The State of



James M Snell

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My estimate, based on way too much data, is that Node.js grew by 20-27% in Q1 of 2016, which is actually more than Q1 in 2015.

RETWEETS 10

LIKES

14



















10:11 PM - 28 Apr 2016



















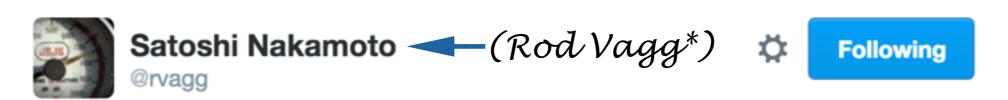


Still working on removing duplicates, but it's starting to look like around 100-120 new contributors to Node.js over the past four months.

10.03 AM - 23 Apr 2010







Truth is, beyond the V8 upgrade, Node.js v6 is kind of boring, but that's the way it should be! Progress + stability.

8:18 AM - 23 Apr 2016





So what is happening in the world of Node.js?





Let's talk about releases.





Node.js v6.0.0 - Current

Node.js v5.11.0

Node.js v4.4.3 - LTS

Node.js v0.12.13 - Maintenance

Node.js v0.10.44 - Maintenance





Node.js v6.0.0 - 2019-04

Node.js v5.11.0 - 2016-06*

Node.js v4.4.3 - 2018-04

Node.js v0.12.13 - 2016-12-31*

Node.js v0.10.44 - 2016-10-31*

*upgrade now!





Node.js v7.x - Arriving 2016-10

Node.js v6.x

Node.js v4.x





So what's new in v6?





V8 v5 is in v6

93% of ES6 Language Features! default params, destructuring*, Proxies, and more.

http://node.green

* there are some performance issues so be careful





lam seriously hoping that we can have V8 v8 in Node.js v8







New Buffer constructors

new Buffer(str, enc)

new Buffer(array)

new Buffer(buf)

new Buffer(size)

new SlowBuffer(size)



Buffer.from(str, enc)

Buffer.from(array)

Buffer.from(buf)

Buffer.alloc(size)

Buffer.allocUnsafe(size)

Buffer.allocUnsafeSlow(size)

Why? Usability and Security.





Other API changes

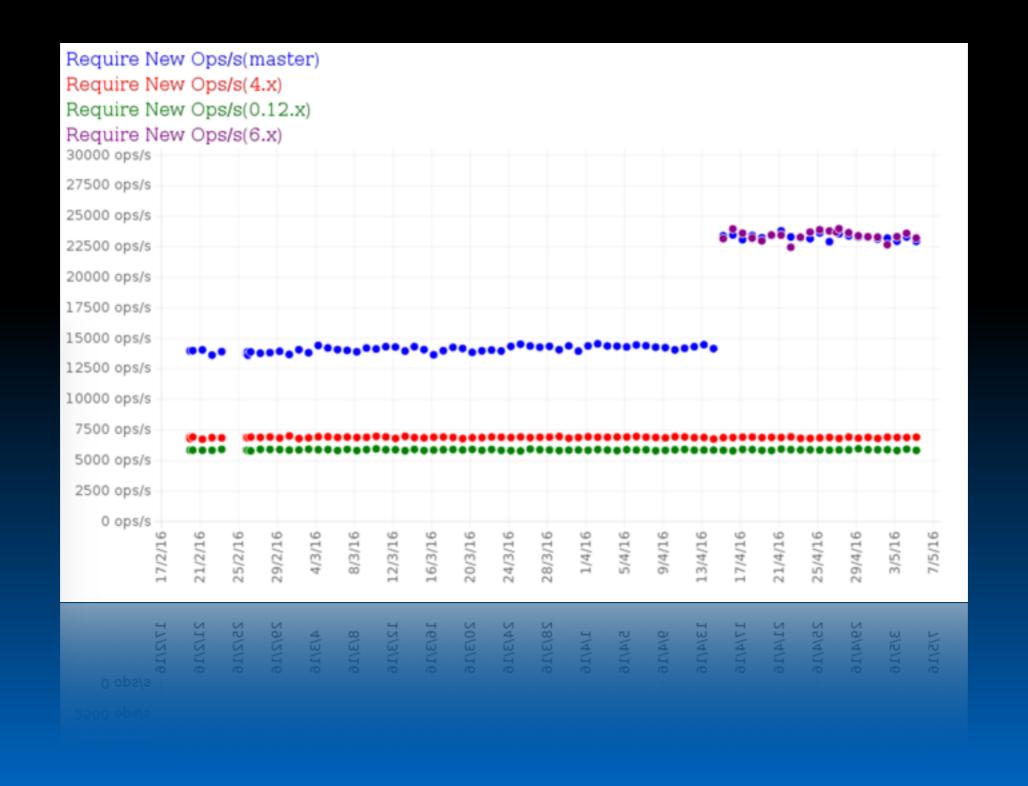
Comparing Buffers with offsets
Better buffer.lastIndexOf()
Couple of new EventEmitter methods
fs.realpath() is much faster (but also now throws errors)
New process warnings API
Improved Zlib support
Lots of other smaller things...

Why? Usability and Security.





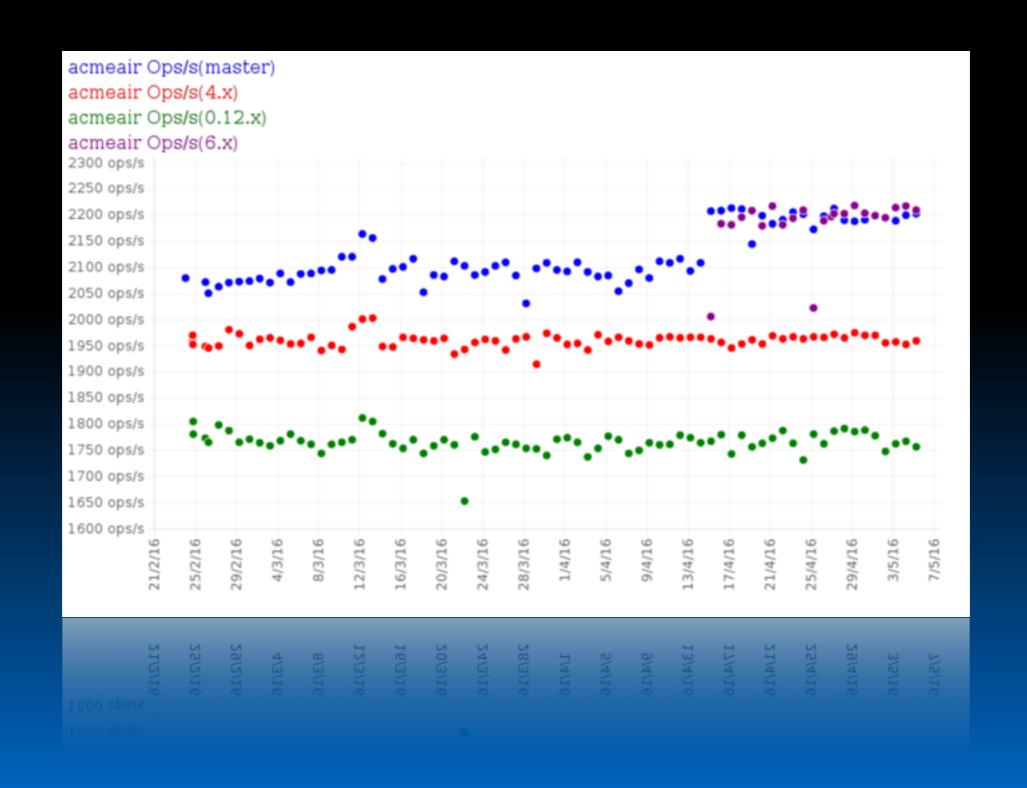
Massive Performance Improvements







Massive Performance Improvements







30 billion transactions per day in benchmark tests*.

* will hopefully be hearing about this more at Node.js Interactive





Significant Improvements to Testing and Documentation

over half of the commits since v4 have been test and doc fixes.

Special shout out to Rich Trott who put in massive effort on the tests





In other words, as soon as we made it easier for people to contribute to Node.js,

they immediately began using that freedom to make Node.js more reliable.





Reminder:

If you're using Node.js v5 now, upgrade to v6 <u>now</u>.

If you're using Node.js v4 LTS, start planning to upgrade.

You should complete your upgrade to v6 in production by the end of 2016.





What's new in the community?





100+ new contributors in 4 months.





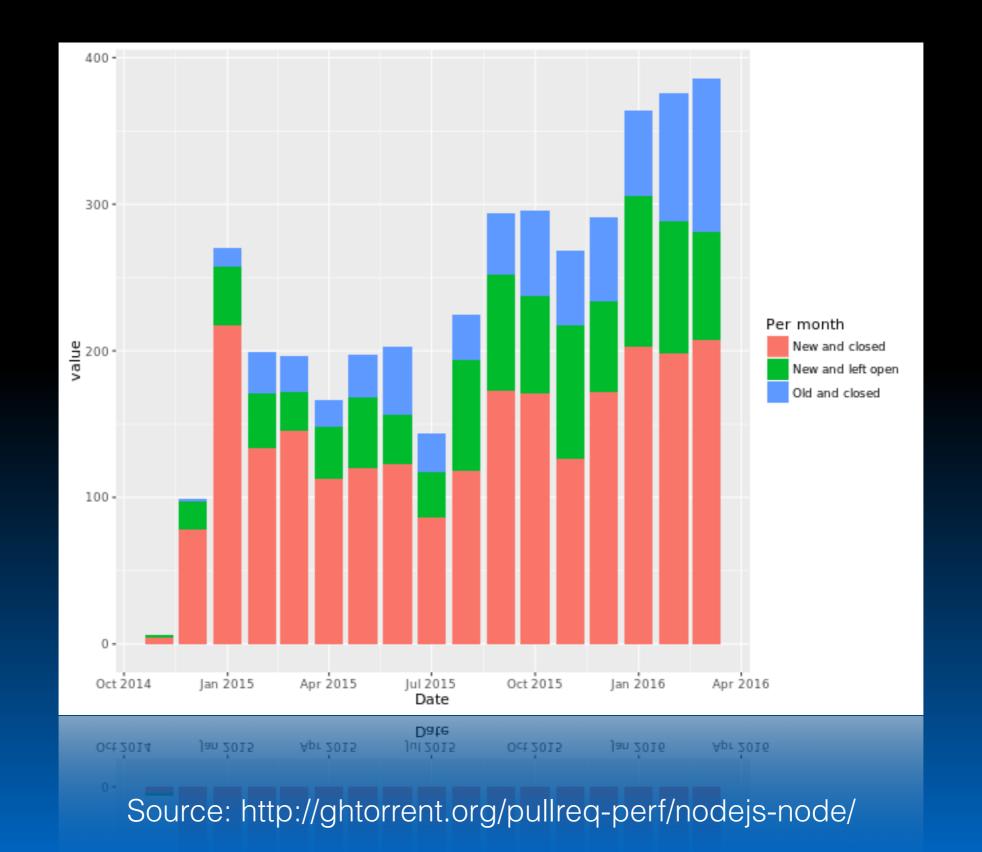
Sustained Growth







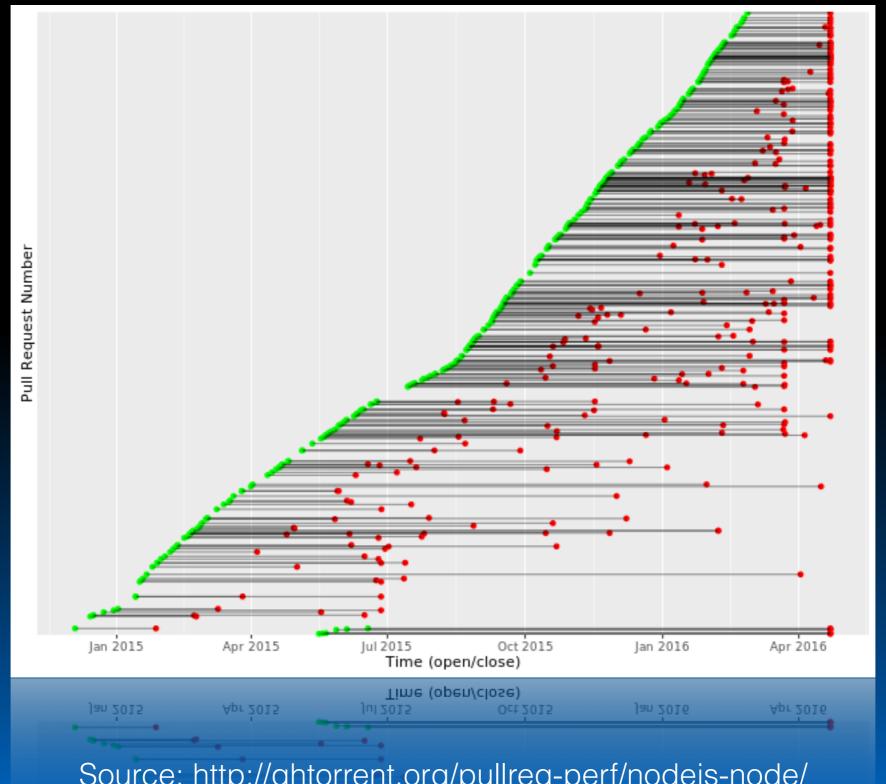
Healthy activity







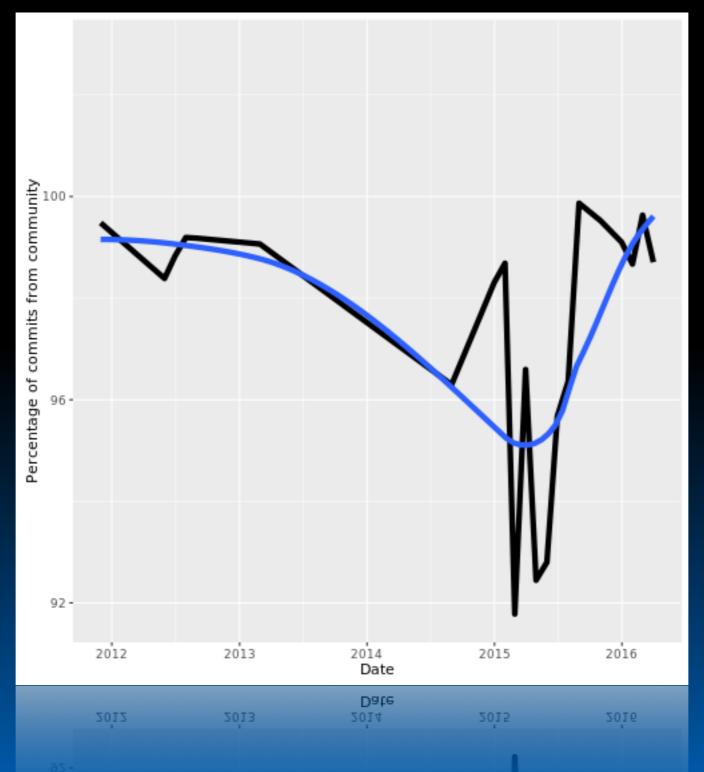
Healthy activity







Community Participation.







Contributors drive the roadmap*.

* mostly. Ask me about ES6 modules later





What's on the horizon?





Even *more* ES6 and ES7

Modules, async await, Intl, etc





Multiple VMs

ChakraCore SpiderMonkey





Improved abstraction APIs for Native Module Developers





More performance improvements.





Better error messages and error handling.





Async-Wrap and other enhanced internals for improved debugging and monitoring.





More ecosystem testing.





Canary in the Gold Mine. https://github.com/nodejs/citgm

We will test your modules in our Cl so we can know if our changes will break your stuff before you do.

Then we can help you fix it.





ES6 Modules?

Sigh.

This one is a bit of a mess, but it's being figured out.

https://github.com/nodejs/node-eps/blob/master/002-es6-modules.md





Get involved.

https://github.com/nodejs/node/blob/master/ CONTRIBUTING.md





Thank you.



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