

Trusted Computing Center of Excellence

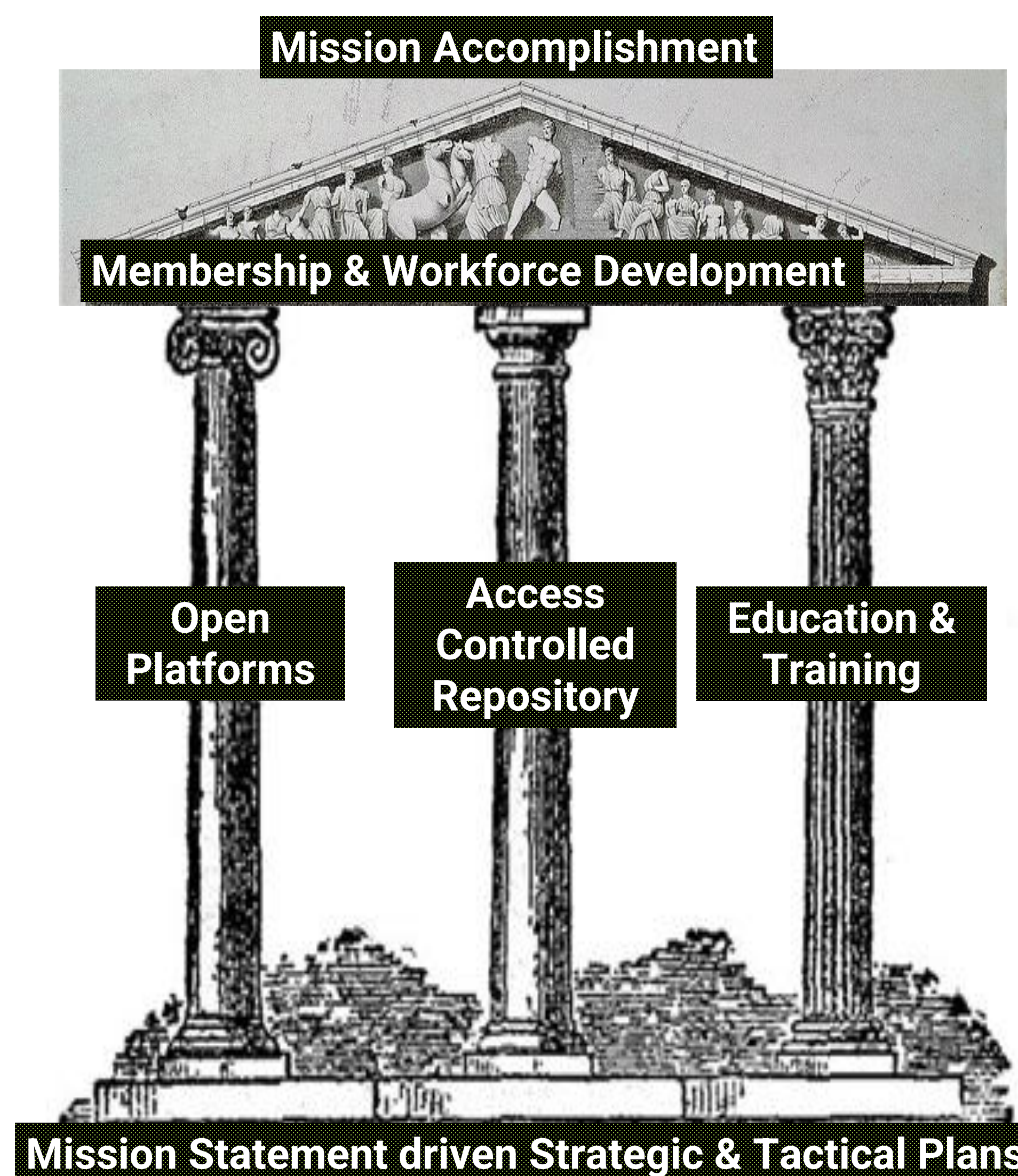
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Mission

- The mission of the Trusted Computing Center of Excellence™ (TCCoE™) is to lower barriers to adoption and facilitate the principled development and deployment of trustworthy software-based systems.
- Thus, risk will be reduced, especially in areas vital to U.S. and allied national defense, intelligence, security, and critical infrastructure.
- Rigorous mathematical proof offers strong evidence of trustworthiness, so the TCCoE fosters adoption of formal methods, as well as other advanced techniques, plus components and systems developed or verified with them.
- A leading example is the open source **seL4™ microkernel**.
- TCCoE goals include maturation of such technologies, stabilization of their software distributions, and expanding/training the user/developer base to provide much needed capabilities for the Nation.

To foster advancement & adoption of formal methods & other techniques to improve/assess trustworthiness, as well as their artifacts, TCCOE activities are structured:



With any of these, can you or your organization:

- Benefit from TCCOE activities?
- Promote your offerings via TCCOE?
- Assist TCCOE in developing our offerings?

•repo

- hosts software with strong evidence of trustworthiness
- admission controlled contributions
- selectable license & distribution restriction markings
- searchable using those markings, etc.
- strongly enforced, policy based, fine grained, mandatory access controls as per those markings
- “eat our own dog food: use code in the repo to host it
- hosts platform source, education & training materials
 - Do you have something for us to host or link?

•platforms

- reduce pain getting started with seL4, CHERI, etc.
- run formal methods etc. tools on their target platforms
- all items in repo verified to run on at least one of these
- platform configuration illustrated in training materials
 - Do you offer or can you recommend suitable platforms?

•education & training

- graduate level concentrations to prepare researchers
- undergrad & continuing ed. to prepare practitioners
- high school modules to motivate study of STEM
- <https://trustedcomputingcoe.org/>
- offer free & paid on-line & on-site classes
- share materials w/non-profit educational institutions
 - Do you have something for us to host or link?
 - Could you help us develop curricula & materials?

I am at the summit! If I am not in front on my poster come and find me to talk about my work.



Nathan Studer
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DornerWorks