

Liberica JDK 21.0.9+11

Release Notes



Liberica JDK
21.0.9
October 21, 2025

be//soft

Copyright © BellSoft Corporation 2018-2025.

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. Version information	5
------------------------	---

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

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

Builds of Liberica JDK With CRaC	9
----------------------------------	---

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

Future Timestamps:	10
--------------------	----

Past Timestamps:	10
------------------	----

Code Fixes:	10
-------------	----

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

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

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

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

JFX issues	38
------------	----

6. Updates to Third Party Libraries	40
-------------------------------------	----

7. Upgrading to the New Version	41
---------------------------------	----

1. Version information

This document provides information about Liberica JDK 21.0.9 release.

The full version string for this update release is 21.0.9+11. The version number is 21.

Liberica JDK 21 is distributed as `.apk`, `.rpm`, `.zip`, `.deb`, `.pkg`, 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-7036144	Summary: GZIPInputStream Will No Longer Use <code>InputStream.available()</code> to Check for the Presence of Concatenated GZIP Stream Description: The <code>GZipInputStream</code> read methods have been modified to remove the usage of <code>InputStream::available()</code> when determining if the stream contains a concatenated GZIP stream. These methods will now read any additional data in the underlying <code>InputStream</code> and check for the presence of a GZIP stream header.
JDK-8313083	Summary: Print 'rss' and 'cache' as part of the container information Description: The HotSpot runtime code has been updated to additionally print container's 'rss' and 'cache'. The additional output is to be found in JVM response to <code>jcmd [PID] VM.info</code> request, and in <code>hs_err</code> file generated in case of JVM abrupt termination. This will help monitoring and troubleshooting <code>OutOfMemory</code> situations as OOM killer can terminate a process if its <code>rss+cache</code> usage reaches the max memory limit of the container.

Issue ID	
JDK-8313367	Summary: SunMSCAPI Provider Opens the Windows Local Computer Key Store in Read-Only Mode in Non-Elevated Processes Description: The Local Computer key store is accessed using the <code>CERT_STORE_MAXIMUM_ALLOWED_FLAG</code>. Since this store is typically managed by administrators for security reasons, processes are only given read-only access to specific private keys. By opening the store in read-only mode, non-elevated processes can now securely use these keys without requiring elevated permissions.
JDK-8319174	Summary: Enhance robustness of some <code>j.m.BigInteger</code> constructors Description: The <code>@throws NumberFormatException</code> clause of constructor <code>BigInteger(byte[], int, int)</code> was extended to throw the same exception when <code>len</code> is zero.
JDK-8337506	Summary: Disable 'best-fit' Mapping on Windows Command Line Description: Command line arguments to the Java launcher are no longer converted with Windows 'best-fit' mapping when the arguments include unmappable characters for the ANSI code page. This mapping has been intervening in the Java launcher's argument parsing. Unmappable characters are now replaced with the default replacement character, such as '?' in some cases. For rare cases, where applications need those unmappable characters on the command line, select UTF-8 in Windows Regional Settings.
JDK-8341964	Summary: Mechanism to Disable TLS Cipher Suites by Pattern Matching Description: TLS cipher suites can be disabled with the <code>jdk.tls.disabledAlgorithms</code> security property in the <code>java.security</code> configuration file using one or more wildcard characters. For example, <code>"TLS_RSA_"</code> disables all cipher suites that start with <code>"TLS_RSA_"</code>. Only cipher suites starting with <code>"TLS_"</code> are allowed to have wildcard characters.

Issue ID

JDK-8344137

Summary: Updated XML Security for Java to 3.0.5

Description: The XML Signature implementation has been updated to Santuario 3.0.5. Support for four new SHA-3 based ECDSA SignatureMethod algorithms have been added:

SignatureMethod.ECDSA_SHA3_224,
SignatureMethod.ECDSA_SHA3_256,
SignatureMethod.ECDSA_SHA3_384, and
SignatureMethod.ECDSA_SHA3_512.

JDK-8349583

Summary: Mechanism to Disable Signature Schemes Based on Their TLS Scope

Description: TLS protocol specific usage constraints are now supported by the `jdk.tls.disabledAlgorithms` property in the `java.security` configuration file. Note that `HandshakeSignature` restricts the use of an algorithm in TLS handshake signatures. `CertificateSignature` restricts the use of an algorithm in certificate signatures. An algorithm with this constraint cannot include other usage types defined in the `jdk.certpath.disabledAlgorithms` property. The usage type follows the keyword and more than one usage type can be specified with a whitespace delimiter.

JDK-8350582

Summary: Correct the parsing of the `ssl` value in `javax.net.debug`

Description: The logging behavior of the TLS `javax.net.debug` system property has been improved in this release. The `javax.net.debug` property is used to generate TLS debug logs from the default JSSE provider. Previously, using the `ssl` option via `-Djavax.net.debug=ssl` produced very limited output, which reduced its usefulness for troubleshooting. With this update, setting `-Djavax.net.debug=ssl` now enables comprehensive SSL debug logging, except for the `data`, `packet`, and `plaintext` sub-options. Applications using this option will now see significantly more detailed debug information in logs.

Issue ID

JDK-8358701

Summary: Remove misleading javax.management.remote API doc wording about JMX spec, and historic link to JMXMP

Description: In the javax.management.remote docs there are references to the historical JMX Remote 1.4 specification, which may imply that parts of that spec are what we implement and support in the JDK. The phrase "specification of this functionality is completed by Part III of the JMX Specification, version 1.4" is misleading, and was removed, to avoid implying that our implementation is extended by the historical spec. Mentioning the historic JMXMP Connector and Generic Connector, and having links to the very old JMX Remote reference implementation in the Javadoc, might misleadingly imply these are a supported part of the JDK, therefore these were also removed.

JDK-8361212

Summary: Removed Four AffirmTrust Root Certificates

Description: The following root certificates, which are deactivated and no longer in use, have been removed from the cacerts keystore: + alias name "affirmtrustcommercialca [jdk]"

Distinguished Name: CN=AffirmTrust Commercial, O=AffirmTrust, C=US; + alias name "affirmtrustnetworkingca [jdk]" Distinguished Name: CN=AffirmTrust Networking, O=AffirmTrust, C=US; + alias name "affirmtrustpremiumca [jdk]" Distinguished Name: CN=AffirmTrust Premium, O=AffirmTrust, C=US; + alias name "affirmtrustpremiumeccca [jdk]" Distinguished Name: CN=AffirmTrust Premium ECC, O=AffirmTrust, C=US

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 21.0.9 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-2025-31257	7.5	javafx	web	network	high	none	required	unchanged	high	high	high
CVE-2025-53057	5.9	security-libs	java.security	network	high	none	none	unchanged	none	high	none
CVE-2025-53066	4.8	xml	jaxp	network	high	none	none	unchanged	low	none	low
CVE-2025-61748	3.7	core-libc		network	high	none	none	unchanged	none	low	none

5. Resolved Issues

JDK issues

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

Issue ID	Summary
JDK-7036144	GZIPInputStream readTrailer uses faulty available() test for end-of-stream
JDK-8079786	[macosx] Test java/awt/Frame/DisposeParentGC/DisposeParentGC.java fails for Mac only
JDK-8167252	Some of Charset.availableCharsets() does not contain itself
JDK-8185429	[macos] After a modal dialog is closed, no window becomes active
JDK-8203867	Delete test java/awt/TrayIcon/DbClickActionEventTest/DbClickActionEventTest.html
JDK-8217914	java/net/httpclient/ConnectTimeoutHandshake Sync.java failed on connection refused while doing POST
JDK-8226919	attach in linux hangs due to permission denied accessing /proc/pid/root

Issue ID	Summary
JDK-8249825	Tests sun/security/ssl/SSLSocketImpl/SetClientMode.java and NonAutoClose.java marked with @ignore
JDK-8259540	MissingResourceException for key cvc-complex-type.2.4.d.1
JDK-8261242	[Linux] OSContainer::is_containerized() returns true when run outside a container
JDK-8279005	sun/tools/jstat tests do not check for test case exit codes after JDK-8245129
JDK-8280818	Expand bug8033699.java to iterate over all LaFs
JDK-8293713	java/net/httpclient/BufferingSubscriberTest.java fails in timeout, blocked in submission publisher
JDK-8302293	jar --create fails with IllegalArgumentException if archive name is shorter than 3 characters
JDK-8302744	Refactor Hotspot container detection code
JDK-8304674	File java.c compile error with -fsanitize=address -O0
JDK-8308633	Increase precision of timestamps in g1 log
JDK-8309238	jdk/jfr/tool/TestView.java failed with "exitValue = 134"
JDK-8309627	Incorrect sorting of DirtyCardQueue buffers

Issue ID	Summary
JDK-8309899	Rename PtrQueueSet::buffer_size()
JDK-8310264	In PhaseChaitin::Split defs and phis are leaked
JDK-8310974	NMT: Arena diffs miss the scale
JDK-8311644	Server should not send bad_certificate alert when the client does not send any certificates
JDK-8313083	Print 'rss' and 'cache' as part of the container information
JDK-8313355	javax/management/remote/mandatory/notif/ListenerScaleTest.java failed with "Exception: Failed: ratio=792.2791601423487"
JDK-8313367	SunMSCAPI cannot read Local Computer certs w/o Windows elevation
JDK-8314166	Update googletest to v1.14.0
JDK-8314611	Provide more explicative error message parsing Currencies
JDK-8314978	Multiple server call from connection failing with expect100 in getOutputStream
JDK-8319067	ProblemList serviceability/AsyncGetCallTrace/MyPackage/ASGCTBaseTest.java on linux-aarch64 in Xcomp mode
JDK-8319174	Enhance robustness of some j.m.BigInteger constructors

Issue ID	Summary
JDK-8319598	SMFParser misinterprets interrupted running status
JDK-8319932	[JVMCI] class unloading related tests can fail on libgraal
JDK-8320189	vmTestbase/nsk/jvmti/scenarios/bcinstr/BI02/bi02t001 memory corruption when using -Xcheckjni
JDK-8320769	Remove ill-advised "make install" target
JDK-8320858	Move jpackage tests to tier3
JDK-8320859	gtest high malloc footprint caused by BufferNodeAllocator stress test
JDK-8322420	[Linux] cgroup v2: Limits in parent nested control groups are not detected
JDK-8322992	Javac fails with StackOverflowError when compiling deeply nested synchronized blocks
JDK-8325397	sun/java2d/Disposer/TestDisposerRace.java fails in linux-aarch64
JDK-8326606	Test javax/swing/text/BoxView/6494356/bug6494356.java performs a synchronization on a value based class
JDK-8326705	Test CertMsgCheck.java fails to find alert certificate_required
JDK-8327125	SpinYield.report should report microseconds

Issue ID	Summary
JDK-8327748	Convert javax/swing/JFileChooser/6798062/bug6798062.java applet test to main
JDK-8327750	Convert javax/swing/JFileChooser/FileFilterDescription/FileFilterDescription.java applet test to main
JDK-8327751	Convert javax/swing/JInternalFrame/6726866/bug6726866.java applet test to main
JDK-8327752	Convert javax/swing/JOptionPane/4174551/bug4174551.java applet to main
JDK-8327753	Convert javax/swing/JOptionPane/8024926/bug8024926.java applet to main
JDK-8327754	Convert javax/swing/JPopupMenu/7160604/bug7160604.java applet to main
JDK-8327755	Convert javax/swing/JScrollBar/8039464/Test8039464.java applet to main
JDK-8327756	Convert javax/swing/JSlider/4987336/bug4987336.java applet to main
JDK-8327826	Convert javax/swing/border/Test4243289.java applet test to main

Issue ID	Summary
JDK-8327835	Convert java/awt/FileDialog/RegexpFilterTest/RegexpFilterTest applet test to main
JDK-8327838	Convert java/awt/FileDialog/MultipleMode/MultipleMode.html applet test to main
JDK-8327872	Convert javax/swing/JToolTip/46444444/bug46444444.java applet test to main
JDK-8327873	Convert javax/swing/border/Test4247606.java applet test to main
JDK-8327874	Convert javax/swing/JTree/4314199/bug4314199.java applet test to main
JDK-8327876	Convert javax/swing/border/Test4252164.java applet test to main
JDK-8327879	Convert javax/swing/border/Test4760089.java applet test to main
JDK-8327969	Convert javax/swing/border/Test6910490.java applet test to main
JDK-8327972	Convert java/awt/FileDialog/SaveFileNameOverrideTest/SaveFileNameOverrideTest.html applet test to main
JDK-8328000	Convert /java/awt/im/8154816/bug8154816.java applet test to main

Issue ID	Summary
JDK-8328012	Convert InputMethod (/java/awt/im) applet tests to main
JDK-8328030	Convert javax/swing/text/GlyphView/4984669/bug4984669.java applet test to main
JDK-8328035	Convert javax/swing/text/html/TableView/7030332/bug7030332.java applet test to main
JDK-8328087	Automate javax/swing/JTable/TAB/TAB.java applet test
JDK-8328089	Automate javax/swing/JTable/4222153/bug4222153.java applet test
JDK-8328154	Convert sun/java2d/loops/CopyAreaSpeed.java applet test to main
JDK-8328190	Convert AWTPanelSmoothWheel.html applet test to main
JDK-8328225	Convert ImageDecoratedDnD.html applet test to main
JDK-8328244	Convert javax/swing/JSlider/6742358/bug6742358.java applet test to main
JDK-8328248	Convert javax/swing/JSlider/6587742/bug6587742.java applet test to main

Issue ID	Summary
JDK-8328262	Convert javax/swing/JSplitPane/8132123/bug8132123.j ava applet test to main
JDK-8328279	Convert java/awt/Cursor/CursorOverlappedPanelsTest test to main
JDK-8328328	Convert javax/swing/JTabbedPane/4666224/bug46662 24.java applet test to main
JDK-8328367	Convert java/awt/Component/UpdatingBootTime test to main
JDK-8328378	Convert java/awt/FileDialog/FileDialogForDirectories test to main
JDK-8328382	Convert java/awt/FileDialog/FileDialogForPackages test to main
JDK-8328384	Convert java/awt/FileDialog/FileDialogOpenDirTest test to main
JDK-8328385	Convert java/awt/FileDialog/FileDialogReturnTest test to main
JDK-8328386	Convert java/awt/FileDialog/FileNameOverrideTest test to main

Issue ID	Summary
JDK-8328398	Convert java/awt/im/4490692/bug4490692.html applet test to main
JDK-8328401	Convert java/awt/Frame/InitialMaximizedTest/InitialMa ximizedTest.html applet test to automated
JDK-8328570	Convert closed JViewport manual applet tests to main
JDK-8328631	Convert java/awt/InputMethods/InputMethodsTest/Inpu tMethodsTest.java applet test to manual
JDK-8330022	Failure test/hotspot/jtreg/vmTestbase/nsk/sysdict/shar e/BTreeTest.java: Could not initialize class java.util.concurrent.ThreadLocalRandom
JDK-8330535	Update nsk/jdb tests to use driver instead of othervm
JDK-8331389	runtime/ErrorHandling/TestDwarf.java fails with "Crash JVM should not exit gracefully"
JDK-8331560	Refactor Hotspot container detection code so that subsystem delegates to controllers
JDK-8332020	jwebserver tool prints invalid URL in case of IPv6 address binding
JDK-8332271	Reading data from the clipboard from multiple threads crashes the JVM

Issue ID	Summary
JDK-8332368	ubsan aarch64: immediate_aarch64.cpp:298:31: runtime error: shift exponent 32 is too large for 32-bit type 'int'
JDK-8332551	Test vmTestbase/nsk/monitoring/MemoryNotificatio nInfo/from/from001/TestDescription.java timed out
JDK-8332857	Test vmTestbase/nsk/jvmti/GetThreadCpuTime/thrc putime002/TestDescription.java failed
JDK-8333326	Linux Alpine build fails after 8302744
JDK-8333446	Add tests for hierarchical container support
JDK-8334010	VM crashes with ObjectAlignmentInBytes > GCCardSizeInBytes
JDK-8334016	Make PrintNullString.java automatic
JDK-8334320	Replace vmTestbase/metaspaceshare/TriggerUnloadin gWithWhiteBox.java with ClassUnloadCommon from testlibrary
JDK-8334394	Race condition in Class::protectionDomain
JDK-8334457	Test javax/swing/JTabbedPane/bug4666224.java fail on macOS with because pressing the â€˜Câ€™ key does not switch the layout to WRAP_TAB_LAYOUT

Issue ID	Summary
JDK-8335131	Test "javax/swing/JColorChooser/Test6977726.java" failed on ubuntu x64 because "Preview" title is missing for GTK L&F
JDK-8335252	Reduce size of j.u.Formatter.Conversion#isValid
JDK-8335577	runtime/cds/appcds/TestParallelGCWithCDS.java still fails with JNI error
JDK-8335882	platform/cgroup/TestSystemSettings.java fails on Alpine Linux
JDK-8336635	Add IR test for Reference.refersTo intrinsic
JDK-8336702	C2 compilation fails with "all memory state should have been processed" assert
JDK-8337506	Disable "best-fit" mapping on Windows command line
JDK-8338236	Compile error in cgroup code on Linux when using clang
JDK-8338482	com/sun/jdi/ThreadMemoryLeakTest.java requires that compressed oops are enabled
JDK-8338939	Simplify processing of hidden class names
JDK-8339460	CDS error when module is located in a directory with space in the name
JDK-8339561	The test/jdk/java/awt/Paint/ListRepaint.java may fail after JDK-8327401

Issue ID	Summary
JDK-8339962	Open source AWT TextField tests - Set1
JDK-8340092	[Linux] containers/systemd/SystemdMemoryAwarenessTest.java failing on some systems
JDK-8340185	Use make -k on GHA to catch more build errors
JDK-8340276	Test java/lang/management/ThreadMXBean/Locks.java failed with NullPointerException
JDK-8340389	vmTestbase/gc/gctests/PhantomReference/phantom001/TestDescription.java Test exit code: 97 with -Xcomp UseAVX=3
JDK-8340547	Starting many threads can delay safepoints
JDK-8340554	Improve MessageFormat readObject checks
JDK-8341178	TypeRawPtr::add_offset may be "miscompiled" due to UB
JDK-8341311	[Accessibility,macOS,VoiceOver] VoiceOver announces incorrect number of items in submenu of JPopupMenu
JDK-8341370	Test java/awt/Frame/ShapeNotSetSometimes/ShapeNotSetSometimes.java fails intermittently on macOS-aarch64
JDK-8341644	Compile error in cgroup coding when using toolchain clang

Issue ID	Summary
JDK-8341684	Typo in External Specifications link of <code>java.util.Currency</code>
JDK-8341861	GHA: Use only retention mechanism to remove bundles
JDK-8341964	Add mechanism to disable different parts of TLS cipher suite
JDK-8342074	Fix <code>runtime/Thread/TestAlwaysPreTouchStacks.java</code> to be flagless or accept VM flags
JDK-8342238	Test <code>javax/crypto/CryptoPermissions/InconsistentEntries.java</code> writes files in tested JDK dir
JDK-8342330	C2: "node pinned on loop exit test?" assert failure
JDK-8342782	<code>AWTEventMulticaster</code> throws <code>StackOverflowError</code> using <code>AquaButtonUI</code>
JDK-8343074	<code>test/jdk/com/sun/net/httpserver/docs/test1/largefile.txt</code> could be generated
JDK-8343452	Incorrect WINDOWS build variable is used in <code>macroAssembler_x86.cpp</code>
JDK-8343607	C2: Shenandoah crashes during barrier expansion in <code>Continuation::enter</code>
JDK-8343618	Stack smashing in <code>awt_InputMethod.c</code> on Linux s390x

Issue ID	Summary
JDK-8343804	Show the default time zone with -XshowSettings option
JDK-8343977	Convert java/awt/TextArea/TextAreaCursorTest/HoveringAndDraggingTest to main
JDK-8344137	Update XML Security for Java to 3.0.5
JDK-8344338	javax/swing/JTextArea/bug4265784.java fails on Ubuntu 24.04.1
JDK-8344671	Few JFR streaming tests fail with application not alive error on MacOS 15
JDK-8345173	BlockLocationPrinter::print_location misses a ResourceMark
JDK-8345337	JFR: jfr view should display all direct subfields for an event type
JDK-8345471	Clean up compiler/intrinsics/sha/cli tests
JDK-8345566	Deproblemlist test/jdk/javax/swing/JComboBox/6559152/bug 6559152.java
JDK-8345767	javax/swing/JSplitPane/4164779/JSplitPaneKeyboardNavigationTest.java fails in ubuntu22.04
JDK-8346255	java/lang/management/ThreadMXBean/VirtualThreadDeadlocks.java finds no deadlock

Issue ID	Summary
JDK-8346285	Update jarsigner compatibility test for change in default digest algorithm
JDK-8346751	Internal java compiler error with type annotations in constants expression in constant fields
JDK-8346871	Improve robustness of java/util/zip/EntryCount64k.java test
JDK-8346929	runtime/ClassUnload/DictionaryDependsTest.java fails with "Test failed: should be unloaded"
JDK-8346998	Test nsk/jvmti/ResourceExhausted/resexhausted003 fails with java.lang.OutOfMemoryError when CDS is off
JDK-8347004	vmTestbase/metaspace/shrink_grow/ShrinkGrowTest/ShrinkGrowTest.java fails with CDS disabled
JDK-8347299	Add annotations to test cases in LicenseTest
JDK-8347302	Mark test tools/jimage/JImageToolTest.java as flagless
JDK-8347381	Upgrade jQuery UI to version 1.14.1
JDK-8347564	ZGC: Crash in DependencyContext::clean_unloading_dependencies
JDK-8347826	Introspector shows wrong method list after 8071693

Issue ID	Summary
JDK-8347840	Fix testlibrary compilation warnings
JDK-8348135	Fix couple of problem listing entries in test/hotspot/jtreg/ProblemList-Virtual.txt
JDK-8348328	Update IANA Language Subtag Registry to Version 2025-05-15
JDK-8348365	Bad format string in CLDRDisplayNamesTest
JDK-8348760	RadioButton is not shown if JRadioButtonMenuItem is rendered with ImageIcon in WindowsLookAndFeel
JDK-8349151	Refactor test/java/security/cert/CertificateFactory/slowstream.sh to java test
JDK-8349214	Improve size optimization flags for MSVC builds
JDK-8349378	Build splashscreen lib with SIZE optimization
JDK-8349583	Add mechanism to disable signature schemes based on their TLS scope
JDK-8349849	PKCS11 SunTlsKeyMaterial crashes when used with TLS1.2 TlsKeyMaterialParameterSpec
JDK-8350106	[PPC] Avoid ticks_unknown_not_Java AsyncGetCallTrace() if JavaFrameAnchor::_last_Java_pc not set
JDK-8350111	[PPC] AsyncGetCallTrace crashes when called while handling SIGTRAP

Issue ID	Summary
JDK-8350456	Test javax/crypto/CryptoPermissions/InconsistentEntries.java crashed: EXCEPTION_ACCESS_VIOLATION
JDK-8350582	Correct the parsing of the ssl value in javax.net.debug
JDK-8350665	SIZE_FORMAT_HEX macro undefined in gtest
JDK-8350767	Fix -Wzero-as-null-pointer-constant warnings in nsjvni stress tests
JDK-8350807	Certificates using MD5 algorithm that are disabled by default are incorrectly allowed in TLSv1.3 when re-enabled
JDK-8350830	Values converted incorrectly when reading TLS session tickets
JDK-8350858	[IR Framework] Some tests failed on Cascade Lake
JDK-8350964	Add an ArtifactResolver.fetch(clazz) method
JDK-8351277	Remove pipewire from AIX build
JDK-8351487	[ubsan] jvmti.h runtime error: load of value which is not a valid value
JDK-8351491	Add info from release file to hserr file
JDK-8351593	[JMH] test PhoneCode.Bulk reports NPE exception

Issue ID	Summary
JDK-8351601	[JMH] test UnixSocketChannelReadWrite failed for 2 threads config
JDK-8351884	Refactor bug8033699.java test code
JDK-8351907	[XWayland] [OL10] Robot.mousePress() is delivered to wrong place
JDK-8351997	AArch64: Interpreter volatile reference stores with G1 are not sequentially consistent
JDK-8352509	Update jdk.test.lib.SecurityTools jar method to accept List<String> parameter
JDK-8352624	Add missing {@code} to PassFailJFrame.Builder.splitUI
JDK-8352637	Enhance bytecode verification
JDK-8352677	Opensource JMenu tests - series2
JDK-8352719	Add an equals sign to the modules statement
JDK-8352765	G1CollectedHeap::expand_and_allocate() may fail to allocate even after heap expansion succeeds
JDK-8352800	[PPC] OpenJDK fails to build on PPC after JDK-8350106
JDK-8352860	Open source events tests batch0
JDK-8352879	TestPeriod.java and TestGetContentType.java run wrong test class

Issue ID	Summary
JDK-8352895	UserCookie.java runs wrong test class
JDK-8352896	LambdaExpr02.java runs wrong test class
JDK-8352946	SEGV_BND signal code of SIGSEGV missing from our signal-code table
JDK-8353000	Open source several swing tests batch2
JDK-8353126	Open source events tests batch1
JDK-8353213	Open source several swing tests batch3
JDK-8353235	Test jdk/jfr/api/metadata/annotations/TestPeriod.java fails with IllegalArgumentException
JDK-8353293	Open source several swing tests batch4
JDK-8353304	Open source two JTabbedPane tests
JDK-8353489	Increase timeout and improve Windows compatibility in test/jdk/java/lang/ProcessBuilder/Basic.java
JDK-8353549	Open source events tests batch2
JDK-8353568	SEGV_BNDERR signal code adjust definition
JDK-8353655	Clean up and open source KeyEvent related tests (Part 1)
JDK-8353662	Add test for non-local file URL fallback to FTP

Issue ID	Summary
JDK-8353698	Output of Simple Web Server is garbled if the console's encoding is not UTF-8
JDK-8353713	Improve Currency.getInstance exception handling
JDK-8353748	Open source several swing tests batch6
JDK-8353847	Remove extra args to System.out.printf in open/test/jdk/java/net/httpclient tests
JDK-8353950	Clipboard interaction on Windows is unstable
JDK-8354285	Open source Swing tests Batch 3
JDK-8354327	Rewrite runtime/LoadClass/LoadClassNegative.java
JDK-8354415	[Ubuntu25.04] api/java_awt/GraphicsDevice/indexTGF.html#SetDisplayMode - setDisplayMode_REFRESH_RATE_UNKNOWN fails: Height is different on vnc
JDK-8354941	Build failure with glibc 2.42 due to uabs() name collision
JDK-8355051	Problem list java/awt/Graphics2D/CopyAreaOOB.java on macosx-aarch64
JDK-8355249	Remove the use of WMIC from the entire source code

Issue ID	Summary
JDK-8355262	Test sun/security/ssl/SSLSessionImpl/NoInvalidateSocketException.java failed: accept timed out
JDK-8355366	Fix the wrong usage of PassFailJFrame.forcePass() in some manual tests
JDK-8355370	Include server name in HTTP test server thread names to improve diagnostics
JDK-8355429	Open source ProgressMonitor test
JDK-8355441	Remove antipattern from PassFailJFrame.forcePass javadoc
JDK-8355453	nsk.share.jdi.Debuggee.waitingEvent() does not timeout properly
JDK-8355475	UNCTest should use an existing UNC path
JDK-8355512	Test compiler/vectorization/TestVectorZeroCount.java times out with -XX:TieredStopAtLevel=3
JDK-8355515	Clarify the purpose of forcePass() and forceFail() methods
JDK-8355528	Update HarfBuzz to 11.2.0
JDK-8355578	[java.net] Use @requires tag instead of exiting based on "os.name" property value

Issue ID	Summary
JDK-8355779	When no "signature_algorithms_cert" extension is present we do not apply certificate scope constraints to algorithms in "signature_algorithms" extension
JDK-8355979	ATTRIBUTE_NO_UBSAN needs to be extended to handle float divisions by zero on AIX
JDK-8356269	Fix broken web-links after JDK-8295470
JDK-8356294	Enhance Path Factories
JDK-8356324	JVM crash (SIGSEGV at ClassListParser::resolve_indy_impl) during -Xshare:dump starting from 21.0.5
JDK-8356778	Compiler add event logging in case of failures
JDK-8357155	[asan] ZGC does not work (x86_64 and ppc64)
JDK-8357173	Split jtreg test group jdk tier3
JDK-8357194	[21u] liblible cannot find the path of libjava
JDK-8357253	Test test/jdk/sun/security/ssl/SSLSessionImpl/ResumeClientTLS12withSNI.java writes in src dir
JDK-8357285	JSR166 Test case testShutdownNow_delayedTasks failed
JDK-8357672	Extreme font sizes can cause font substitution
JDK-8357675	Amend headless message

Issue ID	Summary
JDK-8357793	[PPC64] VM crashes with -XX:-UseSIGTRAP -XX:-ImplicitNullChecks
JDK-8357826	Avoid running some jtreg tests when asan is configured
JDK-8357910	LoaderConstraintsTest.java fails when run with TEST_THREAD_FACTORY=Virtual
JDK-8357914	TestEmptyBootstrapMethodsAttr.java fails when run with TEST_THREAD_FACTORY=Virtual
JDK-8357968	RISC-V: Interpreter volatile reference stores with G1 are not sequentially consistent
JDK-8358004	Delete applications/scimark/Scimark.java test
JDK-8358136	Make langtools/jdk/javadoc/doclet/testLinkOption/TestRedirectLinks.java intermittent
JDK-8358310	ZGC: riscv, ppc ZPlatformAddressOffsetBits may return a too large value
JDK-8358334	C2/Shenandoah: incorrect execution with Unsafe
JDK-8358452	JNI exception pending in Java_sun_awt_screencast_ScreencastHelper_remoteDesktopKeyImpl of screencast_pipewire.c:1214 (ID: 51119)
JDK-8358534	Bailout in Conv2B::Ideal when type of cmp input is not supported

Issue ID	Summary
JDK-8358538	Update GHA Windows runner to 2025
JDK-8358617	java/net/URLConnection/URLConnectionExpectContinueTest.java fails with 403 due to system proxies
JDK-8358659	Bump update version for OpenJDK: jdk-21.0.9
JDK-8358697	TextLayout/MyanmarTextTest.java passes if no Myanmar font is found
JDK-8358701	Remove misleading javax.management.remote API doc wording about JMX spec, and historic link to JMXMP
JDK-8359272	Several vmTestbase/compact tests timed out on large memory machine
JDK-8359402	Test CloseDescriptors.java should throw SkippedException when there is no lsof/sctp
JDK-8359454	Enhance String handling
JDK-8359906	[21u] [BACKOUT] 8347299: Add annotations to test cases in LicenseTest
JDK-8360042	GHA: Bump MSVC to 14.44
JDK-8360518	Docker tests do not work when asan is configured
JDK-8360647	[XWayland] [OL10] NumPad keys are not triggered
JDK-8360937	Enhance certificate handling

Issue ID	Summary
JDK-8361198	[AIX] fix misleading error output in thread_cpu_time_unchecked
JDK-8361212	Remove AffirmTrust root CAs
JDK-8361328	cds/appcds/dynamicArchive/TestAutoCreateSharedArchive.java archive timestamps comparison failed
JDK-8361478	GHA: Use MSYS2 from GHA runners
JDK-8361959	[GCC static analyzer] java_props_md.c leak of 'temp' variable is reported
JDK-8362390	AIX make fails in awt_GraphicsEnv.c
JDK-8362548	[21u] Add bugId to test missed in backport of JDK-8343804
JDK-8362582	GHA: Increase bundle retention time to deal with infra overload better
JDK-8362838	RISC-V: Incorrect matching rule leading to improper oop instruction encoding
JDK-8362839	[21u] Problem list more tests that fail in 21 and would be fixed by 8309622
JDK-8362855	Test java/net/ipv6tests/TcpTest.java should report SkippedException when there no ia4addr or ia6addr
JDK-8363965	GHA: Switch cross-compiling sysroots to Debian bookworm

Issue ID	Summary
JDK-8365375	Method SU3.setAcceleratorSelectionForeground assigns to acceleratorForeground
JDK-8365389	Remove static color fields from SwingUtilities3 and WindowsMenuItemUI
JDK-8365811	test/jdk/java/net/CookieHandler/B6644726.jav a failure - "Should have 5 cookies. Got only 4, expires probably didn't parse correctly"
JDK-8367388	Tests start to fail on JDK-21 after JDK-8351907
JDK-8368308	ISO 4217 Amendment 180 Update

JFX issues

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

Issue ID	Summary
JDK-8328684	HellowWebView demo crashes when a webpage is scrolled
JDK-8350284	WebKit 620.1 crashes on startup on Windows x86 32-bit
JDK-8356982	Update WebKit to 622.1
JDK-8360270	Websocket communication issues with Vaadin applications through webview

Issue ID	Summary
JDK-8366877	Change JavaFX release version to 21.0.9 in jfx21u

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
HarfBuzz	HarfBuzz	11.2.0	java.desktop	8355528
jQuery	jQuery UI	1.14.1	jdk.javadoc	8347381
XML Security	XML Security	3.0.5	java.xml.crypto	8344137

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 21.0.9+11

Release Notes

be//soft