



IOTTA TWG

2025 Review and 2026 Plans

Presented by Geoff Kuenning, Co-Chair

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IOTTA TWG 2025 Accomplishments

- Input/Output Traces, Tools, and Analysis (IOTTA) Technical Work Group
- Primary focus:
 - Create/maintain worldwide repository for storage-related I/O trace files, associated tools, and other related information
 - Trace types: Block I/O, System Call, Key-Value Stores, Static Snapshots, Parallel, Reliability, and others
 - IOTTA Repository website: iotta.snia.org
 - Additional information: iotta.snia.org/faqs/aboutIOTTATWG/
- Recent Work
 - IOTTA Repository website updates
 - Identified additional recent citations of the IOTTA Repository

IOTTA TWG Work Items

- Continued support of the repository
 - Posting of new traces
 - Solicitation of additional traces
 - Repository website maintenance and improvements
- SNIA Compute, Memory, and Storage Community (CMSC) collaboration
 - Stay abreast of CMSC related activities (e.g., Computational Storage)

IOTTA TWG Membership as of December 2025

- ❖ TWG roster includes 58 members
- ❖ Company affiliations include:
 - ❖ AMD, Biomemory, Broadcom, Cisco, Dell, FADU, HPE, Hitachi, Huawei, IBM, IEIT Systems, Intel, KIOXIA, Lenovo, Magnition, Marvell, Micron, Microsoft, Phison, Samsung, Sandisk, Seagate, SMART Modular, Solidigm, Western Digital, Yangtze Memory Technologies
- ❖ Educational Institutions:
 - ❖ Harvey Mudd College (HMC)
 - ❖ Stony Brook University
 - ❖ Rutgers University
 - ❖ University of Connecticut
- ❖ Additional support from Ulsan National Institute of Science and Technology (UNIST) and Stony Brook University

IOTTA TWG Participation

- ❏ Industry Impact of the IOTTA Repository:
 - ❏ Provides a *common facility* through which a *broad community* can avail themselves of a variety of storage-related I/O traces (especially *contemporary* I/O traces)
 - ❏ “One-Stop Shop” with currently 845 [citations](#) in research publications
- ❏ All repository content available for free download and unrestricted use:
 - ❏ Storage research and development communities in both academia and industry
 - ❏ General public
- ❏ Why you should join and participate in the IOTTA TWG:
 - ❏ Help improve the IOTTA Repository, including vote on future directions
 - ❏ Monitor upcoming changes to the repository (e.g., the addition of new traces)
- ❏ Who to contact for additional information:
 - ❏ Co-Chairs: Geoff Kuenning (HMC), Tom West (hyperI/O LLC)
 - ❏ Contact at: iottatwg-chair@snia.org