SNIA®

# SNIA Introduction

# Experts on Data.

# What

SNIA

# Developing and Promoting Storage Standards

SNIA creates and maintains industry standards, best practices, and technical specifications for data storage, ensuring interoperability and efficiency across different storage technologies.

An industry organization that focuses on technologies related to handling and optimizing data

# 2 Education and Advocacy

SNIA provides educational resources to professionals in the storage industry, while also advocating for advancements in storage architecture, cloud storage, and emerging technologies.



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# The Evolution of SNIA

- Founded 25 years ago with a focus on Storage Networking
- Evolved from Storage Networking to Storage
- DATA is now front and center
- Vision and mission reflects SNIA's expertise and technical work to:
  - Accelerate data
  - Format data
  - Transport data
  - Store data
  - Protect data
  - Optimize infrastructure for data





# The SNIA Community



200 industry leading organizations 2,000 active contributing members 50,000 IT end users & storage pros worldwide



# SNIA's Vision and Mission Reflect a Data-Centric Focus

## Vision:

 Be the global experts and trusted authority for technologies related to handling and optimizing data.

### Mission:

 Develop and promote architectures, standards, and education through vendor-neutral collaboration of experts on data technologies that lead the industry worldwide.



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# Data-Centric Focus Areas

"How we consume, process, and protect data is intricate and involved. SNIA is at the core of the entire IT ecosystem, helping the world advance and standardize both established and emerging technologies to facilitate and improve all technologies related to data."

- Dr. J Metz,

Chair, SNIA Board of Directors



# Data-Centric Focus Area: Accelerate



# Accelerate: Move processing to the data.

Accelerate Data: Technologies that move processing closer to the data, enabling improvements in application performance and/or infrastructure efficiency through the integration of compute resources (outside of the traditional compute & memory architecture) either directly with storage or between the host and the storage.

- Areas of Interest:
- Data Accelerator (SDXI)
- Computational Storage
- o DPU



# Data-Centric Focus Area: Protect



### Protect: Secure and protect data.

**Security** is concerned with securing data storage systems and ecosystems and the data that resides on these systems. Storage security represents the convergence of the storage, networking, and security disciplines, technologies, and methodologies for the purpose of protecting and securing digital assets.

**Data protection** is the process of safeguarding important data from corruption, compromise or loss and providing the capability to restore the data to a functional state should something happen to render the data inaccessible or unusable.

#### **Areas of Interest:**

- Storage Security
- TLS for Storage Systems
- Encryption and Key Management
- Sanitization
- Privacy
- Storage Management Security
- Fibre Channel Security

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# Data-Centric Focus Area: Optimize Infrastructure

ک Optimize Infrastructure for Data

# **Optimize Infrastructure: Optimize how data environments are configured and managed.**

**Optimize Infrastructure** for configuration, management, and monitoring of data environments to reduce the consumption of space, power, and other resources required.

### **Areas of Interest**

### Storage Management

- SNIA Swordfish<sup>™</sup>
- iSCSI Management
- SMI-S
- IP Based Drive & Management

#### **Green Storage**

- SNIA Emerald<sup>™</sup>
- Power Efficiency
- Containers

### Performance

- Real World Storage Workload
- IO Capture and Test
- **Green Storage**

ΙοΤ

# Software Defined Storage



# Data-Centric Focus Area: Store

Store Data

# Store: Representation of data on storage media.

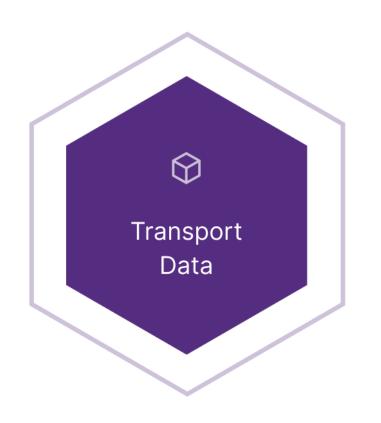
**Data Storage** is a function that records data and supports retrieval, enabling technologies for the storage of data and supporting representation of data on various types of storage media.

#### Areas of Interest:

- Non-Volatile Memory
- Zoned Storage
- Cloud / Hyperscaler Storage
- Key Value
- DNA Data Storage
- Persistent Memory
- Serial Attached SCSI
- Automotive



# Data-Centric Focus Area: Transport



### Transport: Move data between physical locations.

Data Transport is concerned with the specification of mechanisms and technologies that define how data can be moved between physical locations, such as via connectors, cables, transceivers, and protocols.

### Areas of Interest:

- Physical Connections and Transceiver Standards
  - SFF and EDSFF
- Native NVMe-oF<sup>™</sup>
- Memory Fabrics
  - CXL®
- Networked Storage Technologies
  - FC, iSCSI, SMB3
- Serial Attached SCSI



# Data-Centric Focus Area: Format



Format: Different formats to access stored data.

- Data Formats cover different formats for the format and structure of data, together with its associated metadata.
- Areas of Interest:
  - Linear Tape Format Specification (LTFS)
  - Filesystems
  - Cloud Data Management Interface / Reference Implementation
  - ✤ SIRF
  - DDF common RAID Disk Data Format

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# Industry Partnerships

### **Industry Alliances**



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# SNIA's Global Events



### SNIA Developer Conference (SDC)

 SDC is focused on providing storage developers a forum for technical discussions and education on the latest technologies and standards.

### Plugfests

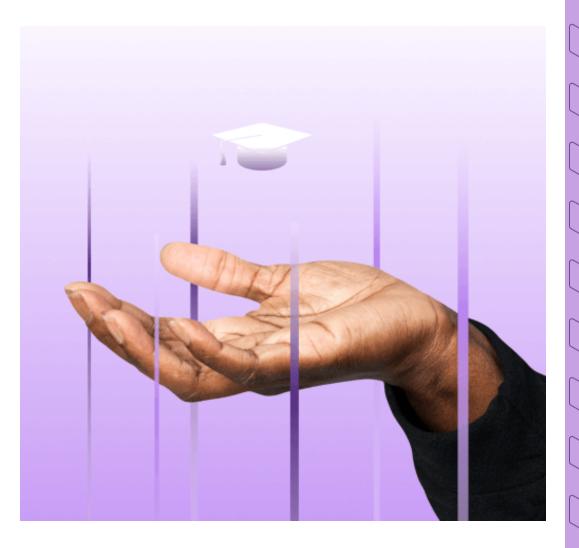
## Learn More at SNIA Events



**SNIA**<sup>°</sup>

# Education

- Education through vendor-neutral collaboration of experts on data that lead the industry worldwide.
- Technical <u>white papers</u> and industry advisories
- Educational Library with over 3,200 content assets
- Peer-reviewed dictionary with over 2,000 IT definitions
- Over 1,800 webinars and <u>videos</u>
- <u>Blogs</u>, <u>articles</u>, <u>podcasts</u> and <u>infographics</u> on industry trends, initiatives and technologies
- Global events for technical education, training, and development





# The Value of Participation

### Influence the Industry

 Drive and impact new technologies related to handling and optimizing data

### **Collaborate Across Boundaries**

 An ecosystem of sharing, knowledge transfer and technology advancement

### **Demonstrate Leadership**

 Lead technology trends and adapt to shifts in the ever-changing industry





# Engage with SNIA

## **Discover SNIA**

- About SNIA
- Education
- Infographics
- Interviews with SNIA Experts
- News & Events
- Membership
- Technical Work
- Alliances

## <u>SNIA Media</u>

- Blogs
- Podcasts
- Videos
- Webinars







# Thank You

