



# Red Hat build of Node.js 14

## Release Notes for Node.js 14

For use with Node.js 14 LTS



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## Abstract

This Release Note contains important information related to Node.js 14 LTS.

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# PREFACE

Date of release: 2020-11-03

## CHAPTER 1. REQUIRED INFRASTRUCTURE COMPONENT VERSIONS

Red Hat does not provide support for components listed below, with the exception of components explicitly designated as supported.

Component name	Version
Nodeshift	2.1.1
npm 6	6.14.8
OpenShift Container Platform (OCP) <sup>[a]</sup>	3.11, 4.5
Minishift	1.34.2 or later
CDK <sup>[b]</sup>	3.11.0
git	2.0 or later
oc command line tool	3.11 or later <sup>[c]</sup>
<p>[a] OCP is supported by Red Hat</p> <p>[b] CDK is supported by Red Hat</p> <p>[c] The version of the <b>oc</b> CLI tool should correspond to the version of OCP that you are using.</p>	



## CHAPTER 2. FEATURES

This section contains information about feature changes introduced in the current release.

### 2.1. NEW AND CHANGED FEATURES

Node.js 14 LTS has the following new features and enhancements.

For detailed changes in Node.js 14 LTS, see the [upstream release notes](#) and [upstream documentation](#).

#### 2.1.1. Diagnostic report available as stable feature

The diagnostic report functionality is available as a stable feature in Node.js 14 LTS. In earlier releases of Node.js, the functionality was available as Technology Preview.

This feature enables you to generate diagnostic reports for anomalies, such as, performance issues, memory leaks, high CPU usage, and so on. The report is in JSON format. The report uses the first failure data capture (FFDC) technology. This technology captures diagnostic data at the time when the error occurs.

#### 2.1.2. V8 JavaScript engine updated from v8.0 to v8.4

The V8 JavaScript engine has been upgraded to v8.4. The engine contains new features, such as, optional chaining and API changes that provide better localization support.

#### 2.1.3. Metering labels for images in Red Hat OpenShift Container Platform

The Node.js images for Red Hat OpenShift Container Platform have labels that enable the use of OpenShift metering. For more information about using metering, see [Metering](#) in Red Hat OpenShift Container Platform documentation.

#### 2.1.4. Full ICU (International Components for Unicode) data set is enabled by default

International Components for Unicode (ICU) supports internationalization and globalization of software applications. It provides support for many languages and locales. It simplifies the development and deployment of software applications in all languages.

From Node.js 14 LTS, the **full-icu** option is enabled by default. This option enables full ICU data set. For more information about the **full-icu** option, see [Internationalization support](#).

In previous releases of Node.js, only English data set was enabled by default. You had to perform additional steps to get and enable support for other locales.

#### 2.1.5. Support for Node.js Runtime on IBM Z

The Red Hat build of Node.js for s390x platform is supported only in OpenShift environments provisioned on IBM Z infrastructure. Running a Node.js application on a stand-alone installation of RHEL on IBM Z is not supported.

New images for products supported on IBM Z are available in the [Red Hat Container Catalog](#).

For more information about deploying Node.js applications on OpenShift provisioned on IBM Z infrastructure, see the section [Example applications for Node.js](#).

## 2.2. DEPRECATED FEATURES

There are no features deprecated in this release.

## 2.3. TECHNOLOGY PREVIEW

The following features are available as Technology Preview features in Node.js 14 LTS release.

### 2.3.1. New class for async local storage

The **AsyncLocalStorage** class creates an asynchronous state in callbacks and promise chains. Use the class to store data in these asynchronous states.

### 2.3.2. WebAssembly System Interface (WASI)

The WebAssembly packages for Node.js improve performance and cross-platform support.

The new WASI APIs provide an implementation of the WebAssembly System Interface specification. Use this interface for sandboxed execution of WebAssembly applications. Using the interface, the applications also get access to the underlying operating system.

### 2.3.3. Removed the warning message for EcmaScript modules

In earlier releases of Node.js, a warning message was returned when EcmaScript modules were used in the applications. The warning message indicated that the EcmaScript modules are experimental features.

From Node.js 14 LTS onward, the warning message has been removed. However, note that the EcmaScript modules are still available as Technology Preview.

## 2.4. SUPPORTED ARCHITECTURES

Node.js builder images and RPM packages are available and supported for use with the following CPU architectures:

- AMD x86\_64
- IBM Z (s390x) in the OpenShift environment
- PowerPC 64-bit Little Endian

## CHAPTER 3. RELEASE COMPONENTS

- [Node.js 14 Builder Image \(Beta\) for RHEL 7](#)
- [Node.js 14 Builder Image for RHEL 8](#)
- [Node.js 14 Universal Base Image 8](#)
- [Node.js 14 RPM packages](#)

## CHAPTER 4. FIXED ISSUES

This release incorporates all of the fixed issues in the community release of Node.js 14 LTS.

## CHAPTER 5. KNOWN ISSUES

There are no known issues affecting this release.

## CHAPTER 6. KNOWN ISSUES AFFECTING REQUIRED INFRASTRUCTURE COMPONENTS

There are no known issues affecting infrastructure components required by this release.

## CHAPTER 7. ADVISORIES RELATED TO THIS RELEASE

The following advisories have been issued to document enhancements, bugfixes, and CVE fixes included in this release.

- [RHBA-2020:4423](#)