

# State of the Node

Isaac Z. Schlueter – 2012

# Brief History

- 2009, Ryan Dahl, JSConf EU, Joyent, etc.  
(you know that story already)
- 2010.08.20 v0.2 "stable-ish"
- 2011.02.10 v0.4 "stuff works"
- 2011.11.04 v0.6 "stuff works on windows"
- 2012.06.25 v0.8 "stuff works better"



# Node v0.2

- First time Node promised to not change API for a little while.
- A pretty big deal at the time (0.1.x had virtually no stability between releases)
- No streams, inconsistent APIs, etc.



# Node v0.4

- `node_modules` stuff, localized module dependencies
- Relatively well-tested functionality
- `util.pump()` to connect Streams
- Unix-only (`window=cygwin=pain`)
- Node's arrival as a Unix systems programming platform worth using.



# Node v0.6

- libuv - Proper windows support
- zlib, cluster, Stream.pipe()
- Easier: Fancy binary installers (pkg/msi), bundled npm
- Microsoft involvement.  
Most APIs "Just Work" on win32. Azure, etc.



# Node v0.7

- Ryan Dahl names Isaac Z. Schlueter lead gatekeeper, moves to new role as advisor / mad scientist
- Isolates: Initially promising (but ultimately not good)
- Domain module experiments
- Tremendous growth in the node community



# Node v0.8

- Significant improvements in stability and performance
- Gyp is a first-class citizen. (Waf is frowned upon.)
- Libuv is much more stable
- Cluster is much more powerful
- File-descriptors work again



# `require('domain')`

- Add event emitters to a Domain object.
- If their events throw, then the Domain catches it.
- If they emit 'error', then the domain catches it.
- Dispose the domain to clean up



# `require('domain')`

- Super duper experimental
- Probably going to change a bit in v0.9
- Don't get too attached to its internals.
- **Do tell us how to improve it!**



# npm-www

The screenshot shows the npm website interface. At the top left is the Node.js logo. To its right is the npm logo. A search bar contains the placeholder "Search Packages". On the far right, there is a user profile for Isaac Z. Schlueter with options to "Edit Profile" and "Log out".

**request**

Simplified HTTP request client.

**Author:**  Mikeal Rogers

**Version:** 2.9.202

**Repository:** <git://github.com/mikeal/request.git> (git)

**Bugs:** <http://github.com/mikeal/request/issues>

**Dependencies:** None

[Read Me](#)

**Request -- Simplified HTTP request method**

**Install**

```
npm install request
```

npm installs request



# npm-www

- <https://github.com/isaacs/npm-www>
- Try it! <https://new.npmjs.org/>
- Using the latest node features: cluster, domain, etc.
- Impetus to factor out npm more strictly  
(npm internals are very useful here)
- Addresses core problem in node:





there are too  
many modules!!





# Remember last year?



*At the next NodeConf,  
I will show you that last slide,  
and you will say, "Wow!"*



It was a lot, right?



# 2011...

- ~1800 projects
- 730 active package authors
- 26 npm contributors
- version 1.0 released

# 2012

- ~12000 projects
- 3800 active package authors
- 72 npm contributors
- version 1.1.35 released



# oral tradition

- "This guy I know wrote this thing"
- Got us this far.
- Starting to show its **weaknesses** now as we grow.
- Package count increased tremendously since last year's NodeConf, speed increases daily.



# Modules: Growing Up

- A site where docs, metadata, management, and discovery can be integrated.
- Ideal => git : github :: npm : npm-www
- A community site for the community.
- Contribute: <https://github.com/isaacs/npm-www>
- Try it: <https://new.npmjs.org/>



# Node v0.9

- Limiting scope dramatically:
- HTTP refactor
- Libuv Streams refactor
- Node Stream API cleanup
- Faster SSL/TLS init



# Deprecation

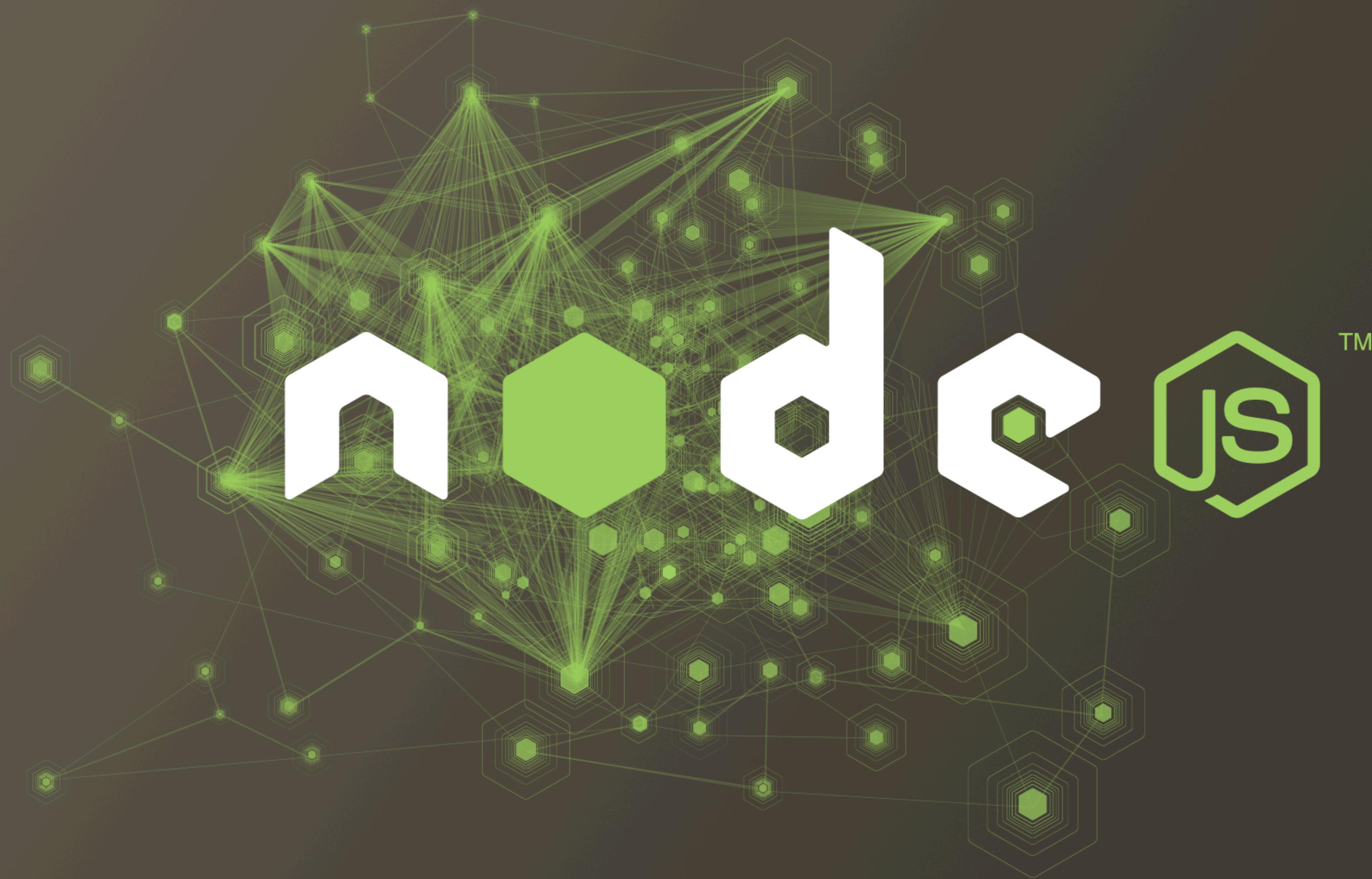
- The days of Node breaking APIs on purpose are pretty much over. We're growing up.
- If your program works today, we will try hard to make sure it works next year.
- No one expected Node to be this mature by now.
- This is **why** we've kept the core small!



# Node 1.0

- No commitments at this time about what "node 1.0" means, or when it'll land.
- Versions are marketing.
- May come directly after 0.9, maybe later.
- Let's take it to the mailing list.





<http://j.mp/2012-state-of-the-node>