Mbed TLS Tech Forum

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Community activity (thank you!)

- Neil Armstrong / Nordic
  - PRs for Use PSA Crypto More epic – mostly merged
  - PRs for PSA – Long Term Secrets – in review

- Archana Madhavan / SiLabs
  - PR for code-gen 1.1 (introduction of JSON driver tooling)
    - Update had a round of review

- Peter Spacek / SiLabs
  - Use PSA for hashing in TLS 1.3 - assigned

- François Beerten / Silex
  - PSA driver support for entropy gathering – progressing after review

- Various (Glen Strauss / lighttpd, IoTerop, …)
  - Accessors for various fields made private in Mbed TLS 3.0 – issues, discussions & PRs
  - Lots of community involvement on this

Mbed TLS major activities within core team

- OpenCI
  - Some parts of CI now publicly visible – more coming
- GitHub migration from ArmMbed to Mbed-TLS organization coming this week
  - Better reflect independence from Mbed OS projects / TF.org ownership
  - Easier management of GitHub (e.g., team members, CI bots, etc)
- TLS 1.3
  - Client side progress: version negotiation, Certificate Verify message
  - Will start server side functionality and PSK in Q2
    - Community help welcomed on these!
- 3.0 follow-up
  - Working on adding accessor functions for some things dropped from the public API in 3.0
  - Aim to cover most/all issues reported by community for Mbed TLS 3.2
  - Progressing rapidly

- Storage format stabilization
  - Testing & documentation to assure stable format for non-volatile storage
- PSA Crypto
  - On-going collaboration including Arm, SiLabs, Nordic
- SHA-256 and SHA-512 performance
  - Optimisations for aarch64 crypto extensions –
    SHA-256 around 7x perf uplift (merged)
    SHA-512 around 3.5x perf uplift in progress
- Review workload
  - Struggling for review bandwidth – any assistance from the community is hugely valuable
  - Easing the general review load accelerates progress on work prioritized by the community