Liberica Native Image Kit 24.2.1+1 (24.0.1+11) Release Notes



Liberica NIK 24.0.1 April, 2025



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1. Introduction

This document provides information about Liberica NIK release.

This particular version of Liberica NIK 24.2.1+1 is based on Liberica JDK 24.0.1+11.



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 24.2.1 supports the following languages and frameworks:

Component	Version
LLVM	18.1.3 (GraalVM CE Native 24.2.1)
Python	3.11.7 (GraalVM CE Native 24.2.1)
Node.js	22.13.1
Ϳανα	Liberica JDK 24.0.1+11
Java Script	GraalVM JavaScript (GraalVM CE Native 24.2.1)
TruffleRuby	24.2.1 (Ruby 3.3.7)
Native Image	GraalVM version 24.2.1 (Liberica JDK 24.0.1+11)

Component	Version
Wasm	WebAssembly (GraalVM CE Native 24.2.1)

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-2024-47606	8.6	N/A	N/A	Local	Low	None	None	Unchanged	High	High	High
CVE-2024-54534	9.8	N/A	N/A	Network	Low	None	None	Unchanged	High	High	High
CVE-2025-23083	7.7	N/A	N/A	Local	Low	None	None	Unchanged	High	High	None
CVE-2025-23084	5.6	N/A	N/A	Local	Low	Low	Required	Unchanged	High	Low	None
CVE-2025-23085	5.3	N/A	N/A	Network	Low	None	None	Unchanged	None	None	Low

5. Resolved Issues

Liberica NIK issues

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

Issue ID	Summary
GR-61793	Backport to 24.2. [GR-61663] Bytecode DSL fixes. uncached transitions and variadic operands to fallback specializations.
GR-61978	Backport to 24.2. TRegex. multiple fixes for look-behind merging across main expression boundary.
GR-62105	Backport to 24.2. Fix boolean boxing elimination in combination with short- circuits could lead to deopt loops.
GR-62111	Backport to 24.2. Fix TruffleSafepoint.poll() must not fail if performed on unrelated threads while thread local actions are performed on a different thread.
GR-62289	Backport to 24.2. Bump to new Barista version with Startup phase iterations
GR-62340	Use correct acquisition count in acquireOnOOME.
GR-62340	Use correct acquisition count in acquireOnOOME.
GR-62343	Backport to 24.2. Remove unqualified exports from jdk.graal.compile
GR-62383	Backport to 24.2. Compilation failure in ImportMetaNode.
GR-62537	Backport to 24.2. Use correct acquisition count in acquireOnOOME.

Issue ID	Summary
GR-62538	Use correct acquisition count in acquireOnOOME.
GR-62552	Upgrade Ruby from 3.3.5 to 3.3.7
GR-62554	Backport to 24.2. Update to Ruby 3.3.7
GR-62653	Backport to 24.2. Move resetting rethrowExceptions to creating jump targets.
GR-62785	Backport to 24.2. TruffleStrings. add some context to internal error messages.
GR-62803	Backport to 24.2. Set maximum eden size for LibGraalCollectionPolicy
GR-62938	[GR-62161] Update labsjdk to 24.0.1+9-jvmci-b01.
GR-62970	Backport to 24.2. Fix return type compatibility check can lead to void specializations being filtered.
GR-63245	Backport to 24.2. Fix ClassCastException in super property access.
GR-63265	Backport to 24.2. Prevent absent hashcode computation split across safepoint checks.
GR-63275	Backport to 24.2. Set CONSTRAINED sandbox policy for js.webassembly option.
GR-63339	Backport to 24.2. Make option js.text-encoding stable and allowed in SandboxPolicy.CONSTRAINED.
GR-63450	Backport to 24.2. A couple of fixes for PyMuPDF
GR-63478	Backport to 24.2. Emit additional reinterpret when generating float CAS from node matching rules

Issue ID	Summary
GR-63483	Backport to 24.2. AMD64ArrayIndexOfOp. Fix short jump across unknown alignment.
GR-63521	Backport to 24.2. Prevent rematerialization of SVM's LoadCompressedObjectConstantOp
GR-63538	Backport to 24.2.1. Avoid rereading code entries of already instantiated wasm modules.
GR-63540	Backport to 24.2.1. Compilation bailout in WasmFunctionInstance InteropLibrary.
GR-63542	Backport to 24.2.1. Wasm Memory not cleared when WasmInstance out of scope.
GR-63631	Merge backports for the next 24.2 release.
GR-63702	Update 3rd party dependencies of GraalVM 24.2.1.

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>.



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