Technical Advisory Council (TAC) Meeting

September 22, 2022

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This meeting is being recorded.

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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Roll Call, and Introductions of new attendees

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

Member	Representative / Alternate	Email
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	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/IBM	Lily Sturmann / Dimitrios	lsturman@redhat.com

* TAC chair

Etherpad - Meeting Minutes

- https://markdown.etherpad.com/p/CCC-TAC-Minutes-2022-09-22

- 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
  - The more that participate, the better the minutes
  - You are the experts on Confidential Computing

- Export document in Markdown (GitHub docs), PDF, TXT, Word, and other formats

Agenda

1. Welcome, roll call, introduce any first-time attendees
2. Approval of minutes
3. Action item review
4. Tac Tech Talks:

   NSF Center for Distributed Confidential Computing (30 min) - Prof Xiaofeng Wang

   MPC + TEE (30 min) - Jordan Brandt
5. Common Test Infrastructure
6. Updates from Outreach committee

   ■ New Website, status
7. Common Terminology whitepaper working session
8. Election timeline
9. Review of open pull requests/issues (time permitting)
10. Any other business

Approval of TAC Minutes

https://github.com/confidential-computing/governance/pull/133

Proposed:

That the minutes of the September 8, 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.

Note: no meeting was held on July 28th

TAC Tech Talks

- NSF Center for Distributed Confidential Computing (30 min) - Prof Xiaofeng Wang
- MPC + TEE (30 min) - Jordan Brandt

Establishing common terminology - Whitepaper

Doc in progress:

- https://github.com/confidential-computing/governance/blob/main/terminology/common-terminology.md
- LF Creative Services engaged for document conversion and formatting for whitepaper PDF, needs to be finalized for last updates to LF CS
- PR's:

  - https://github.com/confidential-computing/governance/pull/132
- Issues:

  - https://github.com/confidential-computing/governance/issues/123

Action Item Review

1. [Stephen/Lily] 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/Helen] work with Outreach for setting up a first draft of the CCC wikipedia page - (Outreach agenda item)
4. [Mentors] Code scanning via LFX Security - add all missing projects to security for scanning, get more details on instructions on installing GitHub bot
   ○ 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
5. [KT] to set up a meeting to define scope and technical requirements for Test Infrastructure with LF IT, Dave T, Dan M, Alec F, Nick V (LF IT ready, need to determine if the projects still want to move forward)

Budget as of 7/31/2022

Description	2022 Approved Budget	YTD Actuals thru July 22	July 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	$4,991	$758	$3,790	
Non-Capital Equipment		$4,961	$0	-$4,961	Custom Exxact Workstation & Amazon order (Gramine)
Community Support	$0	$8,000	$8,000	-$8,000	Outreachy
Consortium IT Services and Collab Tools	$100,000	$0	$0	$100,000	
Hosting and other costs	$10,000		$0	$10,000	
Internships	$52,000		$0	$52,000	Outreachy
Subtotal	$257,781	$17,952	$8,758	$239,829	

Common Test Infrastructure

- **Discussion: still desired?**
  - **Feedback so far is that it might not be used this year**
- **Needing**:
  - LF IT ready to meet for sizing and technical requirements
  - Available CCC leads time to meet - resend email?
- Approved: 50K for infrastructure management and 15K for hardware
- Would any project use such infrastructure if it existed?

Updates from Outreach Committee

- October 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
  - Alternate effort also do a confidential computing page
- https://en.wikipedia.org/wiki/Trusted_execution_environment
- New Website, status

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Election timeline

- FRI Nov 6, **2019**: Call for nominations opens
- THU Nov 12, **2020** / Nov 10, **2021**: Call for nominations closes
- WED Nov 18, **2020**: Voting period opens
- WED Nov 25, **2020**: Voting period closes
- TUE Dec 1, **2020** / Nov 30, **2021**: Election results announced

Any other business / Schedule

Date	CCC Project Review	TAC Tech Talk
22 SEPT 2022		NSF Center for Distributed Confidential Computing (30 min) - Prof Xiaofeng Wang MPC + TEE (30 min) - Jordan Brandt
6 OCT 2022		RISC-V Trusted Computing group
20 OCT 2022		
3 Nov 2022		
17 Nov 2022		

Tentative TAC talk topics

- Rust Hypervisor firmware: https://github.com/cloud-hypervisor/rust-hypervisor-firmware - Dan to provide contact
- Trust domains - Mike?
- Defined-Trust Transport (DeftT) Protocol for Limited Domains - Kathleen Nichols, Van Jacobson, Randy King
- NSF Award Search: Award # 2207231 - Collaborative Proposal: SaTC: Frontiers: Center for Distributed Confidential Computing (CDCC) - (Mona highlighted this)

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: 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

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	Stephen & Lily	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

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

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).

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