# **Introduction to New Relic APM**

New Relic's software analytics product for application performance monitoring (APM) delivers real-time and trending data about your web application's performance and the level of satisfaction that your end users experience. With end to end transaction tracing and a variety of color-coded charts and reports, APM visualizes your data, down to the deepest code levels.

Your DevOps teams don't need to guess whether a performance blocker comes from the app itself, CPU availability, database loads, or something else entirely unexpected. With New Relic APM, you can quickly identify potential problems before they affect your end users.

### **Introduction**

Node.js is a Javascript platform for server-side programming. It allows users to easily create networked applications that require backend functionality. By using Javascript as both the client and server language, development can be fast and consistent.

## **Install Node from Source**

One way of acquiring Node.js is to obtain the source code and compile it yourself.

To do so, you should grab the source code from the project’s website. On the [downloads page](http://nodejs.org/download/), right click on the “Source Code” link and click “Copy link address” or whatever similar option your browser gives you.

On your server, use wget and paste the link that you copied in order to download the archive file:

**wget http://nodejs.org/dist/v0.10.30/node-v0.10.30.tar.gz**

Extract the archive and move into the new directory by typing:

**tar xzvf node-v\* && cd node-v\***

There are a few packages that we need to download from the CentOS repositories in order to compile the code. Use yum to get these now:

**sudo yum install gcc gcc-c++**

Now, we can configure and compile the software:

**./configure**

**make**

The compilation will take quite awhile. When it is finished, you can install the software onto your system by typing:

**sudo make install**

To check that the installation was successful, you can ask Node to display its version number:

**node --version**

>First, Create a newrelic free account

> Launch an **EC2** instance and install httpd and nodejs in it.

To install the Node.js agent for New Relic:

1. Ensure you meet the [system requirements](https://docs.newrelic.com/docs/agents/nodejs-agent/getting-started/compatibility-requirements-nodejs-agent). In particular, ensure you are using a supported version of Node.

2. Use the command **npm install newrelic --save** for each application you want to monitor.

3. From **node\_modules/newrelic**, copy **newrelic.js** into the root directory of your app.

4. Configure agent via the newrelic.js file or via [environment variable](https://docs.newrelic.com/docs/agents/nodejs-agent/installation-configuration/nodejs-agent-configuration#environment):

* + Customize the [license\_key](https://docs.newrelic.com/docs/agents/nodejs-agent/installation-configuration/nodejs-agent-configuration#license) setting with [your license key](https://docs.newrelic.com/docs/accounts-partnerships/accounts/account-setup/license-key).
  + Customize the [app\_name](https://docs.newrelic.com/docs/agents/nodejs-agent/installation-configuration/nodejs-agent-configuration#app_name) setting with one or more [meaningful app names](https://docs.newrelic.com/docs/apm/new-relic-apm/installation-and-configuration/naming-your-application).

5. Add **require('newrelic');** as the first line of your app's main module.

6. Optional: For additional [Node.js runtime-level statistics](https://docs.newrelic.com/docs/agents/nodejs-agent/supported-features/node-vms-statistics-page), ensure the [@newrelic/native-metrics package is installed](https://docs.newrelic.com/docs/agents/nodejs-agent/supported-features/node-vm-measurements).

7. Generate some traffic, then wait a few minutes for data to appear in the [New Relic APM UI](https://docs.newrelic.com/docs/apm/applications-menu/monitoring/apm-overview-page).

8. You can further [customize your agent behavior](https://docs.newrelic.com/docs/agents/nodejs-agent/installation-configuration/nodejs-agent-configuration) via newrelic.js or an environment variable. To keep the agent configuration separate from your app, edit the [NEW\_RELIC\_HOME environmental variable](https://docs.newrelic.com/docs/agents/nodejs-agent/installation-configuration/nodejs-agent-configuration#home).









