AZUL
SYSTEMS®

Zulu® Enterprise: Fully-Supported Builds of OpenJDK™

Open Source Java Standard Edition for Linux, Windows, Solaris, and macOS

INTRODUCING ZULU ENTERPRISE

Zulu Enterprise is fully certified and 100% open source Java Development Kits (JDK) for all Java development and production workloads. Zulu binaries are free to download, to be used without restriction, and based on source code from the OpenJDK project (openjdk.java.net). Zulu builds are designed to allow companies to leverage the latest advances in Java Standard Edition (SE) for all Java-centric use cases. With extended support for multiple Java versions (e.g. JDK 11, 8, 7 and 6), Zulu Enterprise is ideal for organizations and businesses that require regular Java updates (e.g. bug fixes and security patches), including support for older or end-of-life versions of Java. Zulu is highly flexible and supports multiple operating systems (Windows, Linux, macOS, Solaris), CPU architectures (x86, Arm, SPARCv9, MIPS and PPC), and bitness (32-or 64-bit), Java patch levels (8u144 and beyond), and disk and memory sizes where Compact Profiles (Java 8 only) may play a part in container deployment strategies.

ZULU ENTERPRISE IS OPEN SOURCE JAVA

Each Zulu binary is verified compliant with the Java SE specification using the OpenJDK Community Technology Compatibility Kit (TCK) licensed from Oracle. The TCK is a suite of more than 120K unit tests which ensure that each binary build of OpenJDK meets all the specifications of the umbrella and individual Java Specification Requests for a given version of the Java SE platform (e.g. Java 11). Zulu Enterprise binaries carry additional intellectual property (IP) rights granted by passing the TCKs as defined by the Java Specification Participation Agreement and provides extensive IP rights to compatible and specification compliant implementations.

TIMELY MAINTENANCE UPDATES

Azul provides Zulu Enterprise customers with continuous access to the latest Java Critical Patch Updates (CPUs). for all supported Zulu versions (e.g. Java 11, 8, 7 and 6). These CPUs contain both Java SE bug fixes as well as security patches. CPUs are ranked depending upon the severity of the vulnerability, as defined by the National Institute of Standards and Technology (NIST) Common Vulnerability Scoring System version 3 (CVSS v3).

24x7x365 SUPPORT OFFERINGS

While Java is a mature language, Java runtime is a complex piece of code with no guarantees that every build is completely bug-free or secure. As such, Azul offers development and operations teams timely access to out-of-cycle patches to ensure their applications are always running on an up-to-date and secure Java platform. Azul Support offerings include a dedicated Support team that can i) triage Java problems, ii) identify offending code (i.e. perform root cause analysis) and iii) issue temporary patches or security fixes without any dependency on any other company.

With more than 16 years delivering mission-critical support for Global 1000 accounts, Azul has the dedicated teams and deep Java domain expertise to provide high-quality support that development and operations teams need to ensure their Java applications keep running smoothly.

ZULU BENEFITS

› **100% Open source** Zulu Enterprise builds are based on the OpenJDK open source project and licensed under GPL v2 with Classpath Exception. They meet the Java Standard Edition (SE) specifications for Java 11, 8, 7 and 6.

› **10-year Java SE lifetime Major and Long Term Support** Zulu Enterprise releases are supported for at least ten years after their general availability, providing more stability and control for your business.

› **Free to download and use without restrictions** Binary distributions of Zulu are available from the Azul website and Azul repositories, that readily and easily integrate into your development and production processes.

› **Fully supported by Azul** With cost-effective and tiered support options, Azul's globally distributed team has over 16 years of experience supporting mission-critical Java deployments.

› **Timely security updates** Oracle has announced that free updates of Java SE are being phased out. In January 2019, public updates (security patches and platform-level bug fixes) will end for JDK 8 and JDK 11, leaving Java-based businesses with a difficult set of alternatives. Zulu Enterprise is a cost-effective option for Java security and stability.

Zulu Enterprise Features

- 100% open source Java
- Built from OpenJDK sources
- Free to download and use, with cost-effective support options
- Verified by OpenJDK Community TCKs
- Performance parity with Oracle HotSpot
- Customizable packaging from JDK & JRE to Compact Profiles (Java 8 only)
- Full Docker and Linux container support
- Multiplatform support:
    - Java 11, 9, 8, 7 and 6 plus future Long Term Support (LTS) releases
    - Windows, Linux, Solaris, QNX and macOS
    - x86, SPARC, MIPS, PPC and Arm
- Continuous access to Java CPUs and security patches
- Extended product life cycles and selective access to preview builds, including JDK 11

SUPPORTED PLATFORMS

Operating Systems

RHEL 7.0 or later, 6.0 or later CentOS 7.0 or later, 6.0 or later Oracle Linux 7.0 or later, 6.0 or later SLES 12 (SP2 and SP1), SLES 11 (SP4 and SP3)
Ubuntu 16.04 LTS, 14.04 LTS, 12.04 LTS and 18.04 LTS
Debian 9.0 (Stretch), 8.0 (Jessie) and 7.0 (Wheezy)
Amazon Linux
Container Linux by CoreOS 4.7 or later
Alpine Linux 3.5 or later
Windows Server: Nano Server, 2016, 2012 R2, 2012, and 2008 R2
Windows Client (64-bit OS): 10, 8.1, 8 and 7
macOS v10.13 High Sierra, v10.12 Sierra, v10.11 El Capitan, v10.10 Yosemite or later
Solaris v12, v11, v10

Virtual Environments
Docker, VMware, Hyper-V, KVM

Cloud
Amazon AWS (EC2 and S3)
Microsoft Azure

Java Versions on X86
Java SE 11, 9, 8, 7 and 6 for x86-64 and x86-32

Java Versions on Arm
Java SE 9 and 8 for ARMv8 64-bit, ARMv6,and v7 32-bit, and Qualcomm Centriq 2400 Server

Fully Supported by Azul Systems

Azul Systems offers world-class support services for Zulu. Our highly trained customer support engineers have extensive Java experience and deep knowledge of the JVM, memory management, Java performance issues, and usage of production application visibility tools. Two tiers of enterprise technical support for Zulu are available:

	Standard	Premium
Quarterly releases	★	★
		Out-of-cycle bug fixes & early release access
Support hours	Business hours	24x7x365
Channels	Limited tickets & phone/email/web support	Unlimited tickets & phone/email/web support
Dedicated Technical Account Manager	N/A	Optional Partial FTE allocations available

AZUL'S SUPPORT LIFECYCLE FOR JDK 9 AND BEYOND

In September, 2017, Oracle announced that Java SE is moving to a 6-month release cadence. New "Features" releases will appear in March and September of every year. The next feature release after Java 9 was Java 10, which was released March 20, 2018.

- Long Term Support (LTS) releases will happen every 3 years. The next LTS release is Java 17 (planned for September 2021).
- Java 9 and 10 are feature releases with very short support lifespans (only 6 months after initial release). In addition, Oracle's End of Public Updates for JDK 8 is expected to take place 4 months after the initial Java 11 GA, creating a "support cliff" after January 2019.

Azul's Zulu Enterprise Support is designed to remove the risks and operational issues created by the revised Oracle and OpenJDK plans for Java SE:

- Azul will provide 10 years of Long-Term Support (LTS) for Java 8, 11, and 17 plus 2 years of Extended Support.
- Azul designates one Medium-Term Support (MTS) release per year in the years between LTS releases *and* provides support, bug fixes and security updates for 18 months past the GA date of the following LTS release, ensuring support overlap and a smooth transition path for production deployments, plus 12 months of Extended Support.

Contact Azul Systems:
385 Moffett Park Drive, Suite 115
Sunnyvale, CA 94089 USA

T + 1.650.230.6500
F + 1.650.230.6600
www.azul.com/zulu

10-18