

# Experts on Data



## What is SNIA?







- An industry organization that focuses on technologies related to handling and optimizing data
- A collaboration of experts on data that
  - Develops global standards
  - Delivers vendor-neutral education

# The SNIA Community







200
Corporations,
universities, startups,
and individuals

2,500
Active contributing members

50,000
Worldwide
IT end users and professionals



## **Data-Centric Focus Areas**





## 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.

- Data Accelerator (SDXI)
- Computational Storage
- 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.

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



# Data-Centric Focus Area: Optimize Infrastructure



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™
- iSCSI Management
- SMI-S
- IP Based Drive & Management

#### Green Storage

- SNIA Emerald™
- Power Efficiency

Containers

#### Performance

- Real World Storage Workload
- IO Capture and Test

loT

Software Defined Storage



## Data-Centric Focus Area: Store



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.

- 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.

- Physical Connections and Transceiver Standards
  - SFF and EDSFF
- Native NVMe-oF™
- Memory Fabrics
  - CXL<sup>®</sup>
- 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.

- Linear Tape Format Specification (LTFS)
- Filesystems
- Cloud Data Management Interface / Reference Implementation
- SIRF
- DDF common RAID Disk Data Format



# Strong Industry Partnerships

#### **Industry Alliances**















#### **Collaboration Partners**























## **Marketing and Education Partners**















## SNIA's Global Events



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



Solutions, Architectures, and Community

The Summit is focused on compute, memory, security, and storage architectures, solutions, and community building.

**Learn More at SNIA Events** 



## 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 <u>webinars</u> and <u>videos</u>
- Blogs, <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 everchanging industry



# Engage with SNIA

## Discover SNIA

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

## **SNIA** Media

- Blogs
- Podcasts
- Videos
- Webinars

## **SNIA International**

- SNIA India
- SNIA Japan













# **Thank You**

