Liberica Native Image Kit 24.2.2+1 (24.0.2+13)
Release Notes

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Contents

1. Introduction

This document provides information about Liberica NIK release.

This particular version of Liberica NIK 24.2.2+1 is based on Liberica JDK 24.0.2+13.

> ✎ **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 24.2.2 supports the following languages and frameworks:

Component	Version
LLVM	18.1.3 (GraalVM CE Native 24.2.2)
Python	3.11.7 (GraalVM CE Native 24.2.2)
Node.js	22.15.1
Java	Liberica JDK 24.0.2+13
Java Script	GraalVM JavaScript (GraalVM CE Native 24.2.2)
TruffleRuby	24.2.2 (Ruby 3.3.7)
Native Image	GraalVM version 24.2.2 (Liberica JDK 24.0.2+13)

Component	Version
Wasm	WebAssembly (GraalVM CE Native 24.2.2)

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-2025-23165	3.7	node.js	node	network	high	none	none	unchanged	none	none	low
CVE-2025-23166	7.5	node.js	node	network	low	none	none	unchanged	none	none	high
CVE-2025-23167	6.5	node.js	llhttp	network	low	none	none	unchanged	low	low	none
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-2025-50059	8.6	core-libs	java.net	network	low	none	none	changed	high	none	none
CVE-2025-50065	3.7	native-image	http	network	high	none	none	unchanged	none	none	low
CVE-2025-50106	8.1	client-libs	2d	network	high	none	none	unchanged	high	high	high

5. Resolved Issues

Liberica NIK issues

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

Issue ID	Summary
GR-62084	Backport to 24.2: Only duplicate MonitorIdNode for closed lock regions
GR-62110	Backport to 24.2: Fix missing synchronization in statistics listener. Fix transient safepoint poll failure.
GR-63092	use dword comparisons in AMD64ArrayIndexOfOp because search values are definitely int
GR-63226	Backport to 24.2: Instruction counter jobs (polybench and gate perf checks) require special gating hardware.
GR-63227	Update SBOM BuildOutput.md, describe unassociated types
GR-63329	Backport to 24.2: Use dword comparisons in AMD64ArrayIndexOfOp because search values are definitely int
GR-63438	Backport to 24.2: Restore public access from inherited classes when public access is enabled.

Issue ID	Summary
GR-63454	Backport to 24.2: Remove pointless parallel stream processing for classpath entries.
GR-63474	Backport to 24.2: Update JCodings to 1.0.63.
GR-63474	Backport to 24.2: Update to latest graal to test JCodings update
GR-63513	Backport to 24.2: Improve JS exception message.
GR-63566	Backport to 24.2: Fix bug in JFR type repository.
GR-63570	Backport to 24.2: Fix class names in heap dumps.
GR-63602	Update labsjdk to 24.0.2+11-jvmci-b01 (GAC re-spin)
GR-63610	Backport to 24.2: Fix JDWP frames command when thread has no frames.
GR-63614	Backport to 24.2: Fix perf regression in Polyglot.castWithGenerics.
GR-63675	Backport to 24.2: SBOM: Aggregate warnings for missing classes.
GR-63769	Backport to 24.2: Missing Truffle Safepoint poll in bytecode interpreter loop.
GR-63789	Upgrade Joni version
GR-63790	Backport to 24.2: Upgrade Joni version

Issue ID	Summary
GR-64176	Backport to 24.2: Fixes for windows issues in cibuildwheels.
GR-64210	Backport to 24.2: Storing NO_VALUE in attribute removes the Key Value pair
GR-64254	Backport to 24.2: Allow non-file URLs in `uriToURL` on SVM.
GR-64272	Backport to 24.2:: Add default excludes for generating filelists.txt
GR-64295	Backport to 24.2: WasmCallStubNode cannot be cast to WasmDirectCallNode.
GR-64302	Backport to 24.2: Validate reachable object before propagating it.
GR-64315	Backport to 24.2: Fix Truffle inInterpreter methods must be marked as opaque to avoid analysis strengthening which modifies the dominator tree needed during host inlining.
GR-64327	Backport to 24.2: Add support for ormsgpack and prepare upstreaming some changes
GR-64346	Backport to 24.2: TRegex: fix GenerateDFAImmediately option not freeing nfa matcher.
GR-64423	Use initial system properties for jvmstat performance counters.
GR-64428	Backport to 24.2: Various fixes for system properties and locales.

Issue ID	Summary
GR-64428	Various fixes for SystemProperties.
GR-64519	Backport to 24.2: Remove NEGATIVE_QUERY from registeredResources in Build Report data when it was replaced with an actual resource
GR-64577	Parse system properties before options.
GR-64656	Backport to 24.2: Fix UnixFileSystemAccessors.reinitialize(…).
GR-64696	Backport to 24.2: Correction of Array.prototype.flat() producing a foreign array.
GR-64708	Backport to 24.2: ExportValueNode.doTruffleObject() should exclude SafeIntegers.
GR-64748	Backport to 24.2: Fix no unwrapping in interop read array element.
GR-64773	Backport to 24.2: Don't use a base pointer for JIT compiled code and deopt targets.
GR-64925	Backport to 24.2: Do not include Python library pdb by default in gdb-debughelpers.
GR-64961	Backport to 24.2: Escape stars in matching text when fetching hosted only content
GR-65032	Backport to 24.2: Upgrading the underlying Node.js to version 22.15.1.

Issue ID	Summary
GR-65163	Backport to 24.2.2: Native image build with Truffle enterprise fails on GraalVM CE
GR-65227	Ensure writing same value for all keys in a HashingStorage handles storage generalization
GR-65237	Backport to 24.2: Implement AttributeError builtins
GR-65261	Backport to 24.2: Prevent new substitutions for bundle apply without create.
GR-65309	Backport to 24.2: Dates with missing UTC offset should be interpreted (in nashorn-compat mode) as UTC time when they are "strict" only.
GR-65325	Backport to 24.2: We have `null` keys in our hashingstorage.
GR-65326	Backport to 24.2: Fix transient error in tee builtins.
GR-65330	Revert breaking ABI in graalpy242 wheels
GR-65335	Backport to 24.2: Revert breaking ABI in graalpy242 wheels.
GR-65343	Backport to 24.2: Upgrade org.json to version 20250517.
GR-65354	Backport to 24.2: Fix JFR-related UnsatisfiedLinkErrors.

Issue ID	Summary	14
GR-65363	Backport to 24.2: Fix java.specification.maintenance.version.	
GR-65408	Update musl building information.	

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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