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Information technology — Swordfish Scalable Storage Management API Specification

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Foreword

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This document was prepared by SNIA (as Swordfish Scalable Storage Management API Specification, Version, 1.2.4a) and drafted in accordance with its editorial rules. It was adopted, under the JTC 1 PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

This second edition cancels and replaces the first edition (ISO/IEC 5965:2021), which has been technically revised.

The main changes are as follows:

— document has been aligned with DMTF's Redfish Forum 2021.1 release of the Redfish Specification, schema bundle, and other supporting materials;

— support for NVMe and NVMe-oF has been added, expanding the API to support the management of NVMe and NVMe-oF devices and systems;

— the Swordfish Standalone Configuration has been added in the /Storage collection at the ServiceRoot. This simplification of the hierarchy features Storage systems at the ServiceRoot and makes standalone implementations easier to instrument;

— substantial schema changes have been made, including:

  — enhancements to Volume, including new Actions (e.g., ChangeRAIDLayout, ForceEnable); addition of InitializeMethod, IOPerfModeEnabled, and OwningStorageResource and link to JournalingMedia; added InitializeMethod property; added IsBootCapable,

  - enhancements to StoragePools,
  - addition of NVMeDomain schema, and Split NVMeFirmwareImage and NVMeDomains schemas,
  - deprecation of use of NetworkPort; replacement with Port;
- security has been improved, including:
  - new requirements added to NVMeDrive to conform to schema updates for SecureErase,
  - enhancement of CHAP definitions and usage in StorageGroup;
- Profiles have been expanded, including:
  - addition of new profiles for Access Rights management, Connectivity Rights management, Management Controllers, NVMe EBOF, PCIe JBOF, and NVMe-oF,
  - movement of Swordfish profiles to SwordfishInteroperabilityProfile as base – extends Redfish Interoperability Profile, adding support for “conditionals” and comparison for Required Profiles,
  - update of FeaturesRegistry to v1.3.0 to correspond to latest versions of all profiles,
  - updates in multiple profiles to correct conformance to interoperability schema. Modifications to support change for new RequiredProfiles conditionals support.
  - addition of new profile for Swordfish NVMe Front End (used by complex devices such as arrays),
  - enhancement of profiles to include support / requirements for /Storage (move support to v1.1.0 level),
  - addition of NVMe drive, Advanced Features and Ethernet Attach profiles,
  - enhancement of Swordfish event profile,
  - addition of SupportedPoolTypes to StoragePool Profiles.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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