

Technical Advisory Council (TAC) Meeting

June 30, 2022

This meeting is being recorded.



**CONFIDENTIAL COMPUTING
CONSORTIUM**

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.

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Agenda

1. Welcome, roll call, introduce any first-time attendees
2. Approval of minutes
3. Action item review
4. Draft - TAC response to the OSTP - Privacy-Enhancing Technologies
5. TAC Tech Talk - Blueprints for Enclaves
6. Finalize Common Terminology whitepaper for LF CS
7. Updates from Outreach committee
8. Common Test Infrastructure (time permitting)
9. Review of open pull requests/issues (time permitting)
10. Any other business

Roll Call, and Introductions of new attendees

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

| <u>Member</u> | <u>Representative</u> | <u>Email</u> |
|----------------------|------------------------------|---------------------------------|
| Accenture | Giuseppe Giordano | giuseppe.giordano@accenture.com |
| Ant Group | Hongliang Tian (Tate) | 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 | lsturman@redhat.com |

**TAC chair*

Approval of TAC Minutes

<https://github.com/confidential-computing/governance/pull/120>

Proposed:

That the minutes of the June 16, 2022 meeting 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.

Action Item Review

1. [Stephen] 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. [Thomas F] Update GitHub with Veraison charter (Done, in Veraison/community repo) - DONE
4. [Mike Bursell] Wikipedia update needed - Trusted Computing wiki page (Done)
5. [Kurt/Helen] work with Outreach for setting up a first draft of the CCC wikipedia page - (Outreach agenda item)
6. [Mark N, Thomas F, Naveen C, Steve VL, Eric N] governance subgroup - collaborating on the governance topic, SIG formation and status update requested at June 30 meeting
7. [Mentors/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>)
8. [KT] to set up a meeting to define scope and technical requirements with LF IT, Dave T, Dan M, Alec F, Nick V (LF IT ready)
9. [Mentors] to collect questions for determining interest in creating an "Infrastructure" slack channel for discussing best practices

TAC response to the OSTP - Privacy-Enhancing Technologies

<https://www.nitrd.gov/request-for-information-on-advancing-privacy-enhancing-technologies/>

https://docs.google.com/document/d/1WdOGu2ZPpolfpcQW7Vs_HCXM14X8CLuAcc4h_j5o4tw/edit

Review/approve draft response from Mike Bursell's email June 17th

Summary of topics for comment:

1. *Specific research opportunities to advance PETs*
2. *Specific technical aspects or limitations of PETs*
3. *Specific sectors, applications, or types of analysis that would particularly benefit from the adoption of PETs*
4. *Specific regulations or authorities that could be used, modified, or introduced to advance PETs*
5. *Specific laws that could be used, modified, or introduced to advance PETs*
6. *Specific mechanisms, not covered above, that could be used, modified, or introduced to advance PETs*
7. *Risks related to PETs adoption*
8. *Existing best practices that are helpful for PETs adoption*
9. *Existing barriers, not covered above, to PETs adoption*
10. *Other information that is relevant to the adoption of PETs*

TAC Tech Talk

- Blueprints for Enclaves - Paul and Eustace

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/common-terminology.md>
- LF Creative Services engaged for document conversion and formatting for whitepaper PDF
- First Draft completed and under review
- Needs to be finalized for last updates to LF CS
- **TEEP Usecase for confidential computing in network - email from Penglin Yang**

TAC Review - Common Terminology White Paper

See white paper draft in [governance/terminology](#)

Updates from Outreach Committee

- July webinar topics/candidates?
- Wikipedia Confidential Computing Consortium page
 - Outreach will use the first whitepaper as a template and TAC will
 - Currently redirects to LF page
 - https://en.wikipedia.org/w/index.php?title=Confidential_Computing_Consortium&redirect=no

Common Test Infrastructure

- Needing to meet with LF IT for sizing and technical requirements
- Approved: 50K for infrastructure management and 15K for hardware

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>

Any other business / Schedule

| Date | CCC Project Review | TAC Tech Talk |
|-------------|--------------------|--|
| 2 JUNE 2022 | | Multi-TEE systems: PCI-SIG WG - Mark Novak |
| 16 JUN 2022 | | |
| 30 JUN 2022 | | Blueprints for enclaves |
| 14 JUL 2022 | (governance) | (trust domains?) |

Tentative TAC talk topics

- Rust Hypervisor firmware: <https://github.com/cloud-hypervisor/rust-hypervisor-firmware> - Dan to provide contact
- Trust domains - Mike?

| 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-Attestation | TAC | Yes | Yes | N/A | 18 MAR 2021 | 18 MAR 2021 | 21 APR 2022 | Dan & Aeva | 21 JUNE 2022 |
| Veraison | Arm | 4 FEB 2022 | Yes | Yes | 16 MAR 2022 | 18 May 2022 | | Howard Huang | NOV 2021 |

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 [annual review with the TAC](#).
- Inform the TAC when [dependencies change so records can be updated](#).
- Maintainers should take the Linux Foundation's free [Inclusive Open Source Community Orientation](#) 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
- 2022-04-07: Governance
- 2022-05-05: IETF Trusted Execution Environment Provisioning

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.

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 operations@confidentialcomputing.io):
 - Zoom
 - Domain registration and renewals
 - Mailing lists
 - YouTube playlists
- Optional security scanning
- LFX tools (<https://lfx.linuxfoundation.org>).