

Download the Microsoft Build of OpenJDK

Article • 09/27/2023

This article provides links to download the Microsoft Build of OpenJDK.

For instructions on how to install using the graphical **PKG** and **MSI** installers, or through package managers **WinGet**, **Homebrew**, **apt** and **yum**, see the [Install](#) page.

The following tables provide links to the package files for GA releases, and their *.sha256sum.txt* and *.sig* files.

OpenJDK 21

OpenJDK 21.0.0 LTS

| Platform | Architecture | Type | Download link | Other files |
|----------|-----------------|--------|---|--|
| x64 | | | | |
| Linux | x64 | tar.gz | microsoft-jdk-21.0.0-linux-x64.tar.gz | sha256 / sig |
| macOS | x64 | pkg | microsoft-jdk-21.0.0-macOS-x64.pkg | sha256 |
| macOS | x64 | tar.gz | microsoft-jdk-21.0.0-macOS-x64.tar.gz | sha256 / sig |
| Windows | x64 | msi | microsoft-jdk-21.0.0-windows-x64.msi | sha256 |
| Windows | x64 | zip | microsoft-jdk-21.0.0-windows-x64.zip | sha256 / sig |
| AArch64 | | | | |
| Linux | AArch64 / ARM64 | tar.gz | microsoft-jdk-21.0.0-linux-aarch64.tar.gz | sha256 / sig |
| macOS | AArch64 / M1 | pkg | microsoft-jdk-21.0.0-macOS-aarch64.pkg | sha256 |
| macOS | AArch64 / M1 | tar.gz | microsoft-jdk-21.0.0-macOS-aarch64.tar.gz | sha256 / sig |
| Windows | AArch64 / ARM64 | msi | microsoft-jdk-21.0.0-windows-aarch64.msi | sha256 |
| Windows | AArch64 / ARM64 | zip | microsoft-jdk-21.0.0-windows-aarch64.zip | sha256 / sig |

OpenJDK 17

OpenJDK 17.0.8.1 LTS | [See previous releases](#)

| Platform | Architecture | Type | Download link | Other files |
|----------|-----------------|--------|---|--|
| x64 | | | | |
| Alpine | x64 (musl) | tar.gz | microsoft-jdk-17.0.8.1-alpine-x64.tar.gz | sha256 / sig |
| Linux | x64 | tar.gz | microsoft-jdk-17.0.8.1-linux-x64.tar.gz | sha256 / sig |
| macOS | x64 | pkg | microsoft-jdk-17.0.8.1-macOS-x64.pkg | sha256 |
| macOS | x64 | tar.gz | microsoft-jdk-17.0.8.1-macOS-x64.tar.gz | sha256 / sig |
| Windows | x64 | msi | microsoft-jdk-17.0.8.1-windows-x64.msi | sha256 |
| Windows | x64 | zip | microsoft-jdk-17.0.8.1-windows-x64.zip | sha256 / sig |
| AArch64 | | | | |
| Linux | AArch64 / ARM64 | tar.gz | microsoft-jdk-17.0.8.1-linux-aarch64.tar.gz | sha256 / sig |
| macOS | AArch64 / M1 | pkg | microsoft-jdk-17.0.8.1-macOS-aarch64.pkg | sha256 |
| macOS | AArch64 / M1 | tar.gz | microsoft-jdk-17.0.8.1-macOS-aarch64.tar.gz | sha256 / sig |
| Windows | AArch64 / ARM64 | msi | microsoft-jdk-17.0.8.1-windows-aarch64.msi | sha256 |

| Platform | Architecture | Type | Download link | Other files |
|----------|-----------------|------|--|--|
| Windows | AArch64 / ARM64 | zip | microsoft-jdk-17.0.8.1-windows-aarch64.zip | sha256 / sig |

OpenJDK 11

OpenJDK 11.0.20.1 LTS | [See previous releases](#)

| Platform | Architecture | Type | Download link | Other files |
|----------------|-----------------|--------|--|--|
| <i>x64</i> | | | | |
| Alpine | x64 (musl) | tar.gz | microsoft-jdk-11.0.20.1-alpine-x64.tar.gz | sha256 / sig |
| Linux | x64 | tar.gz | microsoft-jdk-11.0.20.1-linux-x64.tar.gz | sha256 / sig |
| macOS | x64 | pkg | microsoft-jdk-11.0.20.1-macOS-x64.pkg | sha256 |
| macOS | x64 | tar.gz | microsoft-jdk-11.0.20.1-macOS-x64.tar.gz | sha256 / sig |
| Windows | x64 | msi | microsoft-jdk-11.0.20.1-windows-x64.msi | sha256 |
| Windows | x64 | zip | microsoft-jdk-11.0.20.1-windows-x64.zip | sha256 / sig |
| <i>AArch64</i> | | | | |
| Linux | AArch64 / ARM64 | tar.gz | microsoft-jdk-11.0.20.1-linux-aarch64.tar.gz | sha256 / sig |
| macOS | AArch64 / M1 | pkg | microsoft-jdk-11.0.20.1-macOS-aarch64.pkg | sha256 |
| macOS | AArch64 / M1 | tar.gz | microsoft-jdk-11.0.20.1-macOS-aarch64.tar.gz | sha256 / sig |
| Windows | AArch64 / ARM64 | msi | microsoft-jdk-11.0.20.1-windows-aarch64.msi | sha256 |
| Windows | AArch64 / ARM64 | zip | microsoft-jdk-11.0.20.1-windows-aarch64.zip | sha256 / sig |

OpenJDK 16

Microsoft no longer publishes updates for OpenJDK 16, as it is not a Long Term Supported (LTS) version of OpenJDK. The binaries published in the past are available in the [Older Releases](#) page.

OpenJDK 8

If you still require Java 8, please download any of the [Eclipse Temurin builds of OpenJDK 8](#) from the Eclipse Adoptium project.

Linux DEB and RPM packages

Linux Packages (RPM and DEB files) are available at [packages.microsoft.com](#) .

For more information see [Install the Microsoft Build of OpenJDK](#).

Container images

For use of Microsoft Build of OpenJDK in container images, see [Container images for the Microsoft Build of OpenJDK](#).

Debug symbols and source code

The following tables provide links to the debug symbols of all platforms and architectures, and the source code.

OpenJDK 21.0.0 LTS

| Platform | Architecture | Type | Download link | Other files |
|-------------|-----------------|--------|--|---------------------------------|
| x64 | | | | |
| Linux | x64 | tar.gz | microsoft-jdk-debugsymbols-21.0.0-linux-x64.tar.gz ↗ | sha256 ↗ |
| macOS | x64 | tar.gz | microsoft-jdk-debugsymbols-21.0.0-macOS-x64.tar.gz ↗ | sha256 ↗ |
| Windows | x64 | zip | microsoft-jdk-debugsymbols-21.0.0-windows-x64.zip ↗ | sha256 ↗ |
| AArch64 | | | | |
| Linux | AArch64 / ARM64 | tar.gz | microsoft-jdk-debugsymbols-21.0.0-linux-aarch64.tar.gz ↗ | sha256 ↗ |
| macOS | AArch64 / M1 | tar.gz | microsoft-jdk-debugsymbols-21.0.0-macOS-aarch64.tar.gz ↗ | sha256 ↗ |
| Windows | AArch64 / ARM64 | zip | microsoft-jdk-debugsymbols-21.0.0-windows-aarch64.zip ↗ <u> </u> | sha256 <u>↗</u> |
| All | | | | |
| Source Code | NA | tar.gz | microsoft-sources-21_35-all-noarch.tar.gz ↗ | sha256 ↗ |

OpenJDK 17.0.8.1 LTS

| Platform | Architecture | Type | Download link | Other files |
|-------------|-----------------|--------|--|--------------------------|
| x64 | | | | |
| Alpine | x64 (musl) | tar.gz | microsoft-jdk-debugsymbols-17.0.8.1-alpine-x64.tar.gz ↗ | sha256 ↗ |
| Linux | x64 | tar.gz | microsoft-jdk-debugsymbols-17.0.8.1-linux-x64.tar.gz ↗ | sha256 ↗ |
| macOS | x64 | tar.gz | microsoft-jdk-debugsymbols-17.0.8.1-macOS-x64.tar.gz ↗ | sha256 ↗ |
| Windows | x64 | zip | microsoft-jdk-debugsymbols-17.0.8.1-windows-x64.zip ↗ | sha256 ↗ |
| AArch64 | | | | |
| Linux | AArch64 / ARM64 | tar.gz | microsoft-jdk-debugsymbols-17.0.8.1-linux-aarch64.tar.gz ↗ | sha256 ↗ |
| macOS | AArch64 / M1 | tar.gz | microsoft-jdk-debugsymbols-17.0.8.1-macOS-aarch64.tar.gz ↗ | sha256 ↗ |
| Windows | AArch64 / ARM64 | zip | microsoft-jdk-debugsymbols-17.0.8.1-windows-aarch64.zip ↗ | sha256 ↗ |
| All | | | | |
| Source Code | NA | tar.gz | microsoft-sources-17.0.8.1_1-all-noarch.tar.gz ↗ | sha256 ↗ |

OpenJDK 11.0.20.1 LTS

| Platform | Architecture | Type | Download link | Other files |
|-------------|-----------------|--------|---|--------------------------|
| x64 | | | | |
| Alpine | x64 (musl) | tar.gz | microsoft-jdk-debugsymbols-11.0.20.1-alpine-x64.tar.gz ↗ | sha256 ↗ |
| Linux | x64 | tar.gz | microsoft-jdk-debugsymbols-11.0.20.1-linux-x64.tar.gz ↗ | sha256 ↗ |
| macOS | x64 | tar.gz | microsoft-jdk-debugsymbols-11.0.20.1-macOS-x64.tar.gz ↗ | sha256 ↗ |
| Windows | x64 | zip | microsoft-jdk-debugsymbols-11.0.20.1-windows-x64.zip ↗ | sha256 ↗ |
| AArch64 | | | | |
| Linux | AArch64 / ARM64 | tar.gz | microsoft-jdk-debugsymbols-11.0.20.1-linux-aarch64.tar.gz ↗ | sha256 ↗ |
| macOS | AArch64 / M1 | tar.gz | microsoft-jdk-debugsymbols-11.0.20.1-macOS-aarch64.tar.gz ↗ | sha256 ↗ |
| Windows | AArch64 / ARM64 | zip | microsoft-jdk-debugsymbols-11.0.20.1-windows-aarch64.zip ↗ | sha256 ↗ |
| All | | | | |
| Source Code | NA | tar.gz | microsoft-sources-11.0.20.1_1-all-noarch.tar.gz ↗ | sha256 ↗ |

OpenJDK 16.0.2

Microsoft no longer publishes updates for OpenJDK 16, as it is not a Long Term Supported (LTS) version of OpenJDK. The binaries published in the past are available in the [Older Releases](#) page.

Public key to verify signature files

To verify the .sig files, download and use [the public key](#).

URLs for major versions only

Developers can also obtain the latest packages of an LTS release by using URLs without the specific minor version. For example, the following URLs will download the latest version of OpenJDK 17:

Linux

```
Bash

curl -OL https://aka.ms/download-jdk/microsoft-jdk-17-linux-x64.tar.gz
```

macOS

```
zsh

curl -OL https://aka.ms/download-jdk/microsoft-jdk-17-macos-x64.tar.gz
```

Windows

```
PowerShell

Invoke-WebRequest -Uri https://aka.ms/download-jdk/microsoft-jdk-17-windows-x64.zip
```

For a complete list of available URLs and versions, [see this page](#).

Previous releases

This page only lists the latest updates available. To download older releases, visit [this document](#).

Provide feedback on the Microsoft Build of OpenJDK

Send us your comments, thoughts, and ideas to help us improve the Microsoft Build of OpenJDK. Visit our [OpenJDK discussions page on GitHub](#) to send us your feedback.

Java and OpenJDK are trademarks or registered trademarks of Oracle and/or its affiliates.