- ✓ Improve 'breakpoint' behaviour
- ✓ Set up a local CI

Xdebug 2.9

- ✓ Performance Improvements

Xdebug 3

- ✓ The Big Refactor™
 - ✓ Introducing modes
 - ✓ Simplify configuration and validation
- ✓ Performance Improvements

Various Versions

	7.2.12	7.2.22-zts	7.2.33	7.3.11-zts	7.3.2-zts	7.4.3-32bit
	7.2.12-32bit	7.2.23	7.2.3-32bit	7.3.12	7.3.3	7.4.3-zts
	7.2.12-zts	7.2.2-32bit	7.2.33-32bit	7.3.12-32bit	7.3.3-32bit	7.4.4
	7.2.13	7.2.23-32bit	7.2.33-zts	7.3.12-zts	7.3.3-zts	7.4.4-32bit
	7.2.1-32bit	7.2.23-zts	7.2.3-zts	7.3.13	7.3.4	7.4.4-zts
	7.2.13-32bit	7.2.24	7.2.4	7.3.1-32bit	7.3.4-32bit	7.4.5
	7.2.13-zts	7.2.24-32bit	7.2.4-32bit	7.3.13-32bit	7.3.4-zts	7.4.5-32bit
	7.2.14	7.2.24-zts	7.2.4-zts	7.3.13-zts	7.3.5	7.4.5-zts
	7.2.14-32bit	7.2.25	7.2.5	7.3.14	7.3.5-32bit	7.4.6
	7.2.14-zts	7.2.25-32bit	7.2.5-32bit	7.3.14-32bit	7.3.5-zts	7.4.6-32bit
	7.2.15	7.2.25-zts	7.2.5-zts	7.3.14-zts	7.3.6	7.4.6-zts
	7.2.15-32bit	7.2.25-zts-32bit	7.2.6	7.3.15	7.3.6-32bit	7.4.7
	7.2.15-zts	7.2.26	7.2.6-32bit	7.3.15-32bit	7.3.6-zts	7.4.7-32bit
	7.2.16	7.2.26-32bit	7.2.6-zts	7.3.15-zts	7.3.7	7.4.7-zts
	7.2.16-32bit	7.2.26-zts	7.2.7	7.3.16	7.3.7-32bit	7.4.8
	7.2.16-zts	7.2.27	7.2.7-32bit	7.3.16-32bit	7.3.7-zts	7.4.8-32bit
	7.2.17	7.2.27-32bit	7.2.7-zts	7.3.16-zts	7.3.8	7.4.8-zts
	7.2.17-32bit	7.2.27-zts	7.2.8	7.3.17	7.3.8-32bit	7.4.9
	7.2.17-zts	7.2.28	7.2.8-32bit	7.3.17-32bit	7.3.8-zts	7.4.9-32bit
	7.2.18	7.2.28-32bit	7.2.8-zts	7.3.17-zts	7.3.9	7.4.9-zts
	7.2.18-32bit	7.2.28-zts	7.2.9	7.3.18	7.3.9-32bit	7.4dev
	7.2.18-zts	7.2.29	7.2.9-32bit	7.3.18-32bit	7.3.9-zts	7.4dev-32bit
	7.2.19	7.2.29-32bit	7.2.9-zts	7.3.18-zts	7.3dev	7.4dev-zts
	7.2.19-32bit	7.2.29-zts	7.2dev	7.3.19	7.3dev-32bit	
	7.2.19-zts	7.2.2-zts	7.2dev-32bit	7.3.19-32bit	7.3dev-zts	master
7.2.0	7.2.1-zts	7.2.3	7.2dev-zts	7.3.19-zts	7.4.0	master-32bit
7.2.0-32bit	7.2.2	7.2.30	7.3.0	7.3.1-zts	7.4.0-32bit	master-zts
7.2.0-zts	7.2.20	7.2.30-32bit	7.3.0-32bit	7.3.2	7.4.0-zts	
7.2.1	7.2.20-32bit	7.2.30-zts	7.3.0-zts	7.3.20	7.4.1	
7.2.10	7.2.20-zts	7.2.31	7.3.1	7.3.20-32bit	7.4.1-32bit	
7.2.10-32bit	7.2.21	7.2.31-32bit	7.3.10	7.3.20-zts	7.4.1-zts	
7.2.10-zts	7.2.21-32bit	7.2.31-zts	7.3.10-32bit	7.3.21	7.4.2	
7.2.11	7.2.21-zts	7.2.32	7.3.10-zts	7.3.21-32bit	7.4.2-32bit	
7.2.11-32bit	7.2.22	7.2.32-32bit	7.3.11	7.3.21-zts	7.4.2-zts	
7.2.11-zts	7.2.22-32bit	7.2.32-zts	7.3.11-32bit	7.3.2-32bit	7.4.3	

Local Continuous Integration

- Any cloud based CI is too slow due to lack of parallelisation
Travis CI, Circle CI, AppVeyor
- Many configuration pivots:
NTS/ZTS, 64-bit/32-bit, OPcache on/off
- Changes between PHP patch versions
Line changes for OPcodes, bug fixes in PHP
- I have a local machine with plenty of cores and memory
- Nightly builds of PHP 7.4 and 8.0

<https://xdebug.org/ci>

Xdebug 2.9

Xdebug 2.9: Code Coverage

Running time of Zeta Document package tests

2.7.2: Time: 2.83 minutes

Xdebug 2.9: Code Coverage

Running time of Zeta Document package tests

2.7.2: Time: 2.83 minutes

2.8.0: Time: 46.04 minutes

Xdebug 2.9: Code Coverage

Running time of Zeta Document package tests

2.7.2: Time: 2.83 minutes

2.8.0: Time: 46.04 minutes

2.8.1: Time: 22.26 minutes

Xdebug 2.9: Code Coverage

Running time of Zeta Document package tests

2.7.2: Time: 2.83 minutes

2.8.0: Time: 46.04 minutes

2.8.1: Time: 22.26 minutes

2.9.0: Time: **1.21** minutes

Xdebug 2.9: Code Coverage

Running time of Zeta Document package tests

2.7.2: Time: 2.83 minutes

2.8.0: Time: 46.04 minutes

2.8.1: Time: 22.26 minutes

2.9.0: Time: **1.21** minutes

Xdebug 3

The Xdebug Experience: The Plan

Xdebug 2.8

- ✓ Improve 'breakpoint' behaviour
- ✓ Set up a local CI

Xdebug 2.9

- ✓ Performance Improvements

Xdebug 3

- ✓ The Big Refactor™
 - ✓ Introducing modes
 - ✓ Simplify configuration and validation
- ✓ Performance Improvements

Code Reorganisation

```
derick@singlemalt:~/dev/php/xdebug-xdebug$ ls *. [hc]
```

config.h	xdebug_handler_dbg.h	xdebug_str.c
php_xdebug.h	xdebug_handlers.c	xdebug_str.h
usefulstuff.c	xdebug_handlers.h	xdebug_superglobals.c
usefulstuff.h	xdebug_hash.c	xdebug_superglobals.h
xdebug_branch_info.c	xdebug_hash.h	xdebug_trace_computerized.c
xdebug_branch_info.h	xdebug_llist.c	xdebug_trace_computerized.h
xdebug.c	xdebug_llist.h	xdebug_trace_html.c
xdebug_code_coverage.c	xdebug_mm.h	xdebug_trace_html.h
xdebug_code_coverage.h	xdebug_monitor.c	xdebug_trace_textual.c
xdebug_com.c	xdebug_monitor.h	xdebug_trace_textual.h
xdebug_com.h	xdebug_private.c	xdebug_tracing.c
xdebug_compat.c	xdebug_private.h	xdebug_tracing.h
xdebug_compat.h	xdebug_profiler.c	xdebug_var.c
xdebug_filter.c	xdebug_profiler.h	xdebug_var.h
xdebug_filter.h	xdebug_set.c	xdebug_xml.c
xdebug_gc_stats.c	xdebug_set.h	xdebug_xml.h
xdebug_gc_stats.h	xdebug_stack.c	
xdebug_handler_dbg.c	xdebug_stack.h	

Code Reorganisation

```
derick@gargleblaster:~/src$ ls -v ../*. [ch] */*. [ch]
```

```
base/base.c          gcstats/gc_stats.c      lib/var_export_html.h
base/base.h          gcstats/gc_stats.h      lib/var_export_line.c
base/filter.c        gcstats/gc_stats_private.h lib/var_export_line.h
base/filter.h        lib/compat.c            lib/var_export_serializ
base/monitor.c       lib/compat.h            lib/var_export_serializ
base/monitor.h       lib/crc32.c             lib/var_export_text.c
base/stack.c         lib/crc32.h             lib/var_export_text.h
base/stack.h         lib/hash.c              lib/var_export_xml.c
base/superglobals.c  lib/hash.h              lib/var_export_xml.h
base/superglobals.h  lib/lib.c               lib/xml.c
coverage/branch_info.c lib/lib.h               lib/xml.h
coverage/branch_info.h lib/lib_private.h       profiler/profiler.c
coverage/code_coverage.c lib/llist.c              profiler/profiler.h
coverage/code_coverage.h lib/llist.h              profiler/profiler_private
coverage/code_coverage_private.h lib/mm.h                 tracing/trace_computer
debugger/com.c        lib/set.c                tracing/trace_computer
debugger/com.h        lib/set.h                tracing/trace_html.c
debugger/debugger.c   lib/str.c                tracing/trace_html.h
debugger/debugger.h   lib/str.h                tracing/trace_textual.c
debugger/debugger_private.h lib/usefulstuff.c       tracing/trace_textual.h
debugger/handlers.c   lib/usefulstuff.h       tracing/tracing.c
debugger/handlers.h   lib/var.c                tracing/tracing.h
debugger/handler_dbgp.c lib/var.h                tracing/tracing_private
```


Code Reorganisation

```
derick@gargleblaster:~/src$ ls -v ../*. [ch] */*. [ch]
```

```
base/base.c          gcstats/gc_stats.c      lib/var_export_html.h
base/base.h          gcstats/gc_stats.h      lib/var_export_line.c
base/filter.c        gcstats/gc_stats_private.h lib/var_export_line.h
base/filter.h        lib/compat.c            lib/var_export_serializ
base/monitor.c       lib/compat.h            lib/var_export_serializ
base/monitor.h       lib/crc32.c             lib/var_export_text.c
base/stack.c         lib/crc32.h             lib/var_export_text.h
base/stack.h         lib/hash.c              lib/var_export_xml.c
base/superglobals.c  lib/hash.h              lib/var_export_xml.h
base/superglobals.h  lib/lib.c               lib/xml.c
coverage/branch_info.c lib/lib.h               lib/xml.h
coverage/branch_info.h lib/lib_private.h
coverage/code_coverage.c lib/llist.c
coverage/code_coverage.h lib/llist.h
coverage/code_coverage_private.h lib/mm.h
debugger/com.c       lib/set.c
debugger/com.h       lib/set.h
debugger/debugger.c  lib/str.c
debugger/debugger.h  lib/str.h
debugger/debugger_private.h lib/usefulstuff.c
debugger/handlers.c  lib/usefulstuff.h
debugger/handlers.h  lib/var.c
debugger/handler_dbgp.c lib/var.h
lib/var_export_html.h
lib/var_export_line.c
lib/var_export_line.h
lib/var_export_serializ
lib/var_export_serializ
lib/var_export_text.c
lib/var_export_text.h
lib/var_export_xml.c
lib/var_export_xml.h
lib/xml.c
lib/xml.h
profiler/profiler.c
profiler/profiler.h
profiler/profiler_private
tracing/trace_computer
tracing/trace_computer
tracing/trace_html.c
tracing/trace_html.h
tracing/trace_textual.c
tracing/trace_textual.h
tracing/tracing.c
tracing/tracing.h
tracing/tracing_private
```


Introducing Modes

Off

Loaded, but miniscule overhead

Introducing Modes

Develop

Every day debugging aides

Introducing Modes

Debugger

Debugging applications with an IDE
Previously: remote debugger

Introducing Modes

Tracing

Tracing the execution of a script to a file

Introducing Modes

Profiler

Profiling application performance

Introducing Modes

Coverage

Which code is run during tests

Introducing Modes

Time Traveller



Introducing Modes

Configuration Settings

```
x.auto_trace
x.cli_color
x.collect_assignments
x.collect_includes
x.collect_params
x.collect_return
x.collect_vars
x.coverage_enable
x.default_enable
x.dump.COOKIE
x.dump.ENV
x.dump.FILES
x.dump.GET
x.dump.POST
x.dump.REQUEST
x.dump.SERVER
x.dump.SESSION
x.dump_globals
x.dump_once
x.dump_undefined
x.extended_info
x.file_link_format
```

```
x.filename_format
x.force_display_errors
x.force_error_reporting
x.gc_stats_enable
x.gc_stats_output_dir
x.gc_stats_output_name
x.halt_level
x.idekey
x.max_nesting_level
x.max_stack_frames
x.overload_var_dump
x.profiler_aggregate
x.profiler_append
x.profiler_enable
x.profiler_enable_trigger
x.profiler_enable_trigger_value
x.profiler_output_dir
x.profiler_output_name
x.remote_addr_header
x.remote_autostart
x.remote_connect_back
x.remote_cookie_expire_time
```

```
x.remote_enable
x.remote_handler
x.remote_host
x.remote_log
x.remote_mode
x.remote_port
x.remote_timeout
x.scream
x.show_error_trace
x.show_exception_trace
x.show_local_vars
x.show_mem_delta
x.trace_enable_trigger
x.trace_enable_trigger_value
x.trace_format
x.trace_options
x.trace_output_dir
x.trace_output_name
x.var_display_max_children
x.var_display_max_data
x.var_display_max_depth
```

Configuration Settings

```
xdebug.cli_color
xdebug.cloud.userid
xdebug.collect_assignments
xdebug.collect_return
xdebug.dump.COOKIE
xdebug.dump.ENV
xdebug.dump.FILES
xdebug.dump.GET
xdebug.dump_globals
xdebug.dump_once
xdebug.dump.POST
xdebug.dump.REQUEST
xdebug.dump.SERVER
xdebug.dump.SESSION
xdebug.dump_undefined
xdebug.file_link_format
xdebug.filename_format
xdebug.force_display_errors
xdebug.force_error_reporting
xdebug.gc_stats_output_name
xdebug.halt_level
xdebug.idekey
xdebug.log
xdebug.log_level
xdebug.max_nesting_level
```

```
xdebug.max_stack_frames
xdebug.mode
xdebug.output_dir
xdebug.profiler_append
xdebug.profiler_output_name
xdebug.remote_addr_header
xdebug.remote_connect_back
xdebug.remote_cookie_expire_time
xdebug.remote_host
xdebug.remote_port
xdebug.remote_timeout
xdebug.scream
xdebug.show_error_trace
xdebug.show_exception_trace
xdebug.show_local_vars
xdebug.start_upon_error
xdebug.start_with_request
xdebug.trace_format
xdebug.trace_options
xdebug.trace_output_name
xdebug.trigger_value
xdebug.var_display_max_children
xdebug.var_display_max_data
xdebug.var_display_max_depth
```


Setup Woes

**Sebastian Ruchlewicz** @SRUchlewicz · 12 Aug 2018
Anyone had **problems** with configuring [#xdebug](#) with [#Docker](#) containers and [#phpstorm](#) ? If yes, check out my last post ruchlewicz.net/blog/xdebug-do... [#php](#)



Xdebug + Docker + PhpStorm | Web Develop...
Have you tried to run xdebug on docker container and catching requests with ruchlewicz.net



**The Bahree** @arjunbahree · 14 Apr 2018
Docker Swarm + XDebug: problem and solution: ift.tt/2qxDBxp



**Victor Bolshov** @crocodile2u · 14 Apr 2018
I just published “**Docker Swarm + XDebug: problem** and solution” medium.com/p/docker-swarm...



**Christian Engel** @Paratron · 22 Mar 2018
Its funny how [#PHP](#) [#xdebug](#) always comes back once a while and makes trouble. Connection **problems** back in the days with [#XAMPP](#), later with [#vagrant](#), now with [#docker](#) [#dejavue](#) [#GroundhogDay](#)



**Vojin Urosevic** 沃因 @vojinoosevic · 20 Feb 2018
Problem Docker-Xdebug-Osx/Mac dlvr.it/QH5tRf



Activating the Step Debugger

php.ini settings:

```
xdebug.mode=debug
```

```
xdebug.client_host=localhost
```

```
xdebug.client_port=9003
```

Activating the Step Debugger

php.ini settings:

`xdebug.mode=debug`

`xdebug.client_host=localhost`

`xdebug.client_port=9003`

`xdebug.discover_client_host=1`

Activating the Step Debugger

On the shell:

```
export XDEBUG_SESSION=yes
```

Activating the Step Debugger

On the shell:

```
export XDEBUG_SESSION=yes
```

```
export XDEBUG_MODE=debug
```

Activating the Step Debugger

On the shell:

```
export XDEBUG_SESSION=yes
```

```
export XDEBUG_MODE=debug
```


Step Debugger Logs

Logging debugging communication:

```
xdebug.log=/tmp/remote.log
```

Also shows connection attempts and failures:

```
xdebug.cloud_id=f047e3fd-9d35-4989-94f3-4cb64a1e6376
```

```
[2912111] Log opened at 2020-11-18 10:11:31.536895
```

```
[2912111] [Step Debug] INFO: Connecting to configured address/port:  
n.cloud.xdebug.com:9020.
```

```
[2912111] [Step Debug] INFO: Connected to debugging client: (null). :-)
```

Step Debugger Logs

Logging debugging communication:

```
xdebug.log=/tmp/remote.log
```

Also shows connection attempts and failures:

```
xdebug.client_discover_address=1  
xdebug.client_host=SomethingEntirelyDifferent  
xdebug.client_port=9003  
  
[Step Debug] Could not connect to debugging client.  
    Tried: SometimeEntirelyDifferent:9003  
    (fallback through xdebug.client_host/xdebug.client_port) :-(
```


Step Debugger Logs

Logging debugging communication:

```
xdebug.log=/tmp/remote.log
```

Also shows connection attempts and failures:

```
xdebug.client_discover_address=1  
xdebug.client_host=SomethingEntirelyDifferent  
xdebug.client_port=9003  
  
[Step Debug] Could not connect to debugging client.  
    Tried: SometimeEntirelyDifferent:9003  
    (fallback through xdebug.client_host/xdebug.client_port) :-(
```

Diagnostic Log

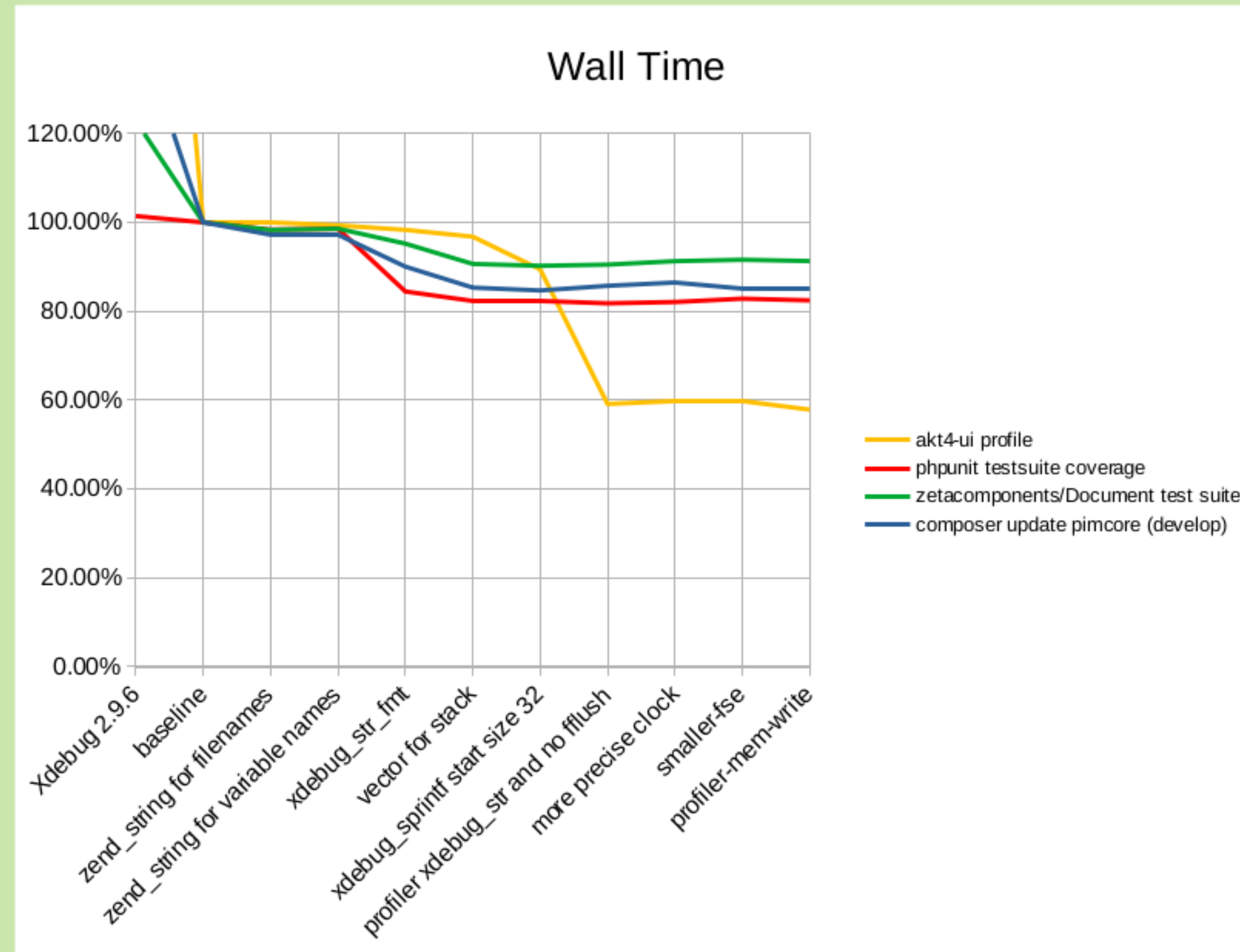
```
<?php
xdebug_info();
```

Result:

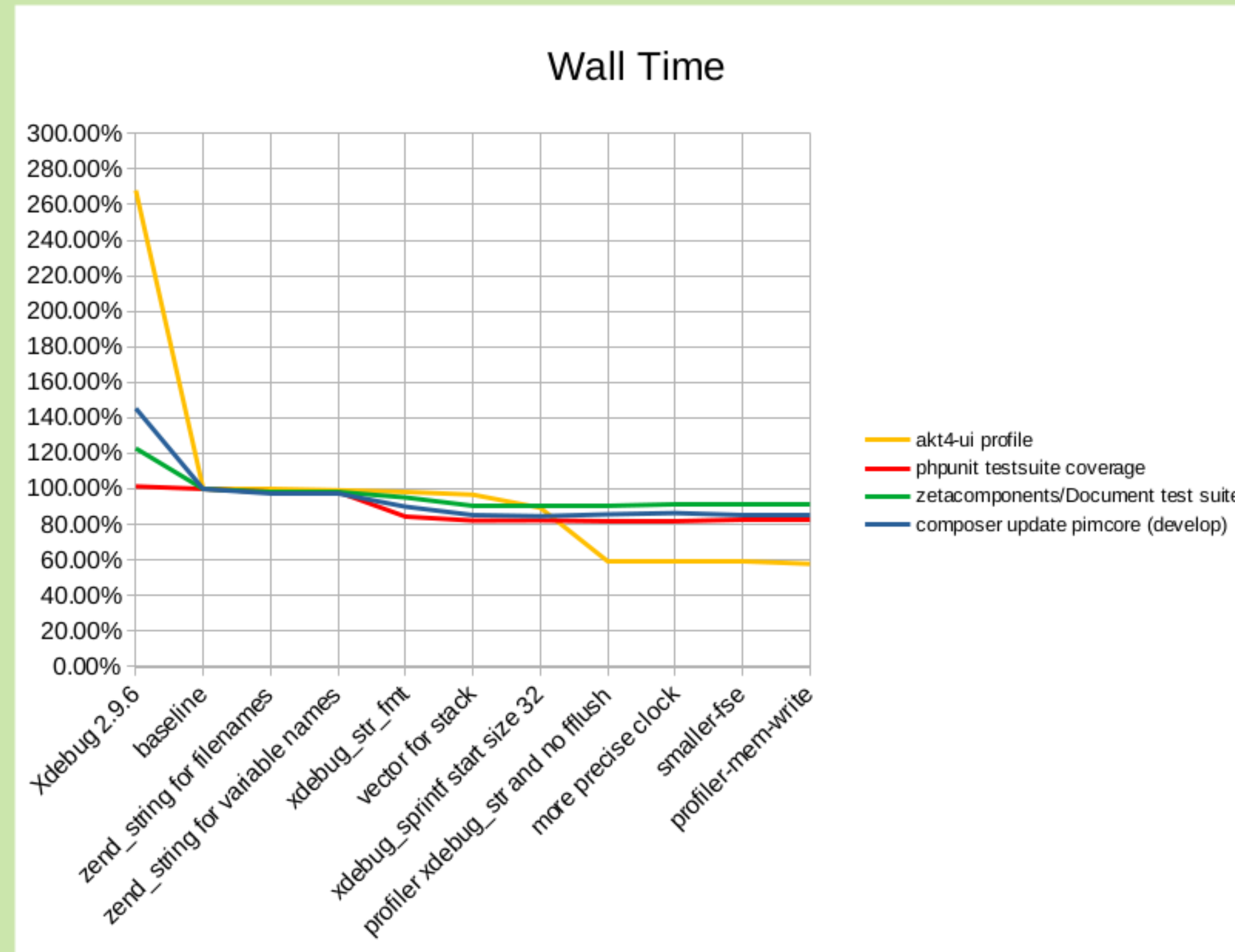
	
Version	3.0.0-dev
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Feature	Enabled/Disabled	Docs
Development Aids	✗ disabled	
Coverage	✗ disabled	
GC Stats	✗ disabled	
Profiler	✗ disabled	
Step Debugger	✓ enabled	
Tracing	✗ disabled	

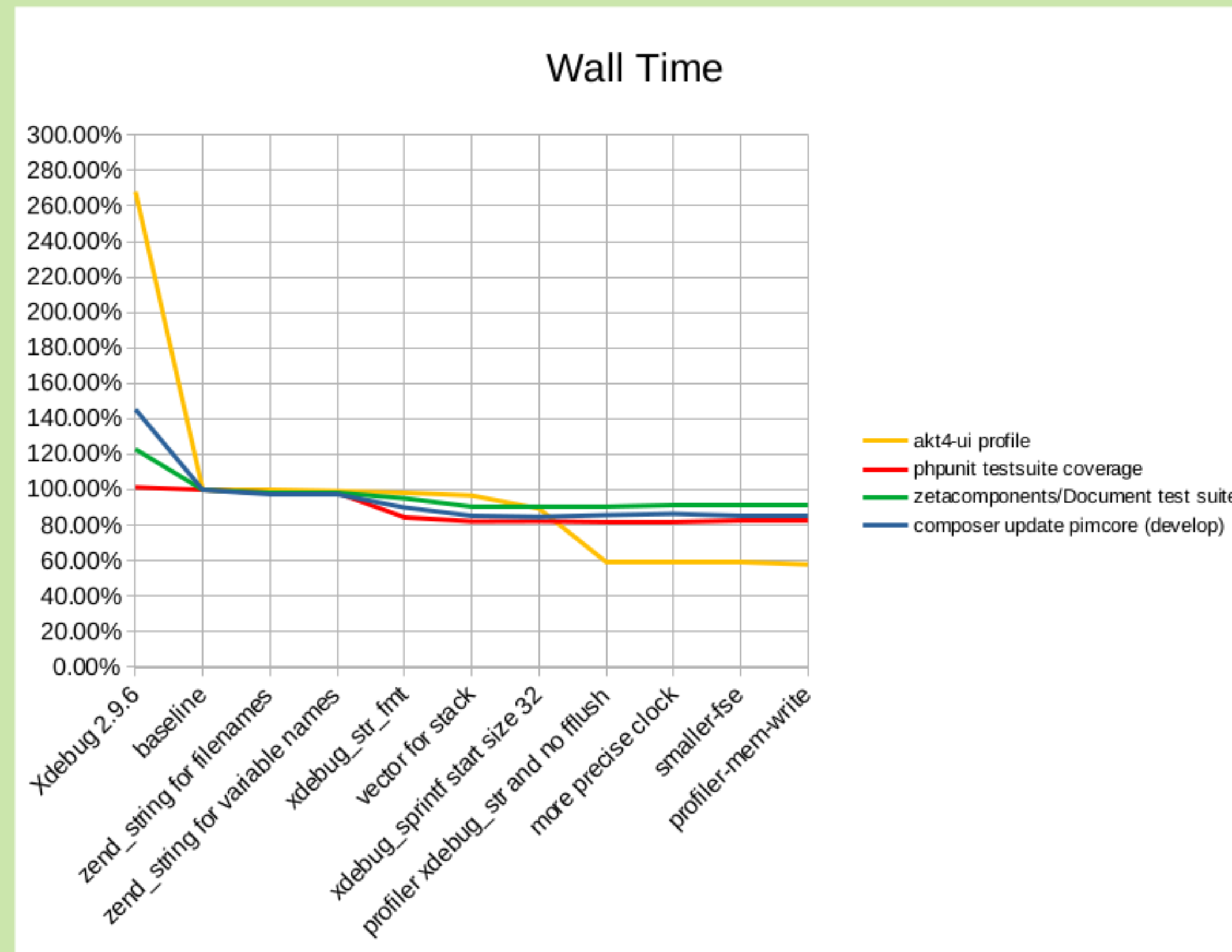
Xdebug 3 Performance

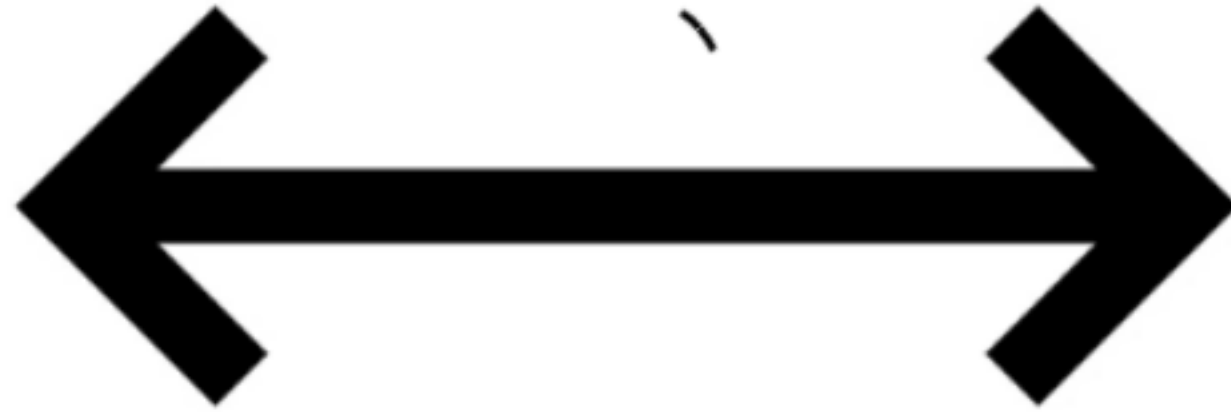


Xdebug 3 Performance



Xdebug 3 Performance

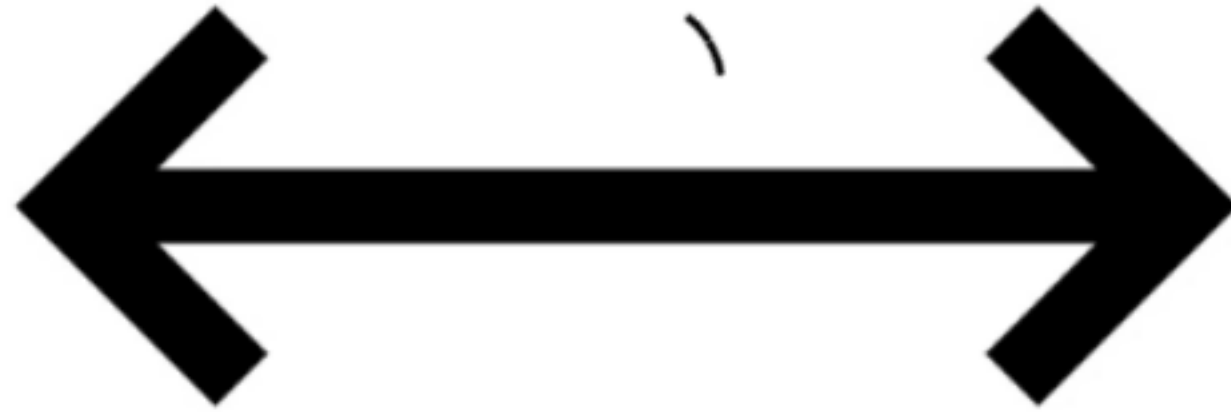




0:00 / 0:50



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0:00 / 0:50



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demo

Supporting Xdebug

It's Open Source and free (as in "free beer")
I would like to work more on Xdebug, to help **you**

Features and Bugs

<https://bugs.xdebug.org>

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Seravo — CHECK24 — Private Packagist — Supermetrics — Intracto — Strategy
 — e3N — Automattic — JetBrains — TYPO3 GmbH — Tideways

Transparency

July 2020



Day	Type	Description	Hours
1	xdebug3	Changing all filenames from char* to zend_string*	5.25
2	xdebug3	PHP 8 compat; #1811: Remove xdebug.collect_includes; #1812: Remove show_mem_delta; #1819: Remove overloaded_var_dump	7.00
3	xdebug3	#1819: Remove overloaded_var_dump	1.00
3	docs	PhpStorm web cast issues	1.50
5	xdebug3	Use zend_string for variable names	1.75
7	docs	Xdebug Cloud/Player/3 docs for JetBrains	1.50
8	ci	PHP 8 on Windows/AppVeyor compatibility	1.00
8	xdebug3	dbgproxy (check for SSL, and build with no-cloud) updates, and deployment automation	3.00
8	xdebug3	Issue #1818: Switch to using zend_string for variable names	2.00
9	xdebug3	Improving performance	4.50
10	xdebug3	Improving performance	4.75
13	xdebug3	Streaming Xdebug performance enhancements	2.00
14	xdebug3	Improving performance	1.00
15	xdebug3	Switch alloc-less string formatting for building xdebug_str's	6.50
16	xdebug3	Merging and testing allocation patch	0.50
16	xdebug3	xdebug_func_format to use a static buffer, PHP 8 compat	3.50
16	docs	Stream with Matt about setting up Xdebug	2.50
17	xdebug3	Reviewing PR #602: Increase profile time precision	1.50
19	xdebug3	Reviewing PR #602: Increase profile time precision	0.75
19	xdebug3	Reviewing PR #604: Profiler + fflush after every function end	0.50
20	xdebug3	Converting stack llist to vector	2.75
22	xdebug3	Converting stack llist to vector	2.50



Episode #70

Explicit Octal Literal

In this episode of "PHP Internals News" I talk with George Peter Banyard ([Website](#), [Twitter](#), [GitHub](#), [GitLab](#)) about an RFC that he has proposed to add an Explicit Octal Literal to PHP.

Thursday November 12th, 2020 — 09:33 GMT



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Episode #69

Short Functions

In this episode of "PHP Internals News" I talk with Larry Garfield ([Twitter](#), [Website](#), [GitHub](#)) about a new RFC that's he proposing related to Short Functions.

Thursday November 5th, 2020 — 09:32 GMT

Episode #68

Observer API

In this episode of "PHP Internals News" I chat with Levi Morrison ([Twitter](#), [GitHub](#)) and Sammy Kave Powers ([Twitter](#), [GitHub](#)).

<https://phpinternals.news>



Any Queries?

Resources



Slides

<https://derickrethans.nl/talks/xdebug-phpig20>

<https://xdebug.org>

<https://phpinternals.news>

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