Storage Networking Industry Association

Technical Activities Update

June 2020

SNIA Technical News: New SNIA Technical Position

- TLS Specification for Storage Systems v1.1
  - 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.

http://www.snia.org/tls

SNIA

SNIA Technical News: New Public Review DRAFT

- Persistent Memory Performance Test Specification White Paper v0.7.3
  - This draft white paper targets test development professionals working on storage and memory architectures. The current PM PTS v1.0.1 is applicable to both block IO read/write tests as well as byte-addressable, load/store architecture. The specification is also applicable across a variety of PM or storage-class memories (SCM) such as 3D XPoint, NVDIMM, MRAM, ReRAM, and other media. Follow-on White Paper targets will apply the tests to more specific architectures and define new test benchmarks.

http://www.snia.org/publicreview

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SNIA Technical News: New Public Review DRAFT

- SNIA Emerald™ Power Efficiency Measurement Specification v4 draft 3
  - This document describes a standardized method to assess the energy efficiency of commercial storage products in both active and idle states of operation. A taxonomy is defined that classifies storage products in terms of operational profiles and supported features. Test definition and execution rules for measuring the power efficiency of each taxonomy category are described; these include test sequence, test configuration, instrumentation, benchmark driver, IO profiles, measurement interval, and metric stability assessment. Qualitative heuristic tests are defined to verify the existence of several capacity optimization methods. Resulting power efficiency metrics are defined as ratios of idle capacity or active operations during a selected stable measurement interval to the average measured power.

http://www.snia.org/publicreview

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SNIA Technical News: New Public Review DRAFT

- Native NVMe-oF™ Drive Specification v1.0p
  - This document 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.

http://www.snia.org/publicreview

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SNIA Technical News: New Public Review DRAFT

- NVMe to RF/SF Model Mapping
  - This proposal is a snapshot of work in progress by the NVMe Task Force of the SNIA Scalable Storage Management (SSM) TWG, and does not represent the work of the SSM TWG at this point.

http://www.snia.org/publicreview

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SNIA Public Review Drafts

- Persistent Memory Performance Test Specification White Paper v0.7.3
- SNIA Emerald™ Power Efficiency Measurement Specification v4 draft 3
- Native NVMe-oF DriveTM Specification Version 1.0p
- NVMe to RF/SF Model Mapping
- Computational Storage Architecture and Programming Model v0.3 rev 1
- Swordfish Storage Profiles Bundle v1
- Persistent Memory (PM) PTS v1.0 rev 0.02 Preamble
- DRAFT CDMI Extensions and Profiles

Check them out! - Provide Feedback!

Participate in their development!

http://www.snia.org/publicreview

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Storage Developer Podcast: Latest Episode

This week's highlighted Podcast:

#126: Introducing the SNIA Swordfish™ PowerShell Tool Kit and Windows Admin Center Integration by Rob (Barkz) Barker, Technical Director, Pure Storage, Inc. and Chris Lionetti, Reference Architect, HPE

PowerShell is a task-based command-line shell and scripting language that helps rapidly automate tasks that manage operating systems (Linux, macOS, and Windows) and processes. PowerShell is open-source, object-based and includes a rich expression parser and a fully developed scripting language with a gentle learning curve. The PowerShell Toolkit for SNIA Swordfish™ provides simple to use commands for managing any Swordfish Implementation (including the SNIA API Emulator). Attend this session to learn how to use the SNIA Swordfish PowerShell Module to jumpstart development of your own Swordfish implementation.

Learning Objectives:
1. Provide an overview of the PowerShell open source tool kit.
2. Describe how the PowerShell tool kit can speed a Swordfish implementation.
3. Educate the audience on how to use and access the PowerShell tool kit.

http://www.snia.org/podcasts

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Storage Developer Podcast: Upcoming Episodes

- Object Storage Workload Testing Tools
- Surfing the World Wide File: SMB3 improvements for safe and efficient internet access
- So, You Want to Build a Storage Performance Testing Lab?
- SNIA Nonvolatile Memory Programming TWG - Remote Persistent Memory
- Redfish Ecosystem for Storage
- Emerging Scalable Storage Management Functionality
- NVMe based Video and Storage solutions for Edged based Computational Storage
- Best Practices for OpenZFS L2ARC in the Era of NVMe
- Programming emerging storage interfaces

http://www.snia.org/podcasts

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2020 Storage Developer Conference (SDC)

Upcoming SNIA Meetings and Events

- SNIA SDC SMB3 Interoperability Lab
  - September 20-23, 2020; Santa Clara, CA
- Storage Developer Conference
  - September 21-24, 2020; Santa Clara, CA

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Geek Out on Storage Architecture

http://www.snia.org/geekout

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Important SNIA Links

- http://www.snia.org/standards/
- http://www.snia.org/software/
- http://www.snia.org/publicreview/
- http://www.snia.org/feedback/
  - Public feedback submission form for draft SNIA Technical Work
- http://www.snia.org/dictionary/
  - Current SNIA Dictionary
- 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

