



Scalable Storage Management (SSM) TWG

2022 Review and 2023 Plans

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SSM TWG 2022 Accomplishments

- Charter: <https://members.snia.org/wg/ssmtwg/document/21899>
 - Summary: Extend DMTF's Redfish spec for Storage
- New Releases:
 - Version 1.2.4 and 1.2.4a – add enhanced support for NVMe and NVMe-oF configurations, with detailed requirements for JBOF and EBOFs, and NVMe-oF fabric-attached configurations. Includes corresponding enhancements to the NVMe Model Overview and Mapping Guide and new content in both the User's Guide and the Error Handling Guide
 - New white paper "Metrics and Telemetry in Swordfish".
 - Specification, schema and registries, profiles, User's Guide, Error Handling Guide, NVMe Model Overview and Mapping Guide, Swordfish Property Guide, Metrics and Telemetry in Swordfish White Paper (New)
 - Updated mockups on swordfishmockups.com
- Continue work on multi-alliance project with DMTF, OFA, and CXL Consortium to enable storage fabric management
- Open source software additions:
 - Update Swordfish emulator:
 - Support all RF/SF schema, add https support, add session service support, add account service, start work on event service
 - Support joint work with Open Fabrics Alliance, DMTF, and GenZ work, prototyping managing fabrics and storage fabrics
- Submitted 1.2.4a to ISO
- For reference - versions:
 - Version 1.2.x: Adds NVMe support - 2020
 - Version 1.1.x: Support for full block storage implementations - 2019
 - Version 1.0.x: Support for service-based implementations

SSM TWG Work Items: 2023

- Collaboration with NVM Express, DMTF for new functionality
 - Additional NVMe / NVMe-oF capabilities, supporting new NVMe features as they are added
 - Enhanced Namespace Management
 - Computational Storage, KV
 - NVMe TP6011 general purpose NVMe-oF virtual support
 - Domain Management
 - NVMe-oF / Boot Storage Use Cases
 - Clarifying ambiguous NVMe vs NVMe-oF usage
- Continue collaboration with OFA (and DMTF) to expand support added for NVMe-oF to additional types of fabrics
 - Continue collaboration with OFA, adding CXL fabric management
- Support for other SNIA Standards and Work Groups
 - CS, SDXI, xPU
- Enhancements to support implementation feedback
- Enhancements to existing profiles based on feedback from CTP

SSM TWG Membership (Jan'23)



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Joined since last symposium

SSM TWG Participation

- Industry impact:

- Develop, maintain, and enhance Swordfish Storage Management Specification and supporting ecosystem – for standards-based storage management of: (Redfish) server-attach storage, external (standalone) storage, storage management of NVMe / NVMe-oF systems, cloud / hyperscalar, hyperconverged, enterprise datacenters

- Who Participates:

- Storage vendors, storage client application developers (storage management, server management, OS vendors, etc)

- Join the SSM TWG to:

- Contribute new or modify existing content to improve interoperability, add support for new functionality, and accelerate your company's implementation
- Monitor new content and discussions as your company decides when to start implementation

- For additional information, contact:

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