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
Standards Development

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
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

Google Cloud

Demonstration

Tour PM Demos
On the Mezzanine

Morning Break
Lunch
Afternoon Break
Networking Reception
<table>
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>8:30 am – 8:40 am</td>
<td><strong>Welcome and What Are We Going to Accomplish Today</strong></td>
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<tr>
<td>8:40 am – 9:10 am</td>
<td><strong>Keynote:</strong></td>
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<td>9:10 am – 9:15 am</td>
<td><strong>Symposium Attendees Leave for Sessions</strong></td>
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<td>9:15 am – 9:40 am</td>
<td><strong>Characteristics of Persistent Memory: Performance, Capacity, Persistence – Which Ones?</strong></td>
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<td>9:40 am – 10:05 am</td>
<td><strong>Impact on Application Development: SNIA NVM Programming Model in the Real World</strong></td>
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<td>10:05 am – 10:30 am</td>
<td><strong>Enabling Persistent Memory Through the Operating System</strong></td>
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<td>10:30 am – 10:45 am</td>
<td><strong>Break and Exhibits</strong></td>
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<td>10:45 am – 11:10 am</td>
<td><strong>Enabling Persistent Memory Use in Java</strong></td>
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<td>11:10 am – 12:00 pm</td>
<td><strong>Elastify Cloud-native Spark Application with Persistent Memory</strong></td>
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<tr>
<td>12:00 pm – 1:00 pm</td>
<td><strong>Lunch and Exhibits</strong></td>
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<tr>
<td>1:00 pm – 1:25 pm</td>
<td><strong>What You Can Do with NVDIMM-N and NVDIMM-P</strong></td>
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<td>1:25 pm – 1:50 pm</td>
<td><strong>The Mission Critical, Fundamental Architecture for Numerous In-memory Databases</strong></td>
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<td>1:50 pm – 2:20 pm</td>
<td><strong>New Interconnects</strong></td>
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<td>2:20 pm – 3:00 pm</td>
<td><strong>Persistent Memory Performance Benchmarking and Comparison</strong></td>
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<td>3:00 pm - 3:15 pm</td>
<td><strong>Coffee, Networking, and Demo Tour Break on the Mezzanine</strong></td>
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<td>3:15 pm – 3:35 pm</td>
<td><strong>Making Remote Memory Persistent</strong></td>
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<td>3:35 pm – 4:15 pm</td>
<td><strong>Persistent Memory Media</strong></td>
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<td>4:15 pm – 4:55 pm</td>
<td><strong>Analysts Weigh In on Persistent Memory</strong></td>
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<td>4:55 pm – 5:10 pm</td>
<td><strong>Recap of Day and Closing Remarks</strong></td>
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<td>Until 6:30 pm</td>
<td><strong>Networking Reception and Demonstrations on the Mezzanine</strong></td>
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Enjoy the Day and Socialize the Summit!

- Encourage your colleagues to live stream the Summit from the SNIA home page [www.snia.org](http://www.snia.org)
- And you can watch on-demand after the event: [www.youtube.com/SNIAVideo](http://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