



Swordfish TWG

2025 Review and 2026 Plans

Richelle Ahlvers, Chair

Email: swordfishtwg-chair@snia.org

Swordfish TWG 2025 Accomplishments

- Charter:
<https://members.snia.org/wg/swordfishtwg/document/21899>
- Summary: Extend DMTF's Redfish spec for Storage
- Supported by the Storage Management Community: find all info at snia.org/swordfish
- New Releases in 2025 - Version 1.2.8
 - Enhancements to the NVMe-oF™ white paper.
 - Updates to NVMe® functionality and mapping guide for namespace management
 - Advancements to filesystem use cases and mockups
 - Revisions to mapping and masking functionality
 - Expanded StoragePool Metrics
- 1.2.8 submitted to ISO to update ISO/IEC 5965:2023

Swordfish TWG Work Items: 2026

- Version 1.2.9 will release Jan/Feb 2026:
 - Expanded specification guidance: Capacity, Mapping and Masking
 - Add support for reporting Reservations info
 - Expanded error handling guide to message usage guide with both events and errors
 - Restructured and expanded Swordfish event message registries
 - Alignment with Redfish usages, such as LifetimeStartDateTime property in metrics, improved guidance for error reporting, Actions behaviors
 - Updates to NVMe functionality and mapping guide and schema for NVMe personalities, retrieving log pages
 - Updated filesystem use cases and mockups, updated mapping and masking functionality, expanded StoragePool Metrics
- New public repository: Swordfish-Publications
 - Provide official read-only copies of published SNIA schemas, message registries, and profiles to support online version checking and diffs.
- Open source software additions:
 - Update Swordfish emulator:
 - Support joint work with Open Fabrics Alliance, DMTF, and GenZ work, prototyping managing fabrics and storage fabrics
- 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

Swordfish TWG Work Items: 2026

- ❖ Collaboration with NVM Express, DMTF for new functionality
 - ❖ Additional NVMe / NVMe-oF capabilities, supporting new NVMe features as they are added
 - ❖ NVMe-oF / Boot Storage Use Cases
- ❖ 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
 - ❖ **Modeling DNA Data Storage through Swordfish - draft available for public review now**
 - ❖ **https://www.snia.org/tech_activities/publicreview**
 - ❖ *CS, SDXI, xPU, StorageAI work areas*
- ❖ Support new work from other alliance partners (e.g., UEC)
- ❖ Enhancements to support implementation feedback

SSM TWG Membership (Jan'26)



BIOMEMORY



KIOXIA

intel®



Hewlett Packard
Enterprise



micron

SAMSUNG



HITACHI



 RedactIQ



Joined since last symposium

TOSHIBA



*Dropped Members: Microsoft



Swordfish 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, system vendors, storage client application developers (storage management, server management, OS vendors, etc)
- ❏ Join the Swordfish 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:
 - ❏ Richelle Ahlvers, Chair: swordfishtwg-chair@snia.org