

Better Debugging with Xdebug

ConFoo 2025

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<https://derickrethans.nl/talks/xdebug-confoo25>

<https://xdebug.org>

About Me

Derick Rethans

- I'm European, living in London
- ~~PHP 7.4 Release Manager~~
- **PHP Foundation**
- **Xdebug** & PHP's Date/Time support
- I ❤️  maps, I ❤️  beer, I ❤️  whisky
- mastodon: @derickr@phpc.social



xdebug_info()

Like `phpinfo()`, but then for Xdebug

DEMO

xdebug_info(string \$category)

Obtain information about Xdebug programatically

DEMO

xdebug_notify(mixed \$data)

Send data over debugging protocol

DEMO

Recently Added Features

Breakpoint Resolving

Xdebug now finds the closest breakpoint line

DEMO

Breakpoint Resolving

Xdebug now finds the closest breakpoint line

DEMO

How does this work?

Breakpoint Resolving

Xdebug now finds the closest breakpoint line

DEMO

How does this work?

Let's check the log...

DEMO

Return Values?

DEMO

Breakpoint Resolving — Revised

The IDE can set breakpoints on non-existing files...

DEMO

xdebug_connect_to_client()

Prods Xdebug to try to make a debug connection again

DEMO

"Smart" Host Names

Helping with the configuration madness...

```
xdebug.client_host=  
xdebug://gateway
```

"Smart" Host Names

Helping with the configuration madness...

xdebug.client_host=

xdebug://gateway

xdebug://nameserver

Recently Added Features

Xdebug 3.3: Control Sockets

DEMO

Xdebug 3.3: Control Sockets

DEMO

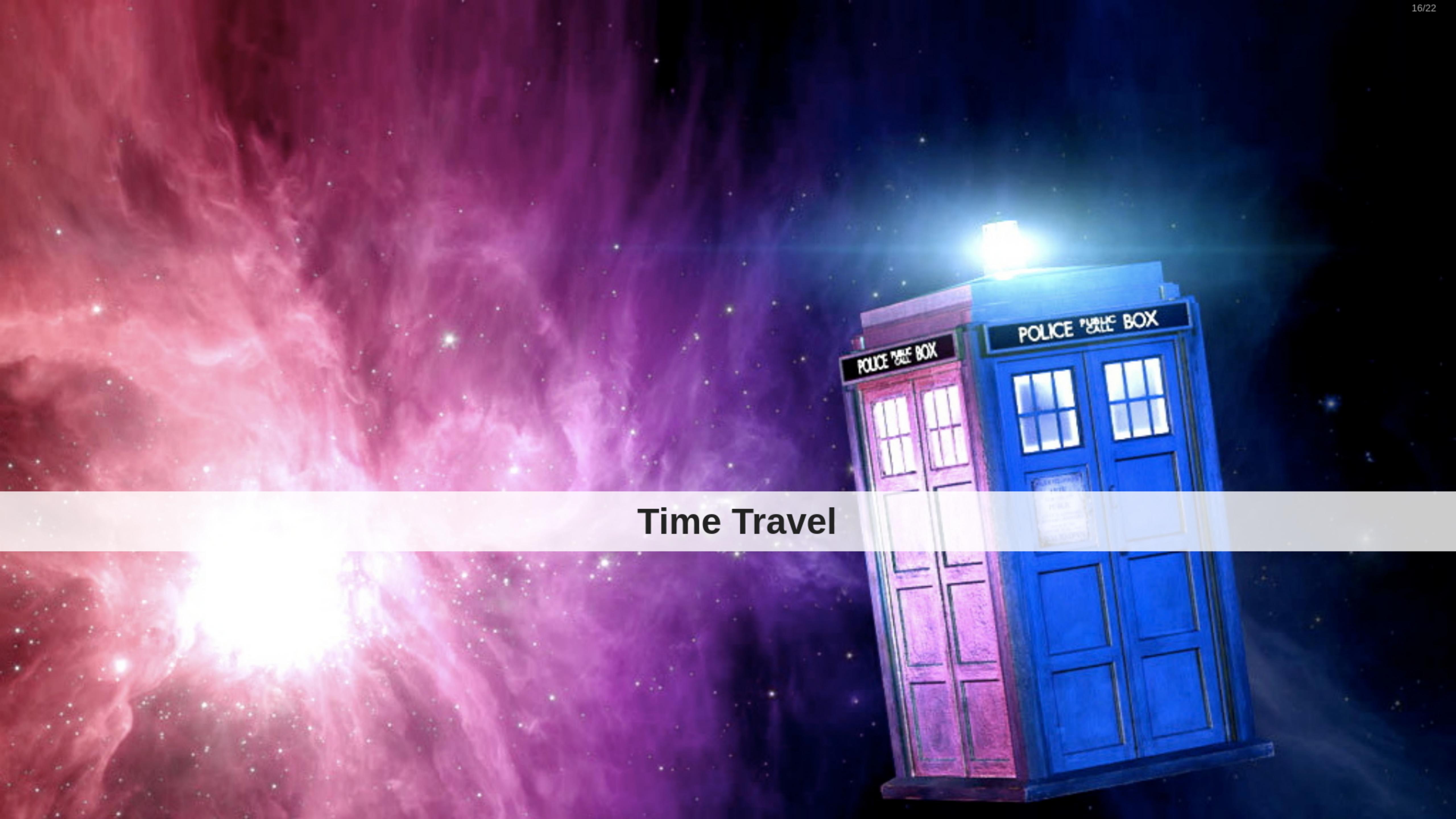
- Linux Only
- Local System Only
- Windows Support in Progress
- IDE Support under Discussion

Future Features

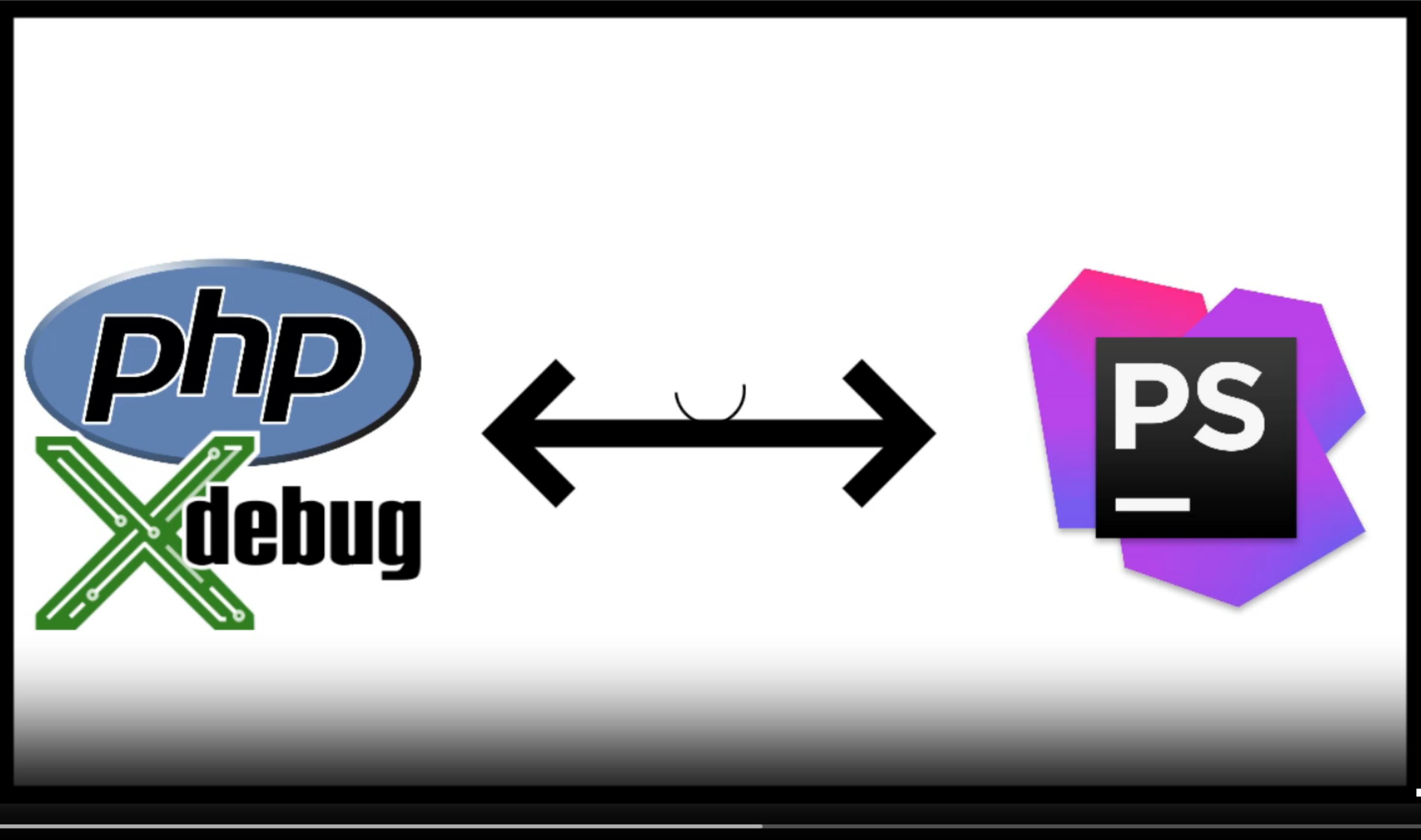
Xdebug 3.4: Native Path Mapping

Using project specific file to map directories,
files, and line ranges

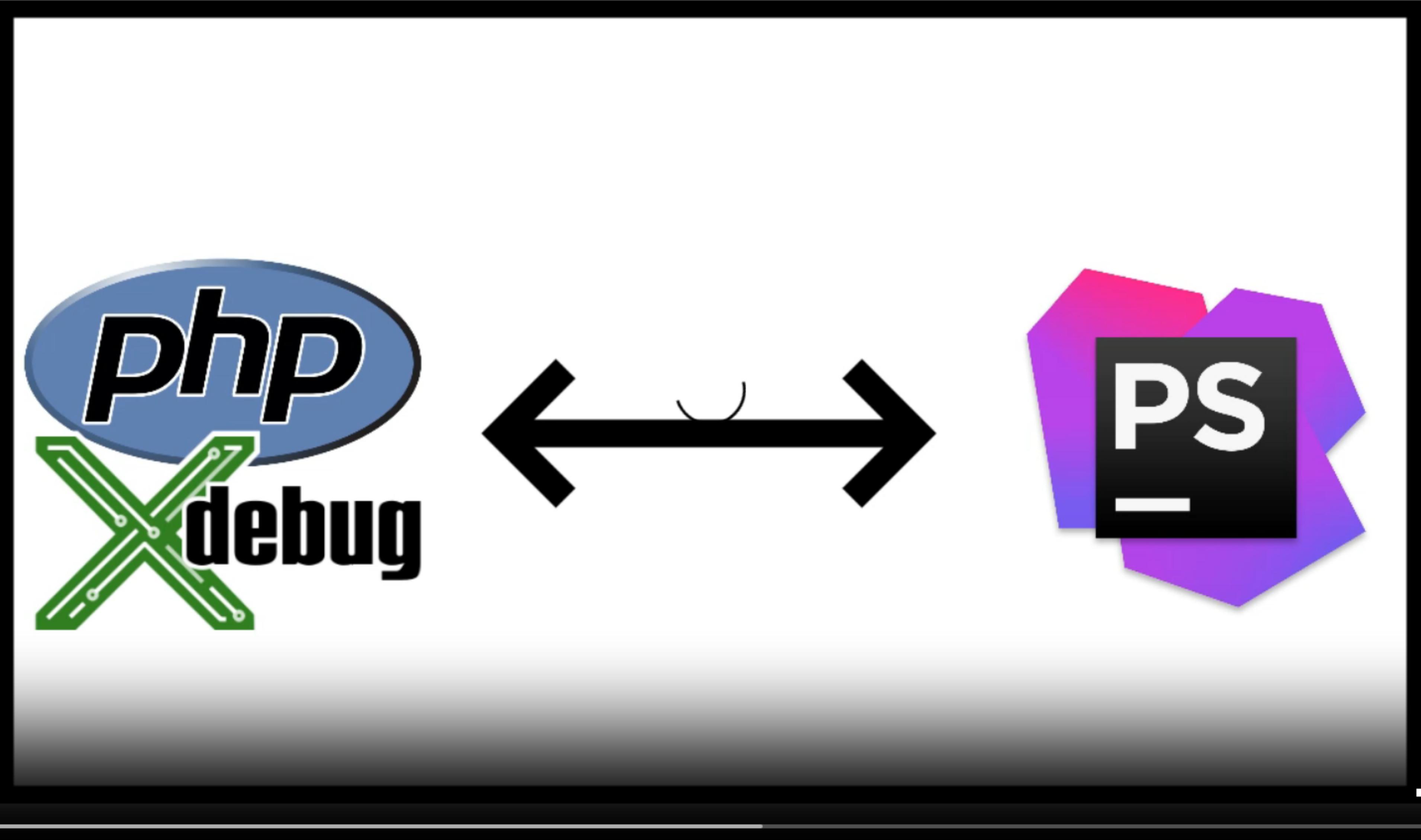
<https://xdebug.org/funding/001-native-path-mapping>



Time Travel



<https://xdebug.cloud>



<https://xdebug.cloud>

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>

 **BECOME A PATRON**

<https://www.patreon.com/derickr>

 **Sponsor**

<https://github.com/sponsors/derickr>

Business Support

Community	Pro	Business
	1 developer	2-20 developers
Choose amount on Patreon or GitHub	£ 200/year *	£ 1000/year *
Tech Support: Stackoverflow Issue Priority: Low ✓ Monthly News Post	<ul style="list-style-type: none"> ✓ Tech Support: E-mail ✓ Issue Priority: Medium ✓ Access to Commercial Add-ons (soon) ✓ Monthly E-mail Newsletter (opt-in) ✓ Invoice † 	<ul style="list-style-type: none"> ✓ Tech Support: E-mail ✓ Issue Priority: High ✓ An hour long presentation or workshop ✓ Access to Commercial Add-ons (soon) ✓ Monthly E-mail Newsletter (opt-in) ✓ Invoice † ✓ "Thank You" with link on site
Support Xdebug via Patreon or GitHub	Sign Up	Sign Up

<https://xdebug.org/support>



Transparency

May 2024



Day	Type	Description	Hours
1	bug	Issue #2264: Precision with overloaded var_dump	2.00
1	website	Update website with “projects” features, including accepting funding for projects	6.00
20	bug	Triage, and dbgpProxy/dgpClient binaries license questions	1.00
20	ci	Fixing Xdebug CI	1.50
20	docs	Add descriptions for published binary tools	0.50
27	xdebug3	Create PIE definition file	0.50
29	xdebug3	PHP 8.4 support: Wrapping closures/ Fixing tests	4.00
30	xdebug3	Tryingout Xdebug changes needed for “Exit” opcode removal	4.00
31	xdebug3	Creating a release and testing with PIE	3.50

For additional information, please see the [monthly](#) report.



Any Queries?

Resources



Slides

<https://derickrethans.nl/talks/xdebug-confoo25>

<https://xdebug.org>

<https://xdebug.cloud>

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