

DAOS Foundation

ISC 2024 Meeting



<https://foundation.daos.io>



Technical Steering Committee (TSC)

TSC Structure

- Voting Members
 - *Argonne*: Kevin Harms
 - *Enakta*: Denis Barahtanov
 - *Google*: Corwin
 - *HPE*: Lance Evans
 - *Intel*: Liang Zhen
 - *TSC Chair*: Johann Lombardi
- Meet weekly with rotating schedule
 - Members distributed across US, EU, China and Australia
- Meeting notes to be public

TSC Scope

- Define community roadmap (2.8+)
 - Gather contributions from all community members
 - Train model
 - Publish roadmap on <https://daos.io>
 - What release should be LTS?
- Produce community releases (2.8+)
 - Track progress, review jira tickets & test results
 - Tag release and sign/distribute packages
 - Provide docker images
- Organize DAOS development
 - Simplify contributions
 - Organize gatekeeping (members, responsibilities, process)
 - Document contribution process

TSC Scope

- Community test infrastructure
 - Goal: artifacts and logs available to all contributors
 - Expand coverage
 - ARM/AMD
 - More fabrics
 - More linux distributions
 - Cloud environments
 - Focus on pmem-less mode
- Working groups
 - Open to anyone
 - Forums for DAOS users/administrators/contributors to exchange
 - Rotating schedule
 - 3 working groups with more to be added

Usability/UX Working Group

- Group focused on raising the bar on ease-of-use
 - Users, administrators and GUI developers
- Address the usual gap between “users” and “developers”
- 76 tickets with “[usability label](#)” in Jira
 - E.g. inconsistent command arguments
 - E.g. how to quickly get a system health diagnostic?
- Prioritize some of those tickets for each new release

Performance Working Group

- Forum to share DAOS performance results
 - Benchmarks (IO500, DLIO, ...)
 - Real applications (LAMMPS, VPIC, Resnet50, WRF, ...)
- Report & discuss pathological behaviors
 - E.g. some iterations taking twice as much time with DLIO
- Explore new workloads & high-level interfaces to invest in
- Share recipes & produce documentation
- Review performance results for each release before GA

Infrastructure Working Group

- Generate DAOS packages outside Intel infrastructure
 - Prototyped by Intel
 - Rely on self-hosted runners from Github
 - Several ARM VMs available already
 - New VMs from GCP to be added soon
- Need space to store artifacts and logs
 - Exploring different options
 - Will be combined with a VM running a database & httpd to browse all logs
- Define what tests to run where
 - Ability to run ftest anywhere
 - Complex matrix: {CPU} x {Fabric} x {SSD config} x {Linux distro}

Questions?

- What other working groups should be prioritized?
- Shall we consider any changes to the way DAOS is packaged/shipped?
- Any organizations willing to contribute HW to be integrated in the DAOS CI?