Non-Volatile Memory SUMMIT

The Future of Computing: The Convergence of Memory and Storage through Non-Volatile Memory (NVM)

NVM SUMMIT AGENDA • JANUARY 29, 2013

Time	Session
8:15	**Welcome and Opening Comments** Wayne Adams, Chairman, SNIA Board of Directors
8:30	**The Storage Industry Landscape: Constable or Pollock?** Mark Peters, Senior Analyst, Enterprise Strategy Group, Inc.
9:15	**What Are the Problems We're Trying to Solve? What Are We Trying to Do Here?** Andy Rudoff, Senior Software Engineer, Intel
9:55	**Linux and NVM: File and Storage System Challenges** Ric Wheeler, Manager, Software Engineering, Red Hat
10:35	Coffee and Networking Break
10:50	**Killer Apps that Benefit from the New Architecture** Garret Swart, Database Architect, Oracle
11:30	**Multi-Tier Subsystem Management Using SLOs** Kaladhar Voruganti, Technical Director, Office of the CTO, NetApp
12:10 - 1:00	Lunch and Presentation **What's Happening Out There and Where's the Mojo in NVM...?** Robin Harris, Founder, Principal and Publisher, Analyst, TechnoQWAN and StorageMojo
1:00	**Design Considerations When Implementing NVM** Jim Pinkerton, Partner Architect, Microsoft
1:40	**Industry Analyst Perspective: Our Growing Digital Universe, the Impact on Enterprise Storage, and the Role Solid State is Playing in the Future** Jeff Janukowicz, Research Director, IDC
2:20	**Evolving Solid State Storage** Bob Beauchamp, Distinguished Engineer and Director Hardware Technology and Architecture, EMC Corporation
3:00	**NVM Technology Manufacturers - What Can/Can't be Done and What's Nice to Have in the New Stack** Steven Peters, Principal Engineer, LSI
3:40	Coffee and Networking Break
3:55	**NVM Software Interfaces – New Directions for Storage** Walt Hubis, Storage Standards Architect, FusionIO
4:30	**The Future of Computing with NVM Inflection Point** David Alan Grier, President, The Computer Society
5:00 - 5:30	**Wrap-Up -- Where Does The Industry, SNIA and the NVM Technical Work Group Go From Here...?** Wayne Adams, Chairman, SNIA Board of Directors and Jim Pappas, Member, SNIA Board of Directors

SNIA™

Non-Volatile Memory Summit Speaker Introductions

MASTERS OF CEREMONIES, WRAP-UP SPEAKERS AND CO-HOSTS

Wayne M. Adams
Chairman, SNIA Board of Directors
Senior Technologist, Office of the CTO, EMC Corporation

Jim Pappas
Member, SNIA Board of Directors
Director of Technology Initiatives, Data Center Group, Intel

Mark Peters
Senior Analyst, Enterprise Strategy
At ESG, Mark is focused on storage systems with areas of emphasis in block storage, virtualized storage, all types of solid-state storage, and the challenges of power, cooling, and space efficiency in data centers. Mark has 25+ years of data storage industry experience and has held senior management roles in sales, marketing, product management, business development and customer intimacy.

Andy Rudoff
Senior Software Engineer, Intel
Andy Rudoff is fast approaching 30 years of Operating Systems Internals and Storage experience. His background includes numerous start-up companies as well as larger companies such as Sun Microsystems and VMware. At Intel, Andy is responsible for Non-Volatile Memory software architecture for Enterprise and Datacenter applications.

Ric Wheeler
Manager, Software Engineering, Red Hat
Ric Wheeler works at Red Hat as the manager and architect of the file system team. He has extensive experience in storage and file systems after spending ten years at EMC in its Symmetrix and Centera groups, four years at The Open Group's Research Institute, and four years at Thinking Machines, where he worked on the CM5 operating system.

Garret Swart
Database Architect, Oracle
Garret has been working in the storage industry for 25+ years. Currently at Oracle, Garret is working on Database, Cloud and Search products. He also serves as a Technology Advisor to TripSketch Corporation

Kaladhar Voruganti
Technical Director, Office of the CTO, NetApp
As a technical director at NetApp, Kaladhar leads engineers company wide on how to manage next generation storage systems and is res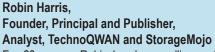ponsible for understanding technology trends, customer problems and competitor actions. He is currently managing cloud based systems, non-volatile memory based systems, DAS based analytic systems, and server based virtualized systems.

Robin Harris,
Founder, Principal and Publisher,
Analyst, TechnoQWAN and StorageMojo
For 20+ years, Robin has been selling and marketing data storage in both large companies and small. In addition to this consulting and analyst work, Robin also writes the respected industry blog StorageMojo and the popular ZDnet blog Storage Bits.

Jim Pinkerton
Partner Architect, Microsoft
Jim Pinkerton is currently an architect in the File System Team (FST) within the Windows Server Division of Microsoft. He has worked on advanced scale-out file servers and the "Windows 8" continuous availability pillar. As part of that work, he helped lead the creation of a next generation file access protocol (SMB3).

Jeff Janukowicz
Research Director, IDC
At IDC, Jeff provides insight and analysis on the SSD and Solid State Storage markets. In this role, Jeff provides expert opinion, in-depth market research, and strategic analysis on the dynamics, trends, and opportunities facing the industry. His research includes market forecasts, market share reports, and technology trends for clients, investors, suppliers, and manufacturers.

Bob Beauchamp
Distinguished Engineer and Director Hardware Technology and Architecture, EMC Corporation
At EMC, Bob championed the introduction of SATA disks, advocated for the use of flash solid-state storage devices, and led the hardware development of the first SAS product. His focus of late has been on flash technology and its potential successors.

Steven Peters
Principal Engineer, LSI
Steven has worked in the storage industry for 25+ years and is currently working in Storage Management Software Architecture and the Flash Storage Division at LSI. He is also one of the original authors of the SMI-S standard. and remains very involved with SNIA's Storage Management Initiative.

Walt Hubis
Storage Standards Architect, FusionIO
At FusionIO, Walt has the responsibility for defining industry standards for solid state storage products and solutions. Walt has 25+ years of experience, has authored several key patents in RAID and other storage related technologies.

David Alan Grier
President, The Computer Society
At the Computer Society, David has spent much of the past decade helping the Society develop new electronic products, writing and editing. He also works as an associate professor of science and technology policy at George Washington University with a particular interest in policy regarding digital technology and professional societies.