## Nov 16th

Attendees: Don, Joanna, Ben, Shebu, Daniel Owens, Matteo, Anton, Dave Rodgman

## Minutes:

- Licensing discussion
  - Possible to provide license-free toolchains/models to remove overhead of click thru license issue. TFC-192
  - 2 issues. 1) Mgt of licensing product. 2) Click thru EULA/Seamless download of Arm products.
  - Re: EULA, Dan would like to understand better.
  - Issue 1: Action, Daniel check on removing license. Confirmed that can't do atm. A commercial product + risk of an uncontrolled product gets out. Also would require multiple builds.
    - Hope to alleviate the issue by simplifying with UBL(User based Licensing) Paul Black the expert to UBL. User can be automation so don't have to ping license server. Re: License Mgr there is a web-based license server that Open CI could access over the internet. Once assigned, it's cached locally for a configurable period of time. Every day the tool will check for the license, if not found will check next day after a week it will fail over and request a new authentication code.
    - Daniel has requested a set of activation codes to provide for Linaro to test in a sandbox environment.
    - Ben: Does help some, but will still require a maintenance cost to Open CI and impact other tasks without licence free technology. Limits use of FVP flexibility - like FVP in a cloud - no implementations to support. Current problem is must continually
    - Daniel: Cost of renewal goes away as Arm will manage licences on their licence server. A could server should work as long as access to the licence server.
    - Ben: Agree can get to work, but won't be supported and extra layer to support. Still must retool the mgt of the licence. Still implementation costs of FVP models, but how keys handed over and given back must be worked.
    - Daniel: Could manage UBL licences locally or Arm could manager. Managed locally, so wouldn't have to ping over internet
    - Ben: Still requires mgt that wouldn't have to do if licence free (behind a firewall)
    - Daniel: Our scenario is worst case since massive parallel builds / simulations with a remote licence server. UBL is envisioned to alleviate this. Would be good to run a pilot project
    - Shebu: Supporting licensed based FVP's in openci is going to cost in engineering cycles, which is something that openci will struggle to fund when we are already budgeted up on on going projects. As as this piloting the new system has a cost as well.
    - Matteo: Would like to see how much the Arm team can help to relieve the limited Open CI dev team. First option again?

- Daniel: Linaro running own licence server Linaro must maintain/fix and renewed yearly. This goes away w/ UBL and Arm managing the licence server.
- Matteo: FVP is the focus, any downside on relying on Arm Server vs Linaro hosted?
  - Shebu: Eng Cost to migrate
  - Matteo: Anything else? Bandwidth? ACL? Adding new FVP issue? Change mgt? Other?
  - Ben: Questions that may not know atm. Need a support channel when run into web-based support system
- Joanna: Can we set check back to very long time? 6 months?
- Daniel: Action: How long can the check back be?
- Don: End of December licence expire, right? what happens? What's our plan?
  - Daniel committed to providing licensing. Need to ask Dan for 12 months of licence renewal under current model while in parallel working long term plan.
- From Board content: Continued progress on the resolution of performance issues in Mbed TLS CI (TFC-260)
  - Windows and linux nodes increased to reduce overall test time
  - Tuning AWS EC2 Instance sizes for a cost-performance balance
  - Transferred the mbedtls Jenkins build jobs from the production to the staging server
  - Shebu: Should still be a priority for Arthur
  - Dave R: Monitoring over the next day and will report back.
- Great job from Paul & Systems team for aiding in quickly resolving the compiler dependency getting thru the Arm Login-wall that was impacting TF-A release <u>TFC-349</u>
- TFC-224 Add ST Platform requested update from the lab
- TFC-275 Chromebook Lava tests. Asurada is enabled, but Lazor still open continuing to debug a servod connection drop issue.
- TFC-247 github mirroring. Lower priority.
- TFC-222 Arm toolchain support for Docker Paul working on it
- TFC-260 The MBed TLS jobs currently on the Jenkins Master node on Scaleway servers shared with TF-A/TF-M/Hafnium (The Jenkins Production Node) are being moved to the Staging Jenkins Master node on AWS to take load off of TF-A/TF-M Jenkins Master Node production builds.
- TFC-285 On hold until after TF-A release