



## Red Hat build of OpenJDK 11

### Release notes for Eclipse Temurin 11.0.18





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## Abstract

The release notes for Eclipse Temurin 11.0.18 provide an overview of new features in OpenJDK 11 and a list of potential known issues and possible workarounds.

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## PREFACE

Open Java Development Kit (OpenJDK) is a free and open-source implementation of the Java Platform, Standard Edition (Java SE). Eclipse Temurin is available in three LTS versions: OpenJDK 8u, OpenJDK 11u, and OpenJDK 17u.

Binaries for Eclipse Temurin are available for macOS, Microsoft Windows, and on multiple Linux x86 Operating Systems including Red Hat Enterprise Linux and Ubuntu.

## 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 FOR ECLIPSE TEMURIN

Red Hat will support select major versions of Eclipse Temurin 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 Eclipse Temurin will be supported for a minimum of six years from the time that version is first introduced. For more information, see the [Eclipse Temurin Life Cycle and Support Policy](#).



### NOTE

RHEL 6 reached the end of life in November 2020. Because of this, Eclipse Temurin does not support RHEL 6 as a supported configuration.

## CHAPTER 2. ECLIPSE TEMURIN FEATURES

Eclipse Temurin does not contain structural changes from the upstream distribution of OpenJDK.

For the list of changes and security fixes included in the latest OpenJDK 11.0.18 release of Eclipse Temurin, see [OpenJDK 11.0.18 Released](#).

### New features and enhancements

Review the following release notes to understand new features and feature enhancements included with the Eclipse Temurin 11.0.18 release:

#### Enhanced BMP bounds

By default, OpenJDK 11.0.18 disables loading a linked International Color Consortium (ICC) profile in a BMP image. You can enable this functionality by setting the new **sun.imageio.bmp.enabledLinkedProfiles** property to **true**. This property replaces the old **sun.imageio.plugins.bmp.disableLinkedProfiles** property

See [JDK-8295687 \(JDK Bug System\)](#).

#### Improved banking of sounds

Previously, the **SoundbankReader** implementation, **com.sun.media.sound.JARSoundbankReader**, downloaded a JAR soundbank from a URL. For OpenJDK 11.0.18, this behavior is now disabled by default. To re-enable the behavior, set the new system property **jdk.sound.jaroundbank** to **true**.

See [JDK-8293742 \(JDK Bug System\)](#).

#### Enhanced Datagram Transport Layer Security (DTLS) performance

OpenJDK now exchanges DTLS cookies for all new and resumed handshake communications.

To re-enable the previous release behavior, set the new system property **jdk.tls.enableDtlsResumeCookie** to **false**.

See [JDK-8287411 \(JDK Bug System\)](#).

#### SunMSCAPI provider supports new Microsoft Windows keystore types

The **SunMSCAPI** provider supports the following Microsoft Windows keystore types where you must append your local namespace to *Windows-*:

- **Windows-MY-LOCALMACHINE**
- **Windows-ROOT-LOCALMACHINE**
- **Windows-MY-CURRENTUSER**
- **Windows-ROOT-CURRENTUSER**

By specifying any of these types, you can provide access to your local computer's location for the Microsoft Windows keystore. Thereby providing the keystore access to certificates that are stored on your local system.

See [JDK-6782021 \(JDK Bug System\)](#).

#### Added note for LoginModule implementation

The OpenJDK 9 release changed the **Set** implementation, which holds principals and credentials, so that the implementation can reject **null** values. Any attempts to call **add(null)**, **contains(null)**, or **remove(null)** would throw a **NullPointerException** message.

The OpenJDK 9 release did not update the **logout()** method in the **LoginModule** implementation to check for **null** values. These values could occur because of a failed login attempt, which can cause a **logout()** call to throw a **NullPointerException** message.

The OpenJDK 11.0.18 release updates the **LoginModule** implementations to check for **null** values. Additionally, the release adds an implementation note to the specification that states the change also applies to third-party modules. The note advises developers of third-party modules to verify that a **logout()** method does not throw a **NullPointerException** message.

- See [JDK-8015081](#) (JDK Bug System).
- See [JDK-8282730](#) (JDK Bug System).

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