

Storage Networking Industry Association (SNIA)

Technical Activities Update

September 2017

➤ SNIA Emerald™ Power Efficiency Measurement Specification v3.0.1

- ◆ 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.

➤ Linear Tape File System (LTFS) v2.4 DRAFT

- ◆ The LTFS Format Specification defines a file system format separate from any implementation on data storage media. Using this format, data is stored in LTFS Volumes. An LTFS Volume holds data files and corresponding metadata to completely describe the directory and file structures stored on the volume.

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

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- Linear Tape File System (LTFS) v2.4
- Storage Management Initiative Specification (SMI-S) v1.8.0r1
- Swordfish Scalable Storage Management API v1.0.4
- Simple IP Based Drive Mockup-4
- IP Based Drive Array Mockup-2
- Persistent Memory Security DRAFT
- CDMI Test Specification v1.0a DRAFT
- CDMI Reference Implementation v1.0e DRAFT
- DRAFT CDMI Extensions and Profiles

Check them out! - Provide Feedback!
Participate in their development!

Storage Developer Podcast: Latest Episode



This week's highlighted Podcast:

#57: SMB3 in Samba – Multi-Channel and Beyond by
Michael Adam, Architect and Manager, Red Hat

The implementation of SMB3 is a broad and important set of topics on the Samba roadmap. After a longer period of preparations, the first and the most generally useful of the advanced SMB3 features has recently arrived in Samba: Multi-Channel. This presentation will explain Samba's implementation of Multi-Channel, especially covering the challenges that had to be solved for integration with Samba's traditional clustering with CTDB, which is invisible to the SMB clients and hence quite different from the clustering built into SMB3. Afterwards an outlook will be given on other areas of active development like persistent file handles, RDMA, and scale-out SMB clustering, reporting on status and challenges.

Storage Developer Podcast: Upcoming Episodes



- NVMe over Fabrics – High Performance Flash moves to Ethernet
- The Data Feedback Loop: Using Big Data to Enhance Data Storage
- Uncovering Distributed Storage System Bugs in Testing (not in Production!)

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

Storage Developer Conference



SNIA's [Storage Developer Conference \(SDC\)](#) is the destination for technical discussions and education on the latest storage technologies and standards. September 11-14, 2017



Created BY developers FOR developers!

This *great* event just ended. Presentation PDFs are now LIVE! Coming soon, video recordings of all breakout sessions.

<http://www.storagedeveloper.org>

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