

# Debugging unleashed: Mastering xrDebug for PHP brilliance

MergePHP 2024-03-14 presented by Rodolfo Berrios

**debugging** /,di:'bʌɡɪŋ/ *n.* **1.** Identifying and removing errors from computer hardware or software.  
**2.** Being the detective in a crime movie where you are also the murderer.

Oxford Languages and Google  
Online Edition

# xrDebug

Lightweight debug utility

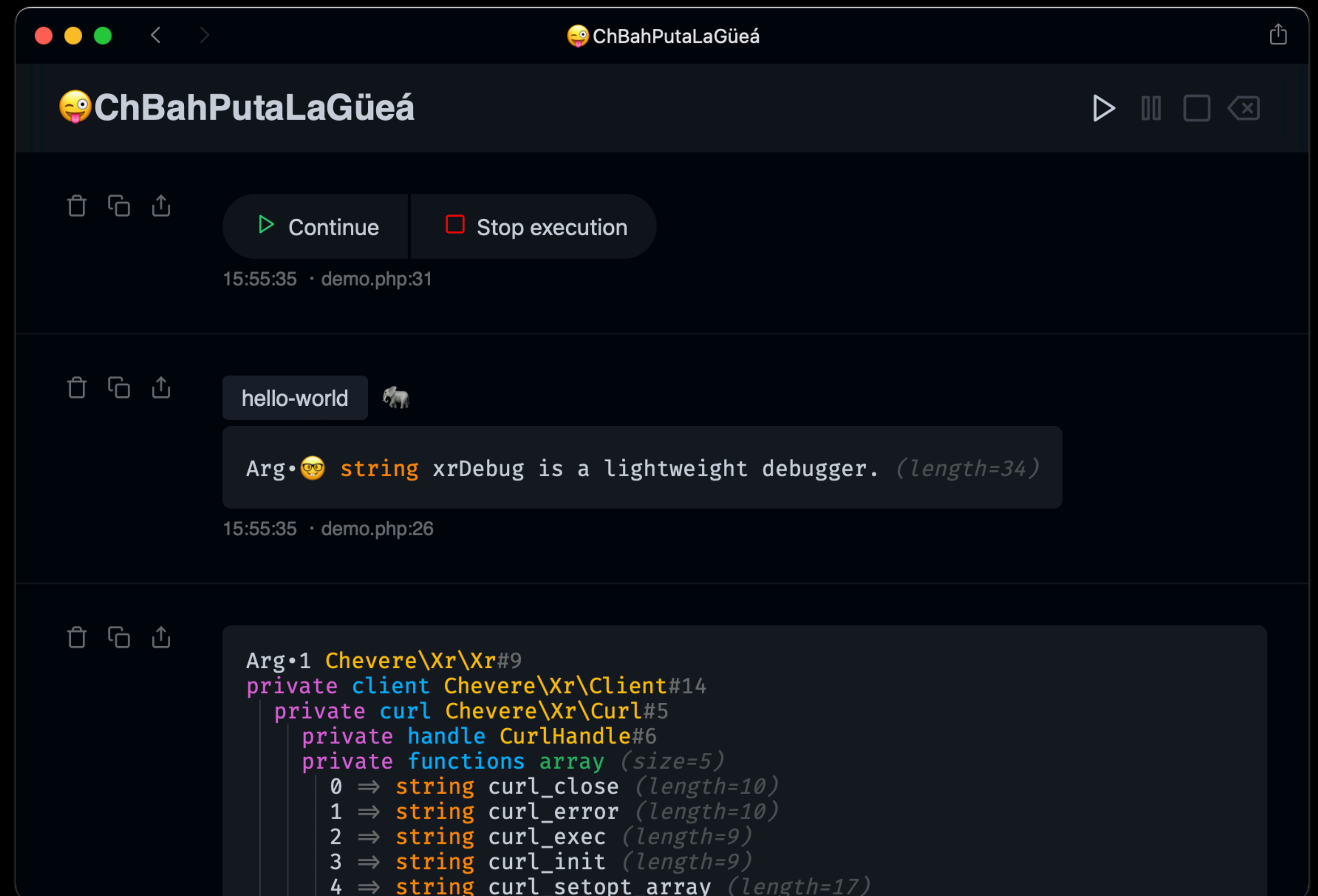
Open Source (Apache-2.0)

Binary distribution (~9MB)

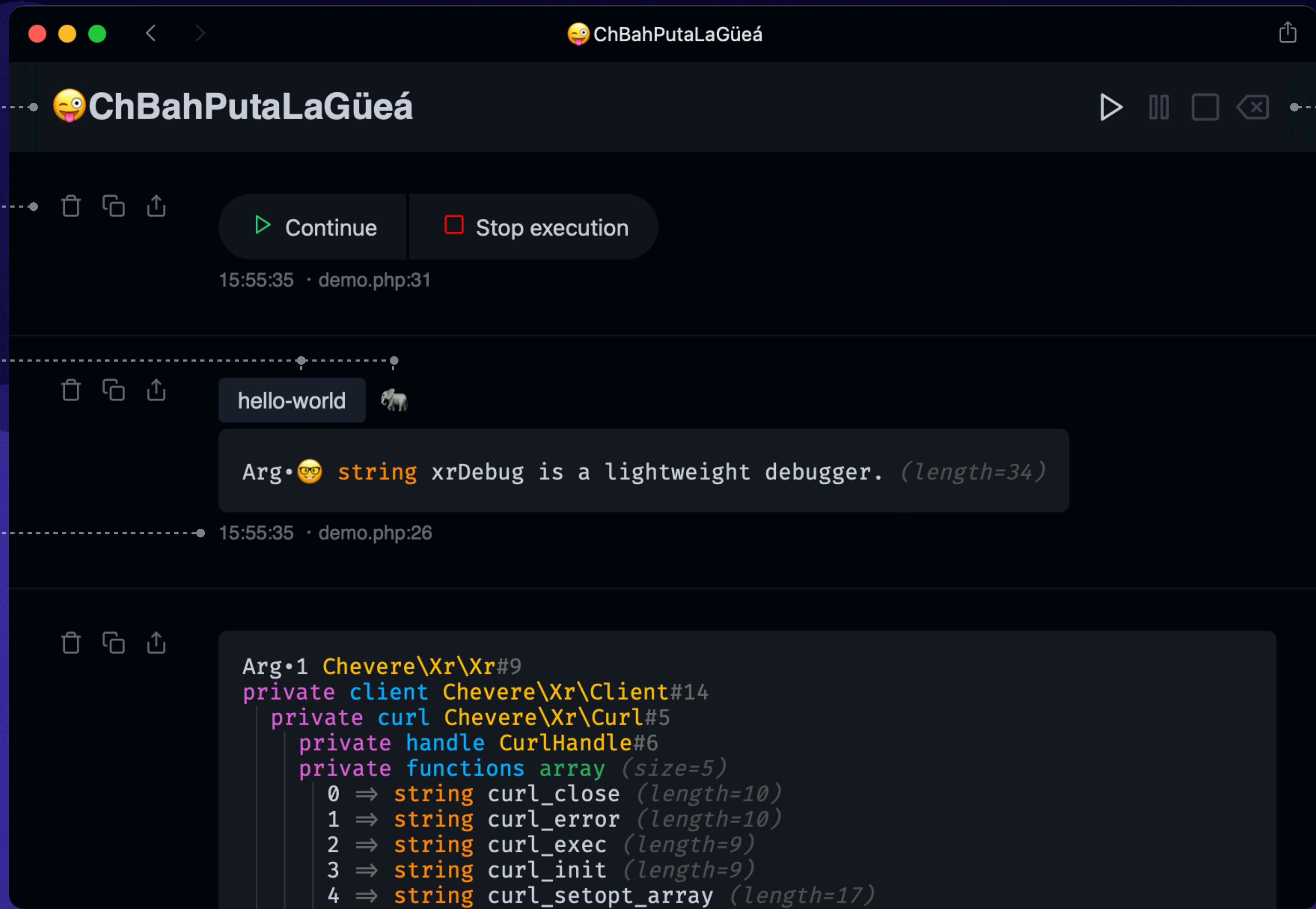
Linux, macOS, Windows (WSL)

Web based

Dedicated user interface



# responsive user interface



custom title

controls

message tools

topic & emote

when & where

messages

follows system color scheme

# System overview

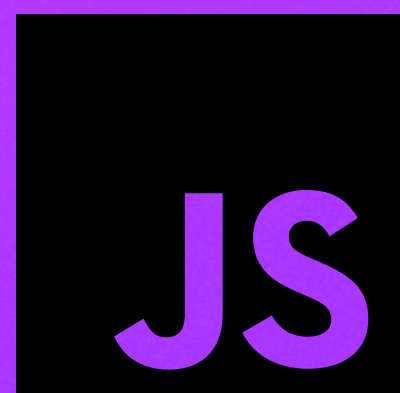
## CLIENT / WEB UI

*Displays debug messages to all connected clients*

JS HTML CSS

Multiple clients

End to end encryption (AES-GCM AE)



## SERVER / CLI

*Serves web user interface and receive dump payloads*

HTTP Server-sent events (ReactPHP)

Configurable

Sign verification (Ed25519)



# Compared to RAY

Software	<b>XR</b>	<b>RAY</b>
Open Source	<b>Yes</b>	Client libraries
Pricing	<b>Free</b>	\$29 ~ \$49 (yearly)
Dump & Pause	<b>Yes</b>	<b>Yes</b>
Filtering	<b>Topics &amp; Emotes</b>	Colors
Library support	PHP for now (*)	<b>PHP and more</b>

# Compared to Xdebug

Software	<b>XR</b>	<b>Xdebug</b>
Purpose	Non-intrusive tool	<b>Full debug suite</b>
var_dump	<b>vd(), vdd()</b>	var_dump override
Dump & Pause	Yes	<b>Yes (breakpoints)</b>
Dedicated UI	<b>Yes</b>	No
Filtering	<b>Topic &amp; Emotes</b>	No

# xrDebug

```
/var/www/html/xdebug.php:59
```

```
Arg#1 array (size=4)
one => string a somewhat long string! (length=23)
two => array (size=1)
    two.one => array (size=2)
        two.one.zero => int 210 (length=3)
        two.one.one => array (size=2)
            two.one.one.zero => float 3.1415926535898 (length=15)
            two.one.one.one => float 2.7 (length=3)
three => test#2
    public pub test#2 (circular reference #2)
    protected prot int 42 (length=2)
    private priv bool true
four => array (size=6)
    0 => int 0 (length=1)
    1 => int 1 (length=1)
    2 => int 2 (length=1)
    3 => int 3 (length=1)
    4 => int 4 (length=1)
    5 => int 5 (length=1)
```

POWERED BY

[chevere.org/packages/var-dump](https://chevere.org/packages/var-dump)

# Xdebug

```
/tmp/var_dump.php:23:
```

```
array (size=4)
    'one' => string 'a somewhat long string!' (length=23)
    'two' =>
        array (size=1)
            'two.one' =>
                array (size=2)
                    'two.one.zero' => int 210
                    'two.one.one' =>
                        array (size=2)
                            ...
'three' =>
    object(test)[1]
        public 'pub' =>
            &object(test)[1]
        private 'priv' => boolean true
        protected 'prot' => int 42
'four' =>
    array (size=6)
        0 => int 0
        1 => int 1
        2 => int 2
        3 => int 3
        4 => int 4
        5 => int 5
```

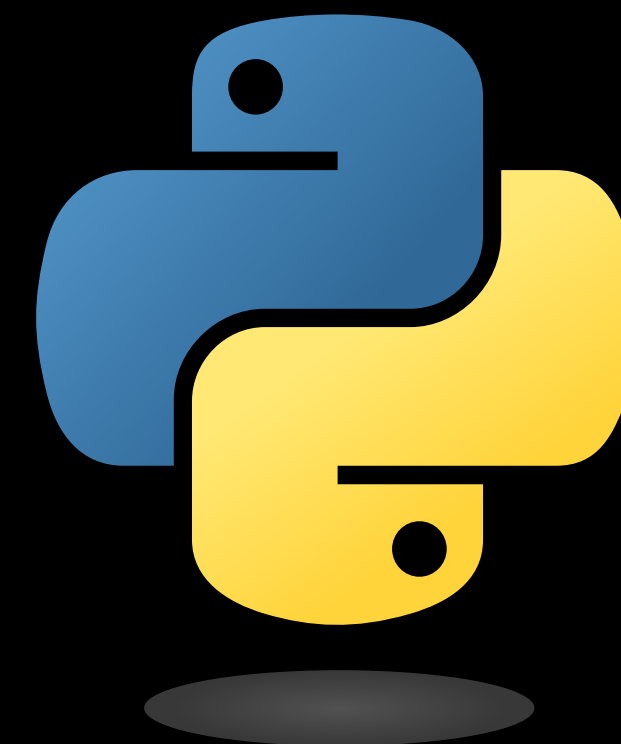
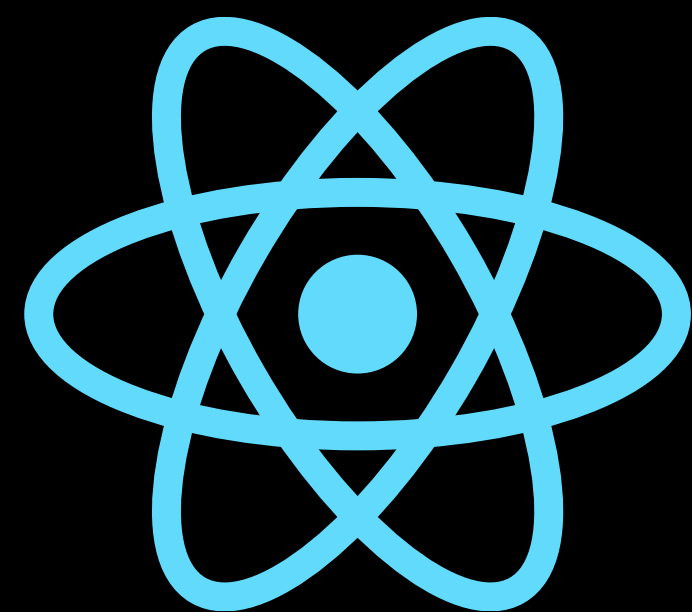


# merge.xrdebug.com

 LIVE DEMO

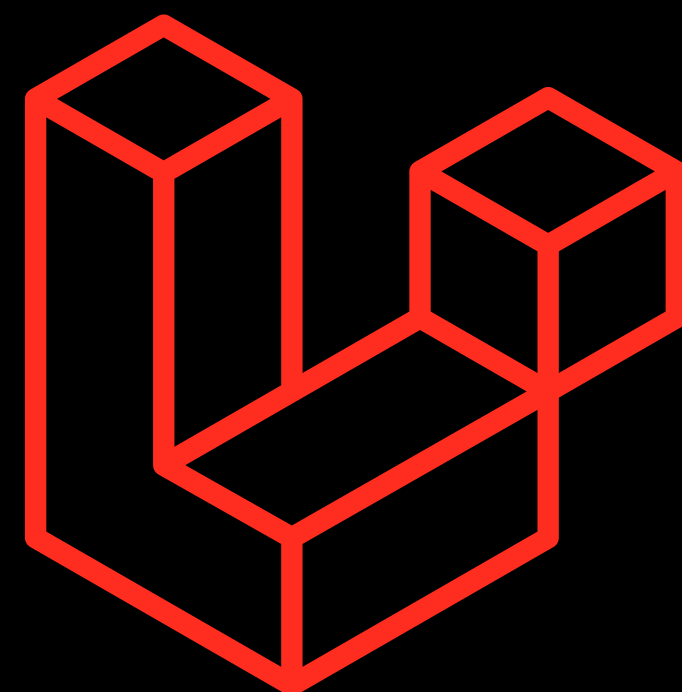
# Questions?

**Feel free to ask :)**



# **Contribute**

[github.com/xrdebug](https://github.com/xrdebug)



# Rodolfo Berrios

[rodolfoberrios.com](http://rodolfoberrios.com)

[chevereto.com](http://chevereto.com) (2007)

[chevere.org](http://chevere.org) (2018)

[xrdebug.com](http://xrdebug.com) (2022)

[github.com/rodber](https://github.com/rodber)

[@rodber@mastodon.social](https://mastodon.social/@rodber)

