Rachel Novak

From:	Rachel Novak
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To:	Rachel Novak
Cc:	John Bent; Justin Woo; Patrick Hession
Subject:	CORTX Monthly News & Updates

It's time again for the monthly CORTX Community Newsletter! We have a lot of great video content for you this month, as well as some exciting news about our global CORTX Integration Challenge, so let's dive right in!

Motr Deep Dive Sessions & CORTX Demos
We are happy to announce that we have been working on uploading our deep dive sessions and demos to Youtube so that they are available to the whole community. You can check out the first few at the links below, and stay tuned- we still have many more to upload! See our Deep Dives here and the demos here.

CORTX Integration Hackathon
The CORTX Integration Challenge is live, and we already have over 150 participants. The challenge is simple: build an integration with CORTX. You can hear more about the challenge by watching our Datasphere session on it or just by checking out the challenge on Devpost.
If you know anyone who would be interested in participating, please help us spread the word! We've provided a banner and some suggested social copy below. There are prizes of up to $11,000 available, and we are excited to see what our participants come up with!

Are you a wizard with APIs? Storage fanatic? Data guru? Join Seagate for a virtual hackathon and win prizes totaling over $20K by integrating CORTX —Seagate's 100% open-source mass capacity object storage system — with the systems, tools, and platforms that underpin the data revolution.
Register now!

CORTX in the Sage2 Hackathon
In other exciting news, our parterns at Sage2 are hosted their own hackathon exploring the use of visualization tools with Sage2 on April 7th. Read more about it here: https://sagestorage.eu/news-and-events/sage2-visualization-hackathon

CORTX in Research:
As we mentioned in the CORTX integration challenge video, there is a number of exciting research projects involving CORTX. Some we have written about before in the newsletter, and we wanted to showcase a few more this month.

- **University of Chicago – HDD Optimized Object Storage for AI and ML.** (Haryadi Gunawi, Meng Wang and Daniar Kurniawan). With the growing popularity of AI and ML there is a demand for advanced storage solutions, especially those that use the more-economical HDDs rather than SSDs. With that in mind, the University of Chicago is building a storage system based on CORTX for ML training and inference that is optimized for HDDs. They are aiming to optimize I/O operations in HDDs to better utilize compute nodes and reduce the number of empty nodes by studying the patterns and structures of ML training and inference to identify optimizations in caching, prefetching, and more.
- **University of Wisconsin-Madison- Learned Indices for LSMs and B-Trees** (Remzi Arpaci-Dusseau) Research from the University of Wisconsin-Madison is pointing the direction towards improved lookup performance and reduced metadata storage overhead. LSM-Trees and B-Trees are the data structures that are used for storage engines in modern key-value (KV) stores. These two structures are optimal for different workloads; LSM-Trees perform better on update queries, whereas B-Trees are preferable for short range lookups.
- **University of Wisconsin-Madison- Enhancing Data Durability in CORTX** (Remzi Arpaci-Dusseau). Also out of the University of Wisconsin-Madison is work to assess and improve data durability in CORTX.

CORTX at Datasphere
CORTX was featured in three Datasphere deep dive sessions. If you missed them, here is your chance to catch up on all the latest of how CORTX is changing how the world does data.

Gregory Tourtetsky, our product manager, lead a session discussing the CORTX and Lyve Rack roadmaps. Watch here.

Mohamad El-Batal spoke about the results of a recent Seagate test which found successful optimization of previously fragmented output data-layout from the virtual data optimizer (VDO) data-reduction utility. Watch here:

John Bent lead a panel discussing CORTX with other researchers. Watch here:

That's all for April! Stay tuned in early May for an update on our hackathon winners as well as for our next Meet the Architect session.

Best,

Rachel Novak (she/her)
CORTX Community Manager

Schedule a meeting with me about CORTX Community