



What is Node.js?

Node.js is a JavaScript runtime built on **Chrome's V8 JavaScript** engine that runs JavaScript without browser

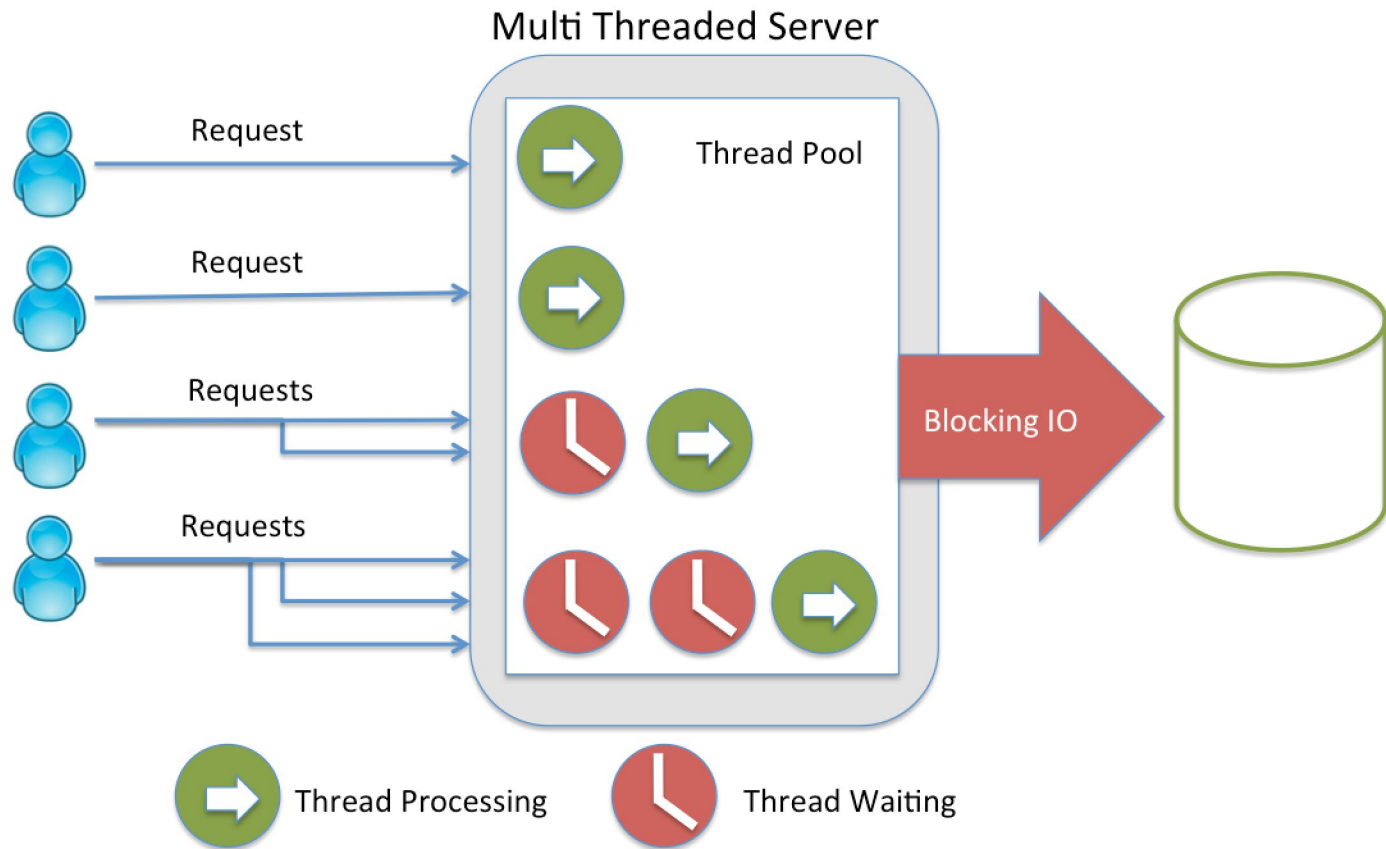


Why should I want this?

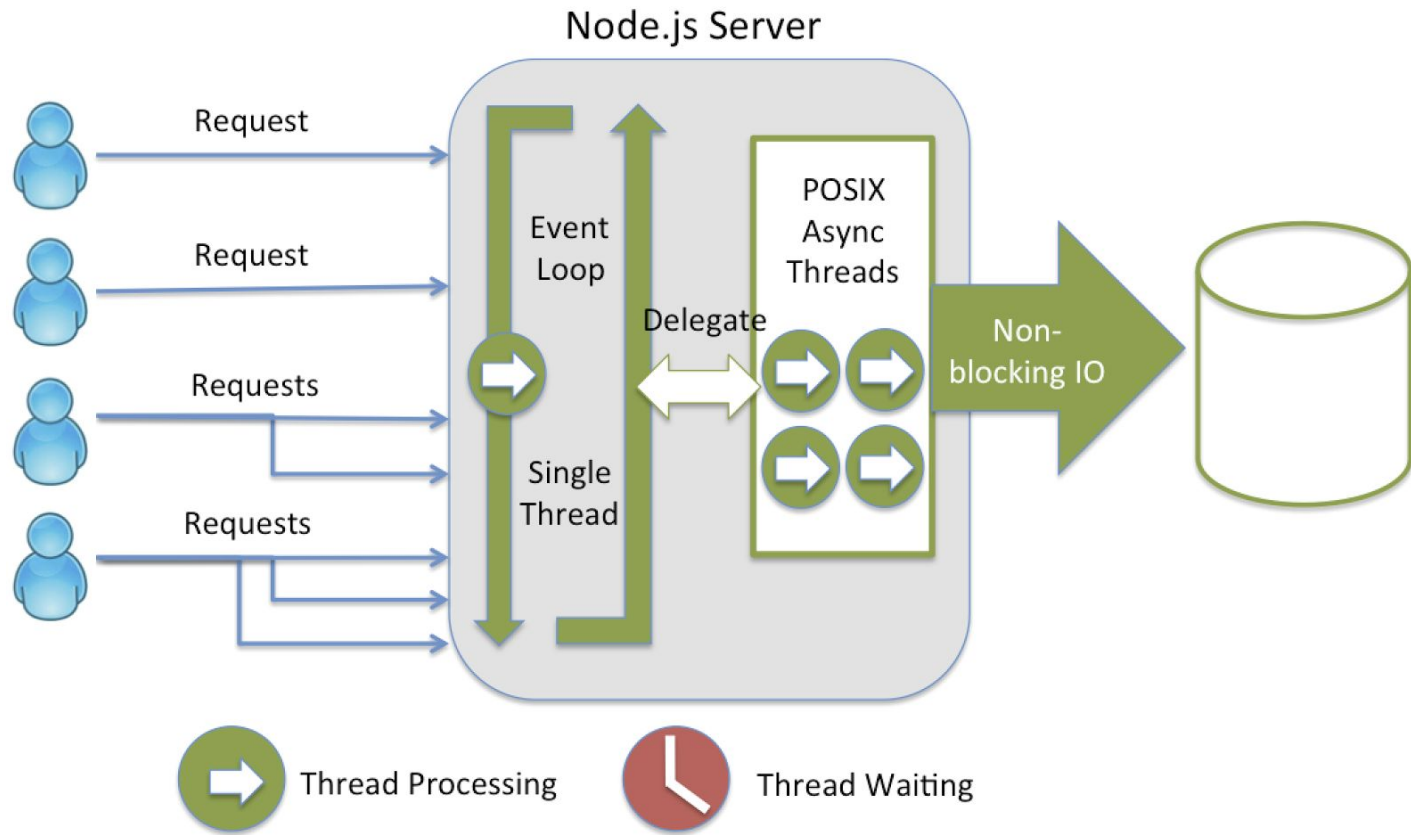


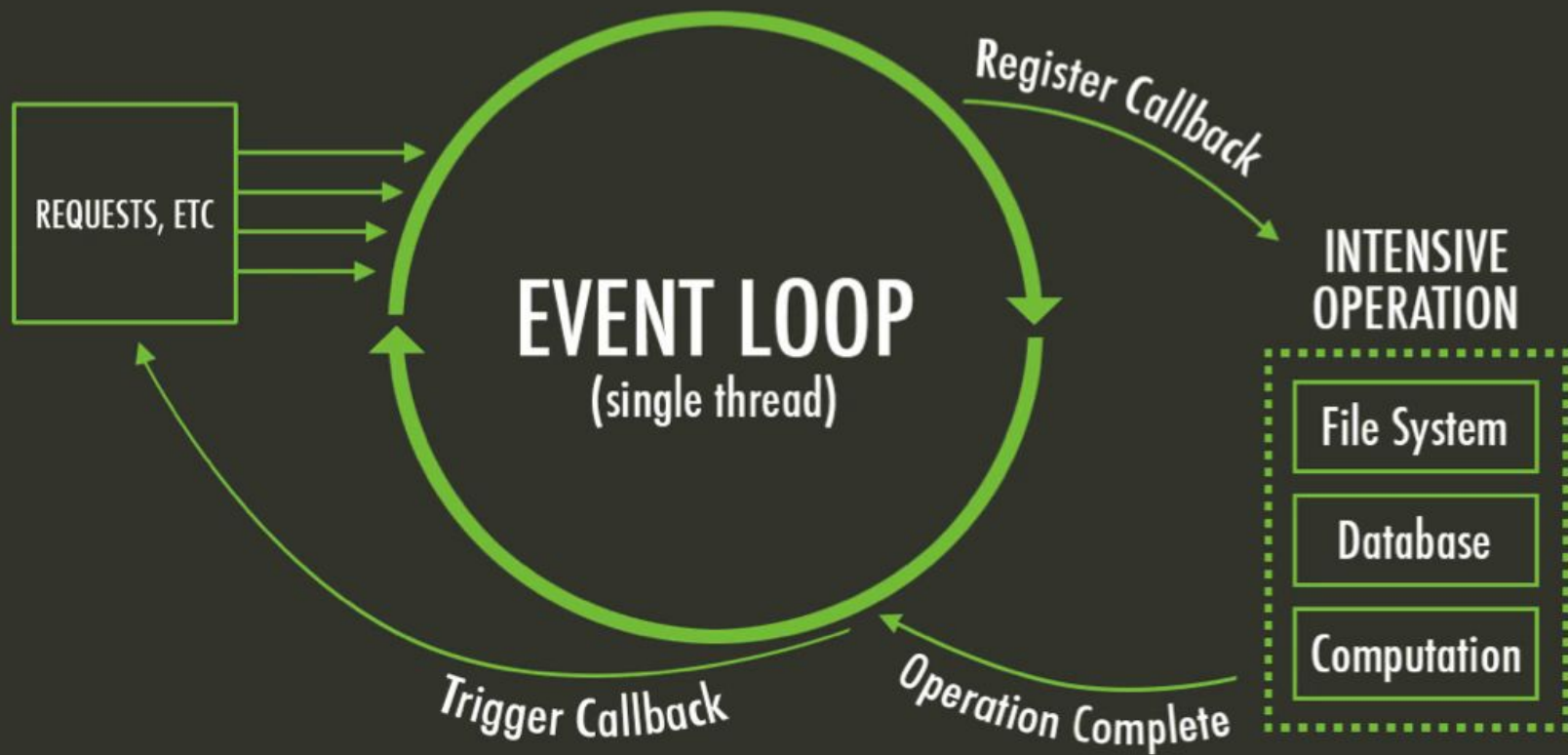
Using an **event-driven, non-blocking I/O** model, Node.js is lightweight and efficient with very little overhead

Let's remember on how traditional
languages works?

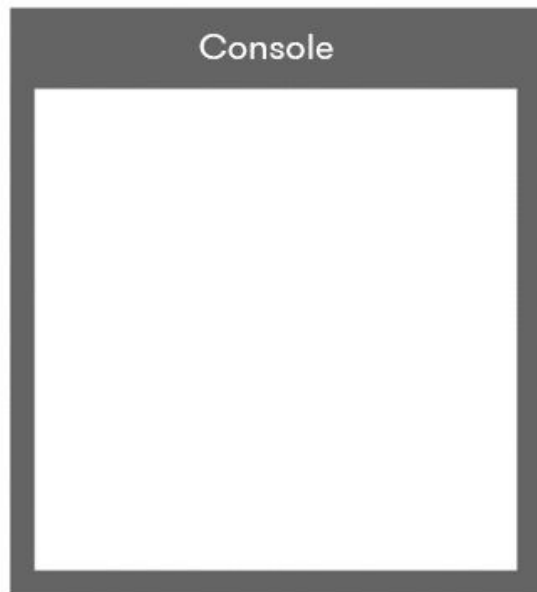


What Node.js can offer?





```
console.log('Hi');  
  
setTimeout(function cb1() {  
  console.log('cb1');  
}, 1000);  
  
console.log('Bye');
```



Call Stack



Node.js APIs



Event Loop

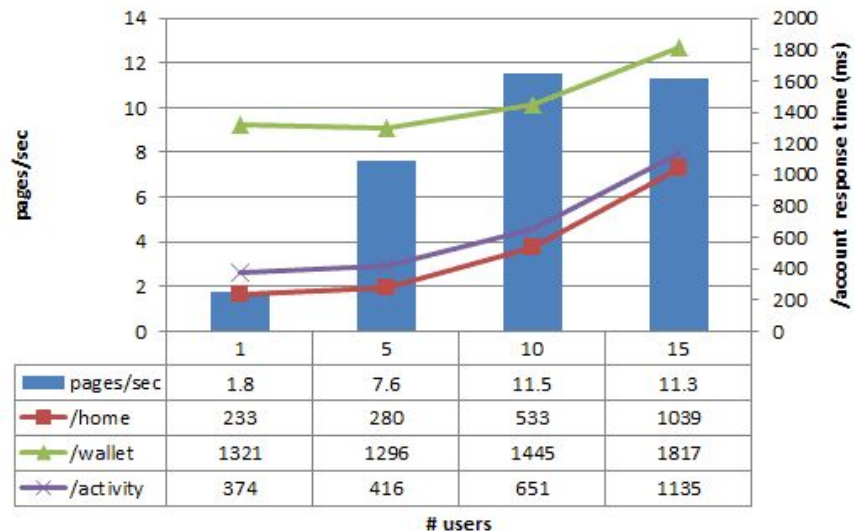


Task Queue

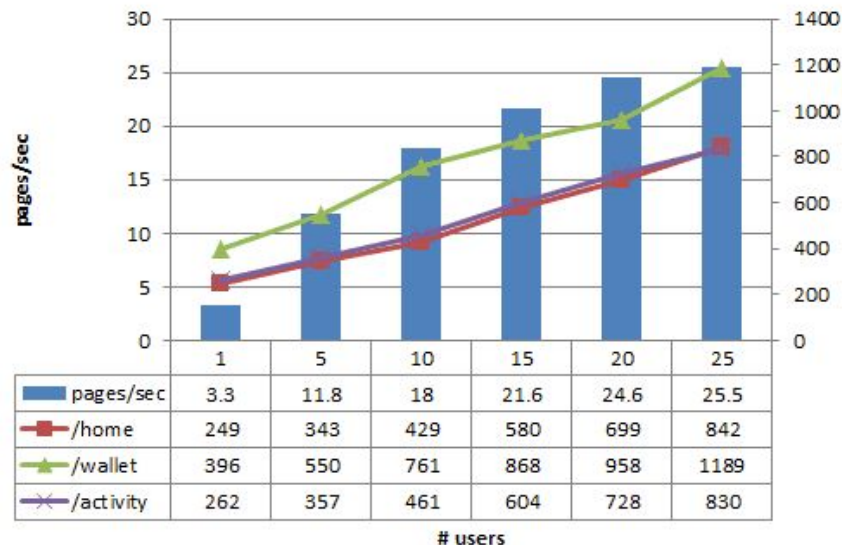


Node.js at PayPal makes the page's response be 35% faster

Java application



Node.js application



* Using a single core for the Node.js application compared to five cores in Java



JavaScript is generally considered an **interpreted** language, but **modern** JavaScript engines no longer just interpret JavaScript, they **compile** it.

What is Node.js good for?

What is Node.js good for?

- Highly scalable network applications
 - It is a great choice for microservice architecture
- Web Services (RESTful API)
- Real-Time applications
- Full stack development, single language for backend and frontend

What is Node.js bad for?

What is Node.js bad for?

- For anything requiring heavy computations
- Applications with a Relational Database

* The Node.js community is working on giving Node.js access to FPGA and GPU acceleration, whereby it will be able to handle more computationally intensive task asynchronously on these alternative computing devices.

Summing It Up?

- When it comes to real world scenarios seen in typical web applications, Node truly is faster and more scalable than Java.
- For web application development Node's performance is hard to beat!!



Node.js package ecosystem, [npm](#), is the largest ecosystem of open source libraries in the world

Who is using Node.js?

NETFLIX



Linked The LinkedIn logo consists of the word "Linked" in a black, sans-serif font, followed by a blue square containing the white lowercase letters "in".

PayPalTM



Walmart The Walmart logo features the word "Walmart" in a blue, sans-serif font, followed by a yellow six-pointed starburst icon.

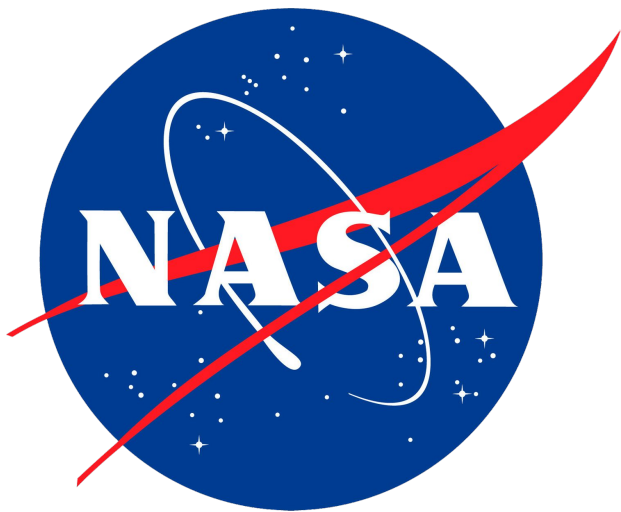


U B E R



The New York Times

Who is using Node.js?



Benjamin Coe @BenjaminCoe 6/3/16

@CollinEstes I heard a rumor that NASA uses Node.js for space-suits. I'm curious, do you use the npm ecosystem to develop these apps?



57



69



Collin Estes @CollinEstes 6/3/16

@BenjaminCoe You heard correctly, and yes we do.



36



74



Where else can I use Node.js for?



Build cross platform desktop apps with JavaScript, HTML, and CSS



Atom



Slack



Visual Studio Code



Postman



Brave Browser

Johnny-Five

The JavaScript
Raspberry Pi
Robotics & IoT Platform



CYLON.JS

[Docs](#) [Platforms](#) [Resources](#) [Blog](#) [Contact](#)

JavaScript Robotics, By Your Command

Next generation robotics framework
with support for 43 different platforms

Get Started



JavaScript, Node, and Drones The Story of NodeCopter

Paris Tech Talks — May 6th, 2013



JavaScript is on its way to become
a really universal language

