Autonomous Data Management at Edge: Challenges and possibilities.

Speakers:

Sanil Kumar D SODA Foundation/Huawei Vinod Eswar SODA Foundation/Wipro

Edge Cloud Computing usually talks about compute, memory, and latency. However, for large deployments of Edge Cloud, the data at the edge is critical for edge computing be possible. Any typical edge cloud could contain heterogeneous hardware, platforms, and of course distributed heterogeneous storage.

Sanil and Vinod from their experience working in Edge Computing, Cloud Native, Data Management, Storage, and CSI, provide methods and architecture to bring the data autonomy to edge computing. To illustrate the architecture and proposal, they use heterogeneous storage management solution models from SODA Foundation projects. The session discusses the demanding data management requirements at the edge, challenges, and opportunities. They think this session can trigger more technical thoughts to build an open and autonomous data management framework for Edge.

Benefits to the ecosystem:

Autonomous Data Management across heterogeneous storage can bring out multiple technical challenges and opportunities for Edge Computing. Multiple projects like Kubernetes, SODA Foundation Projects, Edge Computing platforms like KubeEdge, EdgeX will be discussed. This can provide potential collaboration opportunities.

Sanil Kumar D

TSC Member, Architecture Lead, SODA Foundation, Maintainer KubeEdge(CNCF) Chief Architect, Head India SODA Team, Huawei Technologies

Sanil has over 20 years of Industry experience in Linux, Open Source, ARM Ecosystem, Cloud and Emerging Technologies(like Edge Computing, Blockchain, Distributed Computing). He holds multiple patents, published papers & presented sessions and keynotes in international conferences, was Linux Foundation Yocto Project Advisory Board member, collaborates with IEEE(Roof Computing), CCICI, blockchain groups, Organizer of CNCF and SODA Foundation meetup groups. Currently focusing on Ecosystem, Technology Roadmap for SODA Foundation on Data Management Domain. He does blog/creative writing at skdwriting.wordpress.com. Keen to work with developers and enable their careers through open source.

vinod.eswar@wipro.com Vinod Eswaraprasad, Chief Architect, Global Head of Cloud&Platform Practice, Wipro

Vinod Eswaraprasad is a Chief Architect, and Global Head of Cloud and Platform Practice at Industrial and Engineering Services, Wipro. He has been working in the area of building fault-tolerant, scalable, and distributed platform architecture, and design for last 23 years. In the current role, Vinod is engaged in building integrated Cloud and Storage solutions targeted towards multiple industry segments, especially focusing on cloud-native computing and hybrid/multi-cloud architectures. His main area of interest are distributed computing, cloud/hyper-scale computing, and storage technologies.

Explore Edge Data Management Requirements and Architecture
Analyse Edge Data Management challenges and opportunities
Discuss on possible collaboration among SODA Foundation, CNCF(KubeEdge, Kubernetes, CSI..), EdgeX(LF) for a unified framework
Discuss and collect inputs on the current architecture proposal and future