CORTX

Hello! Here's March's CORTX newsletter.

Meet the Architect

Our next Meet the Architect will be on Thursday, March 3rd. This session of Meet the Architect will feature Seagate CORTX architects Sai Narasimhamurthy, David Vasiliauskas, and Ganesan Umenesan. They will be presenting on some of our collaborative research projects happening in Europe. In addition to the overview, they will also discuss a variety of topics including ephemeral services, deep technical designs for namespace management, and hierarchical storage.

From April on, we are switching to a new schedule! Mark your calendars because MTA will move to the 2nd Tuesday of every month. More on this in our next newsletter.

If you missed February's session, you are now able to see it on Youtube. CORTX developers Andriy Tkachuk and Sining Wu discussed an exciting new development in the software layer used to connect Motr to S3 clients – the adoption of RADOS Gateway. It was a fascinating discussion with some guest appearances from our friends over at Ceph.

Deploying Stateless Applications on K8s

Seagate CORTX Kubernetes Architect Rick Osowski will be appearing on VMware's Tanzu Developer Center's Twitch stream, Enlightening. He will discuss deploying a stateless application on Kubernetes on 3/10/22 at 10am CT. He'll be joining them again on 3/24/22, so keep a look out! Check it out here: Enlightning | VMware Tanzu Developer Center.

SODACODE 2022

We're participating in SODACODE 2022, a data and storage hackathon hosted by our friends over at the SODA foundation. This is a fantastic hackathon that connects a lot of different open-source projects. You can read more about it at their website or check out their poster here. The hackathon runs for the month of March. You can find CORTX Issues by searching for the 'SODACODE2022' label.

Function Shipping Demo - Correction

Correction: Andriy Tkachuk is the CORTX engineer who has created a demo and instructions to show how function shipping can be used with Motr.

MiniKube

A guide to CORTX MiniKube deployment is now available! Special thanks to Sayed Alfhad Shah for putting it together.

ICYMI

Weekly round up of some things you may have missed in CORTX last week:

Slack Discussions:

Community discussion of updates to our Go Bindings

- A community member asked whether it was possible or not to install Motr on RHEL8.x / CentOS8.x (which it is possible to do!)
- There was another discussion about a function when doing a get-object s3 API call
- Installing cortx-hare as a dependency in cortx-utils was not working, discussed here.
- Good discussion on deployment issues with the AWS kubernetes guide.
- In #cortx-hare there was a question on finding python36-dubs.
- After configuring a single node vm there was an issue when running hctl bootstrap.
- Discussion on building Motr and running unit and system tests.
- There was a discussion in cortx-rgw about how to setup a 3-node RGW cluster and how to get the logs for this cluster.
- There was an update on a previous discussion about running cortx on minikube.

New Issues
CORTX images integration wasn't working.

- Suggestion to test and upload the documentation for CORTX Minikube deployment
- There was a problem with m0trace while running example2 in motr/example folder
- There was a panic error while running Motr unit test
- cortx-hare hctl status does not update the device to repairing status when device fails and is set to repair- instead it still broadcasts the device is failed.
- Multiple motr client won't initialize.

Updates and Changes

- We updated the CORTX Images integration to resolve issue #1364.
- In the main CORTX repo instructions for doing s3 IO outside of the cluster were added.
- In cortx-manager support for get IAM user info and delete IAM user API in RGW was added.
- There was a PR to fix the issue with hctl status not showing repairing state fr devices.
- When reusing the same Motr endpoint, hax needs 30 seconds time to sync and release for reuse by other process
- In CORTX-Hare, PR 1986 fixes the status given for nvec reply
- Also in CORTX-Hare, PR 1990 fixes the ha state setting.
- #1987 categorizes bytecount based on pool version.
- Pull Request 1436 is a new integration of CORTX and docker
- We fixed a memory leak in FDMI.
- We replaced cursor calls with get and iter routines.
- We fixed dix-client-ut:server unittest
- In cortx-motr, we added a new functionality that allows you to traverse the bytecount btree and dump all keys and records in a key buffer and record buffer

Best,

Rachel Novak

Community Manager