

REACTIVE JAVA EE

A FEW WORDS ABOUT **ME**



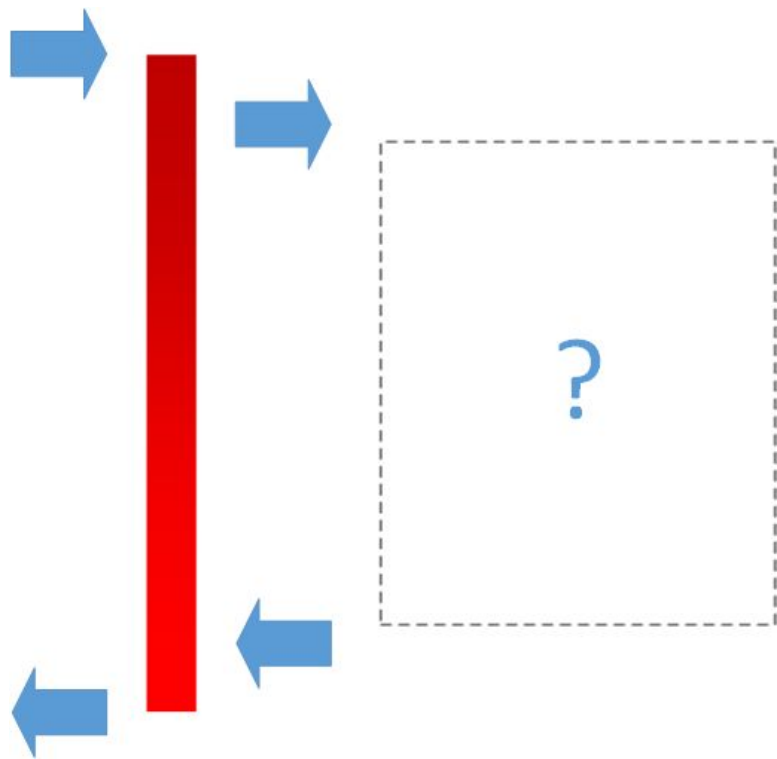
Ola Petersson
@gotoOla

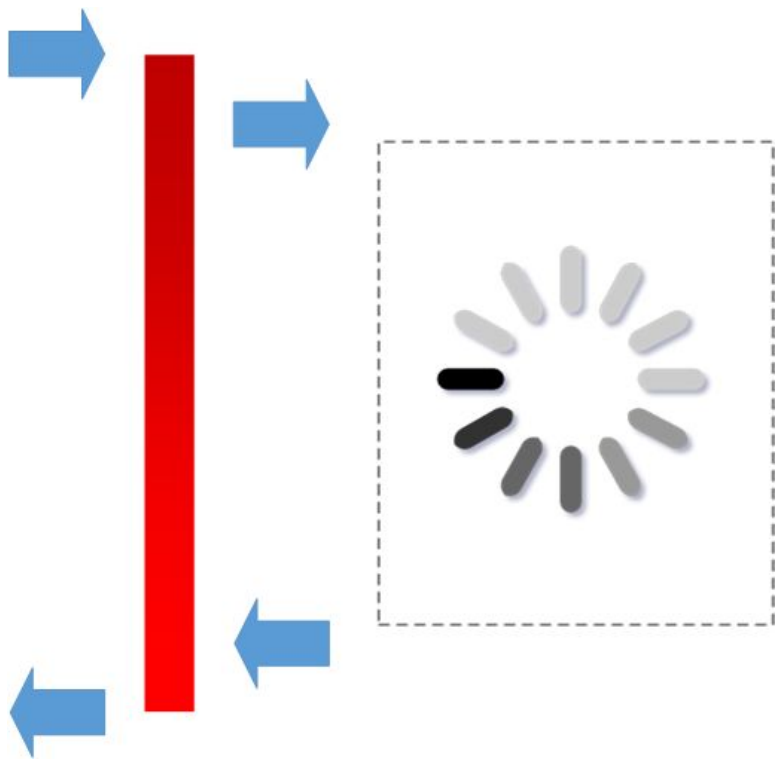
`ola.petersson@squeed.com`

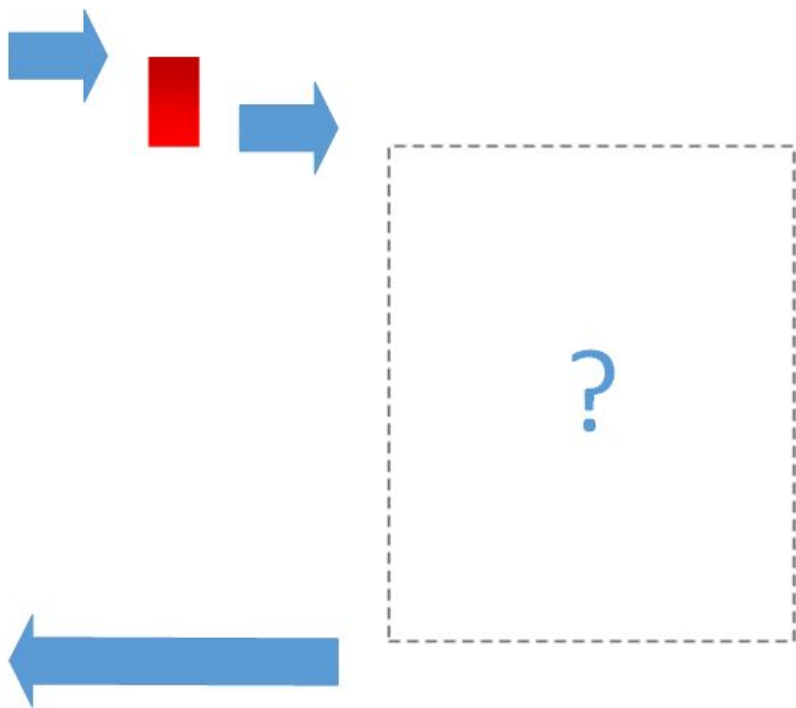


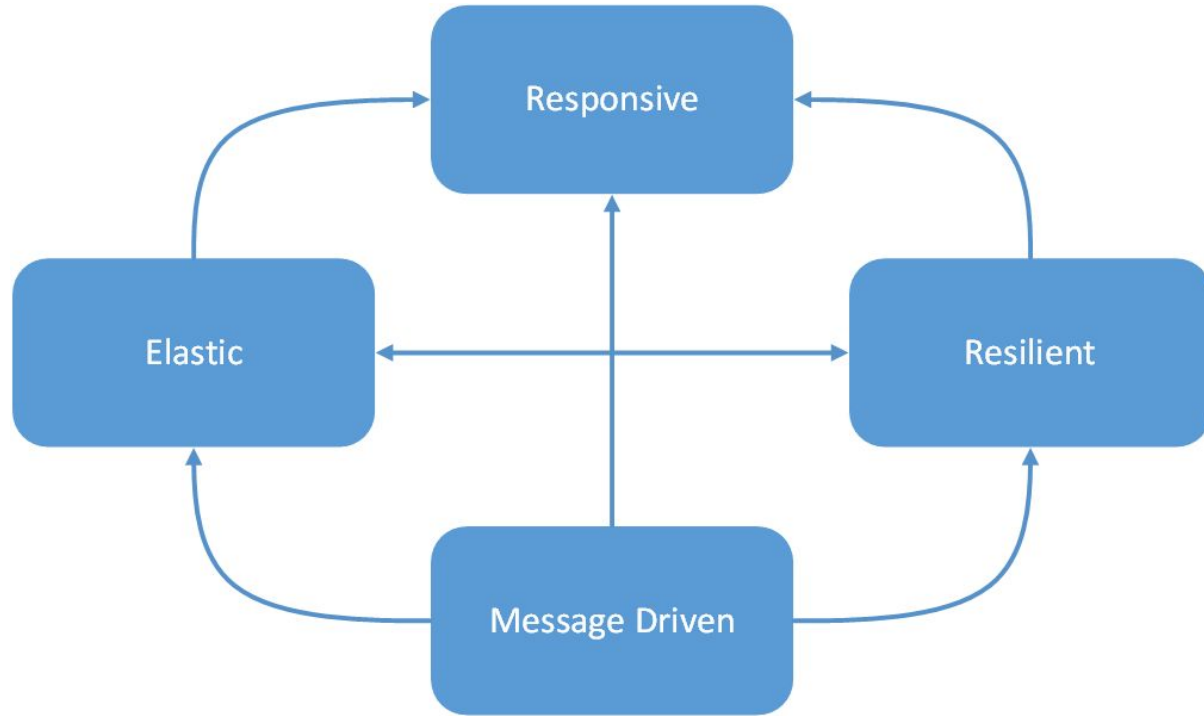
JUG Gothenburg
(JavaForum Göteborg)

THE SHOW MUST GO WRONG





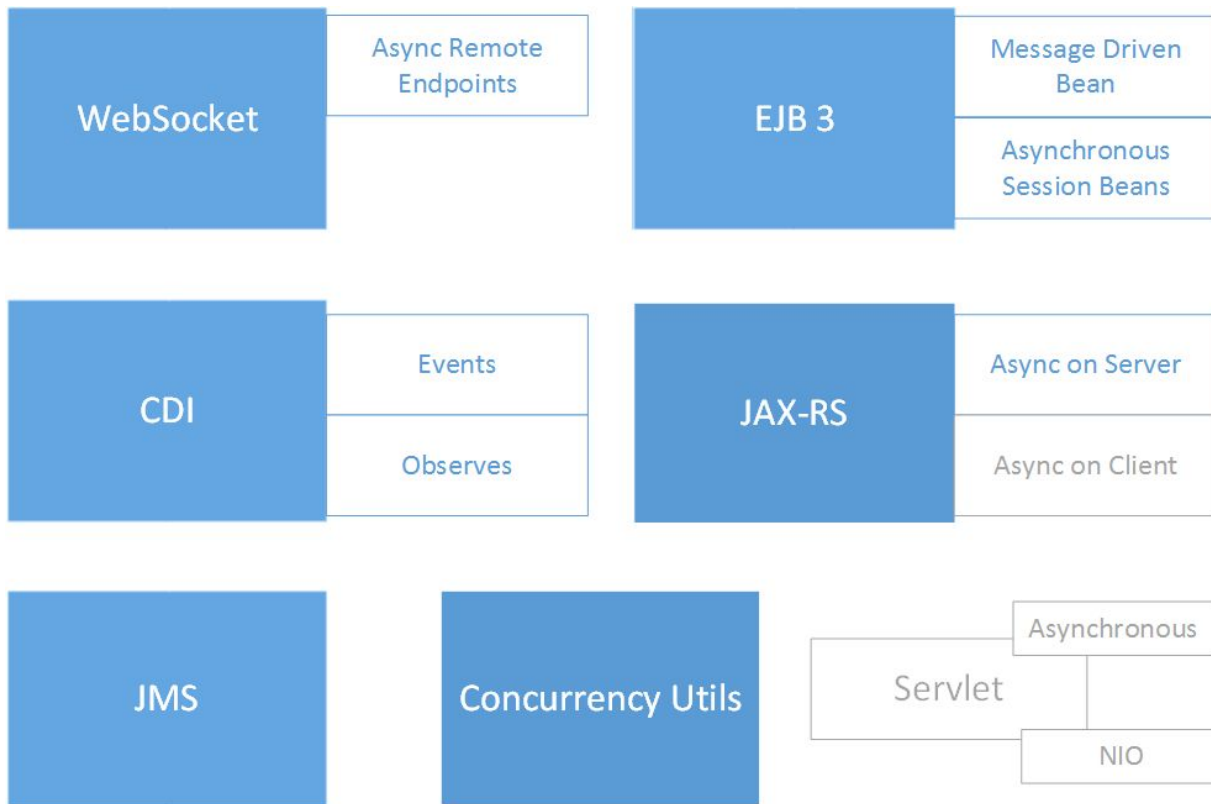




TL;DR
DON'T BLOCK, BE
RESPONSIVE

**BUT
WHY?**

HOW?



SO YOU SAY

RESPONSIVE

I SAY

WEBSOCKET



```
var websocket =  
new WebSocket("ws://domain.com/endpoint");  
  
websocket.onmessage = function(event){  
    console.log(event.data);  
};  
  
websocket.send("Is this the real life?")
```

```
var websocket =  
new WebSocket("ws://domain.com/endpoint");  
websocket.onMessage = function(message){  
    console.log(message);  
};  
websocket.send("Is this the real life?")
```

```
var websocket =  
new WebSocket("ws://domain.com/endpoint");  
websocket.onmessage = function(message){  
    console.log(message);  
};  
websocket.send("Is this the real life?")
```



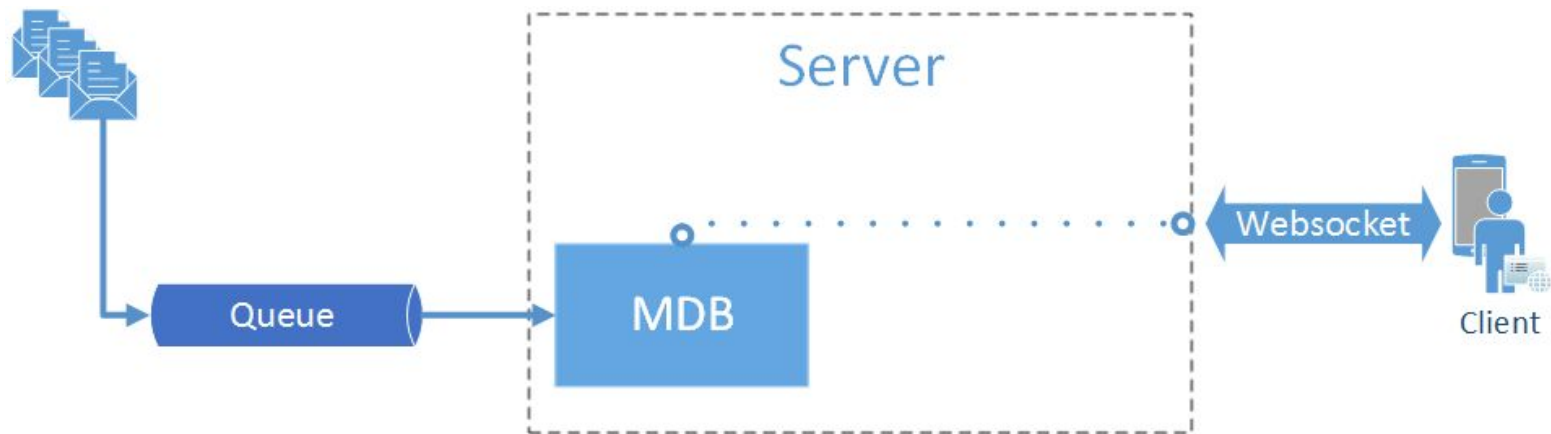
SO YOU SAY

MESSAGE DRIVEN

I SAY

MessageDrivenBean



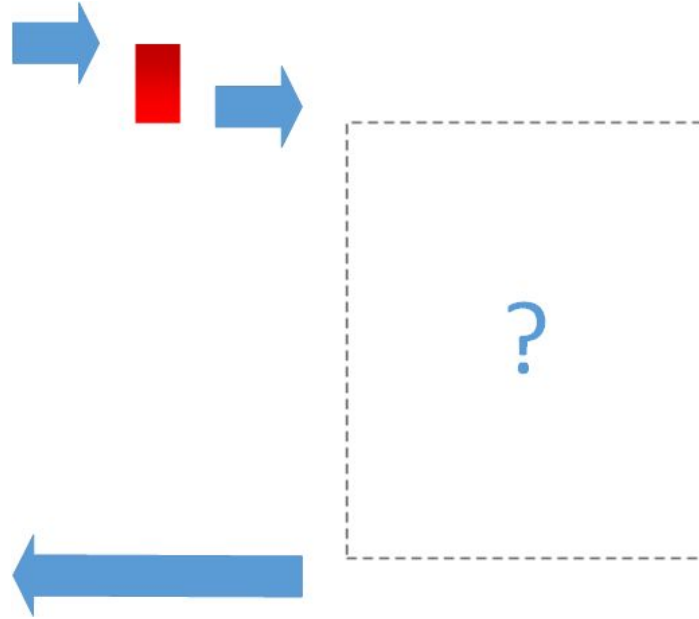


Event & Observes



@ASYNCHRONOUS

AsyncResponse



UNDER PRESSURE



🕒 Response Time (ms)

Total	
Min	506
Max	10033
Mean	5271
Std Deviation	2887



🕒 Response Time (ms)

Total	
Min	508
Max	593
Mean	565
Std Deviation	27

🕒 Response Time (ms)

Total

Min 506

Max 10033

Mean 5271

Std Deviation 2887

🕒 Response Time (ms)

Total

Min 508

Max 593

Mean 565

Std Deviation 27



RESILIENT

ELASTIC

Programming Model

- Extend for reactive programming
- Unified event model
- Event messaging API
- JAX-RS, HTTP/2, Lambda, JSON-B, ...

Resiliency

- Extension to support client-side circuit breakers
- Resilient commands
- Standardize on client-side format for reporting health

Eventual Consistency

- Automatically event out changes to observed data structures

THESE SLIDES

<http://widr.se/olb>

*My presentations- <https://speakerdeck.com/olbpetersson>

*Java EE 8/9 Technical focus -

<https://java.net/downloads/javaee-spec/JavaEE8Update.pdf>

*Lightbend - <https://www.lightbend.com/>

*Reactive manifesto - <https://www.reactivemanifesto.org/>

*Reza Rahman Reactive Java EE Let me count the ways -

https://www.slideshare.net/reza_rahman/reactive-javaee

*My github - <http://github.com/olbpetersson>

*Squeed technical blog - <http://blog.squeed.com/>

*Breakr - <https://github.com/AdamBien/breakr>

*Porcupine - <https://github.com/AdamBien/porcupine>

*Queen - <https://open.spotify.com/artist/1dfeR4HaWDbWqFHLkxsg1d>

*Gatling - <http://gatling.io/#/>

THANK YOU

QUESTIONS