



## OpenJDK 8

### Getting started with OpenJDK 8





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## Abstract

OpenJDK is a Red Hat offering on Microsoft Windows and Red Hat Enterprise Linux platforms. The Getting Started with OpenJDK 8 guide provides an overview of this product and explains how to install the software and start using it.

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## 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](#).

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- 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

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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.  
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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. RED HAT BUILD OF OPENJDK OVERVIEW

The Red Hat build of OpenJDK is a free and open source implementation of the Java Platform, Standard Edition (Java SE). It is based on the upstream OpenJDK 8u and 11u projects and includes the Shenandoah Garbage Collector in both OpenJDK versions 8 and 11.

- **Multi-platform** - The Red Hat build of OpenJDK is now supported on Windows and RHEL. This helps you standardize on a single Java platform across desktop, datacenter, and hybrid cloud.
- **Frequent releases** - Red Hat delivers quarterly updates of JRE and JDK for the OpenJDK 8 and 11 distributions. These are available as **rpm, msi, zip** files and containers.
- **Long-term support** - Red Hat supports the recently released OpenJDK 11 and 8. For more information about the support lifecycle, see [OpenJDK Life Cycle and Support Policy](#) .
- **Java Web Start**- Red Hat build of OpenJDK supports Java Web Start for Windows and RHEL.

## CHAPTER 2. DIFFERENCES FROM UPSTREAM OPENJDK 8

OpenJDK in Red Hat Enterprise Linux contains a number of structural changes to the upstream distribution of OpenJDK. The Windows version of OpenJDK tries to follow Red Hat Enterprise Linux as closely as possible.

The most notable changes are the following:

- On Red Hat Enterprise Linux, we dynamically link against native libraries such as **zlib** for archive format support and **libjpeg-turbo**, **libpng**, and **giflib** for image support. Likewise, we dynamically link against **Harfbuzz** and **FreeType** for font rendering and management. On Microsoft Windows, these libraries are built from the sources of the corresponding Red Hat Enterprise Linux RPMs.
- On Red Hat Enterprise Linux, system-wide timezone data files are used as a source for timezone information. On Microsoft Windows, the latest available timezone data from Red Hat Enterprise Linux is included.
- On Red Hat Enterprise Linux, system-wide CA certificates are used. On Microsoft Windows, the latest available CA certificate from Red Hat Enterprise Linux is used.
- The Windows distribution includes the DejaVu set of TrueType Fonts imported from Red Hat Enterprise Linux.
- The **src.zip** file includes the source for all of the JAR libraries shipped with OpenJDK.

## CHAPTER 3. DISTRIBUTION SELECTION

Red Hat provides several distributions of OpenJDK. This module will help you select the distribution that is right for your needs.

### OpenJDK RPMs for RHEL 7

RPM distributions of OpenJDK 8, and 11 for RHEL 7. The OpenJDK 8 distributions can also be installed as a JRE.

All of these distributions provide Java Web Start via IcedTea-Web (IT-W) packages. IcedTea-Web contains Java Web start and a plugin. IT-W will pull in its default OpenJDK that is OpenJDK 8. You can configure it to use OpenJDK 11 in runtime if necessary, but it is not recommended.

The OpenJDK 11 distribution also includes Flight Recorder for support of Mission Control.

### OpenJDK RPMs for RHEL 8

RPM distributions of OpenJDK 8 and 11 for RHEL 8. The OpenJDK 8 distribution can also be installed as a JRE.

All of these distributions provide Java Web Start via IcedTea-Web (IT-W) packages. IcedTea-Web contains Java Web start. IT-W is pull in its default OpenJDK that is OpenJDK8. You can configure it to use OpenJDK 11 in runtime.

The OpenJDK 11 distribution also includes Flight Recorder for support of Mission Control.

### OpenJDK 8 JRE portable archive for RHEL

Portable OpenJDK 8 JRE archive distribution for RHEL 7 and 8 hosts.

### OpenJDK 8 portable archive for RHEL

Portable OpenJDK 8 archive distribution for RHEL 7 and 8 hosts.

### OpenJDK 11 portable archive for RHEL

Portable OpenJDK 11 archive distribution for RHEL 7 and 8 hosts. This distribution includes Flight Recorder for support of Mission Control.

### OpenJDK archive for Windows

OpenJDK 8 and 11 distributions for all supported Windows hosts. Recommended for cases where multiple OpenJDK versions may be installed on a host. This distribution includes the following:

- Java Web Start
- Mission Control
- Flight Recorder

### OpenJDK installers for Windows

OpenJDK 8 and 11 MSI installer for all supported Windows hosts. Optionally installs Java Web Start and sets environment variables. Suitable for system wide installs of a single OpenJDK version.

### Additional resources

- JDK Mission Control is available for RHEL with [Red Hat Software Collections 3.2](#).

