Red Hat build of OpenJDK 17

Release notes for Eclipse Temurin 17.0.4

Last Updated: 2024-05-03

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Abstract

Review the release notes to understand new features and feature enhancements that have been included with latest build of OpenJDK 17 that is provided by Eclipse Temurin.

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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.

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

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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.

CHAPTER 1. SUPPORT POLICY FOR ECLIPSE TEMURIN

Red Hat will support select major versions of Eclipse Temurin in its products. For consistency, these versions remain similar to Oracle JDK versions that Oracle designates as long-term support (LTS).

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 17 release of Eclipse Temurin, see OpenJDK 17.0.4 Released.

New features and enhancements

Review the following release notes to understand new features and feature enhancements included with the Eclipse Temurin 17.0.4 release:

HTTPS channel binding support for Java Generic Security Services (GSS) or Kerberos

The OpenJDK 17.0.4 release supports TLS channel binding tokens when Negotiate selects Kerberos authentication over HTTPS by using **javax.net.HttpsURLConnection**.

Channel binding tokens are required, because of man in the middle (MITM) attacks. A channel binding token is an enhanced form of security that can mitigate certain kinds of socially engineered attacks.

A MITM operates by communicating from a client to a server. A client creates a connection between security, such as TLS server certificate, and higher-level authentication credentials, such as a username and a password. The server detects if a MITM has implicated a client, so the server shut downs the connection.

The **jdk.https.negotiate.cbt** system property controls this feature. See, Misc HTTP URL stream protocol handler properties (Oracle documentation).

See, JDK-8285240 (JDK Bug System).

Incorrect handling of quoted arguments in ProcessBuilder

Before the OpenJDK 17.0.4 release, arguments to **ProcessBuilder** on Microsoft Windows that contained opening double quotation marks ("), a backslash (\), and closing double quotation marks ("), caused the command to fail. For example, the command prompt on Microsoft Windows would not correctly process the argument **"C:\\Program Files\"**, because the argument contained closing double quotation marks.

The OpenJDK 17.0.4 release resolves this issue by restoring any arguments that contained double quotation marks to **ProcessBuilder** to an earlier required behavior. **ProcessBuilder** no longer applies any special treatment to an argument that includes a backslash (\) before the closing double quotation marks.

See, JDK-8283137 (JDK Bug System).

Default JDK compressor closes when IOException is encountered

The OpenJDK 17.0.4 release, modifies the **DeflaterOutputStream.close()** and **GZIPOutputStream.finish()** methods. This update closes the associated default JDK compressor before propagating a **Throwable** class to a stack.

The release also modifies the **ZIPOutputStream.closeEntry()** method. This update closes the associated default JDK compressor before propagating an **IOException** message, not of type **ZipException**, to a stack.

See, JDK-8278386 (JDK Bug System).

New system property to disable Microsoft Windows Alternate Data Stream support in java.io.File

The Microsoft Windows implementation of **java.io.File** provides access to NTFS Alternate Data Streams (ADS) by default. These streams follow the format *filename:streamname*. The OpenJDK 17.0.4 release adds a system property. With this system property, you can disable ADS support in **java.io.File**, by setting the system property **jdk.io.File.enableADS** to **false**.

IMPORTANT

Disabling ADS support in **java.io.File** results in stricter path checking that prevents the use of special device files, such as **NUL:**.

See, JDK-8285660 (JDK Bug System) .

Revised on 2024-05-03 15:35:22 UTC