



- Installing
- Contributing
- Sponsoring
- Developers' Guide
- Vulnerabilities
- JDK GA/EA Builds
- Mailing lists
- Wiki · IRC
- Bylaws · Census
- Legal
- Workshop
- JEP Process
- Source code
 - Mercurial
 - GitHub
- Tools
 - Git
 - jtreg harness
- Groups
 - (overview)
 - Adoption
 - Build
 - Client Libraries
 - Compatibility & Specification
 - Review
 - Compiler
 - Conformance
 - Core Libraries
 - Governing Board
 - HotSpot
 - IDE Tooling & Support
 - Internationalization
 - JMX
 - Members
 - Networking
 - Porters
 - Quality
 - Security
 - Serviceability
 - Vulnerability
 - Web
- Projects
 - (overview, archive)
 - Amber
 - Audio Engine
 - CRaC
 - Caciocavallo
 - Closures
 - Code Tools
 - Coin
 - Common VM
 - Interface
 - Compiler Grammar
 - Detroit
 - Developers' Guide
 - Device I/O
 - Duke
 - Font Scaler
 - Galahad
 - Graal
 - Graphics Rasterizer
 - IcedTea
 - JDK 7
 - JDK 8
 - JDK 8 Updates
 - JDK 9
 - JDK (... , 21, 22)
 - JDK Updates
 - JavaDoc.Next
 - Jigsaw
 - Kona
 - Kulla
 - Lambda
 - Lanai
 - Leyden
 - Lilliput
 - Locale Enhancement
 - Loom
 - Memory Model
 - Update
 - Metropolis
 - Mission Control
 - Modules
 - Multi-Language VM
 - Nashorn
 - New I/O
 - OpenJFX
 - Panama
 - Penrose
 - Port: AArch32
 - Port: AArch64
 - Port: BSD
 - Port: Haiku
 - Port: Mac OS X
 - Port: MIPS
 - Port: Mobile
 - Port: PowerPC/AIX
 - Port: RISC-V
 - Port: s390x
 - Portola
 - SCTP
 - Shenandoah
 - Skara
 - Sumatra
 - Tiered Attribution
 - Tsan
 - Type Annotations
 - Valhalla
 - Verona
 - VisualVM
 - Wakefield
 - Zero
 - ZGC



JDK 21

This release is the Reference Implementation of version 21 of the Java SE Platform, as specified by [JSR 396](#) in the Java Community Process.

JDK 21 reached [General Availability](#) on 19 September 2023. Production-ready binaries under the GPL are [available from Oracle](#); binaries from other vendors will follow shortly.

The features and schedule of this release were proposed and tracked via the [JEP Process](#), as amended by the [JEP 2.0 proposal](#). The release was produced using the [JDK Release Process \(JEP 3\)](#).

Features

- 430: String Templates (Preview)
- 431: Sequenced Collections
- 439: Generational ZGC
- 440: Record Patterns
- 441: Pattern Matching for switch
- 442: Foreign Function & Memory API (Third Preview)
- 443: Unnamed Patterns and Variables (Preview)
- 444: Virtual Threads
- 445: Unnamed Classes and Instance Main Methods (Preview)
- 446: Scoped Values (Preview)
- 448: Vector API (Sixth Incubator)
- 449: Deprecate the Windows 32-bit x86 Port for Removal
- 451: Prepare to Disallow the Dynamic Loading of Agents
- 452: Key Encapsulation Mechanism API
- 453: Structured Concurrency (Preview)

JDK 21 will be a long-term support (LTS) release from most vendors. For a complete list of the JEPs integrated since the previous LTS release, JDK 17, please see [here](#).

Schedule

- | | |
|------------|--|
| 2023/06/08 | Rampdown Phase One (fork from main line) |
| 2023/07/20 | Rampdown Phase Two |
| 2023/08/10 | Initial Release Candidate |
| 2023/08/24 | Final Release Candidate |
| 2023/09/19 | General Availability |

Last update: 2023/9/19 10:53 UTC

