# Red Hat build of OpenJDK 8

## Release notes for Red Hat build of OpenJDK 8.0.422

Last Updated: 2024-07-22

# Red Hat build of OpenJDK 8 Release notes for Red Hat build of OpenJDK 8.0.422

## Legal Notice

Copyright © 2024 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at
http://creativecommons.org/licenses/by-sa/3.0/
. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux ® is the registered trademark of Linus Torvalds in the United States and other countries.

Java ® is a registered trademark of Oracle and/or its affiliates.

XFS ® is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL ® is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js ® is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack ® Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

## Abstract

The Release notes for Red Hat build of OpenJDK 8.0.422 document provides an overview of new features in Red Hat build of OpenJDK 8 and a list of potential known issues and possible workarounds.

# Table of Contents

PREFACE ..... 3

PROVIDING FEEDBACK ON RED HAT BUILD OF OPENJDK DOCUMENTATION ..... 4

MAKING OPEN SOURCE MORE INCLUSIVE ..... 5

CHAPTER 1. SUPPORT POLICY ..... 6

CHAPTER 2. DIFFERENCES FROM UPSTREAM OPENJDK 8 ..... 7

CHAPTER 3. PLANNED CHANGES TO NAMING CONVENTION FOR WINDOWS BUILD ARTIFACTS ..... 8

CHAPTER 4. RED HAT BUILD OF OPENJDK 8.0.422 RELEASE NOTES ..... 9

Red Hat build of OpenJDK new features and enhancements 9

System properties for controlling the keep-alive behavior of HTTPURLConnection 9

GlobalSign R46 and E46 root certificates added 9

CHAPTER 5. ADVISORIES RELATED TO THIS RELEASE ..... 11

# PREFACE

Open Java Development Kit (OpenJDK) is a free and open source implementation of the Java Platform, Standard Edition (Java SE). The Red Hat build of OpenJDK is available in four versions: 8u, 11u, 17u, and 21u.

Packages for the Red Hat build of OpenJDK are available on Red Hat Enterprise Linux and Microsoft Windows platforms and shipped as a JDK and a JRE in the Red Hat Ecosystem Catalog.

# PROVIDING FEEDBACK ON RED HAT BUILD OF OPENJDK DOCUMENTATION

To report an error or to improve our documentation, log in to your Red Hat Jira account and submit an issue. If you do not have a Red Hat Jira account, then you will be prompted to create an account.

**Procedure**

1. Click the following link to **create a ticket**.
2. Enter a brief description of the issue in the **Summary**.
3. Provide a detailed description of the issue or enhancement in the **Description**. Include a URL to where the issue occurs in the documentation.
4. Clicking **Create** creates and routes the issue to the appropriate documentation team.

# MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see our CTO Chris Wright's message.

# CHAPTER 1. SUPPORT POLICY

Red Hat will support select major versions of Red Hat build of OpenJDK in its products. For consistency, these are the same versions that Oracle designates as long-term support (LTS) for the Oracle JDK.

A major version of Red Hat build of OpenJDK will be supported for a minimum of six years from the time that version is first introduced. For more information, see the OpenJDK Life Cycle and Support Policy .

**NOTE**

RHEL 6 reached the end of life in November 2020. Because of this, Red Hat build of OpenJDK is not supporting RHEL 6 as a supported configuration.

# CHAPTER 2. DIFFERENCES FROM UPSTREAM OPENJDK 8

Red Hat build of OpenJDK in Red Hat Enterprise Linux (RHEL) contains a number of structural changes from the upstream distribution of OpenJDK. The Microsoft Windows version of Red Hat build of OpenJDK attempts to follow RHEL updates as closely as possible.

The following list details the most notable Red Hat build of OpenJDK 8 changes:

- FIPS support. Red Hat build of OpenJDK 8 automatically detects whether RHEL is in FIPS mode and automatically configures Red Hat build of OpenJDK 8 to operate in that mode. This change does not apply to Red Hat build of OpenJDK builds for Microsoft Windows.
- Cryptographic policy support. Red Hat build of OpenJDK 8 obtains the list of enabled cryptographic algorithms and key size constraints from the RHEL system configuration. These configuration components are used by the Transport Layer Security (TLS) encryption protocol, the certificate path validation, and any signed JARs. You can set different security profiles to balance safety and compatibility. This change does not apply to Red Hat build of OpenJDK builds for Microsoft Windows.
- Red Hat build of OpenJDK on RHEL dynamically links against native libraries such as **zlib** for archive format support and **libjpeg-turbo**, **libpng**, and **giflib** for image support. RHEL also dynamically links against **Harfbuzz** and **Freetype** for font rendering and management. This change does not apply to Red Hat build of OpenJDK builds for Microsoft Windows.
- The **src.zip** file includes the source for all the JAR libraries shipped with Red Hat build of OpenJDK.
- Red Hat build of OpenJDK on RHEL uses system-wide timezone data files as a source for timezone information.
- Red Hat build of OpenJDK on RHEL uses system-wide CA certificates.
- Red Hat build of OpenJDK on Microsoft Windows includes the latest available timezone data from RHEL.
- Red Hat build of OpenJDK on Microsoft Windows uses the latest available CA certificate from RHEL.

**Additional resources**

- See, Improve system FIPS detection (RHEL Planning Jira)
- See, Using system-wide cryptographic policies (RHEL documentation)

# CHAPTER 3. PLANNED CHANGES TO NAMING CONVENTION FOR WINDOWS BUILD ARTIFACTS

From October 2024 onward, Red Hat plans to introduce naming changes for some files that are distributed as part of Red Hat build of OpenJDK releases for Windows Server platforms.

These file naming changes will affect both the **.zip** archive and **.msi** installers that Red Hat provides for the JDK, JRE and **debuginfo** packages for Red Hat build of OpenJDK versions 8, 11, and 17.

The aim of this change is to adopt a common naming convention that is consistent across all versions of OpenJDK that Red Hat supports. Red Hat build of OpenJDK versions 8, 11, and 17 will be aligned with the naming convention that Red Hat has already adopted for Red Hat build of OpenJDK 21. This means that Red Hat build of OpenJDK 21 will not require any naming changes.

These planned changes do not affect the files for the Linux portable builds of any Red Hat build of OpenJDK version.

Red Hat build of OpenJDK 8.0.422 is the last release where Red Hat plans to use the old naming convention for Windows artifacts. The following list provides an example of how the planned naming changes will affect each file for future releases of Red Hat build of OpenJDK 8:

MSI installer

- *Old file name:* **java-1.8.0-openjdk-1.8.0.*<version>*.redhat.windows.x86_64.msi**
- *New file name:* **java-1.8.0-openjdk-1.8.0.*<version>*.win.x86_64.msi**

**.zip** archive for JDK package

- *Old file name:* **java-1.8.0-openjdk-1.8.0.*<version>*.redhat.windows.x86_64.zip**
- *New file name:* **java-1.8.0-openjdk-1.8.0.*<version>*.win.jdk.x86_64.zip**

**.zip** archive for for JRE package

- *Old file name:* **java-1.8.0-openjdk-jre-1.8.0.*<version>*.redhat.windows.x86_64.zip**
- *New file name:* **java-1.8.0-openjdk-1.8.0.*<version>*.win.jre.x86_64.zip**

**.zip** archive for debuginfo package

- *Old file name:* **java-1.8.0-openjdk-1.8.0.*<version>*.redhat.windows.x86_64.debuginfo.zip**
- *New file name:* **java-1.8.0-openjdk-1.8.0.*<version>*.win.debuginfo.x86_64.zip**

# CHAPTER 4. RED HAT BUILD OF OPENJDK 8.0.422 RELEASE NOTES

The latest Red Hat build of OpenJDK 8 release might include new features. Additionally, the latest release might enhance, deprecate, or remove features that originated from previous Red Hat build of OpenJDK 8 releases.

NOTE

For all the other changes and security fixes, see OpenJDK 8u422 Released.

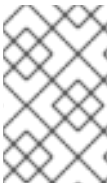
## Red Hat build of OpenJDK new features and enhancements

Review the following release notes to understand new features and feature enhancements that Red Hat build of OpenJDK 8.0.422 provides:

### System properties for controlling the keep-alive behavior of HTTPURLConnection

Red Hat build of OpenJDK 8.0.422 includes the following new system properties that you can use to control the **keep-alive** behavior of **HTTPURLConnection** in situations where the server does not specify a **keep-alive** time:

- The **http.keepAlive.time.server** property controls the number of seconds before an idle connection to a server is closed.
- The **http.keepAlive.time.proxy** property controls the number of seconds before an idle connection to a proxy is closed.



NOTE

If the server or proxy specifies a **keep-alive** time in a **Keep-Alive** response header, this **keep-alive** time takes precedence over any value that you specify for the **http.keepAlive.time.server** or **http.keepAlive.time.proxy** property.

See JDK-8278067 (JDK Bug System).

### GlobalSign R46 and E46 root certificates added

In Red Hat build of OpenJDK 8.0.422, the **cacerts** truststore includes two GlobalSign TLS root certificates:

#### Certificate 1

- Name: GlobalSign
- Alias name: globalsignr46
- Distinguished name: CN=GlobalSign Root R46, O=GlobalSign nv-sa, C=BE

#### Certificate 2

- Name: GlobalSign
- Alias name: globalsigne46
- Distinguished name: CN=GlobalSign Root E46, O=GlobalSign nv-sa, C=BE

See JDK-8316138 (JDK Bug System).

# CHAPTER 5. ADVISORIES RELATED TO THIS RELEASE

The following advisories are issued to document bug fixes and CVE fixes included in this release:

- RHSA-2024:4560
- RHSA-2024:4561
- RHSA-2024:4562
- RHSA-2024:4563

*Revised on 2024-07-22 15:53:32 UTC*