

Liberica JDK 21.0.11+11

Release Notes



Liberica JDK
21.0.11
April 21, 2026

be//soft

Copyright © BellSoft Corporation 2018-2026.

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	8
----------------------------------	---

IANA TZ Data version	8
----------------------	---

Briefly	8
---------	---

Changes to past timestamps	8
----------------------------	---

Changes to build procedure	9
----------------------------	---

Changes to code	9
-----------------	---

Changes to commentary	9
-----------------------	---

3. Known Issues	10
-----------------	----

4. Fixed CVEs	11
---------------	----

5. Resolved Issues	12
--------------------	----

JDK issues 12

JFX issues 25

6. Updates to Third Party Libraries 27

7. Upgrading to the New Version 28

1. Version information

This document provides information about Liberica JDK 21.0.11 release. The full version string for this update release is 21.0.11+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-8244336	<p>Summary: Restrict algorithms at JCE layer</p> <p>Description: A new security property named <code>jdk.crypto.disabledAlgorithms</code> has been introduced to disable algorithms for JCE/JCA cryptographic services. Initially, this property only supports the <i>Cipher</i>, <i>KeyStore</i>, <i>MessageDigest</i>, and <i>Signature</i> services. This property is defined in the <code>java.security</code> file and initially no algorithms are disabled by default. However, this may change in the future. This security property can be overridden by a system property of the same name if applications need to re-enable algorithms. See Disabled and Restricted Cryptographic Algorithms for more information.</p>
JDK-8328608	<p>Summary: Multiple NewSessionTicket support for TLS</p> <p>Description: A new system property, <code>jdk.tls.server.newSessionTicketCount</code>, sets the number of TLSv1.3 resumption tickets sent by a JSSE server per session. It can be set on the command line with <code>-Djdk.tls.server.newSessionTicketCount=</code>, where ranges from 0 to 10. The default is 1. For more details, see Customizing JSSE.</p>

Issue ID

JDK-8354469

Summary: Keytool exposes the password in plain text when command is piped using `grep`

Description: The `[keytool]` command reads passwords from the system console to prevent them from being displayed on the screen. However, the console is usually available only when both the standard input and output streams are not redirected. Previously, if the standard output stream was redirected into a file or another command, the console was unavailable and the input password was echoed on the screen. This enhancement improves password handling to ensure that the password is not displayed on the screen even if the standard output stream is redirected. This enhancement has also been made to the `[jarsigner]` command and the JAAS `[TextCallbackHandler]` API.

JDK-8361613

Summary: `System.console()` should only be available for interactive terminal

Description: `System.console()` now returns a non-null `Console` instance only when both standard input and standard output are connected to a terminal (that is, in the absence of redirection). If I/O has been redirected, `System.console()` always returns null. This behavior is consistent regardless of whether the base provider or the `JLine` provider is in use.

JDK-8369282

Summary: Distrust TLS server certificates anchored by Chunghwa ePKI Root CA

Description: TLS server certificates anchored by the Chunghwa root CAs are distrusted or distrusted after a specific date by Google and Mozilla. The restrictions will be enforced in the SunJSSE Provider of the Java Secure Socket Extension (JSSE) API. A TLS session will not be negotiated if the server's certificate chain is anchored by any of the mentioned Certificate Authorities and the certificate's `notBefore` date is after March 17, 2026. An application will receive an `Exception` with a message indicating the trust anchor (root) is not trusted.

Issue ID

JDK-8373476

Summary: Update Timezone Data to 2025c

Description: The 2025c release of the tz code and data is available. This release mostly changes code and commentary. The only changed data are leap second table expiration and pre-1976 time in Baja California. This release contains several code changes for compatibility with FreeBSD.

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 21.0.11 comes with the 2025c version of the in-tree copy of the [IANA timezone database](#). The following are the key features of this version.

This release mostly changes code and commentary. The only changed data are leap second table expiration and pre-1976 time in Baja California.

Briefly

Several code changes for compatibility with FreeBSD.

Changes to past timestamps

Baja California agreed with California's DST rules in 1953 and in 1961 through 1975, instead of observing standard time all year.

Changes to build procedure

Files in distributed tarballs now have correct commit times. Formerly, the committer's time zone was incorrectly ignored.

Changes to code

An unset TZ is no longer invalid when `/etc/localtime` is missing, and is abbreviated "UTC" not "-00". This reverts to 2024b behavior.

New function `offtime_r`, short for `fixed-offset localtime_rz`. It is defined if `STD_INSPIRED` is defined.

Changes to commentary

The `leapseconds` file contains commentary about the IERS and NIST last-modified and expiration timestamps for leap second data.

For more information, see [JDK-8373476](#).

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-2026-20652	7.5	javafx	web	network	low	none	none	unchanged	none	none	high
CVE-2026-22007	2.9	security-libs	java.security	local	high	none	none	unchanged	low	none	none
CVE-2026-22013	5.3	security-libs	org.ietf.jgss	network	high	none	required	unchanged	high	none	none
CVE-2026-22016	7.5	xml	jaxp	network	low	none	none	unchanged	high	none	none
CVE-2026-22018	3.7	core-libs	java.util	network	high	none	none	unchanged	none	none	low
CVE-2026-22021	5.3	security-libs	java.security	network	low	none	none	unchanged	none	none	low
CVE-2026-23865	5.3	client-libs	2d	local	low	none	required	unchanged	low	low	low
CVE-2026-34268	2.9	security-libs	java.security	local	high	none	none	unchanged	low	none	none
CVE-2026-34282	7.5	core-libs	java.net	network	low	none	none	unchanged	none	none	high

5. Resolved Issues

JDK issues

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

Issue ID	Summary
JDK-6899304	java.awt.Toolkit.getScreenInsets(GraphicsConfiguration) returns incorrect values
JDK-8030957	AIX: Implement <code>OperatingSystemMXBean.getSystemCpuLoad()</code> and <code>.getProcessCpuLoad()</code> on AIX
JDK-8075917	The regression-swing case failed as the text on label is not painted red with the GTK L&F
JDK-8114830	(fs) <code>Files.copy</code> fails due to interference from something else changing the file system
JDK-8244336	Restrict algorithms at JCE layer
JDK-8256289	java/awt/Focus/AppletInitialFocusTest/AppletInitialFocusTest1.java failed with <code>RuntimeException: Wrong focus owner: java.awt.Button[button1,41,36,56x23,label=Button1]</code>
JDK-8287062	com/sun/jndi/ldap/LdapPoolTimeoutTest.java failed due to different timeout message

Issue ID	Summary
JDK-8298153	Colored text is not shown on disabled checkbox and radio button with GTK LAF for bug4314194
JDK-8301875	java.util.TimeZone.getSystemTimeZoneID uses C library default file mode
JDK-8313319	[linux] mmap should use MAP_FIXED_NOREPLACE if available
JDK-8314555	Build with mawk fails on Windows
JDK-8314810	(fs) java/nio/file/Files/CopyInterference.java should use TestUtil::supportsLinks
JDK-8316274	javax.swing.ButtonGroup/TestButtonGroupFocusTraversal.java fails in Ubuntu 23.10 with Motif LAF
JDK-8317633	Modernize text.testlib.HexDumpReader
JDK-8317801	java/net/Socket/asyncClose/Race.java fails intermittently (aix)
JDK-8317838	java/nio/channels/Channels/SocketChannelStreams.java running into timeout (aix)
JDK-8318302	ThreadCountLimit.java failed with "Native memory allocation (mprotect) failed to protect 16384 bytes for memory to guard stack pages"
JDK-8326897	(fs) The utility TestUtil.supportsLinks is wrongly used to check for hard link support

Issue ID	Summary
JDK-8327114	Attach in Linux may have wrong behaviour when pid == ns_pid (Kubernetes debug container)
JDK-8328608	Multiple NewSessionTicket support for TLS
JDK-8329337	Problem list BufferStrategyExceptionTest.java on Windows
JDK-8330016	Stress seed should be initialized for runtime stub compilation
JDK-8331431	Update to use jreg 7.4
JDK-8333386	TestAbortOnVMOperationTimeout test fails for client VM
JDK-8333857	Test sun/security/ssl/SSLSessionImpl/ResumeCheck sServer.java failed: Existing session was used
JDK-8334670	SSLSocketOutputRecord buffer miscalculation
JDK-8334738	os::print_hex_dump should optionally print ASCII
JDK-8335646	Nimbus : JLabel not painted with LAF defined foreground color on Ubuntu 24.04
JDK-8335906	[s390x] Test Failure: GTestWrapper.java
JDK-8336695	Update Commons BCEL to Version 6.10.0
JDK-8337102	JITTester: Fix breaks in static initialization blocks

Issue ID	Summary
JDK-8339238	Update to use jtreg 7.5.1
JDK-8339271	giflib attribution correction
JDK-8339791	Refactor MiscUndecorated/ActiveAWTWindowTest.java
JDK-8341246	Test com/sun/tools/attach/PermissionTest.java fails access denied after JDK-8327114
JDK-8341310	Test TestJcmdWithSideCar.java should skip ACCESS_TMP_VIA_PROC_ROOT (after JDK-8327114)
JDK-8342175	MemoryEaterMT fails intermittently with ExceptionInInitializerError
JDK-8342449	reimplement: JDK-8327114 Attach in Linux may have wrong behavior when pid == ns_pid
JDK-8343234	(bf) Move java/nio/Buffer/LimitDirectMemory.java from ProblemList.txt to ProblemList-Virtual.txt
JDK-8343377	Performance regression in reflective invocation of native methods
JDK-8343622	AesDkCrypto.stringToKey should not return null
JDK-8345578	New test in JDK-8343622 fails with a promoted build

Issue ID	Summary
JDK-8345668	ZoneOffset.ofTotalSeconds performance regression
JDK-8346048	test/lib/containers/docker/DockerRunOptions.java uses addJavaOpts() from ctor
JDK-8346962	Test CRLReadTimeout.java fails with -Xcomp on a fastdebug build
JDK-8347475	GTK: javax/swing/JColorChooser/Test8152419.java there are no swatches or RGB tab in JColorChooser
JDK-8348014	Enhance certificate processing
JDK-8348309	MultiNST tests need more debugging and timing
JDK-8349351	Combine Screen Inset Tests into a Single File
JDK-8350103	Test containers/systemd/SystemdMemoryAwarenessTest.java fails on Linux ppc64le SLES15 SP6
JDK-8351000	StringBuilder getChar and putChar robustness
JDK-8351458	(ch) Move preClose to UnixDispatcher
JDK-8351639	Improve debuggability of test/langtools/jdk/jshell/JdiHangingListenExecutionControlTest.java test
JDK-8353755	Add a helper method to Util - findComponent()

Issue ID	Summary
JDK-8354057	Odd debug output in -Xlog:os+container=debug on certain systems
JDK-8354145	G1: UseCompressedOops boundary is calculated on maximum heap region size instead of maximum ergonomic heap region size
JDK-8354219	Automate javax/swing/JComboBox/ComboPopupBug.java
JDK-8354469	Keytool exposes the password in plain text when command is piped using grep
JDK-8354559	gc/g1/TestAllocationFailure.java doesn't need WB API
JDK-8354878	File Leak in CgroupSubsystemFactory::determine_type of cgroupSubsystem_linux.cpp:300
JDK-8354922	ZGC: Use MAP_FIXED_NO_REPLACE when reserving memory
JDK-8355278	Improve debuggability of com/sun/jndi/ldap/LdapPoolTimeoutTest.java test
JDK-8355445	[java.nio] Use @requires tag instead of exiting based on "os.name" property value
JDK-8355632	WhiteBox.waitForReferenceProcessing() fails assert for return type

Issue ID	Summary
JDK-8356107	[java.lang] Use @requires tag instead of exiting based on os.name or separatorChar property
JDK-8357141	Update to use jtreg 7.5.2
JDK-8357277	Update OpenSSL library for interop tests
JDK-8357380	java/lang/StringBuilder/RacingSBThreads.java times out with C1
JDK-8358077	sun.tools.attach.VirtualMachineImpl::checkCatchesAndSendQuitTo on Linux leaks file handles after JDK-8327114
JDK-8358159	Empty mode/padding in cipher transformations
JDK-8358751	C2: Recursive inlining check for compiled lambda forms is broken
JDK-8359388	Stricter checking for cipher transformations
JDK-8359827	Test runtime/Thread/ThreadCountLimit.java need loop increasing the limit
JDK-8360539	DTLS handshakes fails due to improper cookie validation logic
JDK-8361067	Test ExtraButtonDrag.java requires frame.dispose in finally block
JDK-8361530	Test javax/swing/GraphicsConfigNotifier/StalePreferredSize.java timed out

Issue ID	Summary
JDK-8361613	System.console() should only be available for interactive terminal
JDK-8362834	Several runtime/Thread tests should mark as /native
JDK-8363950	Incorrect jtreg header in TestLayoutVsICU.java
JDK-8364373	Transform Affine transformations
JDK-8364465	Enhance behavior of some intrinsics
JDK-8364764	java/nio/channels/vthread/BlockingChannelOps.java subtests timed out
JDK-8365526	Crash with null Symbol passed to SystemDictionary::resolve_or_null
JDK-8365972	JFR: ThreadDump and ClassLoaderStatistics events may cause back to back rotations
JDK-8366128	jdk/jdk/nio/zipfs/TestPosix.java::testJarFile uses wrong file
JDK-8366261	Provide utility methods for sun.security.util.Password
JDK-8366694	Test JdbStopInNotificationThreadTest.java timed out after 60 second
JDK-8366817	test/jdk/javax/net/ssl/TLSCommon/interop/JdkProcServer.java and JdkProcClient.java should not delete logs

Issue ID	Summary
JDK-8366850	Test com/sun/jdi/JdbStopInNotificationThreadTest.java failed
JDK-8366866	SslRMIClientSocketFactory#createSocket lacking privileges (securitymanger)
JDK-8366938	Test runtime/handshake/HandshakeTimeoutTest.java crashed
JDK-8367135	Test compiler/loopstripmining/CheckLoopStripMinin g.java needs internal timeouts adjusted
JDK-8367583	sun/security/util/AlgorithmConstraints/InvalidCr yptoDisabledAlgos.java fails after JDK- 8244336
JDK-8367772	Refactor createUI in PassFailJFrame
JDK-8368683	[process] Increase jtreg debug output maxOutputSize for TreeTest
JDK-8368787	Error reporting: hs_err files should show instructions when referencing code in nmethods
JDK-8368882	NPE during text drawing on machine with JP locale
JDK-8369282	Distrust TLS server certificates anchored by Chunghwa ePKI Root CA
JDK-8369575	Enhance crypto algorithm support

Issue ID	Summary
JDK-8369858	Remove darcy author tags from jdk tests
JDK-8369911	Test sun/java2d/marlin/ClipShapeTest.java#CubicD oDash, #Cubic and #Poly fail intermittent
JDK-8370325	G1: Disallow GC for TLAB allocation
JDK-8370529	Enhance Path Factories Redux
JDK-8370572	Cgroups hierarchical memory limit is not honored after JDK-8322420
JDK-8370579	PPC: fix inswri immediate argument order
JDK-8370615	Improve Kerberos credentialing
JDK-8370636	com/sun/jdi/TwoThreadsTest.java should wait for completion of all threads
JDK-8370966	Create regression test for the hierarchical memory limit fix in JDK-8370572
JDK-8370986	Enhance Zip file reading
JDK-8370995	Enhance ZipFile usage
JDK-8371103	vmTestbase/nsk/jvmti/scenarios/events/EM02/e m02t006/TestDescription.java failing
JDK-8371485	ProblemList awt/Mixing/AWT_Mixing/JTableInGlassPaneOv erlapping.java for linux

Issue ID	Summary
JDK-8371559	Intermittent timeouts in test javax/net/ssl/Stapling/HttpsURLConnectionClient.java
JDK-8371608	Jtreg test jdk/internal/vm/Continuation/Fuzz.java sometimes fails with (fast)debug binaries
JDK-8371830	Enhance certificate chain validation
JDK-8371889	[21u] JFR: Deadlock in ThrowableTracer
JDK-8371935	Enhance key generation
JDK-8371978	tools/jar/ReproducibleJar.java fails on XFS
JDK-8372048	Performance improvement on Linux remote desktop
JDK-8372321	TestBackToBackSensitive fails intermittently after JDK-8365972
JDK-8372348	Adjust some UL / JFR string deduplication output messages
JDK-8372441	JFR: Improve logging of TestBackToBackSensitive
JDK-8372464	Bump update version for OpenJDK: jdk-21.0.11
JDK-8372710	Update ProcessBuilder/Basic regex
JDK-8372756	Mouse additional buttons and horizontal scrolling are broken on XWayland GNOME >= 47 after JDK-8351907

Issue ID	Summary
JDK-8372857	Improve debuggability of java/rmi/server/RemoteServer/AddrInUse.java test
JDK-8372977	Unnecessary gthread-2.0 loading
JDK-8372988	Test runtime/Nestmates/membership/TestNestHost ErrorWithMultiThread.java failed: Unexpected interrupt
JDK-8373290	Update FreeType to 2.14.1
JDK-8373476	(tz) Update Timezone Data to 2025c
JDK-8373525	C2: assert(!_base == Long) failed: Not a Long
JDK-8373727	New XBM images parser regression: only the first line of the bitmap array is parsed
JDK-8374056	RISC-V: Fix argument passing for the RiscvFlushlcache::flush
JDK-8374178	Missing include in systemDictionary.cpp after JDK-8365526
JDK-8374209	[17u,21u] Backout JDK-8361748 due to JDK-8373727
JDK-8374433	java/util/Locale/PreserveTagCase.java does not run any tests
JDK-8374555	No need for visible input warning in s.s.u.Password when not reading from System.in

Issue ID	Summary
JDK-8374557	Enhance TLS connection handling
JDK-8374642	EscapeHash macro fails with GNU make 4.3 and 4.4
JDK-8375057	Update HarfBuzz to 12.3.2
JDK-8375063	Update Libpng to 1.6.54
JDK-8375530	PPC64: incorrect quick verify_method_data_pointer check causes poor performance in debug build
JDK-8375549	ConcurrentModificationException if jdk.crypto.disabledAlgorithms has multiple entries with known oid
JDK-8375999	com/sun/jndi/ldap/LdapPoolTimeoutTest.java fails sporadically on Windows
JDK-8376251	[macos] java/awt/Frame/I18NTitle.java fails on MacOS (JDK-8355884)
JDK-8376270	[21u, 17u] Redo JDK-8361748: Enforce limits on the size of an XBM image
JDK-8377509	Add licenses for gcc 14.2.0
JDK-8377526	Update Libpng to 1.6.55
JDK-8377905	gcc.md included with every build
JDK-8378218	MSYS2 reports cygwin triplet causing bash configure failure

Issue ID	Summary
JDK-8378631	Update Zlib Data Compression Library to Version 1.3.2
JDK-8378823	AIX build fails after zlib updated by JDK-8378631
JDK-8378853	[25u] Make backport of JDK-8244336 comply with differences in CSR
JDK-8379035	(tz) Update Timezone Data to 2026a
JDK-8379158	Update FreeType to 2.14.2
JDK-8379256	Update GIFlib to 6.1.1
JDK-8380078	Update GIFlib to 6.1.2
JDK-8380959	Update Libpng to 1.6.56
JDK-8382047	Update Libpng to 1.6.57

JFX issues

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

Issue ID	Summary
JDK-8278021	Fix warnings in macOS glass native code and treat warnings as errors

Issue ID	Summary
JDK-8333147	update maven classifier syntax to recent gradle version
JDK-8338886	JavaFX debug builds fail on macOS
JDK-8347937	Canvas pattern test fails and crashes on WebKit 620.1
JDK-8367578	Additional WebKit 622.1 fixes from WebKitGTK 2.48.7
JDK-8368572	Update WebKit to 623.1
JDK-8370235	WebKit build fails on Windows 32-bit and Linux 32-bit after JDK-8367578
JDK-8375976	Change JavaFX release version to 21.0.11 in jfx21u
JDK-8376282	[linux, macos] JavaFX fails to build WebKit in DebugNative
JDK-8376299	[jfx21u] backported test requires more recent JDK
JDK-8377099	Additional WebKit 623.1 fixes from WebKitGTK 2.50.4
JDK-8377930	Additional WebKit 623.1 fixes from WebKitGTK 2.50.5
JDK-8378837	Use Xcode15 for macos build on jfx21u
JDK-8380557	Additional WebKit 623.1 fixes from WebKitGTK 2.50.6

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
Commons BCEL	Byte Code Engineering Library	6.10.0	N/A	JDK-8336695
FreeType	FreeType	2.14.2	java.desktop	JDK-8379158
GIFlib	GIFlib	6.1.2	java.desktop	JDK-8380078
HarfBuzz	HarfBuzz	12.3.2	java.desktop	JDK-8375057
Libpng	Libpng	1.6.57	java.awt	JDK-8382047
Zlib	Zlib	1.3.2	java.base	JDK-8378631

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 21.0.11+11
Release Notes

be//soft