Leading the Future of Flash with NVMe and SCM

Modernize to a Faster Future Without Disruption

Kumar Prabhat, Product Manager, NetApp
Disclaimer

The information is intended to outline our general product direction. It is intended for information purposes only and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality and should not be relied in making purchasing decisions.

NetApp makes no warranties, expressed or implied, about future functionality and timeline. The development, release, and timing of any features or functionality described for NetApp’s products remain at the sole discretion of NetApp. NetApp's strategy and possible future developments, products, and/or platform directions and functionality are all subject to change without notice. NetApp has no obligation to pursue any course of business outlined in this document or any related presentation or to develop or release any functionality mentioned therein.
Flash is essential for digital transformation, but emerging applications demand more.
Real-Time Applications: The Next Phase of Digital Transformation

In-Memory Technologies Will Grow to ~$13B by 2020*

Artificial Intelligence  Machine Learning  Real-Time Analytics

All demand lower latency and higher performance from faster fabrics and faster media

Focus on the Future of Solid-State Media

- SSD
- HDD
- Hybrid Flash
- QLC and/or Consumer SSD
- Persistent Memory
- SCAM
- DRAM

Capacity Flash

Leading in All Flash
Comprehensive NVMe Vision: End-to-End and Nondisruptive

Driving Real Value Out of New Technologies Requires Significant Investment on Multiple Fronts from a Market Leader

Vision: unreleased product plans are subject to change
Deployment Options for Storage-Class Memory/Persistent Memory

Vision: unreleased product plans are subject to change

- Server
- CPU
- Persistent Memory (PMEM)

- Storage
- CPU
- Storage-Class Memory (SCM) as Cache
Deployment Options for Storage-Class Memory/Persistent Memory

Vision: unreleased product plans are subject to change
NetApp

Memory Accelerated Data

Enterprise-Grade Data Management for
Ultra-low-Latency Persistent Memory

Unreleased product plans are subject to change

© 2018 NetApp, Inc. All rights reserved. --- NETAPP CONFIDENTIAL
Time for a new approach...
NetApp Memory Accelerated Data

Drastically accelerate traditional and in-memory and NoSQL databases
• Ultra Low Latency (< 10µs)

Built for emerging applications
• A.I., Machine Learning, High-Frequency Transaction Processing

Integrated data management and automated tiering to AFF
• Fast Application Data Recovery
Random 4KB write / Multi threaded FIO benchmark
NetApp innovation will accelerate customer adoption of flash, NVMe, and SCM data management solutions