

# Liberica JDK 17.0.13+12

## Release Notes



Liberica JDK  
17.0.13  
October 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](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](mailto: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. Version information	5
------------------------	---

---

2. What's New	6
---------------	---

---

Notable Changes	6
-----------------	---

Builds of Liberica JDK With CRaC	10
----------------------------------	----

IANA TZ Data update	10
---------------------	----

3. Known Issues	11
-----------------	----

---

4. Fixed CVEs	12
---------------	----

---

5. Resolved Issues	13
--------------------	----

---

JDK issues	13
------------	----

JFX issues	36
------------	----

6. Updates to Third Party Libraries	37
-------------------------------------	----

---



# 1. Version information

This document provides information about Liberica JDK 17.0.13 release.

The full version string for this update release is 17.0.13+12. The version number is 17.

Liberica JDK 17 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-8333243	<p>Summary: dpkg appears to have problems resolving symbolically linked native libraries</p> <p>Description: Native libraries linked with symbolic links now correctly processed by dpkg.</p>
JDK-8333314	<p>Summary: Parallel: Remove PSAdaptiveSizePolicy::should_full_GC</p> <p>Description: The quite conservative check after-success-young-gc was remove to avoid unnecessary full-gc upgrade. Upgrade to full-gc happens only if young-gc fails.</p>
JDK-8333480	<p>Summary: Reduce verbose locale output in -XshowSettings launcher option</p> <p>Description: The '-XshowSettings' launcher command printed all available locales, thus making the output very verbose by default and making it harder to see settings. This level of detail is now printed only if the -XshowSettings:locale subcommand is specified (to print all other locale details, specify -XshowSettings).</p>
JDK-8333698	<p>Summary: TestJstatdRmiPort fails after JDK-8333667</p> <p>Description: The backport of JDK-8233725 together with JDK-8306946 caused sun/tools/jstatd/TestJstatdRmiPort.java to fail: java.lang.RuntimeException: Output should contain one line: expected 5 to equal 1.</p>

## Issue ID

JDK-8333998

Summary: Disable TLS\_ECDH\_\* cipher suites

Description: These cipher suites do not preserve forward-secrecy and are rarely used in practice. Other TLS implementations (ex: Chrome, Mozilla) do not enable these suites. The successor of RFC 7525 recommends that these suites not be used.

JDK-8334335

Summary: Backport of 8279164 to 11u &amp; 17u includes elements of JDK-8163327

Description: The fix includes the following: Per RFC 7525, implementations SHOULD NOT negotiate cipher suites that use algorithms offering less than 128 bits of security. The strength of 3DES is 112 bits, which is less than 128 bits of security.

JDK-8335174

Summary: Add thread and timestamp options to java.security.debug system property

Description: The `java.security.debug` system property now accepts arguments which add thread ID, thread name, caller information, and timestamp information to debug statements for all components or a specific component. `+timestamp` can be appended to debug options to print a timestamp for that debug option. `+thread` can be appended to debug options to print thread and caller information for that debug option.

JDK-8336718

Summary: Add system property for Java SE specification maintenance version

Description: A system property `'java.specification.maintenance.version'` now allows to programmatically retrieve the maintenance releases (MRs) information.

## Issue ID

JDK-8336748

Summary: Relax the java.awt.Robot specification

Description: This fix relaxes the specification of three methods in the `java.awt.Robot` class - `mouseMove(int, int)`, `getPixelColor(int, int)`, `createScreenCapture(Rectangle)` and `createMultiResolutionScreenCapture(Rectangle)` - to allow these methods to fail when the desktop environment does not permit moving the mouse pointer or capturing screen content.

JDK-8336893

Summary: KEM: Implementation

Description: A new `javax.crypto` API was introduced for key encapsulation mechanisms (KEMs), an encryption technique for securing symmetric keys using public key cryptography.

JDK-8336894

Summary: `KEM.getInstance()` should check if a 3rd-party security provider is signed

Description: Similar to other JCE crypto services like Cipher, Mac, and KeyAgreement, when a KEM object is instantiated from a 3rd party security provider, it now makes sure the provider is loaded from a signed JAR.

JDK-8339476

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-8339479

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

Description: The ClassLoaderMXBean 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 was enabled by using -Xlog on the java launcher command line then isVerbose() returned true even after calling setVerbose(false).

JDK-8339708

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-8341337

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-8341339

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.

## Builds of Liberica JDK With CRaC

This release of Liberica JDK includes full CRaC support. CRaC support is available for Liberica JDK 17 and 21. For more information, see [Using CRaC with Java applications](#).

## IANA TZ Data update

This release of Liberica JDK 17.0.13 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-7022325	TEST_BUG: test/java/util/zip/ZipFile/ReadLongZipFileName.java leaks files if it fails
JDK-7026262	HttpServer: improve handling of finished HTTP exchanges
JDK-7124313	[macosx] Swing Popups should overlap taskbar
JDK-8005885	enhance PrintCodeCache to print more data
JDK-8051959	Add thread and timestamp options to java.security.debug system property
JDK-8170817	G1: Returning MinTLABSize from unsafe_max_tlab_alloc causes TLAB flapping
JDK-8183227	read/write APIs in class os shall return ssize_t
JDK-8193547	Regression automated test '/open/test/jdk/java/awt/Toolkit/DesktopProperties/rfe4758438.java' fails
JDK-8222884	ConcurrentClassDescLookup.java times out intermittently
JDK-8233725	ProcessTools.startProcess() has output issues when using an OutputAnalyzer at the same time

Issue ID	Summary
JDK-8238169	BasicDirectoryModel getDirectories and DoChangeContents.run can deadlock
JDK-8241550	[macOS] SSLSocketImpl/ReuseAddr.java failed due to "BindException: Address already in use"
JDK-8255898	Test java/awt/FileDialog/FilenameFilterTest/FilenameFilterTest.java fails on Mac OS
JDK-8256291	RunThese30M fails "assert(!_class_unload ? true : (JfrTraceldBits::load(class_loader_class & 1 << 4) << 8 != 0)) failed: invariant"
JDK-8257540	javax/swing/JFileChooser/8041694/bug8041694.java failed with "RuntimeException: The selected directory name is not the expected 'd ' but 'D ':"
JDK-8259866	two java.util tests failed with "IOException: There is not enough space on the disk"
JDK-8260633	[macos] java/awt/dnd/MouseEventAfterStartDragTest/MouseEventAfterStartDragTest.html test failed
JDK-8261433	Better pkcs11 performance for libpkcs11:C_EncryptInit/libpkcs11:C_DecryptInit
JDK-8263031	HttpClient throws Exception if it receives a Push Promise that is too large
JDK-8265919	RunThese30M fails "assert((((JfrTraceldBits::load(value & 1 << 4) << 8 != 0)))) failed: invariant"
JDK-8269428	java/util/concurrent/ConcurrentHashMap/ToArray.java timed out
JDK-8269657	Test java/nio/channels/DatagramChannel/Loopback.java failed: Unexpected message

Issue ID	Summary
JDK-8272232	javax/swing/JTable/4275046/bug4275046.java failed with "Expected value in the cell: 'rededited' but found 'redEDITED'."
JDK-8272558	IR Test Framework README misses some flags
JDK-8272777	Clean up remaining AccessController warnings in test library
JDK-8273216	JCMD does not work across container boundaries with Podman
JDK-8273430	Suspicious duplicate condition in java.util.regex.Grapheme#isExcludedSpacingMark
JDK-8273541	Cleaner Thread creates with normal priority instead of MAX_PRIORITY - 2
JDK-8275851	Deproblemlist open/test/jdk/javafx/swing/JComponent/6683775/bug6683775.java
JDK-8276660	Scalability bottleneck in java.security.Provider.getService()
JDK-8277042	add test for 8276036 to compiler/codecache
JDK-8279068	IGV: Update to work with JDK 16 and 17
JDK-8279164	Disable TLS_ECDH_* cipher suites
JDK-8279222	Incorrect legacyMap.get in java.security.Provider after JDK-8276660
JDK-8279337	The MToolkit is still referenced in a few places
JDK-8279641	Create manual JTReg tests for Swing accessibility
JDK-8279878	java/awt/font/JNICheck/JNICheck.sh test fails on Ubuntu 21.10

Issue ID	Summary
JDK-8280034	ProblemList jdk/jfr/api/consumer/recordingstream/TestOnEvent.java on linux-x64
JDK-8280392	java/awt/Focus/NonFocusableWindowTest/NonfocusableOwnerTest.java failed with "RuntimeException: Test failed."
JDK-8280970	Cleanup dead code in java.security.Provider
JDK-8280982	[Wayland] [XWayland] java.awt.Robot taking screenshots
JDK-8280988	[XWayland] Click on title to request focus test failures
JDK-8280990	[XWayland] XTest emulated mouse click does not bring window to front
JDK-8280993	[XWayland] Popup is not closed on click outside of area controlled by XWayland
JDK-8280994	[XWayland] Drag and Drop does not work in java → wayland app direction
JDK-8281944	JavaDoc throws java.lang.IllegalStateException: ERRONEOUS
JDK-8282354	Remove dependency of TestHttpServer, HttpTransaction, HttpCallback from open/test/jdk/ tests
JDK-8282526	Default icon is not painted properly
JDK-8283728	jdk.hotspot.agent: Wrong location for RISC64ThreadContext.java
JDK-8284316	Support accessibility ManualTestFrame.java for non SwingSet tests
JDK-8284585	PushPromiseContinuation test fails intermittently in timeout
JDK-8285497	Add system property for Java SE specification maintenance version

Issue ID	Summary
JDK-8288568	Reduce runtime of java.security microbenchmarks
JDK-8289182	NMT: MemTracker::baseline should return void
JDK-8290367	Update default value and extend the scope of com.sun.jndi.ldap.object.trustSerialData system property
JDK-8290966	G1: Record number of PLAB filled and number of direct allocations
JDK-8291760	PipelineLeaksFD.java still fails: More or fewer pipes than expected
JDK-8292044	HttpClient doesn't handle 102 or 103 properly
JDK-8292739	Invalid legacy entries may be returned by Provider.getServices() call
JDK-8292948	JEditorPane ignores font-size styles in external linked css-file
JDK-8293862	javax/swing/JFileChooser/8046391/bug8046391.java failed with 'Cannot invoke "java.awt.Image.getWidth(java.awt.image.ImageObserver)" because "retVal" is null'
JDK-8293872	Make runtime/Thread/ThreadCountLimit.java more robust
JDK-8294148	Support JSplitPane for instructions and test UI
JDK-8294691	dynamicArchive/RelativePath.java is running other test case
JDK-8294994	Update Jarsigner and Keytool i18n tests to validate i18n compliance
JDK-8295111	dpkg appears to have problems resolving symbolically linked native libraries
JDK-8296410	HttpClient throws java.io.IOException: no statuscode in response for HTTP2
JDK-8296812	sprintf is deprecated in Xcode 14

Issue ID	Summary
JDK-8297878	KEM: Implementation
JDK-8298381	Improve handling of session tickets for multiple SSLContexts
JDK-8298596	vmTestbase/nsk/sysdict/vm/stress/chain/chain008/chain008.java fails with "NoClassDefFoundError: Could not initialize class java.util.concurrent.ThreadLocalRandom"
JDK-8298809	Clean up vm/compiler/InterfaceCalls JMH
JDK-8299058	AssertionError in sun.net.httpserver.ServerImpl when connection is idle
JDK-8299254	Support dealing with standard assert macro
JDK-8299378	sprintf is deprecated in Xcode 14
JDK-8299395	Remove metaprogramming/removeCV.hpp
JDK-8299396	Remove metaprogramming/removeExtent.hpp
JDK-8299397	Remove metaprogramming/isFloatingPoint.hpp
JDK-8299398	Remove metaprogramming/isConst.hpp
JDK-8299399	Remove metaprogramming/isArray.hpp
JDK-8299402	Remove metaprogramming/isVolatile.hpp
JDK-8299479	Remove metaprogramming/decay.hpp
JDK-8299481	Remove metaprogramming/removePointer.hpp
JDK-8299482	Remove metaprogramming/isIntegral.hpp

Issue ID	Summary
JDK-8299487	Test java/net/httpclient/whitebox/SSLTubeTestDriver.java timed out
JDK-8299635	Hotspot update for deprecated sprintf in Xcode 14
JDK-8299779	Test tools/jpackage/share/jdk/jpackage/tests/MainClassTest.java timed out
JDK-8299813	java/nio/channels/DatagramChannel/Disconnect.java fails with jtreg test timeout due to lost datagram
JDK-8299971	Remove metaprogramming/conditional.hpp
JDK-8299972	Remove metaprogramming/removeReference.hpp
JDK-8300169	Build failure with clang-15
JDK-8300260	Remove metaprogramming/isSame.hpp
JDK-8300264	Remove metaprogramming/isPointer.hpp
JDK-8300265	Remove metaprogramming/isSigned.hpp
JDK-8300806	Update googletest to v1.13.0
JDK-8300910	Remove metaprogramming/integralConstant.hpp
JDK-8301132	Test update for deprecated sprintf in Xcode 14
JDK-8301200	Don't scale timeout stress with timeout factor
JDK-8301274	update for deprecated sprintf for security components
JDK-8301279	update for deprecated sprintf for management components

Issue ID	Summary
JDK-8301686	TLS 1.3 handshake fails if server_name doesn't match resuming session
JDK-8301704	Shorten the number of GCs in UnloadingTest.java to verify a class loader not being unloaded
JDK-8302495	update for deprecated sprintf for java.desktop
JDK-8302800	Augment NaN handling tests of FDLIBM methods
JDK-8303216	Prefer ArrayList to LinkedList in sun.net.httpserver.ServerImpl
JDK-8303466	C2: failed: malformed control flow. Limit type made precise with MaxL/MinL
JDK-8303527	update for deprecated sprintf for jdk.hotspot.agent
JDK-8303617	update for deprecated sprintf for jdk.jdwp.agent
JDK-8303830	update for deprecated sprintf for jdk.accessibility
JDK-8303891	Speed up Zip64SizeTest using a small ZIP64 file
JDK-8303920	Avoid calling out to python in DataDescriptorSignatureMissing test
JDK-8303942	os::write should write completely
JDK-8303965	java.net.http.HttpClient should reset the stream if response headers contain malformed header fields
JDK-8304375	jdk/jfr/api/consumer/filestream/TestOrdered.java failed with "Expected at least some events to be out of order! Reuse = false"
JDK-8304962	sun/net/www/http/KeepAliveCache/B5045306.java: java.lang.RuntimeException: Failed: Initial Keep Alive Connection is not being reused

Issue ID	Summary
JDK-8304963	HttpServer closes connection after processing HEAD after JDK-7026262
JDK-8305072	Win32ShellFolder2.compareTo is inconsistent
JDK-8305079	Remove finalize() from compiler/c2/Test719030
JDK-8305081	Remove finalize() from test/hotspot/jtreg/compiler/runtime/Test8168712
JDK-8305825	getBounds API returns wrong value resulting in multiple Regression Test Failures on Ubuntu 23.04
JDK-8305959	x86: Improve itable_stub
JDK-8306583	Add JVM crash check in CDSTestUtils.executeAndLog
JDK-8306929	Avoid CleanClassLoaderDataMetaspaces safepoints when previous versions are shared
JDK-8306946	jdk/test/lib/process/ProcessToolsStartProcessTest.java fails with "wrong number of lines in OutputAnalyzer output"
JDK-8307091	A few client tests intermittently throw ConcurrentModificationException
JDK-8307193	Several Swing jtreg tests use class.forName on L&F classes
JDK-8307352	AARCH64: Improve itable_stub
JDK-8307383	Enhance DTLS connections
JDK-8307448	Test RedefineSharedClassJFR fail due to wrong assumption
JDK-8307779	Relax the java.awt.Robot specification
JDK-8307848	update for deprecated sprintf for jdk.attach

Issue ID	Summary
JDK-8307850	update for deprecated sprintf for jdk.jdi
JDK-8308022	update for deprecated sprintf for java.base
JDK-8308144	Uncontrolled memory consumption in SSLFlowDelegate.Reader
JDK-8308184	Launching java with large number of jars in classpath with java.protocol.handler.pkgs system property set can lead to StackOverflowError
JDK-8308801	update for deprecated sprintf for libnet in java.base
JDK-8308891	TestCDSVMCrash.java needs @requires vm.cds
JDK-8309241	ClassForNameLeak fails intermittently as the class loader hasn't been unloaded
JDK-8309621	[XWayland] [Screencast] screen capture failure with sun.java2d.uiScale other than 1
JDK-8309703	AIX build fails after JDK-8280982
JDK-8309756	Occasional crashes with pipewire screen capture on Wayland
JDK-8309934	Update GitHub Actions to use JDK 17 for building jtreg
JDK-8310070	Test: javax/net/ssl/DTLS/DTLSWontNegotiateV10.java timed out
JDK-8310108	Skip ReplaceCriticalClassesForSubgraphs when EnableJVMCI is specified
JDK-8310201	Reduce verbose locale output in -XshowSettings launcher option
JDK-8310334	[XWayland] [Screencast] screen capture error message in debug

Issue ID	Summary
JDK-8310628	GcInfoBuilder.c missing JNI Exception checks
JDK-8310683	Refactor StandardCharset/standard.java to use JUnit
JDK-8311208	Improve CDS Support
JDK-8311666	Disabled tests in test/jdk/sun/java2d/marlin
JDK-8312049	runtime/logging/ClassLoadUnloadTest can be improved
JDK-8312140	jdk/jshell tests failed with JDI socket timeouts
JDK-8312229	Crash involving yield, switch and anonymous classes
JDK-8313256	Exclude failing multicast tests on AIX
JDK-8313394	Array Elements in OldObjectSample event has the incorrect description
JDK-8313674	(fc) java/nio/channels/FileChannel/BlockDeviceSize.java should test for more block devices
JDK-8313697	[XWayland] [Screencast] consequent getPixelColor calls are slow
JDK-8313873	java/nio/channels/DatagramChannel/SendReceiveMaxSize.java fails on AIX due to small default RCVBUF size and different IPv6 Header interpretation
JDK-8313901	[TESTBUG] test/hotspot/jtreg/compiler/codecache/CodeCacheFullCountTest.java fails with java.lang.VirtualMachineError
JDK-8314476	TestJstatdPortAndServer.java failed with "java.rmi.NoSuchObjectException: no such object in table"
JDK-8314614	jdk/jshell/ImportTest.java failed with "InternalError: Failed remote listen"

Issue ID	Summary
JDK-8314837	5 compiled/codecache tests ignore VM flags
JDK-8315024	Vector API FP reduction tests should not test for exact equality
JDK-8315362	NMT: summary diff reports threads count incorrectly
JDK-8315422	getSoTimeout() would be in try block in SSLSocketImpl
JDK-8315437	Enable parallelism in vmTestbase/nsk/monitoring/stress/classload tests
JDK-8315442	Enable parallelism in vmTestbase/nsk/monitoring/stress/thread tests
JDK-8315559	Delay TempSymbol cleanup to avoid symbol table churn
JDK-8315576	compiler/codecache/CodeCacheFullCountTest.java fails after JDK-8314837
JDK-8315651	Stop hiding AIX specific multicast socket errors via NetworkConfiguration (aix)
JDK-8315684	Parallelize sun/security/util/math/TestIntegerModuloP.java
JDK-8315774	Enable parallelism in vmTestbase/gc/g1/unloading tests
JDK-8315804	Open source several Swing JTabbedPane JTextArea JTextField tests
JDK-8315936	Parallelize gc/stress/TestStressG1Humongous.java test
JDK-8315965	Open source various AWT applet tests
JDK-8316104	Open source several Swing SplitPane and RadioButton related tests
JDK-8316193	jdk/jfr/event/oldobject/TestListenerLeak.java java.lang.Exception: Could not find leak

Issue ID	Summary
JDK-8316211	Open source several manual applet tests
JDK-8316240	Open source several add/remove MenuBar manual tests
JDK-8316285	Opensource JButton manual tests
JDK-8316306	Open source and convert manual Swing test
JDK-8316328	Test jdk/jfr/event/oldobject/TestSanityDefault.java times out for some heap sizes
JDK-8316387	Exclude more failing multicast tests on AIX after JDK-8315651
JDK-8316389	Open source few AWT applet tests
JDK-8316468	os::write incorrectly handles partial write
JDK-8316973	GC: Make TestDisableDefaultGC use createTestJvm
JDK-8317112	Add screenshot for Frame/DefaultSizeTest.java
JDK-8317228	GC: Make TestXXXHeapSizeFlags use createTestJvm
JDK-8317288	[macos] java/awt/Window/Grab/GrabTest.java: Press on the outside area didn't cause ungrab
JDK-8317316	G1: Make TestG1PercentageOptions use createTestJvm
JDK-8317343	GC: Make TestHeapFreeRatio use createTestJvm
JDK-8317358	G1: Make TestMaxNewSize use createTestJvm
JDK-8317360	Missing null checks in JfrCheckpointManager and JfrStringPool initialization routines

Issue ID	Summary
JDK-8317372	Refactor some NumberFormat tests to use JUnit
JDK-8317635	Improve GetClassFields test to verify correctness of field order
JDK-8317831	compiler/codecache/CheckLargePages.java fails on OL 8.8 with unexpected memory string
JDK-8318039	GHA: Bump macOS and Xcode versions
JDK-8318089	Class space not marked as such with NMT when CDS is off
JDK-8318474	Fix memory reporter for thread_count
JDK-8318479	[jmh] the test security.CacheBench failed for multiple threads run
JDK-8318605	Enable parallelism in vmTestbase/nsk/stress/stack tests
JDK-8318696	Do not use LFS64 symbols on Linux
JDK-8318986	Improve GenericWaitBarrier performance
JDK-8319103	Popups that request focus are not shown on Linux with Wayland
JDK-8319197	Exclude hb-subset and hb-style from compilation
JDK-8319406	x86: Shorter movptr(reg, imm) for 32-bit immediates
JDK-8319713	Parallel: Remove PSAadaptiveSizePolicy::should_full_GC
JDK-8320079	The ArabicBox.java test has no control buttons
JDK-8320379	C2: Sort spilling/unspilling sequence for better ld/st merging into ldp/stp on AArch64

Issue ID	Summary
JDK-8320602	Lock contention in SchemaDVFactory.getInstance()
JDK-8320608	Many jtreg printing tests are missing the @printer keyword
JDK-8320655	awt screencast robot spin and sync issues with native libpipewire api
JDK-8320692	Null icon returned for .exe without custom icon
JDK-8320945	problemlist tests failing on latest Windows 11 update
JDK-8321025	Enable Neoverse N1 optimizations for Neoverse V2
JDK-8321176	[Screencast] make a second attempt on screencast failure
JDK-8321220	JFR: RecordedClass reports incorrect modifiers
JDK-8322008	Exclude some CDS tests from running with -Xshare:off
JDK-8322330	JavadocHelperTest.java OOMs with Parallel GC and ZGC
JDK-8322726	C2: Unloaded signature class kills argument value
JDK-8322971	KEM.getInstance() should check if a 3rd-party security provider is signed
JDK-8323122	AArch64: Increase itable stub size estimate
JDK-8323584	AArch64: Unnecessary ResourceMark in NativeCall::set_destination_mt_safe
JDK-8323670	A few client tests intermittently throw ConcurrentModificationException
JDK-8323801	<s> tag doesn't strikethrough the text

Issue ID	Summary
JDK-8324577	[REDO] - [IMPROVE] OPEN_MAX is no longer the max limit on macOS >= 10.6 for RLIMIT_NOFILE
JDK-8324646	Avoid Class.forName in SecureRandom constructor
JDK-8324648	Avoid NoSuchMethodError when instantiating NativePRNG
JDK-8324668	JDWP process management needs more efficient file descriptor handling
JDK-8324753	[AIX] adjust os_posix after JDK-8318696
JDK-8324755	Enable parallelism in vmTestbase/gc/gctests/LargeObjects tests
JDK-8324933	ConcurrentHashMap::statistics_calculate synchronization is expensive
JDK-8325022	Incorrect error message on client authentication
JDK-8325179	Race in BasicDirectoryModel.validateFileCache
JDK-8325194	GHA: Add macOS M1 testing
JDK-8325384	sun/security/ssl/SSLSessionImpl/ResumptionUpdateBoundValues.java failing intermittently when main thread is a virtual thread
JDK-8325444	GHA: JDK-8325194 causes a regression
JDK-8325567	jspawnhelper without args fails with segfault
JDK-8325620	HTMLReader uses ConvertAction instead of specified CharacterAction for <b>, <i>, <u>
JDK-8325621	Improve jspawnhelper version checks

Issue ID	Summary
JDK-8325754	Dead AbstractQueuedSynchronizer\$ConditionNodes survive minor garbage collections
JDK-8326106	Write and clear stack trace table outside of safepoint
JDK-8326332	Unclosed inline tags cause misalignment in summary tables
JDK-8326446	The User and System of jdk.CPULoad on Apple M1 are inaccurate
JDK-8326734	text-decoration applied to <span> lost when mixed with <u> or <s>
JDK-8327007	javax/swing/JSpinner/8008657/bug8008657.java fails
JDK-8327137	Add test for ConcurrentModificationException in BasicDirectoryModel
JDK-8327312	[17u] Problem list ReflectionCallerCacheTest.java due to 8324978
JDK-8327424	ProblemList serviceability/sa/TestJmapCore.java on all platforms with ZGC
JDK-8327650	Test java/nio/channels/DatagramChannel/StressNativeSignal.java timed out
JDK-8327787	Convert javax/swing/border/Test4129681.java applet test to main
JDK-8327840	Automate javax/swing/border/Test4129681.java
JDK-8328011	Convert java/awt/Frame/GetBoundsResizeTest/GetBoundsResizeTest.java applet test to main
JDK-8328075	Shenandoah: Avoid forwarding when objects don't move in full-GC
JDK-8328110	Allow simultaneous use of PassFailJFrame with split UI and additional windows
JDK-8328115	Convert java/awt/font/TextLayout/TestJustification.html applet test to main

Issue ID	Summary
JDK-8328158	Convert java/awt/Choice/NonFocusablePopupMenuTest to automatic main test
JDK-8328218	Delete test java/awt/Window/FindOwner/FindOwner.html
JDK-8328234	Remove unused nativeUtils files
JDK-8328238	Convert few closed manual applet tests to main
JDK-8328269	NonFocusablePopupMenuTest.java should be marked as headful
JDK-8328273	sun/management/jmxremote/bootstrap/RmiRegistrySslTest.java failed with java.rmi.server.ExportException: Port already in use
JDK-8328286	Enhance HTTP client
JDK-8328544	Improve handling of vectorization
JDK-8328560	java/awt/event/MouseEvent/ClickDuringKeypress/ClickDuringKeypress.java imports Applet
JDK-8328561	test java/awt/Robot/ManualInstructions/ManualInstructions.java isn't used
JDK-8328642	Convert applet test MouseDraggedOutCauseScrollingTest.html to main
JDK-8328647	TestGarbageCollectorMXBean.java fails with C1-only and -Xcomp
JDK-8328726	Better Kerberos support
JDK-8328896	Fontmetrics for large Fonts has zero width
JDK-8328953	JEditorPane.read throws ChangedCharSetException
JDK-8328999	Update GIFlib to 5.2.2

Issue ID	Summary
JDK-8329004	Update Libpng to 1.6.43
JDK-8329103	assert(!thread→in_asgct()) failed during multi-mode profiling
JDK-8329109	Threads::print_on() tries to print CPU time for terminated GC threads
JDK-8329126	No native wrappers generated anymore with -XX:-TieredCompilation after JDK-8251462
JDK-8329134	Reconsider TLAB zapping
JDK-8329510	Update ProblemList for JFileChooser/8194044/FileSystemRootTest.java
JDK-8329559	Test javax/swing/JFrame/bug4419914.java failed because The End and Start buttons are not placed correctly and Tab focus does not move as expected
JDK-8329605	hs_errfile generic events - move memory protections and nmethod flushes to separate sections
JDK-8329663	hs_err file event log entry for thread adding/removing should print current thread
JDK-8329667	[macos] Issue with JTree related fix for JDK-8317771
JDK-8329995	Restricted access to /proc can cause JFR initialization to crash
JDK-8330063	Upgrade jQuery to 3.7.1
JDK-8330524	Linux ppc64le compile warning with clang in os_linux_ppc.cpp
JDK-8330611	AES-CTR vector intrinsic may read out of bounds (x86_64, AVX-512)
JDK-8330615	avoid signed integer overflows in zip_util.c readCen / hashN

Issue ID	Summary
JDK-8331011	[XWayland] TokenStorage fails under Security Manager
JDK-8331063	Some HttpClient tests don't report leaks
JDK-8331077	nroff man page update for jar tool
JDK-8331164	createJMHBundle.sh download jars fail when url needed to be redirected
JDK-8331265	Bump update version for OpenJDK: jdk-17.0.13
JDK-8331331	:tier1 target explanation in doc/testing.md is incorrect
JDK-8331446	Improve deserialization support
JDK-8331466	Problemlist serviceability/dcmd/gc/RunFinalizationTest.java on generic-all
JDK-8331605	jdk/test/lib/TestMutuallyExclusivePlatformPredicates.java test failure
JDK-8331746	Create a test to verify that the cmm id is not ignored
JDK-8331798	Remove unused arg of checkErgonomics() in TestMaxHeapSizeTools.java
JDK-8331885	C2: meet between unloaded and speculative types is not symmetric
JDK-8332008	Enable issuestitle check
JDK-8332113	Update nsk.share.Log to be always verbose
JDK-8332174	Remove 2 (unpaired) RLO Unicode characters in ff_AdIm.xml
JDK-8332248	(fc) java/nio/channels/FileChannel/BlockDeviceSize.java failed with RuntimeException

Issue ID	Summary
JDK-8332424	Update IANA Language Subtag Registry to Version 2024-05-16
JDK-8332524	Instead of printing "TLSv1.3," it is showing "TLS13"
JDK-8332643	Better Location requests
JDK-8332644	Improve graph optimizations
JDK-8332898	failure_handler: log directory of commands
JDK-8332936	Test vmTestbase/metaspace/gc/watermark_70_80/TestDescription.java fails with no GC's recorded
JDK-8333270	HandlersOnComplexResetUpdate and HandlersOnComplexUpdate tests fail with "Unexpected reference" if timeoutFactor is less than 1/3
JDK-8333353	Delete extra empty line in CodeBlob.java
JDK-8333398	Uncomment the commented test in test/jdk/java/util/jar/JarFile/mrjar/MultiReleaseJarAPI.java
JDK-8333477	Delete extra empty spaces in Makefiles
JDK-8333698	[17u] TestJstatdRmiPort fails after JDK-8333667
JDK-8333716	Shenandoah: Check for disarmed method before taking the nmethod lock
JDK-8333724	Problem list security/infra/java/security/cert/CertPathValidator/certification/CAInterop.java #teliasonerarootcav1
JDK-8333804	java/net/httpclient/ForbiddenHeadTest.java threw an exception with 0 failures
JDK-8334166	Enable binary check

Issue ID	Summary
JDK-8334297	(so) java/nio/channels/SocketChannel/OpenLeak.java should not depend on SecurityManager
JDK-8334332	TestIOException.java fails if run by root
JDK-8334333	MissingResourceCauseTestRun.java fails if run by root
JDK-8334335	[TESTBUG] Backport of 8279164 to 11u & 17u includes elements of JDK-8163327
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-8334482	Shenandoah: Deadlock when safepoint is pending during nmethods iteration
JDK-8334600	TEST java/net/MulticastSocket/IPMulticastIF.java fails on linux-aarch64
JDK-8334653	ISO 4217 Amendment 177 Update
JDK-8334769	Shenandoah: Move CodeCache_lock close to its use in ShenandoahConcurrentNMethodIterator
JDK-8335536	Fix assertion failure in IdealGraphPrinter when append is true
JDK-8335713	Enhance vectorization analysis
JDK-8335775	Remove extraneous 's' in comment of rawmonitor.cpp test file
JDK-8335808	update for deprecated sprintf for jfrTypeSetUtils
JDK-8335918	update for deprecated sprintf for jvmti

Issue ID	Summary
JDK-8335967	"text-decoration: none" does not work with "A" HTML tags
JDK-8336301	test/jdk/java/nio/channels/AsyncCloseAndInterrupt.java leaves around a FIFO file upon test completion
JDK-8336928	GHA: Bundle artifacts removal broken
JDK-8337038	Test java/nio/file/attribute/BasicFileAttributeView/CreationTime.java should set as /native
JDK-8337283	configure.log is truncated when build dir is on different filesystem
JDK-8337664	Distrust TLS server certificates issued after Oct 2024 and anchored by Entrust Root CAs
JDK-8337669	[17u] Backport of JDK-8284047 missed to delete a file
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-8339869	[21u] Test CreationTime.java fails with UnsatisfiedLinkError after 8334339
JDK-8341057	Add 2 SSL.com TLS roots
JDK-8341059	Change Entrust TLS distrust date to November 12, 2024
JDK-8341673	[17u] Remove designator DEFAULT_PROMOTED_VERSION_PRE=ea for release 17.0.13

## JFX issues

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

Issue ID	Summary
JDK-8236689	macOS 10.15 Catalina: LCD text renders badly
JDK-8282359	Intermittent WebKit build failure on Windows: C1090: PDB API call failed, error code 23
JDK-8315870	icu fails to compile with Visual Studio 2022 17.6.5
JDK-8318984	Update to Xcode 14.3.1 on macOS
JDK-8319762	Update to Visual Studio 2022 version 17.6.5 on Windows
JDK-8319996	Update to GCC 13.2.0 on Linux
JDK-8328994	Update WebKit to 619.1
JDK-8329011	Update SQLite to 3.45.3
JDK-8331765	Websocket callbacks are not executed after WebKit 617.1 update
JDK-8334656	Enable issuestitle check
JDK-8334657	Enable binary check
JDK-8334713	WebKit build failed on LoongArch64 because currentStackPointer is undefined
JDK-8335548	testCookieEnabled fails with WebKit 619.1
JDK-8336730	Change JavaFX release version to 17.0.13 in jfx17u

# 6. Updates to Third Party Libraries

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

Library	Full name	New Version	Module	JBS
GIFlib	GIFlib	5.2.2	java.desktop	JDK-8328999
jQuery	jQuery	3.7.1	jdk.javadoc	JDK-8330063
Libpng	Libpng	1.6.43	java.desktop	JDK-8329004

# 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](#).



Liberica JDK 17.0.13+12  
Release Notes

**be//soft**