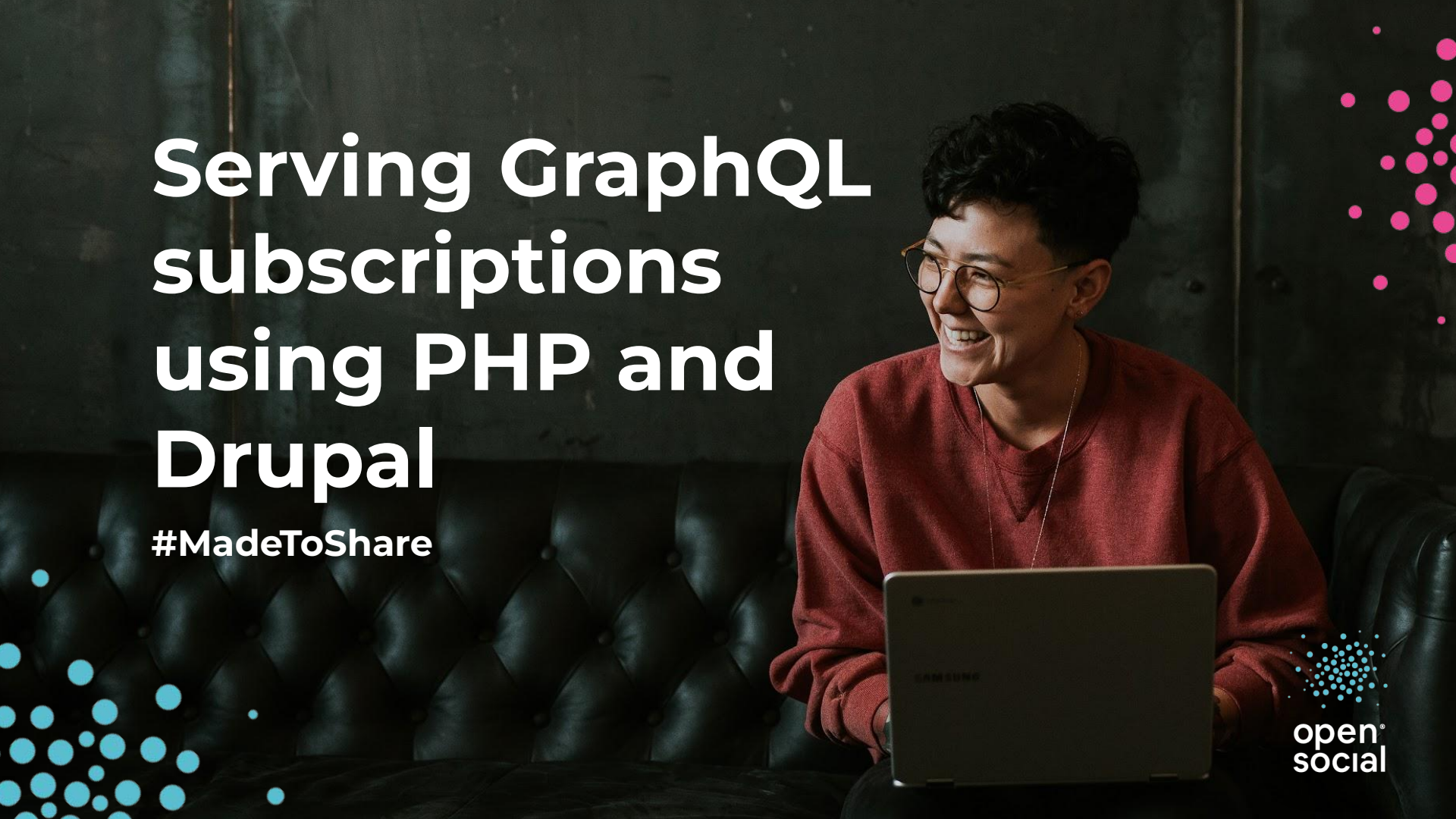
Serving GraphQL subscriptions using PHP and Drupal

#MadeToShare



open social

Who am I?

Alexander Varwijk
@Kingdutch

Lead Front-end Engineer at Open Social

(Happy with an excuse to suit up)

What do we do?

Community Engagement Platform

Built on top of Drupal

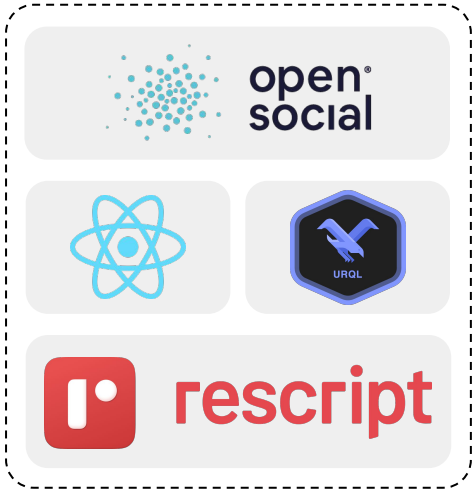
Checking out our tech-stack

The Open Social server

Checking out our tech-stack

extending the product with Real-Time Chat

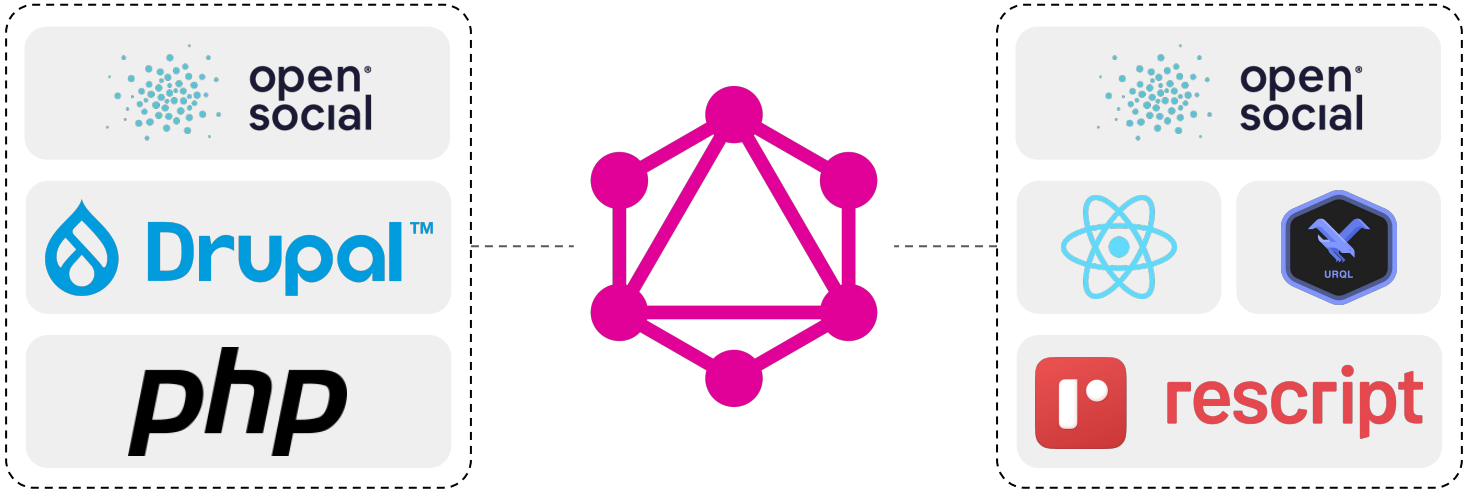
The Open Social server



The Open Social Chat Client

Checking out our tech-stack

with GraphQL to bind them



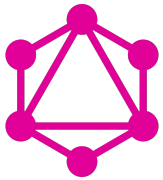
The Open Social server

The Open Social Chat Client

GraphQL in Drupal

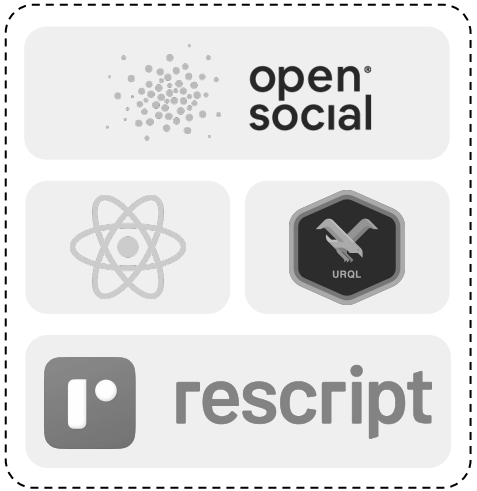
a library and a module

The Open Social server



graphql-php
"A PHP port of the GraphQL reference implementation"
webonyx/graphql-php

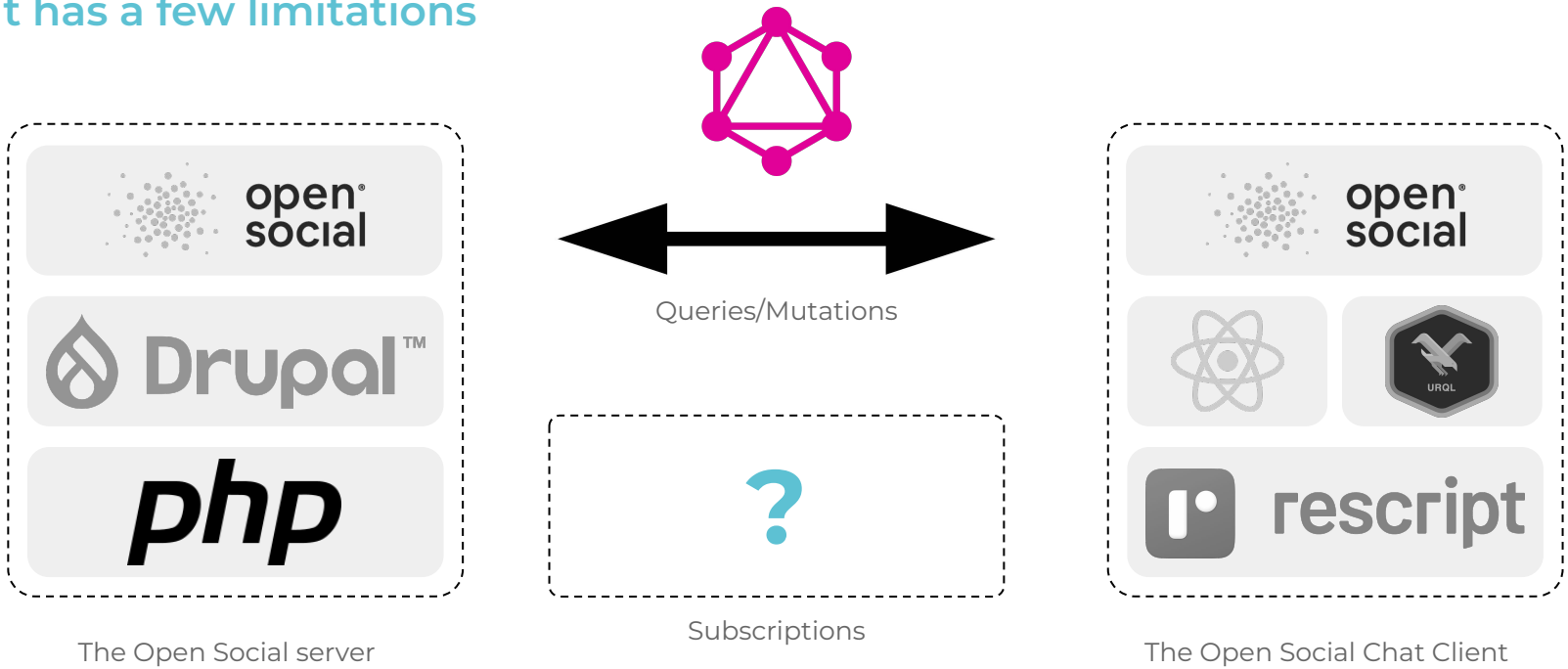
Drupal GraphQL
"Lets you craft and expose a GraphQL schema for Drupal"
Built on graphql-php
drupal.org/project/graphql



The Open Social Chat Client

GraphQL in Drupal

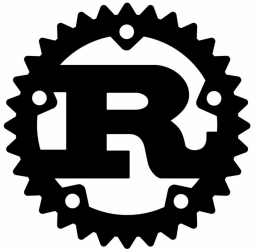
It has a few limitations



Solving for subscriptions

Building a separate subscription service

Subscriptions



Solving for maintainability

Play to the strengths of your team members

Subscriptions

Asynchronous PHP

Choosing your NodeJS equivalent

ReactPHP

https://reactphp.org/

Amp

https://amphp.org/

Revolt

PHP 8.1 Fibers

https://revolt.run/

Asynchronous PHP

Handling websockets

ReactPHP

Async event loop

https://reactphp.org/

Ratchet

Websockets

https://github.com/ratchetphp

Asynchronous PHP

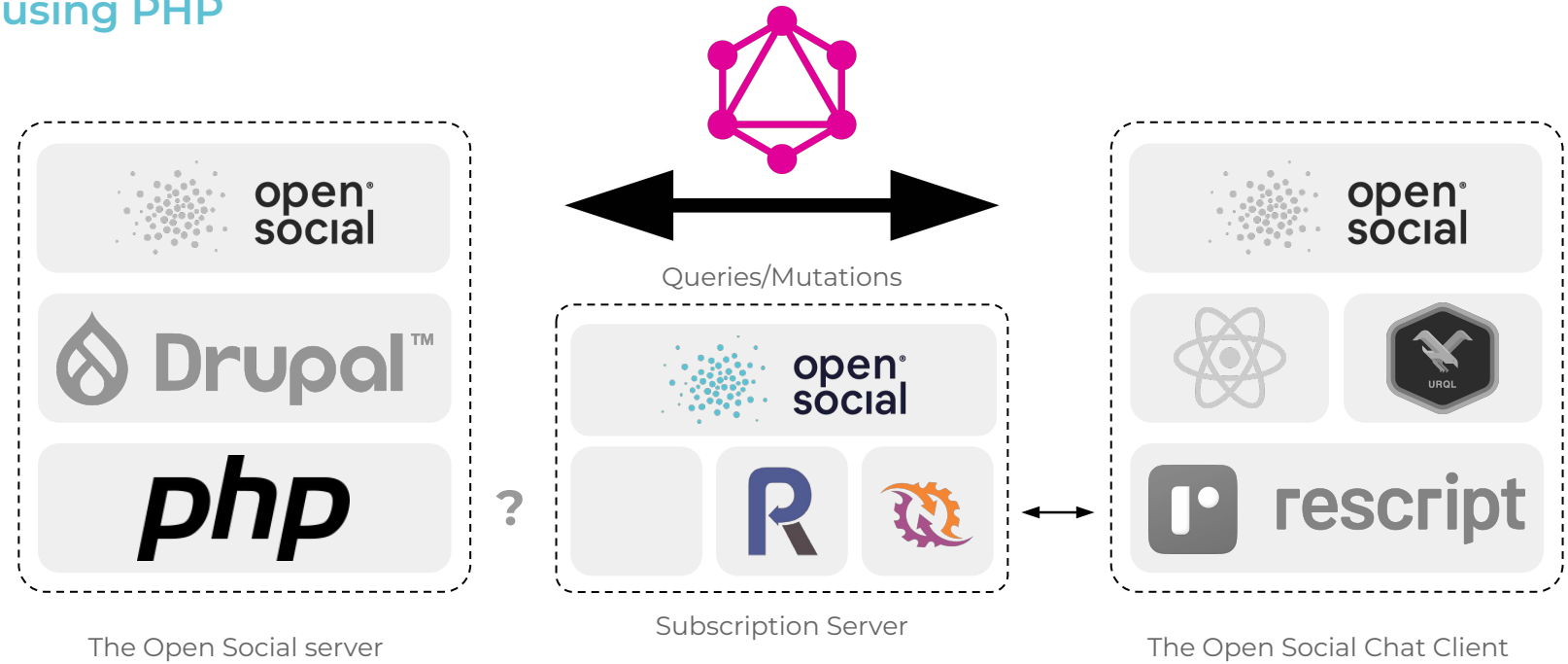
Handling GraphQL subscriptions

ReactPHP
Async event loop
https://reactphp.org/

Ratchet
Websockets
https://github.com/ratchetphp

GraphQL Websocket PHP
graphql-ws in PHP
goalgorilla/graphql-php-ws

Accepting websockets
using PHP



Responding to new events
with a message queue

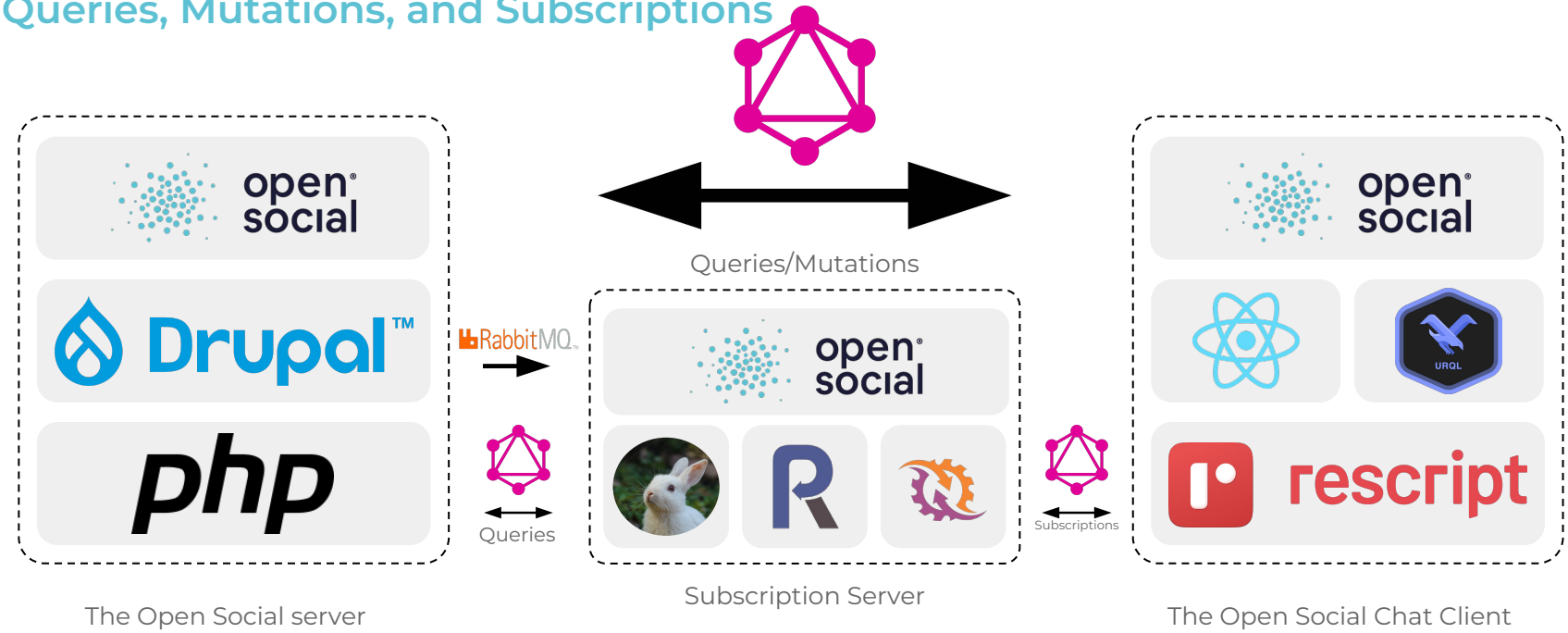
RabbitMQ
Message Queue
https://www.rabbitmq.com/

Bunny
RabbitMQ Client for ReactPHP
jakubkulhan/bunny

* Bunny has no logo so here's a photo by Satyabrata sm on Unsplash

Bringing it all together

Queries, Mutations, and Subscriptions



The Open Social server

Subscription Server

The Open Social Chat Client

wrapping up

Serving GraphQL subscriptions using PHP and Drupal

Presented by Alexander Varwijk

Contact me on Twitter
@Kingdutch

Slides available on
https://www.alexandervarwijk.com/talks/