



# IOTTA TWG

2023 Review and 2024 Plans

Presented by Geoff Kuenning (IOTTA TWG Co-Chair)

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# IOTTA TWG 2023 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, Reliability, and others
  - Repository website: [iotta.snia.org](https://iotta.snia.org)
  - Additional information: [iotta.snia.org/faqs/aboutIOTTATWG/](https://iotta.snia.org/faqs/aboutIOTTATWG/)
- Recent Work
  - ‘Alibaba’ trace files to be added to the IOTTA Repository website soon
  - IOTTA Repository website improvements (e.g., trace contribution guidelines)

# 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 Initiative (CMSI) collaboration
  - Stay abreast of CMSI related activities (e.g., Performance Test Specifications)

# IOTTA Membership as of January 2024

- TWG roster includes 57 members
- Company affiliations include:
  - Broadcom, Cisco, Dell, FADU, HPE, Huawei, Inspur, Intel, Lenovo, Marvell, Micron, Microsoft, Phison, Samsung, Seagate, SMART Modular, Solidigm, Western Digital, Yangtze Memory Technologies
- Educational Institutions:
  - Harvey Mudd College (HMC)
  - Stony Brook University
- 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 over 627 [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)
- **Contact chairs for additional information:**
  - Co-Chairs: Geoff Kuenning (HMC), Tom West (hyperI/O LLC)
  - Contact at: [iottatwgchair@snia.org](mailto:iottatwgchair@snia.org)