# Technical Advisory Council (TAC) Meeting

January 26, 2023



## 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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#### **Etherpad - Meeting Minutes**

- https://etherpad.lfnetworking.org/p/CCC-TAC-Minutes-2023-01-26
- 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
- Action item review
- 4. 2023 Goals
  - a. CC+FHE objectives Thomas F.
  - b. Conformance to terminology Dave Thaler
- 5. EUAC CCS (June) Project's Day update Richard Searle
- 6. GRC SIG Formalization
- 7. 2022 Project Blog(s) status
- 8. Github Issue Cleanup
  - a. Issue per TAC member
- 9. Any other business
  - a. Community Architect Position



#### 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 / Dimitrios	Isturman@redhat.com		

#### Introduction of new attendees?



## Approval of TAC Minutes

https://github.com/confidential-computing/governance/pull/152

#### Proposed:

That the minutes of the January 12, 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.



#### **Action Item Review**

- 1. [Kurt] project messaging services to be listed on the new website, like eBPF Foundation (Started in wiki)
  - 1/26 Note: Can we track this in the website work under outreach? (Move to Website/Outreach agenda)
- 2. [Kurt/Dan] gather information on the job role for a Technical Architect role (In progress, Documenting responsibilities)
  - Update 12/15: First draft of role criteria
  - COMPLETE 1/26: Reviewed with board. Board discussing w/ LF PMO. Anticipate closure in February.
- 3. [Kurt] follow up with CDCC investigator for future tech talks
  - COMPLETE 1/26: Dan sent invitation
- 4. [Kurt] to direct LF Creative to publish the Terminology White paper (Draft in review)
  - Output of the complete of t
- 5. [Ben Fischer] Outreach committee to review all whitepapers for capitalization of Confidential Computing.
  - Update 12/15: Clarify has Ben accepted this Action Item? [Yes per Helen 1/12]
  - Update 1/26: Transfer this to outreach for tracking? (Done track in Outreach)
- 6. [Kurt] 1/12: Direct LF Creative to export the TAC whitepaper to markdown so we can put it under TAC source control.
  - Update 1/26: ?
- 7. [Howard] 1/12: Propose description in pull request for incubation requirements (target for after Chinese New Year)
- 8. [Richard] 1/12: June conference roadmap for Projects Day (Done, completed in this meeting)
- 9. [MikeB] 1/26 (NEW): Board recommends a blog post explaining why we added attestation verbiage to CC definition.



## Media inquiry

- VentureBeat CC Story Media Questions https://venturebeat.com/
  - a. Why is confidential computing important for enterprises?
  - b. Please describe the consortium's latest work.
  - c. What role will confidential computing play in data security going forward?
  - d. What CISOs/security leaders should be aware of?



#### 2023 TAC Areas of Focus

#### Working copy here:

https://docs.google.com/document/d/1BLsI0hv9ybHI-FBNgHp6bJzy6ng8yKs 556bTgBswc

Moving forward: Split out committees. <Noted in google doc above>

Discussion for 1/26: CC + FHE objective

Who: homomorphicencryption.org

What: Joint Whitepaper. Joint webinar.

How: HE mtg in Seoul in March...

Who: CDCC

What: Research agenda accommodates FHE & CC comparisons

How: Dialog. Invitations to TAC, Summit, etc. Academic projects into the CCC.



## 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
- ...



## **EUAC Update**

- Richard Searle
  - 2/4 Social Event at FOSDEM
  - CCC Projects day at CCS conference
    - CCS is 6/29
  - Schedule roadmap



#### Formalization for GRC SIG?

- GRC SIG in project matrix
  - o project mentor ?
  - o annual updates?
- Any other formalization?



#### 2022 Accomplishments

https://docs.google.com/document/d/1S6Ytq0le0ZZegMG2rJQOrlW6UjrLO-4OVkPwqAg03c8/edit?usp=sharing

Projects individually encouraged to post a blog.



# Project blogs

Project	Mentor	Recommended	Project will Blog?
Enarx	Nick Vidal		
OE SDK	Dave Thaler		
Gramine	Eric V		
Keystone	Lily		
Occlum	Tate Tian		
Veracruz	Thomas F		
CCC-Attestation	Dan		
Veraison	Howard Huang		
GRC SIG			

## 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	
15 Dec 2022			
<del>29 Dec 2022</del>		Canceled	
12 Jan 2023	Veracruz - Thomas Fossati	EUAC FOSDEM Briefing	
26 Jan 2023			
9 Feb 2023	Gramine - Michal, Mona, Don	eBPF - Dave	
23 Feb 2023			



# Next Agenda (2023-02-09)

- 1. Welcome, roll call, introduce any first-time attendees
- 2. Approval of minutes
- 3. Action item review
- 4. 2023 Goals
- 5. Annual Report from Gramine
- 6. Tech Talk: Dave eBPF
- 7. Any other business
  - a. Conformance to terminology Dave Thaler
  - b. Community Architect Position
  - C.



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
CCC-Attest ation SIG	TAC	Yes	Yes	N/A	18 MAR 2021	18 MAR 2021	21 APR 2022	Dan	21 JUNE 2022
Veraison	Arm	4 FEB 2022	Yes	Yes	16 MAR 2022	18 May 2022	TBD	Howard Huang	NOV 2021
GRC SIG			Yes	N/A	21 SEP 2022	N/A	Quarterly	Mark Novak	



# Deferred topics / Backup



## Tentative TAC Tech Talk topics

- Trust domains Mike?
- Defined-Trust Transport (DeftT) Protocol for Limited Domains Kathleen Nichols, Van Jacobson,
   Randy King
- CDCC research updates
- Relationship between eBPF and Confidential Computing Dave Thaler



# **TAC Budget**

Description	2022 Approved Budget	2022 September YTD	2023 Draft Budget	Notes	Area
License Scanning	\$12,000	\$0	\$0		Project support
Test infrastructure (capital or non-capital)	\$75,000	\$9922	\$60,000	\$10k/project x 6 projects	Project support
IT Services and Collab Tools	\$3,864	\$6,507	\$8,000	website, slack, groups,io	Project support Community development & DCI
Consortium IT Services and Collab Tools	\$100,000	\$0	\$10,000	Misc. budget for use by projects	Project support
Travel expenses	\$0	\$0	\$80,000	\$10k/project x 8 projects	Project support Cross-org coordination
Software licenses	\$10,000	\$0	\$0		Project support
Outreachy (internships/community support)	\$52,000	\$8,000	\$32,000	Outreachy (\$8k x 4 projects)	Community development & DCI Project support
Community management for projects			\$100,000		Community development & DCI Project support
Subtotal	\$257,781	\$17,952	\$290,000		© co

## Annual report

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."

# Budget as of 9/30/2022

Description	2022 Approved Budget	YTD Actuals thru Sept 22	Sept 2022	Remainder	Notes
License Scanning	\$12,000	\$0	\$0	\$12,000	
Test infrastructure	\$75,000	\$0	\$0	\$75,000	Common \$15k, Project \$60k
IT Services and Collab Tools	\$3,864	\$6,507	\$758	\$3,790	
Non-Capital Equipment		\$4,961	\$0	-\$4,961	Custom Exxact Workstation & Amazon order (Gramine)
Community Support	\$0	\$80	\$0	\$0	
Consortium IT Services and Collab Tools	\$100,000	\$0	\$0	\$100,000	
Hosting and other costs	\$10,000	\$0	\$0	\$10,000	
Internships	\$52,000	\$0	\$8,000	\$52,000	Outreachy
Subtotal	\$257,781	\$17,952	\$8,758	\$239,829	CONFIDENTIAL COMPUTING

#### 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
- 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





#### 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



## 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 \$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
- Optional security scanning
- LFX tools (<u>https://lfx.linuxfoundation.org</u>)



#### Reference Common Test Infrastructure

#### Summary:

 Projects preferred per project funding. No demand for common infrastructure. Approvals retained here for reference.

#### • Needing:

- LF IT ready to meet for sizing and technical requirements
- Approved: 50K for infrastructure management and 15K for hardware
- Would any project use such infrastructure if it existed?
  - Projects: Enarx yes, OE no, Gramine no, Occlum ?? (Annual Report)



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