



## Azul Zulu builds of OpenJDK

August 2023 Azul Zulu 11.66 (11.0.20.1) and  
17.44 (17.0.8.1) Update

Release Notes

Revision 1.0

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## Revision History

| Revision | Date              | Description       |
|----------|-------------------|-------------------|
| 0.1      | September 5, 2023 | Initial version.  |
| 1.0      | September 5, 2023 | Released version. |

## Release Details

This is a follow-up release for the July 2023 quarterly update, that addresses some regressions introduced in OpenJDK for Java 17 and 11.

The following table lists detailed information on the Azul Zulu versions released with the current update.

| Azul Zulu Version (*)  | Update Type (**) | JDK Version | Based on          |             | JavaFX Version |
|--|------------------|-------------|-------------------|-------------|----------------|
|  |                  |             | Azul Zulu Version | JDK Version |                |
| 17.44.53 (CA)<br>17.44.55 (CA)<br>17.44.54 (SA)<br>17.44.56 (SA) | PSU              | 17.0.8.1    | 17.44.15          | 17.0.8+7    | 20.0.2+100     |
|  |                  |             | 17.44.17          |             |                |
|  |                  |             | 17.44.16          |             |                |
|  |                  |             | 17.44.18          |             |                |
| 11.66.19 (CA)<br>11.66.20 (SA)                                   | PSU              | 11.0.20.1   | 11.66.17          | 11.0.20+8   | 19.0.4+100     |
|  |                  |             | 11.66.18          |             |                |

(\*) Azul provides two types of distribution packages for each Java version:

- **SA** distributions are tested, certified, and commercially supported Azul Zulu builds of OpenJDK. Azul ensures that the software that uses the Accessible APIs of the product doesn't have to include specific licenses and that such use doesn't contaminate the code or intellectual property of such software with any license requirements.
- **CA** are Azul Zulu builds of OpenJDK that are free to download and use.

**NOTE**

Both SA and CA distributions may contain Early Access builds noted with `-ea-` in their filename. Early Access builds may not be TCK certified.

(\*\*) Update type:

- **CPU** (Critical Patch Updates) contain fixes to security vulnerabilities and critical bug fixes. Azul Zulu CPU releases are generally based on prior-cycle PSU releases, with only security fixes applied. They provide a low-risk vehicle for the potentially urgent deployment of security fixes when issues of sufficient severity arise. CPU releases are available in SA distributions.
- **PSU** (Patch Set Updates) incorporates all fixes in the corresponding CPU, as well as additional non-security bug fixes. Azul Zulu PSU releases incorporate both security fixes and other changes that align the release contents with the associated OpenJDK project quarterly release. PSU releases are available in SA and CA distributions.

## What's New

### Invalid CEN Header (ZIP64)

This release includes [JDK-8313765](#), which relaxes ZIP64 extra field validation introduced in the July 2023 Update release. In the scope of the July 2023 Update release, a fix related to [JDK-8302483](#) introduced additional field validation in ZIP64. The validation may refuse previously accepted ZIP archives, so a flag was also introduced to turn off the validation, see "[Extra Field validation in ZIP64](#)".

However, it turned out that the validation was too strict, and it refused a lot of previously accepted archives. The fix for [JDK-8313765](#) extends the set of accepted ZIP archives in the default configuration, with the extra field validation still being performed.

## Known Issues

There are no new known issues to report in this release.

# OpenJDK Bug Fixes

The following table describes the OpenJDK changes implemented in this release.

| OpenJDK Patch ID            | Azul Zulu Version | Synopsis   |
|-----------------------------|-------------------|--|
| <a href="#">JDK-8313765</a> | 11, 17            | Invalid CEN header (invalid zip64 extra data field size)     |
| <a href="#">JDK-8314678</a> | 11                | Bump update version for OpenJDK: jdk-11.0.20.1               |
| <a href="#">JDK-8304725</a> | 17                | AsyncGetCallTrace can cause SIGBUS on M1                     |
| <a href="#">JDK-8283326</a> | 17                | Implement SafeFetch statically                               |
| <a href="#">JDK-8288719</a> | 17                | [arm32] SafeFetch32 thumb interleaving causes random crashes |
| <a href="#">JDK-8284997</a> | 17                | arm32 build crashes since JDK-8283326                        |
| <a href="#">JDK-8285675</a> | 17                | Temporary fix for arm32 SafeFetch                            |
| <a href="#">JDK-8314677</a> | 17                | Bump update version for OpenJDK: jdk-17.0.8.1                |