Red Hat support for Spring Boot 2.7

Release Notes for Spring Boot 2.7

For use with Spring Boot 2.7.18

Last Updated: 2023-12-07

Red Hat support for Spring Boot 2.7 Release Notes for Spring Boot 2.7

For use with Spring Boot 2.7.18

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Abstract

This Release Note contains important information related to Spring Boot 2.7.18

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PREFACE

Date of release: 2023-12-08

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.

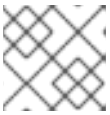
Prerequisites

- 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:

1. Click the **Feedback** button in the top-right corner of the document to see existing feedback.



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.
3. Click the **Add Feedback** pop-up that appears near the highlighted text.
   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

When you work with Red Hat support for Spring Boot, you can use the following components. However, Red Hat does not provide support for components listed below except Red Hat OpenShift cluster and Red Hat OpenJDK.

Required components

The following components are required to build and develop applications using Spring Boot.

Table 1.1. Required components

Component name	Version
Maven	3.6.3
JDK[a]	OpenJDK 8, OpenJDK 11, OpenJDK 17

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

Optional components

Red Hat recommends using the following components depending on your development and production environments.

Table 1.2. Optional components

Component name	Version
git	2.0 or later
oc command line tool	4.12 or later[a]
Access to a Red Hat OpenShift cluster[b]	4.12, 4.13

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

[b] OpenShift cluster is supported by Red Hat.

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 Maven artifacts that Red Hat provides support for in Spring Boot 2.7.18 see the corresponding section of the component details overview.

CHAPTER 3. FEATURES

3.1. NEW AND CHANGED FEATURES

3.1.1. Spring Boot BOM

From Red Hat support for Spring Boot 2.7 onward, the Spring Boot BOM (Bill of Materials) to manage dependencies for Red Hat supported components is not available. You can, however, manage these components individually in an application's **pom.xml** file as dependencies by specifying their **groupId**, **artifactId**, and **version** (GAV). For more information, see Migrating applications to Spring Boot 2.7 .

3.2. NEW FEATURES INTRODUCED IN EARLIER 2.X RELEASES

3.2.1. Deploy Spring Boot applications to OpenShift using the Dekorate Maven dependency

Use the Dekorate Maven dependency to deploy your Spring Boot applications to OpenShift. The Fabric8 Maven plugin is no longer supported. For information about deploying your application to OpenShift, see Dekorate Guide for Spring Boot Developers .

3.2.2. OpenJDK11 OpenShift images support multiple architectures

OpenJ9 images for IBM Z and IBM Power Systems have been deprecated. The following OpenJDK11 image has been updated to support multiple architectures:

- **ubi8/openjdk-11**

You can use the OpenJDK11 image with the following architectures:

- x86 (x86_64)
- s390x (IBM Z)
- ppc64le (IBM Power Systems)

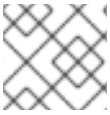
If you want to use the OpenJ9 Java Virtual Machine (JVM) with the OpenJDK11 images, see Java Change in Power and Z OpenShift Images.

3.2.3. Support for OpenJDK 8 OpenJDK 11 and OpenJDK 17 RHEL 8 Universal Base Images (UBI8)

Spring Boot 2.7 introduces support for building and deploying Spring Boot applications to OpenShift with OCI-compliant Universal Base Images for Red Hat OpenJDK 8 , Red Hat OpenJDK 11 , and Red Hat OpenJDK 17 on RHEL 8. The RHEL 8 OpenJDK Universal Base Images replace the RHEL 8 OpenJDK builder images supported by Red Hat for use with earlier releases of Red Hat Build of Spring Boot. The previously supported RHEL 8 OpenJDK base images are no longer supported for use with Red Hat Build of Spring Boot.

3.2.4. Spring Boot metering labels for OpenShift

You can add metering labels to your Spring Boot pods and check Red Hat subscription details with the OpenShift Metering Operator.



NOTE

Do not add metering labels to any pods that an operator deploys and manages.

Spring Boot should use the following metering labels:

- **com.company: Red_Hat**
- **rht.prod_name: Red_Hat_Runtimes**
- **rht.prod_ver: 2023-Q4**
- **rht.comp: Spring_Boot**
- **rht.comp_ver: 2.7.18**
- **rht.subcomp: <leave_blank>**
- **rht.subcomp_t: application**

See Metering documentation for more information.

For more information on labels, see Understanding how to update labels on nodes .

3.3. DEPRECATED FEATURES

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

3.4. TECHNOLOGY PREVIEW

3.4.1. Dekorate build hooks for deploying Spring Boot applications to OpenShift Container Platform

You can use Dekorate 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 Dekorate version 1.0.0 and later. 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 2.7.18 component details overview.

CHAPTER 5. FIXED ISSUES

This Spring Boot release incorporates all bug fixes from the upstream release. Issues resolved in the community release are listed in the Spring Boot 2.7.18 Release Notes .

CHAPTER 6. KNOWN ISSUES

- SB-1165: Database application fails to run because **org.apache.tomcat.jdbc.pool.DataSource** can not be found.
- ENTSBT-1211: A running service does not automatically recover after a short time, as it should, after pressing the **Stop Service** button in the Health Check Spring Boot Example.
- ENTSBT-1243: The provided **hibernate-core** version is not compatible with Spring Boot 2.7.
- ENTSBT-1258: **jakarta.xml.bind-api-2.3.3.redhat-00001-sources.jar** file, which is a dependency for Dekorate 2.11.5, is not brought in.
- ENTSBT-1261: Running **crud-example** throws **java.sql.SQLFeatureNotSupportedException** exception.
- ENTSBT-1332: Enabling **pooledPreparedStatements** causes a **StackOverflowError** on transaction timeout.
- ENTSBT-1354: The Narayana Spring Boot starter includes **spring-boot-starter** version **2.7.2**. Use Maven version 3.8.5 to ensure that **spring-boot.version** is overridden as expected. When using a Maven version other than 3.8.5, if you specify the value of **spring-boot.version** by using **mvn -Dspring-boot.version**, the **spring-boot-starter version** is not always overridden.

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-2023:7664