Liberica JDK 11.0.28+12 Release Notes



Liberica JDK 11.0.28 July 16, 2025



Copyright © BellSoft Corporation 2018-2025.

BellSoft software contains open source software. Additional information about third party code is available at <u>https://bell-sw.com/third_party_licenses</u>. You can also get more information on how to get a copy of source code by contacting <u>info@bell-sw.com</u>.

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
Graal support in Liberica JDK 11	9
IANA TZ Data update	9
Future Timestamps:	9
Past Timestamps:	10
Code Fixes:	10
3. Known Issues	11
4. Fixed CVEs	12
5. Resolved Issues	13
JDK issues	13
JFX issues	16

6. Updates to Third Party Libraries		
7. Upgrading to the New Version	18	

1. Version information

This document provides information about Liberica JDK 11.0.28 release.

The full version string for this update release is 11.0.28+12. The version number is 11.

Liberica JDK 11 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-8293345

Summary: Legacy Mechanism Check in SunPKCS11 Provider Is Enhanced with Service Type

Description: "Native PKCS11 mechanisms, which support decryption but not encryption, or signature verification but not signing, are considered legacy and are disabled by default. The legacy mechanism check in SunPKCS11 provider is enhanced with the service type. For example, prior to this fix, a mechanism supporting encryption, decryption, and verification but not signing, is considered legacy and can't be used at all. After this fix, the corresponding Cipher service using this mechanism is available since both encryption and decryption are supported. However, the corresponding Signature service is not since only verification is supported. To bypass the legacy mechanism check, set the PKCS11 provider configuration attribute "allowLegacy" to true. The default value is false. Note that it is the caller's responsibility to make sure the legacy mechanism is not used for the unsupported functionality."

Issue ID

JDK-8303770	Summary: Removed Baltimore CyberTrust Root Certificate After Expiry Date
	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.
JDK-8309841	Summary: Jarsigner should print a warning if an entry is removed
	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.

Issue ID

JDK-8350498	Summary: Removed Two Camerfirma Root Certificates		
	Description: The following root certificates, which are terminated and no longer in use, have been removed from the cacerts keystore: alias name camerfirmachamberscommerceca [jdk], Distinguished Name: CN=Chambers of Commerce Root, OU=http://www.chambersign.org, O=AC Camerfirma SA CIF A82743287, C=EU; alias name camerfirmachambersignca [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.		
JDK-8352716	Summary: Update Timezone Data to 2025b 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.		

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.

Graal support in Liberica JDK 11

Liberica JDK continues to provide support for AOT and Graal JIT. Since in OpenJDK 11 builds these features are deemed experimental and deprecated, it is recommended to compile native executables with <u>Liberica Native Image Kit</u> to avoid errors.

IANA TZ Data update

This release of Liberica JDK 11.0.28 upgrades the in-tree copy of the <u>IANA timezone database</u> 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 -I with multiple arguments.
- A buffer underflow issue is resolved.

For more information, see <u>JDK-8352716</u>.

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-2025-30761	5.9	core-libs	javax.script	network	high	none	none	unchanged	none	high	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-8026976	ECParameters, Point does not match field size
JDK-8211400	nsk.share.gc.Memory::getArrayLength returns wrong value
JDK-8231058	VerifyOops crashes with assert(_offset >= 0) failed: offset for non comment?
JDK-8232625	HttpClient redirect policy should be more conservative
JDK-8258483	[TESTBUG] gtest CollectorPolicy.young_scaled_initial_ergo_vm fails if heap is too small
JDK-8293345	SunPKCS11 provider checks on PKCS11 Mechanism are problematic
JDK-8296631	NSS tests failing on OL9 linux-aarch64 hosts
JDK-8301753	AppendFile/WriteFile has differences between make 3.81 and 4+
JDK-8303770	Remove Baltimore root certificate expiring in May 2025

Issue ID	Summary
JDK-8309841	Jarsigner should print a warning if an entry is removed
JDK-8315380	AsyncGetCallTrace crash in frame::safe_for_sender
JDK-8327476	Upgrade JLine to 3.26.1
JDK-8328957	Update PKCS11Test.java to not use hardcoded path
JDK-8331959	Update PKCS#11 Cryptographic Token Interface to v3.1
JDK-8339300	CollectorPolicy.young_scaled_initial_ergo_vm gtest fails on ppc64 based platforms
JDK-8339728	[Accessibility,Windows,JAWS] Bug in the getKeyChar method of the AccessBridge class
JDK-8339810	Clean up the code in sun.tools.jar.Main to properly close resources and use ZipFile during extract
JDK-8345133	Test sun/security/tools/jarsigner/TsacertOptionTest.j ava failed: Warning found in stdout
JDK-8345625	Better HTTP connections
JDK-8346887	DrawFocusRect() may cause an assertion failure
JDK-8347629	Test FailOverDirectExecutionControlTest.java fails with -Xcomp

Issue ID	Summary
JDK-8348110	Update LCMS to 2.17
JDK-8348596	Update FreeType to 2.13.3
JDK-8348598	Update Libpng to 1.6.47
JDK-8348989	Better Glyph drawing
JDK-8349111	Enhance Swing supports
JDK-8349594	Enhance TLS protocol support
JDK-8350469	[11u] Test AbsPathsInImage.java fails - JDK- 8239429 public clone
JDK-8350498	Remove two Camerfirma root CA certificates
JDK-8350991	Improve HTTP client header handling
JDK-8351099	Bump update version of OpenJDK: 11.0.28
JDK-8351422	Improve scripting supports
JDK-8352302	Test sun/security/tools/jarsigner/TimestampCheck.ja va is failing
JDK-8352716	(tz) Update Timezone Data to 2025b
JDK-8356096	ISO 4217 Amendment 179 Update
JDK-8356571	Re-enable -Wtype-limits for GCC in LCMS
JDK-8359170	Add 2 TLS and 2 CS Sectigo roots

Issue ID	Summary
JDK-8360147	Better Glyph drawing redux

JFX issues

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

Issue ID	Summary
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

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
PKCS#11	PKCS#11 Cryptographic Token Interface	3.1	security-libs	8331959
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 <u>Liberica JDK Installation Guide</u>.



Liberica JDK 11.0.28+12 Release Notes be

be//soft