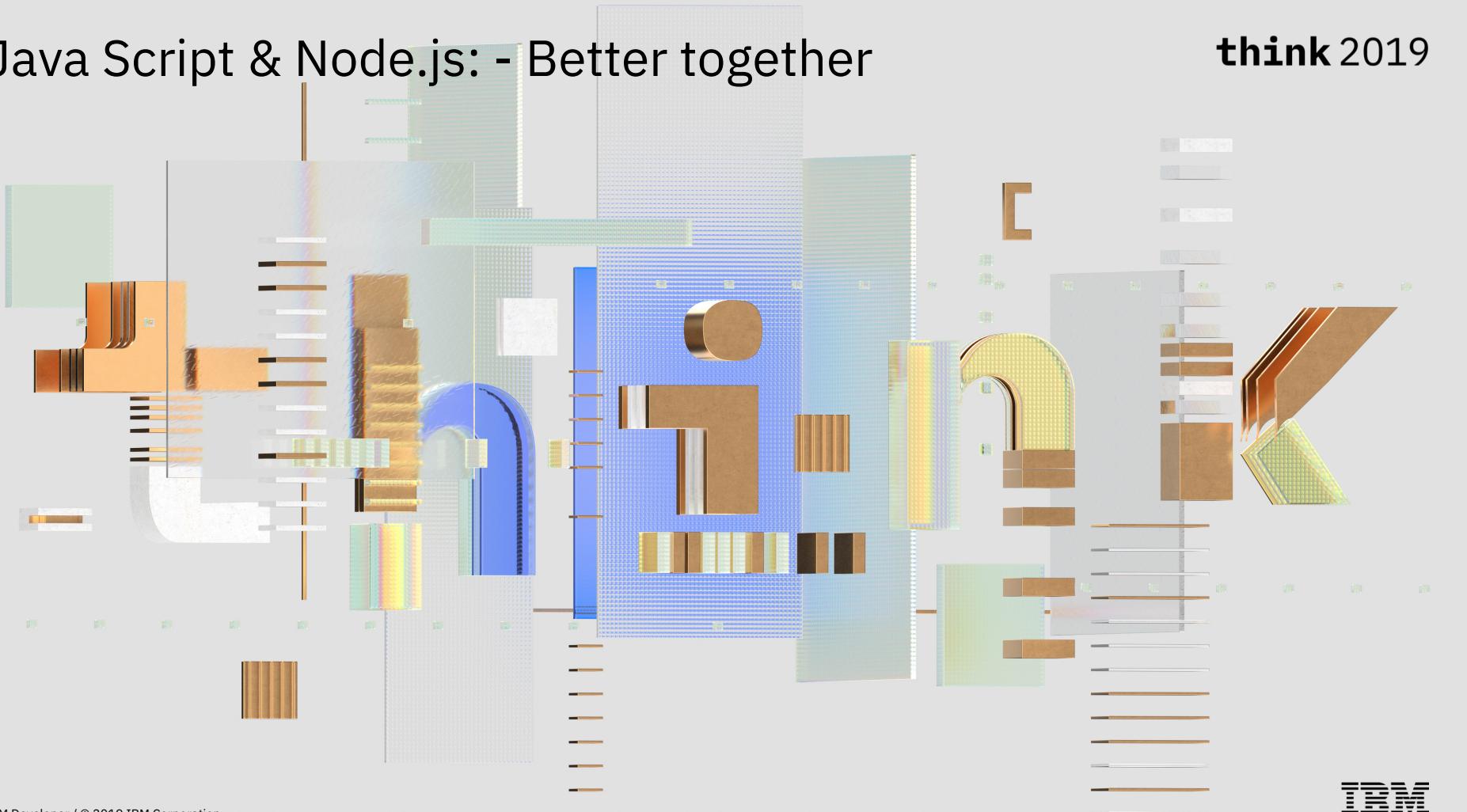


# Java Script & Node.js: - Better together

think 2019



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# About Michael Dawson

## IBM Community Lead for Node.js



# Active Node.js community member

# Collaborator

Node.js Technical Steering Committee TSC Chair

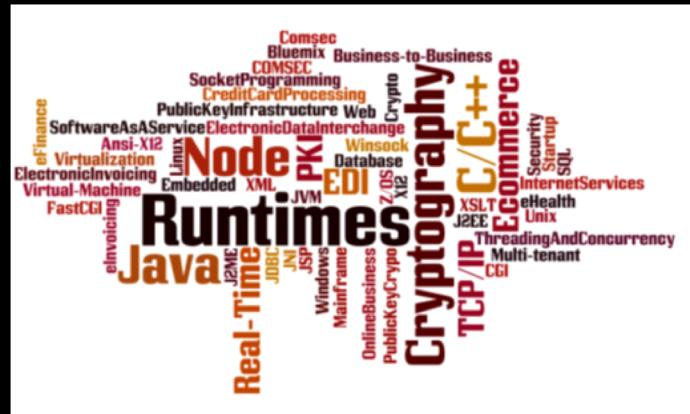
## Community Committee member

## Working group(s) member/leadership

Twitter: @mhdawson1

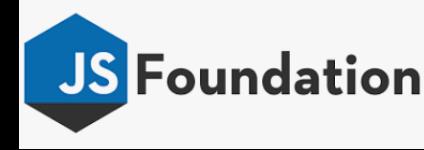
GitHub: @mhdawson

Linkedin: <https://www.linkedin.com/in/michael-dawson-6051282>

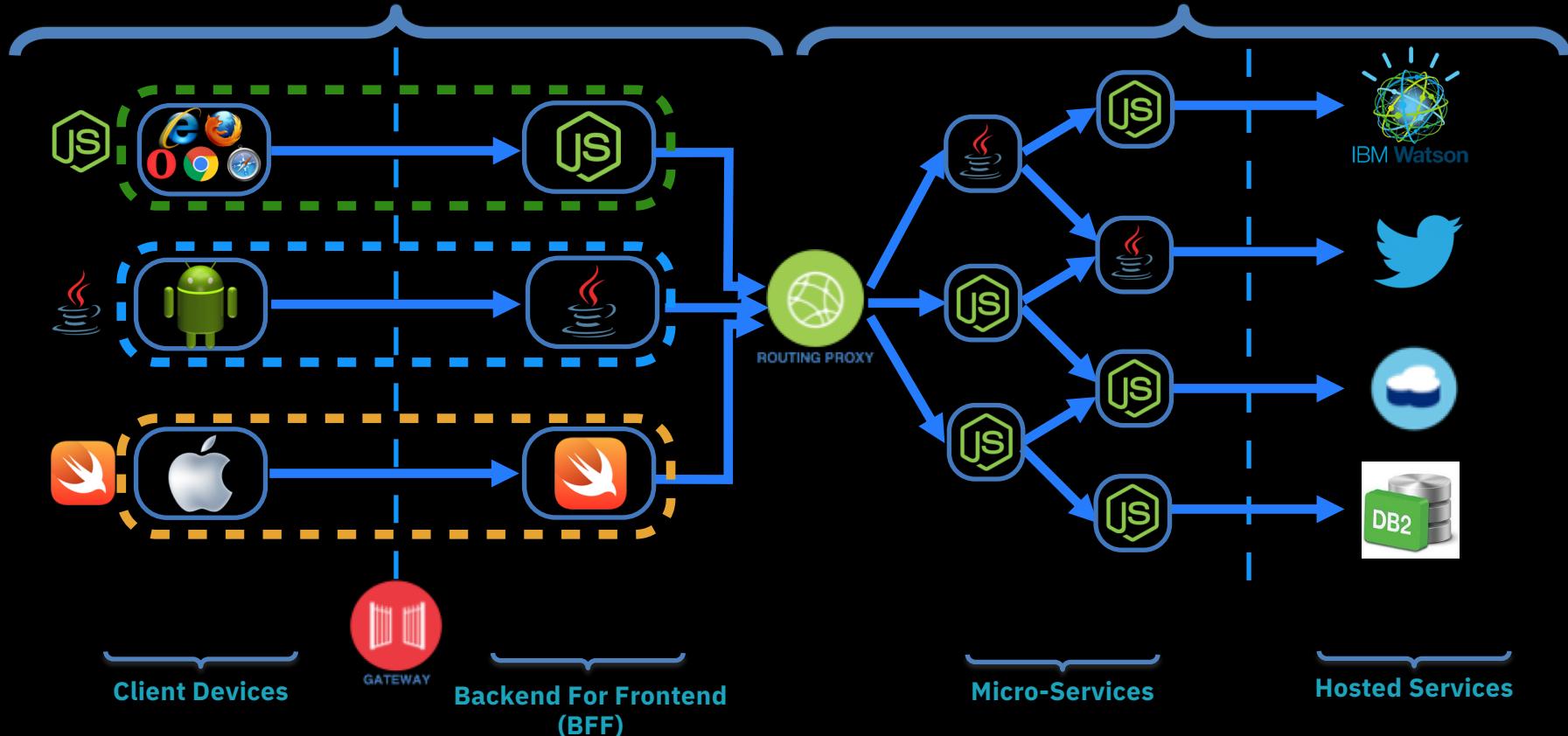


# Agenda

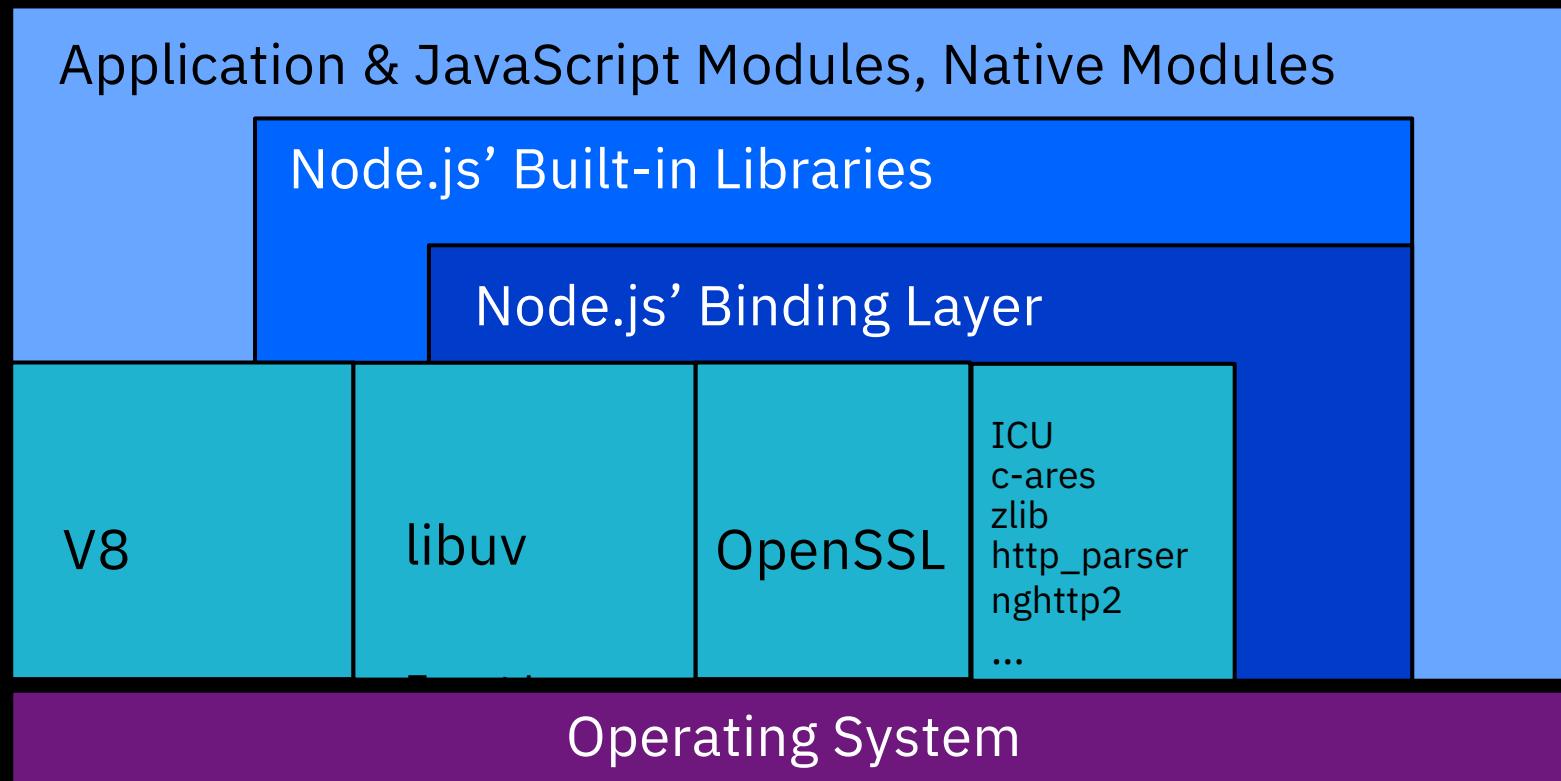
- Node.js and JavaScript – Better Together
- Bringing Node.js and JS Foundation Together
- Node.js Package Maintenance Effort
- IBM's Investments in Node.js and JavaScript Ecosystem
- IBM's Node.js Strategy
- To Learn More



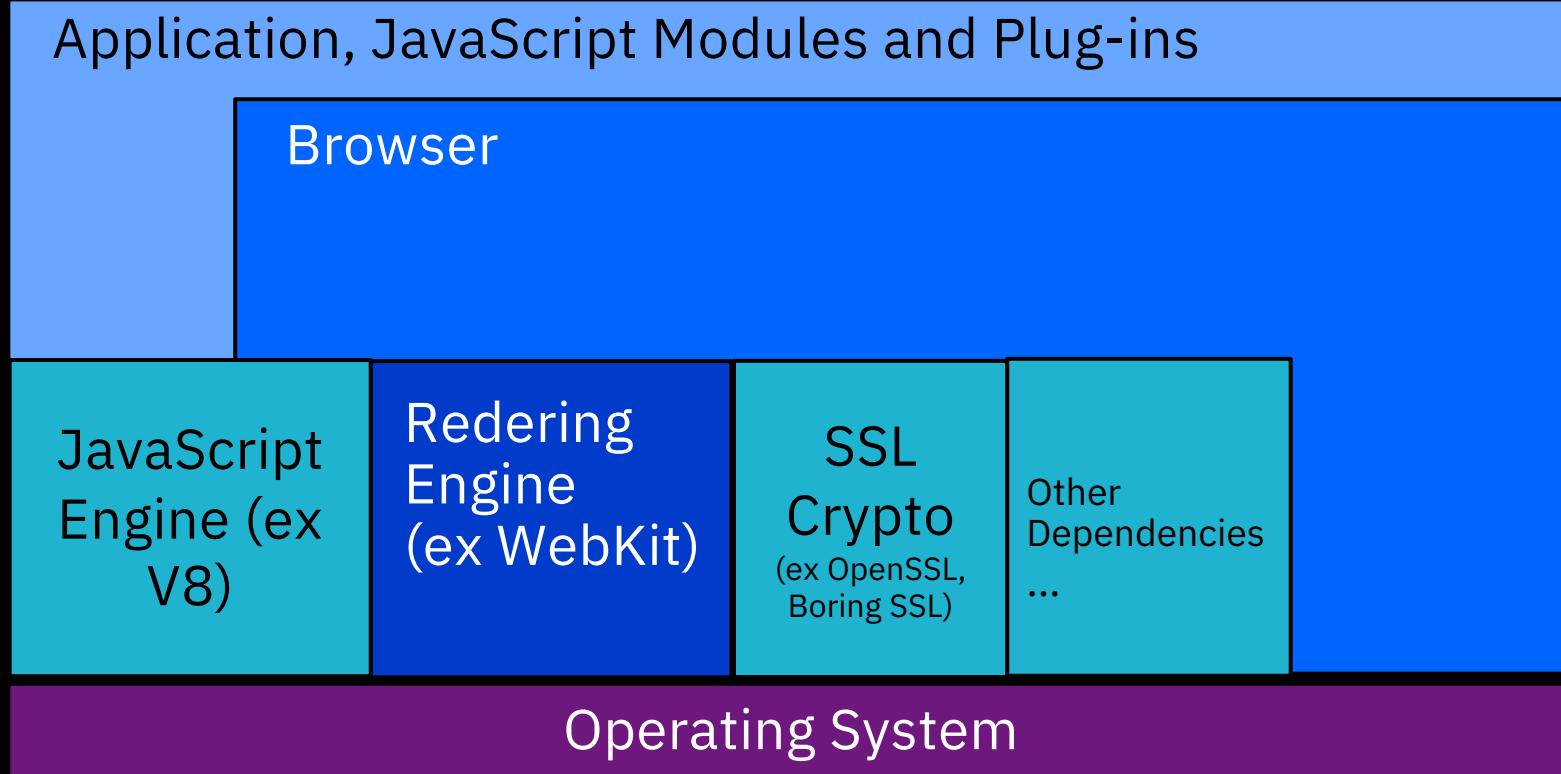
# Node.js and JavaScript - Better Together



# Sharing a Common Foundation



# Sharing a Common Foundation



# A lot in Common

- JavaScript Language
- Modules – often written to run on both
  - ES6 modules will accelerate
- Applications often have components running in both
- Tooling
  - Debugger
  - Heap dumps
  - Tracing

# Bringing Node.js and JS Foundations Together

- A common home for JavaScript projects
  - Oct 4 2018 - <https://medium.com/@nodejs/the-node-js-foundation-and-js-foundation-announce-an-intent-to-merge-a-message-from-the-boards-8a2e4a5cbd2b>

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- Removes confusion over “which foundation to join”
  - Strong and better funded
- Better collaboration
  - Same code often runs in both Node.js and Browser
  - Projects often have a strong Node.js dependency
  - Common Tooling requirements
  - End user Outreach (ex individual membership program)

# Bringing Node.js and JS Foundations Together

- Easier/stronger/more diverse voice in standards bodies
  - Ex: TC39. Node.js and JS Foundation projects both rely on Language features

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# Bringing Node.js and JS Foundations Together

- Easier/stronger/more diverse voice in standards bodies
  - Ex: TC39. Node.js and JS Foundation projects both rely on Language features
- Focus on Projects not Foundation
  - Promotion of great projects, not umbrella
- As with most Foundations
  - Home for IP
  - Legal advice and best practices
  - Software/hardware resources
  - Build membership to make resources available to projects

# Bringing Node.js and JS Foundations Together

- Bootstrap Team
  - <https://github.com/nodejs/bootstrap>
  - Weekly meetings Monday 9EST/2 EST
  - Open participation

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- Bootstrap Team
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  - Weekly meetings Monday 9EST/2 EST
  - Open participation
- Cross Project Council - [https://github.com/nodejs/bootstrap/tree/master/proposals/stage-1/CPC\\_CHARTER](https://github.com/nodejs/bootstrap/tree/master/proposals/stage-1/CPC_CHARTER)
  - Members from projects
  - “Support projects, not dictate”
  - Board representation

# Bringing Node.js and JS Foundations Together

- Project Progression
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- Commons.js

Bringing Node.js and JS Foundations Together

What does this  
mean to me as a  
Developer?

# Bringing Node.js and JS Foundations Together

- Stronger/better home for your code

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# Bringing Node.js and JS Foundations Together

- Stronger/better home for your code
- Better support for the projects you depend on
- Common Foundation to engage for key concerns

# Node.js – Package Maintenance

- Call to Action: Accelerating Node.js Growth

<https://medium.com/@nodejs/call-to-action-accelerating-node-js-growth-e4862bee2919>

- Challenge

- Many broadly used packages
  - Small core -> external packages part of core toolbox
  - Hard to keep up with basic maintenance
  - No easy/obvious way for consumers to help

# Node.js – Package Maintenance

- Solution
  - Package Maintenance team
  - <https://github.com/nodejs/package-maintenance>
  - Goals
    - Key packages, what assistance can be provided
    - Tools/processes to enable organizations to help
    - Maintain backlog of work items to help package maintainers
    - Guidance, tools and processes to that help maintainers

# Node.js – Package Maintenance

- The Kickoff
  - 80-90 members joined the team!
  - Meetings 9EST/3EST every other week (3 so far)
- Initial focus areas
  - Defining some key packages and friendlies
  - Defining the problems
  - Best practices
  - Enabling enterprise participation

# Node.js – Package Maintenance

- Baseline Practice – support level
  - <https://github.com/nodejs/package-maintenance/pull/139>
    - target
    - response
    - response-paid
    - Backing
- CI/CD guidelines - <https://github.com/nodejs/package-maintenance/pull/146>
- Deprecation guidelines - <https://github.com/nodejs/package-maintenance/pull/150>

```
{ "support": {  
    "target" : "NODE_LTS",  
    "response": "BEST EFFORT",  
    "backing": "SPONSORED"  
}  
}
```

# Node.js – Package Maintenance

## Support-target

The support target captures the level of support that the package maintainer aims to provide. The standardized options are as follows:

- ABANDONED - Not recommended for use. The package is deprecated or no longer maintained.
- NONE - Use at your own risk, no active support. May or may not work for a given Node.js version.
- NODE-LATEST - The package is maintained only for the Latest Node.js versions. You will be required to update to the latest Node.js version in order to ensure you can use new versions/get security fixes, get updates
- NODE-LTS - The package is maintained for the Node.js LTS releases (both in Active and Maintenance mode). Anyone creating an application using an LTS version of Node.js and using the latest major version of LTS adopting modules will not have to accept semver-major level (ie. breaking) changes into that application in order to receive essential fixes. Full details are available in: <https://github.com/nodejs/package-maintenance/issues/119> (should we bring this into the package-maintenance repo?)
- NODE-SUPERSET - The package is maintained for versions of Node.js including both LTS and non-LTS releases. It may be necessary to accept semver-major level (ie. breaking) changes into that application in order to receive essential fixes. Documentation for the package will include the non-LTS releases for which the package is still maintained.

# Node.js – Package Maintenance

## Support-response and Support-response-paid

Support response quantifies how quickly the maintainer chooses to, or is able to, respond to issues:

- ABANDONED - Don't expect a response, the package is not being actively maintained
- BEST-EFFORT - The maintainer is interested in fixing/discussing issues, however, it's not their day job so there should be no expectation on response times. If and when the maintainer has time they may respond.
- REGULAR-7 - There are dedicated resources who regularly maintain the module, expected response time is 7 days or less for a "we read your issue" response. Further work will depend on prioritization of the issue by the maintainer team.
- REGULAR-1 - There are dedicated resources who regularly maintain the module, expected response time is 1 days or less for a "we read your issue" response. Further work will depend on prioritization of the issue by the maintainer team.
- 24-7 - There are dedicated resources who regularly maintain the module and they are available 24/7. You can expect to be able to contact the maintainers and get an initial response with 6 hours.

## Support-backing

- ABANDONED - There is nobody backing this module
- HOBBY - The single maintainer maintains the package for fun, does not get any support to continue maintenance.
- SPONSORED - The single maintainer actively maintains the package but depends on sponsorship to be able to continue to maintain the package. Consider supporting this sponsorship through patreon etc.
- BOUNTY - The package is maintained through the use of a bounty service
- PROJECT - The package is maintained under the auspices of a larger project (ex Node.js project).
- FOUNDATION - The package is maintained and supported under the auspices of a Foundation.
- COMPANY - The package is maintained and supported by a corporate entity but many not be related to their product or service offerings.
- COMMERCIAL - The package is maintained and supported by a corporate entity as part of supporting their products.

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# Node.js – Package Maintenance

- **Maintainers**
  - A venue to share your problems with maintaining modules
  - A potential source of help
  - Re-usable assets and guidance

# Node.js – Package Maintenance

- **Maintainers**
  - A venue to share your problems with maintaining modules
  - A potential source of help
  - Re-usable assets and guidance
- **Consumers**
  - A way to help out and “give back”
  - A potential way to reduce risk related to modules you depend on.

# IBM's Investments in Node.js and JavaScript ecosystem

# IBM's Investments in Node.js and JavaScript ecosystem 2013 -

## Node.js on POWER / Z

- Porting libuv to AIX, POWER, z/OS
- Porting V8 to POWER, Z
- Performance



Node.js@IBM

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1,274 commits 51,538 ++ 105,836 --



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## Node.js Core

- Defects and bugs
- Tests and features
- Documentation



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2,343 commits 2,147,098 ++ 1,031,544 --

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## 2013 - 2018

### Node.js@IBM

7,804 commits 4,505,620 ++ 2,229,314 --

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2,343 commits 2,147,098 ++ 1,031,544 --



### Node.js@IBM

3,079 commits 2,192,604 ++ 1,047,197 --

### Node.js WGs

- Performance, Build, Release
- I18n, Security, N-API
- Post-Mortem



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### Module LTS

- Module LTS, linked to Node.js LTS
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# IBM's Investments in Node.js and JavaScript ecosystem

1 TSC member, 11 Core Collaborators



Michael  
Dawson



Gireesh  
Punathil



Bethany  
Griggs



Sam  
Roberts



George  
Adams



Sam  
Ruby



Richard  
Lau



Steven  
Loomis



Yi-Hong  
Wang



Christopher  
Hiller



Ben  
Noordhuis

# IBM's Investments in Node.js and JavaScript ecosystem

Over the years IBM has also invested/supported a number of JavaScript Open source projects in some capacity



[LoopBack](#)



Node-RED



express



Mocha



As well as others ....

# IBM Node.js/JavaScript Strategy

- Enterprise Ready Runtime

# IBM Node.js/JavaScript Strategy

- Enterprise Ready Runtime
- Production Enablement

# IBM Node.js/JavaScript Strategy

- Enterprise Ready Runtime
- Production Enablement
- Simplify Module Consumption

# IBM Node.js/JavaScript Strategy

- Enterprise Ready Runtime
- Production Enablement
- Simplify Module Consumption
- Production Support

# To Learn More

- Feb 13
  - 7675A - 10:30 – 11:15 (Code Café) Leveraging Open Source with Node.js to bring value to your business.
  - 7750A - 11:15 – 11:45 (Code Café Room 1) Stump the IBM Experts: Node.js
  - 7764A - 13:00 – 14:30 –(Moscone South, Lobby Level - Room 103B) MasterClass Kubernetes/LoopBack/Bring your own
- Feb 14
  - 7816A -14:00 – 15:00 () Quick Labs Serverless/Microservices/LoopBack and GraphQL

# Thank you

Michael Dawson  
IBM Community Lead for Node.js

—  
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Twitter: @mhdawson1  
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