



Welcome to the

Storage Networking Industry Association
(SNIA) Annual Members Symposium
and
Persistent Memory Summit

Welcome



Rob Peglar

Director, SNIA Board of Directors

President, Advanced Computation and Storage LLC

SNIA-at-a-Glance



170
industry leading
organizations



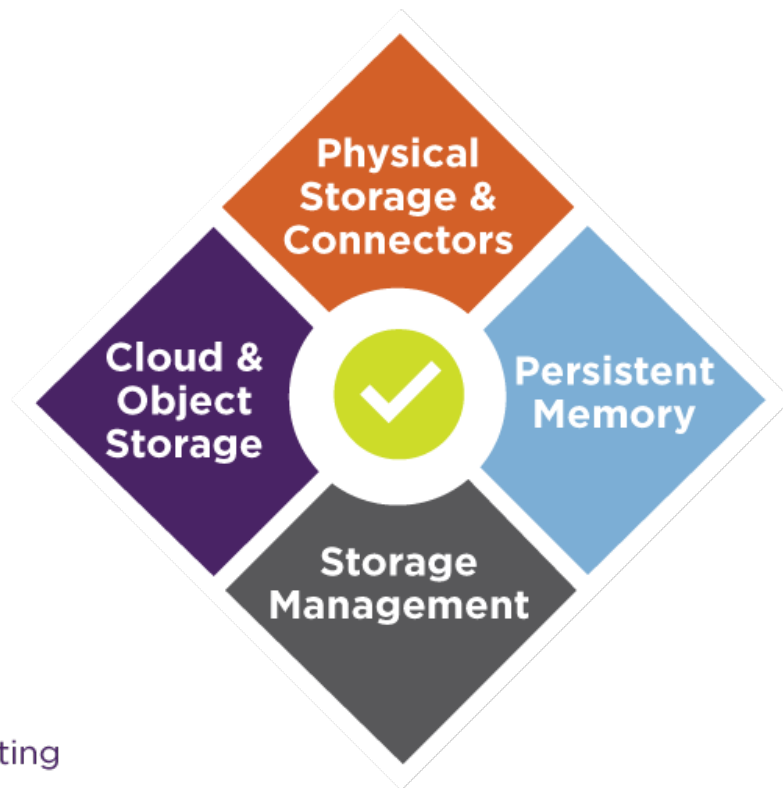
2,500
active contributing
members



50,000
IT end users & storage
pros worldwide

20+ YEARS of Standards Development

- ✓ ISO & ANSI Standards
- ✓ Storage Standards
- ✓ Best Practices & Security
- ✓ Interoperability & Conformance Testing

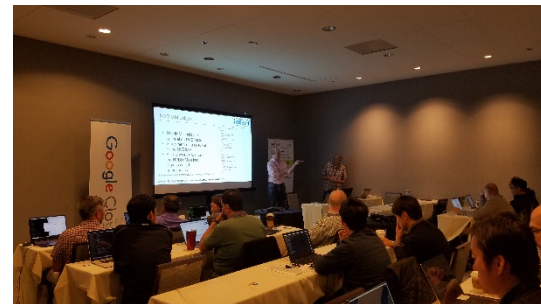




Opening Remarks – What We Are Going to Accomplish Today

Yesterday and Tomorrow

- Welcome to all – on behalf of the SNIA
- Yesterday – a very successful Hackathon! (thanks Google Cloud!)
 - ◆ 25 Developers gained a better understanding of PM
 - ◆ Exposure of the SNIA NVM Programming Model
 - ◆ Tiers of memory, modes of access, the impact of persistence
- Tomorrow – a day to think and reflect on today
 - ◆ Oh, and the SNIA Board meeting 😊
 - ◆ A day to use social media and tell others what you learned



- The SNIA established new efforts – NVM Programming TWG, NVDIMM SIG – to optimize application/system usage of PM and accelerate adoption of JEDEC standards for PM.
 - In at least two cases, we know that next-generation PM is either generally available or sampling to application and system developers.
 - There is a significant increase seen in new application vendors requesting enabling in application development.

All indicators suggest native PM platforms are imminent!

Remote Persistent Memory

- Remote Persistent Memory (RPM) allows the programming model to extend beyond a single node, to within a datacenter (or between datacenters) scalability.
 - RPM is the basis for a relationship between Open Fabrics Alliance (OFA) and SNIA.
 - The first use case (High Availability) defined and spec in progress
 - New usage models are in the queue...
 - Example, pooled PM and memory-centric architectures

Today – Persistently Fun

➤ A metric boatload of great presentations/sessions awaits!

- ◆ PM Characteristics
- ◆ The SNIA NVM Programming Model and its Impact
- ◆ Enabling PM via Operating Systems
- ◆ Enabling PM in Java
- ◆ Cloud-native Apache Spark w/PM
- ◆ Existing/New Uses for NVDIMMs (-N, -P)
- ◆ PM and In-Memory Databases
- ◆ New Interconnects for PM
- ◆ PM Performance Benchmarking/Comparisons
- ◆ Remote PM
- ◆ PM Media Types
- ◆ The Analyst View of PM
- ◆ Recap
- ◆ Beer o’Clock

Thanks To Our Sponsors

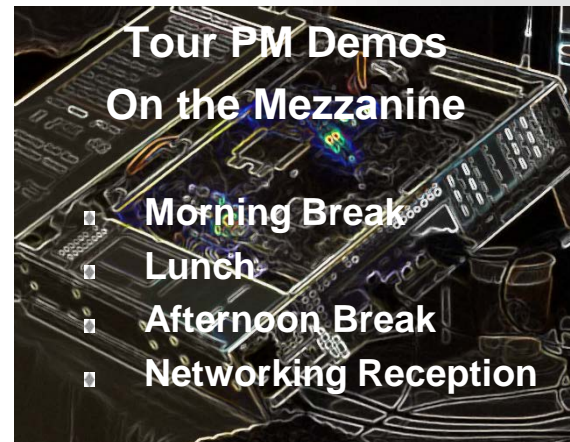
Underwriters



Demonstration



Google Cloud



Summit Morning Agenda

8:30 am – 8:40 am	Welcome and What Are We Going to Accomplish Today
8:40 am – 9:10 am	Keynote:
9:10 am – 9:15 am	<i>Symposium Attendees Leave for Sessions</i>
9:15 am – 9:40 am	Characteristics of Persistent Memory: Performance, Capacity, Persistence – Which Ones?
9:40 am – 10:05 am	Impact on Application Development: SNIA NVM Programming Model in the Real World
10:05 am – 10:30 am	Enabling Persistent Memory Through the Operating System
10:30 am – 10:45 am	<i>Break and Exhibits</i>
10:45 am – 11:10 am	Enabling Persistent Memory Use in Java
11:10 am – 12:00 pm	Elastify Cloud-native Spark Application with Persistent Memory
12:00 pm – 1:00 pm	<i>Lunch and Exhibits</i>

Summit Afternoon Agenda

1:00 pm – 1:25 pm	What You Can Do with NVDIMM-N and NVDIMM-P
1:25 pm – 1:50 pm	The Mission Critical, Fundamental Architecture for Numerous In-memory Databases
1:50 pm – 2:20 pm	New Interconnects
2:20 pm – 3:00 pm	Persistent Memory Performance Benchmarking and Comparison
3:00 pm - 3:15 pm	Coffee, Networking, and Demo Tour Break on the Mezzanine
3:15 pm – 3:35 pm	Making Remote Memory Persistent
3:35 pm – 4:15 pm	Persistent Memory Media
4:15 pm – 4:55 pm	Analysts Weigh In on Persistent Memory
4:55 pm – 5:10 pm	Recap of Day and Closing Remarks
Until 6:30 pm	Networking Reception and Demonstrations on the Mezzanine

Enjoy the Day and Socialize the Summit!

- ◆ Encourage your colleagues to live stream the Summit from the SNIA home page www.snia.org
- ◆ And you can watch on-demand after the event:
 - ◆ www.youtube.com/SNIAVideo
- ◆ Ask a question during the Summit:
 - ◆ Tweet your question using #SNIAPM and we will do our best to address your question during the session
- ◆ Spread the word about the Summit!
 - ◆ Tweet mentioning @SNIA
 - ◆ Join our LinkedIn group – Storage Networking Industry Association