Linaro Edge & Fog Computing group

- **LEDGE Web Page - https://www.linaro.org/engineering/groups/ledge/**
- **LEDGE presentation - https://docs.google.com/presentation/d/1OQcxZjPy26r_SUSLxQ0ftqIhUrTyrxZUk7MRqPszUxA/edit?usp=sharing**
- **IRC Channel on Freenode -**
- **Mailing list -**
- **Weekly meeting calendar invite -**
- **Use cases meeting calendar invite -**

LEDGE is a group dedicated to edge computing at Linaro.

Our goal is to create a common software substrate, named LEDGE Reference Platform, to simplify creation of lightweight Edge Stacks such as Akraino Eliot, Akraino micro-MEC, IOTivity, SAP Leonardo and many others.

The LEDGE RP comprises an operating system with low foot print container support and software frameworks to leverage any hardware acceleration (GPUs, audio, video...).

> *The LEGE RP runtime shall consume less than 100MB and the persistent storage occupation shall be in the range of half a GB.*

It will be distributed in three flavors: Fedora IoT edition based, Debian Pure Blend and Open Embedded recipe.

On the firmware front, LEDGE will ensure UEFI interface extensions to U-Boot so that the operating system can assume UEFI compatibility regardless of the firmware nature. LEDGE will extend U-boot to support UEFI compliant SecureBoot and later Measured Boot (with either a hardware or a firmware TPM v2).

For OTA technologies, LEDGE participate to Industrial Internet Consortium to develop both standard and reference implementation of OTA related technologies. In particular it will implement UEFI update capsules in U-boot and allow the various platform firmwares (TrustedFirmware, OPTEE...), keys, certificates, secrets to be updated in a consistent manner regardless of the Arm processor.

Lastly, confidential computing support will be integrated to simplify creation of applications for trust such as "non repudiable logs", "device onboarding". This includes but is not limited to support of OPTEE applications and Microsoft Open Enclave applications.

The intent is that LEDGE Reference Platform becomes the upstream project of the Akraino Eliot Lightweight OS and the basis for Akraino micro-MEC Blue Print.