Red Hat build of Node.js 12

Release Notes for Node.js 12

For use with Node.js 12.16.1

Last Updated: 2021-03-22

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Legal Notice

Abstract

This Release Note contains important information related to Node.js 12.16.1.

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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[a]	6.4.1
OpenShift Container Platform (OCP)[b]	3.11, 4.5
Minishift	1.34.2 or later
CDK[c]	3.11.0
git	2.0 or later
oc command line tool	3.11 or later[d]

[a] Distributed with as a supported RPM for Node.js 12

[b] OCP is supported by Red Hat

[c] CDK is supported by Red Hat

[d] The version of the **oc** CLI tool should correspond to the version of OCP that you are using.

CHAPTER 2. FEATURES

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

2.1. NEW AND CHANGED FEATURES

Red Hat Enterprise Linux 8.1 includes a release of Node.js 12 that provides a number of new features and enhancements over Node.js 10. Notable changes include:

- The V8 engine upgraded to version 7.4
- A new default HTTP parser, llhttp (no longer experimental)
- Integrated capability of heap dump generation
- Support for ECMAScript 2015 (ES6) modules
- Improved support for native modules
- Worker threads no longer require a flag
- A new experimental diagnostic report feature
- Improved performance

For detailed changes in Node.js 12.16.1, see the upstream release notes and upstream documentation.

2.1.1. 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 an 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 .

2.1.2. Deploying example applications on OpenShift provisioned on IBM Z infrastructure

To deploy the example applications on OpenShift environments provisioned on IBM Z infrastructure, specify the relevant IBM Z image name in the **package.json** file and commands.

Some of the example applications also require other products, such as Red Hat Data Grid to demonstrate the workflows. In this case, you must also change the image names of these products to their relevant IBM Z image names in the YAML file of the example applications.

The Secured example application in Node.js requires Red Hat SSO 7.3. Since Red Hat SSO 7.3 is not supported on IBM Z, the Secured example is not available for IBM Z.

2.2. DEPRECATED FEATURES

There are no features deprecated in this release.

2.3. TECHNOLOGY PREVIEW

2.3.1. Circuit breaker pattern Opossum for Red Hat build of Node.js

Opossum is a circuit breaker for Node.js. Red Hat build of Node.js provides a fully supported **@redhat/opossum** module.

The circuit breaker pattern is used to reduce the impact of network failure and high latency on service architectures, where services asynchronously invoke other services.

The **@redhat/opossum** module is available for download from the Red Hat Customer registry. The modules with the **@redhat** namespace should be downloaded from the Red Hat registry and all the other modules should be downloaded from the npm registry. To specify the download paths, create a **.npmrc** file in the root directory of your application with the following code:

```
@redhat:registry=https://npm.registry.redhat.com
registry=https://registry.npmjs.org
```

After specifying the download paths, to install the **@redhat/opossum** module in your application enter the following command:

```
$ npm install @redhat/opossum
```

To work with the @redhat/opossum module add the following code to your application:

```
const CircuitBreaker = require('@redhat/opossum')
```

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
- PowerPC 64-bit Little Endian

CHAPTER 3. RELEASE COMPONENTS

- Node.js 12 Builder Image for RHEL 7
- Node.js 12 Universal Base Image 7
- Node.js 12 Builder Image for RHEL 8
- Node.js 12 Universal Base Image 8
- Node.js 12 RPM packages

CHAPTER 4. FIXED ISSUES

This release incorporates all of the fixed issues in the community release of Node.js 12.16.1.

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-2020:2173