

Liberica JDK 23.0.1+13

Release Notes



Liberica JDK
23.0.1
October 16, 2024

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1. Version information

This document provides information about Liberica JDK 23.0.1 release.

The full version string for this update release is 23.0.1+13. The version number is 23.

Liberica JDK 23 is distributed as `.apk`, `.rpm`, `.zip`, `.deb`, and `.tar.gz` packages. Please select the most appropriate for your purposes.

2. What's New

This release contains the following updates and new features.

Notable Changes

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

Issue ID	
JDK-8334954	<p>Summary: Improve error for illegal early access from nested class</p> <p>Description: This is a fixed backport of JDK-8334488 Improve error for illegal early access from nested class.</p>
JDK-8334962	<p>Summary: javap crash - Fatal error: Unmatched bit position 0x2 for location CLASS</p> <p>Description: javap reported a fatal error for several classes in java.lang.invoke instead of printing them correctly.</p>
JDK-8335416	<p>Summary: Deprecate no-arg constructor BasicSliderUI() for removal</p> <p>Description: This constructor is deprecated for removal and removed in a later release.</p>
JDK-8337901	<p>Summary: Add explicit non-null return value expectations to Object.toString()</p> <p>Description: An explicit non-null return value expectations were added to Object.toString() method.</p>

Issue ID

JDK-8337905

Summary: MemorySegment::reinterpret removes read-only property

Description: The MemorySegment::reinterpret method returned a new memory segment that did not carry over the read-only property of the segment it was create from, but it should have.

JDK-8337907

Summary: Chained builders not sending transformed models to next transforms

Description: ClassFile API chained builders did not emit certain elements through downstream transforms and returned wrong builder for chaining.

JDK-8339039

Summary: {ClassLoader,Memory}MXBean::isVerbose methods are inconsistent with their setVerbose methods

Description: The ClassLoadingMXBean and MemoryMXBean APIs have setVerbose methods to control verbose mode and isVerbose methods to query it. Some JCK tests expect setVerbose(false) to disable verbose mode and, subsequently, isVerbose() to return false. However, if logging to a file is enabled by using -Xlog on the java launcher command line then isVerbose() returned true even after calling setVerbose(false).

JDK-8339078

Summary: BasicFileAttributes.creationTime() falls back to epoch if birth time is unavailable

Description: The change which resolved JDK-8316304 added support for obtaining the file creation time from the birth timestamp. Prior to this change, the last modified time had been returned to the creation time. After this change, if the birth timestamp was unavailable, for example if it was not supported by the file system even though the operating system supported it, then the epoch (0) was returned to the creation time. This could cause problems in situations which relied on the old behavior.

Issue ID

JDK-8339734 Summary: Distrust TLS server certificates issued after Oct 2024 and anchored by Entrust Root CAs

Description: Google and Mozilla have announced plans to distrust TLS Server certificates issued by Entrust. This enhancement implements similar restrictions in the JDK. The restrictions is enforced in the SunJSSE Provider of the Java Secure Socket Extension (JSSE) API. A TLS session will not be negotiated if the server's certificate chain is anchored by any of the Certificate Authorities specified in this issue and the certificate's notBefore date is after October 31, 2024. If necessary, you can work around the restrictions by removing 'ENTRUST_TLS' from the 'jdk.security.caDistrustPolicies' security property.

JDK-8341163 Summary: Add 2 SSL.com TLS roots

Description: New SSL.com TLS roots were added as they will be the issuing CA used by Entrust.

JDK-8341165 Summary: Change Entrust TLS distrust date to November 12, 2024

Description: Google has changed their distrust date for Entrust from November 1 to November 12, 2024. Entrust has also changed the date they plan to use SSL.com as the issuing CA for public TLS server certificates to November 12. To align with those updated dates, the distrust date was changed to November 12, 2024.

Discontinued OS support

Note that Liberica JDK 23.0.1 is not available for and cannot be run on the following operating systems:

- Windows x86 (32-bit)
- macOS 10.x

IANA TZ Data update

This release of Liberica JDK 23.0.1 comes with IANA Time Zone Database version [2024a](#). The following are the main changes in this update:

Kazakhstan unifies on UTC+5 beginning 2024-03-01. Palestine springs forward a week later after Ramadan. zic no longer pretends to support indefinite-past DST. localtime no longer mishandles Ciudad Juárez in 2422.

3. Known Issues

This release does not contain any known issues.

4. Fixed 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-2023-42950	7.5	javafx	web	network	high	none	required	unchanged	high	high	high
CVE-2024-21208	3.7	core-libs	java.net	network	high	none	none	unchanged	none	none	low
CVE-2024-21210	3.7	hotspot	compiler	network	high	none	none	unchanged	none	low	none
CVE-2024-21217	3.7	core-libs	java.io.serialization	network	high	none	none	unchanged	none	none	low
CVE-2024-21235	4.8	hotspot	compiler	network	high	none	none	unchanged	low	low	none
CVE-2024-25062	7.5	javafx	web	network	low	none	none	unchanged	none	none	high

5. Resolved Issues

JDK issues

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

Issue ID	Summary
JDK-6967482	TAB-key does not work in JTables after selecting details-view in JFileChooser
JDK-8166352	FilePane.createDetailsView() removes JTable TAB, SHIFT-TAB functionality
JDK-8269657	Test java/nio/channels/DatagramChannel/Loopback.java failed: Unexpected message
JDK-8299813	java/nio/channels/DatagramChannel/Disconnect.java fails with jtreg test timeout due to lost datagram
JDK-8307383	Enhance DTLS connections
JDK-8311208	Improve CDS Support
JDK-8314794	Improve UTF8 String supports
JDK-8318106	Generated HTML for snippet does not always contain an id
JDK-8319859	Better symbol storage
JDK-8320097	Improve Image transformations
JDK-8320548	Improved loop handling

Issue ID	Summary
JDK-8323231	Improve array management
JDK-8323390	Enhance mask blit functionality
JDK-8324559	Improve 2D image handling
JDK-8324841	PKCS11 tests still skip execution
JDK-8325280	Update troff manpages in JDK 23 before RC
JDK-8325369	@sealedGraph: Bad link to image for tag on nested classes
JDK-8325525	Create jtreg test case for JDK-8325203
JDK-8325600	Better symbol storage
JDK-8325984	4 jcstress tests are failing in Tier6 4 times each
JDK-8327413	Enhance compilation efficiency
JDK-8328286	Enhance HTTP client
JDK-8328544	Improve handling of vectorization
JDK-8328726	Better Kerberos support
JDK-8331194	NPE in ArrayCreationTree.java with -XX:-UseCompressedOops
JDK-8331411	Shenandoah: Reconsider spinning duration in ShenandoahLock
JDK-8331446	Improve deserialization support
JDK-8332524	Instead of printing "TLSv1.3," it is showing "TLS13"

Issue ID	Summary
JDK-8332644	Improve graph optimizations
JDK-8332818	ubsan: archiveHeapLoader.cpp:70:27: runtime error: applying non-zero offset 18446744073707454464 to null pointer
JDK-8333652	RISC-V: compiler/vectorapi/VectorGatherMaskFoldingTest.java fails when using RVV
JDK-8333716	Shenandoah: Check for disarmed method before taking the nmethod lock
JDK-8333884	MemorySegment::reinterpret removes read-only property
JDK-8333887	ubsan: unsafe.cpp:247:13: runtime error: store to null pointer of type 'volatile int'
JDK-8334041	Bump version numbers for 23.0.1
JDK-8334123	log the opening of Type 1 fonts
JDK-8334167	Test java/lang/instrument/NativeMethodPrefixApp.java timed out
JDK-8334239	Introduce macro for ubsan method/function exclusions
JDK-8334339	Test java/nio/file/attribute/BasicFileAttributeView/CreationTime.java fails on alinux3
JDK-8334418	Update IANA Language Subtag Registry to Version 2024-06-14
JDK-8334653	ISO 4217 Amendment 177 Update
JDK-8334719	(se) Deferred close of SelectableChannel may result in a Selector doing the final close before concurrent I/O on channel has completed

Issue ID	Summary
JDK-8334781	JFR crash: <code>assert(((JfrTraceIdBits::load(klass & JfrTraceIdEpoch::this_epoch_method_and_class_bits()) != 0)))</code> failed: invariant
JDK-8335409	Can't allocate and retain memory from resource area in <code>frame::oops_interpreted_do</code> oop closure after 8329665
JDK-8335536	Fix assertion failure in <code>IdealGraphPrinter</code> when <code>append</code> is true
JDK-8335637	Add explicit non-null return value expectations to <code>Object.toString()</code>
JDK-8335713	Enhance vectorization analysis
JDK-8335766	Switch case with pattern matching and guard clause compiles inconsistently
JDK-8335775	Remove extraneous 's' in comment of <code>rawmonitor.cpp</code> test file
JDK-8335817	<code>javac</code> <code>AssertionError</code> <code>addLocalVar</code> <code>checkNull</code>
JDK-8335820	<code>java/lang/invoke/LFCaching/LFSingleThreadCachingTest.java</code> fails due to <code>IllegalArgumentException</code> : hash must be nonzero
JDK-8335935	Chained builders not sending transformed models to next transforms
JDK-8335966	Remove incorrect problem listing of <code>java/lang/instrument/NativeMethodPrefixAgent.java</code> in <code>ProblemList-Virtual.txt</code>
JDK-8335967	"text-decoration: none" does not work with "A" HTML tags
JDK-8336036	Synthetic documentation for a record's equals is incorrect for floating-point types
JDK-8336259	Wrong link to <code>stylesheet.css</code> in JavaDoc API documentation

Issue ID	Summary
JDK-8336301	test/jdk/java/nio/channels/AsyncCloseAndInterrupt.java leaves around a FIFO file upon test completion
JDK-8336366	Change milestone to fcs for all releases
JDK-8336375	Crash on paste to JShell
JDK-8337054	JDK 23 RDP2 L10n resource files update
JDK-8337103	The change for RDP2 CPU24_10 has corrupted line endings in the file version-numbers.conf.
JDK-8337664	Distrust TLS server certificates issued after Oct 2024 and anchored by Entrust Root CAs
JDK-8337716	ByteBuffer hashCode implementations are inconsistent
JDK-8338139	{ClassLoader,Memory}MXBean::isVerbose methods are inconsistent with their setVerbose methods
JDK-8338696	(fs) BasicFileAttributes.creationTime() falls back to epoch if birth time is unavailable (Linux)
JDK-8341057	Add 2 SSL.com TLS roots
JDK-8341059	Change Entrust TLS distrust date to November 12, 2024

JFX issues

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

Issue ID	Summary
JDK-8304008	Update README.md and CONTRIBUTING.md for jfx update repos
JDK-8319779	SystemMenu: memory leak due to listener never being removed
JDK-8323787	Mac System MenuBar throws IOB exception
JDK-8328994	Update WebKit to 619.1
JDK-8334124	Rendering issues with CSS "text-shadow" in WebView
JDK-8334874	Horizontal scroll events from touch pads should scroll the TabPane tabs
JDK-8335548	testCookieEnabled fails with WebKit 619.1
JDK-8336035	Change JavaFX release version to 23.0.1 in jfx23u
JDK-8336277	Colors are incorrect when playing H.265/HEVC on Windows 11
JDK-8336798	DRT test cssrounding.html test for linear layout fails with WebKit 619.1
JDK-8336938	Update libFFI to 3.4.6
JDK-8336939	Update Glib to 2.80.4
JDK-8336940	Update GStreamer to 1.24.6
JDK-8336941	Update libxslt to 1.1.42
JDK-8337481	File API: file.name contains path instead of name
JDK-8338306	WebView Drag and Drop fails with WebKit 619.1
JDK-8338307	Additional WebKit 619.1 fixes from WebKitGTK 2.44.3

Issue ID	Summary
JDK-8338701	Provide media support for libavcodec version 61
JDK-8338886	JavaFX debug builds fail on macOS
JDK-8339247	Create release notes for JavaFX 23

6. Updates to Third Party Libraries

This release does not contain any changes in the third party libraries.

7. Upgrading to the New Version

To keep your Liberica JDK up-to-date and secure, always upgrade to the newest available version once it is released. To upgrade, install the new version over the previous one. For the installation instructions, see [Liberica JDK Installation Guide](#).



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