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.

2014 Update Summary

This update was compiled by comparing survey results with the progress being made since for each individual survey question. Most areas continue to function as well as before. While several areas have seen improved scores, according to the survey results, a few areas have seen their scores decline.

The OpenJDK infrastructure area saw advances such as the migration to new servers in March, improved Project and per-Project Mercurial repository listings in April, and the migration of JEPs to the JDK Bug System (JBS) in May. The Governing Board continues to closely monitor progress in this area. An open meeting at the FOSDEM conference presented an additional opportunity to provide feedback on it directly to the Governing Board.

Several new Projects and a new Group have been established, and begun their work during 2014. A JDK Release Project completed its work in March with the JDK 8 GA, while another, JDK 9, improved on the previous survey's scores of JDK 8 across the board. JEPs, in particular, have become a useful and accepted tool to provide transparency into JDK feature planning, and with the JEP 2.0 Process, drafted in May, are now used for both JDK Release Projects and other Projects.

In conclusion, the OpenJDK Community has continued well on its path in 2014, improving in several aspects over the previous survey.

OpenJDK Scorecard Survey Results

The 2014 survey covered the calendar year 2014. The survey was run in early 2015. Responses on the survey were gathered, and a first round of scores proposed based on the Scorecard draft. Over 40 responses to the survey were received, down from over 50 in 2013. Next year we will have to work to increase the participation rate back to 2013 levels.

- Half of respondents completed the survey (down from two thirds in 2013).

- More than half the respondents had at least the role of Participants, while more than a third were OpenJDK Members.

- Three quarters of the respondents were active in the OpenJDK Community for three or more years.

- 24% (vs. 2013: 29%) of respondents were not Contributors in OpenJDK, just "Interested Participants". 20% (vs 12%) Contribute on their own time. 12% (vs. 15%) Contribute as part of their job, but at less than half their time, and 43% (vs. 44%) of respondents Contribute full time as their job. These numbers are largely in the range of last survey's results.

- Key Takeaways from Survey:

    o   Most Community Scorecard scores stayed within 5% of the previous survey

    o   Feedback on scoring methodology and the score card itself indicates that adding an 'I don't know' option to answers would be desirable

    o   There were only enough Project Scores for the JDK 9 (13) and OpenJFX (3) Project to track meaningful results.

        ·Overall, JDK 9 fared better across the board than JDK 8 in the previous survey. This was the first survey including OpenJFX.

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

"2014 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	2014 GB Score	Survey Results		Comments	
		2014	2013	2014	2013
Project-Specific Infrastructure					
Project source code and history are easily accessible.	5	4.25, 4, 5	4.14, 4, 5	Projects are able to commit and push code, public is able to read and consume code. Comments from respondents point out that Mercurial works well, and suggest specific improvements, like a public source code index (e.g. LXR), HTTPS support for checkouts, and making it easier to discern what different purposes different source code forests play in Projects that have more than one. One respondent suggested moving to GitHub.	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.	4	3.74, 4, 5	3.80, 4, 5	Projects are able to create new forests, add new Committers and manage repos. Comments from respondents pointed out the absence of branches and suggested that forests were painful, expressing hope that the new JDK 9 sandbox would help. One comment pointed out that some parts of the source can still only be effectively managed by Oracle, as they require submitting changes through JPRT or simultaneous changes to both OpenJDK and other code. One comment suggested moving to GitHub or Bitbucket.	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.	4	3.56, 4, 5	3.73, 4, 5	An issue tracker is available, and is being actively used by 7 Projects. Comments from respondents focused on lack of write access for individuals without an Author (or higher) Role in the OpenJDK Community, expressing their annoyance at the inability to create new issues or comment on existing ones.	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	2.87, 3, 3	2.56, 3, 2	Infrastructure at cr.openjdk.java.net is used for code display, with actual code review being handled through email on respective mailing lists. Comments largely focused on the webrev tool, with some respondents suggesting it was sufficient and working well, while other respondents found it difficult to use and lacking features, like in-line commenting and integration with source control. One comment suggested that Crucible or something similar would be desirable.	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	4.32, 4, 5	4.56, 5, 5	Mailing lists are available. Comments focused on different aspects of using mailing lists – one comment pointed out the lack of a search facility, another lack of an NNTP bridge. Some comments pointed out that there were too many lists, and that finding the right one to subscribe to can be difficult. Finally, one comment suggested not sending out password reminders by default.	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.	3	3.15, 3, 4	3.23, 3, 5	Updates of pages on openjdk.java.net continue to be made via ops@openjdk.java.net as necessary, while some Projects and Groups have embraced transitioning to wiki as way forward, as one comment suggests. Some comments point out that there is no simple way to edit the web pages for non-Oracle Project/Group Leads, and suggest making OpenJDK easier in this area, while a third of the comments suggest that the respondents don't know about or haven't tried editing web pages.	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	3.50, 4, 5	3.78, 4, 5	A wiki is available at wiki.openjdk.java.net. Comments suggest making the wiki more broadly editable.	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	3.29, 4, 5	3.18, 3, 5	A blog aggregator is available at planetjdk.org. Most comments don't know of one, and suggest that it is not well advertised. One comment suggests filtering blogs by Projects.	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	2.91, 3, 3	2.94, 3, 4	Voting occurs via email. Comments suggesting that mailing lists are serviceable for the purpose, but that it also can be noisy. One comment suggests moving it to an unspecified webpage style voting link.	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	2.86, 3, 2	3.00, 3, 3	Comments in general suggest that by consulting the mailing list archives and the mercurial forests one can get a general idea of vitality, but that a single page aggregating statistics from different sources like commits, issues, blog and mailing list posts, would be clearer. One comment points out the difficulty in distinguishing between Groups and Projects for newcomers, and what's currently being worked on. Other comments suggest that some amount of handholding is crucial in order to find the right people and mailing lists to engage with.	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	2014 GB Score	Survey Results		Comments	
		2014	2013	2014	2013
Groups					
Votes are transparent.	5	4.63, 5, 5	4.64, 5, 5	The only comment received was a 'Yes'.	Votes continue to be run transparently, on the respective Groups' mailing lists.
Status reports are available.	0	3.04, 4, 4	2.56, 4, 0	The Governing Board has declined to enforce quarterly report requirements in late 2013. Most comments suggest that no status reports are currently published by most Groups or Projects, and that they wouldn't know where to look for them. One commenter suggested that such reports could be an alternative way to discern vitality.	Only the Build Group has published a Quarterly Report since the last update.
Governing Board					
Elected Seats are filled as per bylaws.	5	4.33, 5, 5	4.42, 5, 5	Elections seats have been filled as per bylaws. Comments received for this question fall into the 'not sure what to say here' category.	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	3.54, 4, 5	3.24, 4, 5	The board meets continues to meet. Comments suggest that the board's meeting frequency is hard to determine for respondents who are not on the Governing Board, as the publication of minutes tends to take time to catch up. One respondent said that they were unable to attend due to work commitments, while another said that meetings were missed from time to time.	The Governing Board continues to meet at least as frequently as required per bylaws.

Governing Board meeting results are transparent.	3	3.60, 4, 5	2.96, 4, 5	Minutes are being published, albeit with some delay. One comment pointed out that the minutes for the one meeting in 2014 were only published in 2015, and another respondent complained about the severe delay in publishing minutes.	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.	3	3.77, 4, 5	2.59, 3, 3	The Governing Board held a panel discussion at the FOSDEM Conference in Brussels, Belgium in 2014. Comments indicate that responders are not aware of any of such meetings, beside the one at FOSDEM.	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.	5	3.78, 4, 5	2.95, 3, 5	The OpenJDK Community Scorecard serves as the GB Annual Report. Comments indicate that some respondents are not aware of an annual review.	The OpenJDK Community Scorecard will serve as the GB Annual Report.
Meritocracy - Progression of Roles					

Each Role is attracting new Participants.	3	3.48, 4, 5	3.42, 4, 5	New Participants continue to join the OpenJDK Community. One comment points out that for people outside Oracle, their slow progression though Roles may prevent contributions from being accepted. Another comment points out that even some active Oracle employees are not Committers, let alone Reviewers in Projects of their expertise.	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	3.26, 3, 5	3.61, 4, 5	Roles and their progressions are documented on the OpenJDK web site in the Groups & Projects sections. Comments indicate that it's not always clear what Roles are available in which Project, and how to and what it takes move from one Role to the next.	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	3.28, 3, 3	3.48, 4, 5	While active Projects see their Participants progress to the appropriate roles, comments indicate that the initial hurdle to become a Committer might be steep, along with the process to become an Author being too slow and lacking insight whether it's blocked on a Project Lead, the Registrar, or something else. One commenter wasn't sure if anyone cared much outside Oracle.	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	4.19, 4, 5	4.27, 4, 5	Voting processes continue to function as well as before. Two thirds of the comment submissions agree, with one comment suggesting moving votes off the mailing lists to a web app, due to the noise they bring.	Voting process continues to function as well as before.
Public Voting on issues with results published, as per the bylaws.	5	4.38, 5, 5	4.66, 5, 5	Votes are happening in public, and transparently, as required. The comments agree.	Transparency of votes continues to be provided as before.

Intellectual Property	2014 GB Score	Survey Results		Comments	
		2014	2013	2014	2013
Licenses					
All projects use FSF or OSI License.	5	3.91, 5, 5	4.13, 5, 5	Working as expected. One comment indicated that the respondent didn't check all Projects.	Continues to work as well as before.
Trademark License exists and is easily accessible.	5	3.86, 4, 5	3.32, 4, 5	Continues to work as intended. One comment indicated that the respondent didn't check.	Continues to work as well as before.
Terms of Use for Infrastructure are consistent.	4	3.90, 4, 5	3.64, 4, 4	Wiki, website, code review server, JBS and mailing lists all use the OpenJDK Terms of Use. One comment indicated that the respondent is not a lawyer.	The new wiki, wiki.openjdk.java.net, uses the standard OpenJDK Terms Of Use.
Policies for legal notices in source code are documented.	1	3.52, 4, 4	3.41, 4, 4	There have been no updates in this area. Some respondents expressed uncertainty where to find such documentation outside of Oracle, and references to mailing list archives.	There have been no updates in this area.
Contributor Agreement					

Path for new Contributors to complete Contributor Agreement is clear and working.	4	3.88, 5, 5	3.75, 4, 4	OpenJDK continues to attract a high number of new Contributors. Comments focused on encouraging improving processing speed. One respondent found the OCA to be excessive.	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	4.15, 5, 5	3.86, 4, 4	There were no changes in this area since last year. Comments suggested linking the OCA signatories list from the OpenJDK How to Contribute page, and providing a REST API for it.	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	3.59, 4, 5	3.68, 4, 4	This process continues to work as before. One comment indicates the respondent didn't check, another that they hope it would be easy, and two more that they didn't find it very clear.	This process continues to work as before.
IP Processes					

Process for incorporating third-party libraries is clear.	1	3.20, 4, 5	2.50, 3, 3	There have been no updates in this area. Comments indicate that this is still a bit of a gray area, with a specific process existing within Oracle, but not necessarily within OpenJDK as such.	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	3.35, 4, 5	2.65, 3, 3	There have been no updates in this area. One comment noted this was still a gray area.	There have been no updates in this area.

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JDK 9 & OpenJFX Project Scorecards

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2014 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 2014 JDK 7u and AArch 64 Port include only 1 completed scorecards so is not tracked for this year. The JDK 9 project had 13 completed scorecards, and feedback was more relevant. The OpenJFX Project has 3 completed scorecards so it's tracked here. There were no further project specific scorecards.

Per-Project Scorecard	2014 GB Score (JDK 9 / OpenJFX)	Survey Results		Comments	
		2014 (JDK 9 / OpenJFX)	2013 (JDK 7u/JDK 8)	2014	2013
Visibility					
JDK Enhancement Process (JEP) is helping identify interesting features.	4 / 4	4.50, 4, 5 / 4.33, 5, 5	NA, NA, NA / 2.78, 3, 3	The JEP process is in place. One comment indicates that the scope of work under a single JEP can vary immensely. Another comment indicated that when available, it's perfect.	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.	3 / 4	3.50, 3, 3 / 4.00, 5, 5	NA, NA, NA / 2.33, 2, 2	JEPs are being used to plan JDK Release Projects and JDK Update Projects. One respondent wondered if OpenJFX development is stalling.	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.	3 / 3	3.88, 3, 3 / 3.33, 3, 3	NA, NA, NA / 2.67, 3, 4	Many design decisions are publicly available and observable. Comments indicate that active reading of JEPs and participation on mailing list is required in order to observe them. One comment suggested that while the OpenJFX design is done in the wiki, but redesign to simplify API is not made or not public.	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.	4 / 4	3.70, 4, 5 / 4.00, 4, 4	NA, NA, NA / 2.56, 3, 3	There have been no significant changes in this area. One respondent wondered where to find such information for JDK 9. One respondent wondered whether milestones make sense for JDK 8 Updates.	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	3.90, 4, 4 / 4.33, 5, 5	NA, NA, NA / 2.89, 3, 3	Documentation is available. One comment indicates that while some documentation for JDK 9 is very up to date, other may be missing or outdated. One comment indicates that some OpenJFX wiki pages might not be up to date.	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.	4 / 3	4.20, 5, 5 / 3.33, 3, 3	NA, NA, NA / 3.78, 4, 5	Project Leads are documented in the OpenJDK Census. One comment for JDK 9 indicates that it may be hard to identify groups responsible for different areas, like client libraries. One comment pointed out that the OpenJFX mailing list was OK, but identifying current project leadership was less clear.	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	4.78, 5, 5 / 3.50, 2, 5	NA, NA, NA / 4.44, 5, 5	Votes are happening transparently according to the bylaws.	Voting continues to function as well as before.
Technical Matters					

Project is easy to build.	4 / 4	4.30, 5, 5 / 5.00, 5, 5	NA, NA, NA / 3.78, 4, 4	The new build infrastructure has improved the situation on most platforms. One comment praised its developers, and one respondent pointed out that build issues with JDK 9 still occur on OS X, and with VM-shared folders.	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.	4 / 4	3.60, 4, 4 / 5.0, 5, 5	NA, NA, NA / 2.78, 3, 4	JTReg based regression tests are made available in JDK Release and Update Projects. One respondent suggested better integration with IDEs like Eclipse through test templates, and another pointed out that not all tests are part of the JDK 9 Project.	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.

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Contributing new test cases is easy.	4 / 4	4.00, 4, 4 / 4.00, 4, 4	NA, NA, NA / 2.78, 3, 3	It is currently possible to contribute tests. One comment suggested making it easier by having 'pull requests'.	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.	4 / 4	3.60, 4, 4 / 4.00, 4, 4	NA, NA, NA / 2.78, 3, 3	Patches are getting submitted. One comment suggested having pull requests, another moving to git, and yet another pointed out that there is now way to have a patch tested by an automated test system.	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.	4 / 4	4.00, 5, 5 / 5.00, 5, 5	NA, NA, NA / 3.33, 4, 4	This continues to be the case. One comment praised the benefits of a distributed version control system, while another pointed out that forests can be a little painful in that regard.	This continues to be the case.

If applicable, API Specification is available and easy to find.	4 / 4	4.00, 5, 5 / 3.50, 2, 2	NA, NA, NA / 3.63, 4, 4	This continues to be the case. One respondent wondered where to find the JDK 9 API specification.	This continues to be the case.
Release and Update Projects (only)					
Process for getting TCK Access is clear.	4 / 0	3.67, 4, 4 / Not Applicable	NA, NA, NA / 2.38, 2, 2	The process continues to work as well as before. One respondent indicated they would not even know where to begin for JDK 9.	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.	4 / 0	3.86, 4, 5 / Not Applicable	NA, NA, NA / 3.00, 3, 3	There were no changes in this area.	The list of signatories is up to date and includes OCTLA for JDK 8 signatories.