Liberica JDK 24.0.2+12
Release Notes

bell/soft

Contents

1. Version information

This document provides information about Liberica JDK 24.0.2 release.

The full version string for this update release is 24.0.2+12. The version number is 24.

Liberica JDK 24 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-8303770	Summary: Removed Baltimore CyberTrust Root Certificate After Expiry Date Description: The following expired root certificate has been removed from the `cacerts` keystore: alias name baltimorecybertrustca [jdk], Distinguished Name: CN=Baltimore CyberTrust Root, OU=CyberTrust, O=Baltimore, C=IE.
JDK-8345185	Summary: jpackage No Longer Includes Service Bindings by Default for Generated Run-Time Images Description: Starting with JDK 25, `jpackage` no longer includes service bindings for a run-time image that it creates. Prior to JDK 25, `jpackage` would include service bindings for run-time images. As a result, the generated run-time images produced by `jpackage` might not include the same set of modules as it did in prior versions. The previous behavior can be achieved by adding the `--bind-services` `jlink` option to the default `jlink` options `jpackage`.

Issue ID
JDK-8346587   Summary: Distrust TLS server certificates anchored by Camerfirma Root CAs Description: The JDK will stop trusting TLS server certificates issued after April 15, 2025 and anchored by Camerfirma root certificates, in line with similar plans announced by Google, Mozilla, Apple, and Microsoft. TLS server certificates issued on or before April 15, 2025 will continue to be trusted until they expire. Certificates issued after that date, and anchored by any of the Certificate Authorities in the table below, will be rejected. The restrictions are enforced in the JDK implementation (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 in the table below and the certificate has been issued after April 15, 2025.

Issue ID	
JDK-8350498	Summary: Removed Two Camerfirma Root Certificates Description: The following root certificates, which are terminated and no longer in use, have been removed from the `cacerts` keystore: alias name camerfirmachamberscommerceca [jdk], Distinguished Name: CN=Chambers of Commerce Root, OU=http://www.chambersign.org, O=AC Camerfirma SA CIF A82743287, C=EU; alias name camerfirmachambersignca [jdk], Distinguished Name: CN=Global Chambersign Root - 2008, O=AC Camerfirma S.A., SERIALNUMBER=A82743287, L=Madrid (see current address at www.camerfirma.com/address), C=EU.
JDK-8352716	Summary: Update Timezone Data to 2025b Description: The 2025b release of the tz code and data contains the following changes: New zone for Aysén Region in Chile which moves from -04/-03 to -03.

Issue ID	
JDK-8359170	Summary: Added 4 New Root Certificates from Sectigo Limited Description: The following Sectigo Limited root certificates have been added to the cacerts truststore: sectigocodesignroote46, DN: CN=Sectigo Public Code Signing Root E46, O=Sectigo Limited, C=GB; sectigocodesignrootr46, DN: CN=Sectigo Public Code Signing Root R46, O=Sectigo Limited, C=GB; sectigotlsroote46, DN: CN=Sectigo Public Server Authentication Root E46, O=Sectigo Limited, C=GB; sectigotlsrootr46, DN: CN=Sectigo Public Server Authentication Root R46, O=Sectigo Limited, C=GB.

Discontinued OS support

Note that Liberica JDK 24.0.2 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 24.0.2 upgrades the in-tree copy of the IANA timezone database to 2025b. The following are the key changes of this update:

Future Timestamps:

New Time Zone:

A new time zone, America/Coyhaique, is created for Chile's Aysén Region, which will now observe

UTC−03 year-round (no daylight saving time).

- This diverges from America/Santiago starting March 20, 2025.

- Aysén will not change clocks on April 5, 2025.

- This aligns Aysén with Magallanes Region.

Past Timestamps:

Iran Time Change Correction:

Iran changed from UTC+04 to UTC+03:30 on November 10, 1978, not at the end of the year as previously recorded.

Code Fixes:

Improved behavior for the zic tool:

- It no longer creates invalid symlinks when using -l with multiple arguments.

- A buffer underflow issue is resolved.

For more information, see JDK-8352716.

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-2025-24855	7.5	javafx	web	network	high	none	required	unchanged	high	high	high
CVE-2025-27113	7.5	javafx	web	network	high	none	required	unchanged	high	high	high
CVE-2025-30749	8.1	client-libs	2d	network	high	none	none	unchanged	high	high	high
CVE-2025-30754	4.8	security-libs	javax.net.ssl	network	high	none	none	unchanged	low	low	none
CVE-2025-50059	8.6	core-libs	java.net	network	low	none	none	changed	high	none	none
CVE-2025-50106	8.1	client-libs	2d	network	high	none	none	unchanged	high	high	high

5. Resolved Issues

JDK issues

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

Issue ID	Summary
JDK-8217914	java/net/httpclient/ConnectTimeoutHandshake Sync.java failed on connection refused while doing POST
JDK-8276995	Bug in jdk.jfr.event.gc.collection.TestSystemGC
JDK-8280991	[XWayland] No displayChanged event after setDisplayMode call
JDK-8281511	java/net/ipv6tests/UdpTest.java fails with checkTime failed
JDK-8286204	[Accessibility,macOS,VoiceOver] VoiceOver reads the spinner value 10 as 1 when user iterates to 10 for the first time on macOS
JDK-8294155	Exception thrown before awaitAndCheck hangs PassFailJFrame
JDK-8303770	Remove Baltimore root certificate expiring in May 2025

Issue ID	Summary
JDK-8305010	Test vmTestbase/nsk/jvmti/scenarios/sampling/SP05/sp05t003/TestDescription.java timed out: thread not suspended
JDK-8314840	3 gc/epsilon tests ignore external vm options
JDK-8322983	Virtual Threads: exclude 2 tests
JDK-8330598	java/net/httpclient/Http1ChunkedTest.java fails with java.util.MissingFormatArgumentException: Format specifier '%s'
JDK-8330936	[ubsan] exclude function BilinearInterp and ShapeSINextSpan in libawt java2d from ubsan checks
JDK-8334644	Automate javax/print/attribute/PageRangesException.java
JDK-8336042	Caller/callee param size mismatch in deoptimization causes crash
JDK-8338303	Linux ppc64le with toolchain clang - detection failure in early JVM startup
JDK-8339889	Several compiler tests ignore vm flags and not marked as flagless
JDK-8340784	Remove PassFailJFrame constructor with screenshots

Issue ID	Summary
JDK-8342524	Use latch in AbstractButton/bug6298940.java instead of delay
JDK-8342775	[Graal] java/util/concurrent/locks/Lock/OOMEInAQS.java fails OOME thrown from the UncaughtExceptionHandler
JDK-8343191	Cgroup v1 subsystem fails to set subsystem path
JDK-8343224	print/Dialog/PaperSizeError.java fails with MediaSizeName is not A4: A4
JDK-8343607	C2: Shenandoah crashes during barrier expansion in Continuation::enter
JDK-8343882	BasicAnnoTests doesn't handle multiple annotations at the same position
JDK-8343978	Update the default value of CodeEntryAlignment for Ampere-1A and 1B
JDK-8344316	security/auth/callback/TextCallbackHandler/Password.java make runnable with JTReg and add the UI
JDK-8344453	Test jdk/jfr/event/oldobject/TestSanityDefault.java timed out
JDK-8344581	[TESTBUG] java/awt/Robot/ScreenCaptureRobotTest.java failing on macOS

Issue ID	Summary
JDK-8344629	SSLSocketNoServerHelloClientShutdown test timeout
JDK-8344892	beans/finder/MethodFinder.findMethod incorrectly returns null
JDK-8344925	translet-name ignored when package-name is also set
JDK-8345133	Test sun/security/tools/jarsigner/TsacertOptionTest.java failed: Warning found in stdout
JDK-8345134	Test sun/security/tools/jarsigner/ConciseJarsigner.java failed: unable to find valid certification path to requested target
JDK-8345185	Update jpackage to not include service bindings by default
JDK-8345276	Remove EA from the JDK 24 version string with first RC promotion
JDK-8345368	java/io/File/createTempFile/SpecialTempFile.java fails on Windows Server 2025
JDK-8345569	[ubsan] adjustments to filemap.cpp and virtualspace.cpp for macOS aarch64
JDK-8345590	AIX 'make all' fails after JDK-8339480
JDK-8345625	Better HTTP connections

Issue ID	Summary
JDK-8345676	[ubsan] ProcessImpl_md.c:561:40: runtime error: applying zero offset to null pointer on macOS aarch64
JDK-8345728	[Accessibility,macOS,Screen Magnifier]: JCheckbox unchecked state does not magnify but works for checked state
JDK-8346049	jdk/test/lib/security/timestamp/TsaServer.java warnings
JDK-8346264	"Total compile time" counter should include time spent in failing/bailout compiles
JDK-8346285	Update jarsigner compatibility test for change in default digest algorithm
JDK-8346581	JRadioButton/ButtonGroupFocusTest.java fails in CI on Linux
JDK-8346587	Distrust TLS server certificates anchored by Camerfirma Root CAs
JDK-8346671	java/nio/file/Files/probeContentType/Basic.java fails on Windows 2025
JDK-8346705	SNI not sent with Java 22+ using java.net.http.HttpClient.Builder#sslParameters
JDK-8346832	runtime/CompressedOops/CompressedCPUSpecificClassSpaceReservation.java fails on RISC-V
JDK-8346880	[aix] java/lang/ProcessHandle/InfoTest.java still fails: "reported cputime less than expected"

Issue ID	Summary
JDK-8346881	[ubsan] logSelection.cpp:154:24 / logSelectionList.cpp:72:94 : runtime error: applying non-zero offset 1 to null pointer
JDK-8346888	[ubsan] block.cpp:1617:30: runtime error: 9.97582e+36 is outside the range of representable values of type 'int'
JDK-8346972	Test java/nio/channels/FileChannel/LoopingTruncate.java fails sometimes with IOException: There is not enough space on the disk
JDK-8347000	Bug in com/sun/net/httpserver/bugs/B6361557.java test
JDK-8347018	C2: Insertion of Assertion Predicates ignores the effects of PhaseIdealLoop::clone_up_backedge_goo()
JDK-8347038	[JMH] jdk.incubator.vector.SpiltReplicate fails NoClassDefFoundError
JDK-8347126	gc/stress/TestStressG1Uncommit.java gets OOM-killed
JDK-8347171	(dc) java/nio/channels/DatagramChannel/InterruptibleOrNot.java fails with virtual thread factory
JDK-8347173	java/net/DatagramSocket/InterruptibleDatagramSocket.java fails with virtual thread factory
JDK-8347267	[macOS]: UnixOperatingSystem.c:67:40: runtime error: division by zero

Issue ID	Summary
JDK-8347268	[ubsan] logOutput.cpp:357:21: runtime error: applying non-zero offset 1 to null pointer
JDK-8347286	(fs) Remove some extensions from java/nio/file/Files/probeContentType/Basic.java
JDK-8347296	WinInstallerUiTest fails in local test runs if the path to test work directory is longer that regular
JDK-8347298	Bug in JPackageCommand.ignoreFakeRuntime()
JDK-8347300	Don't exclude the "PATH" var from the environment when running app launchers in jpackage tests
JDK-8347302	Mark test tools/jimage/JImageToolTest.java as flagless
JDK-8347373	HTTP/2 flow control checks may count unprocessed data twice
JDK-8347377	Add validation checks for ICC_Profile header fields
JDK-8347427	JTabbedPane/8134116/Bug8134116.java has no license header
JDK-8347564	ZGC: Crash in DependencyContext::clean_unloading_dependents
JDK-8347576	Error output in libjsound has non matching format strings

Issue ID	Summary
JDK-8347629	Test FailOverDirectExecutionControlTest.java fails with -Xcomp
JDK-8347718	Unexpected NullPointerException in C2 compiled code due to ReduceAllocationMerges
JDK-8347740	java/io/File/createTempFile/SpecialTempFile.java failing
JDK-8347847	Enhance jar file support
JDK-8347995	Race condition in jdk/java/net/httpclient/offline/FixedResponseHttpClient.java
JDK-8347997	assert(false) failed: EA: missing memory path
JDK-8348102	java/net/httpclient/HttpClientSNITest.java fails intermittently
JDK-8348110	Update LCMS to 2.17
JDK-8348261	assert(n→is_Mem()) failed: memory node required
JDK-8348299	Update List/ItemEventTest/ItemEventTest.java
JDK-8348323	Corrupted timezone string in JVM crash log
JDK-8348356	Update the release version after forking Apr CPU25_04
JDK-8348562	ZGC: segmentation fault due to missing node type check in barrier elision analysis

Issue ID	Summary
JDK-8348582	Set -fstack-protector when building with clang
JDK-8348596	Update FreeType to 2.13.3
JDK-8348597	Update HarfBuzz to 10.4.0
JDK-8348598	Update Libpng to 1.6.47
JDK-8348600	Update PipeWire to 1.3.81
JDK-8348675	TrayIcon tests fail in Ubuntu 24.10 Wayland
JDK-8348936	[Accessibility,macOS,VoiceOver] VoiceOver doesn't announce untick on toggling the checkbox with "space" key on macOS
JDK-8348989	Better Glyph drawing
JDK-8349002	GenShen: Deadlock during shutdown
JDK-8349039	Adjust exception No type named <ThreadType> in database
JDK-8349058	'internal proprietary API' warnings make javac warnings unusable
JDK-8349084	Update vectors used in several PQC benchmarks
JDK-8349111	Enhance Swing supports
JDK-8349150	Support precompiled headers on AIX

Issue ID	Summary
JDK-8349183	[BACKOUT] Optimization for StringBuilder append boolean & null
JDK-8349200	[JMH] time.format.ZonedDateTimeFormatterBenchmark fails
JDK-8349213	G1: Clearing bitmaps during collection set merging not claimed by region
JDK-8349214	Improve size optimization flags for MSVC builds
JDK-8349239	[BACKOUT] Reuse StringLatin1::putCharsAt and StringUTF16::putCharsAt
JDK-8349348	Refactor ClassLoaderDeadlock.sh and Deadlock.sh to run fully in java
JDK-8349358	[JMH] Cannot access class jdk.internal.vm.ContinuationScope
JDK-8349370	Bump version numbers for 24.0.2
JDK-8349375	Cleanup AIX special file build settings
JDK-8349378	Build splashscreen lib with SIZE optimization
JDK-8349492	Update sun/security/pkcs12/KeytoolOpensslInteropTest.java to use a recent Openssl version
JDK-8349501	Relocate supporting classes in security/testlibrary to test/lib/jdk tree

Issue ID	Summary
JDK-8349551	Failures in tests after JDK-8345625
JDK-8349584	Improve compiler processing
JDK-8349594	Enhance TLS protocol support
JDK-8349623	[ASAN] Gtest os_linux.glibc_mallinfo_wrapper_vm fails
JDK-8349637	Integer.numberOfLeadingZeros outputs incorrectly in certain cases
JDK-8349751	AIX build failure after upgrade pipewire to 1.3.81
JDK-8349753	Incorrect use of CodeBlob::is_buffer_blob() in few places
JDK-8349787	java/lang/Thread/virtual/ThreadPollOnYield.java#default passes unexpectedly without libVThreadPinner.so
JDK-8349943	[JMH] Use jvmArgs consistently
JDK-8350103	Test containers/systemd/SystemdMemoryAwarenesTest.java fails on Linux ppc64le SLES15 SP6
JDK-8350137	After JDK-8348975, Linux builds contain man pages for windows only tools
JDK-8350201	Out of bounds access on Linux aarch64 in os::print_register_info
JDK-8350202	Tune for Power10 CPUs on Linux ppc64le

Issue ID	Summary
JDK-8350211	CTW: Attempt to preload all classes in constant pool
JDK-8350260	Improve HTML instruction formatting in PassFailJFrame
JDK-8350313	Include timings for leaving safepoint in safepoint logging
JDK-8350386	Test TestCodeCacheFull.java fails with option -XX:-UseCodeCacheFlushing
JDK-8350483	AArch64: turn on signum intrinsics by default on Ampere CPUs
JDK-8350498	Remove two Camerfirma root CA certificates
JDK-8350499	Minimal build fails with slowdebug builds
JDK-8350546	Several java/net/InetAddress tests fails UnknownHostException
JDK-8350682	[JMH] vector.IndexInRangeBenchmark failed with IndexOutOfBoundsException for size=1024
JDK-8350683	Non-C2 / minimal JVM crashes in the build on ppc64 platforms
JDK-8350786	Some java/lang jtreg tests miss requires vm.hasJFR
JDK-8350820	OperatingSystemMXBean CpuLoad() methods return -1.0 on Windows

Issue ID	Summary
JDK-8350924	javax/swing/JMenu/4213634/bug4213634.java fails
JDK-8350991	Improve HTTP client header handling
JDK-8351033	RISC-V: TestFloat16ScalarOperations asserts with offset (4210) is too large to be patched in one beq/bge/bgeu/blt/bltu/bne instruction!
JDK-8351223	Update localized resources in keytool and jarsigner
JDK-8351233	[ASAN] avx2-emu-funcs.hpp:151:20: error: â€˜D.82188â€™ is used uninitialized
JDK-8351277	Remove pipewire from AIX build
JDK-8351382	New test containers/docker/TestMemoryWithSubgroups.java is failing
JDK-8351500	G1: NUMA migrations cause crashes in region allocation
JDK-8351639	Improve debuggability of test/langtools/jdk/jshell/JdiHangingListenExecutionControlTest.java test
JDK-8351665	Remove unused UseNUMA in os_aix.cpp
JDK-8351933	Inaccurate masking of TC subfield decrement in ForkJoinPool
JDK-8352109	java/awt/Desktop/MailTest.java fails in platforms where Action.MAIL is not supported

Issue ID	Summary
JDK-8352302	Test sun/security/tools/jarsigner/TimestampCheck.java is failing
JDK-8352508	[Redo] G1: Pinned regions with pinned objects only reachable by native code crash VM
JDK-8352512	TestVectorZeroCount: counter not reset between iterations
JDK-8352706	httpclient HeadTest does not run on HTTP2
JDK-8352716	(tz) Update Timezone Data to 2025b
JDK-8352866	TestLogJIT.java runs wrong test class
JDK-8352946	SEGV_BND signal code of SIGSEGV missing from our signal-code table
JDK-8353053	(fs) Add support for UserDefinedFileAttributeView on AIX
JDK-8353066	Properly detect Windows/aarch64 as build platform
JDK-8353185	Introduce the concept of upgradeable files in context of JEP 493
JDK-8353237	[AArch64] Incorrect result of VectorizedHashCode intrinsic on Cortex-A53
JDK-8353261	Problemlist 5 tests due to failures in the CI pipeline

Issue ID	Summary
JDK-8353274	[PPC64] Bug related to -XX:+UseCompactObjectHeaders -XX:-UseSIGTRAP in JDK-8305895
JDK-8353329	Small memory leak when create GrowableArray with initial size 0
JDK-8353709	Debug symbols bundle should contain full debug files when building --with-external-symbols-in-bundles=public
JDK-8353740	Problemlist 2 tests due to failures in the CI pipeline
JDK-8353787	Increased number of SHA-384-Digest java.util.jar.Attributes$Name instances leading to higher memory footprint
JDK-8353861	Problemlist 1 test due to failures in the CI pipeline
JDK-8353946	Incorrect WINDOWS ifdef in os::build_agent_function_name
JDK-8354657	Problemlist 2 tests due to failures in the CI pipeline
JDK-8354831	Problemlist 2 tests due to failures in the CI pipeline
JDK-8354861	Change milestone to fcs for all releases
JDK-8354904	[Backout] JDK-8345625: Better HTTP connections

Issue ID	Summary
JDK-8355524	Only every second line in upgradeable files is being used
JDK-8355884	[macos] java/awt/Frame/I18NTitle.java fails on MacOS
JDK-8356096	ISO 4217 Amendment 179 Update
JDK-8359170	Add 2 TLS and 2 CS Sectigo roots
JDK-8360147	Better Glyph drawing redux

JFX issues

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

Issue ID	Summary
JDK-8318985	[macos] Incorrect 3D lighting on macOS 14 and later
JDK-8347937	Canvas pattern test fails and crashes on WebKit 620.1
JDK-8350136	Create release notes for JavaFX 24
JDK-8350284	WebKit 620.1 crashes on startup on Windows x86 32-bit
JDK-8351264	Some images don't load with WebKit 620.1

Issue ID	Summary
JDK-8351602	Change JavaFX release version to 24.0.2 in jfx24u
JDK-8351653	Webkit debug build failure after update to 620.1
JDK-8352162	Update libxml2 to 2.13.8
JDK-8352164	Update libxslt to 1.1.43
JDK-8353916	Unexpected event type for DOM mutation events with WebKit 620.1
JDK-8354182	Create release notes for JavaFX 24.0.1
JDK-8354318	freetype.c: compilation error: 'incompatible pointer type' with gcc 14
JDK-8354336	gstclock.c: compilation error: 'incompatible pointer type' with gcc 14
JDK-8354337	GHA: Windows build fails with chmod permission error
JDK-8354876	Update SQLite to 3.49.1
JDK-8354940	Fail to sign in to Microsoft sites with WebView

6. Updates to Third Party Libraries

This is the list of changes in the third party libraries.

Library	Full name	New Version	Module	JBS number
FreeType	FreeType	2.13.3	java.desktop	8348596
HarfBuzz	HarfBuzz	10.4.0	java.desktop	8348597
LCMS	LittleCMS	2.17	java.desktop	8348110
Libpng	Libpng	1.6.47	java.desktop	8348598
libxml2	libxml2	2.13.8	javafx.web	8352162
libxslt	libxslt	1.1.43	javafx.web	8352164
PipeWire	PipeWire	1.3.81	java.desktop	8348600
SQLite	SQLite	3.49.1	javafx.web	8354876

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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