

JSR 391: Java SE 16

Specification

- Latest: https://cr.openjdk.java.net/~iris/se/16/latestSpec (DRAFT 35)
- Updates track promotion
- Public Review ends 2021/02/11

Reference Implementation (RI) – JDK 16

- Latest: https://jdk.java.net/16 (build 35) Initial Release Candidate (RC) build
- Repository: https://github.com/openjdk/jdk16
- Development limited to high priority bugs
- Triage of incoming bugs on-going
- General Availability (GA): 2021/03/16

Technology Compatibility Took Kit (TCK) – JCK 16

- Code and Doc Freezes last week
- Only a few more promotions expected

Schedule

2020/06/02 – 2020/08/31 Expert Group Formation

2021/01/12 – 2021/02/11 Public Review

2021/02/16 – 2021/02/22 Public Review – Final Approval Ballot

2021/03 Final Release



What's New in Java SE 16?

6 JDK Enhancement Process (JEP) Proposals

380: Unix-Domain Socket Channels

390: Warnings for Value-Based Classes

394: Pattern Matching for **instanceof**

395: Records

396: Strongly Encapsulate JDK Internals by Default

397: Sealed Classes (Second Preview)

2 JSR Maintenance Releases

199: Java Compiler API [MR4]

269: Pluggable Annotations

Processing API [MR10]

99 Compatibility & Specification Review (CSR) Requests

https://bugs.openjdk.java.net/browse/

?filter=39068

1 Removed API
javax.tools.ToolProvider.<init>()

26 Terminally Deprecated APIs Added



JSR 392: Java SE 17

Specification

- No DRAFTs yet; first expected after JSR 391 Final Release
- Public Review expected this Summer

Reference Implementation (RI) – JDK 17

- Latest: https://jdk.java.net/17 (build 8)
- Repository: https://github.com/openjdk/jdk
- Active discussion on all relevant *-dev mailing lists
- 1 Targeted SE JEP; 11 approved SE CSRs
- No schedule yet, but GA expected 2021/09

Technology Compatibility Took Kit (TCK) – JCK 17

First promotion expected after JCK 16 GA

Schedule (start dates)

2020/12/07
Expert Group Formation

2021/06 – 2021/07 Public Review

2021/07 – 2020/08 Public Review – Final Approval Ballot

2021/09 Final Release



What's New in Java SE 17? (so far)

1 JDK Enhancement Process (JEP) Proposal

356: Enhance Pseudo-Random Number Generators

1 JSR Maintenance Release269: Pluggable Annotations Processing

API [MR11]

11 Compatibility & Specification Review (CSR) Requests

https://bugs.openjdk.java.net/browse/?filter=40170

0 Removed APIs

O Terminally Deprecated APIs Added



Lifetime of a Platform JSR

Spec EG page, JEP & CSR Dashboards

created to track Spec evolution

JSR Start/Expert Group Formation

RI Build 1 promoted and published

RI Active discussion on all relevant lists

RI Reviewed changes pushed to repo

Spec New Candidate and Proposed to

Target (PPT) SE JEPs announced

TCK Initial Build

Spec Initial DRAFT

RI Fork from mainline for stabilization

Spec PR DRAFT 1

Public Review

RI Initial Release Candidate

TCK Code & Doc Freeze

Public Review – Final Approval Ballot

RI Final Release Candidate

Spec FR DRAFT 1

All FR readiness announced

Final Release

JDK/ General Availability (GA)



Resources

- https://openjdk.java.net/projects/jdk/16/spec/
 - https://jcp.org/en/jsr/detail?id=391
 - o https://cr.openjdk.java.net/~iris/se/16/latestSpec/
 - o JEPs: https://bugs.openjdk.java.net/secure/Dashboard.jspa?selectPageId=19517
 - o CSRs: https://bugs.openjdk.java.net/secure/Dashboard.jspa?selectPageId=19518
 - o https://mail.openjdk.java.net/mailman/listinfo/java-se-spec-experts
 - o https://jdk.java.net/16/
- https://openjdk.java.net/projects/jdk/17/spec/
- https://mail.openjdk.java.net
- https://github.com/openjdk



Q&A

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Glossary

- **{Code, Doc} Freeze** [JCK] Deadline for the addition of new tests or documentation.
- Compatibility & Specification Review (CSR) [JDK] OpenJDK Group empowered to review interface changes proposed within active JDK Release Projects.
- **{FR, PR} DRAFT** [Spec] Snapshot of the current Specification for publication on jcp.org.
- **JDK Enhancement Process** [JDK] Process for collecting, reviewing, sorting, and recording the results of proposals for enhancements to the JDK and for related efforts, such as process and infrastructure improvements.
- Release Candidate [JDK] Build which has the potential to become the final release.
- **SE {CSR, JEP}** [JDK] CSR Request or JEP Proposal with "Scope" = "SE" indicating that it includes changes to the Java SE Specification.
- **Terminally Deprecated** [JDK] API with **ForRemoval=true** indicating that it is eligible for removal in a future release.

