

Liberica JDK 8u402+7

Release Notes



Liberica JDK
8u402
January 16, 2024

be//soft

Copyright © BellSoft Corporation 2018-2024.

BellSoft software contains open source software. Additional information about third party code is available at https://bell-sw.com/third_party_licenses. You can also get more information on how to get a copy of source code by contacting info@bell-sw.com.

THIS INFORMATION MAY CHANGE WITHOUT NOTICE. TO THE EXTENT PERMITTED BY APPLICABLE LAW, BELLSOFT PROVIDES THIS DOCUMENTATION “AS IS” WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL BELLSOFT BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF BELLSOFT IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in this document is governed by the applicable license agreement, which is not modified in any way by the terms of this notice.

Alpaquita, Liberica and BellSoft are trademarks or registered trademarks of BellSoft Corporation. The registered trademark Linux® is used pursuant to a sublicense from the Linux Foundation, the exclusive licensee of Linus Torvalds, owner of the mark on a worldwide basis. Java and OpenJDK are trademarks or registered trademarks of Oracle and/or its affiliates. Other trademarks are the property of their respective owners and are used only for identification purposes.

Contents

1. Introduction	5
-----------------	---

2. Liberica JDK 8u402+7	6
-------------------------	---

3. Liberica JDK 8 distribution	7
--------------------------------	---

4. Security Baselines	8
-----------------------	---

5. Known Issues	9
-----------------	---

6. CVEs	10
---------	----

7. Notable Issues	11
-------------------	----

8. Resolved Issues	14
--------------------	----

JDK issues

14

JFX issues

16

1. Introduction

This document provides the late-breaking information about Liberica JDK 8u402 release.

The full version string for this update release is 8u402+7. The version number is 8.

2. Liberica JDK 8u402+7

Liberica is a certified, Java SE 8-compliant distribution of OpenJDK 8, which works on server (Linux x86_64, Linux ARM64, Windows 64), desktop (Windows 64, Mac, Linux x86_64), and embedded devices (Linux ARM64, Linux ARMv7, including Raspberry Pi 2 & 3 (ARMv6 hardfloat)). It has the following notable additions:

- Linux x86_64 version contains support for ZGC.
- Linux x86_64, ARMv8 and ARMv7 distributions include a choice of Client VM, Server VM and Minimal VM.
- Alpine Linux x86_64 and aarch64 are built with musl support.
- Windows x86_64, Windows ARMv8, Mac, Linux x86_64, and Linux ARMv7 distributions contain OpenJFX 8.
- Linux ARMv7 distribution contains Device IO API compiled for Raspberry Pi.

Refer to the Oracle JDK 8u402 release notes for further information on JDK 8 features. This document further outlines the peculiarities of Liberica distribution as compared to Oracle JDK 8 distribution.

3. Liberica JDK 8 distribution

Liberica JDK 8 is distributed as .rpm, .zip, .deb and .tar.gz packages. Please select the most appropriate for your purposes.

Liberica JDK 8 introduced all [new features](#) supported by OpenJDK 8.

With the introduction of the Jigsaw feature in JDK 9 and Minimal VM it is now possible to create a Runtime that is sufficient to run your application and trim down the size of the Runtime. To generate a Runtime with just the Minimal VM, add `--vm=minimal` to `jlink` options.

By default, the Liberica uses Server VM. Server VM and Client VM can be enabled with `-server` and `-client` command line options, respectively. In case the deployment requires to minimize the footprint, it may be beneficial to use Minimal VM, which emphasises on a minimal footprint. It has C1 JIT compiler only, Serial GC and no serviceability features.

4. Security Baselines

BellSoft Liberica follows the security baselines for Oracle Java SE. Please refer to the Oracle documentation for a list of issues fixed in a given release.

5. Known Issues

This release does not contain any known issues.

6. CVEs

This is the list of the security issues fixed in this release. CVSS scores are provided using the CVSS version 3.1 scoring system.

CVE ID	CVSS score	Component	Module	Attack Vector	Complexity	Privileges	User Interaction	Scope	Confidentiality	Integrity	Availability
CVE-2024-20918	7.4	hotspot	compiler	network	high	none	none	unchanged	high	high	none
CVE-2024-20919	5.9	hotspot	runtime	network	high	none	none	unchanged	none	high	none
CVE-2024-20921	5.9	hotspot	compiler	network	high	none	none	unchanged	high	none	none
CVE-2024-20922	2.5	javafx	window-toolkit	local	high	none	required	unchanged	none	low	none
CVE-2024-20923	3.1	javafx	graphics	network	high	none	required	unchanged	low	none	none
CVE-2024-20925	3.1	javafx	media	network	high	none	required	unchanged	none	low	none
CVE-2024-20926	5.9	core-libs	javafx.script	network	high	none	none	unchanged	high	none	none
CVE-2024-20945	4.7	security-libs	javafx.xml.crypto	local	high	low	none	unchanged	high	none	none
CVE-2024-20952	7.4	security-libs	java.security	network	high	none	none	unchanged	high	high	none

7. Notable Issues

This is the list of the notable issues fixed in this release.

Issue ID: JDK-8316606

Summary: Accept yes/no for boolean krb5.conf settings

Description: The `allow_weak_crypto` option in the `/etc/krb5.conf` file now correctly parses both answers `true` and `yes` to signify that users want to allow weak crypto.

Issue ID: JDK-8316635

Summary: Remove SECOM certificate that is expiring in September 2023

Description: The `secom` root certificate expiring in September 2023 was removed.

Issue ID: JDK-8317321

Summary: Arrays should be cloned in several JAAS Callback classes

Description: In JAAS `ChoiceCallback` and `ConfirmationCallback`, arrays were not cloned when passed into a constructor or returned. This allowed an external program to get access to internal fields of these classes.

Issue ID: JDK-8319176

Summary: Added Certigna Root CA - 2

Description: The Certinga root certificate has been added to the cacerts truststore.

Issue ID: JDK-8320704

Summary: Increase `jdk.jar.maxSignatureFileSize` default size, which is too low for JARs such as WhiteSource/Mend unified agent jar

Description: `jdk.jar.maxSignatureFileSize` default size of 8MB was too low and caused errors. The fix increased the default value to 16MB.

Issue ID: JDK-8322257

Summary: Add Telia Root CA v2

Description: Telia root certificate was added.

Issue ID: JDK-8322258

Summary: Add Let's Encrypt ISRG Root X2

Description: New Let's Encrypt root certificates were added.

Issue ID: JDK-8322259

Summary: Add four DigiCert root certificates

Description: Four new DigiCert root certificates were added to JDK 8

8. Resolved Issues

JDK issues

This is the list of general JDK issues fixed in this release.

Issue ID	Summary
JDK-6528710	sRGB-ColorSpace to sRGB-ColorSpace Conversion
JDK-8029995	accept yes/no for boolean krb5.conf settings
JDK-8159156	[TESTBUG] ReserveMemory test is not useful on Aix.
JDK-8176509	Use pandoc for converting build readme to html
JDK-8206179	com/sun/management/OperatingSystemMXBean/GetCommittedVirtualMemorySize.java fails with Committed virtual memory size illegal value
JDK-8207404	MulticastSocket tests failing on AIX
JDK-8209115	adjust libsplashscreen linux ppc64le builds for easier libpng update
JDK-8212677	X11 default visual support for IM status window on VNC
JDK-8239365	ProcessBuilder test modifications for AIX execution
JDK-8242330	Arrays should be cloned in several JAAS Callback classes
JDK-8271838	AmazonCA.java interop test fails
JDK-8283441	C2: segmentation fault in ciMethodBlocks::make_block_at(int)

Issue ID	Summary
JDK-8285398	Cache the results of constraint checks
JDK-8285696	AlgorithmConstraints:permits not throwing IllegalArgumentException when 'alg' is null
JDK-8295685	Update Libpng to 1.6.38
JDK-8302017	Allocate BadPaddingException only if it will be thrown
JDK-8305329	[8u] Unify test libraries into single test library - step 1
JDK-8305815	Update Libpng to 1.6.39
JDK-8307837	[8u] Check step in GHA should also print errors
JDK-8308204	Enhanced certificate processing
JDK-8309088	security/infra/java/security/cert/CertPathValidator/certification/AmazonCA.java fails
JDK-8311813	C1: Uninitialized PhiResolver::_loop field
JDK-8312489	Increase jdk.jar.maxSignatureFileSize default which is too low for JARs such as WhiteSource/Mend unified agent jar
JDK-8312535	MidiSystem.getSoundbank() throws unexpected SecurityException
JDK-8314284	Enhance Nashorn performance
JDK-8314295	Enhance verification of verifier
JDK-8314307	Improve loop handling
JDK-8314468	Improve Compiler loops

Issue ID	Summary
JDK-8315135	Memory leak in the native implementation of Pack200.Unpacker.unpack()
JDK-8315280	Bump update version of OpenJDK: 8u402
JDK-8315506	C99 compatibility issue in LinuxNativeDispatcher
JDK-8316976	Improve signature handling
JDK-8317291	Missing null check for nmethod::is_native_method()
JDK-8317373	Add Telia Root CA v2
JDK-8317374	Add Let's Encrypt ISRG Root X2
JDK-8317547	Enhance TLS connection support
JDK-8318759	Add four DigiCert root certificates
JDK-8319187	Add three eMudhra emSign roots
JDK-8319405	[s390] [jdk8] Increase javac default stack size for s390x zero
JDK-8320597	RSA signature verification fails on signed data that does not encode params correctly

JFX issues

This is the list of JFX issues fixed in this release.

Issue ID	Summary
JDK-8284544	[Win] Name-Property of Spinner cannot be changed
JDK-8297067	Update Gradle to 7.6
JDK-8306918	WebView: Update Public Suffix List to 88467c9
JDK-8310681	Update WebKit to 616.1
JDK-8311097	Synchron XMLHttpRequest not receiving data
JDK-8313048	Better Glyph handling
JDK-8313056	General enhancements of Glass
JDK-8313105	Improved media framing
JDK-8313177	Web Workers timeout with Webkit 616.1
JDK-8313181	Enabling modern media controls on webkit 616.1 does not load button images on HTML5 video Element
JDK-8313321	Set minimum python version in WebKit cmake scripts
JDK-8313711	Cherry-pick WebKit 616.1 stabilization fixes
JDK-8313856	Replace VLA with malloc in pango
JDK-8313900	Possible NULL pointer access in NativeAudioSpectrum and NativeVideoBuffer
JDK-8314212	Crash when loading cnn.com in WebView
JDK-8315074	Possible null pointer access in native glass

Issue ID	Summary
JDK-8315657	Application window not activated in macOS 14 Sonoma
JDK-8315870	icu fails to compile with Visual Studio 2022 17.6.5
JDK-8315958	Missing range checks in GlassPasteboard
JDK-8317508	Provide media support for libavcodec version 60
JDK-8318708	FX: Update copyright year in docs, readme files to 2024
JDK-8319066	Application window not always activated in macOS 14 Sonoma



Liberica JDK 8u402+7
Release Notes

be//soft