

Liberica JDK 21.0.8+12

Release Notes



Liberica JDK
21.0.8
July 16, 2025

be//soft

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Contents

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

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

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

Builds of Liberica JDK With CRaC	12
----------------------------------	----

IANA TZ Data update	12
---------------------	----

Future Timestamps:	12
--------------------	----

Past Timestamps:	13
------------------	----

Code Fixes:	13
-------------	----

3. Known Issues	14
-----------------	----

4. Fixed CVEs	15
---------------	----

5. Resolved Issues	16
--------------------	----

JDK issues	16
------------	----

JFX issues	46
------------	----

6. Updates to Third Party Libraries	48
-------------------------------------	----

7. Upgrading to the New Version	49
---------------------------------	----

1. Version information

This document provides information about Liberica JDK 21.0.8 release.

The full version string for this update release is 21.0.8+12. The version number is 21.

Liberica JDK 21 is distributed as `.apk`, `.rpm`, `.zip`, `.deb`, and `.tar.gz` packages. Please select the most appropriate for your purposes.

2. What's New

This release contains the following updates and new features.

Notable Changes

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

Issue ID	
JDK-8303770	<p>Summary: Removed Baltimore CyberTrust Root Certificate After Expiry Date</p> <p>Description: The following expired root certificate has been removed from the cacerts keystore: alias name baltimorecybertrustca [jdk], Distinguished Name: CN=Baltimore CyberTrust Root, OU=CyberTrust, O=Baltimore, C=IE.</p>
JDK-8309841	<p>Summary: Jarsigner should print a warning if an entry is removed</p> <p>Description: If an entry is removed from a signed JAR file, there is no mechanism to detect that it has been removed using the JarFile API, since the getJarEntry method returns null as if the entry had never existed. With this change, the jarsigner -verify command analyzes the signature files and if some sections do not have matching file entries, it prints out the following warning: 'This JAR contains signed entries for files that do not exist'. Users can further find out the names of these entries by adding the -verbose option to the command.</p>

Issue ID

JDK-8318636

Summary: New `System.map` and `System.dump_map` Diagnostic Commands Have Been Added

Description: New `System.map` and `System.dump_map` diagnostic commands have been added to `jcmd`. When executed, these commands print the virtual memory map of the JVM process, together with Native Memory Tracking information about the virtual memory segments. For the latter information to be displayed, Native Memory Tracking must be enabled. `jcmd <pid> System.map` will print the virtual memory map of the JVM indicated by `<pid>` to the stdout of `jcmd`. `jcmd <pid> System.dump_map` will cause the target JVM indicated by `<pid>` to print the virtual memory map to a file named `vm_memory_map_<pid>.txt` into the current directory of the target JVM.

Issue ID

JDK-8338136

Summary: Hotspot should support multiple large page sizes on Windows

Description: A new JVM flag (`-XX:+EnableAllLargePageSizesForWindows`) was added (default is false) to support large pages greater than 4MB on the Windows AMD64 architecture. This flag allows users to opt in to the new large page handling behavior and provides a warning when the requested large page size is not a multiple of the OS minimum page size by populating the valid page size list with all sizes starting from the minimum page size, including each subsequent size that is a multiple of 2 (i.e., doubling each time) until the size reaches the large page size. With this change, the list is populated on non-IA32 architectures of Windows. The false default state helps avoid unexpected changes to applications, as the new behavior only takes effect when the JVM flag is enabled.

JDK-8341779

Summary: `TypeMirror` Changed to Provide Annotations for Types Loaded from Bytecode

Description: The implementation of `TypeMirror` now provides access to annotations for types loaded from bytecode. Previously type annotations were not associated with types loaded from bytecode. Annotation processors can access type annotations for elements using `AnnotationMirror#getAnnotationMirrors`, and the annotations will be included in the output of `AnnotationMirror#toString`. Any programs that relied on annotations being omitted for elements loaded from the classpath should be updated to handle type annotations.

Issue ID
<div>JDK-8342075</div> <div>Summary: <code>java.net.http.HttpClient</code> Is Enhanced to Report HTTP/2 Flow Control Errors to the Server</div> <div>Description: The <code>java.net.http.HttpClient</code> will now report HTTP/2 flow control errors to the server when they are detected. This is an implementation detail that should be transparent to users of the <code>HttpClient</code> API, but could result in streams being reset or connections being closed if connecting to a non-conformant HTTP/2 server.</div>
<div>JDK-8347506</div> <div>Summary: Compatible OCSP readtimeout Property with OCSP Timeout</div> <div>Description: In JDK 21, an enhanced syntax for various timeout properties was released through JDK-8179502. This included a new system property, <code>com.sun.security.ocsp.readtimeout</code>, which allows users to control the timeout while reading OCSP responses after a successful TCP connection has been established. This changes the default posture of this property to be the value of the <code>com.sun.security.ocsp.timeout</code> system property from its original default of 15 seconds. If the <code>com.sun.security.ocsp.timeout</code> system property is also not set, then its default 15 second timeout is propagated to the default for <code>com.sun.security.ocsp.readtimeout</code>.</div>

Issue ID
<div>JDK-8347596</div> <div>Summary: Updated HSS/LMS Public Key Encoding</div> <div>Description: The X.509 encoded format for HSS/LMS public keys has been updated to align with the latest standard outlined in RFC 9708[https://www.rfc-editor.org/rfc/rfc9708.html#name-hss-lms-public-key-identifi]. Notably, the additional OCTET STRING wrapping around the public key value has been removed. For compatibility, public key encodings generated by earlier JDK releases are still recognized.</div>
<div>JDK-8350412</div> <div>Summary: AArch64: Ambiguous frame layout leads to incorrect traces in JFR</div> <div>Description: When doing a runtime call from compiled code, JVM used to put two words onto the stack, which broke the invariant the stack walker relies on: the size of the compiled frame is constant (i.e. SP does not change) after <code>frame_complete_offset</code>. However, in this case, SP was temporarily adjusted, and therefore JVM could not find the sender frame.</div>

Issue ID	
JDK-8350498	<p>Summary: Removed Two Camerfirma Root Certificates</p> <p>Description: The following root certificates, which are terminated and no longer in use, have been removed from the <code>cacerts</code> keystore: alias name <code>camerfirmachamberscommerceca</code> [jdk], Distinguished Name: CN=Chambers of Commerce Root, OU=http://www.chambersign.org, O=AC Camerfirma SA CIF A82743287, C=EU; alias name <code>camerfirmachambersignca</code> [jdk], Distinguished Name: CN=Global Chambersign Root - 2008, O=AC Camerfirma S.A., SERIALNUMBER=A82743287, L=Madrid (see current address at www.camerfirma.com/address), C=EU.</p>
JDK-8352716	<p>Summary: Update Timezone Data to 2025b</p> <p>Description: The 2025b release of the tz code and data contains the following changes: New zone for Aysén Region in Chile which moves from -04/-03 to -03.</p>
JDK-8354893	<p>Summary: [REDO BACKPORT] javac crashes while adding type annotations to the return type of a constructor (JDK-8320001)</p> <p>Description: The issue was fixed with some of the JCK tests related to Annotation processing that were failing with 'java.lang.AssertionError: Cannot add metadata to this type: VOID'</p>

Issue ID

JDK-8359170

Summary: Added 4 New Root Certificates from Sectigo Limited

Description: The following Sectigo Limited root certificates have been added to the cacerts truststore: sectigocodesignroote46, DN: CN=Sectigo Public Code Signing Root E46, O=Sectigo Limited, C=GB; sectigocodesignrootr46, DN: CN=Sectigo Public Code Signing Root R46, O=Sectigo Limited, C=GB; sectigotlsroote46, DN: CN=Sectigo Public Server Authentication Root E46, O=Sectigo Limited, C=GB; sectigotlsrootr46, DN: CN=Sectigo Public Server Authentication Root R46, O=Sectigo Limited, C=GB.

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 21.0.8 upgrades the in-tree copy of the [IANA timezone database](#) to 2025b. The following are the key changes of this update:

Future Timestamps:

New Time Zone:

A new time zone, America/Coyhaique, is created for Chile's Aysén Region, which will now observe UTC-03 year-round (no daylight saving time).

- This diverges from America/Santiago starting March 20, 2025.
- Aysén will not change clocks on April 5, 2025.
- This aligns Aysén with Magallanes Region.

Past Timestamps:

Iran Time Change Correction:

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

Code Fixes:

Improved behavior for the zic tool:

- It no longer creates invalid symlinks when using -l with multiple arguments.
- A buffer underflow issue is resolved.

For more information, see [JDK-8352716](#).

3. Known Issues

This release does not contain any known issues.

4. Fixed CVEs

This is the list of the security issues fixed in this release. CVSS scores are provided using the CVSS version 3.1 scoring system.

CVE ID	CVSS score	Component	Module	Attack Vector	Complexity	Privileges	User Interaction	Scope	Confidentiality	Integrity	Availability
CVE-2025-24855	7.5	javafx	web	network	high	none	required	unchanged	high	high	high
CVE-2025-27113	7.5	javafx	web	network	high	none	required	unchanged	high	high	high
CVE-2025-30749	8.1	client-libs	2d	network	high	none	none	unchanged	high	high	high
CVE-2025-30754	4.8	security-libs	javax.net.ssl	network	high	none	none	unchanged	low	low	none
CVE-2025-50059	8.6	core-libs	java.net	network	low	none	none	changed	high	none	none
CVE-2025-50106	8.1	client-libs	2d	network	high	none	none	unchanged	high	high	high

5. Resolved Issues

JDK issues

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

Issue ID	Summary
JDK-6956385	URLConnection.getLastModified() leaks file handles for jar:file and file: URLs
JDK-8051591	Test javax/swing/JTabbedPane/8007563/Test8007563.java fails
JDK-8136895	Writer not closed with disk full error, file resource leaked
JDK-8180450	secondary_super_cache does not scale well
JDK-8183348	Better cleanup for jdk/test/sun/security/pkcs12/P12SecretKey.java
JDK-8200566	DistributionPointFetcher fails to fetch CRLs if the DistributionPoints field contains more than one DistributionPoint and the first one fails
JDK-8202100	Merge vm/share/InMemoryJavaCompiler w/ jdk/test/lib/compiler/InMemoryJavaCompiler
JDK-8210471	GZIPInputStream constructor could leak an un-ended Inflater

Issue ID	Summary
JDK-8211400	nsk.share.gc.Memory::getArrayLength returns wrong value
JDK-8220213	com/sun/jndi/dns/ConfigTests/Timeout.java failed intermittent
JDK-8249831	Test sun/security/mscapi/nonUniqueAliases/NonUniqueAliases.java is marked with @ignore
JDK-8253440	serviceability/sa/TestJhsdbJstackLineNumbers.java failed with "Didn't find enough line numbers"
JDK-8256211	assert fired in java/net/httpclient/DependentPromiseActionsTest (infrequent)
JDK-8258483	[TESTBUG] gtest CollectorPolicy.young_scaled_initial_ergo_vm fails if heap is too small
JDK-8267174	Many test files have the wrong Copyright header
JDK-8270269	Desktop.browse method fails if earlier Colnitalize call as COINIT_MULTITHREADED
JDK-8276995	Bug in jdk.jfr.event.gc.collection.TestSystemGC
JDK-8279016	JFR Leak Profiler is broken with Shenandoah
JDK-8280991	[XWayland] No displayChanged event after setDisplayMode call

Issue ID	Summary
JDK-8281511	java/net/ipv6tests/UdpTest.java fails with checkTime failed
JDK-8282726	java/net/vthread/BlockingSocketOps.java timeout/hang intermittently on Windows
JDK-8286204	[Accessibility,macOS,VoiceOver] VoiceOver reads the spinner value 10 as 1 when user iterates to 10 for the first time on macOS
JDK-8286789	Test forceEarlyReturn002.java timed out
JDK-8286875	ProgrammableUpcallHandler::on_entry/on_exit access thread fields from native
JDK-8294155	Exception thrown before awaitAndCheck hangs PassFailJFrame
JDK-8295804	javax/swing/JFileChooser/JFileChooserSetLocationTest.java failed with "setLocation() is not working properly"
JDK-8297692	Avoid sending per-region GCPhaseParallel JFR events in G1ScanCollectionSetRegionClosure
JDK-8303770	Remove Baltimore root certificate expiring in May 2025
JDK-8305010	Test vmTestbase/nsk/jvmti/scenarios/sampling/SP05/sp05t003/TestDescription.java timed out: thread not suspended

Issue ID	Summary
JDK-8307318	Test serviceability/sa/ClhsdbCDSJstackPrintAll.java failed: ArrayIndexOutOfBoundsException
JDK-8307824	Clean up Finalizable.java and finalize terminology in vmTestbase/nsk/share
JDK-8308033	The jcmd thread dump related tests should test virtual threads
JDK-8308966	Add intrinsic for float/double modulo for x86 AVX2 and AVX512
JDK-8309667	TLS handshake fails because of ConcurrentModificationException in PKCS12KeyStore.engineGetEntry
JDK-8309841	Jarsigner should print a warning if an entry is removed
JDK-8309978	[x64] Fix useless padding
JDK-8310066	Improve test coverage for JVMTI GetThreadState on carrier and mounted vthread
JDK-8310525	DynamicLauncher for JDP test needs to try harder to find a free port
JDK-8310643	Misformatted copyright messages in FFM
JDK-8312246	NPE when HSDB visits bad oop
JDK-8312475	org.jline.util.PumpReader signed byte problem

Issue ID	Summary
JDK-8313290	Misleading exception message from STS.Subtask::get when task forked after shutdown
JDK-8313430	[JVMCI] fatal error: Never compilable: in JVMCI shutdown
JDK-8313654	Test WaitNotifySuspendedVThreadTest.java timed out
JDK-8314056	Remove runtime platform check from frem/drem
JDK-8314136	Test java/net/httpclient/CancelRequestTest.java failed: WARNING: tracker for HttpClientImpl(42) has outstanding operations
JDK-8314236	Overflow in Collections.rotate
JDK-8314319	LogCompilation doesn't reset lateInlining when it encounters a failure.
JDK-8314840	3 gc/epsilon tests ignore external vm options
JDK-8314842	zgc/genzgc tests ignore vm flags
JDK-8315128	jdk/jfr/event/runtime/TestResidentSetSizeEvent.java fails with "The size should be less than or equal to peak"
JDK-8315484	java/awt/dnd/RejectDragDropActionTest.java timed out

Issue ID	Summary
JDK-8315669	Open source several Swing PopupMenu related tests
JDK-8315742	Open source several Swing Scroll related tests
JDK-8315827	Kitchensink.java and RenaissanceStressTest.java time out with jvmti module errors
JDK-8315871	Opensource five more Swing regression tests
JDK-8315876	Open source several Swing CSS related tests
JDK-8315951	Open source several Swing HTMLToolkit related tests
JDK-8315981	Opensource five more random Swing tests
JDK-8316061	Open source several Swing RootPane and Slider related tests
JDK-8316324	Opensource five miscellaneous Swing tests
JDK-8316388	Opensource five Swing component related regression tests
JDK-8316452	java/lang/instrument/modules/AppendToClass PathModuleTest.java ignores VM flags
JDK-8316497	ColorConvertOp - typo for non-ICC conversions needs one-line fix
JDK-8316580	HttpClient with StructuredTaskScope does not close when a task fails

Issue ID	Summary
JDK-8316629	<code>j.text.DateFormatSymbols.setZoneStrings()</code> exception is unhelpful
JDK-8317264	<code>Pattern.Bound</code> has <code>static</code> fields that should be <code>static final</code> .
JDK-8318509	x86 <code>count_positives</code> intrinsic broken for <code>-XX:AVX3Threshold=0</code>
JDK-8318636	Add <code>jcmd</code> to print annotated process memory map
JDK-8318700	MacOS Zero cannot run gtests due to wrong JVM path
JDK-8318811	Compiler directives parser swallows a character after line comments
JDK-8318915	Enhance checks in <code>BigDecimal.toPlainString()</code>
JDK-8319439	Move <code>BufferNode</code> from <code>PtrQueue</code> files to new files
JDK-8319572	Test <code>jdk/incubator/vector/LoadJsvmlTest.java</code> ignores VM flags
JDK-8319690	[AArch64] C2 compilation hits <code>offset_ok_for_immed: assert "c2 compiler bug"</code>
JDK-8320687	<code>sun.jvmstat.monitor.MonitoredHost.getMonitoredHost()</code> throws unexpected exceptions when invoked concurrently
JDK-8320948	NPE due to unreported compiler error

Issue ID	Summary
JDK-8321204	C2: assert(false) failed: node should be in igvn hash table
JDK-8321479	java -D-D crashes
JDK-8321931	memory_swap_current_in_bytes reports 0 as "unlimited"
JDK-8322141	SequenceInputStream.transferTo should not return as soon as Long.MAX_VALUE bytes have been transferred
JDK-8322475	Extend printing for System.map
JDK-8323795	jcmm Compiler.codecache should print total size of code cache
JDK-8324345	Stack overflow during C2 compilation when splitting memory phi
JDK-8324678	Replace NULL with nullptr in HotSpot gtests
JDK-8324681	Replace NULL with nullptr in HotSpot jtreg test native code files
JDK-8324799	Use correct extension for C++ test headers
JDK-8324880	Rename get_stack_trace.h
JDK-8325055	Rename Injector.h
JDK-8325180	Rename jvmti_FollowRefObjects.h
JDK-8325347	Rename native_thread.h

Issue ID	Summary
JDK-8325367	Rename nsk_list.h
JDK-8325435	[macos] Menu or JPopupMenu not closed when main window is resized
JDK-8325456	Rename nsk_mutex.h
JDK-8325458	Rename mlvmJvmtiUtils.h
JDK-8325680	Uninitialised memory in deleteGSSCB of GSSLibStub.c:179
JDK-8325682	Rename nsk_strace.h
JDK-8325910	Rename jnihelper.h
JDK-8326090	Rename jvmti_aod.h
JDK-8326389	[test] improve assertEquals failure output
JDK-8326524	Rename agent_common.h
JDK-8326586	Improve Speed of System.map
JDK-8327071	[Testbug] g-tests for cgroup leave files in /tmp on linux
JDK-8327169	serviceability/dcmd/vm/SystemMapTest.java and SystemDumpMapTest.java may fail after JDK-8326586
JDK-8327370	(ch) sun.nio.ch.Poller.register throws AssertionError

Issue ID	Summary
JDK-8327461	KeyStore getEntry is not thread-safe
JDK-8328107	Shenandoah/C2: TestVerifyLoopOptimizations test failure
JDK-8328301	Convert Applet test ManualHTMLDataFlavorTest.java to main program
JDK-8328482	Convert and Open source few manual applet test to main based
JDK-8328484	Convert and Opensource few JFileChooser applet test to main
JDK-8328648	Remove applet usage from JFileChooser tests bug4150029
JDK-8328670	Automate and open source few closed manual applet test
JDK-8328673	Convert closed text/html/CSS manual applet test to main
JDK-8328864	NullPointerException in sun.security.jca.ProviderList.getService()
JDK-8329261	G1: interpreter post-barrier x86 code asserts index size of wrong buffer
JDK-8329729	java/util/Properties/StoreReproducibilityTest.java times out
JDK-8330106	C2: VectorInsertNode::make() shouldn't call ConlNode::make() directly

Issue ID	Summary
JDK-8330158	C2: Loop strip mining uses ABS with min int
JDK-8330534	Update nsk/jdwp tests to use driver instead of othervm
JDK-8330598	java/net/httpclient/Http1ChunkedTest.java fails with java.util.MissingFormatArgumentException: Format specifier '%s'
JDK-8330936	[ubsan] exclude function BilinearInterp and ShapeSINextSpan in libawt java2d from ubsan checks
JDK-8331088	Incorrect TraceLoopPredicate output
JDK-8331735	UpcallLinker::on_exit races with GC when copying frame anchor
JDK-8332252	Clean up vmTestbase/vm/share
JDK-8332506	SIGFPE In ObjectSynchronizer::is_async_deflation_needed()
JDK-8332631	Update nsk.share.jpda.BindServer to don't use finalization
JDK-8332641	Update nsk.share.jpda.Jdb to don't use finalization
JDK-8332880	JFR GCHelper class recognizes "Archive" regions as valid

Issue ID	Summary
JDK-8332921	Ctrl+C does not call shutdown hooks after JLine upgrade
JDK-8333013	Update vmTestbase/nsk/share/LocalProcess.java to don't use finalization
JDK-8333117	Remove support of remote and manual debuggee launchers
JDK-8333680	com/sun/tools/attach/BasicTests.java fails with "SocketException: Permission denied: connect"
JDK-8333805	Replaying compilation with null static final fields results in a crash
JDK-8333890	Fatal error in auto-vectorizer with float16 kernel.
JDK-8334644	Automate javax/print/attribute/PageRangesException.java
JDK-8334780	Crash: assert(h_array_list.not_null()) failed: invariant
JDK-8334895	OpenJDK fails to configure on linux aarch64 when CDS is disabled after JDK-8331942
JDK-8335181	Incorrect handling of HTTP/2 GOAWAY frames in HttpClient
JDK-8335643	serviceability/dcmd/vm tests fail for ZGC after JDK-8322475

Issue ID	Summary
JDK-8335662	[AArch64] C1: guarantee(val < (1ULL << nbits)) failed: Field too big for insn
JDK-8335684	Test ThreadCpuTime.java should pause like ThreadCpuTimeArray.java
JDK-8335710	serviceability/dcmd/vm/SystemDumpMapTest.java and SystemMapTest.java fail on Linux Alpine after 8322475
JDK-8335836	serviceability/jvmti/StartPhase/AllowedFunctions/AllowedFunctions.java fails with unexpected exit code: 112
JDK-8335860	compiler/vectorization/TestFloat16VectorConvChain.java fails with non-standard AVX/SSE settings
JDK-8336042	Caller/callee param size mismatch in deoptimization causes crash
JDK-8336499	Failure when creating non-CRT RSA private keys in SunPKCS11
JDK-8336587	failure_handler lldb command times out on macosx-aarch64 core file
JDK-8336827	compiler/vectorization/TestFloat16VectorConvChain.java timeouts on ppc64 platforms after JDK-8335860
JDK-8337221	CompileFramework: test library to conveniently compile java and jasm sources for fuzzing

Issue ID	Summary
JDK-8337299	vmTestbase/nsk/jdb/stop_at/stop_at002/stop_at002.java failure goes undetected
JDK-8337681	PNGImageWriter uses much more memory than necessary
JDK-8337795	Type annotation attached to incorrect type during class reading
JDK-8337958	Out-of-bounds array access in secondary_super_cache
JDK-8337981	ShenandoahHeap::is_in should check for alive regions
JDK-8337998	CompletionFailure in getEnclosingType attaching type annotations
JDK-8338010	WB_IsFrameDeoptimized miss ResourceMark
JDK-8338064	Give better error for ConcurrentHashTable corruption
JDK-8338136	Hotspot should support multiple large page sizes on Windows
JDK-8338154	Fix -Wzero-as-null-pointer-constant warnings in gtest framework
JDK-8338202	Shenandoah: Improve handshake closure labels
JDK-8338314	JFR: Split JFRCheckpoint VM operation
JDK-8339148	Make os::Linux::active_processor_count() public

Issue ID	Summary
JDK-8339288	Improve diagnostic logging runtime/cds/DeterministicDump.java
JDK-8339300	CollectorPolicy.young_scaled_initial_ergo_vm gtest fails on ppc64 based platforms
JDK-8339538	Wrong timeout computations in DnsClient
JDK-8339639	Opensource few AWT PopupMenu tests
JDK-8339678	Update runtime/conddy tests to be executed with VM flags
JDK-8339727	Open source several AWT focus tests - series 1
JDK-8339769	Incorrect error message during startup if working directory does not exist
JDK-8339794	Open source closed choice tests #1
JDK-8339810	Clean up the code in sun.tools.jar.Main to properly close resources and use ZipFile during extract
JDK-8339836	Open source several AWT Mouse tests - Batch 1
JDK-8339842	Open source several AWT focus tests - series 2
JDK-8339895	Open source several AWT focus tests - series 3
JDK-8339906	Open source several AWT focus tests - series 4
JDK-8339935	Open source several AWT focus tests - series 5

Issue ID	Summary
JDK-8339982	Open source several AWT Mouse tests - Batch 2
JDK-8339984	Open source AWT MenuItem related tests
JDK-8339995	Open source several AWT focus tests - series 6
JDK-8340024	In ClassReader, extract a constant for the superclass supertype_index
JDK-8340077	Open source few Checkbox tests - Set2
JDK-8340084	Open source AWT Frame related tests
JDK-8340143	Open source several Java2D rendering loop tests.
JDK-8340146	ZGC: TestAllocateHeapAt.java should not run with UseLargePages
JDK-8340164	Open source few Component tests - Set1
JDK-8340173	Open source some Component/Panel/EventQueue tests - Set2
JDK-8340176	Replace usage of -noclassgc with -Xnoclassgc in test/jdk/java/lang/management/MemoryMXBean/LowMemoryTest2.java
JDK-8340193	Open source several AWT Dialog tests - Batch 1
JDK-8340228	Open source couple more miscellaneous AWT tests

Issue ID	Summary
JDK-8340271	Open source several AWT Robot tests
JDK-8340279	Open source several AWT Dialog tests - Batch 2
JDK-8340332	Open source mixed AWT tests - Set3
JDK-8340366	Open source several AWT Dialog tests - Batch 3
JDK-8340367	Opensource few AWT image tests
JDK-8340393	Open source closed choice tests #2
JDK-8340407	Open source a few more Component related tests
JDK-8340417	Open source some MenuBar tests - Set1
JDK-8340432	Open source some MenuBar tests - Set2
JDK-8340433	Open source closed choice tests #3
JDK-8340437	Open source few more AWT Frame related tests
JDK-8340458	Open source additional Component tests (part 2)
JDK-8340555	Open source DnD tests - Set4
JDK-8340560	Open Source several AWT/2D font and rendering tests

Issue ID	Summary
JDK-8340605	Open source several AWT PopupMenu tests
JDK-8340621	Open source several AWT List tests
JDK-8340625	Open source additional Component tests (part 3)
JDK-8340639	Open source few more AWT List tests
JDK-8340713	Open source DnD tests - Set5
JDK-8340784	Remove PassFailJFrame constructor with screenshots
JDK-8340790	Open source several AWT Dialog tests - Batch 4
JDK-8340809	Open source few more AWT PopupMenu tests
JDK-8340874	Open source some of the AWT Geometry/Button tests
JDK-8340907	Open source closed frame tests # 2
JDK-8340966	Open source few Checkbox and Cursor tests - Set1
JDK-8340967	Open source few Cursor tests - Set2
JDK-8340978	Open source few DnD tests - Set6
JDK-8340985	Open source some Desktop related tests
JDK-8341000	Open source some of the AWT Window tests

Issue ID	Summary
JDK-8341004	Open source AWT FileDialog related tests
JDK-8341072	Open source several AWT Canvas and Rectangle related tests
JDK-8341128	open source some 2d graphics tests
JDK-8341148	Open source several Choice related tests
JDK-8341162	Open source some of the AWT window test
JDK-8341170	Open source several Choice related tests (part 2)
JDK-8341177	Opensource few List and a Window test
JDK-8341191	Open source few more AWT FileDialog tests
JDK-8341239	Open source closed frame tests # 3
JDK-8341257	Open source few DND tests - Set1
JDK-8341258	Open source few various AWT tests - Set1
JDK-8341278	Open source few TrayIcon tests - Set7
JDK-8341298	Open source more AWT window tests
JDK-8341373	Open source closed frame tests # 4
JDK-8341378	Open source few TrayIcon tests - Set8
JDK-8341447	Open source closed frame tests # 5

Issue ID	Summary
JDK-8341535	sun/awt/font/TestDevTransform.java fails with RuntimeException: Different rendering
JDK-8341637	java/net/Socket/UdpSocket.java fails with "java.net.BindException: Address already in use" (macos-aarch64)
JDK-8341779	[REDO BACKPORT] type annotations are not visible to javac plugins across compilation boundaries (JDK-8225377)
JDK-8341972	java/awt/dnd/DnDRemoveFocusOwnerCrashTest.java timed out after JDK-8341257
JDK-8342075	HttpClient: improve HTTP/2 flow control checks
JDK-8342376	More reliable OOM handling in ExceptionDuringDumpAtObjectsInitPhase test
JDK-8342524	Use latch in AbstractButton/bug6298940.java instead of delay
JDK-8342633	javax/management/security/HashedPassword FileTest.java creates tmp file in src dir
JDK-8342958	Use jymArgs consistently in microbenchmarks
JDK-8343019	Primitive caches must use boxed instances from the archive
JDK-8343037	Missing @since tag on JColorChooser.showDialog overload

Issue ID	Summary
JDK-8343103	Enable debug logging for vmTestbase/nsk/jvmti/scenarios/sampling/SP05/sp05t003/TestDescription.java
JDK-8343124	Tests fails with java.lang.IllegalAccessException: class com.sun.javatest.regtest.agent.MainWrapper\$ MainTask cannot access
JDK-8343144	UpcallLinker::on_entry racingly clears pending exception with GC safepoints
JDK-8343170	java/awt/Cursor/JPanelCursorTest/JPanelCursorTest.java does not show the default cursor
JDK-8343224	print/Dialog/PaperSizeError.java fails with MediaSizeName is not A4: A4
JDK-8343342	java/io/File/GetXSpace.java fails on Windows with CD-ROM drive
JDK-8343345	Use -jvmArgsPrepend when running microbenchmarks in RunTests.gmk
JDK-8343529	serviceability/sa/ClhsdbWhere.java fails AssertionFailure: Corrupted constant pool
JDK-8343754	Problemist jdk/jfr/event/oldobject/TestShenandoah.java after JDK-8279016
JDK-8343855	HTTP/2 ConnectionWindowUpdateSender may miss some unprocessed DataFrames from closed streams

Issue ID	Summary
JDK-8343891	Test javax/swing/JTabbedPane/TestJTabbedPaneBackgroundColors.java failed
JDK-8343936	Adjust timeout in test javax/management/monitor/DerivedGaugeMonitorTest.java
JDK-8344316	security/auth/callback/TextCallbackHandler/Password.java make runnable with JReg and add the UI
JDK-8344346	java/net/httpclient/ShutdownNow.java fails with java.lang.AssertionError: client was still running, but exited after further delay: timeout should be adjusted
JDK-8344361	Restore null return for invalid services from legacy providers
JDK-8344414	ZGC: Another division by zero in rule_major_allocation_rate
JDK-8344925	translet-name ignored when package-name is also set
JDK-8345133	Test sun/security/tools/jarsigner/TsacertOptionTest.java failed: Warning found in stdout
JDK-8345134	Test sun/security/tools/jarsigner/ConciseJarsigner.java failed: unable to find valid certification path to requested target

Issue ID	Summary
JDK-8345146	[PPC64] Make intrinsic conversions between bit representations of half precision values and floats
JDK-8345341	Fix incorrect log message in JDI stop002t test
JDK-8345357	test/jdk/javax/swing/JRadioButton/8033699/bug8033699.java fails in ubuntu22.04
JDK-8345447	test/jdk/javax/swing/JToolBar/4529206/bug4529206.java fails in ubuntu22.04
JDK-8345547	test/jdk/javax/swing/text/DefaultEditorKit/4278839/bug4278839.java fails in ubuntu22.04
JDK-8345598	Upgrade NSS binaries for interop tests
JDK-8345625	Better HTTP connections
JDK-8345728	[Accessibility,macOS,Screen Magnifier]: JCheckbox unchecked state does not magnify but works for checked state
JDK-8345838	Remove the appcads/javaldt/AnonVmClassesDuringDump.java test
JDK-8346049	jdk/test/lib/security/timestamp/TsaServer.java warnings
JDK-8346082	Output JVMTI agent information in hserr files
JDK-8346264	"Total compile time" counter should include time spent in failing/bailout compiles

Issue ID	Summary
JDK-8346581	JRadioButton/ButtonGroupFocusTest.java fails in CI on Linux
JDK-8346888	[ubsan] block.cpp:1617:30: runtime error: 9.97582e+36 is outside the range of representable values of type 'int'
JDK-8347000	Bug in com/sun/net/httpserver/bugs/B6361557.java test
JDK-8347019	Test javax/swing/JRadioButton/8033699/bug8033699.java still fails: Focus is not on Radio Button Single as Expected
JDK-8347083	Incomplete logging in nsk/jvmti/ResourceExhausted/resexhausted00* tests
JDK-8347126	gc/stress/TestStressG1Uncommit.java gets OOM-killed
JDK-8347173	java/net/DatagramSocket/InterruptibleDatagramSocket.java fails with virtual thread factory
JDK-8347286	(fs) Remove some extensions from java/nio/file/Files/probeContentType/Basic.java
JDK-8347296	WinInstallerUiTest fails in local test runs if the path to test work directory is longer than regular
JDK-8347373	HTTP/2 flow control checks may count unprocessed data twice

Issue ID	Summary
JDK-8347506	Compatible OCSP readtimeout property with OCSP timeout
JDK-8347596	Update HSS/LMS public key encoding
JDK-8347629	Test FailOverDirectExecutionControlTest.java fails with -Xcomp
JDK-8347995	Race condition in jdk/java/net/httpclient/offline/FixedResponseHttpClient.java
JDK-8348107	test/jdk/java/net/httpclient/HttpsTunnelAuthTest.java fails intermittently
JDK-8348110	Update LCMS to 2.17
JDK-8348299	Update List/ItemEventTest/ItemEventTest.java
JDK-8348323	Corrupted timezone string in JVM crash log
JDK-8348596	Update FreeType to 2.13.3
JDK-8348597	Update HarfBuzz to 10.4.0
JDK-8348598	Update Libpng to 1.6.47
JDK-8348600	Update PipeWire to 1.3.81
JDK-8348865	JButton/bug4796987.java never runs because Windows XP is unavailable

Issue ID	Summary
JDK-8348936	[Accessibility,macOS,VoiceOver] VoiceOver doesn't announce untick on toggling the checkbox with "space" key on macOS
JDK-8348989	Better Glyph drawing
JDK-8349111	Enhance Swing supports
JDK-8349200	[JMH] time.format.ZonedDateTimeFormatterBenchmark fails
JDK-8349348	Refactor ClassLoaderDeadlock.sh and Deadlock.sh to run fully in java
JDK-8349358	[JMH] Cannot access class jdk.internal.vm.ContinuationScope
JDK-8349492	Update sun/security/pkcs12/KeytoolOpensslInteropTest.java to use a recent Openssl version
JDK-8349501	Relocate supporting classes in security/testlibrary to test/lib/jdk tree
JDK-8349594	Enhance TLS protocol support
JDK-8349623	[ASAN] Gtest os_linux.glibc_mallinfo_wrapper_vm fails
JDK-8349637	Integer.numberOfLeadingZeros outputs incorrectly in certain cases
JDK-8349751	AIX build failure after upgrade pipewire to 1.3.81

Issue ID	Summary
JDK-8350201	Out of bounds access on Linux aarch64 in os::print_register_info
JDK-8350211	CTW: Attempt to preload all classes in constant pool
JDK-8350224	Test javax/swing/JComboBox/TestComboBoxComponentRendering.java fails in ubuntu 23.x and later
JDK-8350260	Improve HTML instruction formatting in PassFailJFrame
JDK-8350313	Include timings for leaving safepoint in safepoint logging
JDK-8350383	Test: add more test case for string compare (UL case)
JDK-8350386	Test TestCodeCacheFull.java fails with option -XX:-UseCodeCacheFlushing
JDK-8350412	[21u] AArch64: Ambiguous frame layout leads to incorrect traces in JFR
JDK-8350483	AArch64: turn on signum intrinsics by default on Ampere CPUs
JDK-8350498	Remove two Camerfirma root CA certificates
JDK-8350546	Several java/net/InetAddress tests fails UnknownHostException

Issue ID	Summary
JDK-8350616	Skip ValidateHazardPtrsClosure in non-debug builds
JDK-8350650	Bump update version for OpenJDK: jdk-21.0.8
JDK-8350682	[JMH] vector.IndexInRangeBenchmark failed with IndexOutOfBoundsException for size=1024
JDK-8350786	Some java/lang jtreg tests miss requires vm.hasJFR
JDK-8350924	javax/swing/JMenu/4213634/bug4213634.java fails
JDK-8350991	Improve HTTP client header handling
JDK-8351086	(fc) Make java/nio/channels/FileChannel/BlockDeviceSize.java test manual
JDK-8351500	G1: NUMA migrations cause crashes in region allocation
JDK-8351665	Remove unused UseNUMA in os_aix.cpp
JDK-8351933	Inaccurate masking of TC subfield decrement in ForkJoinPool
JDK-8352076	[21u] Problem list tests that fail in 21 and would be fixed by 8309622
JDK-8352109	java/awt/Desktop/MailTest.java fails in platforms where Action.MAIL is not supported

Issue ID	Summary
JDK-8352302	Test sun/security/tools/jarsigner/TimestampCheck.java is failing
JDK-8352512	TestVectorZeroCount: counter not reset between iterations
JDK-8352676	Opensource JMenu tests - series1
JDK-8352680	Opensource few misc swing tests
JDK-8352684	Opensource JInternalFrame tests - series1
JDK-8352706	httpClient HeadTest does not run on HTTP2
JDK-8352716	(tz) Update Timezone Data to 2025b
JDK-8352908	Open source several swing tests batch1
JDK-8352942	jdk/jfr/startupargs/TestMemoryOptions.java fails with 32-bit build
JDK-8353070	Clean up and open source couple AWT Graphics related tests (Part 1)
JDK-8353138	Screen capture for test TaskbarPositionTest.java, failure case
JDK-8353190	Use "/native" Run Option for TestAvailableProcessors Execution
JDK-8353237	[AArch64] Incorrect result of VectorizedHashCode intrinsic on Cortex-A53

Issue ID	Summary
JDK-8353320	Open source more Swing text tests
JDK-8353446	Open source several AWT Menu tests - Batch 2
JDK-8353475	Open source two Swing DefaultCaret tests
JDK-8353685	Open some JComboBox bugs 4
JDK-8353709	Debug symbols bundle should contain full debug files when building --with-external-symbols-in-bundles=public
JDK-8353787	Increased number of SHA-384-Digest java.util.jar.Attributes\$Name instances leading to higher memory footprint
JDK-8353942	Open source Swing Tests - Set 5
JDK-8354255	[jittester] Remove TempDir debug output
JDK-8354530	AIX: sporadic unexpected errno when calling setsockopt in Net.joinOrDrop
JDK-8354554	Open source several clipboard tests batch1
JDK-8354802	MAX_SECS definition is unused in os_linux
JDK-8354893	[REDO BACKPORT] javac crashes while adding type annotations to the return type of a constructor (JDK-8320001)
JDK-8355498	[AIX] Adapt code for C++ VLA rule

Issue ID	Summary
JDK-8356053	Test java/awt/Toolkit/Headless/HeadlessToolkit.java fails by timeout
JDK-8356096	ISO 4217 Amendment 179 Update
JDK-8356571	Re-enable -Wtype-limits for GCC in LCMS
JDK-8357105	C2: compilation fails with "assert(false) failed: empty program detected during loop optimization"
JDK-8357193	[VS 2022 17.14] Warning C5287 in debugInit.c: enum type mismatch during build
JDK-8359170	Add 2 TLS and 2 CS Sectigo roots
JDK-8360147	Better Glyph drawing redux
JDK-8360406	[21u] Disable logic for attaching type annotations to class files until 8359336 is fixed

JFX issues

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

Issue ID	Summary
JDK-8350284	WebKit 620.1 crashes on startup on Windows x86 32-bit

Issue ID	Summary
JDK-8351038	ConcurrentModificationException in EventType constructor
JDK-8352162	Update libxml2 to 2.13.8
JDK-8352164	Update libxslt to 1.1.43
JDK-8354876	Update SQLite to 3.49.1
JDK-8354940	Fail to sign in to Microsoft sites with WebView
JDK-8355642	Change JavaFX release version to 21.0.8 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
FreeType	FreeType	2.13.3	java.desktop	8348596
HarfBuzz	HarfBuzz	10.4.0	java.desktop	8348597
LCMS	LittleCMS	2.17	java.desktop	8348110
Libpng	Libpng	1.6.47	java.desktop	8348598
libxml2	libxml2	2.13.8	javafx.web	8352162
libxslt	libxslt	1.1.43	javafx.web	8352164
PipeWire	PipeWire	1.3.81	java.desktop	8348600
SQLite	SQLite	3.49.1	javafx.web	8354876

7. Upgrading to the New Version

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



Liberica JDK 21.0.8+12

Release Notes

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