



# Storage Networking Industry Association

## Technical Activities Update

April 2021

T11-2021-00101-v000

# SNIA Technical News: New SNIA Standard

## ■ TLS Specification for Storage Systems v2.0

- This document specifies the requirements and guidance for use of the Transport Layer Security (TLS) protocol in conjunction with data storage technologies. The requirements are intended to facilitate secure interoperability of storage clients and servers as well as non-storage technologies that may have similar interoperability needs. This document was developed with the expectation that future versions of SMI-S and CDMI could leverage these requirements to ensure consistency between these standards as well as to more rapidly adjust the security functionality in these standards.

# SNIA Technical News: New Public Review DRAFT

- Native NVMe-oF™ Drive Specification v1.1
  - This Native NVMe-oF™ Drive Specification describes the features and functions of a storage device class known as Native NVMe-oF Drives. It includes a taxonomy covering the scope of involved device capabilities.

# SNIA Technical News: New Public Review DRAFT

- **Swordfish Scalable Storage Management API Specification v1.2.2**
  - The Swordfish Scalable Storage Management API ("Swordfish") uses RESTful interface semantics and a standardized data model to provide a scalable, customer-centric interface for managing storage and related data services.

# SNIA Public Review Drafts

- Native NVMe-oF™ Drive Specification v1.1
- Swordfish Scalable Storage Management API Specification v1.2.2
- DRAFT CDMI Extensions and Profiles
  - Capabilities Selection Extension v2.0
  - CORS Extension v2.0
  - Data Affinity Extension v2.0
  - Jobs v2.0
  - Partial Upload Extension v2.0
- Computational Storage Architecture and Programming Model v0.5 rev 1

**Check them out! - Provide Feedback!**

***Participate in their development!***



# Storage Developer Podcast: Latest Episode



This week's highlighted Podcast:

**#144: Key Value Standardized** by Bill Martin, Samsung.

The NVMe Key Value (NVMe-KV) Command Set has been standardized as one of the new I/O Command Sets that NVMe Supports. Additionally, SNIA has standardized a Key Value API that works with the NVMe Key Value allows access to data on a storage device using a key rather than a block address. The NVMe-KV Command Set provides the key to store a corresponding value on non-volatile media, then retrieves that value from the media by specifying the corresponding key. Key Value allows users to access key-value data without the costly and time-consuming overhead of additional translation tables between keys and logical blocks. This presentation will discuss the benefits of Key Value storage, present the major features of the NVMe-KV Command Set and how it interacts with the NVMe standards, and present open source work that is available to take advantage of Key Value storage.

Learning Objectives: Present the standardization of SNIA KV API, Present the standardization of NVMe Key Value Command Set, Present the benefits of Key Value in computational storage, Present open source work on Key Value Storage.

# Storage Developer Podcast: Upcoming Episodes

- The Future of Accessing Files remotely from Linux: SMB3.1.1 client status update
- Understanding Compute Express Link (CXL): A Cache-coherent Interconnect
- Platform Performance Analysis for I/O-intensive Applications
- End To End Data Placement For Zoned Block Devices
- Enabling Ethernet Drives
- Tiered Storage Deployments with 24G SAS
- Redfish Ecosystem for Storage

# SNIA PERSISTENT MEMORY + SUMMIT 2021 COMPUTATIONAL STORAGE

FROM DATACENTER TO EDGE : VIRTUAL EVENT  
APRIL 21-22, 2021



***Complimentary registration*** is now open at  
<https://www.snia.org/pm-summit>



Storage Developer Conference  
September 28-29, 2021

[illegible]

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# Geek Out on Storage: NVMe over Fabrics



<http://www.snia.org/geekout>

# Important SNIA Links

- <http://www.snia.org/standards/>
- <http://www.snia.org/software/>
- <http://www.snia.org/publicreview/>
  - Draft SNIA Technical Work available for public review
- <http://www.snia.org/feedback/>
  - Public feedback submission form for draft SNIA Technical Work
- <http://www.snia.org/dictionary/>
  - Current SNIA Dictionary
- <http://www.snia.org/library>
  - Educational Library
- <http://www.sniacloud.org>
  - Latest news on SNIA Cloud activities
- <http://www.storagedeveloper.org>
  - SNIA Storage Developer Conference (SDC)
- <http://www.snia.org/podcasts/>
  - SDC Podcasts