



## Industry Trends Perspective Update Newsletter

Information Technology and Data infrastructure  
Cloud Virtual Physical Software Defined

### Volume 15, Issue IV

Hello and welcome to this April 2015 Server and StorageIO update newsletter.

Thus this months newsletter has a focus on object storage for archiving, bulk data, unstructured data, big data, archiving and protection among other scenarios.

Enjoy this edition of the Server and StorageIO update newsletter and watch for new tips, articles, StorageIO lab report reviews, blog posts, videos and Podcasts along with in the news commentary appearing soon.



### StorageIOblog posts

April StorageIOblog posts include:

- Cloud conversations: [AWS EFS Elastic File System \(Cloud NAS\) First Preview Look](#)
- Blog and Podcast [S3motion Buckets Containers Objects AWS S3 Cloud and EMCcode](#)
- Data Protection Gumbo (Blog & Podcast) [Protect Preserve and Serve Information](#)
- In case you missed it, March 2015 [Server StorageIO Newsletter](#)

View other recent as well as past [blog posts here](#)

### April Newsletter Feature Theme Cloud and Object Storage Fundamentals

There are many facets to object storage including

### In This Issue

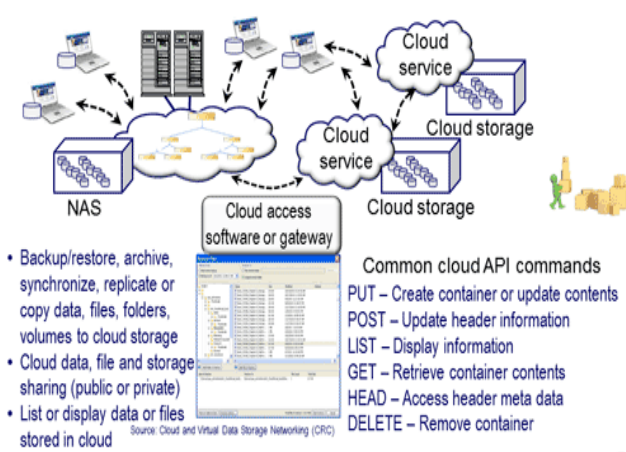
- Industry Trends Perspectives News
- Commentary in the news
- Tips and Articles
- StorageIOblog posts
- Events and Webinars
- StorageIOblog posts
- Server StorageIO Lab reports
- Resources and Links

### Industry News and Activity

Recent Industry news and activity

- GovTech: [Storage Costs Cloud Police Cam](#)
- Via BostonHerald: [Booting Up: Storage costs cloud police cam issue](#)
- Via ComputerWorld: [Amazon offers network file storage in the cloud](#)
- Via ComputerWeekly: [HGST marries helium HDD's and Himalaya in object storage](#)
- Via GoogleCloudPlatform Blog: [GCS Nearline Online storage at Offline price](#)
- Via MarketWatch: [Global Data Center Provider CyrusOne Announces Direct Connectivity to Google Cloud Platform](#)
- Via PRNewsWire: [Quantum Announces New Archive Solutions Designed To Reduce Unstructured Data Storage Costs](#)
- Via StorageIOblog: [AWS S3 Cross Region Replication storage enhancements](#)
- Via StreetInsider: [Western Digital \(WDC\) to Acquire Object Storage Software Amplitude](#)
- Via Enterprise Storage Forum: [Dell Invests in Object Storage Startup Exablox](#)
- Via Enterprise Storage Forum: [Introducing s3motion \(S3 and object access docker based appliance\)](#)
- Via Computerworld: Quantum enhances their cloud and object storage management with [new StorNext software version](#)
- [ScaleOut Software Releases Version 5.2 of Its In-Memory Computing Platform](#)
- [HP Inks Global Reseller Agreement With Object Storage Startup Scalify](#)
- [NetApp Introduces Software-Defined Object Storage for the Hybrid Cloud](#)
- Via InsideHPC: [Deploying Hadoop on Lustre](#)





Via [Cloud Virtual Data Storage Networking](#) (CRC)

- Object - Byte (or bit) stream that can be as small as one byte to as large as several TBytes (some solutions and services support up to 5TByte sized objects). The object contains what ever data in any organization along with meta data. Different solutions and services support from a couple hundred KBytes of meta-data to MBytes worth of meta-data. In terms of what can be stored in an object, anything from files, videos, images, virtual disks (VMDK's, VHDX), ZIP or tar files, backup and archive save sets, executable images or ISO's, anything you want.
- OPS - Objects per second or how many objects accessed similar to a IOP. Access includes gets, puts, list, head, deletes for a CRUD interface e.g. Created, Read, Update, Delete.
- Region - Location where data is stored that can include one or more data centers also known as Availability Zones.
- Sub-folder - While object storage can be accessed in a flat name space for commonality and organization some solutions and service support the notion of sub-folder that resemble traditional directory hierarchy.

Learn more about cloud, object storage and adjacent themes in [Cloud and Virtual Storage Networking](#) (CRC) and [www.objectstoragecenter.com](http://www.objectstoragecenter.com)



## OpenStack Manila (e.g. Folders and Files)

## Data Protection Gumbo Podcast Protect Preserve and Serve Data

In this episode, Greg Schulz is a guest on [Data Protection Gumbo](#) hosted by Demetrius Malbrough (@dmalbrough). The conversation covers various aspects of data protection which has a focus of protect preserve and serve information, applications and data across different environments and customer segments.

While we discuss enterprise and SMB data protection, we also talk about trends from Mobile to the cloud among many others tools, technologies and techniques. [Check out the podcast here.](#)

## Springtime in Kentucky With Kendrick Coleman of EMCcode Cloud Object Storage S3motion and more

In this episode, [@EMCcode](#) (Part of [EMC](#)) developer advocate Kendrick Coleman ([@KendrickColeman](#)) joins me (e.g. Greg Schulz) [for a conversation.](#)

Conversation covers what is [EMCcode](#), [EMC Federation](#), [Cloud Foundry](#), [clouds](#), [object storage](#), buckets, containers, objects, [node.js](#), [Docker](#), [OpenStack](#), [AWS S3](#), micro services, and the [S3motion](#) tool Kendrick developed.

S3motion is a good tool to have in your server storage I/O tool box for working with cloud and object storage along with others such as Cloudberry, [S3fs](#), Cyberduck, S3 browser among many others. You can [get S3motion for free from git hub here](#) Check out the [companion blog post for this podcast here.](#)

StorageIO podcast's are also available via



From StorageIO Labs  
 Research, Reviews and Reports  
**AWS S3 Cross-Region Replication**

AWS recently announced their new cloud based Elastic File Storage ([EFS](#)) to compliment their existing Elastic Block Storage (EBS) offerings. However are you aware of what is going on with cloud files within [OpenStack](#)?

For those who are familiar with OpenStack or simply talk about it and [Swift object storage](#), or perhaps [Cinder block storage](#), are you aware that there is also a file (NAS or Network Attached Storage) component called [Manila](#)?

In concept Manila should provide a similar capability to what AWS has recently announce with their Elastic File Service (EFS), or depending on your perspective, perhaps the other way around. If you are familiar and have done anything with Manila what are your initial thoughts and perspectives.

## What this all means

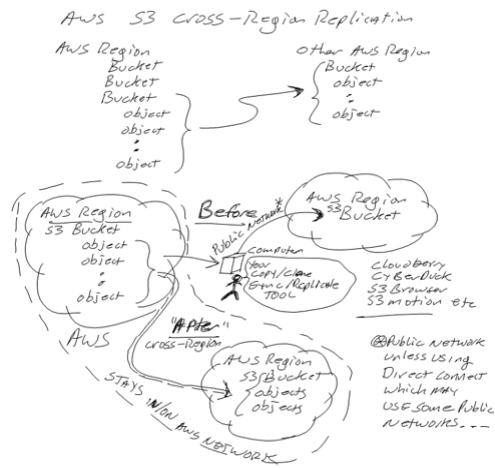
People routinely tell me this is the most exciting and interesting times ever in servers, storage, I/O networking, hardware, software, backup or data protection, performance, cloud and virtual or take your pick too which I would not disagree. However, for the past several years (no, make that decade), there is new and more interesting things including in adjacent areas.

I predict that at least for the next few years (no, make that decades), we will continue to see plenty of new and interesting things, questions include.

However, what's applicable to you and your environment vs. simply fun and interesting to watch?

Ok, nuff said, for now

Cheers gs



Moving and Replicating Buckets/Containers, Sub folders and Objects (Click on Image to read about [AWS Cross-Region Replication](#))

View other StorageIO lab review reports [here](#)

## Resources and Links

- [Cloud conversations: If focused on cost you might miss other cloud benefits](#)
- [AWS overview and primer](#)
- [Avoid Cloud Storage Pricing Surprises](#)
- [Are more than 5 nines of availability possible?](#)
- [Primary storage clouds vs cloud for backup](#)
- [storageio.com/links](#)
- [objectstoragecenter.com](#)
- [dataprotectiondiaries.com](#)
- [storageperformance.us](#)
- [thessdplace.com](#)
- [storageio.com/raid](#)

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**Thank you for reading the Server StorageIO Update newsletter**