Storage Management

SDC 20

Log Collection and Analysis
- Log bundling
- Offline failure analysis
- Offline predictive analysis

Configuration
- System settings
- Security configuration
- User administration

Block

File

Connectivity

Object

Diagnostics
- Self-tests
- Error injection
- Active manipulation of features
- Read / set internal structures

Capacity Management
- Disk, volume, file configuration
- Access mapping and management
- Encryption
- Provisioning
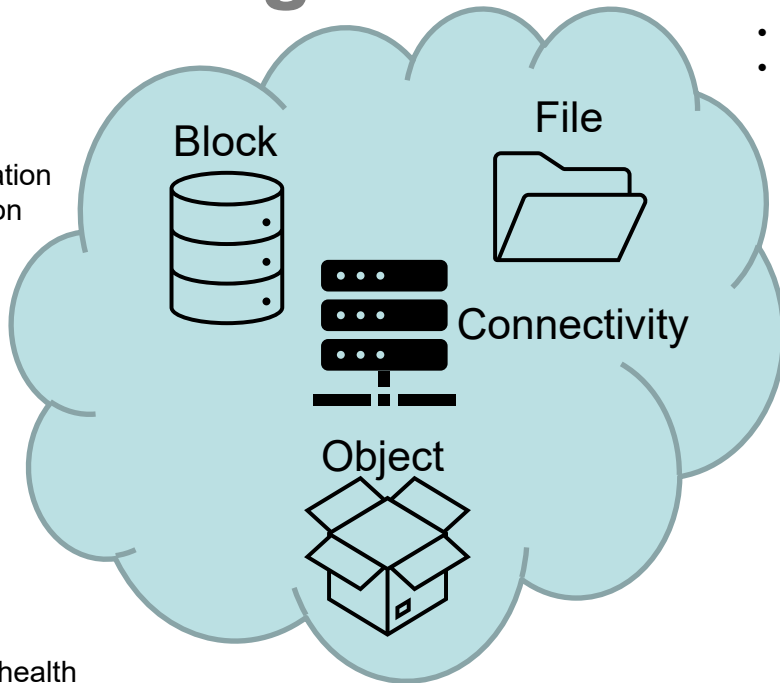
Monitoring
- System state and health
- System settings
- Performance inventory, monitoring and analysis
- Capacity monitoring and trend information / analysis)
- License inventory and compliance
- Security auditing

Event Notification
- Configuration changes
- State change notifications
- Threshold trigger notifications

Overview

- Track Overview and Recommended Order

- Storage Management Standards

- Related Presentations
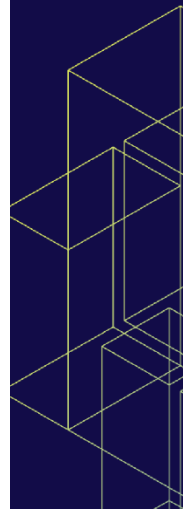
SDC 2020: Storage Management Track

Title	Abstract
Redfish Ecosystem for Storage	This presentation will provide an overview of DMTF's Redfish standard. It will also provide an overview HPE's implementation of Redfish, focusing on their storage implementation and needs. HPE will provide insights into the benefits and challenges of the Redfish Storage model, including areas where functionality added to SNIA™ Swordfish is of interest for future releases.
SNIA Swordfish™ Overview and Deep Dive	If you've heard about the SNIA Swordfish open industry storage management standard specification but are looking for a deeper understanding of its value and functionality, this presentation is for you. The speaker will provide a broad look at Swordfish and describe the RESTful methods and JSON schema variants.
What's New in SNIA Swordfish™	If you haven't caught the new wave in storage management, it's time to dive in and catch up on the latest developments of the SNIA Swordfish™ specification.
NVMe and NVMe-oF Configuration and Manageability with Swordfish	The SNIA Swordfish specification is currently growing to include full NVMe and NVMe-oF enablement and alignment across DMTF, NVMe, and SNIA for NVMe and NVMe-oF use cases. This presentation will provide an overview of the work in progress to map these standards together to ensure NVMe and NVMe-oF environments can be represented entirely in Swordfish and Redfish environments.
Migrating OEM Extensions to Swordfish for Scalable Storage Management	During this presentation, the speaker from Cisco will provide an overview of the company's existing storage management solution using Redfish storage and OEM extensions. The speaker will also discuss Cisco's implementation experience to-date that consists of planning the migration of its OEM storage management Redfish extensions to the standards-based schema in the v1.1.0 SNIA Swordfish specification.
How to Increase Demand for Your Products with the Swordfish Conformance Test Program	New this year, the SNIA Swordfish Conformance Test Program allows manufacturers the ability to test their products with a vendor-neutral test suite to validate conformance to the SNIA Swordfish specification.
Zero to Swordfish Implementation Using Open Source Tools	SNIA's Storage Management Initiative sponsored the initial development of open source software tools that can help developers start working with Swordfish.

Swordfish Info: www.snia.org/swordfish

- ▪ Resources
  - ▪ Specifications
  - ▪ User's Guide
  - ▪ GitHub for Swordfish Tools
  - ▪ Practical Guide
  - ▪ Other Documentation
- ▪ Swordfish Mockups Site
  - ▪ Traditional configs:
  - ▪ Service-based
  - ▪ Block vs file configurations
  - ▪ Small and large configurations
  - ▪ NVMe and NVMe-oF
- ▪ Education/Community
  - ▪ Whitepapers, Presentations
  - ▪ YouTube shorts & Webinars
- ▪ Participate
  - ▪ Join SNIA and the SSM TWG
  - ▪ Implement
- · Conformance Program
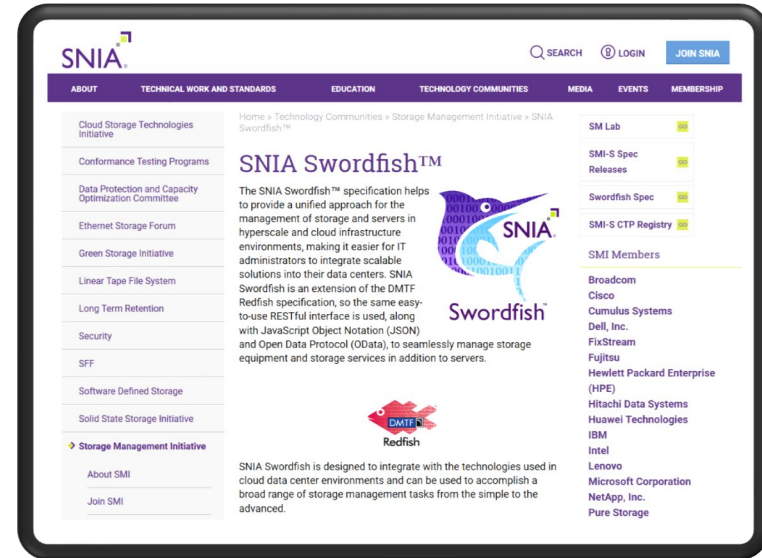
Open Source Tools and Infrastructure Development

- ## Available: http://github.com/snia

  - ### Swordfish Emulator Extensions
    - Extends the Redfish emulator – adds all Swordfish schema (behave like dynamic objects)

  - ### Basic Swordfish Web client
    - Discover, display and edit Swordfish services

  - ### DataDog and Power BMI Client Sample Dashboards
    - Sample implementations show integration concepts with sample code:
    - PowerBI: Point-in-time dashboard; Datadog: Data trending dashboard

  - ### Swordfish Powershell Toolkit
    - Powershell toolkit integration for Windows and Linux

Thank you for watching

- ## SNIA Swordfish™ Standards
  - Schemas, Specs, Mockups, Users Guide, Practical Guide & more
    https://www.snia.org/swordfish

- ## Redfish / Swordfish Specification Forum
  - This is where you can ask and answer questions about Redfish and Swordfish
  - http://swordfishforum.com/

- ## Scalable Storage Management (SSM) TWG
  - Technical Work Group that defines Swordfish
  - Influence the next generation of the Swordfish standard
  - Join SNIA and participate: https://www.snia.org/member_com/join-SNIA

- ## Join the SNIA Storage Management Initiative
  - Unifies the storage industry to develop and standardize interoperable storage management technologies
  - https://www.snia.org/forums/smi/about/join

Related Presentations:

- Storage management standards incorporated into orchestration:
  - Orchestration track:
  - **SODA - One Data Framework, Infinite Possibilities**
  - **Predictive analysis of storage health and performance for heterogeneous environment**
  - **Resilient Workflow Automation in a Hybrid Cloud environment**
- For more NVMe and NVMe-oF content, check out the NVMe and NVMe-oF tracks
  - NVMe: **NVMe 2.0 Specification Preview**

Maximize your SDC 2020 Experience

- Participate in our online chat for this track
- Check out the Birds of a Feather (BoF) sessions
  - o Meet the Experts and Speed your SNIA Swordfish™ Implementation of NVMe™ and NVMe-oF™ - Sharpen Your Sword to Hone Your Edge in Storage Management
  - o 4:00 – 5:00 pm, Tuesday, September 22
- Please be sure you rate each session you watch – you'll see a box under the video
- For additional details see the *Introduction to Virtual SDC* video (https://www.snia.org/SDCintro)
- ***Enjoy the SDC 2020 virtual event!***