

Real Time com Java e Node.Js

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Agenda

1. Node.js
2. Socket.io
- 2.1 Websockets
3. Redis
4. Jedis



Por que Node.Js?



Ryan Dahl (Criador do Node.Js)

“I am not happy with the way web servers and apps work today”

“We need something faster, highly scalable”

O que é Node.js?

Servidor web em JavaScript

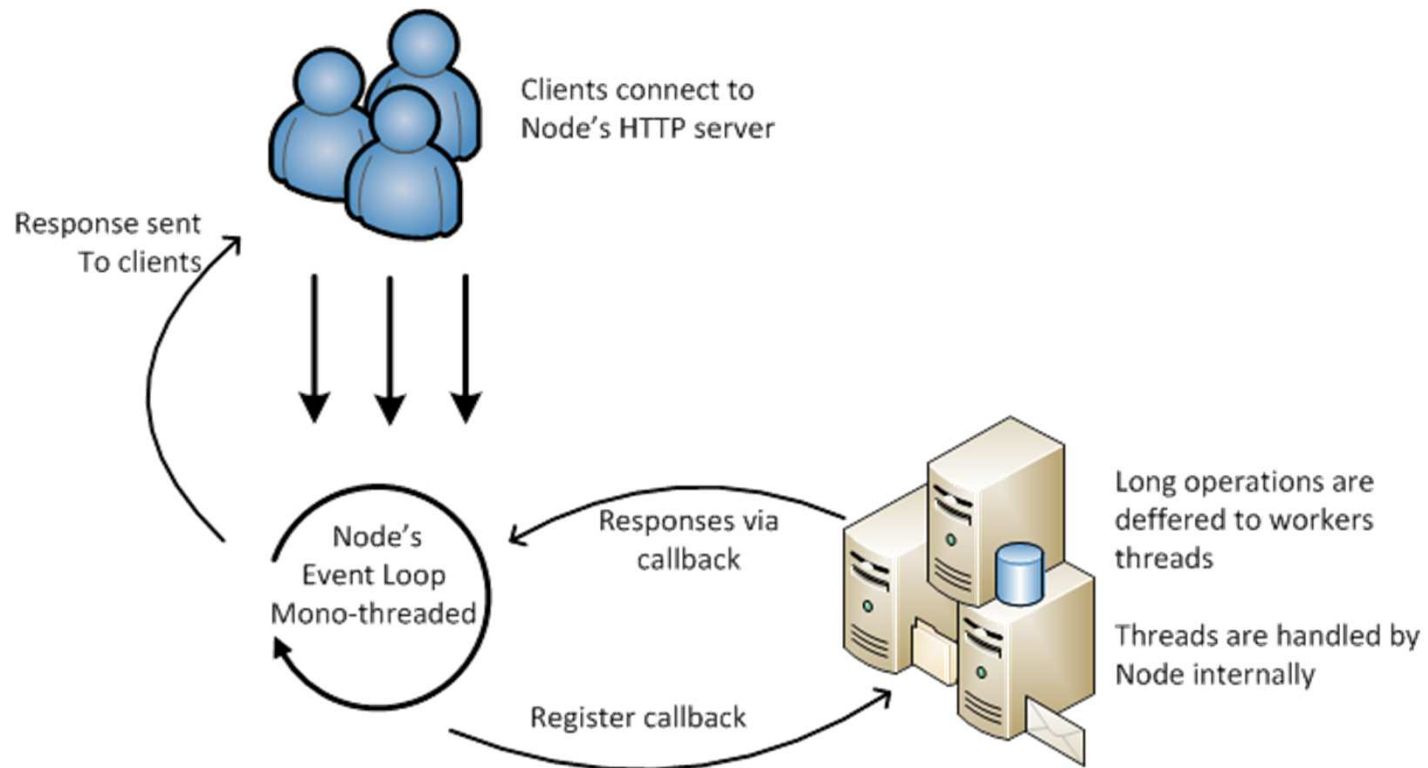


Node.Js

*“**Node.js** is a platform built on Chrome’s JavaScript runtime for easily building fast, scalable network applications. “* <http://nodejs.org>

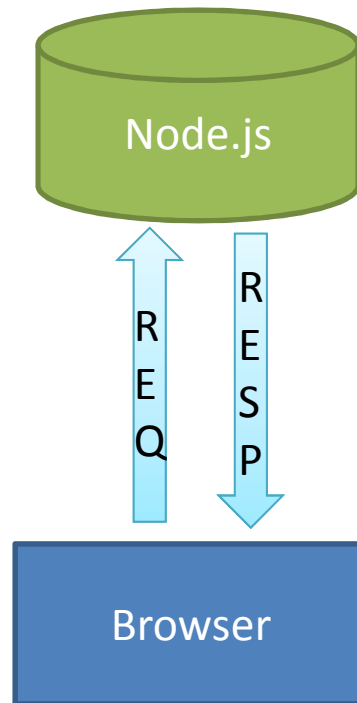
- Biblioteca de alta performance para operações I/O (Ex: HTTP)
- *Asynchronous, non-blocking I/O*
- Single threaded, event loop
- Leve, eficiente e rápido
- Modular, possui gerenciador de pacotes: npm

Node.js – Event Loop



<http://magnetik.github.io/node-webid-report/>

LET'S CODE 😊



SOCKET IO

Por quê Socket.io?

- Você já precisou enviar informação para o browser em *real time*?
- Você já desenvolveu sua própria tecnologia de *push*?

Socket.IO

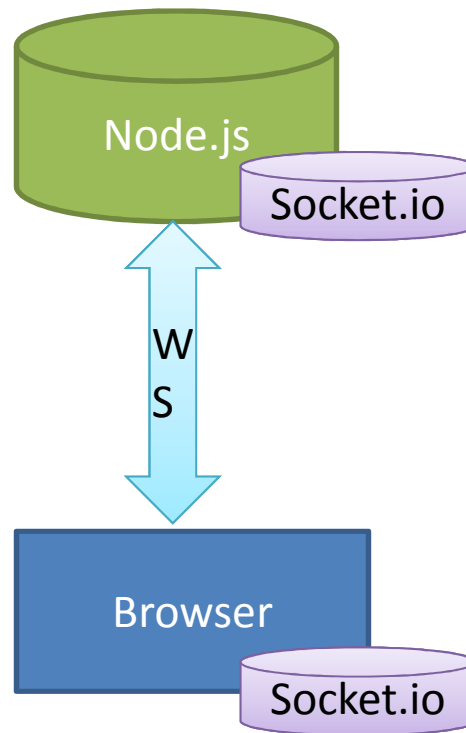
*“**Socket.IO** aims to make realtime apps possible in every browser and mobile device...”*
<http://socket.io>

- 100% JavaScript
- Websockets
- Fallback transports
 - flash sockets
 - ajax long polling
 - ajax streaming
 - iframe
 - json polling

Websockets

- Protocolo padronizado pelo IETF, RFC 6455
- Conexão Bi-direcional, full duplex... TCP socket
- HTTP handshake somente uma vez
- 2 bytes overhead

LET'S CODE 😊





Por quê Redis?

- Você já precisou de um BD em memória?
- Você já precisou compartilhar informação entre aplicações em *real time*?

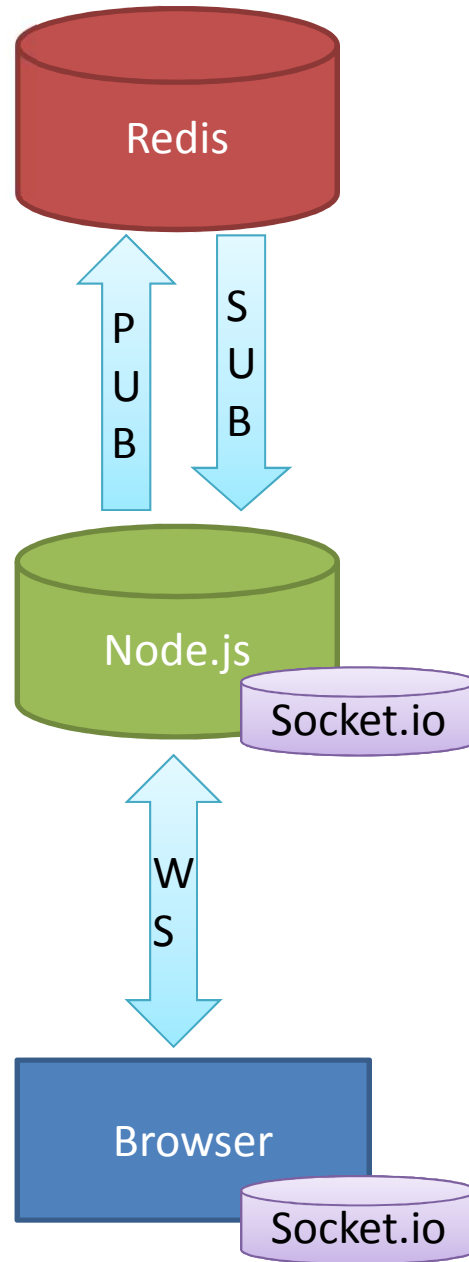


Redis

*"It is often referred to as a **data structure server** since keys can contain strings, hashes, lists, sets and sorted sets." <http://redis.io>*

- Key-value datastore, em memória
- Publish/Subscriber channels
- Master-slave replication, non blocking
- Etc...

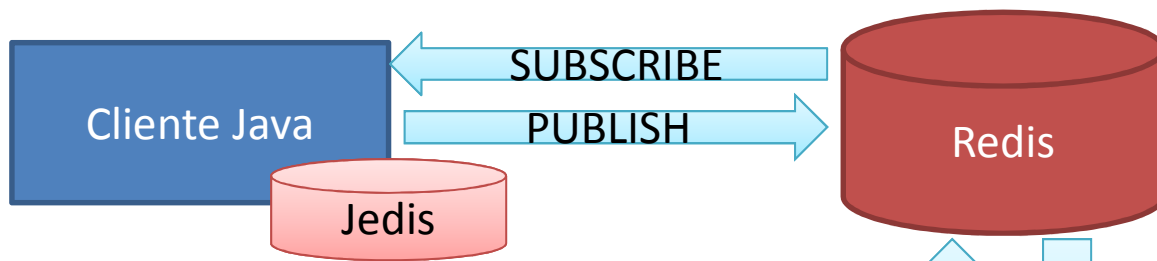
LET'S CODE 😊



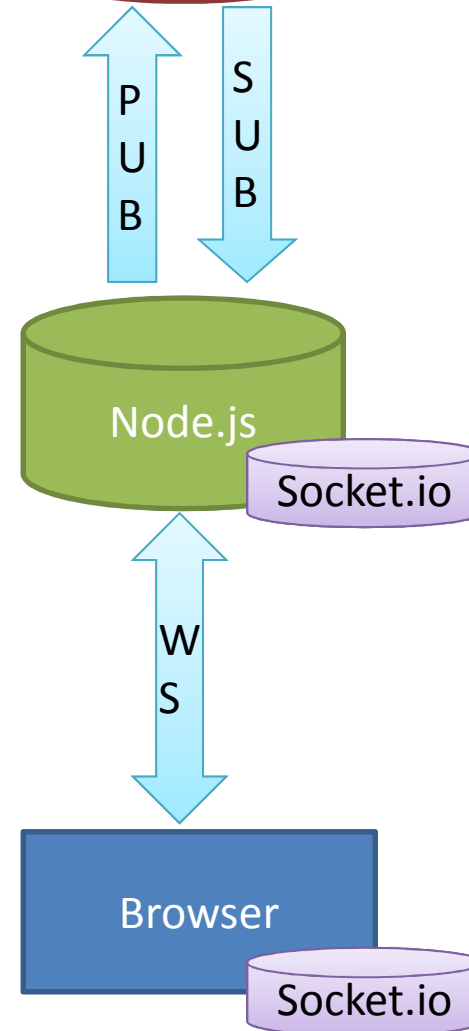
JEDIS

"Jedis is a blazingly small and sane Redis java client." <https://github.com/xetorthio/jedis>

- Connection handling
- Commands operating on strings, hashes, lists, sets, sorted lists
- Publish/Subscribe
- Etc...



LET'S CODE 😊



OBRIGADO
THAT'S ALL FOLKS!!!