Scaling of Node.js

Event

Node.js Interactive
Submission Type Presentation
Category Developer

Biography

My Employer: Intel I'm part of Scripting Software Optimization team at Intel with 10+ years of software optimization experience including various compiler toolchains, viz., GCC, Pathscale and PGI compiler toolchains. I've been very actively involved in the optimization of few runtimes, viz., Zend-PHP, HHVM, JavaScript and Google's 'Go' language. My recent contribution is a performance patch submitted towards 'Go' language runtime. I've never spoken in a conference before this opportunity.

Abstract

Data centers are growing rapidly. This is in support of exponential growth in the mobile clients and partly due to increasing popularity of Node.js' asynchronous execution model to support millions of concurrent connections. The question now is that, can you scale the datacenter without changing any code? Models have shown that for every 600 smart phones, a new server is needed. Node.js gives high I/O scalability by providing single threaded, non-blocking execution model without headaches of thread programming. But heavy computation could choke up node.js's single thread and cause problems for all connected clients by queuing up (blocking) all the incoming requests until said computation is completed. To maximize the server investment, node.js's execution has been optimized by addition of a native cluster functionality. This talk will review current results and future work.

Audience

Web application developers, Node.js based cloud service providers. Linux kernel development.

Experience Level

Beginner

Benefits to the Ecosystem

This presentation will help existing and new node.js application developers better understand the scalability issue and solution to get maximum return on their investment for them and the companies that they work for.
Status New