GraalVM Advisory Board February Meeting

Date
February 18, 2021

Participants
Alan Hayward (ARM), Alina Yurenko (Oracle), Bruno Caballero (Microdoc), Chris Seaton (Shopify), Eric Sedlar (Oracle), Fabio Niephaus (Hasso Plattner Institute), Gilles Duboscq (Oracle), Ivan Lopez (OCI), Johan Vos (Gluon), Max Rydahl Andersen (Red Hat), Michael Simons (Neo4j), Paul Hohensee (Amazon), Roxana Bradescu (Oracle), San-Hong Li (Alibaba), Sébastien Deleuze (VMware), Shaun Smith (Oracle), Thomas Wuerthinger (Oracle), Uma Srinivasan (Twitter)

Agenda

High priority (e.g. blockers, decisions, ...)
Medium priority (e.g. issues/PR for discussion, announcements, ...)

- Fabio Niephaus: Announcements of bug fix releases (e.g. 21.0.0.2)?
  - Thomas Wuerthinger: to-do: we should have put it on the mailing list;
    - Fabio Niephaus: it is important because can break installing latest version of components;
- Fabio Niephaus: GraalVM CE bundles need to be signed and notarized by Apple to function properly on macOS Catalina and later (see issue 1724 from 2019; the xattr workaround has caused lots of confusion for users). How can the GraalVM community help and take care of it? I (Fabio) have automated this process as part of the CI/CD for another VM project, GraalVM EE bundles appear to be signed as well.
  - Gilles Duboscq: we can't use a standard notarization tool;
  - Fabio Niephaus: this is important for all macOS users (e.g. Homebrew installations);
  - Gilles Duboscq: how does this affect installing components with gu?
  - to-do: follow-up with Fabio offline; we do want to have notarized builds
  - Thomas Wuerthinger, Paul Hohensee: to follow-up regarding Java8 builds for Mac with Doug Simon

- Thomas Wuerthinger: Since many people are moving to Java 11, what is community's opinion on Java 8 support?
  - Sébastien Deleuze: Spring Native plan is to support both Java 8 and Java 11 since there are footprint issue like https://github.com/oracle/graal/issues/3163. When this is solved, we will likely switch on Java 11 and even Java 17 if available.
  - The other footprint related issue is https://github.com/oracle/graal/issues/3162 (potentially not specific to Java 11 but still annoying).
  - Bruno Caballero: for many users Java 8 is more preferable because of support duration
  - Eric Sedlar: how many concurrent version is community willing to support?
  - Max Rydahl Andersen: no objections against dropping Java 8
  - Thomas Wuerthinger: summary: need to resolve footprint issues, and then we can move to Java 11.

Low priority (e.g. questions, follow-ups, ...)

- Fabio Niephaus: The availability of a LabsJDK CE 16 suggests that a Java16-based GraalVM CE/EE release is imminent. Any updates on this?
  - Thomas Wuerthinger: ongoing work; no specific ETA at the moment; goal is to have 17.
  - The biggest effort is to make Native Image work on 17;
  - another issue - support for new GCs (ZGC & Shenandoah); we are hoping to get some support from the Shenandoah team (Red Hat);
- San-Hong Li: There was an early discussion about porting OpenJDK on RISC-V. Does GraalVM have a plan to support the RISC-V architecture?
  - Thomas Wuerthinger: not at the moment; the most realistic way would be via an llvm backend;
- Alan Hayward: Are there any plans for the SPARC target?
  - Thomas Wuerthinger: we want to retire it
  - Bruno Caballero: do you also receive requests to support architectures like PowerPC?
    - Thomas Wuerthinger: not really; main focus is ARM support
- Max: Update on automation of getting PRs instead of commits directly to master?
  - Thomas Wuerthinger: working on it, there's a system in place; now we need to involving more developers into it
  - Thomas Wuerthinger: what's the best way/system to collaborate on something before having the final PR?
    - Max Rydahl Andersen: in a fork?

- Johan Vos: a way to find where some commit is coming from is having everything merged via a PR and each PR is linked to an issue;
- Thomas Wuerthinger: or at least provide more info via comments/commit messages
- Max Rydahl Andersen: important for traceability/ & as a heads up
- Thomas Wuerthinger: maybe we should have more tests for JavaFX
  - to-do: ask Vojin;
- also as a GitHub action: https://github.com/oracle/graal/actions/workflows/quarkus.yml