

# JDK11u

## Welcome to OpenJDK 11 Updates!

OpenJDK 11 updates are part of the [JDK updates project](#) of the OpenJDK. [Rob McKenna](#) serves as the Project Lead. The list of Reviewers, Committers, and Authors can be found in the [jdk updates](#) section of the OpenJDK Census.

### Maintainers

- [Andrew Haley](#) (Lead Maintainer)
- [Christoph Langer](#)
- [Severin Gehwolf](#)
- [Goetz Lindenmaier](#)

### General Information

OpenJDK 11 updates will be delivered on the same established [quarterly cycle](#) used by Oracle i.e. "the Tuesday closest to the 17th day of January, April, July and October."

Development takes place in the [jdk11u-dev](#) Git repository and should be the primary place for OpenJDK committers to submit their work.

Code from the development repository is regularly tagged and promoted to the master [jdk11u](#) repository, which is used to stabilize and deliver the quarterly releases. Distributors should use this as their primary source for creating OpenJDK builds.

For further process details you might want to continue reading [here](#).

### Contributing

New fixes should first be submitted to the development repository for the current version of OpenJDK, [jdk/jdk](#). Most changes submitted to the OpenJDK 11 project will be *backports* from this repository. Exceptions are made if an issue only applies to 11.

Everybody is encouraged to submit fixes for OpenJDK 11 by creating a pull request to the [jdk11u-dev](#) Git repository. Established community members will help new developers without commit access in getting their patch reviewed. For details on the process involved, continue reading these [backport instructions](#).

Should you not be willing or not be able to drive a fix into JDK 11 updates, you can still suggest changes by dropping a mail to the [jdk-updates-dev mailing list](#). But by only doing that, you are at the grace of the community to pick up your suggestion.

### Fix Approvals

In general we follow the [common rules for the jdk-updates project](#). **Please note that these common rules do not allow enhancements to be backported, only fixes to bugs.**

In addition this list, we will consider

- Build system improvements, particularly for stability and reproducibility
- Changes necessary to make 11u work on new operating systems and hardware

However, if there is an enhancement that provides substantial benefit to OpenJDK 11u users and it is of low risk, we will consider it. Please ask on the [jdk-updates mailing list](#) mailing list if you are in any doubt about whether your proposed backport might qualify.

If the backport requires more than just cosmetic changes (file location changes, copyright header updates) to apply to the 11u repository, it should first be submitted for review.

Push approval for a fix is requested by setting the [jdk11u-fix-request](#) label on the original [JBS](#) bug. The maintainers will either approve by setting [jdk11u-fix-yes](#) or reject by setting [jdk11u-fix-no](#). Outstanding approvals can be monitored [here](#). If and only if the fix gets approved, it may be pushed to the [jdk11u-dev](#) repository. Approved fixes show up in this [JBS filter](#) (login required).

During the later stages of a release cycle, the release enters *rampdown*. The master [jdk11u](#) repository contains the latest version of that release, while the [jdk11u-dev](#) repository is used to start work on the next release. If a change needs to be pushed to a release in rampdown, push approval can still be requested using the [jdk11u-critical-request](#) label. As the name of this tag suggests, this process is intended for fixes such as major regressions that must make the release. More minor bugs and new features should go in the next release being developed in [jdk11u-dev](#). The maintainers may approve with [jdk11u-critical-yes](#), defer to [jdk11u-dev](#) or reject altogether. Outstanding approvals for critical fixes can be monitored [here](#). If, and only if, the fix gets approved with [jdk11u-critical-yes](#), it may be pushed to the [jdk11u](#) repository. Approved critical fixes show up in this [JBS filter](#) (login required).

At the end of the month prior to the release month, the [jdk11u](#) repository is declared frozen so embargoed security fixes can be added in private during the final few weeks. On release day, the final version will be pushed to the [jdk11u](#) repository and source bundles made available.

### Repositories

[jdk11u-dev](#): Always open repository for development of upcoming JDK 11 Update releases. Pushes after [jdk11u-fix-yes](#) approval. Check [here](#) for clearance.

[jdk11u](#): Repository used for Rampdown of JDK 11 Update releases. Pushes only during 4-weeks rampdown period after [jdk11u-critical-yes](#) approval. Check [here](#) for clearance.

## Timelines

The release date follows the schedule of [Oracle Critical Patch Updates](#) as this is the date embargoed security fixes can be published.

### OpenJDK 11.0.20

- Tuesday, July 18 2023 GA; OpenJDK 11.0.20 released (tag: jdk-11.0.20-ga)

### OpenJDK 11.0.21

- Wednesday, May 31 2023: jdk11u-dev repo open (tag: 11.0.21+0)
- Tuesday, August 1 2023: First merge from jdk11u-dev to jdk11u (tag: 11.0.21+1)
- Tuesday, August 29 2023: Rampdown; last merge from jdk11u-dev to jdk11u
- Tuesday, September 26 2023: Last tag before code freeze
- Tuesday, October 17 2023 GA; OpenJDK 11.0.21- released (tag: jdk-11.0.21-ga)

### OpenJDK 11.0.22

- Wednesday, August 30 2023: jdk11u-dev repo open (tag: 11.0.22+0)
- Tuesday, October 31 2023: First merge from jdk11u-dev to jdk11u (tag: 11.0.22+1)
- Tuesday, November 28 2023: Rampdown; last merge from jdk11u-dev to jdk11u
- Tuesday, December 26 2023: Last tag before code freeze
- Tuesday, January 16 2024 GA; OpenJDK 11.0.22 released (tag: jdk-11.0.22-ga)

### OpenJDK 11.0.23

- Wednesday, November 29 2023: jdk11u-dev repo open (tag: 11.0.23+0)

## Releases

**Latest GA release:** 11.0.20.1

- 11.0.20.1+1 (GA), August 24 2023, [\[Release\]](#) [\[Tag\]](#) [\[Binaries\]](#)

Older releases can be found in the [archive](#).

## Downloads

Latest Generally Available (GA) binary releases of the jdk11u stream of the OpenJDK jdk-updates project are available at: <https://adoptium.net/temurin/releases/?version=11>

Latest Early Access (EA) binary releases of the jdk11u stream of the OpenJDK jdk-updates project are available at: <https://adoptium.net/temurin/nightly/?version=11>

## JBS Filters

Some filters will only work for users that are logged into JBS.

### Standard Fix Requests

[\[All requests\]](#) [\[Approved requests\]](#) [\[Approved requests without push\]](#) [\[Unapproved requests\]](#)

### Critical Fix Requests

[\[All requests\]](#) [\[Approved requests\]](#) [\[Approved requests without push\]](#) [\[Unapproved requests\]](#)

### Filters for Release 11.0.20

[11.0.20/all](#): OracleJDK but not OpenJDK: Changes backported to OracleJDK 11.0.3-11.0.20 but not in OpenJDK 11.0.20. \*\*\*

[11.0.20/all!/deferred](#): OracleJDK but not OpenJDK: Changes backported to OracleJDK 11.0.3-11.0.20 but not in OpenJDK 11.0.20 excluding deferred items, see JBS labels below. \*\*\*

[11.0.20/new](#): OracleJDK but not OpenJDK: Changes new in OracleJDK 11.0.20 but not in OpenJDK 11.0.20.

[11.0.20/new/!deferred: OracleJDK but not OpenJDK](#): Changes new in OracleJDK 11.0.20 but not in OpenJDK 11.0.20 excluding deferred Items, see JBS labels below.

[11.0.20/new/!deferred testbugs: OracleJDK but not OpenJDK](#): Changes touching only tests new in OracleJDK 11.0.20 but not in OpenJDK 11.0.20 excluding deferred Items, see JBS labels below.

The OpenJDK but not OracleJDK "all" filters became increasingly complex and now overcharge JBS. Here a prototype for 11.0.20: [11.0.20/all: OpenJDK but not OracleJDK](#), It is not yet tailored for 11.0.20, as it does not deliver a result at all. We will omit these in future.

## Filters for Release 11.0.21

[11.0.21/all: OracleJDK but not OpenJDK](#): Changes backported to OracleJDK 11.0.3-11.0.21 but not in OpenJDK 11.0.21. \*\*\*

[11.0.21/all/!deferred: OracleJDK but not OpenJDK](#): Changes backported to OracleJDK 11.0.3-11.0.21 but not in OpenJDK 11.0.21 excluding deferred Items, see JBS labels below. \*\*\*

[11.0.21/new: OracleJDK but not OpenJDK](#): Changes new in OracleJDK 11.0.21 but not in OpenJDK 11.0.21.

[11.0.21/new/!deferred: OracleJDK but not OpenJDK](#): Changes new in OracleJDK 11.0.21 but not in OpenJDK 11.0.21 excluding deferred Items, see JBS labels below.

[11.0.21/new/!deferred testbugs: OracleJDK but not OpenJDK](#): Changes touching only tests new in OracleJDK 11.0.21 but not in OpenJDK 11.0.21 excluding deferred Items, see JBS labels below.

## Filters for Release 11.0.22

[11.0.22/all: OracleJDK but not OpenJDK](#): Changes backported to OracleJDK 11.0.3-11.0.22 but not in OpenJDK 11.0.22. \*\*\*

[11.0.22/all/!deferred: OracleJDK but not OpenJDK](#): Changes backported to OracleJDK 11.0.3-11.0.22 but not in OpenJDK 11.0.22 excluding deferred Items, see JBS labels below. \*\*\*

[11.0.22/new: OracleJDK but not OpenJDK](#): Changes new in OracleJDK 11.0.22 but not in OpenJDK 11.0.22.

[11.0.22/new/!deferred: OracleJDK but not OpenJDK](#): Changes new in OracleJDK 11.0.22 but not in OpenJDK 11.0.22 excluding deferred Items, see JBS labels below.

[11.0.22/new/!deferred testbugs: OracleJDK but not OpenJDK](#): Changes touching only tests new in OracleJDK 11.0.22 but not in OpenJDK 11.0.22 excluding deferred Items, see JBS labels below.

## Common jdk11u JBS labels

The above filters exclude issues that are marked with the following labels:

- [jdk11u-na](#) Change does not apply to open jdk11u. In general, this is a change done by Oracle for their build or test infrastructure, for their own delivery or in their tests not open sourced. Any other change can also be not of interest to open jdk11u. In the past, we also used label [openjdk-na](#) for this purpose.
- [jdk11u-jvmci-defer](#) Changes that address jvmci and graal. We, the maintainers, currently do not backport these changes. Feel free to address them!
- [jdk11u-solaris-sparc-defer](#) Changes that address the Solaris or sparc ports. We, the maintainers currently do not backport these changes. Feel free to address them!
- [jdk11u-a11y-defer](#) Changes that address accessibility. These should be urgently backported.
- [jdk11u-todo](#) Changes Oracle backported to older releases that are not backported to open jdk11u. We mostly need this tag to make the "all" filters more efficient.