

Liberica Native Image Kit 24.0.2+1 (22.0.2+11) Release Notes



Liberica NIK
22.0.2
July, 2024

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1. Introduction

This document provides information about Liberica NIK release.

This particular version of Liberica NIK 24.0.2+1 is based on Liberica JDK 22.0.2+11.

**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 24.0.2 supports the following languages and frameworks:

Component	Version
LLVM	16.0.1 (GraalVM CE Native 24.0.2)
Python	3.10.13 (GraalVM CE Native 24.0.2)
Node.js	18.20.2
Java	Liberica JDK 22.0.2+11
Java Script	GraalVM JavaScript (GraalVM CE Native 24.0.2)
TruffleRuby	24.0.2 (Ruby 3.2.2)
Native Image	GraalVM version 24.0.2 (Liberica JDK 22.0.2+11, LTS)

Component	Version
Wasm	WebAssembly (GraalVM CE Native 24.0.2)

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-2024-21131	3.7	hotspot	runtime	network	high	none	none	unchanged	none	low	none
CVE-2024-21138	3.7	hotspot	runtime	network	high	none	none	unchanged	none	none	low
CVE-2024-21140	4.8	hotspot	compiler	network	high	none	none	unchanged	low	low	none
CVE-2024-21145	4.8	client-libs	2d	network	high	none	none	unchanged	low	low	none
CVE-2024-21147	7.4	hotspot	compiler	network	high	none	none	unchanged	high	high	none
CVE-2024-21147	7.4	hotspot	compiler	network	high	none	none	unchanged	high	high	none
CVE-2024-27983	7.4	node.js	nghttp2	network	low	none	none	unchanged	none	low	high

5. Resolved Issues

Liberica NIK issues

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

Issue ID	Summary
GR-51149	Removed obsolete message.
GR-51149	Wrong error message when polyglot implementation is missing.
GR-52884	Cannot update closed speculation encoding.
GR-52957	Backport to 24.0: Fix values reported in JFR event GCHeapSummary.
GR-52984	Backport to 24.0: Partial support for physical memory usage and JFR tests for periodic native events.
GR-53095	Backport to 24.0: Remove OpaqueValueNodes at the end of low tier
GR-53098	Backport to 24.0: Add epsilon to more floating-point probability comparisons
GR-53304	Backport to 24.0: Cannot update closed speculation encoding.
GR-53407	Optionally ignore OutOfMemoryErrors while in VM-internal code.
GR-53430	Backport to 24.0: Various CPUSampler fixes
GR-53471	Backport to 24.0: Make reference processing more robust, especially against OOME during tear-down.

Issue ID	Summary
GR-53476	Backport to 24.0: Upgrading the underlying Node.js to version 18.20.2.
GR-53500	Backport to 24.0: Fix consistency issue in HeapImplMemoryMXBean.getHeapMemoryUsage().
GR-53518	Backport to 24.0: Make graal osr test usable outside of inheritance.
GR-53534	Backport to 24.0: JDWP method invocation fix.
GR-53541	Fixed a deadlock if we run OutOfMemory while entering a synchronized blocks.
GR-53543	Backport to 24.0: Fix issue when stepping and resuming only the current thread.
GR-53544	Backport to 24.0 : Fix stepping into intrinsified Java methods in JDWP.
GR-53546	Backport to 24.0: Adds profiling to Espresso method resolution from interop.
GR-53602	Backport to 24.0: Wrong error message when polyglot implementation is missing.
GR-53640	Backport to 24.0: remove getpwuid in favor of getpwuid_r
GR-53650	Backport 24.0: E3 Benchmarking migration.
GR-53655	Add ability to transform globs into regex
GR-53766	Backport to 24.0: Fix type converter combination for foreign exceptions and custom type converters.
GR-53770	Backport to 24.0: Recompute Buffer.address field for array-based buffers in the image heap

Issue ID	Summary
GR-53801	Added context pre-initialization test for unpatched resource roots.
GR-53801	NullPointerException: Cannot invoke "com.oracle.truffle.polyglot.InternalResourceRoots\$Root.path()" because "this.owningRoot" is null.
GR-53801	Resolved review comments.
GR-53801	Updated unittests.
GR-53805	Backport to 24.0: OutOfMemoryError-related fixes.
GR-54053	Backport to 24.0: Re-enable jdk-latest jobs on darwin-amd64 and move to macOS BigSur.
GR-54078	Backport to 24.0: NullPointerException: Cannot invoke "com.oracle.truffle.polyglot.InternalResourceRoots\$Root.path()" because "this.owningRoot" is null.
GR-54089	Backport to 24.0: Fix: DeltaBlue benchmark buffer leak.
GR-54092	Backport to 24.0: Make ContextPolicyTest#testOptionDescriptorContextReuse more robust.
GR-54094	Backport to 24.0: Change CCharPointer from "signed char" to "char".
GR-54176	Backport to 24.0: Loop infra: use correct bit size for overflow checks.
GR-54178	Backport to 24.0: Unsigned loops that need an overflow to terminate must not be counted.
GR-54184	Backport to 24.0: Increase stack size for renaissance benchmarks to 1090k for all platforms

Issue ID	Summary
GR-54189	Update labsjdk to 22.0.2+7-jvmci-b01
GR-54210	Backport to 24.0: Replicate hosted module graph relations for unnamed modules
GR-54257	Backport to 24.0: Align stack pointer while in deoptStub.
GR-54339	Update labsjdk to 22.0.2+8-jvmci-b01
GR-54373	Backport to 24.0: Don't log CPUSampler interrupt if the sampler is already closed.
GR-54447	Build espresso's runtime resources according the the labsjdk type (ce/ee).
GR-54551	Backport to 24.0: Remove espresso from standalones builds.
GR-54556	Update labsjdk to 22.0.2+9-jvmci-b01
GR-54676	Backport to 24.0: Make the esm-eval-returns-exports option be stable and usable in sandbox mode.
GR-54762	Developer info is consistent with other suites.
GR-54863	Backport to 24.0: Support converting foreign object to a non-mapped interface.

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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