Liberica Native Image Kit 25.0.1-1 (25.0.1+12)

Release Notes



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Introduction Chapter 1

1. Introduction

This document provides information about Liberica NIK release.

This particular version of Liberica NIK 25.0.1-1 is based on Liberica JDK 25.0.1+12.



Note:

For more information about Liberica JDK release, see <u>Liberica JDK Release Notes</u>.

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.

What's New Chapter 2

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 JDK Release Notes</u>

Language and framework versions

Liberica NIK 25.0.1 supports the following languages and frameworks:

Component	Version
LLVM	20.1.4 (GraalVM CE Native 25.0.1)
Python	3.12.8 (GraalVM CE Native 25.0.1)
Node.js	22.17.1
Java	Liberica JDK 25.0.1+12
Java Script	GraalVM JavaScript (GraalVM CE Native 25.0.1)
TruffleRuby	25.0.1 (Ruby 3.3.7)
Native Image	GraalVM version 25.0.1 (Liberica JDK 25.0.1+12, LTS)

What's New Chapter 2

Component	Version
Wasm	WebAssembly (GraalVM CE Native 25.0.1)



Known Issues Chapter 3

3. Known Issues

This release does not contain any known issues. For the list of Liberica JDK known issues, see <u>Liberica JDK Release Notes</u>.



CVEs Chapter 4

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	јахр	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-67544	Backport to 25: Support conditional invocation plugin in runtime compilation.
GR-68525	[GR-68536] [GR-68520] [GR-68535] [GR-68529] Backport to 25: Investigate graph size of MLE Excelize Benchmark
GR-68554	Backport to 25.0: Ignore deopt nodes with deopt action "None" for deopt cycle detection.
GR-68589	do not materialize instanceofs at logic negation usages (as seen in non canonical graphs)
GR-68589	refactor InstanceofSnippetsTemplates#canMaterialize
GR-68604	Backport to 25.0: Add intrinsic for TStringOps#runByteSwap.
GR-68820	Backport to 25.0: Fix transient failure in JmxTest
GR-68888	Handle multiple contexts.

Issue ID	Summary
GR-68897	Backport to 25.0: Remove AMD64.CPUFeature.HT from build time CPU features
GR-68910	Backport to 25.0: Wrong help text forfuture -defaults.
GR-68927	Backport to 25.0: Analyze and Fix Tier 2 Compile Times on function 5311
GR-68962	Backport to 25.0: Make sure we update guest class modifiers for JDK 25+ when they're changed by redefinition.
GR-68963	Backport to 25.0: Handle multiple contexts.
GR-68975	Backport to 25.0: Use smaller dacapo archive whenever possible.
GR-69043	Backport to 25.0: Handle v128 values in the polymorphic select instruction.
GR-69171	Backport to 25.0: Failure: several symtest in SubstrateDiagnosticsTests fail on Windows
GR-69269	Backport to 25.0: Reset GlobalAtomicLong.address.
GR-69290	Backport to 25.0: HostInlining marks wrong dominator as "inInterpeter" if the branch is never executed
GR-69334	Backport to 25.0: Fix pending JNI exception leak in native-image-agent.



Issue ID	Summary
GR-69371	Release GraalVM 25.0.0 and start 25.0.1 dev cycle.
GR-69429	Backport to 25.0: Speed up LinearScan lifetime analysis by compressing bitsets
GR-69441	Backport to 25.0.1: Setting -H:Dump in a @SVMTest affects other tests
GR-69464	Backport to 25.0: Evaluate Merge Explode PE without ProxyPlaceHolder nodes
GR-69586	Backport to 25.0: Return UNCAUGHT_EXCEPTION for uncaught exceptions.
GR-69592	Backport to 25.0: TruffleFeature fails when blocklisting a class containing deleted methods
GR-69606	Backport to 25.0: Fix handling of StageFlag.VECTOR_API_EXPANSION
GR-69662	Backport to 25.0: Fix rare race conditions.
GR-69702	Backport to 25.0: Fix stack walking of crashed threads.
GR-69787	Backport to 25.0.1: Excessive process execution times as Truffle waits for compilations to complete.
GR-69811	Backport to 25.0: Mark compiler threads as crashed in both isolates.
GR-69817	Update labsjdk to 25.0.1+7-jvmci-b01.



Issue ID	Summary
GR-69817	Update labsjdk to 25.0.1+8-jvmci-b01
GR-69958	Partial backport to 25.0: Improve crash log.
GR-69976	Backport to 25.0.1: Segfault in petclinic with open type world



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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Release Notes

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