The purpose of the 2016 Node.js User Survey was to better understand Node.js users:

- what type of development work they use Node.js for
- what other technologies they use with Node.js
- where they are located
- how many years of experience they have
- how they learn new languages
- how the Node.js Foundation can help them get more out of Node.js
- what version of Node.js they use
- more

In addition to revealing interesting insights about the current state of play and trends in web development, the survey provided important information to help The Node.js Foundation be more successful in our mission “to enable widespread adoption and help accelerate development of Node.js and other related modules...”

Survey insights are being used to inform training materials and documentation, to plan events and meet-ups, and create resources to assist developers, enterprises, and tech leaders do more with Node.js.
By many measures, Node.js is the fastest growing and most significant development language right now. With 3.5 million users and an annual growth rate of 100%, Node.js is truly everywhere.

This survey reveals the type of development work Node.js users do, the other technology they use with Node.js, which languages they plan to use more of, and which they plan to use less of in the coming months, and more.
Node.js: A Universal Language
The full stack is no longer "front end and back end" but rather "front end, back end and connected devices," everything from the browser to your toaster all powered by JavaScript and Node.js.

Node.js and Containers Take Off
Both Node.js and containers are a good match for efficiently developing and deploying microservices architectures.

Full “MEAN” Stack Explodes
Real-time, social networking and interactive game applications use MongoDB, Express, Angular.js and Node.js to address concurrent connections and extreme scalability.

Node.js Pervasive in Enterprises
More than 45 percent already using the Node.js Long Term Support release (v4) geared toward medium to large enterprise users.

IoT Developers Using Node.js Stand Out
IoT developers using Node.js have more experience than their front end and back end counterparts and tend to use more Node.js across their stack.
The survey was open for **15 days**, from January 13 to January 28, 2016. During this time, **1,760 people** from around the world completed the survey. The survey was promoted by Node.js Foundation members, through Node.js social media accounts and by email to attendees of the 2015 Node Interactive conference.
Node.js User Survey Basic Stats

- 1,760 respondents, of which 1,124 (64%) run Node.js in production
- ~70% Developers, 22% Technical Management
- 824* Node.js Developer Respondents
  - 62% do both Front End and Back End development
  - 9% do Front End, Back End and IoT development
- 35% from US, 22% from Continental Europe, 6% India, 6% UK
- ~15% of all respondents from large enterprises

* Developer respondents that run Node.js in production
Type of Development Work

What areas of development are you focused on?

- Back-end (Including APIs)
- Front-end
- IoT
- Other (please specify)

Select the type of development work you spend most of your time on.

- Web Apps
- Enterprise
- Hobbyist
- Big Data/Analytics
- IoT
- Other (Please specify)
Average Years Experience

**Total Years of Professional Development Experience**

- Under 1 year: 10%
- 1-3 Years: 20%
- 3-5 Years: 20%
- 5-10 Years: 20%
- More than 10 years: 10%

52% have 5+ years

**Years of Node.js Experience**

- Under 1 year: 20%
- 1-3 Years: 30%
- More than 3 years: 10%

81% 3 years or less w/ Node.js
In addition to Node.js/JavaScript, Language Popularity by Developer Type
Language Use Forecast – Front End, Back End, IoT

Who Expects to Write More with What

- **7% Expected Decline**
  - PHP
  - .Net
  - Java
  - Ruby
  - Scala
  - C++

- **39% Expected Increase**
  - Python
  - Go
  - JavaScript (including Node.js and any frameworks, such as React, etc.)

Front End | Back End | IoT
---|---|---
Decreasing | Increasing |
Tech Use with/in Node – Front End, Back End, IoT

~45% of Developer Respondents use Node.js with Containers
Resources Developers and Tech Leaders Rely on

Resources Developers and Tech Leaders Use

- Developers
- Tech Leadership
Resources Developers and Tech Leaders Want More of

![Chart showing resource types and preferences]

What Types of Resources Do Developers and Tech Leaders Want to see MORE of

- Business case study podcasts
- Forums (StackOverflow, etc.)
- Commercial support
- Business case study webcasts
- In person training
- Technical podcasts
- Documentation
- Technical webinars
- Online training/tutorials
- Case studies
- Conferences
- Enterprise tooling
- Meet-ups/local events

Strong interest in Enterprise Tooling among Tech Leaders is an indicator of Node’s growing role in the enterprise.
Experience Learning Node.js

Survey Comment Themes

<table>
<thead>
<tr>
<th>Positive</th>
<th>Needs Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background in other scripting languages makes adopting Node.js straightforward</td>
<td>More resources for advanced Node.js techniques, especially for large Enterprise projects would help</td>
</tr>
<tr>
<td>Strong MongoDB stack resources</td>
<td>More explanation of asynchronous models and handling callbacks</td>
</tr>
</tbody>
</table>
Experience Learning Node.js

Survey Comment Themes

<table>
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</thead>
<tbody>
<tr>
<td>Large and active community produces large volume of high-quality resources</td>
<td>More API resources would be beneficial</td>
</tr>
<tr>
<td>Excellent availability of introductory Node.js resources</td>
<td>Greater availability of large-scale, enterprise and cloud-ready resources would be helpful</td>
</tr>
</tbody>
</table>
Experience Learning Node.js

Survey Comment Themes

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<tbody>
<tr>
<td>High-quality resources</td>
<td>Rapidly evolving state of the art requires rapid</td>
</tr>
<tr>
<td></td>
<td>resource iteration</td>
</tr>
</tbody>
</table>
Version of Node.js in Production and Upgrade Plans/Path

What Version Do You Run in Production?

- v4: 50.0%
- v5: 20.0%
- v0.12: 10.0%
- v0.10: 10.0%
- v0.8: 0.0%

Did You Upgrade to v4?

- Yes: 70.0%
- No, we started with v4: 30.0%

What version did you upgrade from?

- v0.8: 10.0%
- v0.10: 50.0%
- v0.12: 60.0%
- v5: 20.0%
Version of Node.js in Production and Upgrade Plans/Path

Node.js Version in Production

Plan to Upgrade to v4?

When Upgrading?

Detailed feature comparisons and matrices across versions will improve clarity
How Can The Foundation Help Clarify Versions?

Survey Comment Themes

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Versions are well described</td>
<td>Help/encourage frameworks to migrate to LTS promptly</td>
</tr>
<tr>
<td>Changelog is good</td>
<td>Expand tutorials/guides/ matrices to assist users make the best choice for their needs and prepare for issues they may face</td>
</tr>
</tbody>
</table>
Thank you!

www.nodejs.org