

# **Industry Trends Perspective Update Newsletter**

Information Technology and Data infrastructure
Cloud Virtual Physical Software Defined

# Volume 16, Issue VIII

Hello and welcome to this August 2016 Server StoragelO update newsletter.

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Enjoy this shortened summer edition of the Server StoragelO update newsletter.

Cheers GS

## **Industry Activity Trends**

With VMworld coming up this week, rest assured, there will be plenty to talk about and discuss in the following weeks. However for now, here are a few things from this past month.

At Flash Memory Summit (FMS) which is more of a component, vendor to vendor industry type event, there was buzz about analytics, however what was shown as analytics tended to be lometer. Hmmm, more on that in a future post. However something else at FMS besides variations of Non-Volatile Memory (NVM) including SSD, NAND, Flash, Storage Class Memory (SCM) such as 3D XPoint (among its new marketing names) along with NVM Expres (NVMe) was NVMe over Fabric.

This includes <u>NVMe over RoCE</u> (RDMA over Converged Ethernet) which can be implemented on some 10 Gb (and faster) Ethernet adapters as well as some InfiniBand adapters from Mellanox among others. Another variation is Fibre Channel NVMe (FC-NVMe) where the NVMe protocol command set is transported as a Upper Level Protocol (ULP) over FC. This is similar to how the SCSI command set is implemented on FC (e.g. SCSI\_FCP or FCP) which means NVMe can be seen as a competing protocol to FCP (which it will or could be). Naturally not to be left out, some of the marketers have already started with Persistent Memory over Fabric among other variations of Non- Ephemeral Memory over Fabrics. More on NVM, NVMe and fabrics in future posts, commentary and newsletter.

Some other buzzword topics regaining mention (or perhaps for the first time for some) includes FedRAMP, Authority To Operate (ATO) clouds for Government entities, and FISMA among others. Many service providers, cloud and hosting providers from large <u>AWS</u> and <u>Azure</u> to smaller <u>Blackmesh</u> have added FedRAMP and other options in addition to traditional, DevOps.

Some of you may recall me mentioning <u>ScaleMP</u> in the past which is a technology for aggregating multiple compute servers including processors and memory into a converged resource pool. Think the opposite of a hypervisor that divides up resources to support consolidation. In other words, where you need to scale up without complexity of clustering or to avoid having to change and partition your software applications. In addition to ScaleMP, a newer hardware agnostic startup to check out is <u>Tidal Scale</u>.

On the merger and acquisition front, the Dell / EMC deal is moving forward expected to close

soon, perhaps by time or before you read this. In other news, <u>HPE announced</u> that it is buying SGI to gain access to a larger portion of the traditional legacy big data Super Compute and High Performance Compute (HPC) market. One of the SGI diamonds in the rough that if you are not aware, is <u>DMF</u> for data management. <u>HPE and Dropbox also announced</u> a partnership deal earlier this summer.

That's all for now, time to pack my bags and off to Las Vegas for VMworld 2016.

Ok, nuff said, for now...

#### **StoragelOblog Posts**

Recent and popular Server StoragelOblog posts include:

- Happy 20th Birthday Windows Server, ready for Server 2016?
  In case you have not heard, Microsoft is celebrating the 20th birthday (or anniversary) of Windows Server. Microsoft has a nice site with info graphics and timelines of where Windows Server has been and accomplished over the past 20 years (view here). Some of you may remember from 20 years ago Windows Server with a different name aka Windows NT Server. Back in the day, if you recall (or read), server requirements were more in the 33 MHz vs. 3.3GHz range, 32MB of RAM Memory vs. 32GB to 320GB, 150MB HDD vs. 150GB SSD or 1.5TB HDD. Read more here.
- Server StorageIO June July 2016 Update Newsletter

View other recent as well as past <u>StoragelOblog posts here</u>

# **StorageIO Commentary in the news**

Recent Server StoragelO industry trends perspectives commentary in the news.

<u>Via FutureReadyOEM Q&A</u>: when to implement ultra-dense storage

<u>Via EnterpriseStorageForum Comments</u> on Top 10 Enterprise SSD Market Trends

<u>Via SearchStorage Comments</u> on NAS system buying decisions

<u>Via EnterpriseStorageForum Comments</u> on Cloud Storage Pros and Cons

<u>EnterpriseStorageForum Comments</u> on Top 10 Enterprise SSD Market Trends

View more Server, Storage and I/O hardware as well as software trends comments here

## **StorageIO Tips and Articles**

Recent and past Server StoragelO articles appearing in different venues include:

Via Iron Mountain <u>Preventing Unexpected Disasters: IT and Data Infrastructure</u>
Via FutureReadyOEM <u>Q&A: When to implement ultra-dense storage servers</u>
Via Micron Blog Whats next for NVMe and your Data Center - Preparing for Tomorrow

August 2016

Redmond Magazine: Trends - Evolving from Data Protection to Data Resiliency

IronMountain: <u>5 Noteworthy Data Privacy Trends From 2015</u>
InfoStor: <u>Data Protection Gaps</u>, <u>Some Good</u>, <u>Some Not So Good</u>

Virtual Blocks (VMware Blogs): **EVO:RAIL** • When And Where To Use It?

Check out these resources techniques, trends as well as tools. View more tips and articles here

# **StorageIO Webinars and Industry Events**

December 7: BrightTalk Webinar - Hyper-Converged Infrastructure (HCI) Webinar 11AM PT

November 23: BrightTalk Webinar - BCDR and Cloud Backup - Software Defined Data Infrastructures (SDDI) and Data Protection - 10AM PT

November 23: BrightTalk Webinar - Cloud Storage - Hybrid and Software Defined Data Infrastructures (SDDI) - 9AM PT

November 22: BrightTalk Webinar - Cloud Infrastructure - Hybrid and Software Defined Data Infrastructures (SDDI) - 10AM PT

October 20: BrightTalk Webinar - Next-Gen Data Centers - Software Defined Data Infrastructures (SDDI) including Servers, Storage and Virtualizations - 9AM PT

September 29: TBA Webinar - 10AM PT

September 27-28 - NetApp - Las Vegas

September 20: <u>BrightTalk Webinar</u> - Software Defined Data Infrastructures (SDDI) Enabling Software Defined Data Centers - Part of Software-Defined Storage summit - 8AM PT

September 13: Redmond Webinar - Windows Server 2016 and Active Directory What's New and How to Plan for Migration - 11AM PT

September 8: Redmond Webinar - Data Protection for Modern Microsoft Environments - 11AM PT

August 29-31: VMworld Las Vegas

August 25 - MSP CMG - The Answer is Software Defined - What was the guestion?

August 16: <u>BrightTalk Webinar</u> Software Defined Data Centers (SDDC) are in your future (if not already) - Part of Enterprise Software and Infrastructure summit <u>8AM PT</u>

August 10-11 Flash Memory Summit (Panel discussion August 11th) - NVMe over Fabric

See more webinars and other activities on the <u>Server StorageIO Events page here</u>.

### **Server StorageIO Industry Resources and Links**

Check out these useful links and pages:

storageio.com/links - Various industry links (over 1,000 with more to be added soon)
 objectstoragecenter.com - Cloud and object storage topics, tips and news items
 dataprotectiondiaries.com - Various data protection items and topics
 thenvmeplace.com - Focus on NVMe trends and technologies
 thessdplace.com - NVM and Solid State Disk topics, tips and techniques

<u>storageio.com/performance.com</u> - Various server, storage and I/O performance and benchmarking

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Thank you for reading the Server StoragelO Update newsletter