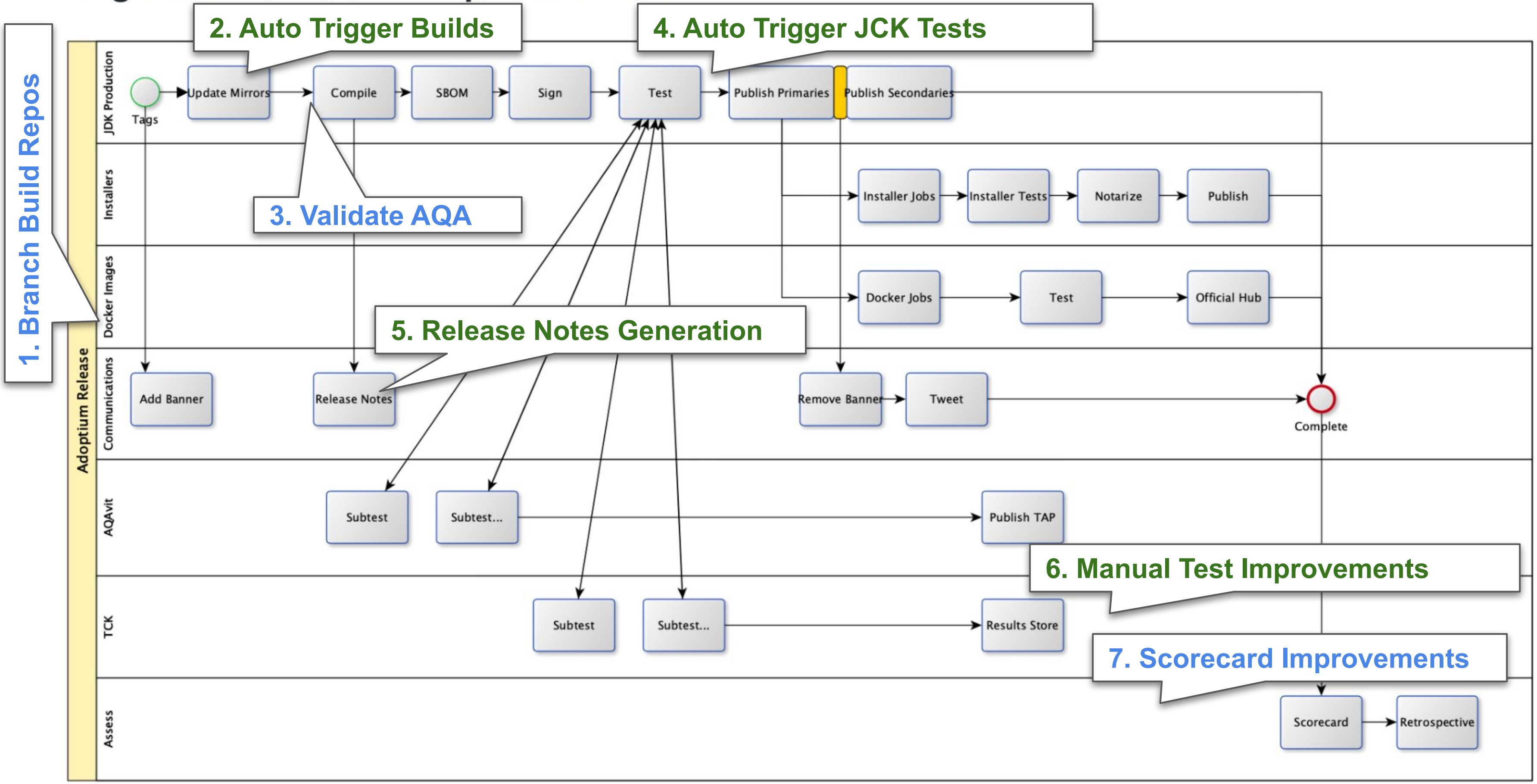
Jan 2023 Retrospective

Review of Adoptium Release Activities

Diagram of an overall Adoptium release



1. Branch Build Repos

2. Auto Trigger Builds

3. Validate AQA

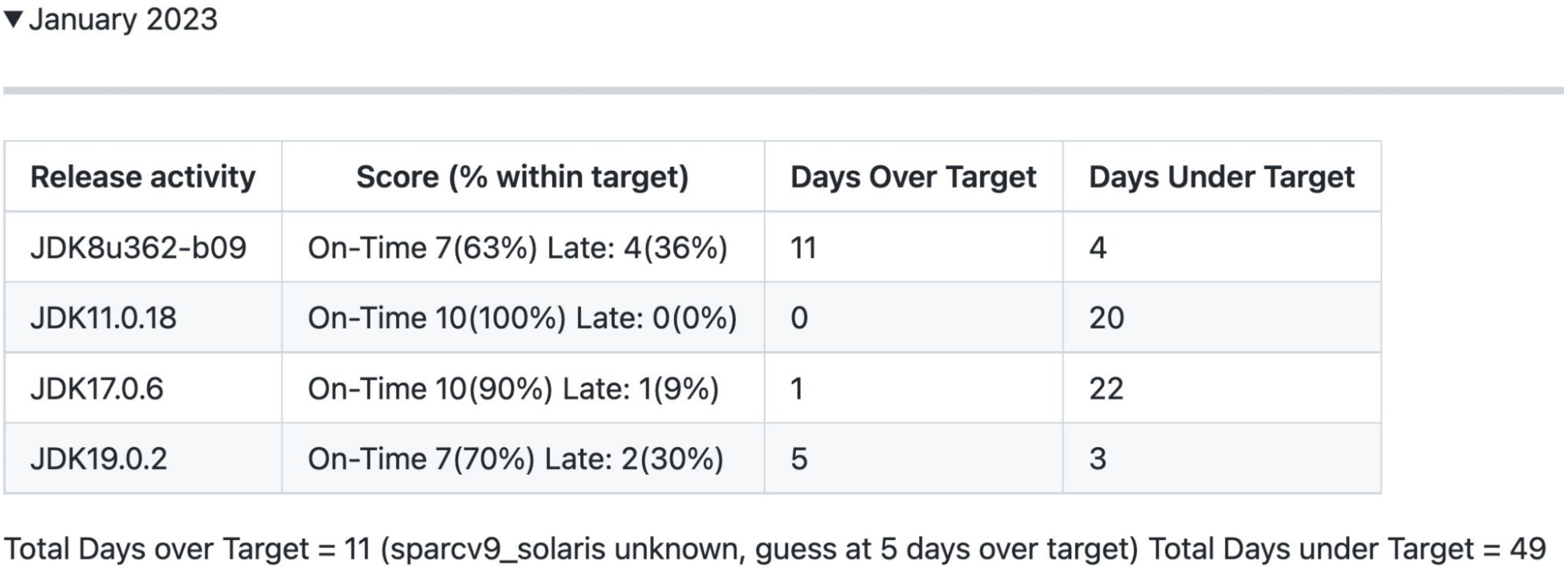
4. Auto Trigger JCK Tests

5. Release Notes Generation

6. Manual Test Improvements

7. Scorecard Improvements

Scorecard

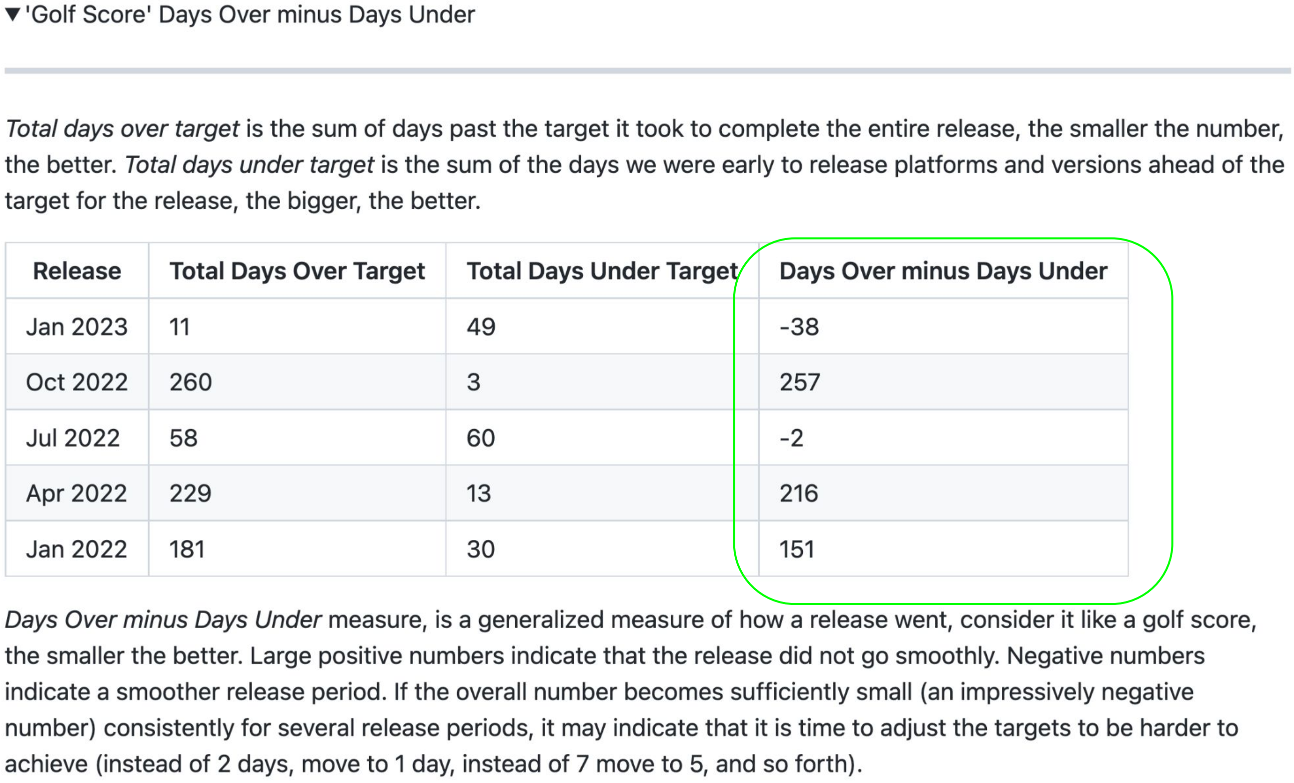


▼January 2023

Release activity	Score (% within target)	Days Over Target	Days Under Target
JDK8u362-b09	On-Time 7(63%) Late: 4(36%)	11	4
JDK11.0.18	On-Time 10(100%) Late: 0(0%)	0	20
JDK17.0.6	On-Time 10(90%) Late: 1(9%)	1	22
JDK19.0.2	On-Time 7(70%) Late: 2(30%)	5	3

Total Days over Target = 11 (sparcv9_solaris unknown, guess at 5 days over target) Total Days under Target = 49

Big Strides with Latest Improvements



▼'Golf Score' Days Over minus Days Under

Total days over target is the sum of days past the target it took to complete the entire release, the smaller the number, the better. *Total days under target* is the sum of the days we were early to release platforms and versions ahead of the target for the release, the bigger, the better.

Release	Total Days Over Target	Total Days Under Target	Days Over minus Days Under
Jan 2023	11	49	-38
Oct 2022	260	3	257
Jul 2022	58	60	-2
Apr 2022	229	13	216
Jan 2022	181	30	151

Days Over minus Days Under measure, is a generalized measure of how a release went, consider it like a golf score, the smaller the better. Large positive numbers indicate that the release did not go smoothly. Negative numbers indicate a smoother release period. If the overall number becomes sufficiently small (an impressively negative number) consistently for several release periods, it may indicate that it is time to adjust the targets to be harder to achieve (instead of 2 days, move to 1 day, instead of 7 move to 5, and so forth).

Opportunities for Improvement

- Stability of ci.adoptopenjdk.net infrastructure
  - Caused delays in AQA testing and triage & complicates the gathering of test results due to numerous follow-up Grinders needed (and having to collate distributed results)
  - Fixes already underway to resolve some outstanding issues
- Upstream tag guesswork
  - If we guess wrong, it delays the triggering of build pipelines (or causes us to abort and retrigger them with correct tags)
  - Could this be improved through collaboration, better communication with OpenJDK teams?

Next Steps (Before Next Release Period)

- Further improvements for manual test requirements in Temurin Compliance
- Phase 2 of Release Notes automation (support serving those artifacts from API and subsequently the web page)
- AQA Test / Upstream Tag Parameterisation

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Appendices - For Reference

Worked Well (Many Improvements Made)

1. Branch build pipelines
   a. Less requirement to code freeze critical repos
   b. Removes evaluation platforms from the mix, not cluttering the view during triage
   c. Nightly builds no longer triggered (leaves release pipeline in main view of TRSS)
2. Auto-trigger build pipelines (monitor GA tag availability)
   a. saves 1-3 days delay when done manually (see scorecard assessment)
3. Verify correct AQAvit test material is used, or fail build pipeline

   Less need to rerun testing with correct material
4. Remote trigger JCK automated testing per platform
   a. Launch JCK jobs the moment the build succeeds, saves hours to days of delay from when done manually
5. Release Notes Automation (phase 1) delivered

Worked Well (continued)

6. Improve manual testing approach in Temurin Compliance
   - Get to green automated test runs
   - Reduce number of steps from the manual testing process by adding convenience scripts
   - Shared location/permissions for JDK and convenience scripts
     - Allows all committers ability to step in and help each other
   - Standardize naming of results
   - More caution with leaving processes running on machines
7. Updates to scorecard (clarify goals, track/gamify improvement process)