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Computational Storage TWG

2022 Review and 2023 Plans

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Computational Storage TWG 2022 Accomplishments

Architectural and Programming Model <u>1.0 Released</u>

- Included Security Recommendations
- Updated Release of API <u>r0.8</u>
 - Significant updates getting ready for 1.0
- Continued Content creation and delivery for CS SIG in CMSI
 - Includes FMS, SDC, PMCSS, Security Summit
- Continued collaboration with <u>NVMe TP</u> around "Computational Programs"
- TWG Charter <u>Computational Storage TWG Charter V1c-Approved.pdf</u>



Computational Storage TWG Work Items

- Drive Rev 1.1 Release Architecture and Programming Model
 - Additional Use Model in appendix
 - Chaining of commands, management
 - Ongoing work on Security recommendations
- Drive Rev 1.0 Release User API Document
 - Deep Dive during F2F in January to drive release 1.0
 - Continue evolution as NVMe TP work continues
- Continued Support CS SIG Work
 - Webinars, Blogs, Contributed Articles
 - 3rd Annual PM/CS Summit, FMS, SDC
 - Support the planned TCO Model work

- SNIA Group collaboration
 - Continued effort to drive collaboration with SDXI TWG
 - Continued collaboration with Security TWG on Security for CS
- External Interactions
 - NVM Express interaction around TP work
 - OCP has started a Computational Work Stream



50 Participating Companies - 258 Member Representatives 11111 DapuStor arm BLOOMBASE BROADCOM CISCO FUITSU GIGAIO Li F A D U **FUTUREWEI** DELLEMC Hewlett Packard Enterprise INNOGRIT intel inspur **HITACHI** JETIO 科 HUAWEI M LOS Alamos Micron 🖪 KALRAY ΚΙΟΧΙΑ MICROCHIP Microsoft THE POWER OF MORE MARVELL NetApp[®] NEC NEUREALITY 🔨 NETINT NR NYRIAD PHISON 0 5 **ScaleFlux**^{*} **PLiOPS** Quantum. SAMSUNG SiliconMotion SOLIDIGM. SEAGATE Sight I YANGTZE **SUPERMICR** TOSHIBA **vm**ware[®] Western Digital.

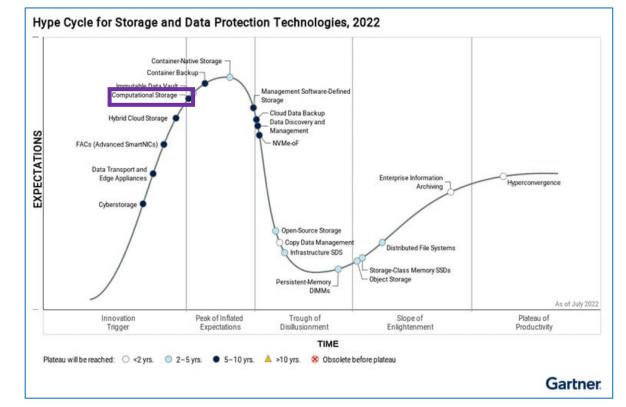
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Computational Storage TWG Participation

What is the expected industry impact of this work?

- Encourage development and deployment of Computational Storage Devices (CSxes) in the current and future ecosystem.
- What is the industry segment relevance?
 - Current Infrastructure has developed new bottlenecks and the need to shift compute away from just an xPU has driven the need for Computational Storage
- Why should you join and participate in this TWG?
 - Participation allows members the ability to impact the direction, development, and deployment of new and innovative storage solutions for their organizations and customers



- Who to contact for additional information
 - computationaltwgchair@snia.org

