OpenJDK Scorecard

This scorecard helps assess goals set by the OpenJDK Community and Governing Board so we can track progress over time. The Community Scorecard covers the areas of Infrastructure, Governance and IP. The Project Scorecard, focuses on Project-specific goals, and covers Visibility and Technical matters.

2013 Update Summary

This update was compiled by comparing survey results with the progress being made since for each individual survey question. Some areas have seen advances, while others that functioned well before, according to the survey results, have continued to do so. In particular, there have been no regressions on existing progress.

The OpenJDK infrastructure area saw several advances such as the new OpenJDK Wiki under OpenJDK ToU coming on line in early 2013, and the long awaited JDK Bug System coming on line in September 2013. The Governing Board continues to closely monitor progress in this area. Two open meetings, at the JavaOne and FOSDEM conferences, since the initial survey presented an additional opportunity to provide feedback on it directly to the Governing Board.

Several new Projects have been established since the 2012 Scorecard. A number of Contributors are progressing through the different Roles in Groups and Projects. Community-led initiatives like AdoptAJSR and AdoptOpenJDK are bringing OpenJDK to new developers through JUGs, Conferences and Test Fest days. Those activities are flanked by an increasing number of presentations and materials explaining OpenJDK development and governance processes, as well as the development and design processes of individual Projects to make them more accessible to the broader Java Community. JEPs, in particular, have become a useful and accepted tool to provide transparency into JDK 8 feature planning.

In conclusion, it is safe to say that the OpenJDK Community has moved forward since JavaOne 2012.

OpenJDK Scorecard Survey Results

This version contains an update after having completed an OpenJDK Community survey. The 2013 survey ran for a week from October 22nd – November 1st. Responses on the survey were gathered, and a first round of scores proposed based on the Scorecard draft. Over 50 people responded to the survey, down from 80 in 2012.

- Two-thirds of respondents completed the survey (up from just below half in 2012).
- There was a pretty even distribution amongst Roles and Experience level in the Survey.
- 29% of respondents were not Contributors OpenJDK, just "Interested Participants". 12% Contribute on their own time. 15% Contribute as part of their job, but at less than half their time, and 44% of respondents Contribute full time as their job. These numbers are within 5% of last years results.
- Key Takeaways from Survey:
    - Almost every Community Scorecard score improved in 2013
    - In particular, scores related to issue tracking and wiki have vastly improved
    - Scores related to technical matters and transparency also did well
    - Only two Community areas declined in this survey:
        - Governing Board Meeting transparency (not statistically significant)
        - Trademark Policy exists and is easily understood
            - Comments were related to content of policy than its ease of finding and understanding
    - There were only enough Project Scores for the JDK 8 Project to track meaningful results.
        - Overall, technical matters fared well compared to last year, but visibility and transparency scores were down slightly.

OpenJDK Scorecard Scoring Methodology:

Score	Meaning
0	Not Existent, no workarounds
1	Workarounds exist, but are highly problematic.
2	OK, with major inconveniences. (Only specific people are able to work around the issue, or specialized tools not widely available are required, or an inordinate amount of time is required).
3	OK, with minor inconveniences. (Any participant could work around the issue given available information/tools within a reasonable amount of time).
4	Good, but improvements sought.
5	Meets or exceeds expectations.

Comments field will be used to justify the Score, and describe how to improve upon the score for the next round (if not clear by improving the issues noted in the comment).

Community Scorecard

"2012 GB Score" reviewed by GB based on feedback from Oracle, and analysis of survey results. Note that it would be imprudent to only consider the average of the survey results too seriously given the spread of opinions, and those who might skew the survey up or down with ill considered clicks of 5's or 0's. Therefore, we look carefully at the median score, and the most popular score in the results as well.

Survey results X,Y,Z: X is the average weighted score, and Y is the median, Z is the most popular score. So "3.97, 4, 5" means the average score was 3.97, that the median was 4, but that 5 was selected more than any other.

Infrastructure	2012 GB Score	Survey Results		Comments	
		2012	2013	2012	2013
Project-Specific Infrastructure					
Project source code and history are easily accessible.	5	3.97, 4, 5	4.14, 4, 5	Projects are able to commit and push code, public is able to read and consume code. Code archives are maintained. Mercurial is generally well liked, and even detractors generally admit it's tolerable. It can be a challenge to find the right Mercurial forests without asking.	The OpenJDK Mercurial infrastructure continues to perform as expected. Survey comments indicate a preference towards GIT and that some Mercurial tooling tree/forest concepts not always intuitive. Also that security patches come late and can be hard to follow.
Projects are able to manage their SCM easily.	3	3.68, 4, 4	3.80, 4, 5	Projects are able to create new forests, add new Committers and manage repos, but usually require interacting with ops@openjdk.java.net at Oracle to perform these tasks. Lead times to make changes and have requests processed can vary significantly.	SCM management requests sent to ops@openjdk.java.net are typically processed within days, allowing new Projects to bootstrap their source code repositories rapidly. There are some that struggle with SSH blocking at their corporate networks, and https may help overcome that. Changes through JPRT can take a long time.

An issue tracker is available to the entire community.	1	1.66, 1, 1	3.73, 4, 5	An issue tracker is available. The public is able to submit issues, and read most issues. At the current time, only Oracle staff are able to perform queries, manage bugs and the bug lifecycle. This has required projects lead by non-Oracle Committers to seek alternative locations to manage bug fixes.	The migration from the legacy Sun BugTraq to the internal JIRA system is complete. It is used by bugs.sun.com to provide its content. Has been in active use and over 10000 new issues have been filed since the migration. The JDK Bug System was launched in September, 2013. Early feedback on the JIRA based system is positive, but there is still a need for a broader ability to submit and comment on issues.
Public Code Review System is available to the entire community.	2	2.16, 2, 1	2.56, 3, 2	cr.openjdk.java.net used for code display, approval handled by email. More features would be possible if a newer technology could be used.	The existing infrastructure continues to be used. Specifically, the webrev.ksh tool is being gradually updated to improve the user experience. More features such as more easily tracked comments and linking to bug reports are requested.
Group and Project					
Mailing List infrastructure is available.	4	4.34, 5, 5	4.56, 5, 5	Easy to use and generally well known mail tools available. Archives are not easily searchable, and attachments can be problematic. It would be helpful to better describe and group the various lists for people new to OpenJDK.	Mail lists working as intended, however there are some concerns that there are too many mailing lists and it can be difficult for newcomers to understand which list is for what. Also, it would be nice if there was a better search ability within mailing list archives such as gmane.

Project and Group members can easily edit web pages.	2	2.6, 3, 4	3.23, 3, 5	A process exists for Groups and Projects to have a web page created. Unfortunately, only Oracle staff may currently edit OpenJDK web pages, so non-Oracle staff must make requests to ops@openjdk.java.net. This is problematic for Groups and Projects that may not have Oracle Committers.	Updates of pages on openjdk.java.net continue to be made via ops@openjdk.java.net. The new wiki.openjdk.java.net provides Groups and Projects with an alternative way to offer up-to-date information.
Project and Group members can easily edit wiki pages.	3	2.77, 3, 4	3.78, 4, 5	A wiki is available, but under different TOU than the rest of OpenJDK, which is of concern to some participants.	A new OpenJDK Wiki under OpenJDK TOU has been rolled out at wiki.openjdk.java.net. Existing OpenJDK Wiki content has been migrated to the new instance. Project and Group members can now easily edit their wiki pages. 3 new projects have added wiki spaces: Port: PowerPC/AIX, Type Annotations, Nashorn. Participants note that understanding the permissions and processes for getting write access could be clearer.
Blog Aggregator is available.	4	2.93, 4, 5	3.18, 3, 5	A blog aggregator is in use. Technology used and process for adding or removing bloggers could be improved.	A number of new bloggers have been added to the blog aggregator since the last update. Most indications are that few people rely on or follow blogs other than for very important updates and that twitter and other social media has taken priority.
Infrastructure to manage voting is available.	4	2.76, 3, 4	2.94, 3, 4	Voting occurs via email, which is a popular method in a number of communities. One issue that rises frequently is ineligible people tend to vote (not realizing they are ineligible), which can cause some confusion when tabulating results.	Voting continues to be performed by e-mail. The vast majority of feedback is that the methodology and simple email based approach are sufficient.

It’s easy for a newcomer to determine the vitality of a particular Group or Project.	3	2.27, 2, 3	3.00, 3, 3	It is generally possible by monitoring mailing lists and other project activity – or simply asking a Project or Group lead on the relevant mailing list. However, there isn’t a consistent manner across groups and projects to determine liveness. Having a better issue tracking system, and better enabling Projects to update their web assets (webpage, wiki, etc) will help in this area.	Some Projects use Ohloh.net to compile committer and commit statistics. An example can be found at https://www.ohloh.net/p/openjdk the OpenJDK 8 Project. Most feedback indicates that email archives and viewing source repositories are the main methods for understanding vitality. Indicators such as those found at Github would be welcome.

Governance	2012 GB Score	Survey Results		Comments	
		2012	2013	2012	2013
Groups					
Votes are transparent.	5	4.46, 5, 5	4.64, 5, 5	As per the bylaws, elections have been run transparently. If anything were to be improved, a summary of votes and results could be posted somewhere other than email archives.	Votes continue to be run transparently, on the respective Groups' mailing lists.
Quarterly Reports are published.	0	1.84, 2, 0	2.56, 4, 0	To date, quarterly reports from Groups have not been published, with rare exceptions (Build group, for example).	Only the Build Group has published a Quarterly Report since the last update.
Governing Board					
Elected Seats are filled as per bylaws.	5	4.23, 5, 5	4.42, 5, 5	Elections have taken place on schedule, and candidates have been nominated. Moreover, there are Observers, and the process for adding observers is working as expected.	The 2013 nomination period has closed, and elections for at-large seats have taken place again.
Meetings occur with regular frequency as per bylaws.	5	2.86, 3, 5	3.24, 4, 5	The board meets more frequently, but at least once per quarter as required.	The Governing Board continues to meet at least as frequently as required per bylaws.
Governing Board meeting results are transparent.	3	3.04, 4, 5	2.96, 4, 5	Minutes are being published, but there are frequently delays of several months between the meetings and the minutes being posted.	The remaining meeting minutes from 2011 and 2012 have been posted on the Governing Board web page.

Open Meetings, or other venues for timely community discussions, besides email, are happening.	2	2.56, 4, 0	2.59, 3, 3	To date, no open meetings of the Governing Board have been held. However, the appointed and elected board are easy to find and approachable. There are several general "OpenJDK BOF" events throughout the year with different OpenJDK Governing Board Members participating where the public could attend and provide feedback.	The Governing Board has held two panel discussions since the last update. The first one was at the JavaOne Conference in San Francisco, USA in 2012. The second one took place a few months later at the FOSDEM Conference in Brussels, Belgium, in 2013. In both cases, community participants were able to attend a Governing Board panel session and provide feedback to the Governing Board directly. That being said, when asked about the governing board, feedback continues to be that some people don't know or don't care about what the GB is doing.
Annual Review is completed.	0	2.11, 2, 0	2.95, 3, 5	It has only just been one year since the ratification of the OpenJDK Bylaws. The Governing Board is currently surveying the landscape and expects to do an annual review after JavaOne 2012.	The OpenJDK Community Scorecard will serve as the GB Annual Report.
Meritocracy - Progression of Roles					

Each Role is attracting new Participants.	3	2.96, 3, 4	3.42, 4, 5	In this case, we use a score of “2012 == 3”, and will adjust this score up, or down, over time as we believe growth is increasing or decreasing. Given the current infrastructure and resources, we feel there is a good number of new Participants and Projects joining the ecosystem, and that individuals are free to evolve their Roles. However, if successful, we should see increasing activity from the current baseline.	New Participants continue to join the OpenJDK Community, in part fueled by AdoptJSR and AdoptOpenJDK initiatives from the broader Java & JUG community. In addition, OpenJDK Community remains attractive to new Projects. Since JavaOne 2012, two new Projects, Project Nashorn and the AArch64 Porting Project have been established.
New Participants can easily see what Roles and progressions are available.	3	2.90, 3, 4	3.61, 4, 5	Aside from the Bylaws, limited resources are available explaining the various roles and progressions.	JavaOne 2012 included a presentation on OpenJDK Governance and a development Role and Process overview, which has been made available to the public, and summarized in blog posts. JavaOne 2013 included a presentation on Community participation in OpenJDK, which has been made available to the public. There is some feedback that the process is complicated, but others contend that the bylaws cover most scenarios very well.
Participants are progressing to the appropriate Roles.	3	2.60, 2, 2	3.48, 4, 5	Given the limited visibility into what the various Roles are, feedback for this goal is mixed. As with the initial goal in the subsection, we will use “2012 == 3” as a baseline, and adjust up or down based on progress of people being able to transition roles YoY.	Many active Projects see Participants evolve their Roles from Authors to Committers and Reviewers, where applicable. Some feedback indicates the bar to become a Reviewer is quite high and that the process to make someone an Author is too slow and could be automated via web interface (and made more transparent).

Votes					
Voting Process is clear and well understood.	4	4.15, 4, 4	4.27, 4, 5	Voting processes are described in the Bylaws and it's easy to get quick answers to voting related questions. An FAQ or similar resources would be all that's required to improve this area.	Voting process continues to function as well as before.
Public Voting on issues with results published, as per the bylaws.	5	3.97, 5, 5	4.66, 5, 5	Votes are happening in public, and transparently, as required. A posted summary of vote results could be helpful to avoid needing to search mail archives for results.	Transparency of votes continues to be provided as before.

Intellectual Property	2012 GB Score	Survey Results		Comments	
		2012	2013	2012	2013
Licenses					
All projects use FSF or OSI License.	5	3.96, 5, 5	4.13, 5, 5	Working as expected. Some concerns were raised that it's possible for Oracle and related Licensees to distribute commercial distributions based on OpenJDK sources. However, that is intended. It is consistent with other communities, and OS licenses that commercially licensed software be possible.	Continues to work as well as before.
Trademark License exists and is easily accessible.	5	3.75, 4, 5	3.32, 4, 5	OpenJDK Trademark license was recently updated. Some concerns were raised that Oracle sole steward of the OpenJDK trademark, however, that is intended.	Continues to work as well as before.
Terms of Use for Infrastructure are consistent.	3	3.55, 4, 5	3.64, 4, 4	Progress has been made in this area, but some preferred technologies (such as the Wiki) are still not consistent with OpenJDK.	The new wiki, wiki.openjdk.java.net, uses the standard OpenJDK Terms Of Use.
Policies for legal notices in source code are documented.	1	2.95, 4, 5	3.41, 4, 4	Policies exist, but are not documented and require asking around.	There have been no updates in this area.
Contributor Agreement					

Path for new Contributors to complete Contributor Agreement is clear and working.	3	3.52, 4, 4	3.75, 4, 4	The Contributor Agreement process is well described and relatively straight forward. However, processing times can vary and may take up to a month, unless escalated by a Project Committer.	OpenJDK continues to attract a high number of new Contributors. Most of them are able to complete the Contributor Agreement and processing times have improved. The number of concerns raised about the contents of the Contributor Agreement has declined significantly and in fact only one person noted in the 2013 survey that some trademark and OCA terms are not satisfactory.
It is easy to identify existing Contributors (people covered by a Contributor Agreement).	4	3.21, 3, 3	3.86, 4, 4	Contributors are listed on a publicly available on Signatories List page. Project and Group Role affiliations are listed on the OpenJDK Census page. However, it is not always clear to Committers where this list is, and how to use it. Also, the information can be sparse and requires follow up and clarification.	The list of Contributors is kept up to date with the processed Contributor Agreements.
Ability for Contributors to handle Change in Employment is clear and working.	4	3.10, 3, 4	3.68, 4, 4	Notwithstanding the issue about processing time, it is easy for Individuals to continue their Role in OpenJDK should they wish to do so, and their employer changes. However, this fact is not readily clear and there may be confusion by Committers when it happens.	This process continues to work as before.
IP Processes					

Process for incorporating third-party libraries is clear.	1	2.09, 1, 1	2.50, 3, 3	Currently, there is no process or method for Projects to add third-party libraries to their code. When third party dependencies must be added, only Oracle staff are able to do so, and the process for them doing so is completely internal.	There have been no updates in this area. Feedback is that people are able to find answers by asking, but if there were a more centralized source of information it may help speed up and reduce interactions.
Process for asking IP-Related questions is clear.	1	1.91, 1, 1	2.65, 3, 3	Currently these discussions can only take place on relevant project or discuss mailing lists. No guidelines or specific venues exists.	There have been no updates in this area.

JDK 7u & JDK 8 Project Scorecards

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2012 and 2013 Survey results X,Y,Z: X is the average weighted score, and Y is the median, Z is the most popular score. So "3.97, 4, 5" means the average score was 3.97, that the median was 4, but that 5 was selected more than any other

*** NOTE – Survey results for 2013 JDK 7u include only 1 completed scorecards so is not tracked for this year. The JDK 8 project had 12 completed scorecards, and feedback was more relevant. There were project scorecards for hsx, Graal and JDK6 projects, but not enough of any to be statistically significant, however their results comments have been saved for reference.

Per-Project Scorecard	2012 GB Score (JDK 7u / JDK 8)	Survey Results (JDK 7u / JDK 8)		Comments	
		2012	2013	2012	2013
Visibility					
JDK Enhancement Process (JEP) is helping identify interesting features.	2 / 3	1.33, 1, 1 / 3.00, 3, 3	NA, NA, NA / 2.78, 3, 3	The JEP process is in place. We seek ways to improve quality of feedback, status of particular JEPs, and to respond faster to proposed JEPs.	JEPs continue to be used for JDK 8 and future planning. There are comments that some features are added without corresponded JEP, and encourage more JEP use for transparency.

Project Planning is publicly available and observable.	2 / 3	1.33, 1, 1 / 2.67, 3, 3	NA, NA, NA / 2.33, 2, 2	At this time, people who actively watch mailing lists are usually able find and track progress and compare to schedules. However, there is generally no single-source summary location for this information, or agreed time interval for reporting.	While JEPs have brought mo re transparency at a less granular level to the OpenJDK Community, their use is mostly constrained to JDK 8 and future releases.
Design Decisions are publicly available and observable.	2 / 3	1.67, 1, 1 / 3.2, 3, 3	NA, NA, NA / 2.67, 3, 4	Design decisions are often spread across various resources, and not always publicly visible. In some cases, JEPs and feedback on JEPs, besides being able to observe JSR Expert Groups helps somewhat with visibility.	While many design decisions are publicly visible, the decentralized nature of JDK development can present a challenge for newcomers to find the right forum to observe. JavaOne 2013 and a number of other conferences featured presentations on JDK 7u development processes to increase the visibility of decision making within that Project in the broader Java Community. Community feedback is that more frequent roadmap updates and details would be appreciated.
Projects are providing information on their roadmaps, milestones, build, integration, and release schedules.	2 / 3	3.00, 2, 2 / 2.90, 3, 3	NA, NA, NA / 2.56, 3, 3	There have been improvements in JDK 8 with publishing milestone, release and roadmap schedules but more improvements are needed.	JDK 8 has continued to publish updates to existing milestone, release and roadmap schedules as they have become available.

Relevant documentation is available and up to date.	4 / 4	2.67, 3, 3 / 2.80, 3, 4	NA, NA, NA / 2.89, 3, 3	Documentation is available, but goes stale, more attention is need to keep things current.	While availability of Project documentation continues to improve, currency and, as a corollary, accuracy remain a challenge. Some projects share information via the wiki, but more details and more projects following this pattern would be preferred.
Identifying Project Leadership and determining how to ask questions is easy.	3 / 3	3.33, 3, 3 / 3.70, 4, 4	NA, NA, NA / 3.78, 4, 5	The OpenJDK Census page helps with this goal, but is not well known or understood. A different view into the Census (listing Projects, Groups and who fills the various Roles) may help improve this score.	The JDK 7u Project additionally lists Project Leadership on its web page, linking to the OpenJDK Census page for detailed information. 8 leadership is simpler and continues to be documented through the census page.
Votes are transparent as per the bylaws.	5 / 5	3.33, 4, 4 / 3.80, 4, 4	NA, NA, NA / 4.44, 5, 5	Votes are happening transparently according to the bylaws. A summary of vote results may save people from having to mine mailing lists for results.	Voting continues to function as well as before.
Technical Matters					

Project is easy to build. 	2 / 3	3.33, 3, 3 / 3.18, 3, 3	NA, NA, NA / 3.78, 4, 4	Several community participants have demonstrated it's possible to do custom builds of OpenJDK. However, the knowledge and resources are scattered and difficult to find. Related tools for doing continuous build and integration testing do not exist. The Infrastructure Project (sometimes referred to as the "new build" Project) has offered improvements, but still has a way to go to help a broader set of Participants.	Integration of the new build infrastructure Project into JDK 8 has improved the situation on most platforms. New Participants are starting to work on build improvements and enhancements. Community feedback is that this is an area that keeps improving and hopes are that the current improvement trajectory continues.
Project is easy to test.	2 / 3	3.67, 4, 4 / 2.5, 3, 3	NA, NA, NA / 2.78, 3, 4	There are still internal tests and frameworks. This can cause issues and delays with some projects when 3rd party contributions must first be verified before going into a mainline release. Some spec code requires additional licenses – their availability and ease of access is scored separately.	Test results from Oracle JDK builds are now regularly published for JDK 8 EA builds to provide OpenJDK Community testers with a baseline to compare their own builds to. More tests, especially around the JVM and Hotspot are strongly desired by the community.

Contributing new test cases is easy.	2 / 2	3.00, 4, 4 / 2.8, 3, 3	NA, NA, NA / 2.78, 3, 3	It is currently possible to contribute tests, but only to a subset of the overall testing that is required to ensure a stable build. Also, there are no guidelines for submitting tests, and it is currently very difficult for the Contributors to participate in this area.	A TestFest was held at Devoxx UK conference to introduce new Contributors to existing testing infrastructure, and get some experience writing new tests. As part of that effort, new and updated documentation for testing has been provided to the OpenJDK Community on the Code Tools Wiki. A second event occurred recently at GeeCON conference, and a third event at a JUG.RU meeting.
\Submitting a patch is easy.	3 / 3	2.67, 4, 4 / 3.55, 4, 4	NA, NA, NA / 2.78, 3, 3	Submitting a patch can be fairly straightforward to Participants, but can be daunting to people new to OpenJDK. A guide, or other documentation, with an eye to new Participants / Contributors, would be helpful.	This continues to be the case. Getting attention of Committers can be difficult depending on the contribution, and patches that only address one platform and not others are especially problematic. More testing and ability for Contributors to validate
Making a complete fork of the project is easy.	3 / 3	3.00, 4, 4 / 3.00, 3, 3	NA, NA, NA / 3.33, 4, 4	It has been demonstrated that it is technically easy to migrate code from OpenJDK to various forges. The inconvenience remaining is forkers are on their own to define what “build and test” means for the fork. Better build and test systems will help fork-ability.	This continues to be the case.

If applicable, API Specification is available and easy to find.	4 / 4	3.33, 4, 4 / 3.78, 4, 4	NA, NA, NA / 3.63, 4, 4	The Javadoc for API for JDK 7 and JDK 8 are straightforward and easy to find. What is still a challenge, though, are finding information about things like Command line switches, that "shall-not-break" during updates.	This continues to be the case.
Release and Update Projects (only)					
Process for getting TCK Access is clear.	4 / 0	2.67, 3, 3 / Not Applicable	NA, NA, NA / 2.38, 2, 2	It is possible to receive the Java Compatibility Kit by completing the "OpenJDK Community TCK License Agreement" (OCTLA). Processing times may vary. The OCTLA for JDK 8 is not yet available.	TCK Access Process continues to work as well as before. The OCTLA for JDK 8 is now available.
Finding list of OCTLA Signatories is easy.	2 / 0	2.00, 3, 3 / Not Applicable	NA, NA, NA / 3.00, 3, 3	A list of OCTLA Signatories exists, however, it is currently out of date and difficult to find. The OCTLA for JDK 8 is not yet available.	The list of signatories is up to date and includes OCTLA for JDK 8 signatories.