Technical Advisory Council (TAC) Meeting

June: 1, 2023



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.





Antitrust Policy Notice

- Linux Foundation meetings involve participation by industry competitors, and it is the intention of the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws.
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Etherpad - Meeting Minutes

- https://etherpad.lfnetworking.org/p/CCC-TAC-Minutes-2023-06-01
- Join the etherpad and set up your name and text color
 - Meeting attendance please add yourself
 - Voting Attendees just need to put a "+" next to their name
- Please help make the meeting minutes be more accurate



Agenda

- 1. Welcome, roll call, introduce any first-time attendees
- 2. Approval of minutes
- 3. GRC-SIG Customer Guide and Checklist Pawan
- 4. VirTEE project submission
- 5. Survey Mike Bursell
- 6. 2023 Goals
 - a. OpenSSF Best Practices badge Dave
 - b. Progression: Graduation Stage Requirements (Dave/Howard)
- 7. Annual Report/Update: Veraison Simon Frost
- 8. Tech Talk: Bao Project Sandro Pinto
- 9. Any other business
 - a. Next meeting agenda
 - b. Action item review move to creating issues?
 - c. Issues/Pull requests



Roll Call

Quorum requires **4** or more voting reps:

* TAC chair

| <u>Member</u> | Representative / Alternate | <u>Email</u> |
|----------------|-----------------------------|---------------------------------|
| Accenture | Giuseppe Giordano | giuseppe.giordano@accenture.com |
| Arm | Thomas Fossati / Michael | thomas.fossati@arm.com |
| Meta Platforms | Eric Northup / Shankaran | digitaleric@fb.com |
| Google | Cfir Cohen / Catalin Sandu | cfir@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 | Lily Sturmann / Yash Mankad | Isturman@redhat.com |



Welcome New Community Members

New to the community?

Haven't introduced yourself at least twice?

Let us know

- your name
- where you are joining from
- your main Confidential Computing interest





Approval of TAC Minutes

https://github.com/confidential-computing/governance/pull/172

Proposed:

That the minutes of the May 18, 2023 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.



Customer Guide and Checklist

GRC-SIG Customer Guide and Checklist - Pawan Khandavilli



Project Submission

VirTEE project - https://virtee.io/

Project Submission Template: https://lists.confidentialcomputing.io/g/tac/message/1035

Amended to read:

1.2. Project Description (what it does, why it is valuable, origin and history)

VirTEE describes itself as "An open community dedicated to building components for Virtualization-based TEEs". We develop a number of libraries and command lines tools to make the development and use of TEEs easier. Some of our projects are:

sev Rust library: Provides type-safe APIs to the Linux kernel's SEV and SEV-SNP ioctl interface.

sevetl: CLI tool for managing the legacy SEV (i.e. not SEV SNP) firmware device on a host machine.

oci2cw: Scripting tool to convert Open Container Images (OCIs) into measured confidential container images.

reference-kbs: KBS attestation server for confidential workloads.

kbs-types: Rust (de)serializable types for the Key Broker Service (KBS) attestation protocol.



Member Survey - Mike Bursell

- Survey preliminary results
- Take the <u>member survey</u> if you haven't already!



Project Progression

Check #160

Graduation Stage - Dave

Incubation Benefits - Dan

Reminder review VirTEE proposal on TAC mail list



Progression discussion

- https://github.com/confidential-computing/governance/pull/160
- What additional services do projects want?
 - Gramine: Website
 - Note that existing list came from project requests and voted in by TAC after original policy was created
 - Mentors check in with projects on wishlists (see slide 28)
- Are different tiers / progression levels helpful or necessary?
 - o History:
 - initial stage: is it defined enough to accept to the CCC
 - next stage: under development vs in production
 - How to apply criteria to projects with subprojects at different stages?



Project Annual Report

Veraison - Simon Frost



Tech Talk

Bao Project - Sandro Pinto



Best Practices

OpenSSF Best Practices badge - Dave



2023 TAC Goals

Working copy: https://docs.google.com/document/d/1BLsI0hv9ybHI-FBNqHp6bJzy6ng8yKs_556bTqBswc

"We have increased the impact of the CCC in the ecosystem such that..."

- 1. we increased Cross-project Integration [Lily, EricV]
- 2. the CCC hosts s/w projects adopted by the ecosystem [Dave, Howard, Dan]
- 3. other organizations reference Confidential Computing [MarkN, Howard, Thomas]
- 4. grew outbound education [Giuseppe, Cfir, EricN]
- 5. matured community D&I [Dan, Nick]



Any other business / Schedule

| Date | CCC Project Review | TAC Goal Topic | TAC Tech Talk |
|---------------|------------------------|--------------------------------|--------------------------------------|
| 23 Mar 2023 | OE SDK - Radhika | | SGX Assurance Tool - Alex Berenzon |
| 6 April 2023 | GRC - Mark Novak | Progression - Howard | CDCC - XiaoFeng Wang |
| 20 April 2023 | | xProject - Lily / EricV | |
| 4 May 2023 | | Education - Cfir et al | VirTEE - Sergio Lopez Pascual (@slp) |
| 18 May 2023 | Attestation SIG | D&I - Dan & Nick | Keylime - Thore / Marcio |
| 1 June 2023 | Veraison - Simon Frost | Progression pt.2 - Dave/Howard | Bao Project - Sandro / Howard |
| 15 June 2023 | | | Fan Zhang - CDCC second talk? |
| 29 June 2023 | CCS | ccs | ccs |
| 13 July 2023 | | | |
| 27 July 2023 | | | |
| 10 Aug 2023 | | | CHAOSS and D&I - Georg Link |
| 24 Aug 2023 | | | |



Next Agenda (2023-06-01)

- 1. Welcome, roll call, introduce any first-time attendees
- 2. Approval of minutes
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- 4.
- 5. 2023 Goals
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 - b. TAC Goals:
- Annual Report/Update:
- 7. Tech Talk: CDCC
- 8. Any other business
 - a.
 - b.



Action Item Review

- 1. [Kurt] 1/12: Direct LF Creative to export the TAC whitepaper to markdown so we can put it under TAC source control.
 - a. 5/3: https://github.com/confidential-computing/governance/pull/167 (Done, please review)
- 2. [Dan/Kurt] 2/9: to look into a communication channel (mail list?) for discussing cross-project security concerns
 - a. 3/21: Mail list created, need mentors to contact their projects for the right person to monitor
 - b. 3/23: Kurt to email TAC mentors to find security mail list monitors (Done)
 - c. 4/20: [Thomas] Veracruz-(contacted: Derek or Mathias); OE (Radhika)
 - d. 5/4: Remaining mentors/projects; Kurt will ping the TAC list again.
- 3. [Kurt] 3/23: revise the Project review timeline and Tech Talk slides to show current status (In progress)
- 4. [Dan] propose addition to Incubation status to cover one-time website or similar benefits
- 5. [Kurt] fix the errors in the Maintainer file to add Yash Mankad (**Done**)
- 6. [Kurt] ask Outreach committee if they needed a source .md file for the "Confidential Computing: Hardware-Based Trusted Execution for Applications and Data" white paper
- 7. [Kurt] get the latest recommendations on how the LF LFX license scans are started and what code-bases are supported
- 8.



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



| 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 | Nick Vidal | 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 | Lily | JUN 2021 |
| Occlum | Ant Financial | 20 AUG 2020 | Yes | Yes | 10 SEP 2020 | 15 SEP 2021 | 17 NOV 2022 | Tate Tian | MAY 2021 |
| Veracruz | Arm | 3 SEP 2020 | Yes | Yes | 19 NOV 2020 | 14 APR 2021 | 18 NOV 2021 | Thomas F | APR 2021 |
| Veraison | Arm | 4 FEB 2022 | Yes | Yes | 16 MAR 2022 | 18 May 2022 | TBD | Howard Huang | NOV 2021 |



| SIG / WG | Proposed by | TAC Approved | Tech. Charter | Board Presentation | Annual Review | Mentor | Webinar |
|----------------------|-------------|--------------|------------------|-----------------------|------------------|------------|-----------------|
| CCC-Attestat ion SIG | TAC | Yes | Yes | 18 MAR 2021 | 21 APR 2022 | Dan | 21 JUNE 2022 |
| GRC SIG | TAC | Yes | Yes | 21 SEP 2022 | Quarterly | Mark Novak | |



Deferred topics / Backup



Project Website Funding

Gramine and Veraison have both asked for website updates

- Rough estimate approximately \$5K each (\$16k for github page)
- Existing budget allocated \$10K total for all projects for "Project IT Services and Collab Tools" which would cover website redesign
- Gramine also needing VPS Cloud services from the same budget item
- 1) Gramine VPS could be funded out of "Test Infrastructure/Hardware" budget (\$10K) and that would allow all the 10K from Project IT Services to be used on websites
- 2) The TAC could get Governing Board approval for additional funding for Project IT Services
- 3) The TAC could also/instead get approval to allow funding to be shifted from Test to IT
- 4) Seek competitive bid from outside LF?
- 5) Associate this spend level with progression level



TAC Budget (From approved budget 2/28/23 Final)

| Description | 2022 Approved Budget | 2023 Approved Budget | Notes | Area |
|--|-------------------------|-------------------------|----------------------------------|--|
| License Scanning | \$12,000 | \$0 | LF Security | Project support |
| Test infrastructure (capital or non-capital) | \$75,000 | \$60,000 | \$10k/project x 6 projects | Project support |
| IT Services and Collab Tools | \$3,864 | \$15,000 | website, slack, groups,io | Project support Community development & DCI |
| Consortium IT Services and Collab Tools | \$100,000 | \$10,000 | Misc. budget for use by projects | Project support |
| Staff Travel | \$0 | \$60,000 | \$10k/project x 6 projects | Project support (combined with other travel) |
| Hosting and other costs | \$10,000 | \$0 | Software | Project support |
| Outreachy (internships/community support) | \$52,000 | \$32,000 | Outreachy (\$8k x 4 projects) | Community development & DCI Project support |
| Community Support | | \$100,000 | Part-time Technical Architect | Community development & DCI Project support |
| Subtotal | \$257,781 | \$277,000 | | CONFIDENTIAL COMPUTING CON SORTIUN |

Reference: CCC project benefits

CCC projects have access to a number of benefits:

- Up to \$10K 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
 - Slack
- Optional security scanning
- LFX tools (<u>https://lfx.linuxfoundation.org</u>)



Conformance to Terminology

- Spreadsheet Dave Thaler
 - Reactions to a recent post



Conformance to terminology - Dave

Various examples across industry:

- IEC 62443
- Vendor self-assertion
- OCF: OCF-generated requirements and contracted certification
- IPv6Ready: IETF-generated requirements but external lab vendor certification
- DISA, NIST: Regulatory body requirements
- NISTIR 8259A: Regulatory body recommendations (not requirements)
- CCC Wikipedia article should follow TAC definitions
- ...



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 LFX mentorship
- 2022-03-10: Overview of TCG confidential computing
- 2022-04-07: Governance
- 2022-04-21: Code Scanning via LFX Security
- 2022-05-05: IETF Trusted Execution Environment Provisioning (TEEP)
- 2022-05-19: Logging and error reporting in confidential computing
- 2022-06-02: Multi-TEE systems: PCI-SIG WG
- 2022-06-30: Blueprints for Enclaves
- 2022-09-22:
- 2022-10-06: HC / RISC-V Security
- 2022-12-01: Best Practices for Creating an Inclusive Community
- 2023-02-25: RISC-V AP-TEE
- 2023-03-09: eBPF
- 2023-03-23: SGX Assurance Tool



Annual reports

governance/project-progression-policy.md at main · confidential-computing/governance (github.com)

"The review includes the following:

- 1. Review whether any answers to the project's submission template or Technical Charter have changed, and if so, review the new answers. A representative from the project is responsible for presenting any deltas to the template answers since the last review, if any. If there are no changes, there is nothing to review here.
- 2. Review the project's progression status to determine whether the project is in the stage that accurately reflects its needs and goals. For example, is it already ready to move to another progression level? Is it on track at the current level? Is any action needed from the TAC (e.g., change in or addition to any project mentor(s))? If nothing has changed significantly, there may be nothing to review here.
- 3. Review any budget allocations relevant to the project, and whether any adjustments are needed.
- 4. Review license scans provided by the Linux Foundation. Provide feedback on any outstanding issues and evaluate the scanning service from the project's perspective.

Projects are encouraged to proactively inform the TAC when something changes that affects their submission template or Technical Charter (changing a License, security reporting process, CoC, etc.), rather than waiting for the next annual review."

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

