

Quality Outreach Report September 2021

Quality Outreach Report introduction

The first Quality Report was published in September 2015 [here](#), our initial intention was to provide a report every six months. We now release a Feature Release every 6 months so we have decided to publish a Quality Outreach Report every three months.

The previous report was issued in June 2021 [here](#)

- Section one looks at the number of FOSS Project participating in the Quality Outreach.
- Section two lists the bug logging activities over the past three months (July 2021 - September 2021).
- Section three lists the FOSS project activities on JDK 17 Early Access builds.
- Section four lists the FOSS project activities on JDK 18 Early Access builds.
- Section five lists the traffic on quality-discuss@openjdk.java.net.
- Section six is about JDK 17 release.

1.0 FOSS Projects listed on Quality Outreach Wiki

We now have **169** FOSS Projects of which 160 and their developers are listed on the Quality Outreach [Wiki](#) page.

There have been **7** new FOSS Projects added since the last report in June 2021. Welcome All!

New Projects added :

- Apache Johnzon
- Helidon
- jqwik
- JReleaser
- MapStruct
- OkHttp
- OpenNMS

All FOSS Projects receive regular updates when Early Access (EA) builds become available, they are encouraged to test and report back any issues they find during their testing.

2.0 Bugs logged since June 2021

Developers from **7** of the then **169** participating projects filed **8** new issues in the JDK Bug System in the last three months, thank you !

Priority	Fixed	Open	Duplicate	Not an Issue	Won't fix	Total
P1	0	0	0	0	0	0
P2	1	0	0	1	0	2
P3	1	1	0	0	0	2
P4	2	2	0	0	0	4
Total Unique Issues	4	3	0	1	0	8

The table above lists the number of bugs logged in total - **8**, of which **2** were P2, **2** were P3 and **4** were P4 bugs.

Component	P1	P2	P3	P4	Total
core-libs	0	0	0	4	4
hotspot	0	0	1	0	1
tools	0	2	1	0	3
Total Unique Issues	0	2	2	4	8

The table above lists the number of bugs logged by Component. Total **8** Bugs were found in **3** component areas.

2.1 FOSS Projects logging significant bugs

The following Projects have submitted bug reports in the last three months and deserve special mention:

- Apache Ant
- Apache Derby
- Apache Maven
- Apache Tomcat
- IntelliJ
- JaCoCo
- jOOQ

2.2 Overall Summary of bugs filed by FOSS Projects since October 2013

Priority	Fixed	Open	Duplicate	Not an Issue	Incomplete	Won't fix	Can't Reproduce	Other	Total
P1	13	0	0	0	0	0	0	0	13
P2	66	0	10	7	0	0	4	2	89
P3	131	16	28	22	3	7	6	3	216
P4	44	47	13	12	4	7	5	4	136
P5	3	0	1	0	0	0	0	0	4
Total Issues	257	63	52	41	7	14	15	9	458

3.0 FOSS activity on JDK 17 Early Access Builds - bugs logged since June 2021 to now

Priority	Fixed	Open	Duplicate	Not an Issue	Total
P1	0	0	0	0	0
P2	1	0	0	1	2
P3	0	0	0	0	0
P4	1	0	0	0	1
Total Unique Issues	2	0	0	1	3

The following Projects have submitted bug reports against JDK 17 Early Access builds :

- Apache Maven
- IntelliJ
- jOOQ

3.1 Testing Early Access builds of JDK 17 - list of FOSS Projects results and their comments

	FOSS Project	JDK 17	Comments
1	Apache Ant	b35	I've run Java 17 against our Ant testsuite on Linux and all tests have passed without issues.
2	Apache Aries JAX-RS	b16	I've just added JDK 17- <i>ea</i> to the Aries JAX-RS project build matrix and everything is green across the board.
3	Apache Aries SPI Fly	b16	All tests are green on Java 17- <i>ea</i> .
4	Apache Commons	b35	I expect to be switching GitHub Action builds from 16 to 17 and replacing 17- <i>ea</i> with 18- <i>ea</i> .
5	Apache CXF	b31	Apache CXF team is very happy to advice that we have stable green builds on JDK 17.
6	Apache DataSketches	b16	Green for JDK 17 EA.
7	Apache Derby	b35	No new issues were found with the first release candidate.
8	Apache Lucene	b25	Logged one bug - JDK-8268743.
9	Apache Maven	b31	Logged JDK-8270831.
10	Apache Syncope	b16	I am glad to confirm that all works with JDK 17 <i>ea</i> as well, on Linux, Windows and Mac OS.
11	Apache Tomcat	b35	Build and tests pass successfully with JDK 17 on both Linux aarch64 and x86_64!
12	Apache Wicket	b35	Build and tests pass successfully with JDK 17 on both Linux aarch64 and x86_64!

13	Apache Zookeeper	b31	ZooKeeper works well on JDK17.
14	Apereo CAS	b35	Just wanted to report back that Apereo CAS has no issues building against JDK 17ea.
15	Burningwave	b16	All test are green.
16	Eclipse Collections	b35	I just merged the build changes, so, Eclipse Collections will now build with 17 GA.
17	eo-yaml	b23	eo-yaml seems to work fine on OpenJDK 17 EA, the CI build is green.
18	FXGL	b26	JDK 17-ea is currently failing due to the Kotlin compiler.
19	Gradle	b31	The latest Gradle nightly supports JDK 17.
20	Hibernate ORM	b35	Java 17 is available, and all Hibernate libraries are ready for it!
21	Hibernate Validator	b35	Java 17 is available, and all Hibernate libraries are ready for it!
22	Hibernate Search	b35	Java 17 is available, and all Hibernate libraries are ready for it!
23	Hibernate Reactive	b35	Java 17 is available, and all Hibernate libraries are ready for it!
24	JabRef	b31	Encountered no issues so far!
25	JaCoCo	b28	Reported a JVM crash issue - JDK-8270090.
26	Java Katas	b21	Build for: JDK 17 b22, 16, 15, Loom, Valhalla and Panama. Happy to report all green!
27	JobRunr	b26	JobRunr still works fine on OpenJDK 17 EA Build 26.
28	JOOQ	b31	Logged JDK-8270866 and resolved in b33.
29	JUnit5	b35	JUnit5 builds and runs fine on OpenJDK 17 Release Candidate.
30	Karate	b35	I can confirm that the Karate project is green for all versions.
31	MyBatis	b29	All tests are passing on JDK 17 EA build.
32	PDFsam	b23	Tests are all green with this release.
33	RxJava	b35	Results for RxJava 3.1.2 snapshot on GitHub Actions: Target 12,13,14,15,16: Compile-OK, Tests-OK. Target 17: Compile-OK, Tests-OK.
34	Sejda	b23	All tests are passing with this release.
35	Selenide	b35	Selenide project is green with Java 17.
36	Vaadin	b21	Our products build and work correctly with OpenJDK 17 EA.

3.2 FOSS Tweets on JDK 17 General Availability

	FOSS Project	Tweets
1	Apache Kafka	Apache Kafka 3.1. #BrewYourBeansOnJDK17
2	Apache Maven	Maven project already running on EA releases of JDK 17. #BrewYourBeansOnJDK17
3	Apache Tomcat	#ApacheTomcat #BrewYourBeansOnJDK17
4	Apache Wicket	#ApacheWicket #BrewYourBeansOnJDK17
5	AssertJ	#AssertJ, since 3.19.0. #BrewYourBeansOnJDK17
6	BootstrapFX	BootstrapFX 0.4.0. #BrewYourBeansOnJDK17
7	Byte Buddy	Byte Buddy 1.11.7. #BrewYourBeansOnJDK17
8	DesktopPaneFX	DesktopPaneFX 0.15.0. #BrewYourBeansOnJDK17
9	Eclipse Collections	Eclipse Collections 10.4.0 upwards #BrewYourBeansOnJDK17
10	Eclipse Jetty	Jetty 9.4.x, 10.0.x, 11.0.x. #BrewYourBeansOnJDK17
11	Eclipse Vert.x	Eclipse Vert.x 4 works very fine on JDK 17 #BrewYourBeansOnJDK17
12	EqualsVerifier	EqualsVerifier 3.7.1. #BrewYourBeansOnJDK17
13	Groovy	#groovylang 4.0.0-beta-1 runs on #JDK17 and even #JDK18ea perfectly.

14	Hibernate	Java 17 is available, and all Hibernate libraries are ready for it!
15	HSQLDB	Latest HyperSQL Database (HSQLDB). #BrewYourBeansOnJDK17
16	Ikonli	Ikonli 12.2.0. #BrewYourBeansOnJDK17
17	JaCoCo	JaCoCo 0.8.7. #BrewYourBeansOnJDK17
18	JHipster	jhipster 7.2: All tests pass! #Java17.
19	JOOQ	jOOQ, since version 3.15. #BrewYourBeansOnJDK17
20	JOSM	JOSM version 18193. #BrewYourBeansOnJDK17
21	JReleaser	JReleaser 0.7.0. #BrewYourBeansOnJDK17
22	JUnit5	JUnit 5.8.1 is the current version, older versions run also on #JDK17.
23	Karate	a reminder that Karate is ready for Java 17 and even OpenJDK 18.
24	MapStruct	MapStruct for sure since 1.4 (latest GA release), but maybe even older ones. #BrewYourBeansOnJDK17
25	Micrometer	Every LTS and milestone versions of micrometerio: 1.5.x, 1.7.x, 1.8.x. #BrewYourBeansOnJDK17
26	Micronaut	#Micronaut and #Java17. #BrewYourBeansOnJDK17
27	Mockito	Mockito 3.12.0. #BrewYourBeansOnJDK17
28	Parallel Collectors	parallel-collectors 2.5.0. #BrewYourBeansOnJDK17
29	Piranha Cloud	Piranha Cloud 21.9.0, but has worked on #JDK17 EA versions since many months ago. #BrewYourBeansOnJDK17
30	ProGuard	We hope you're as excited as we are about the new #Java17 release. As a reminder, #ProGuard 7.2.0-beta2 is already compatible so please try it out!
31	Scala	Scala 2.13.6 and 2.12.15 work great on JDK 17! #BrewYourBeansOnJDK17
32	Selenide	Selenide runs on Java 7..17 since 4.0. #BrewYourBeansOnJDK17
33	SpringBoot	You'll be happy to know that SpringBoot 2.5.5 helps you #BrewYourBeansOnJDK17
34	Vaadin	Happy to report that vaadin versions 14.7 and 21.0 support Java 17. #BrewYourBeansOnJDK17

4.0 FOSS activity on JDK 18 Early Access Builds - bugs logged since June 2021 to now

Priority	Fixed	Open	Duplicate	Not an Issue	Total
P1	0	0	0	0	0
P2	0	0	0	0	0
P3	1	1	0	0	2
P4	1	0	0	0	1
Total Unique Issues	2	1	0	0	3

The following Projects have submitted bug reports against JDK 18 Early Access builds :

- Apache Ant
- JaCoCo

4.1 Testing Early Access builds of JDK 18 - list of FOSS Projects results and their comments

	FOSS Project	JDK 18 EA	Comments
1	Apache Ant	b14	I've run Java 18 build against our Ant testsuite on Linux and all tests have passed without issues.
2	Apache Commons	b14	I expect to be switching GitHub Action builds from 16 to 17 and replacing 17- <i>ea</i> with 18- <i>ea</i> .

3	Apache Tomcat	b14	10.1.x build and tests pass successfully with JDK 18-ea on both Linux x86_64 and aarch64 !
4	Apache Wicket	b14	Build and tests pass successfully with JDK 18-ea on both Linux x86_64 and aarch64!
5	Apache Zookeeper	b14	I have created (finally) an automatic build for testing ZooKeeper master branch against JDK18. All tests are passing.
6	Eclipse Collections	b14	I just merged the build changes, so, Eclipse Collections will now build with 18 EA.
7	Hibernate ORM	b14	Versions 5.6 tested against JDK 18 EA. No problems to report.
8	Hibernate Validator	b14	Versions 6.2, 7.0 tested against JDK 18 EA. No problems to report.
9	Hibernate Search	b14	Versions 6.0, 6.1 tested against JDK 18 EA. No problems to report.
10	Hibernate Reactive	b14	Version 1.0 tested against JDK 18 EA. No problems to report.
11	Karate	b14	Project is green for all versions, including JDK 18.
12	RxJava	b14	Results for RxJava 3.1.0 RC on Github Actions: Target 13 to 17: Compile OK, Tests OK Target 18: AFAIK Gradle doesn't support this target yet.
13	Vaadin	b15	We have been actively testing with the newly released JDKs, now JDK 18 EA build is good to go with the Vaadin product.

5.0 Discussion of the quality-discuss@openjdk.java.net mailing list

- Total 3 members participated in various discussions on the mailing list.
- Discussion threads
 - OpenJDK 17/18 EA build availability - 1
 - OpenJDK 17 EA build test results - 7
 - OpenJDK 18 EA build test results - 14
 - JDK 17 Rampdown Phase Two notification - 1
 - JDK 17 Release Candidate Phase notification - 1
 - JDK 17 General Availability Announcement - 1
 - Adding new project in Quality Outreach wiki - 2

6.0 Java 17 is now available!

- Worth reading - [The arrival of Java 17!](#)
- **#BrewYourBeansOnJDK17**
 - If you maintain a popular **Java library**, framework, or tool on **JDK 17**? Then respond to this [tweet](#) with its name and version.

The next Quality Outreach report is due in December 2021