Technical Advisory Council (TAC) Meeting

May 19, 2022



The Confidential Computing Consortium

A community focused on open source licensed projects securing DATA IN USE & accelerating the adoption of confidential computing through open collaboration

Every member is welcome; every project meeting our criteria is welcome. We are a transparent, collaborative community.

We as members, contributors, and leaders pledge to make participation in our community a harassment-free experience for everyone.



Antitrust Policy Notice

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Agenda

- 1. Welcome, roll call, introduce any first-time attendees
- 2. Approval of minutes
- 3. TAC Tech Talk: Logging and error reporting in confidential computing
- 4. Action item review
- Common Test Infrastructure
- 6. Veraison approved
- 7. Updates from Outreach committee
- Common Terminology
- 9. Any other business



Roll Call, and Introductions of new attendees

Quorum requires **5** or more voting reps:

| <u>Member</u> | Representative | <u>Email</u> |
|---------------|---------------------------|---------------------------------|
| Accenture | Giuseppe Giordano | giuseppe.giordano@accenture.com |
| Ant Group | Tate, Hongliang Tian | tate.thl@antgroup.com |
| ARM | Thomas Fossati / Michael | thomas.fossati@arm.com |
| Facebook | Eric Northup / Shankaran | digitaleric@fb.com |
| Google | Iulia Ion | iuliaion@google.com |
| Huawei | Zhipeng (Howard) Huang | huangzhipeng@huawei.com |
| Intel | Dan Middleton / Simon | dan.middleton@intel.com |
| Microsoft | Dave Thaler(*) | dthaler@microsoft.com |
| Red Hat/IBM | Lily Sturmann / Dimitrios | Isturman@redhat.com |

*TAC chair



Approval of TAC Minutes

https://github.com/confidential-computing/governance/pull/102 https://github.com/confidential-computing/governance/pull/103/ https://github.com/confidential-computing/governance/pull/110

Proposed:

That the minutes of the April 7, 2022, April 21, 2022 and May 5, 2022 meetings of the Technical Advisory Council meeting of the Confidential Computing Consortium as distributed to the members of the TAC in advance of this meeting are hereby adopted and approved.



TAC Tech Talk: Logging and Error Reporting in Confidential Computing

Mike Bursell



Action Item Review

- 1. **[Stephen, Zongmin]** Recommend diversity and inclusion training to their projects and report back to the TAC on whether the maintainers or the contributors will be taking it and when the expected completion date is.
 - Please report back that project maintainers have been made aware of the training, and have been asked to take it.
- 2. **[Mentors]** Mentors to reach out to the project for getting the maintainers involved in Common Test Infrastructure
- 3. **[Kurt]** Find out if there is a DCO needed for the Governance repo on GitHub [Issue #107] (https://github.com/confidential-computing/governance/issues/107)
- 4. **[Kurt]** Investigate prior efforts to finalize Graduated lifecycle language, and if needed file an issue to finalize Graduated lifecycle language. (Done created Github Issue #104)
- 5. **[Kurt]** Check if terminology document markdown format will work with LF Creative team and check on their timeline for completing the formatting for the whitepaper (Done Markdown is fine, timeline is 1-3 weeks, depending on length and complexity)
- 6. **[Kurt]** Code scanning via LFX Security add all missing projects to security for scanning, get more details on instructions on installing github bot (Done Projects can set up the bot and repos they want scanned by following these instructions: https://community.lfx.dev/t/how-to-install-and-configure-bots-to-secure-your-projects/181)



Common test infrastructure - Dave

| Description | 2021 Budget | 2021 Jan- Aug | 2021 Forecast | 2022 Budget | Notes |
|---|-------------------|-------------------|-------------------|----------------|---|
| LF License Scanning | \$10,000 | \$6,000 | \$10,000 | \$12,000 | |
| IT Services and Collab tools | \$5,700 | \$3,352 | \$3,864 | \$3,864 | website, groups.io, paid Slack |
| Hosting and other costs | \$0 | \$0 | \$10,000 | \$10,000 | Used if someone needs a software license or something else simple |
| Consortium IT Services and Collab Tools | \$270,000 | \$0 | \$50,000 | \$100,000 | Budget for use by projects |
| Common test infrastructure | N/A | N/A | N/A | \$15,000 | |
| Project test infrastructure | N/A | N/A | N/A | \$60,000 | Up to \$7500 per qualifying project |
| Outreachy interns | N/A (Outreach) | N/A (Outreach) | N/A (Outreach) | \$52,000 | \$6500 per qualifying project |
| TOTAL | \$285,700 | \$9,352 | \$73,864 | \$252,864 | |



| Project | Proposed by | TAC Approved | Tech. Charter | IP Assigned | Board Presentation | Board Approved | Annual Review | Mentor | Webinar |
|------------------|-----------------|-----------------|------------------|----------------|-----------------------|-------------------|------------------|-----------------|----------|
| Enarx | Red Hat | 31 OCT 2019 | Yes | Yes | 31 OCT 2019 | Yes | 10 MAR 2022 | Mike Bursell | JAN 2021 |
| OE SDK | Microsoft | 31 OCT 2019 | Yes | Yes | 31 OCT 2019 | Yes | 24 FEB 2022 | Dave Thaler | MAR 2021 |
| Gramine | UNC Chapel Hill | 2 APR 2020 | Yes | Yes | 1 DEC 2021 | 15 SEP 2021 | 4 NOV 2021 | Eric V | FEB 2022 |
| Keystone | UC Berkeley | 23 JUL 2020 | Yes | Yes | 24 JUN 2021 | MAR 2021 | 13 JAN 2022 | Stephen | JUN 2021 |
| Occlum | Ant Financial | 20 AUG 2020 | Yes | Yes | 10 SEP 2020 | 15 SEP 2021 | 2 DEC 2021 | Zongmin | MAY 2021 |
| Veracruz | Arm | 3 SEP 2020 | Yes | Yes | 19 NOV 2020 | 14 APR 2021 | 18 NOV 2021 | Thomas F | APR 2021 |
| CCC-Attest ation | TAC | Yes | Yes | N/A | 18 MAR 2021 | 18 MAR 2021 | 21 APR 2022 | Dan & Aeva | JUNE |
| Veraison | Arm | 4 FEB 2022 | Yes | Yes | 16 MAR 2022 | 18 May 2022 | | Howard Huang | NOV 2021 |



Interns - Dan/Nick

- Follow up from slack #general discussion
 - https://app.slack.com/client/T01E5V2UGLW/C01EJRY7AQ4/thread/C01QZ3K1APM-1644878
 090.837339
- Nick is authoring a proposed CCC blog post, will share soon



Updates from Outreach Committee

- May webinar topics/candidates?
- Wikipedia Confidential Computing removal/clarification: https://en.wikipedia.org/wiki/Trusted Computing



Establishing common terminology - Whitepaper

Doc in progress:

- First draft committed to github, revisions will be handled as PRs
- https://github.com/confidential-computing/governance/blob/main/terminology/c ommon-terminology.md

Next step: engage LF Creative for document conversion and formatting for whitepaper once summary and references are complete



Any other business

| Date | CCC Project Review | TAC Tech Talk |
|-------------|--------------------|---|
| 21 APR 2022 | CCC-Attestation | Code Scanning via LFX Security - Shubhra Kar and David Deal (Linux Foundation), confirmed |
| 5 MAY 2022 | | IETF Trusted Execution Environment Provisioning - Dave Thaler, Mingliang Pei, Hannes Tschofenig |
| 19 MAY 2022 | | Logging and error reporting in confidential computing - Mike Bursell |

<u>Federal Register :: Evaluating and Improving NIST Cybersecurity Resources: The Cybersecurity Framework and Cybersecurity Supply Chain Risk Management</u>

Deferred topic: Common test infrastructure



Tentative TAC talk topics

- Rust Hypervisor firmware: https://github.com/cloud-hypervisor/rust-hypervisor-firmware Dan to provide contact
- Blueprints for enclaves (Thomas F. sent email) June 30 or later
- Multi-TEE systems (e.g., CPU+GPU+NIC TEEs)
 - PCI-SIG WG Mark? June 2
 - Routers Eric?
 - Trust domains Mike?



Time permitting: Review of open issues and PRs

Current open issues in the Governance repo:

https://github.com/confidential-computing/governance/issues

Current open PRs in the Governance repo:

https://github.com/confidential-computing/governance/pulls



Deferred topics



Reference: CCC project expectations

CCC projects are expected to:

- Participate actively in CCC activities (webinars, newsletters, events, etc.).
- Notify the TAC and Outreach committees of relevant news.
- Participate in an <u>annual review with the TAC</u>.
- Inform the TAC when <u>dependencies change so records can be updated</u>.
- Maintainers should take the Linux Foundation's free <u>Inclusive Open Source</u>
 <u>Community Orientation</u> training course.
- Transfer trademarks and domain registrations to the Linux Foundation



Reference: past TAC tech talk topics

- 2021-10-07: Kata containers
- 2021-10-21: Protecting critical infrastructure
- 2021-12-02: RISC-V security overview
- 2022-01-13: Homomorphic Encryption
- 2022-01-27: OP-TEE and Trusted Services
- 2022-02-10: Confidential computing mentorship
- 2022-03-10: Overview of TCG confidential computing
- Governance



Code Scanning from the LF

Recap:

- Intake Scan: High level scan with an emphasis on finding all open source licenses present in the codebase, and some third party dependencies. We provide a summary report listing the licenses found, including any copyleft licenses and potential license conflicts. We do NOT examine every match to a potential license, and we do NOT provide a detailed file inventory showing where the license matches occur. In order to do any follow up or recurring scans, a full baseline scan will be necessary first.
- Baseline Scan: Full scan, where every license match is examined. A detailed report is provided including a complete file inventory for every license match, and detailed findings for any copyleft license or other potential license issues found. This can potentially take significantly longer than an intake scan, depending on the size of the codebase. The baseline scan results are stored and are available for doing incremental / recurring periodic scans.



Scanning

Completed FOSSology scans (as of Sept. 16)

- Open Enclave SDK
- Enarx

Process for initiating a scan and getting access to results:

 Please ask an LF staffer, who will work with Legal to schedule the scan and distribute the results to core project participants.



Reference: CCC project benefits

CCC projects have access to a number of benefits:

- Up to \$7,500 in budget for hardware and software per year.
- Funding for one Outreachy intern.
- TAC mentor assigned to the project.
- Collaboration tools (contact <u>operations@confidentialcomputing.io</u>):
 - Zoom
 - Domain registration and renewals
 - Mailing lists
 - YouTube playlists
- Optional security scanning
- LFX tools (<u>https://lfx.linuxfoundation.org</u>).

