



Worldwide Cloud Services Partner

Alibaba Position Statement JCP EC Elections 2024

Why Alibaba?

Over the years, Java has proliferated in Alibaba – numerous applications are written in Java, with tens of thousands of developers contributing over a billion lines of Java code. These Java programs are developed for online trading, payments, logistics operations, etc. Alibaba uses the full spectrum of Java technologies, including middleware (Apache Tomcat, Jetty, Netty, etc.), micro-services (Spring, Dubbo), big data (Spark, HBase, Flink), OLTP/OLAP (Drill, ElasticSearch), and message queue (RocketMQ, Kafka), etc.

Alibaba is deeply committed to the success of Java. Our investment in OpenJDK dates back to 2010, and we are an active contributor to the OpenJDK update and tip projects. Alibaba's contributions to OpenJDK position us among the notable external contributors, showcasing our unwavering dedication to the Java community. In our efforts to support RISC-V, we first kicked off the RISC-V support in OpenJDK 11u and completed the main porting work. Further, we enhanced the functionality of the Loom project on RISC-V. As a GraalVM Project Advisory Board member, Alibaba is among the active external GraalVM contributors. In the GraalVM tip project, we have implemented an innovative approach to support Java agent in GraalVM native image so that native image runtime observability becomes possible in production use.

Alibaba's involvement in the Java community extends beyond the Java Runtime. We actively participate on the corporate level in a wide range of open-source projects in the Apache and Eclipse communities, demonstrating our proactive role in the Java community.

Alibaba joined the Apache Foundation in 2015 and is the most significant contributor to Apache Flink, Dubbo, RocketMQ, etc. In 2023, we implemented the Java TEE SDK project, which enables running confidential Java programs inside TEE environments such as SGX with the smallest TCB. We have donated it to the Apache Teaclave incubator project.

Alibaba joined the Eclipse Foundation in 2021 and donated a web-based diagnostic tool (GC, heap, and thread dump analysis) —Java Issue Finder Assistant (Jifa) — to the Eclipse Foundation. In 2022, we open-sourced the Eclipse Migration Toolkit for Java (EMT4J) project under the umbrella of Eclipse Adoptium - the project's goal is to simplify the migration of Java applications from previous versions of OpenJDK and help the developers to make the application upgrading efficiently. As a founding strategic member of the Eclipse Adoptium Working Group, we actively contribute to EMT4J and AQAvt sub-projects under Adoptium, co-working with community members to strive to ensure developers have access to a vendor-neutral, high-quality, reliable Java platform.

Alibaba is also a core member of the Cloud Native Computing Foundation, and we are excited to make Java embrace cloud-native technology and build first-class support for Java on the Alibaba Cloud platform.

As a Java advocate in China, Alibaba has attracted many young developers from both industrial and academia to learn and use Java. We published an open-source book, Alibaba Java Coding Guidelines, consolidating Alibaba's best programming practices over the years. In addition, we worked through the GreenTea JUG community and talented researchers in China to promote and advocate Java technology. We hosted JUG activities regularly and have delivered a series of technical talks on cutting-edge Java technologies, covering JVM, middleware, and application development, to Java developers across China and East Asia. We joined China Computer Federation's opensource-to-campus campaign to present Java and its ecosystem in China's top universities.

As a member of the JCP EC, we look forward to a stronger relationship with the Java community, contributing more to JCP, and collaborating with the industry for the common good of the Java ecosystem.

Alibaba's JCP Representatives

Sanhong Li has been working on Java since 2004, when he began at Intel, implementing JSR135. He progressed to working on developing IBM's J9VM in 2010, where he led a project to develop multi-tenancy technology for the JVM. In 2014, he joined Alibaba to lead the development of Alibaba Dragonwell, a downstream of OpenJDK. He has authored over twenty technical patents/papers in the areas of managed runtime and presented at various conferences such as JVMLS, JavaOne, QCon, etc. He is a Java Champion and the co-leader of the GreenTea JUG (the largest JUG in China), Alibaba's representative of the GraalVM Project Advisory Board, and Eclipse Adoptium PMC member.

Denghui Dong has been working on Java since 2015. In 2017, he joined the Alibaba JVM team, focusing on reliability, availability, and serviceability (RAS). He is an OpenJDK committer and the project lead for Eclipse Jifa and Eclipse Migration Toolkit for Java (EMT4J) projects.