

SFD10

Nimble Storage

*Gavin Cohen, Head of product Marketing - <https://www.linkedin.com/in/gavincohen>

99.9997% - measured at less than 8 seconds a month

InfoSight

SPoF

Triple+ Parity RAID

- tolerates 3 simultaneous SSD failures per RAID group

- “+” - intra-drive parity in every SSD

- integrated hot spare

- rapid RAID rebuild

SSDs have a lower entire drive failure rate than disk drives, BUT higher partial failure (uncorrectable error) rate than disk drives

*Tom McKnight, VP Hardware Engineering

Demo on component resilience

6 drives, PSU and controller failure

*Gavin Cohen

Predictive Flash Platform

InfoSight + Unified Flash Fabric

single architecture for all flash and adaptive flash

100% flash - absolute speed for performance sensitive apps

adaptive (up to 100% flash) - optimised price/perf for mixed mainstream apps

transparent app migration across adaptive and all-flash arrays

replicate to cost-optimised secondary storage

*Stephan Joe

Demo on MS Exchange Live Migration

*Gavin

Designed to be generationally more advanced than other AFAs

Announced Feb 23

FCS Mid-March

55 Customers, 12% Q1 Array revenue, 64% unified deployments

Scale-to-fit: flexible and non-disruptive scalability

scale performance within an array - non-disruptively

Single array - 2PB “effective capacity”, 300K IOPS

Scale-out cluster - 8.2PB effective, 1.2M IOPS

unconstrained by memory

- reduced cost of controller
- more flash capacity/controller
- fewer controllers needed

Requires 10-30x less memory than competition

Designed for cost-optimised 3D-NAND

- advanced flash endurance management
- large-scale coalescing
- integrated hot-sparing
- seven year SSD lifespan
- increased performance
- 20% more usable capacity

Comprehensive data reduction

- variable block deduplication
- variable block compression
- zero pattern elimination
- plus more from thin provisioning

5x or more data reduction

Replication - Protect at a third of the cost

- WAN efficient SmartReplicate

Application consistent backups

- protect frequently
- recover rapidly from online backups

Backup, DR and archival

- DR down to 5 minute RPO
- retain for months cost-effectively
- easy test/dev with cloning

Absolute Resiliency

- non-stop availability
- Triple+ Parity RAID - 3 simultaneous drive failures plus intra-drive protection and integrated sparing
- integrated data protection - backup more frequently and recover faster with application consistent SmartSnap and SmartReplicate
- SmartSecure Encryption - application-granular encryption and secure data shredding

*Rod Bagg, VP Analytics and Customer Support
InfoSight Introduction

causes of app-data gap

- storage related
- configuration issues
- non-storage best practices
- interoperability issues
- host, compute, VM, etc

Closing the app-data gap

- SSD - Fast flash is not enough

You need predictive analytics

Every week InfoSight analyses more than a trillion data points

Makes Infrastructure Transparent

- proactively informs and guides without alarm fatigue
- predicts future needs and simplifies planing
- delivers transformed support experience from level 3 experts

9/10 issues detected before you do

“If we know about an issue, it shouldn’t happen to you”

Traditional L3 Support vs Nimble (pick up the phone, dial 1-877-364-6253, get L3 support)

Average hold time is <1 minute

*Stephan - wrapping up Exchange demo with replication setup

*Rochna Dhand - Director, product management

Vvols support from v3.x

*David Adamson, Principal Data Scientist, InfoSight Operations

InfoSight Labs

Capacity Trending

- replication timeline
- top consumers
- block size profile for volume(s)

dispelling the myths of real world block size