Liberica JDK 21.0.10+10
Release Notes

bell/soft

Contents

1. Version information

This document provides information about Liberica JDK 21.0.10 release. The full version string for this update release is 21.0.10+10. 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-8245545   Summary: Disabled TLS_RSA cipher suites Description: The TLS_RSA cipher suites have been disabled by default, by adding 'TLS_RSA_*' to the `jdk.tls.disabledAlgorithms` security property in the `java.security` configuration file. The TLS_RSA cipher suites do not preserve forward-secrecy and are not commonly used. Some TLS_RSA cipher suites are already disabled because they use DES, 3DES, RC4, or NULL, which are disabled. This action disables all remaining TLS_RSA cipher suites. Any attempts to use cipher suites starting with 'TLS_RSA_' will fail with an `SSLHandshakeException`. Users can, at their own risk, re-enable these cipher suites by removing 'TLS_RSA_*' from the `jdk.tls.disabledAlgorithms` security property. The following previously enabled cipher suites are now disabled: TLS_RSA_WITH_AES_256_GCM_SHA384, TLS_RSA_WITH_AES_128_GCM_SHA256, TLS_RSA_WITH_AES_256_CBC_SHA256, TLS_RSA_WITH_AES_128_CBC_SHA256, TLS_RSA_WITH_AES_256_CBC_SHA, TLS_RSA_WITH_AES_128_CBC_SHA.

Issue ID	
JDK-8311906	Summary: Improved robustness of String constructors with mutable array inputs Description: A warning was added to the constructors of String, and the methods of `StringBuilder` and `Appendable` that modification of arrays or `CharSequence` arguments can result in unspecified results.
JDK-8340321	Summary: Disabled SHA-1 in TLS/DTLS 1.2 handshake signatures Description: The SHA-1 algorithm has been disabled by default in TLS 1.2 and DTLS 1.2 handshake signatures, by adding `rsa_pkcs1_sha1` usage HandshakeSignature, `ecdsa_sha1` usage HandshakeSignature, `dsa_sha1` usage HandshakeSignature to the `jdk.tls.disabledAlgorithms` security property in the `java.security` config file. RFC 9155 deprecates the use of SHA-1 in TLS 1.2 and DTLS 1.2 digital signatures. Users can, at their own risk, re-enable the SHA-1 algorithm in TLS 1.2 and DTLS 1.2 handshake signatures by removing `rsa_pkcs1_sha1` usage HandshakeSignature, `ecdsa_sha1` usage HandshakeSignature, `dsa_sha1` usage HandshakeSignature from the `jdk.tls.disabledAlgorithms` security property.
JDK-8345213	Summary: Changes to the Default Time Zone Detection on Debian-based Linux Description: On Debian-based Linux distributions such as Ubuntu, the `/etc/timezone` file was previously used to determine the JDK's default time zone (`TimeZone.getDefault()`). According to [Debian's Wiki](), `/etc/localtime` is now the primary source for the system's default time zone, making `/etc/timezone` redundant. As a result, the JDK's default time zone detection logic has been updated to use `/etc/localtime` instead of `/etc/timezone`. If `/etc/localtime` and `/etc/timezone` are inconsistent for any reason, the JDK's default time zone is now determined solely based on `/etc/localtime` file.

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Issue ID	
JDK-8364556	Summary: Disabled `SymbolTableStatistics` and `StringTableStatistics` in `default.jfc` Description: `SymbolTableStatistics` and `StringTableStatistics` events are disabled in `default.jfc`. It is sufficient for them to be enabled in profile.jfc.
JDK-8364993	Summary: Disabled `jdk.ModuleExport` in `default.jfc` Description: Some applications with lots of code can produce an enormous number of ModuleExport events and associated constant pool data. These events provide practically no value. `jdk.ModuleExport` has been disabled in `default.jfc`. Users who want to diagnose module exports can easily run a small recording using the profile setting, or opt-in for the event as follows: $ java -XX:StartFlightRecording:settings=profile ...; $ java -XX:StartFlightRecording:jdk.ModuleExport#enabled=true ...
JDK-8365086	Summary: CookieStore.getURIs() and get(URI) return an immutable List Description: `CookieStore.getURIs` now returns 'an immutable list of URIs and returns an empty list if no cookie in this cookie store is associated with an URI' based on its JavaDoc.

Issue ID

| JDK-8367237 | Summary: Added a thread-Safety Usage Warning for `java.text.Collator` Classes

Description: Re-using a `java.text.Collator` instance in a multi threaded environment leads to slower than expected performance. Since the state is mutable, and thread-safety achieved via synchronization, concurrent usage leads to threads stuck in a blocked state for significant periods of time. Using a dedicated instance per each thread leads to better performance and (of course) resolves the thread contention issues reported when using a single instance concurrently. Note that since the `Collator` and `RuleBasedCollator` classes are designed to be thread-safe and it is not a goal to label all such implementations as non thread-safe, the following wording is done as implementation-specific. An implementation note is provided suggesting to users that creating a new Collator instance per each thread is the suggested approach. It also calls out the potential thread contention when used otherwise. This applies to both `Collator` and `RuleBasedCollator`, where the former (which is an abstract class) warns about instances returned by the factory methods when the standard provider is in use. |
| JDK-8370214 | Summary: [21u] Removed `-Xdebug` and `-Xnoagent` from tests: backport parts of 8227229 and 8312072

Description: The `-Xdebug` and `-Xnoagent` options were removed from tests. |

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 version

This release of Liberica JDK 21.0.10 comes with the 2025b version of the in-tree copy of the [IANA timezone database](). The following are the key features of this version.

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-2025-43368	7.5	javafx	web	network	high	none	required	unchanged	high	high	high
CVE-2025-47219	3.1	javafx	media	network	high	none	required	unchanged	low	none	none
CVE-2025-6021	5.9	javafx	web	network	high	none	none	unchanged	none	none	high
CVE-2025-6052	3.7	javafx	media	network	high	none	none	unchanged	none	none	low
CVE-2025-7424	5.5	javafx	web	local	low	none	required	unchanged	none	none	high
CVE-2025-7425	7.5	javafx	web	network	high	none	required	unchanged	high	high	high
CVE-2026-21925	4.8	core-libs	java.rmi	network	high	none	none	unchanged	low	low	none
CVE-2026-21932	7.4	client-libs	java.awt	network	low	none	required	changed	none	high	none
CVE-2026-21933	6.1	core-libs	java.net	network	low	none	required	changed	low	low	none
CVE-2026-21945	7.5	security-libs	java.security	network	low	none	none	unchanged	none	none	high
CVE-2026-21947	3.1	javafx	web	network	high	none	required	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-7191877	TEST_BUG: java/rmi/transport/checkLeaseInfoLeak/CheckLeaseLeak.java failing intermittently
JDK-8072701	resume001 failed due to ERROR: timeout for waiting for a BreakpintEvent
JDK-8139228	JFileChooser renders file names as HTML document
JDK-8139392	JInternalFrame has incorrect padding
JDK-8140527	JInternalFrame has incorrect title button width
JDK-8162380	[TEST_BUG] MouseEvent/... /AltGraphModifierTest.java has only "Fail" button
JDK-8199149	Improve the exception message thrown by VarHandle of unsupported operation
JDK-8201183	sjavac build failures: "Connection attempt failed: Connection refused"

Issue ID	Summary
JDK-8201778	Speed up test javax/net/ssl/DTLS/PacketLossRetransmission.java
JDK-8204868	java/util/zip/ZipFile/TestCleaner.java still fails with "cleaner failed to clean zipfile."
JDK-8210807	Printing a JTable with a JScrollPane prints table without rows populated
JDK-8216437	PPC64: Add intrinsic for GHASH algorithm
JDK-8219408	Tests should handle ${} in the view of jtreg "smart action"
JDK-8230016	re-visit test sun/security/pkcs11/Serialize/SerializeProvider.java
JDK-8245545	Disable TLS_RSA cipher suites
JDK-8265429	Improve GCM encryption
JDK-8277424	javax/net/ssl/TLSCommon/TLSTest.java fails with connection refused
JDK-8280482	Window transparency bug on Linux
JDK-8290043	serviceability/attach/ConcAttachTest.java failed "guarantee(!CheckJNICalls) failed: Attached JNI thread exited without being detached"
JDK-8297531	sun/security/krb5/MicroTime.java fails with "Exception: What? only 100 musec precision?"

Issue ID	Summary
JDK-8300708	Some nsk jvmti tests fail with virtual thread wrapper due to jvmti missing some virtual thread support
JDK-8304065	HttpServer.stop should terminate immediately if no exchanges are in progress
JDK-8304811	vmTestbase/vm/mlvm/indy/func/jvmti/stepBreakPopReturn/INDIFY_Test.java fails with JVMTI_ERROR_TYPE_MISMATCH
JDK-8305186	Reference.waitForReferenceProcessing should be more accessible to tests
JDK-8305567	serviceability/tmtools/jstat/GcTest01.java failed utils.JstatGcResults.assertConsistency
JDK-8306579	Consider building with /Zc:throwingNew
JDK-8307160	Fix AWT/2D/A11Y to support the permissive-flag on the Microsoft Visual C compiler
JDK-8308780	Fix the Java Integer types on Windows
JDK-8309511	Regression test ExtraImportSemicolon.java refers to the wrong bug
JDK-8310049	Refactor Charset tests to use JUnit
JDK-8310915	Typo in aarch64.ad: "envcodings"
JDK-8311076	RedefineClasses doesn't check for ConstantPool overflow

Issue ID	Summary
JDK-8311906	Improve robustness of String constructors with mutable array inputs
JDK-8313231	Redundant if statement in ZoneInfoFile
JDK-8313770	jdk/internal/platform/docker/TestSystemMetrics .java fails on Ubuntu
JDK-8315130	java.lang.IllegalAccessError when processing classlist to create CDS archive
JDK-8315990	Amend problemlisted tests to proper position
JDK-8316422	TestIntegerUnsignedDivMod.java triggers "invalid layout" assert in FrameValues::validate
JDK-8317132	Prepare HotSpot for permissive-
JDK-8317332	Prepare security for permissive-
JDK-8317970	Bump target macosx-x64 version to 11.00.00
JDK-8318467	[jmh] tests concurrent.Queues and concurrent.ProducerConsumer hang with 101+ threads
JDK-8318730	MonitorVmStartTerminate.java still times out after JDK-8209595
JDK-8318850	Duplicate code in the LCMSImageLayout
JDK-8319570	Change to GCC 13.2.0 for building on Linux at Oracle

Issue ID	Summary
JDK-8320049	PKCS10 would not discard the cause when throw SignatureException on invalid key
JDK-8320577	Improve MessageHeader's toString() function to make HttpURLConnection's debug log readable
JDK-8320836	jtreg gtest runs should limit heap size
JDK-8321180	Condition for non-latin1 string size too large exception is off by one
JDK-8321183	Incorrect warning from cds about the modules file
JDK-8321514	UTF16 string gets constructed incorrectly from codepoints if CompactStrings is not enabled
JDK-8322018	Test java/lang/String/CompactString/MaxSizeUTF16 String.java fails with -Xcomp
JDK-8322135	Printing JTable in Windows L&F throws InternalError: HTHEME is null
JDK-8322140	javax/swing/JTable/JTableScrollPrintTest.java does not print the rows and columns of the table in Nimbus and Aqua LookAndFeel
JDK-8323803	ConstantOopReadValue::print_on should print 'null' instead of 'nullptr'
JDK-8324065	Daylight saving information for `Africa/Casablanca` are incorrect

Issue ID	Summary
JDK-8324491	Keyboard layout didn't keep its state if it was changed when dialog was active
JDK-8325277	[21u] Backout test change of JDK-8291809
JDK-8325530	Vague error message when com.sun.tools.attach.VirtualMachine fails to load agent library
JDK-8325590	Regression in round-tripping UTF-16 strings after JDK-8311906
JDK-8325647	[IR framework] Only prints stdout if exitCode is 134
JDK-8325731	Installation instructions for Debian/Ubuntu don't mention autoconf
JDK-8325766	Extend CertificateBuilder to create trust and end entity certificates programmatically
JDK-8327434	Test java/util/PluggableLocale/TimeZoneNameProviderTest.java timed out
JDK-8327704	Update nsk/jdi tests to use driver instead of othervm
JDK-8327757	Convert javax/swing/JSlider/6524424/bug6524424.java applet to main
JDK-8327856	Convert applet test SpanishDiacriticsTest.java to a main program

Issue ID	Summary
JDK-8327980	Convert javax/swing/JToggleButton/4128979/bug4128979.java applet test to main
JDK-8328124	Convert java/awt/Frame/ShownOnPack/ShownOnPack.html applet test to main
JDK-8328247	Remove redundant dir for tests converted from applet to main
JDK-8328299	Convert DnDFileGroupDescriptor.html applet test to main
JDK-8328377	Convert java/awt/Cursor/MultiResolutionCursorTest test to main
JDK-8328562	Convert java/awt/InputMethods/DiacriticsTest/DiacriticsTest.java applet test to main
JDK-8331231	containers/docker/TestContainerInfo.java fails
JDK-8333200	Test containers/docker/TestPids.java fails Limit value -1 is not accepted as unlimited
JDK-8333526	Restructure java/nio/channels/DatagramChannel/StressNativeSignal.java to a fail fast exception handling policy
JDK-8333569	jpackage tests must run app launchers with retries on Linux only

Issue ID	Summary
JDK-8333783	java/nio/channels/FileChannel/directio/DirectIO Test.java is unstable with AV software
JDK-8334217	[AIX] Misleading error messages after JDK-8320005
JDK-8334509	Cancelling PageDialog does not return the same PageFormat object
JDK-8334756	javac crashed on call to non-existent generic method with explicit annotated type arg
JDK-8334771	[TESTBUG] Run TestDockerMemoryMetrics.java with -Xcomp fails exitValue = 137
JDK-8335986	Test javax/swing/JCheckBox/4449413/bug4449413.java fails on Windows 11 x64 because RBMenuItem's and CBMenuItem's checkmark on the left side are not visible
JDK-8337723	Remove redundant tests from com/sun/security/sasl/gsskerb
JDK-8338428	Add logging of final VM flags while setting properties
JDK-8338740	java/net/httpclient/HttpsTunnelAuthTest.java fails with java.io.IOException: HTTP/1.1 header parser received no bytes
JDK-8339280	jarsigner -verify performs cross-checking between CEN and LOC

Issue ID	Summary
JDK-8339366	[jittester] Make it possible to generate tests without execution
JDK-8340015	Open source several AWT focus tests - series 7
JDK-8340321	Disable SHA-1 in TLS/DTLS 1.2 handshake signatures
JDK-8340354	Open source AWT desktop properties and print related tests
JDK-8341097	GHA: Demote Mac x86 jobs to build only
JDK-8341131	Some jdk/jfr/event/compiler tests shouldn't be executed with Xcomp
JDK-8341138	Rename jtreg property docker.support as container.support
JDK-8341443	[macos] AppContentTest and SigningOptionsTest failed due to "codesign" does not fails with "--app-content" on macOS 15
JDK-8341496	Improve JMX connections
JDK-8342576	[macos] AppContentTest still fails after JDK-8341443 for same reason on older macOS versions
JDK-8342582	user.region for formatting number no longer works for 21.0.5
JDK-8342934	TYPE_USE annotations printed with error causing "," in toString output

Issue ID	Summary
JDK-8343191	Cgroup v1 subsystem fails to set subsystem path
JDK-8343340	Swapping checking do not work for MetricsMemoryTester failcount
JDK-8343875	Minor improvements of jpackage test library
JDK-8343876	Enhancements to jpackage test lib
JDK-8344143	Test jdk/java/lang/Thread/virtual/stress/GetStackTraceALotWhenPinned.java timed out on macosx-x64
JDK-8344577	Virtual thread tests are timing out on some macOS systems
JDK-8345213	JVM Prefers /etc/timezone Over /etc/localtime on Debian 12
JDK-8346142	[perf] scalability issue for the specjvm2008::xml.validation workload
JDK-8346234	javax/swing/text/DefaultEditorKit/4278839/bug4278839.java still fails in CI
JDK-8346753	Test javax/swing/JMenuItem/RightLeftOrientation/RightLeftOrientation.java fails on Windows Server 2025 x64 because the icons of RBMenuItem and CBMenuItem are not visible in Nimbus LookAndFeel

Issue ID	Summary
JDK-8346839	[TESTBUG] "java/awt/textfield/setechochartest4/setechochartest4.java" failed because the test frame disappears on clicking "Click Several Times" button
JDK-8346875	Test jdk/jdk/jfr/event/os/TestCPULoad.java fails on macOS
JDK-8347143	[aix] Fix strdup use in os::dll_load
JDK-8347277	java/awt/Focus/ComponentLostFocusTest.java fails intermittently
JDK-8347300	Don't exclude the "PATH" var from the environment when running app launchers in jpackage tests
JDK-8347377	Add validation checks for ICC_Profile header fields
JDK-8347434	Richer VM operations events logging
JDK-8347811	Container detection code for cgroups v2 should use cgroup.controllers
JDK-8347841	Test fixes that use deprecated time zone IDs
JDK-8348240	Remove SystemDictionaryShared::lookup_super_for_unregistered_class()
JDK-8348402	PerfDataManager stalls shutdown for 1ms
JDK-8349188	LineBorder does not scale correctly

Issue ID	Summary
JDK-8349534	Refactor jdk/sun/security/krb5/runNameEquals.sh to java test
JDK-8349705	java.net.URI.scanIPv4Address throws unnecessary URISyntaxException
JDK-8349988	Change cgroup version detection logic to not depend on /proc/cgroups
JDK-8350102	Decouple jpackage test-lib Executor.Result and Executor classes
JDK-8350623	Fix -Wzero-as-null-pointer-constant warnings in nsk native test utilities
JDK-8350813	Rendering of bulky sound bank from MIDI sequence can cause OutOfMemoryError
JDK-8351110	ImageIO.write for JPEG can write corrupt JPEG for certain thumbnail dimensions
JDK-8351359	OperatingSystemMXBean: values from getCpuLoad and getProcessCpuLoad are stale after 24.8 days (Windows)
JDK-8351382	New test containers/docker/TestMemoryWithSubgroups.java is failing
JDK-8351567	Jar Manifest test ValueUtf8Coding produces misleading diagnostic output

Issue ID	Summary
JDK-8352016	Improve java/lang/RuntimeTests/RuntimeExitLogTest.java
JDK-8352533	Report useful IOExceptions when jspawnhelper fails
JDK-8352678	Opensource few JMenuItem tests
JDK-8352682	Opensource JComponent tests
JDK-8352686	Opensource JInternalFrame tests - series3
JDK-8352687	Opensource few JInternalFrame and JTextField tests
JDK-8352793	Open source several AWT TextComponent tests - Batch 1
JDK-8352865	Open source several AWT TextComponent tests - Batch 2
JDK-8352905	Open some JComboBox bugs 1
JDK-8352926	New test TestDockerMemoryMetricsSubgroup.java fails
JDK-8352966	Opensource Several Font related tests - Batch 2
JDK-8352997	Open source several Swing JTabbedPane tests
JDK-8353007	Open some JComboBox bugs 2

Issue ID	Summary
JDK-8353011	Open source Swing JButton tests - Set 1
JDK-8353013	java.net.URI.create(String) may have low performance to scan the host/domain name from URI string when the hostname starts with number
JDK-8353175	Eliminate double iteration of stream in FieldDescriptor reinitialization
JDK-8353201	Open source Swing Tooltip tests - Set 2
JDK-8353299	VerifyJarEntryName.java test fails
JDK-8353309	Open source several Swing text tests
JDK-8353319	Open source Swing tests - Set 3
JDK-8353445	Open source several AWT Menu tests - Batch 1
JDK-8353470	Clean up and open source couple AWT Graphics related tests (Part 2)
JDK-8353483	Open source some JProgressBar tests
JDK-8353486	Open source Swing Tests - Set 4
JDK-8353585	Provide ChoiceFormat#parse(String, ParsePosition) tests
JDK-8353586	Open source several toolkit tests
JDK-8353589	Open source a few Swing menu-related tests

Issue ID	Summary
JDK-8353592	Open source several scrollbar tests
JDK-8353661	Open source several swing tests batch5
JDK-8353832	Opensource FontClass, Selection and Icon tests
JDK-8353953	com/sun/jdi tests should be fixed to not always require includevirtualthreads=y
JDK-8353957	Open source several AWT ScrollPane tests - Batch 1
JDK-8353958	Open source several AWT ScrollPane tests - Batch 2
JDK-8354095	Open some JTable bugs 5
JDK-8354106	Clean up and open source KeyEvent related tests (Part 2)
JDK-8354214	Open source Swing tests Batch 2
JDK-8354233	Open some JTable bugs 6
JDK-8354235	Test javax/net/ssl/SSLSocket/Tls13PacketSize.java failed with java.net.SocketException: An established connection was aborted by the software in your host machine
JDK-8354248	Open source several AWT GridBagLayout and List tests
JDK-8354340	Open source Swing Tests - Set 6

Issue ID	Summary
JDK-8354341	Open some JTable bugs 7
JDK-8354365	Opensource few Modal and Full Screen related tests
JDK-8354418	Open source Swing tests Batch 4
JDK-8354451	Open source some more Swing popup menu tests
JDK-8354465	Open some JTable bugs 8
JDK-8354466	Open some misc Swing bugs 9
JDK-8354472	Clean up and open source KeyEvent related tests (Part 3)
JDK-8354475	TestDockerMemoryMetricsSubgroup.java fails with exitValue = 1
JDK-8354493	Opensource Several MultiScreen and Insets related tests
JDK-8354495	Open source several AWT DataTransfer tests
JDK-8354532	Open source JFileChooser Tests - Set 7
JDK-8354552	Open source a few Swing tests
JDK-8354553	Open source several clipboard tests batch0
JDK-8354561	Open source several swing tests batch0

Issue ID	Summary
JDK-8354646	java.awt.TextField allows to identify the spaces in a password when double clicked at the starting and end of the text
JDK-8354653	Clean up and open source KeyEvent related tests (Part 4)
JDK-8354701	Open source few JToolTip tests
JDK-8354873	javax/swing/plaf/metal/MetalIconFactory/bug4 952462.java failing on CI
JDK-8354928	Clean up and open source some miscellaneous AWT tests
JDK-8355071	Fix nsk/jdi test to not require lookup of main thread in order to set the breakpoint used for communication
JDK-8355077	Compiler error at splashscreen_gif.c due to unterminated string initialization
JDK-8355241	Move NativeDialogToFrontBackTest.java PL test to manual category
JDK-8355333	Some Problem list entries point to non-existent / wrong files
JDK-8355387	[jittester] Disable downcasts by default
JDK-8355444	[java.io] Use @requires tag instead of exiting based on "os.name" property value
JDK-8355478	DoubleActionESC.java fails intermittently

Issue ID	Summary
JDK-8355558	SJIS.java test is always ignored
JDK-8355561	[macos] Build failure with Xcode 16.3
JDK-8355569	Some nsk/jdi tests can glean the "main" thread by using the ClassPrepareEvent for the debuggee main class
JDK-8355773	Some nsk/jdi tests can fetch ThreadReference from static field in the debuggee
JDK-8356023	Some nsk/jdi tests can fetch ThreadReference from static field in the debuggee: part 2
JDK-8356040	java/util/PluggableLocale/LocaleNameProvider Test.java timed out
JDK-8356145	ListEnterExitTest.java fails on macos
JDK-8356187	TestJcmd.java may incorrectly parse podman version
JDK-8356588	Some nsk/jdi tests can fetch ThreadReference from static field in the debuggee: part 3
JDK-8356752	Log mouse enter and exit events for debugging
JDK-8356811	Some nsk/jdi tests can fetch ThreadReference from static field in the debuggee: part 4
JDK-8356897	Update NSS library to 3.111
JDK-8357172	Extend try block in nsk/jdi tests to capture exceptions thrown by Debuggee.classByName()

Issue ID	Summary
JDK-8357305	Compilation failure in javax/swing/JMenuItem/bug6197830.java
JDK-8357561	BootstrapLoggerTest does not work on Ubuntu 24 with LANG de_DE.UTF-8
JDK-8357799	Improve instructions for JFileChooser/HTMLFileName.java
JDK-8357822	C2: Multiple string optimization tests are no longer testing string concatenation optimizations
JDK-8357882	Use UTF-8 encoded data in LocaleDataTest
JDK-8358048	java/net/httpclient/HttpsTunnelAuthTest.java incorrectly calls Thread::stop
JDK-8358532	JFileChooser in GTK L&F still displays HTML filename
JDK-8358577	Test serviceability/jvmti/thread/GetCurrentContendedMonitor/contmon01/contmon01.java failed: unexpexcted monitor object
JDK-8358679	[asan] vmTestbase/nsk/jvmti tests show memory issues
JDK-8358748	Large page size initialization fails with assert "page_size must be a power of 2"
JDK-8358764	(sc) SocketChannel.close when thread blocked in read causes connection to be reset (win)

Issue ID	Summary
JDK-8358813	JPasswordField identifies spaces in password via delete shortcuts
JDK-8359061	Update and ProblemList manual test java/awt/Cursor/CursorDragTest/ListDragCursor.java
JDK-8359167	Remove unused test/hotspot/jtreg/vmTestbase/nsk/share/jpda/BindServer.java
JDK-8359182	Use @requires instead of SkippedException for MaxPath.java
JDK-8359207	Remove runtime/signal/TestSigusr2.java since it is always skipped
JDK-8359418	Test "javax/swing/text/GlyphView/bug4188841.java" failed because the phrase of text pane does not match the instructions
JDK-8359428	Test 'javax/swing/JTabbedPane/bug4499556.java' failed because after selecting one of L&F items, the test case automatically failed when clicking on L&F Menu button again
JDK-8359449	[TEST] open/test/jdk/java/io/File/SymLinks.java Refactor extract method for Windows specific test
JDK-8359477	com/sun/net/httpserver/Test12.java appears to have a temp file race
JDK-8359501	Enhance Handling of URIs

Issue ID	Summary
JDK-8359687	Use PassFailJFrame for java/awt/print/Dialog/DialogType.java
JDK-8360022	ClassRefDupInConstantPoolTest.java fails when running in repeat
JDK-8360178	TestArguments.atojulong gtest has incorrect format string
JDK-8360288	Shenandoah crash at size_given_klass in op_degenerated
JDK-8360408	[TEST] Use @requires tag instead of exiting based on "os.name" property value for sun/net/www/protocol/file/FileURLTest.java
JDK-8360411	[TEST] open/test/jdk/java/io/File/MaxPathLength.java Refactor extract method to encapsulate Windows specific test logic
JDK-8360478	libjsig related tier3 jtreg tests fail when asan is configured
JDK-8360533	ContainerRuntimeVersionTestUtils fromVersionString fails with some docker versions
JDK-8360981	Remove use of Thread.stop in test/jdk/java/net/Socket/DeadlockTest.java
JDK-8361253	CommandLineOptionTest library should report observed values on failure

Issue ID	Summary
JDK-8361298	SwingUtilities/bug4967768.java fails where character P is not underline
JDK-8361314	Test serviceability/jvmti/VMEvent/MyPackage/VMEventRecursionTest.java FATAL ERROR in native method: Failed during the GetClassSignature call
JDK-8361423	Add IPSupport::printPlatformSupport to java/net/NetworkInterface/IPv4Only.java
JDK-8361447	[REDO] Checked version of JNI Release<type>ArrayElements needs to filter out known wrapped arrays
JDK-8361599	[PPC64] enable missing tests via jtreg requires
JDK-8361748	Enforce limits on the size of an XBM image
JDK-8361751	Test sun/tools/jcmd/TestJcmdSanity.java timed out on Windows
JDK-8361754	New test runtime/jni/checked/TestCharArrayReleasing.java can cause disk full errors
JDK-8361868	[GCC static analyzer] complains about missing calloc - NULL checks in p11_util.c
JDK-8361871	[GCC static analyzer] complains about use of uninitialized value ckpObject in p11_util.c
JDK-8362123	ClassLoader Leak via Executors.newSingleThreadExecutor(...)

Issue ID	Summary
JDK-8362204	test/jdk/sun/awt/font/TestDevTransform.java fails on Ubuntu 24.04
JDK-8362207	Add more test cases for possible double-rounding in fma
JDK-8362308	Enhance Bitmap operations
JDK-8362516	Support of GCC static analyzer (-fanalyzer)
JDK-8362532	Test gc/g1/plab/* duplicate command-line options
JDK-8362533	Tests sun/management/jmxremote/bootstrap/* duplicate VM flags
JDK-8362602	Add test.timeout.factor to CompileFactory to avoid test timeouts
JDK-8362632	Improve HttpServer Request handling
JDK-8363676	[GCC static analyzer] missing return value check of malloc in OGLContext_SetTransform
JDK-8363720	Follow up to JDK-8360411 with post review comments
JDK-8363966	GHA: Switch cross-compiling sysroots to Debian trixie
JDK-8364198	NMT should have a better corruption message
JDK-8364199	Enhance list of environment variables printed in hserr/hsinfo file

Issue ID	Summary
JDK-8364214	Enhance polygon data support
JDK-8364235	Fix for JDK-8361447 breaks the alignment requirements for GuardedMemory
JDK-8364257	JFR: User-defined events and settings with a one-letter name cannot be configured
JDK-8364258	ThreadGroup constant pool serialization is not normalized
JDK-8364263	HttpClient: Improve encapsulation of ProxyServer
JDK-8364484	misc tests fail with Received fatal alert: handshake_failure
JDK-8364514	[asan] runtime/jni/checked/TestCharArrayReleasing.java heap-buffer-overflow
JDK-8364556	JFR: Disable SymbolTableStatistics and StringTableStatistics in default.jfc
JDK-8364597	Replace THL A29 Limited with Tencent
JDK-8364660	ClassVerifier::ends_in_athrow() should be removed
JDK-8364786	Test java/net/vthread/HttpALot.java intermittently fails - 24999 handled, expected 25000
JDK-8364993	JFR: Disable jdk.ModuleExport in default.jfc

Issue ID	Summary
JDK-8364996	java/awt/font/FontNames/LocaleFamilyNames.java times out on Windows
JDK-8365058	Enhance CopyOnWriteArraySet
JDK-8365086	CookieStore.getURIs() and get(URI) should return an immutable List
JDK-8365098	make/RunTests.gmk generates a wrong path to test artifacts on Alpine
JDK-8365168	Use 64-bit aligned addresses for CK_ULONG access in PKCS11 native key code
JDK-8365240	[asan] exclude some tests when using asan enabled binaries
JDK-8365271	Improve Swing supports
JDK-8365280	Enhance JOptionPane
JDK-8365425	[macos26] javax/swing/JInternalFrame/8160248/JInternalFrameDraggingTest.java fails on macOS 26
JDK-8365442	[asan] runtime/ErrorHandling/CreateCoredumpOnCrash.java fails
JDK-8365487	[asan] some oops (mode) related tests fail
JDK-8365615	Improve JMenuBar/RightLeftOrientation.java
JDK-8365660	test/jdk/sun/security/pkcs11/KeyAgreement/ tests skipped without SkipExceprion

Issue ID	Summary
JDK-8365790	Shutdown hook for application image does not work on Windows
JDK-8365834	Mark java/net/httpclient/ManyRequests.java as intermittent
JDK-8365913	Support latest MSC_VER in abstract_vm_version.cpp
JDK-8365919	Replace currentTimeMillis with nanoTime in Stresser.java
JDK-8365983	Tests should throw SkippedException when SCTP not supported
JDK-8366092	[GCC static analyzer] UnixOperatingSystem.c warning: use of uninitialized value 'systemTicks'
JDK-8366159	SkippedException is treated as a pass for pkcs11/KeyStore, pkcs11/SecretKeyFactory and pkcs11/SecureRandom
JDK-8366208	Unexpected exception in sun.java2d.cmm.lcms.LCMSImageLayout
JDK-8366229	runtime/Thread/TooSmallStackSize.java runs with all collectors
JDK-8366231	Bump update version for OpenJDK: jdk-21.0.10
JDK-8366342	Key generator and key pair generator tests skipping, but showing as passed

Issue ID	Summary
JDK-8366359	Test should throw SkippedException when there is no lpstat
JDK-8366558	Gtests leave /tmp/cgroups-test* files
JDK-8366750	Remove test 'java/awt/Choice/ChoiceMouseWheelTest/ChoiceMouseWheelTest.java' from problemlist
JDK-8366764	Deproblemlist java/awt/ScrollPane/ScrollPositionTest.java
JDK-8366844	Update and automate MouseDraggedOriginatedByScrollBarTest.java
JDK-8366893	java/lang/Thread/virtual/stress/GetStackTrace ALotWhenPinned.java timed out on macos-aarch64
JDK-8367017	Remove legacy checks from WrappedToolkitTest and convert from bash
JDK-8367021	Regression in LocaleDataTest refactoring
JDK-8367131	Test com/sun/jdi/ThreadMemoryLeakTest.java fails on 32 bits
JDK-8367133	DTLS: fragmentation of Finished message results in handshake failure
JDK-8367237	Thread-Safety Usage Warning for java.text.Collator Classes
JDK-8367348	Enhance PassFailJFrame to support links in HTML

Issue ID	Summary
JDK-8367372	Test `test/hotspot/jtreg/gc/TestObjectAlignmentCardSize.java` fails on 32 bit systems
JDK-8367384	The ICC_Profile class may throw exceptions during serialization
JDK-8367782	VerifyJarEntryName.java: Fix modifyJarEntryName to operate on bytes and re-introduce verifySignatureEntryName
JDK-8367869	Test java/io/FileDescriptor/Sync.java timed out
JDK-8367904	Test java/net/InetAddress/ptr/Lookup.java should throw SkippedException
JDK-8368032	Enhance Certificate Checking
JDK-8368192	Test java/lang/ProcessBuilder/Basic.java#id0 fails with Exception: Stack trace
JDK-8368668	Several vmTestbase/vm/gc/compact tests timed out on large memory machine
JDK-8368960	Adjust java UL logging in the build
JDK-8368982	Test sun/security/tools/jarsigner/EC.java completed and timed out
JDK-8369032	Add test to ensure serialized ICC_Profile stores only necessary optional data
JDK-8369078	Fix faulty test conversion in IllegalCharsetName.java

Issue ID	Summary
JDK-8369184	SimpleTimeZone equals() Returns True for Unequal Instances with Different hashCode Values
JDK-8369226	GHA: Switch to MacOS 15
JDK-8369319	java/net/httpclient/CancelRequestTest.java fails intermittently
JDK-8369450	[Ubuntu 25.10] openjdk fails to build due to rust-coreutils date
JDK-8369506	Bytecode rewriting causes Java heap corruption on AArch64
JDK-8369563	Gtest dll_address_to_function_and_library_name has issues with stripped pdb files
JDK-8369616	JavaFrameAnchor on RISC-V has unnecessary barriers and wrong store order in MacroAssembler
JDK-8369946	Bytecode rewriting causes Java heap corruption on PPC
JDK-8369947	Bytecode rewriting causes Java heap corruption on RISC-V
JDK-8370214	[21u] Remove -Xdebug and -Xnoagent from tests: backport parts of 8227229 and 8312072
JDK-8370465	Right to Left Orientation Issues with MenuItem Component

Issue ID	Summary
JDK-8372534	Update Libpng to 1.6.51
JDK-8374209	[17u,21u] Backout JDK-8361748 due to JDK-8373727

JFX issues

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

Issue ID	Summary
JDK-8339335	set number of parallel jobs when building webkit
JDK-8339505	Enable parallel compilation of native code on macOS
JDK-8361648	Update Glib to 2.84.3
JDK-8361719	Enhance Handling of URI
JDK-8361893	Update libxml2 to 2.14.5
JDK-8362535	Update libxslt support
JDK-8366217	Update GStreamer to 1.26.5
JDK-8367578	Additional WebKit 622.1 fixes from WebKitGTK 2.48.7

Issue ID	Summary
JDK-8368600	Missing "/DELAYLOAD:shlwapi.dll" in win.gradle
JDK-8368691	Update libxml2 to 2.14.6
JDK-8368704	Better glyph handling
JDK-8370235	WebKit build fails on Windows 32-bit and Linux 32-bit after JDK-8367578
JDK-8370632	Additional libxslt 1.1.43 fixes
JDK-8371016	Change JavaFX release version to 21.0.10 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
Glib	GNU Glib	2.84.3	javafx.media	JDK-8361648
GStreamer	GStreamer	1.26.5	javafx.media	JDK-8366217
Libpng	Libpng	1.6.51	java.awt	JDK-8372534

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 21.0.10+10
Release Notes