

Debugging unleashed: Mastering xrDebug for PHP brilliance

MergePHP 2024-03-14 presented by Rodolfo Berrios

debugging /də'bʌgɪŋ/ *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



The screenshot shows a dark-themed web-based debugger interface. At the top, there's a header bar with three dots, a back arrow, a forward arrow, and a file icon. The title bar says "ChBahPutLaGüeá" with a smiling emoji. Below the title bar are two buttons: "Continue" (green triangle) and "Stop execution" (red square). The main area displays a stack trace or variable dump:

```
Arg•1 Chevere\Xr\Xr#9
private client Chevere\Xr\Client#14
private curl Chevere\Xr\Curl#5
private handle CurlHandle#6
private functions array (size=5)
  0 => string curl_close (length=10)
  1 => string curl_error (length=10)
  2 => string curl_exec (length=9)
  3 => string curl_init (length=9)
  4 => string curl_setopt_array (length=17)
```

At the bottom of the interface, there are three small icons: a magnifying glass, a square, and an upward arrow. The timestamp "15:55:35" and file path "demo.php:26" are visible at the bottom of the main content area.

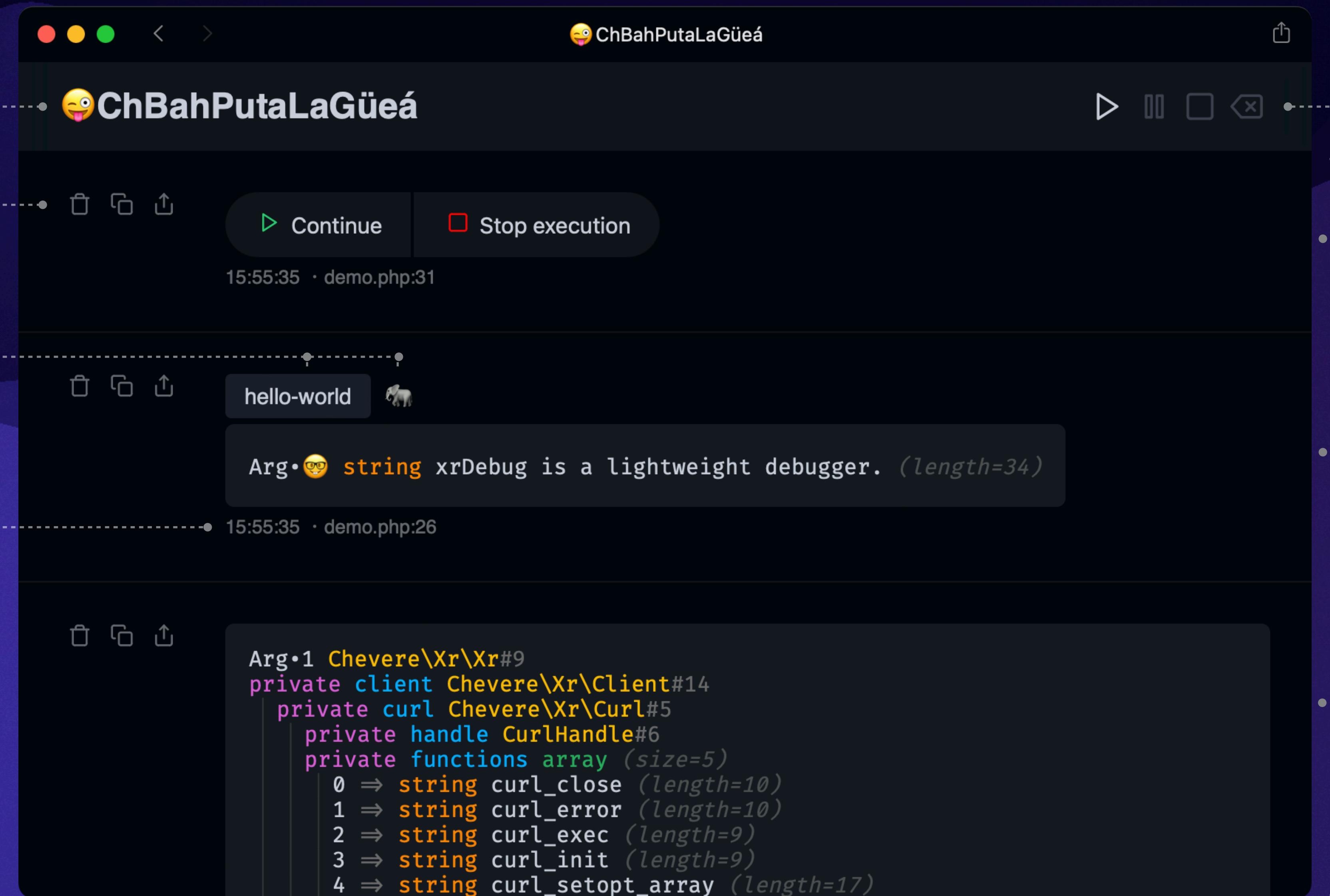
responsive user interface

custom title

message tools

topic & emote

when & where



follows system color scheme

System overview

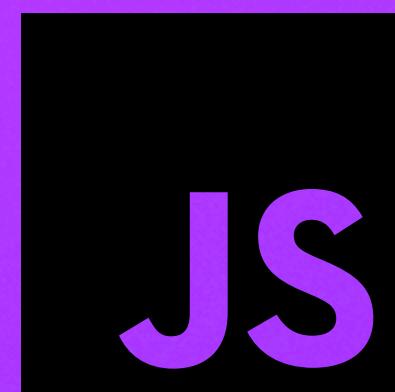
CLIENT / WEB UI

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)

php

Compared to RAY

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

Compared to Xdebug

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

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
```

POWERED BY



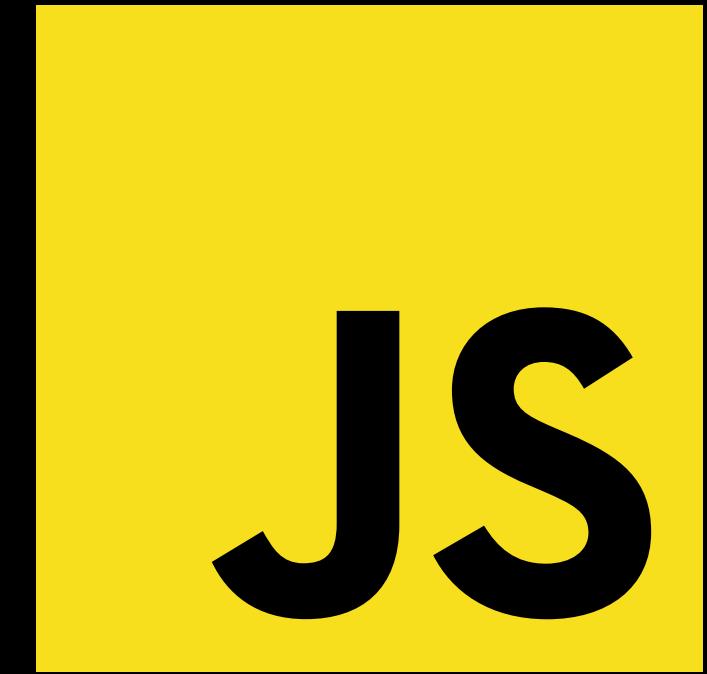
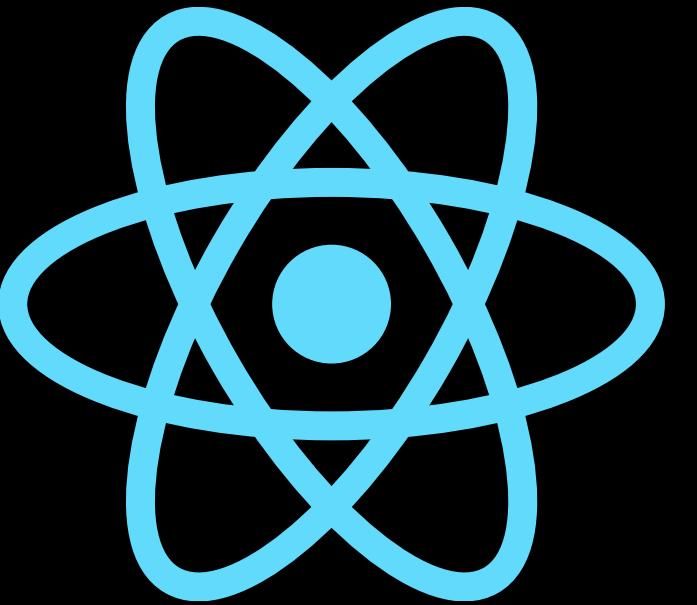
chevere.org/packages/var-dump

merge.xrdebug.com

LIVE DEMO

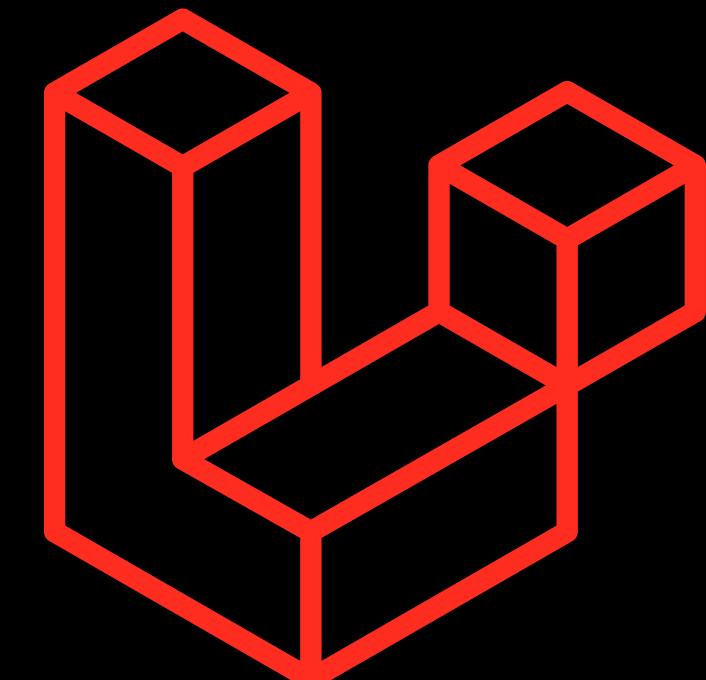
Questions?

Feel free to ask :)



=GO Contribute

github.com/xrdebug





Rodolfo Berrios

rodolfoberrios.com

chevereto.com (2007)

chevere.org (2018)

xrdebug.com (2022)

github.com/rodber

@godlike@phpc.social

The screenshot shows a user interface for the chevereto photo sharing platform. At the top, there are navigation links: 'Explore' (with a rocket icon), 'Random' (with a shuffle icon), and 'Search' (with a magnifying glass icon). On the far right, the 'chevereto' logo is displayed. Below the navigation, there is a header bar with a small profile picture, a timestamp, and sorting options: 'Most recent' (selected), 'Oldest', 'Most viewed', 'Most liked', and 'AZ'. The main content area displays a grid of images. The first image in the top row is a Gran Condor in flight over a rocky cliff. The second image is titled 'The Great Chilean Landscape' and shows two people standing in a scenic, colorful landscape. The third image in the top row is partially visible. In the bottom row, the first image shows a group of llamas in a field, and the second image is a landscape of mountains under a dark sky. Each image has a set of edit and sharing icons above it. The overall theme of the images is nature and landscapes.