



Worldwide Cloud Services Partner

Alibaba Position Statement JCP Elections 2022

Why Alibaba?

Over the years, Java has proliferated in Alibaba - many applications are written in Java, with more than a billion lines of Java code contributed by over 10,000 developers. 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 very much committed to the success of Java. Alibaba's investment in OpenJDK dates back to 2010, and Alibaba is an active contributor to OpenJDK tip, 8u, 11u, and 17u update projects. Alibaba is also among the active external GraalVM contributors and a member of the GraalVM Project Advisory Board. Furthermore, as a founding member of the Eclipse Adoptium Working Group, Alibaba is committed to creating an open, neutral environment to make open-source Java SE technology available to all. Beyond the work on Java Runtime, we also actively participate on the corporate level in a broad range of Java open-source projects in Apache and Eclipse communities, including Apache Flink, Dubbo, RocketMQ, Eclipse Jifa, etc.

As a Java advocator, Alibaba worked through the GreenTea JUG community (the largest JUG in China) and talented researchers to promote Java technology across China and East Asia. In addition, we are committed to Java in Education via Alibaba's open-source program and educate the younger generation of future Java developers from mindset to practice.

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

Alibaba and the Java Community

Alibaba operates leading online and mobile marketplaces in retail and wholesale trade, cloud computing, and other services. We provide technology and services to enable consumers, merchants, and other participants to conduct commerce in our ecosystem. We turn our experience running millions of JVM instances into practical technologies and contribute them back to the OpenJDK community. By collaborating with communities, we helped backport Java Flight Recorder (JFR) into OpenJDK 8u and co-initiated and contributed to the RISC-V port project, which has been released in OpenJDK 19.

Beyond OpenJDK's contribution, Alibaba also contributes to other open-source communities that would help advance Java technology but need collaborations from the Java world. We are a member of the GraalVM Project Advisory Board and contributed many enhancement features such as survivor space support, serialization support, standalone points-to analysis framework, etc. We 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 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 do the application upgrading easily. Alibaba is also a core member of the Cloud Native Computing Foundation, and we are excited to make Java embrace cloud-native technology.

As a Java advocator in China, Alibaba has attracted many young developers 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.

Alibaba's JCP Representatives

Sanhong Li has been working on Java since 2004, when he began at Intel R&D Lab, 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 compiler and presented at various conferences such as JVMLS, JavaOne, JPoint, Joker, 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.

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 projects.