Why Does a Major Broadcasting Network In The Middle East Choose Flash For Their Workflow?

Presented by:

Stephanie Brewer

DDN Customer Advocacy Program Manager

Kurt Kuckein

DDN Director of Product Management

Santa Clara, CA
August 2016

cFlash

eFlash

Top Challenges for Enterprise At-Scale, Big Data and HPC Environments

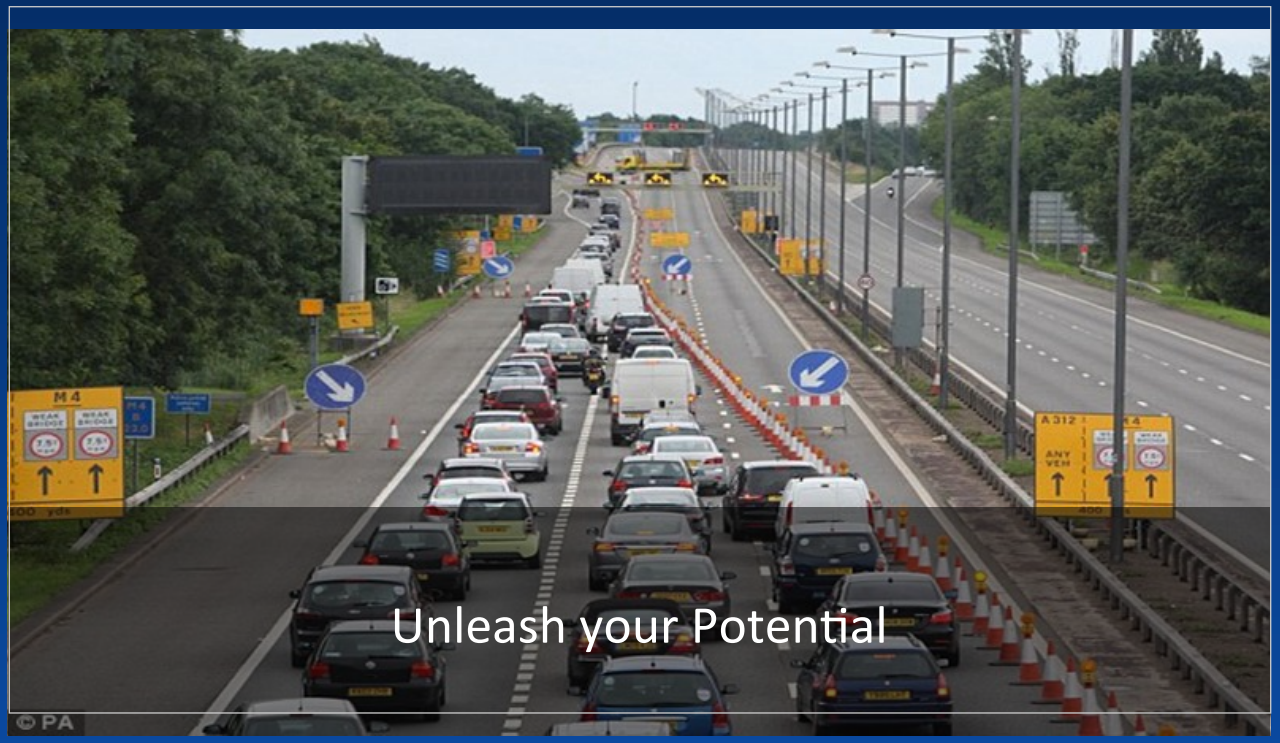
Biggest challenges today?

Identifying and removing I/O bottlenecks

Traditional flash arrays come up short:

- Workflows only as fast as the slowest moving part
- Spinning disk drives are outdated & used for capacity rather than response time

Flash Memory SUMMIT



Unleash your Potential

Top Challenges for Enterprise At-Scale, Big Data and HPC Environments

Customers need:

- Advanced analytics, modeling and simulation applications
- Low cost applications software license
- Reduce latency of infrastructure
- Maximize CPU work on the computes
- Massively scalable, high performance, technical infrastructure
- Support demanding requirements and increasing time to results

What are the Flash hungry applications?

Telecom	Financial	O&G	Retail	Public
Billing CRM	EoD Batch CRM Analytics DWH	ERP SCM BI Seismic	Reporting Warehouse	Analytics Healthcare Genome Cyber Security
VDI – Currency Exchange platforms, e-trading, Online reservations				
Databases (ERP, CRM, SCM Analytics, …)				
Big Data (Hadoop , Spark)				

Challenges For Middle East Broadcast Company

- **Enterprise Cyber Security project** - include compute power, storage and network infrastructure
- **Information Security Infrastructure** - function with optimum security, reliability & performance
- **VMware Integration**
- **Comply** - new ME cyber security laws

DDN Big Data Storage Solution for IBM Qradar Security Intelligence Software

SAN A

- 242 x 1.6TB Read Intensive SSD 12GB/s 4Kn

SAN B

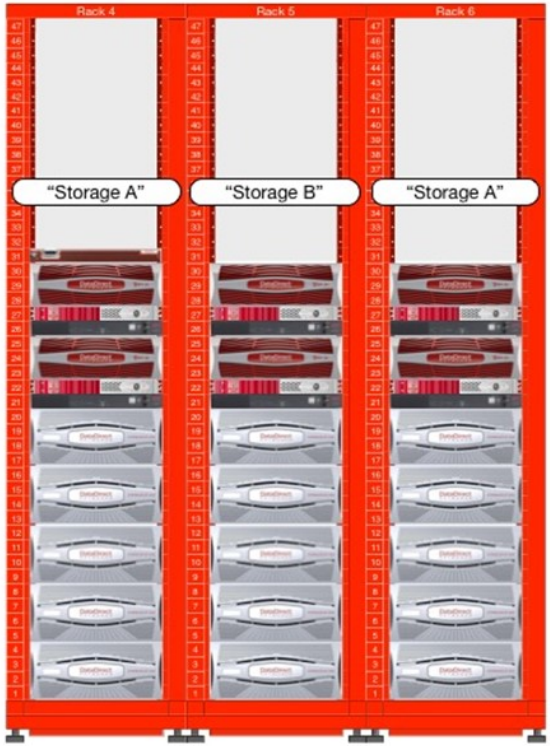
- 242 x 1.6TB Read Intensive SSD 12GB/s 4Kn

SAN C

- 330 X 8TB 7,200 RPM 12Gb/s 4Kn
- 25 x 1.6TB Read Intensive SSD 12GB/s 4Kn

SAN Monitoring - DirectMon Server

- Manage multiple systems from a single point
- Redundant Management Servers



Total parts lists

3 x **SFA12KXi Active/Active** Redundant Block Appliance.
Includes 2 x 12KX40IS-16FC, 32x FC16 ports

15 x **SS8460** 84-slot 6Gb/s SAS/SATA/SSD enclosures.

For storage A:
System 1
242 x 1.6TB Read Intensive **SSD** 12Gb/s SAS 4Kn drives

System 3
242 x 1.6TB Read Intensive **SSD** 12Gb/s SAS 4Kn drives

For storage B:
System 2
330 x 8TB 7,200 RPM 12Gb/s **SAS** 4Kn drives
25 x 1.6TB Read Intensive **SSD** 12Gb/s SAS 4Kn drives

For SAN Monitoring
1 x 1U DirectMon server

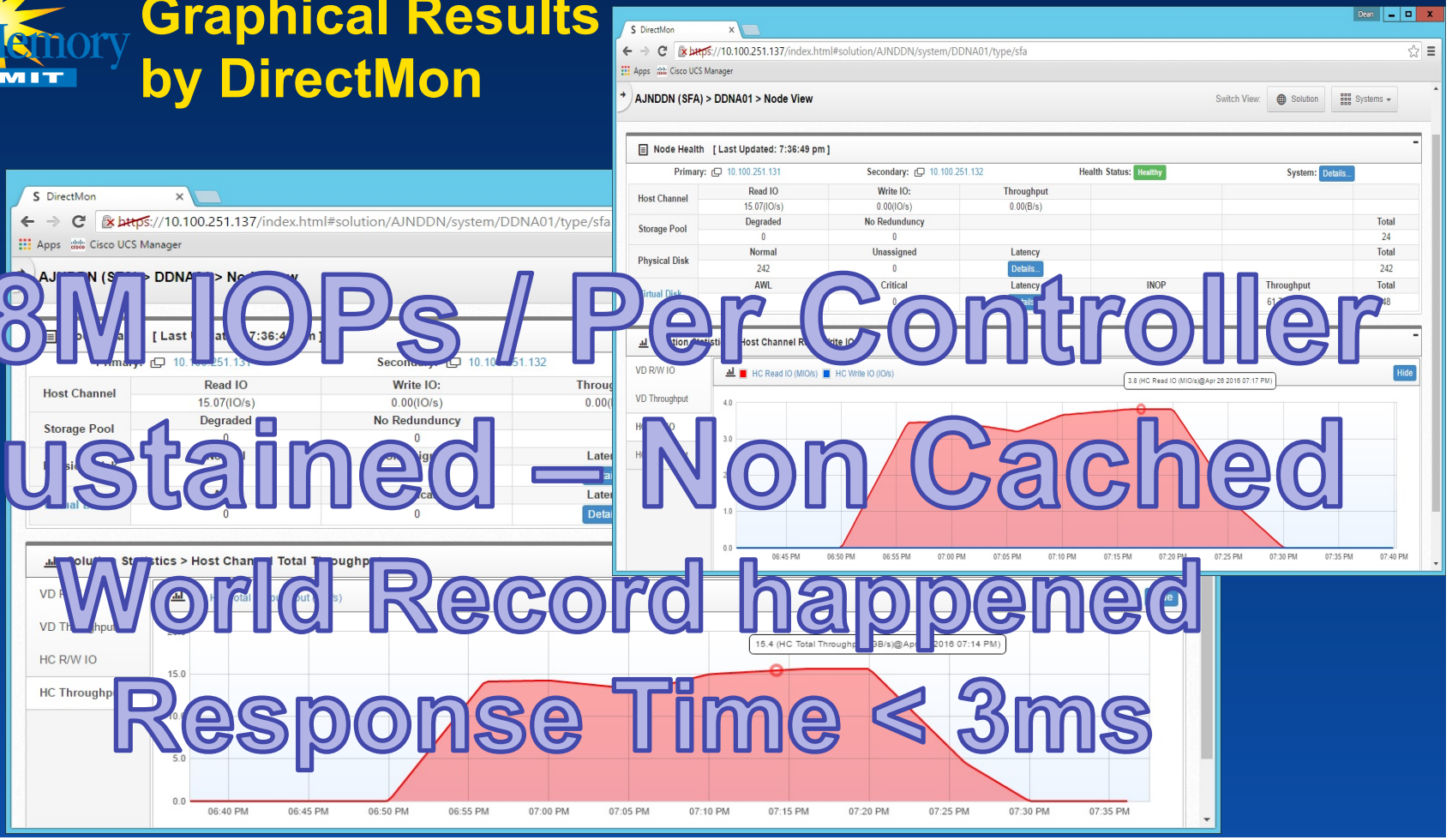
*(3 x **47U** racks to be supplied by customer)*

DDN STORAGE

Estimated Power**(Watts)**: 16,003 total
Estimated Heat **(BTU/h)**: 54,603 total
Weight without Racks**(kg)**:1,488 total
Estimated Airflow**(CFM)**: 4,224 total

Flash Memory SUMMIT

Graphical Results by DirectMon



3.8M IOPs / Per Controller Sustained — Non Cached

World Record happened

Response Time < 3ms

Three High End Systems and only 3 x 28 RU!!
~ 500 x SSD and ~ 400 x SAS_NL

DDN benefits on this Project

Problems We Solve

1. *Speed*
2. *Efficiency*
3. *Faster Insight*

How We Add Value and Deliver Differentiation

- Delivering fast ROI by installing IBM Qradar Security Software without tuning.
- Lowering Software licenses costs by 2x by DDN low latency < 3ms though maximizing Compute CPUs workload
- Reducing Opex → power and cooling requirements by 4x
- Instant data copy and management to disk, tape, cloud in the future

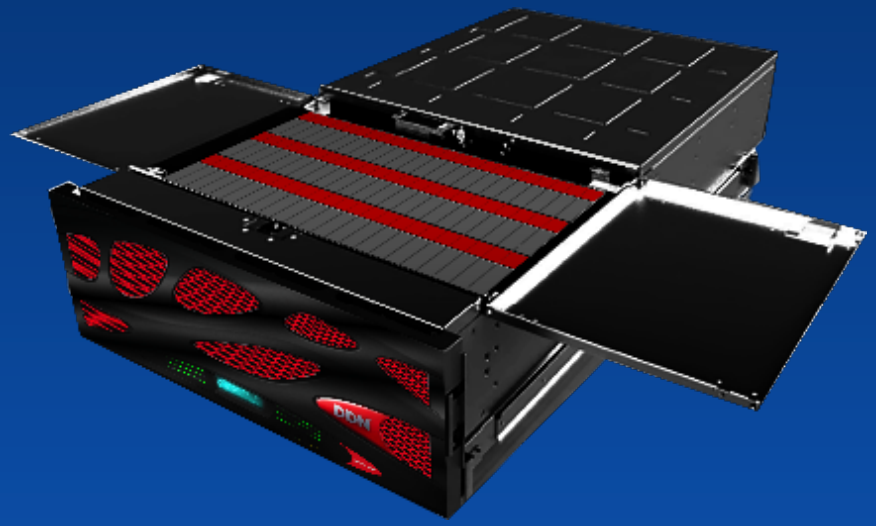
5 Petabytes of All Flash

DDN *Flashscale*™
1 rack

Flash Startup
3.3 racks

Major Storage Vendor
37.6 racks

All in One DDN *Flashscale*™ !!



What Is Your Dream?
Let us help you!

Questions & Answers

Thank you!

Stephanie Brewer
Customer Advocacy Program Manager
sbrewer@ddn.com

Kurt Kuckein
Director of Product Management
kkuckein@ddn.com