



Red Hat support for Spring Boot 2.2

Release Notes for Spring Boot 2.2

For use with Spring Boot 2.2.11

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Abstract

This Release Note contains important information related to Spring Boot 2.2.11

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PREFACE

Date of release: 2020-01-11

PROVIDING FEEDBACK ON RED HAT DOCUMENTATION

We appreciate your feedback on our documentation. To provide feedback, you can highlight the text in a document and add comments.

This section explains how to submit feedback.

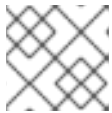
Prerequisites

- You are logged in to the Red Hat Customer Portal.
- In the Red Hat Customer Portal, view the document in **Multi-page HTML** format.

Procedure

To provide your feedback, perform the following steps:

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NOTE

The feedback feature is enabled only in the **Multi-page HTML** format.

2. Highlight the section of the document where you want to provide feedback.
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A text box appears in the feedback section on the right side of the page.
4. Enter your feedback in the text box and click **Submit**.
A documentation issue is created.
5. To view the issue, click the issue tracker link in the feedback view.

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
Maven	3.6.0
Fabric8 Maven Plugin	4.4.1
JDK ^[a] ^[b]	OpenJDK 8, OpenJDK 11 ^[c]
Red Hat Enterprise Linux 7 ^[d]	7.7
Red Hat Enterprise Linux 8 ^[e]	8.1
OpenShift Container Platform (OCP) ^[f]	3.11, 4.5, 4.6
Minishift	1.34.2 or later
CDK ^[g]	3.11.0
git	2.0 or later
oc command line tool	3.11 or later ^[h]

[a] A full JDK installation is required, as JRE does not provide tools for compiling Java applications from source.

[b] Red Hat OpenJDK is supported by Red Hat

[c] Red Hat supports only LTS releases of JDK.

[d] For deploying applications based on CNR on stand-alone RHEL in a production environment.

[e] For deploying applications based on CNR on stand-alone RHEL in a production environment.

[f] OCP is supported by Red Hat

[g] CDK is supported by Red Hat

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

CHAPTER 2. SUPPORTED SPRING BOOT RUNTIME COMPONENT CONFIGURATIONS AND INTEGRATIONS

The following resource defines the supported configurations and integrations of Red Hat products with Spring Boot:

- For a list of technologies that are supported for integration with Spring Boot in production environments see the [Supported Spring Boot configurations and integrations](#).
- For a list of supported Spring Boot 2.2.11 Maven artifacts see the [Spring Boot 2.2.11 component details page](#).

CHAPTER 3. FEATURES

3.1. NEW AND CHANGED FEATURES

3.1.1. Spring Boot product version number for 2.2.11 release

The product version number for Spring Boot 2.2.11 release is 2.2.11.SP1-redhat-00001.

3.1.2. Support for Spring Boot Runtime on IBM Z

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

Eclipse OpenJ9 Java images for IBM Z and new images for products supported on IBM Z are available in the [Red Hat Ecosystem Catalog](#).

3.1.3. 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 **pom.xml** 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 Spring Boot 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.

3.1.4. Support for AMQ Spring Boot starter

Red Hat AMQ always supports the minor version of the latest Spring Boot release. So, the AMQ Spring Boot starter is not supported for all Red Hat Spring Boot releases. For example, if the latest Spring Boot release is 2.3 and the latest minor version is 2.3.4, the starter is supported for 2.3.4 release. With every Spring Boot release, the support will change depending on the latest version. If you want to work with AMQ Spring Boot starters, you must use the latest Red Hat Spring Boot release.

3.1.5. Support for OpenJDK 8 and OpenJDK 11 RHEL 8 Universal Base Images (UBI8)

Spring Boot 2.2.11 introduces support for building and deploying Spring Boot applications to OpenShift with OCI-compliant [Universal Base Images](#) for [Red Hat OpenJDK 8](#) and [Red Hat OpenJDK 11](#) on [RHEL 8](#).

The RHEL 8 OpenJDK Universal Base Images replace the RHEL 8 OpenJDK builder images. The RHEL 8 OpenJDK base images are no longer supported for use with Spring Boot.

3.1.6. Product BOM name change and updates

The Spring Boot 2.2.11 introduces the following updates to the BOM:

- The Maven **groupid** of the BOM changes to **dev.snowdrop**.

- The Maven **artifactId** of the BOM changes to **snowdrop-dependencies**.
- You can use the BOM as:
 - a dependency of your application in the **<dependencyManagement>** section, to automatically manage the version of product dependencies that your application uses
 - a parent BOM of your application project, to automatically manage product dependency versions, the name and version of the build plugin, and the settings of repositories that Maven uses to build your application.

3.1.7. New Eclipse Vert.x Spring Boot Starters for AMQP and Apache Kafka

Spring Boot 2.2.11 includes new productized Eclipse Vert.x Spring Boot starters for AMQP and Apache Kafka. You can use these starters to add AMQP 1.0 messaging integration, and distributed streaming capabilities of Apache Kafka to your reactive Spring Boot cloud-native applications. Red Hat provides support for Eclipse Vert.x reactive clients in Spring Boot applications.

3.1.8. Support for reactive Spring application stack with Eclipse Vert.x Components

The Spring Boot 2.2.11 introduces production support for the Spring Boot technology stack for developing reactive applications. The stack is based on the Red Hat build of Eclipse Vert.x. The reactive components also include a set of supported Spring Boot Reactive Starters based on the community version of Spring Starters released by the Snowdrop project. Red Hat provides support for the use of the starters with the reactive stack components to develop applications for OpenShift Container Platform.

3.1.9. Support for Dekorator 1.0.0 with Spring Boot

Spring Boot 2.2.11 introduces support for [Dekorator](#), a collection of compile-time annotation parsers and configuration resource generators for OpenShift and Kubernetes that integrate with Spring Boot. With Dekorator you can automatically configure your application for deployment to an OpenShift cluster without the need to manually write application manifests. When you build your application, Dekorator extracts the configuration parameters from the source code of your Spring Boot application. It then generates a YAML, JSON, or XML-formatted application manifest and populates it with the extracted parameters. Dekorator works independently of the language and build tools you use, and integrates with multiple cloud-native application frameworks, including Spring Boot. Dekorator is distributed as a separate BOM that is included with Spring Boot 2.2.11. Red Hat provides support for the use of Dekorator to generate application configuration templates for deploying applications based on Spring Boot to OpenShift Container Platform with Maven. Red Hat does not provide support for executing Source-to-image application deployments using build hooks generated with Dekorator.

3.2. DEPRECATED FEATURES

No features or functionalities are marked as deprecated in this release.

3.3. TECHNOLOGY PREVIEW

3.3.1. Dekorator build hooks for deploying Spring Boot applications to OpenShift Container Platform

You can use Dekorator to configure a Source-to-image build of your application that starts automatically after you compile your application with Maven. This functionality is provided as [Technology Preview](#) in Dekorator version 1.0.0. Red Hat does not provide support for using this functionality in a production

environment.

CHAPTER 4. RELEASE COMPONENTS

For a complete list of release components included in this release, and for information about the current support status of these components, see the [Spring Boot 2.2.11 component details page](#).

CHAPTER 5. FIXED ISSUES

This Spring Boot release incorporates all bugfixes from the upstream release. Issues resolved in the community release are listed in the [Spring Boot 2.2.11 Release Notes](#).

CHAPTER 6. KNOWN ISSUES

- [ENTSBT-912](#): Examples applications not supported on OpenShift Container Platform 4.x
The Spring Boot runtime provides example applications, which are accessed on [Developer Launcher](#). These example applications are not supported on OpenShift Container Platform 4.x.
- Red Hat AMQ Streams images are not available for IBM Z
The Red Hat AMQ Streams Operator and Kafka images are not available for IBM Z. Since the images are not available, the starter **vertex-spring-boot-starter-kafka** is not certified to work with AMQ Streams on IBM Z.
- [SB-379](#): Missing APR/native library in the **openshift-openjdk** image
- [SB-1165](#): Database application fails to run because **org.apache.tomcat.jdbc.pool.DataSource** can not be found
- [ENTSBT-365](#) Keycloak Client Starter: **javax.net.ssl.SSLHandshakeException: PKIX path building does not work** without setting the **keycloak.disable-trust-manager=true** property
- [ENTSBT-366](#) Infinispan Hotrod Client Starter:
org.infinispan.client.hotrod.exceptions.HotRodClientException:: ISPN004034: Unable to unmarshall bytes when the **infinispan.remote.java-serial-whitelist=<your_class_name>** property is not set in **application.properties**
- [ENTSBT-367](#) Remote communication between Red Hat Spring Boot 2.2.11 with Infinispan/Red Hat Data Grid 7.3 does not work without setting the **infinispan.remote.protocol-version=2.6** property.

CHAPTER 7. ADVISORIES RELATED TO THIS RELEASE

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

- [RHSA-2020:5388](#)