

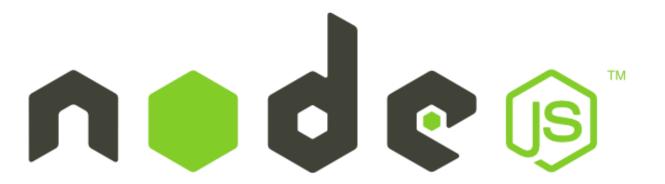
25.10.2014 Martina Kraus

### Martina Kraus

- Web Developer
- M.Sc. (Informatik) (April 2015)







Framework für serverseitiges JavaScript

"Keine Programmiersprache"

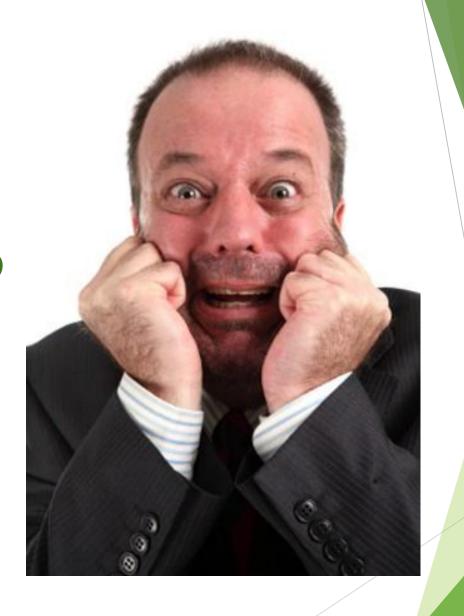
# JavaScript?

"böses Voodoo im Browser"

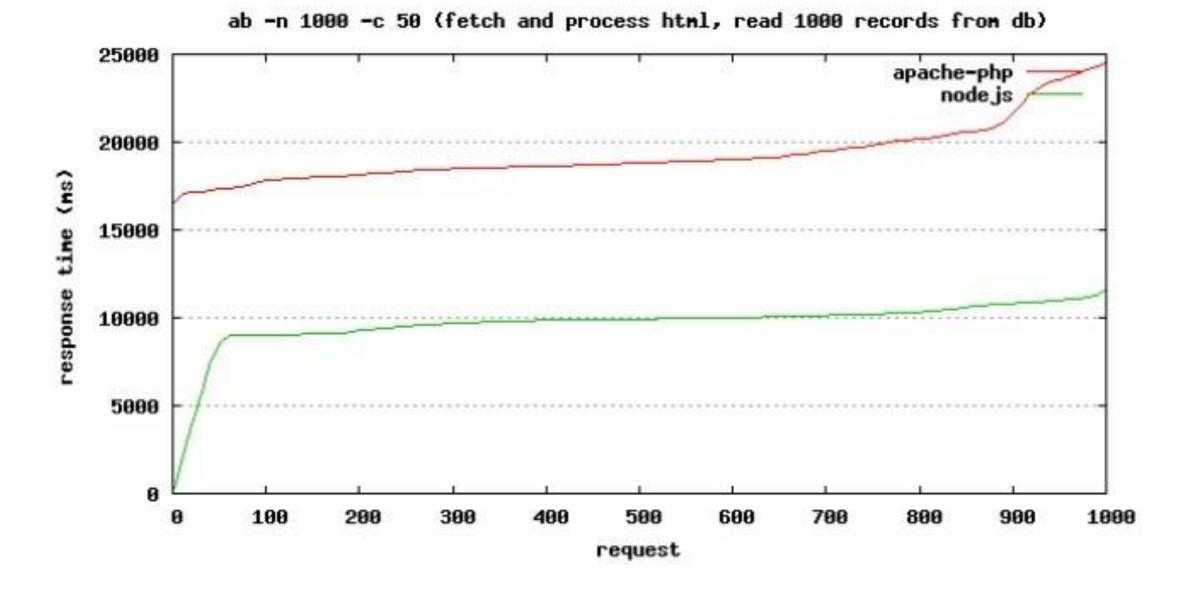


# serverseitig?

"Typsicherheit?"



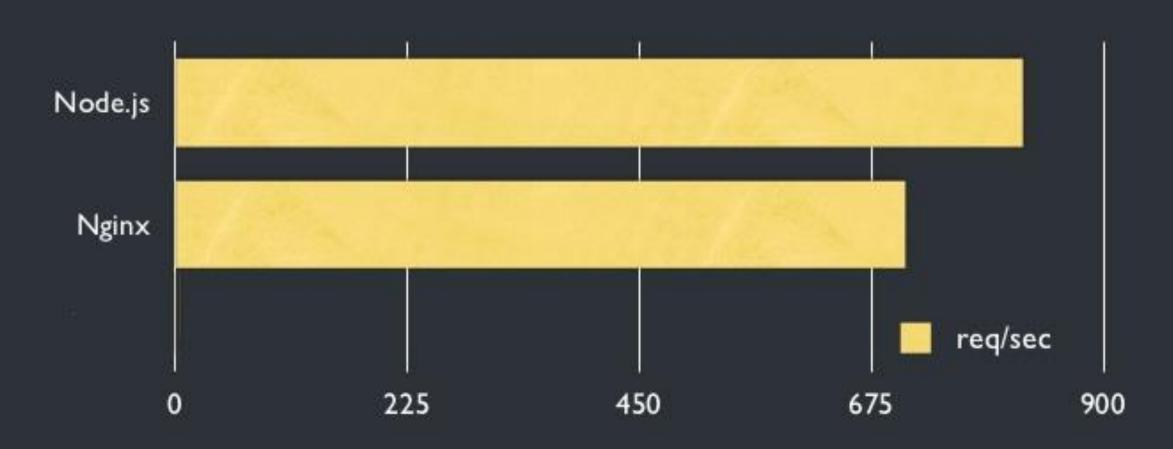
# Ja!!!



Radu Cojocaru: http://www.slideshare.net/Vodafonedeveloper/nodejs-vs-phpapache

### Benchmark

100 concurrent clients I megabyte response







- ► Google V8 Engine (Chrome)
- Serverseitiges JavaScript
- ► Ausgelegt für viel I/O
- Asynchron
- ► Single-Threaded

## Asynchron

- event-driven
- ► non-blocking I/O
- event-loops

## Traditionelles I/O

```
var db_result = db.query("select * from table");
doSomething(db_result); //wait!
doSomeOtherVoodoo(); //blocked
```

# Non-blocking I/O

```
db.query("select * from table",function(db_result){
   doSomething(db_result); //wait
});
doSomeOtherVoodoo();
```

# WebServer: Non-blocking I/O

```
var http = require('http');
http.createServer(function (req, res){
    res.writeHead(200, {'Content-Type':'text/plain'});
    res.end('Hello World\n');
}).listen(1337,'127.0.01');
```

### One Thread to rule them all

- leicht zu programmieren
- keine Deadlocks
- keine Race-Conditions

## **Event-loop**

"With an event loop, you ask it to do something and it'll get back to you when it's done"

~@davidpadbury

## Why should I node?

- ► Non-blocking Server
- skalierbarkeit
- ein Sprache
- ► I/O-Handling

## Getting Started ...

http://nodejs.org/download/

## Fragen?

Danke!!!

#### **Useful Links**

- <u>http://nodejs.org/download/</u> (Node.js Homepage)
- <u>http://howtonode.org/</u> (Tutorials)
- https://www.joyent.com/noderoad (next Steps Node.js)
- http://nodeschool.io/ (Tutorials)
- http://socket.io/ (Node.js Modul für WebSockets)
- https://www.npmjs.org (Node packaged Modul Packed Manager)