Meet the Architect

Our next Meet the Architect session will be on FDMI (file data manipulation interface) by Liana Valdes, an exciting new addition to the CORTX project. FDMI allows data scientists to subscribe to event notifications and then perform custom manipulations or analyses on newly created (or updated) data, and Liana will be discussing this in the context of CORTX.

If you missed last month's session, with Gregory Kurtzer of CIQ (and Rocky Linux fame) on open source and enterprise, you can see it now on Youtube.

Anatoily Bilenko and Nikita Danilov's talk from September on the topic of DTM, it can also now be found on Youtube here.

CORTX Architectural Documents

We now have a ton of great architectural documents about CORTX available publicly in our Confluence pages. You can check them out here.

CORTX MOTR Interface Workshop

Join us November 5th, 2021 at 9am GMT for a workshop and hackathon on CORTX Motr. This workshop focuses on interfaces with Motr. The S3 interface is ubiquitious and easy to use. However, sometimes domain specific interfaces are simpler for scientists to use because they are closer to natural language and the scientific abstractions dominant in those domains. Thus, there is often value in adding domain specific interfaces between applications and the S3 interface. In this workshop, European scientists will describe the new interfaces they have developed to make it easier to work with CORTX.

This workshop/Hackathon will cover the various interfaces developed by the community to work on top of the Core Motr Interface that powers CORTX! These interfaces have been developed primarily by the European scientific and research communities.

The workshop will present the context under which these interfaces have been developed (The Sage2 EU R&D project) and then describe each of these interfaces. We then have a hands-on session where there is an opportunity to work directly with the API on the SAGE platform at Juelich Supercomputing Center – providing insights to the audience to create their own interfaces!

Email sai.narasimhamurthy@seagate.com for more information or to sign up.

CORTX at SC21 - "Object-stores for HPC - a Devonian Explosion or an Extinction Event?"

A session of interest to the entire CORTX community at SC21 on Tuesday, 16 November 2021 at 12:15pm - 1:15pm CST.

"The rise of Exascale brings major challenges for storage systems, reaching the scalability limits with legacy solutions such as POSIX and parallel file systems. As HPC experts rethink data access paths in the data intensive HPC paradigm, object store seems a promising path. Both scalable and flexible, it provides options within the HPC ecosystem, whereas it became a cornerstone for Cloud. The object storage paradigm lives a plentiful evolution, but has many facets. Is it the next stage of evolution for data storage in HPC as we move towards Exascale and beyond? Or is it just a passing fad?"

More information on this session can be found here.

ICYMI

Some open Issues/Discussions:

- There was an issue created in the cortx-hare repo which highlights that hare is supporting a very limited number of versions for facter, which can cause dependency issues https://github.com/Seagate/cortx-hare/issues/1834
- Another issue that was raised in the HARE repo now has been resolved with this PR that is pending approval https://github.com/Seagate/cortx-hare/issues/1830
- There is an issue in the s3server repo where the user is trying to figure out how to operate a single node cluster of Motr, HARE and s3 https://github.com/Seagate/cortx-s3server/issues/1361

Slack Discussions:

- There was a discussion in the cortx-motr slack channel about the current state of the guides for building the entire cortx stack https://cortxcommunity.slack.com/archives/C019S0SGWNQ/p1635164790003900
- There was also a discussion in cortx-s3 about the design decisions made for the cortx-s3server code https://cortxcommunity.slack.com/archives/C019YDQ8AKT/p1634799301011700

Some recent PRs:

- There was a PR in the new cortx-multisite repo for validation of source and dest buckets https://github.com/Seagate/cortx-multisite/pull/62 . This multisite repo was created to work on allowing CORTX to offer the feature of replicating across different physical locations when you read/write to your cloud.
- There was a PR in the cortx-utils repo that was created to enhance and integrate py-utils unittests into py-utils test_framework https://github.com/Seagate/cortx-utils/pull/592
- The cortx-manager repo had a PR which added a Kubernetes file in order to access the csm_agent and the s3 services https://github.com/Seagate/cortx-manager/pull/675
- In cortx-s3server when you delete an old object you sometimes will need to pass the PVID and layout id this PR allows this functionality https://github.com/Seagate/cortx-s3server/pull/1398

- There was a PR to update the instructions for the community build
  https://github.com/Seagate/cortx/pull/1316
- There was another PR to update the directory for the AWS instructions
  https://github.com/Seagate/cortx/pull/1315
- In the cortx-s3server repo put-bucket-versioning API was implemented
  https://github.com/Seagate/cortx-s3server/pull/1554
- There was a PR which separated out all 3rd party dependencies from the s3 rpm spec to
  third-party-rpms.txt https://github.com/Seagate/cortx-s3server/pull/1546
- In the Motr repo there was a fix or calling destroy btree before btree was empty
  https://github.com/Seagate/cortx-motr/pull/1180
- In the cortx-prvsnr repo there were minor changes in install.sh as tested on community
  build https://github.com/Seagate/cortx-prvsnr/pull/6255

That's all for this month! See you in December.

Best,