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Open CI auto parse TF-M dependency versions

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TF-M dependencies

- + MCUBoot
- + MBedTLS
- + QCBOR
- + PSA Arch tests
- + tf-m-tests
- + ...

Previous CI Status

- + Dependency versions are fixed in Open CI
 - Need to create CI patch to update the fixed version when TF-M upgrades dependency version
 - + CI may use unmatched dependency versions if CI update patch is missed
 - + TF-M patches to upgrade dependency versions cannot be directly verified by **Allow-CI** with correct dependency version -- Need maintainers to manually trigger CI jobs with specified version
- + Patches for tf-m-tests cannot be verified by **Allow-CI** (per-patch job)
 - Need maintainers to manually trigger CI jobs to verify unmerged tf-m-tests patches

Current CI Status

- + Open CI parses dependency versions from TF-M before downloading dependencies
 - No longer need to create CI patch to update dependency versions
 - Make sure every TF-M commit is tested with correct dependency versions
 - TF-M patches to upgrade dependency versions can be directly verified by **Allow-CI** with correct dependency version -- No need to manually trigger CI jobs
- + Unmerged patches in tf-m-tests can also be automatically verified with following steps:
 1. Create a TF-M patch to update test version in *lib/ext/tf-m-tests/version.txt* to the tf-m-tests commit to be tested.
 2. Start per-patch test with **Allow-CI** on the TF-M patch to update test version
- + **Note:** Unmerged patches for 3rd party dependencies cannot be covered

Example

- + Verify tf-m patch to upgrade MCUBoot version

<https://review.trustedfirmware.org/c/TF-M/trusted-firmware-m/+24550>

- + Verify tf-m-tests patch

- tf-m-tests patch to be verified:

<https://review.trustedfirmware.org/c/TF-M/tf-m-tests/+25060>

- tf-m patch to update test version:

<https://review.trustedfirmware.org/c/TF-M/trusted-firmware-m/+25057>

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Thank You

Danke

Gracias

Grazie

谢谢

ありがとう

Asante

Merci

감사합니다

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Kiitos

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