

RESEARCH

Consistently Reduced Latency is Everything in Advanced Analytics



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Ben McElroy – GResearch Eric Stouffer – VP Distributed Storage IBM Andy Walls – IBM Fellow, CTO Flash, IBM



- Memory Summit
 We apply scientific techniques to find patterns in large, noisy and real-world data sets,
 - using latest statistical and "big data" analysis methodologies to predict global financial markets.
 - We deliver a complex infrastructure that stores and processes huge amounts of data on a daily basis.
- Use lots of databases including SQL
- Low and Consistent Latency is Everything



Storage Requirements

- Shared Storage
- Very low latency
- Consistent performance _

Enables more analysis

 \rightarrow Flash Storage is now key



IBM Flash Storage

IBM FlashSystem 900

- Low Function Tier 0 Storage
- Very low and Consistent
 performance
- Custom Flash Controller with advanced IP
 - Endurance
 - Performance and Latency
- Enterprise RAID 5, RAS, Concurrent Code Load and repair
- Building block for other Tier 1 storage



Flash Memory Summit 2017 Santa Clara, CA

IBM FlashSystem V9000

- Full Function Tier 1 Storage Stack based on IBM Spectrum Virtualize
- Scales up or out
- Uses FS900 as Flash storage
- Can be AFA or Hybrid with tiering

- Very low latency to 900
- Has Compression

IBM FlashSystem A9000

- Full Function Tier 1 Storage Stack based on IBM Spectrum Accelerate
- Grid Scale out with no hot spots
- Pod and Rack configs
- Uses FS900 as flash storage
- AFA only
- Full flash optimized Dedupe
 and compression











Mutual Benefit - IBM Flash and GResearch

Questions?