Quality Outreach report June 2020

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 March 2020 here

- Section one looks at the number of FOSS Project participating in the Quality Outreach.
- Section two lists Bug logging activities over the past three months (end of March 2020 - June 2020).
- Section three lists FOSS project activity on JDK 15 Early Access builds.
- Section four lists traffic on quality-discuss@openjdk.java.net.
- Section five a request for feedback via a Survey on JDK tools

1.0 FOSS Projects listed on Quality Outreach Wiki

We now have 135 FOSS Projects and their developers listed on the Quality Outreach Wiki page.

There have been 16 new FOSS Projects added since the last report in March 2020. Welcome!

New Projects added:

- Apache Aries CDI
- Apache Aries JAX-RS
- Apache Hadoop
- Apache Zookeeper
- Bnd
- Debezium
- Eo-yaml
- FXGL
- Java Katas
- JobRunr
- Micrometer
- MyBatis
- Parallel Collectors
- PDFsam
- Sejda
- Vaadin

Note, we have a further 15 Projects that we communicate with that are not listed on the wiki i.e 150 projects in total.

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 March 2020

Developers from 8 of the 150 participating projects filed 14 new issues in the JDK Bug System in the last three months, thank you!

<table>
<thead>
<tr>
<th>Priority</th>
<th>Fixed</th>
<th>Open</th>
<th>Duplicate</th>
<th>Not an Issue</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>P2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
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<td>P3</td>
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</tr>
<tr>
<td>P4</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Total Unique Issues</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>14</td>
</tr>
</tbody>
</table>

The Table above lists the number of bugs logged in total - 14, of which 2 were P2 bugs, with 4 P3 bugs & 8 P4 bugs.

<table>
<thead>
<tr>
<th>Component</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>core-libs</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</tbody>
</table>
The table above lists the number of bugs logged by Component. The 14 Bugs were found in 6 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:

- Byte Buddy
- Eclipse Jetty
- GraphHopper
- JaCoCo
- JUnit5
- Netty
- PDFBox

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

<table>
<thead>
<tr>
<th>Priority</th>
<th>Fixed</th>
<th>Open</th>
<th>Duplicate</th>
<th>Not an Issue</th>
<th>Incomplete</th>
<th>Won't fix</th>
<th>Can't Reproduce</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>13</td>
</tr>
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<td>P2</td>
<td>57</td>
<td>0</td>
<td>10</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>79</td>
</tr>
<tr>
<td>P3</td>
<td>95</td>
<td>16</td>
<td>27</td>
<td>21</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>0</td>
<td>175</td>
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<tr>
<td>P4</td>
<td>25</td>
<td>36</td>
<td>12</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>95</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total Unique Issues</td>
<td>191</td>
<td>52</td>
<td>50</td>
<td>35</td>
<td>7</td>
<td>12</td>
<td>15</td>
<td>2</td>
<td>364</td>
</tr>
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</table>

3.0 FOSS activity on JDK 15 Early Access Builds - bugs logged from March 2020 to date

<table>
<thead>
<tr>
<th>Priority</th>
<th>Fixed</th>
<th>Open</th>
<th>Duplicate</th>
<th>Not an Issue</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>P2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>P3</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>P4</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Total Unique Issues</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

The following Projects have submitted bug reports against JDK 15 Early Access builds:

- Apache Lucene
- Apache PDFBox
- Apache Tomcat
- Byte Buddy
- Eclipse Jetty
- JaCoCo
- Netty

3.1 Testing Early Access builds of JDK 15 - list of FOSS Projects results and their comments
### FOSS Project | JDK 15 EA | Comments
--- | --- | ---
1 | Apache Ant | ✅ | No issues found against our Ant testsuite on a Linux setup using JDK 15 EA build 15-ea+24-1168.
2 | Apache CXF | ✅ | Testing JDK15 EA builds, we have to address is removal of SSLv3 support (this is good thing).
3 | Apache Lucene | ✅ | JDK15 build 14 was installed, and first build succeeded.
4 | Apache Maven | ✅ | We’re testing with Java 15-ea for a couple of weeks now, no issues found.
5 | Apache Tomcat | ✅ | All looking OK at the moment for Java 15 as far as Tomcat is concerned.
6 | Apache Wicket | ✅ | I’ve just tested JDK 15 b24 with Apache Wicket. Except the issue with aQute library everything else is rock solid for us!
7 | Apache Zookeeper | ✅ | I have tested a bunch of other applications that use ZooKeeper and all works as expected.
8 | Eclipse Collections | ✅ | building on JDK14 GA and JDK15 EA-Build-25.
9 | Eo-yaml | ✅ | All tests passed with JDK 15 EA b28.
9 | JaCoCo | ✅ | Java 15 repo is green for us (including tag jdk-15+24) - confirmed JDK-8245070 fixed in b24.
10 | JobRunr | ✅ | FYI - all is also working on openjdk:15-ea-27-jdk.
11 | JOSM | ✅ | Logged bug testing JDK 15 EA b6 – confirmed fix in b19.
12 | JUnit5 | ✅ | JDK 15+ea-24 shows "#TestsAreStillGreenOnJDK15"
13 | FXGL | ✅ | Tests are green with b24.
14 | MyBatis | ✅ | All test pass b27.
15 | PDFsam | ✅ | All tests are green with b24.
16 | RxJava | ✅ | All targets - Compile: OK Tests: OK with JDK 15b24.
17 | Sejda | ✅ | All tests are green with b24.

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

- Total 1 member participated in various discussions on the mailing list.
- Discussion threads
  - OpenJDK 15 EA build test results - 7
  - OpenJDK 15 EA builds availability - 3

### 5.0 Survey on JDK tools

Oracle is considering deprecation and (eventual) removal of the jinfo, jmap, jstack - (aka "j* tools") and building out a future foundation for some aspect of serviceability on jcmd. For this, a Survey has been created to gather more information on how these tools are used in practice, especially outside of Oracle. The survey(link below) will remain open through July 15 2020.

[Survey : On the jinfo, jmap, jstack serviceability tools](#)

The next Quality Outreach report is due in September 2020