Liberica Native Image Kit 24.0.1+1 (22.0.1+10) Release Notes



Liberica NIK 22.0.1 April 16, 2024

be//soft

Copyright © BellSoft Corporation 2018-2024.

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. Introduction	4
Liberica NIK distribution	4
2. What's New	5
Notable Issues	5
Language and framework versions	5
3. Known Issues	7
4. CVEs	8
5. Resolved Issues	9
Liberica NIK issues	9
6. Upgrading to the New Version	12

1. Introduction

This document provides information about Liberica NIK release.

This particular version of Liberica NIK 24.0.1+1 is based on Liberica JDK 22.0.1+10.



For more information about Liberica JDK release, see Liberica JDK Release Notes.

<u>Liberica Native Image Kit</u> is a utility Based on <u>GraalVM Open Source</u> that is capable of converting your JVM-based application into a fully compiled native executable ahead-of-time under the closed-world assumption with an almost instant startup time.

Liberica NIK supports the following platforms:

- Linux x86_64 (glibc)
- Linux Alpine x86_64 (musl)
- Linux AArch64 (glibc)
- Linux Alpine AArch64 (musl)
- Mac OS x86_64
- Mac OS AArch64
- Windows x86_64

Liberica NIK distribution

Liberica NIK is distributed as .apk, .deb, .dmg, .msi, .pkg, .rpm, .tar.gz, and .zip packages. Please <u>select the most appropriate</u> for your purposes.

2. What's New

This release contains the following updates and new features.

Notable Issues

This release does not contain any notable issues. For the list of Liberica JDK notable issues, see <u>Liberica</u> JDK Release Notes

Language and framework versions

Liberica NIK 24.0.1 supports the following languages and frameworks:

Component	Version
LLVM	16.0.1 (GraalVM CE Native 24.0.1)
Python	3.10.13 (GraalVM CE Native 24.0.1)
NodeJS	18.19.1
Ϳανα	Liberica JDK 22.0.1+10
Java Script	GraalVM JavaScript (GraalVM CE Native 24.0.1)
TruffleRuby	24.0.1 (Ruby 3.2.2)
Native Image	GraalVM version 24.0.1 (Liberica JDK 22.0.1+10, LTS)

Component	Version
Wasm	WebAssembly (GraalVM CE Native 24.0.1)

3. Known Issues

This release does not contain any known issues. For the list of Liberica JDK known issues, see <u>Liberica</u> JDK Release Notes

4. 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-2023-46809	6.8	node.js	crypto	network	high	low	none	unchanged	high	high	none
CVE-2023-5678	5.3	node.js	openssl	network	low	none	none	unchanged	none	none	low
CVE-2023-6129	6.5	node.js	openssl	network	high	none	none	unchanged	none	low	high
CVE-2024-0727	5.5	node.js	openssl	local	low	none	required	unchanged	none	none	high
CVE-2024-21011	3.7	hotspot	runtime	network	high	none	none	unchanged	none	none	low
CVE-2024-21012	3.7	core-libs	java.net	network	high	none	none	unchanged	none	low	none
CVE-2024-21068	3.7	hotspot	compiler	network	high	none	none	unchanged	none	low	none
CVE-2024-21892	7.5	node.js	credentials	local	high	low	none	changed	high	high	none
CVE-2024-22019	7.5	node.js	llhttp	network	low	none	none	unchanged	none	none	high
CVE-2024-22025	6.5	node.js	zlib	network	low	none	required	unchanged	none	none	high
CVE-2024-24758	3.9	node.js	undici	network	high	high	required	unchanged	low	low	low
CVE-2024-24806	7.3	node.js	libuv	network	low	none	none	unchanged	low	low	low

5. Resolved Issues

Liberica NIK issues

This is the list of Liberica NIK issues fixed in this release.

Issue ID	Summary
GR-50768	new dev cycle GraalVM 24.0.1
GR-51274	Backport removal of the GraalVM Component Updater (gu) and the installables.
GR-51529	FileSystemsTest#testSetAttribute() fails on JDK-23-linux.
GR-51666	Backport to 24.0: Use safe abs in loop opts.
GR-52224	Backport to 24.0: loop fragment: ensure we are not killing control flow when we have nodes in head/tail counted position that are actually empty themselves (skipable)
GR-52246	Backport to 24.0: Document -0, -march, and build artifacts.
GR-52277	Fix a deadlock in IsolateAwareTruffleCompiler.tearDownIsolateOnShutdown.
GR-52312	Backport to 24.0: Register the virtual thread group unconditionally.
GR-52324	Add InsertGuardFencesPhase into runtime compilation phases.
GR-52434	Backport to 24.0: Small fixes and improvements.

Issue ID	Summary
GR-52434	ExitOnOutOfMemoryError must wait until HeapDumpOnOutOfMemoryError finishes.
GR-52457	Backport to 24.0: Fix single stepping in Espresso JDWP when stepping within not yet loaded code.
GR-52466	Backport to 24.0: Upgrading the underlying Node.js to version 18.19.1.
GR-52468	Backport to 24.0: Fix NPE in JDWP when debugger asks for local variable table.
GR-52502	Backport to 24.0: MoveGuardsUpwards: respect dom tree.
GR-52532	Backport to 24.0: Deprecate ZeroExtendNode.inputAlwaysPositive.
GR-52602	Backport to 24.0 : Update -g to include all information for profiling. Fix the problem with objcopy strip command.
GR-52613	Improve a code installation error message.
GR-52616	Limit Log.exception() output.
GR-52616	Prevent register writes from floating.
GR-52623	Backport to 24.0: Add InsertGuardFencesPhase into runtime compilation phases.
GR-52657	Fix simplification of always-deopt FixedGuard.
GR-52696	Update labsjdk to 22.0.1+8-jvmci-b01.
GR-52708	Backport to 24.0: pi node: guard against deletion in recursion
GR-52735	Backport to 24.0: Fix simplification of always-deopt FixedGuard.

Issue ID	Summary
GR-52750	Backport to 24.0: Report error if building static executable without musl libc.
GR-52782	Remove project definitions that hardcode GraalVM versions in pom files.
GR-52840	Backport to 24.0: Instanceof operator should check whether the left side is a (foreign) object.
GR-52910	Backport to 24.0: Fix caching of Regexps.
GR-52921	Mark installDeoptimizedFrame() as @Uninterruptible.
GR-52921	Remove DumpTopDeoptimizedFrame.
GR-52946	Backport to 24.0 : GH-8638: Correctness problem when System.arraycopy a byte array.
GR-53257	release GraalVM 24.0.1

6. Upgrading to the New Version

To keep your Liberica NIK 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 NIK Installation Guide</u>.



Liberica Native Image Kit 24.0.1+1 (22.0.1+10) Release Notes

be//soft