

Liberica Native Image Kit 23.1.9-1 (21.0.9+12) Release Notes



Liberica NIK
21.0.9
October, 2025

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1. Introduction

This document provides information about Liberica NIK release.

This particular version of Liberica NIK 23.1.9-1 is based on Liberica JDK 21.0.9+12.

**Note:**

For more information about Liberica JDK release, see [Liberica JDK Release Notes](#).

[Liberica Native Image Kit](#) is a utility Based on [GraalVM Open Source](#) 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 [select the most appropriate](#) 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 [Liberica JDK Release Notes](#)

Language and framework versions

Liberica NIK 23.1.9 supports the following languages and frameworks:

Component	Version
LLVM	16.0.1 (GraalVM CE Native 23.1.9)
Python	3.10.8 (GraalVM CE Native 23.1.9)
Node.js	18.20.6
Java	Liberica JDK 21.0.9+12
Java Script	GraalVM JavaScript (GraalVM CE Native 23.1.9)
R	4.0.3 (FastR)
TruffleRuby	23.1.9 (Ruby 3.2.2)

Component	Version
Native Image	GraalVM version 23.1.9 (Liberica JDK 21.0.9+12, LTS)
Wasm	WebAssembly (GraalVM CE Native 23.1.9)

3. Known Issues

This release does not contain any known issues. For the list of Liberica JDK known issues, see [Liberica 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-2025-53057	5.9	security-libs	java.security	network	high	none	none	unchanged	none	high	none
CVE-2025-53066	4.8	xml	jaxp	network	high	none	none	unchanged	low	none	low
CVE-2025-61748	3.7	core-libc		network	high	none	none	unchanged	none	low	none

5. Resolved Issues

Liberica NIK issues

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

Issue ID	Summary
GR-45020	Do not permit FixedGuardNode and ConditionAnchorNode to go away if there are PiNodes attached
GR-49845	Add system modules implicitly required by the application to the image builder module graph
GR-52557	Pi node: guard against deletion in recursion.
GR-53634	Handle static frame slots in BytecodeOSRMetadata#restoreParentFrame.
GR-53902	Fix DynamicObjectLibrary.setPropertyFlags.
GR-54313	TruffleString: fix TruffleStringBuilder and RepeatNode breaking string compaction invariants
GR-54673	Add MaximumCompilations option.
GR-56094	Remove constant memory buffer assumption and simplify ByteArrayWasmMemory.

Issue ID	Summary
GR-57835	Remove dead threads from PolyglotContextImpl#threads during new thread initialization.
GR-58070	Update VisualVM documentation and add more validation for the option '--enable-monitoring'.
GR-58542	Process --version, --help or --help-extra like java does.
GR-58571	Preserve local symbols if post-link stripping follows.
GR-58670	Clear polyglot source cache more aggressively.
GR-59408	Infinite recursion in AArch64MacroAssembler.add/sub with immediate = Integer.MIN_VALUE
GR-59497	TRegex: fix OracleDB flavor incorrectly parsing escaped surrogate pairs.
GR-59582	Better messages for OutOfMemoryErrors and small cleanups/bugfixes.
GR-59688	Allow compiler newer than Truffle runtime in a minor version.
GR-59858	Mark type of hidden field reachable.
GR-59897	Fix documentation for the sandbox.MaxHeapMemory resource limit.
GR-60578	Upgrade ASM dependency from 9.5 to 9.7.1.

Issue ID	Summary
GR-60694	Fix int overflow in <code>ObjectSizeCalculator#increaseByArraySize</code> .
GR-61452	unrolling track created main loops
GR-61452	unrolling track created main loops
GR-61882	Upgrading the underlying Node.js to version 18.20.6.
GR-61888	Fix <code>@Uninterruptible</code>
GR-62678	Backport to 23.1 : <code>System.out/err</code> usage in <code>PolyglotLoggers</code> .
GR-63266	Backport to 23.1: Prevent absent hashcode computation split across safepoint checks.
GR-63479	Backport to 23.1: Emit additional reinterpret when generating float CAS from node matching rules.
GR-63795	Backport to 23.1: Verify that recurring callbacks are allocation free.
GR-63795	restore <code>com.oracle.svm.core.thread.Safepoint.existSlowPathCheck()</code>
GR-65664	Backport to 23.1: Rethrow <code>OutOfMemoryErrors</code> that happen during performance data initialization.
GR-65730	Backport to 23.1: Copy <code>MultiOptionValues</code> in <code>HostedOptionCustomizer</code> .

Issue ID	Summary
GR-65754	Backport to 23.1: TRegex: update pre-defined character classes in OracleDBFlavor.
GR-65853	Backport to 23.1: Return correct name for libgraal-specific collection policy.
GR-66054	Backport to 23.1: Partial escape analysis: materialize for too many fixpoint iterations.
GR-66190	Backport to 23.1: UnsupportedSpecializationException caused by null from PropertyGetNode.
GR-66289	Backport to 23.1: TruffleLogger.getLevelNum() causes deopt loops.
GR-66325	Backport to 23.1: Handle getSystemResource method properly in the Native Image agent.
GR-67264	Backport to 23.1: Fix JFR GC events.
GR-67895	Backport to 23.1: Print stack trace of UserException causes.
GR-67898	Backport to 23.1: Avoid recursive printing of exception causes.
GR-67962	Backport to 23.1: SubstrateDiagnostics and OutOfMemoryError bugfixes.
GR-68032	Backport to 23.1: Improve -XX:FlightRecorderLogging error message for unknown tag set.

Issue ID	Summary
GR-68111	Backport to 23.1: Remove HostedOptionCustomizer.
GR-68114	Backport to 23.1: Fix memory leak in SourceManager.verifiedPaths.
GR-68324	Backport to 23.1: TRegex: treat nested quantifiers as a bailout instead of a syntax error in OracleDBFlavor.
GR-68356	Backport to 23.1: Make EventBinding a context heap boundary.
GR-68722	Backport to 23.1: Cross-isolate exception dispatch for isolated compilation.
GR-69141	Backport to 23.1: Bump double-conversion version number.

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 [Liberica NIK Installation Guide](#).



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