Liberica Native Image Kit 24.1.2+1 (23.0.2+9)
Release Notes

Liberica NIK
23.0.2
January, 2025

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1. Introduction

This document provides information about Liberica NIK release.

This particular version of Liberica NIK 24.1.2+1 is based on Liberica JDK 23.0.2+9.

> **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 24.1.2 supports the following languages and frameworks:

Component	Version
LLVM	18.1.3 (GraalVM CE Native 24.1.2)
Python	3.11.7 (GraalVM CE Native 24.1.2)
Node.js	20.15.1
Java	Liberica JDK 23.0.2+9
Java Script	GraalVM JavaScript (GraalVM CE Native 24.1.2)
TruffleRuby	24.1.2 (Ruby 3.2.4)
Native Image	GraalVM version 24.1.2 (Liberica JDK 23.0.2+9, LTS)

Component	Version
Wasm	WebAssembly (GraalVM CE Native 24.1.2)

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-2025-21502	4.8	hotspot	compiler	network	high	none	none	unchanged	low	low	none

5. Resolved Issues

Liberica NIK issues

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

Issue ID	Summary
GR-18163	Change order of module creation steps and assign a module's full name before calling the Module#const_added callback
GR-55134	Backport to 24.1: Improve manifest files.
GR-55134	Backport to 24.1: Improve manifest files.
GR-56805	Include wasm in js standalone.
GR-57973	Backport to 24.1: Remove dead threads from PolyglotContextImpl#threads during new thread initialization.
GR-58561	Backport to 24.1:[JDK-8340655] Fix source launcher regression.
GR-58599	Backport to 24.1: Adopt "JDK-8314794: Improve UTF8 String supports"
GR-58629	Backport 24.1: Fix duplicate class definition attempts for generated type-mapped proxies.
GR-58687	Add regression test for Polyglot.eval returning a java.lang.String.
GR-58687	Fix missing return value conversion in Polyglot.eval[File].
GR-58725	Backport to 24.1: Fix missing return value conversion in Polyglot.eval[File].

Issue ID	Summary
GR-58725	Backport to 24.1: Fix missing return value conversion in Polyglot.eval[File].
GR-58920	Backport to 24.1: Make missing registration warn mode stack trace length customizable
GR-58956	Backport to 24.1: Add barista benchmark suite.
GR-59040	Update labsjdk to 23.0.2+2-jvmci-b01
GR-59040	Update labsjdk to 23.0.2+3-jvmci-b01
GR-59040	Update labsjdk to 23.0.2+4-jvmci-b01
GR-59040	Update labsjdk to 23.0.2+7-jvmci-b01
GR-59077	Backport to 24.1: Fix of top-level for-await-of in a module.
GR-59077	Backport to 24.1: Fix of top-level for-await-of in a module.
GR-59094	New dev cycle GraalVM 24.1.2
GR-59094	New dev cycle GraalVM 24.1.2
GR-59094	New dev cycle GraalVM 24.1.2
GR-59108	Backport to 24.1: Shared engine cannot be used with GraalPyResources.
GR-59108	Backport to 24.1: Shared engine cannot be used with GraalPyResources.
GR-59144	Backport to 24.1: Clear polyglot source cache more aggressively.
GR-59172	Backport to 24.1: Change order of module creation steps and assign a module’s full name before calling the Module#const_added callback

Issue ID	Summary
GR-59172	Backport to 24.1: Change order of module creation steps and assign a module's full name before calling the Module#const_added callback
GR-59335	Backport to 24.1: Handle mixing overloaded operators with non-numeric primitives
GR-59335	Backport to 24.1: Handle mixing overloaded operators with non-numeric primitives
GR-59540	Backport to 24.1: Preserve local symbols if post-link stripping follows.
GR-59575	Backport to 24.1.2: Infinite recursion in AArch64MacroAssembler.add/sub with immediate = Integer.MIN_VALUE
GR-59579	Backport to 24.1: Fix missing state for StoreIndexedNode.
GR-59621	Backport to 24.1: ensure only safepoint usages left
GR-59621	Backport to 24.1:[GR-59003] Safepoint refactorings.
GR-59632	Backport to 24.1: Update LIBFFI to 3.4.6
GR-59670	Backport to 24.1: Graalpy gradle plugin does not build if project does not contain any resource files.
GR-59670	Backport to 24.1: Graalpy gradle plugin does not build if project does not contain any resource files.
GR-59672	Backport to 24.1: Include wasm in js standalone.
GR-59715	Backport to 24.1: Improve VS detection and related error messages.
GR-59791	Backport to 24.1: Make PosixPlatformTimeUtils.javaTimeSystemUTC uninterruptible

Issue ID	Summary
GR-59948	Backport to 24.1: Use a safe cast when retrieving the storage in array-based static objects.
GR-59970	Backport to 24.1: Fix documentation for the sandbox.MaxHeapMemory resource limit.
GR-60090	Backport to 24.1: Handle static frame slots in BytecodeOSRMetadata#restoreParentFrame.
GR-60462	Backport to 24.1: No exit safepoint if end safepoints are disabled.
GR-60698	Backport to 24.1: Fix int overflow in ObjectSizeCalculator#increaseByArraySize.

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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