Industry Trends Perspective Update Newsletter
Information Technology and Data infrastructure
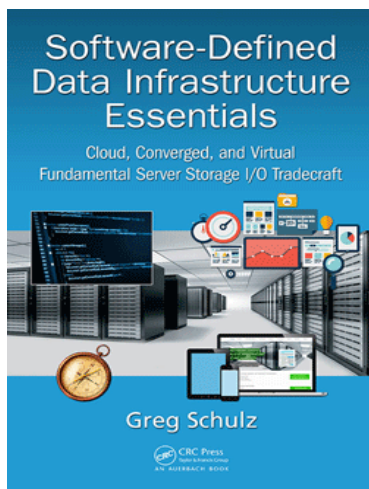Cloud Virtual Physical Software Defined

Volume 17, Issue 11 (November 2017)

Hello and welcome to the November 2017 issue of the Server StorageIO update newsletter.

2017 has a few more weeks left which look to be busy with end of year, holidays and other activities. Like the rest of 2017 November saw a lot of activity in and around the industry, setting up 2018 as yet another sequel to the busiest and most exciting year ever.

This is also the time of year when predictions for the following year (e.g. 2018) start to roll out, some of which are variations from those of the past or perennial favorites (e.g. the year of flash, the year of cloud, the year of software defined, the year of <insert_your_favorite_item_here>. Look for predictions and perspectives in future posts and newsletters.

having been a busy month, let's get to the content...

In This Issue

- Data Infrastructure Industry Activity
- News Commentary and Tips
- Server StorageIOblog posts

- Recommended Reading
- Various Events and Webinars
- Industry Resources and Links

Enjoy this edition of the Server StorageIO data infrastructure update newsletter.

Cheers GS

Data Infrastructure and IT Industry Activity Trends

Some recent Industry Activities, Trends, News and Announcements include:

On the heals of completing its acquisition of Brocade (note previously Avago (who bought LSI) also bought Broadcom and then changed its name to the more well-known entity. Broadcom also announced relocating it headquarters from Singapore to the US, along an over $100 Billion USD acquisition offer of Qualcomm (here is interesting perspective Apple might play). Broadcom has

been focused more on server, storage, I/O and general networking technology, while Qualcomm on mobile including phones and related items. Note that Qualcomm has previously made a $38.5 Billion USD offer for NXP semiconductors waiting regularity approval. View recent Broadcom financial results here.

Also in November server storage I/O controller chip maker Marvell (not to be confused with entertainment provider Marvel) announced a merger with Cavium who had previously acquired Qlogic among others. The resulting combined entity to be called Marvell will have an estimated $16 Billion USD revenue stream focused on server, storage, I/O and networking technologies among others.

In other merger and acquisition activity, VMware announced acquisition of VeloCloud for software defined wide area networking (SD-WAN).

With Super Compute 2017 (SC17) in November there were several announcements including from ATTO, DDN, Enmotus and Micron, Everspin, along with many others. By the way, in case you missed it at end of October Microsoft and Cray announced a partnership to bring Super Compute capabilities to Azure clouds. Speaking of Microsoft, there was also an announcement of adding VMware running on top of Azure (granted without VMware support), similar in concept to VMware on AWS (read hare).

Also at the end of November was AWS Reinvent with many announcements (more on those in a follow-up newsletter and posts). Prior to Reinvent AWS announced several server, storage and other data infrastructure security enhancements including for S3. Highlights from AWS reinvent include Fargate (serverless aka containers at scale without managing infrastructure), Elastic Container Services for Kubernetes (EKS), Greengrass (machine learning [ML] data infrastructure), along with many others.

Fargate is for those who want to leverage serveless microservices containers without having to devote DevOps and related activity to the care and feeding of its data infrastructure. In other words, Fargate is for those who want to focus maximum effort on the business applications, vs. the business of setting up and maintaining the data infrastructure for serverless On the other hand, AWS also announced EKS for those who want or need to customize their serverless data infrastructure including around Kubernetes among others.

In other industry activity, Taiwanese based Foxconn who manufactures technology for the who's who of the industry announced progress towards their future Wisconsin based factory complex.

Over at HPE, the big news announcement is that CEO Meg Whitman is stepping down. HPE also announced new AMD powered Gen 10 Proliant services, as well as multi-cloud management solutions. HPE also announced new partnerships with DDN for HPC and SC, with Rackspace for selling private cloud services, along with Cloudian EMEA partnership among others.

OwnBackup announced a new version of their data protection software, while low-cost budget bulk storage service backblaze (B2) announced their more recent quarterly drive failure (or success) reliability reports. Meanwhile over at Quantum they released former Ceo Jon Gacek and rotated in new management.

Red Hat announced Ceph Storage 3 including CephFS (POSIX compatible file system), iSCSI gateway including support for VMware and Windows that lack native Ceph drivers, daemon deployment in Linux containers for smaller hardware footprint. Also included are enhanced monitoring, troubleshooting and diagnostics to streamline deployment and ongoing management. Red Hat also announced OpenShift version 3.7 for containers.

SANblaze announced NVMf and dual port NVMe capabilities for NVMe fabrics, while Linbit won an European grant to build out a software defined storage cloud scale out solution.

I often get asked who are the hot, new, trendy or other vendors and services to keep an eye on some of which I have mentioned in previous newsletters, as well as posts such as here and here. Moving in to 2018 some to keep an eye on (not all are new or trendy, yet they can enable you to be productive, or differentiate) include the following.

AWS, Bluemedora, Chelsio, Cloudian, CloudPassage, Compuverde, Databricks, Datadog, Datos, Enmotus, Everspin, Excelero, Fluree (Blockchain database), Google, Mellonox, Microsemi, Microsoft, Marvel and Cavium, MyWorkDrive, Red Hat, Rook, Rozo, Rubrik, Strongbox, Storone, Turbonomic, Ubuntu, Veeam, Velostrata, Virtuozo, VMware, WekaIO and others.

What the above means, is that it has been a busy month as well as year, and, the year is not over yet. There are still plenty of shopping days left both for christmas and the holidays, as well as for IT year-end spending, vendors looking to do acquisitions, or other last-minute projects. Speaking of which, drop me a note if you have any end of year, or new year projects Server StorageIO can assist you with.

Check out other industry news, comments, trends perspectives here.

Server StorageIO Commentary in the news, tips and articles

Recent Server StorageIO industry trends perspectives commentary in the news.

Via HPE Insights: Comments on Public cloud versus on-prem storage
Via DataCenterKnowledge: Data Center Standards: Where's the Value?
Via arsTechnica: Comments on cloud backup disaster recovery

View more Server, Storage and I/O trends and perspectives comments here

Server StorageIOblog Data Infrastructure Posts

Recent and popular Server StorageIOblog posts include:

- IT transformation Serverless Life Beyond DevOps Podcast
  In this Server StorageIO podcast episode New York Times CTO / CIO Nick Rockwell (@nicksrockwell) joins me for a conversation discussing Digital, Business and IT transformation, Serverless Life Beyond DevOps and related topics.Read more here.

- Data Protection Diaries Fundamental Topics Tools Techniques Technologies Tips
  This is a multi-part series on Data Protection fundamental tools topics techniques terms technologies trends tradecraft tips as a follow-up to my Data Protection Diaries series, as well as a companion to my new book Software Defined Data Infrastructure Essentials – Cloud, Converged, Virtual Server Storage I/O Fundamental tradecraft (CRC Press 2017).

  Posts in this series include:

    - Part 1 – Data Infrastructure Data Protection Fundamentals
    - Part 2 – Reliability, Availability, Serviceability (RAS) Data Protection Fundamentals
    - Part 3 – Access Availability RAID Erasure Codes (EC) including LRC
    - Part 4 – Data Protection Recovery Points (Archive, Backup, Snapshots, Versions)
    - Part 5 – Point In Time Data Protection Granularity Points of Interest
    - Part 6 – Data Protection Security Logical Physical Software Defined
    - Part 7 – Data Protection Tools, Technologies, Toolbox, Buzzword Bingo Trends
    - Part 8 – Data Protection Diaries Walking Data Protection Talk
    - Part 9 – who's Doing What (Toolbox Technology Tools)
    - Part 10 – Data Protection Resources Where to Learn More

  Read more here.

- HPE Announces AMD Powered Gen 10 ProLiant DL385 For Software Defined Workloads
  HPE Announced a new AMD EPYC 7000 Powered Gen 10 ProLiant DL385 for Software Defined Workloads including server virtualization, software-defined data center (SDDC), software-defined data infrastructure (SDDI), software-defined storage among others. These new servers are part of a broader Gen10 HPE portfolioof ProLiant DL systems. Read more here.

- **AWS Announces New S3 Cloud Storage Security Encryption Features**
  Amazon Web Services (AWS) recently announced new Simple Storage Service (S3) encryption and security enhancements including Default Encryption, Permission Checks, Cross-Region Replication ACL Overwrite, Cross-Region Replication with KMS and Detailed Inventory Report. Another recent announcement by AWS is for PrivateLinks endpoints within a Virtual Private Cloud (VPC). Read more here.

In Case You Missed It #ICYMI

- October 2017 Server StorageIO Data Infrastructure Update Newsletter
- Data Infrastructure server storage I/O network Recommended Reading #blogtober
- PCIe Server Storage I/O Network Fundamentals #blogtober
- Introducing Windows Subsystem for Linux WSL Overview #blogtober
- Fixing the Microsoft Windows 10 1709 post upgrade restart loop
- September 2017 Server StorageIO Data Infrastructure Update Newsletter
- If Answer is NVMe, what are the questions?
- Hot Popular New Trending Data Infrastructure Vendors To Watch
- NVMe Wont Replace Flash By Itself They Complement Each Other

View other recent as well as past StorageIOblog posts here

Server StorageIO Recommended Reading (Watching and Listening) List

In addition to my own books including Software Defined Data Infrastructure Essentials (CRC Press 2017), the following are Server StorageIO data infrastructure recommended reading, watching and listening list items. The list includes various IT, Data Infrastructure and related topics. Speaking of my books, Didier Van Hoye (@WorkingHardInIt) has a good review over on his site you can view here, also check out the rest of his great content while there.

Intel Recommended Reading List (IRRL) for developers is a good resource to check out.

For those who are into Linux, container and hypervisor performance along with internals including cloud based, check out Brendan Gregg site. He has a lot of great material including some recent interesting posts ranging from dealing with workplace jerks, to whats inside AWS EC2 new KVM (switch from Xen based) hypervisors among others.

Here is a post by New York Times CIO/CTO Nick Rockwell The (Futile) Resistance to Serverless, also check out my podcast discussion with Nick here.

Over at Next Platform they have some interesting perspectives on Intel's next Exascale architecture worth spending a few minutes to read.

Watch for more items to be added to the recommended reading list book shelf soon.

Events and Activities

Recent and upcoming event activities.

Nov. 9, 2017 - Webinar - All You Need To Know about ROBO Data Protection Backup
Nov. 2, 2017 - Webinar - Modern Data Protection for Hyper-Convergence

See more webinars and activities on the Server StorageIO Events page here.

Server StorageIO Industry Resources and Links

Useful links and pages:
Data Infrastructure Recommend Reading and watching list
Microsoft TechNet - Various Microsoft related from Azure to Docker to Windows
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

OpenStack.org - Various OpenStack related items
storageio.com/downloads - Various presentations and other download material
storageio.com/protect - 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
storageio.com/converge - Various CI, HCI and related SDS topics
storageio.com/performance - Various server, storage and I/O benchmark and tools
VMware Technical Network - Various VMware related items

Connect and Converse With Us

Subscribe to Newsletter - Newsletter Archives - StorageIO.com - StorageIOblog.com

About Us, Privacy Policy, Disclosure and Copyrights

About Us - Privacy Policy - Disclosure

Thank you for reading this Server StorageIO Update newsletter