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
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 every 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

Timer → tf-m-nightly → tf-m-build-config 1 → tf-m-lava-submit
         → tf-m-build-config 2 → tf-m-lava-submit
         → tf-m-build-config ... → tf-m-lava-submit
         → tf-m-build-config n → tf-m-lava-submit
         → tf-m-build-docs

Artifacts

Trigger → Build → Test → Archive
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](https://developer.trustedfirmware.org/w/collaboration/openci)
Artifacts

• Build log
• Build output
• Test output
• Result summary