Technical Advisory Council (TAC)

Update to Akraino Community

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TAC Chair

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THE LINUX FOUNDATION

LF EDGE

https://wiki.lfedge.org/pages/viewpage.action?pageId=1671298

LF Edge – Unified umbrella for Edge Projects

AKRAINO EDGE STACK

Aims to create an open source software stack that supports high-availability cloud services optimized for edge computing systems and applications.

BAETYL

Baetyl offers a general-purpose platform for edge computing that manipulates different types of hardware facilities and device capabilities into a standardized container runtime environment and API, enabling efficient management of application, service, and data flow through a remote console both on cloud and on prem.

EDGE X FOUNDRY

Highly flexible open source software framework that facilitates interoperability between heterogeneous devices and applications at the IoT Edge, along with a consistent foundation for security and manageability regardless of use case.

EDGE VIRTUALIZATION ENGINE

An open abstraction engine that simplifies the development, orchestration and security of cloud-native applications on distributed edge hardware. Supporting containers, VMs and unikernels, EVE provides a flexible foundation for Industrial and Enterprise IoT edge deployments with choice of hardware, applications and clouds.

FLEDGE

Fledge is an open source framework and community for the Industrial Edge. Architected for rapid integration of any IIoT device, sensor or machine all using a common set of application, management and security REST APIs with existing industrial "brown field" systems and clouds.

HOME EDGE

Interoperable, flexible, and scalable edge computing services platform with a set of APIs that can also run with libraries and runtimes.

OPEN GLOSSARY OF EDGE COMPUTING

Uses common dictionary-making techniques to maintain a database of canonical definitions for components and concepts important to edge computing. By advocating for industry-wide adoption of common terms, the project seeks to improve dialog and understanding. The project also maintains the Edge Computing Landscape.

LF Edge Mission – Why we exist

Create a <u>unified community</u> for Open Source Edge that

› fosters *cross-industry collaboration* across IOT, Telecom, Enterprise and Cloud ecosystems

› enables organizations to accelerate *adoption* and the pace of innovation for edge computing

› delivers value to end users by providing a *neutral platform* to capture and distribute requirements across the umbrella

› seeks to facilitate *harmonization* across Edge projects

Details

Unified Community/Cross Industry collaboration
- Developers, SDO, Consortiums, End Users, Vendors, SI
- Markets (Telecom, Enterprise, IOT, Cloud)
- Other OSS community (Upstream first)

Accelerate Adoption & Project Harmonization
- Reference Solutions (Blueprints/Operations/Mgmt) spanning projects, use cases, markets (including focused Vertical Solutions Groups)
- Interoperability & Integration testing (projects, vendors, hardware, software)
- Scope of LF Edge (On prem – device Edge to Telecom thick edge)
- Scope of Edge Stack (Device to APIs connecting Edge Apps) through lose coupling of projects (tight only as needed by blueprints)
- Provide process for life cycle mgmt & architecture framework to facilitate project harmonization

LF Edge 2020: Key Objectives

1. *Unifying* Open Source Edge *Communities & frameworks* across IOT, Enterprise, Cloud & Telecom Edge and grow community
   › Launch education and training courses beyond thought leadership/glossary

2. Keep LF Edge *Open & Interoperable* with
   › Hardware, Silicon, Cloud, OS, Protocol independence
   › Bringing the best of telecom, cloud, IOT & enterprise – location, latency & mobility

3. *Collaborate and Integrate* with upstream and downstream OSS communities and drive additional value by new projects across verticals with Blueprints to accelerate deployment of use cases
   › Focus on Cross Project collaboration (including demos, whitepapers..)
   › In collaboration with Consortiums/SDO (IIC, AECC, OEC, ETSI)
   › Align Major events around IOT SWC & ONES (expanded to include Edge)

Primary Charter of the TAC

"Facilitate communication and collaboration among multiple Technical Projects"

2020 TAC Objectives

Foster collaboration across all LF Edge projects

Create a "better together" environment

Enable and encourage cross-project collaboration

TAC Activities

Architectural White Paper – Across all projects. Led by Vikram

Cross Project Demos – Aimed at ONES

Community cross-LF Edge face-to-face gatherings:

- ONES LA Unconference, April 20-21
  https://wiki.lfnetworking.org/display/LN/2020+ONES%3ANA+Unconfrence+Topic+Proposals
    - LF Edge/LF Networking session
    - LF Edge/OpenStack Foundation Edge Computing Working Group session
    - LF Edge – project only session? (not currently scheduled; thoughts?)
- Open Source Summit (OSS) Austin Unconference, June 22-24

Feedback

› What else would you like to see the TAC doing?

› What are we doing well?

› What are we doing poorly?

› Any other open feedback?

Thanks

Questions?

Comments?