



arm

TF-M openCI

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Agenda

Write in your subtitle here

- How CI helps
- TF-M openCI
- Issue report
- Ongoing...

How CI helps

CI with TF-M daily developer

- Example [Patch](#)
- Steps
 - Allow-CI to trigger the patch verification
 - Wait the comment on the patch
 - Find the error details if have
 - CI results/artifacts/errors

The screenshot shows a Gerrit code review interface. At the top, there are navigation tabs: 'Gerrit', 'CHANGES', 'YOUR', 'DOCUMENTATION', and 'BROWSE'. Below this, the review title is '7023: Boot: Add workaround to not fetch MCUboot's submodules' with an 'Active' status indicator. The left sidebar contains metadata: Updated (Nov 20), Owner (Øyvind Rønningstad), Assignee, Reviewers (TrustedFirmware Code Review, Summer Qin, Kevin Townsend, Raef Coles, Anton Komlev), CC (ADD CC), Repo (TF-M/trusted-firmware-m), Branch (master), Parent (368a25f), Topic (No topic), Strategy (Rebase if Necessary), and Hashtags. The main content area shows a 'REPLY' button and a comment box containing the following text: 'Boot: Add workaround to not fetch MCUboot's submodules', 'CMP0097 doesn't work on 3.16 and 3.17.', a link to a GitLab issue, and a description of the workaround. Below the comment is an 'EDIT' button. At the bottom, there are review labels: 'Code-Review' with '+1' from Kevin Townsend and Raef Coles, and 'Other labels' with '+1' from TrustedFirmware Code Review and Øyvind Rønningstad.

TF-M openCI

Infra

- Run slaves based on AWS
- Jenkins/LAVA support by LSS
- Entry on tf.org:
<https://ci.trustedfirmware.org/view/TF-M>

Repos

- Job configs
 - <https://git.trustedfirmware.org/ci/tf-m-job-configs.git>
- CI Scripts
 - <https://git.trustedfirmware.org/ci/tf-m-ci-scripts.git>

TF-M CI Jobs overview

Production CI Jobs

- tf-m-build-docs-nightly
- tf-m-nightly
- tf-m-static(per-patch)
- tf-m-build-docs
- tf-m-build-config
- tf-m-lava-submit
- tf-m-cppcheck
- tf-m-checkpatch

Release Jobs

- tf-m-release
- tf-m-code-coverage

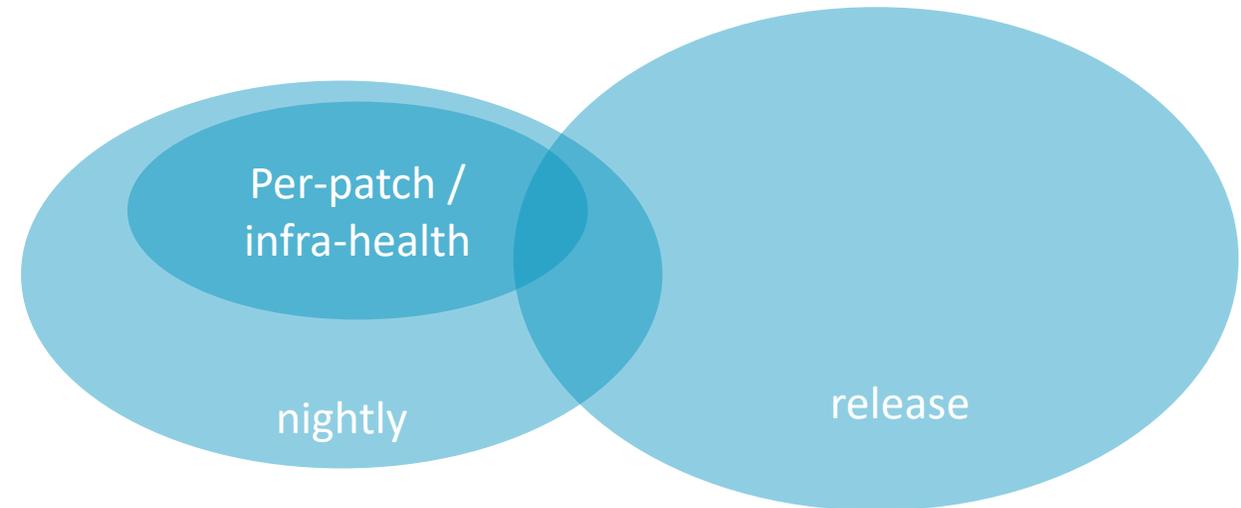
Infra Jobs

- tf-m-infra-health
- tf-m-build-config-infra-health

Job coverage

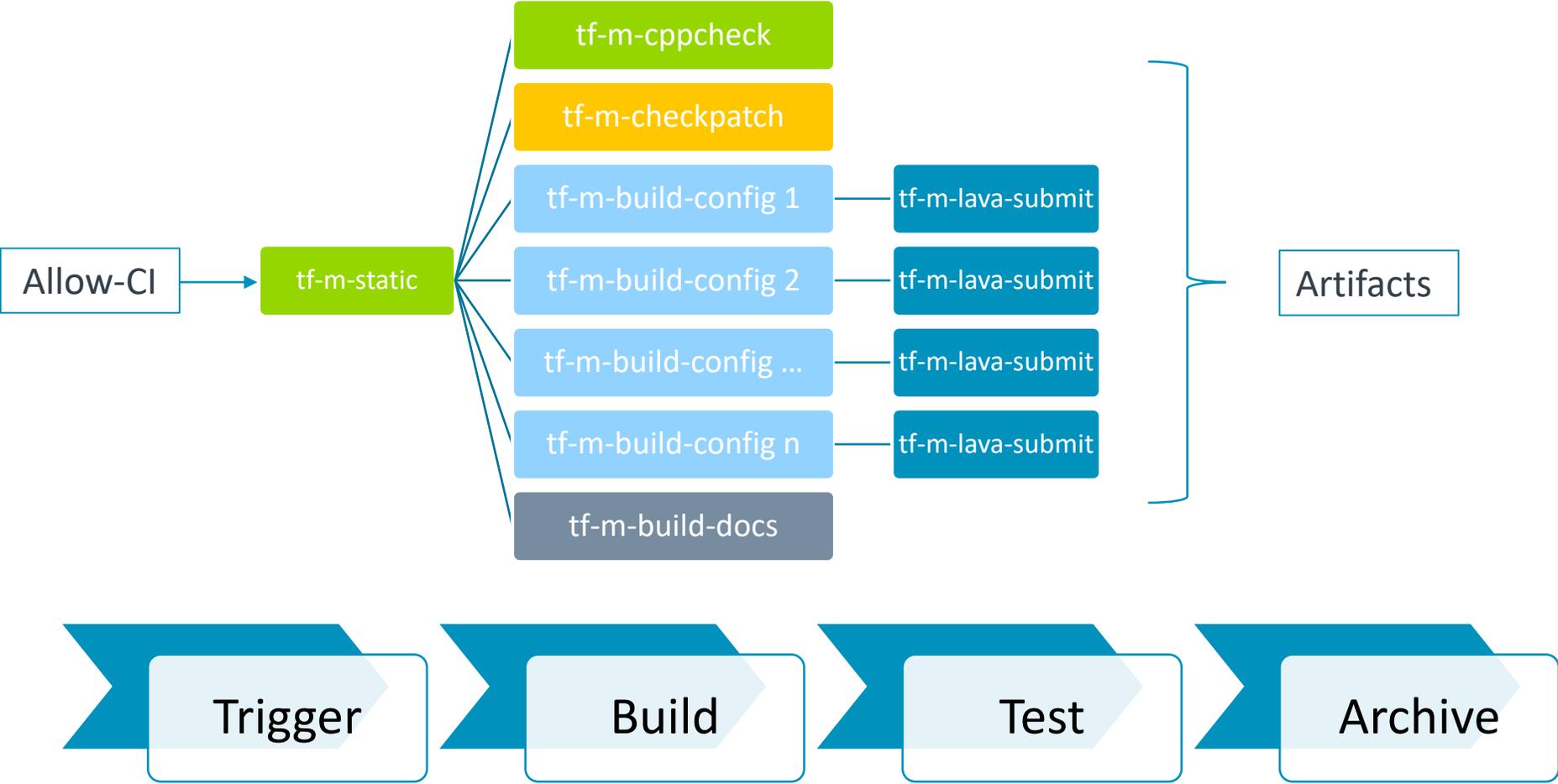
Jobs defined for different purpose

- Release job
 - Active during release stage
 - Manually only
 - Size: XL
- Nightly job
 - Active ever day to cover the latest HEAD
 - Notification to mail list when got fail
 - Size: M
- Per-patch
 - Gerrit patch verify before merge
 - Size: S



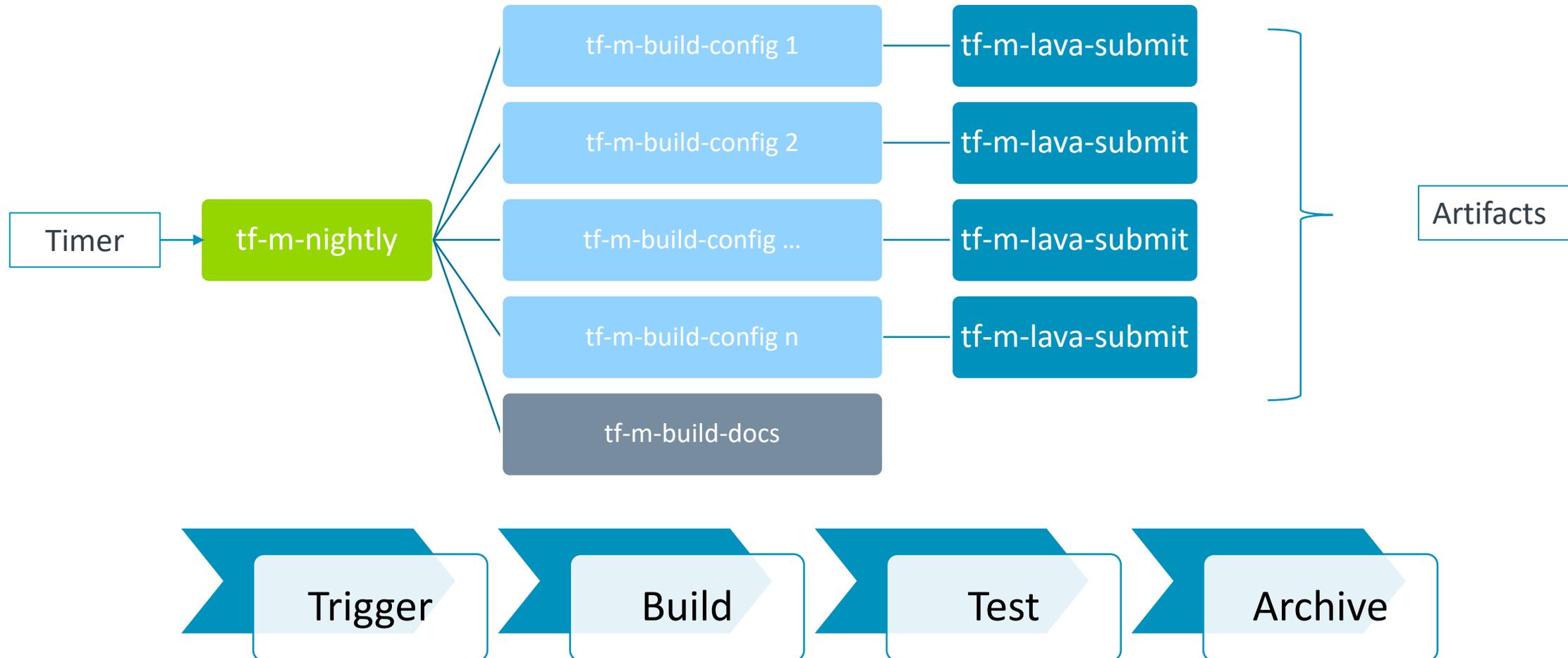
Job dependencies

Per-patch



Job dependencies

Nightly



CI notification

- Nightly job only
- Email when build or test fail
- Email address: `tf-m-ci-notifications@lists.trustedfirmware.org`
- Mail list:
 - <https://lists.trustedfirmware.org/mailman/listinfo/tf-m-ci-notifications>
- Public to partners
 - Easy to add or remove independently
- Archive



Contribute

Young CI

- Welcome
- Many mechanism have chances to improve
- More automated tests required
- Gerrit:
 - <https://review.trustedfirmware.org/q/project:ci/tf-m-ci-scripts>

Staging Server

- Staging jobs
 - <https://ci.staging.trustedfirmware.org/view/TF-M>
- Staging repos
 - <https://git.trustedfirmware.org/next/ci>
- Staging doc in review
 - [Google docs](#)

CI Issue report

- TF-M CI Infra (LSS ticket)
 - Jenkins
 - LAVA
 - Gerrit
 - Git
- TF-M CI Scripts (tf-m@lists.trustedfirmware.org)
 - Build process
 - Test configs

Ongoing

- Musca B1 board for LAVA test
- ARM CLANG compiler support
- CI mail list for notification with fail content
- More info about TF-M CI phase 2
 - <https://developer.trustedfirmware.org/w/collaboration/openci>

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Artifacts



Artifacts

- Build log
- Build output
- Test output
- Result summary

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Q & A