



Akraino R5 includes ELIOT IOT-Gateway blueprint an Akraino approved blueprint under ELIOT Blueprint Family. BP is intends to develop a fully integrated edge infrastructure and running edge computing applications on lightweight Edge Nodes.

Akraino Blueprint: ELIOT Edge Lightweight and IOT – IOT Gateway

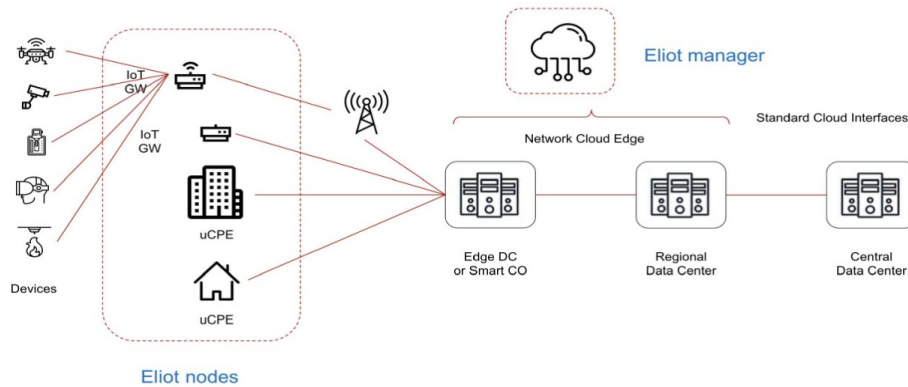


Figure 1: High level Architecture

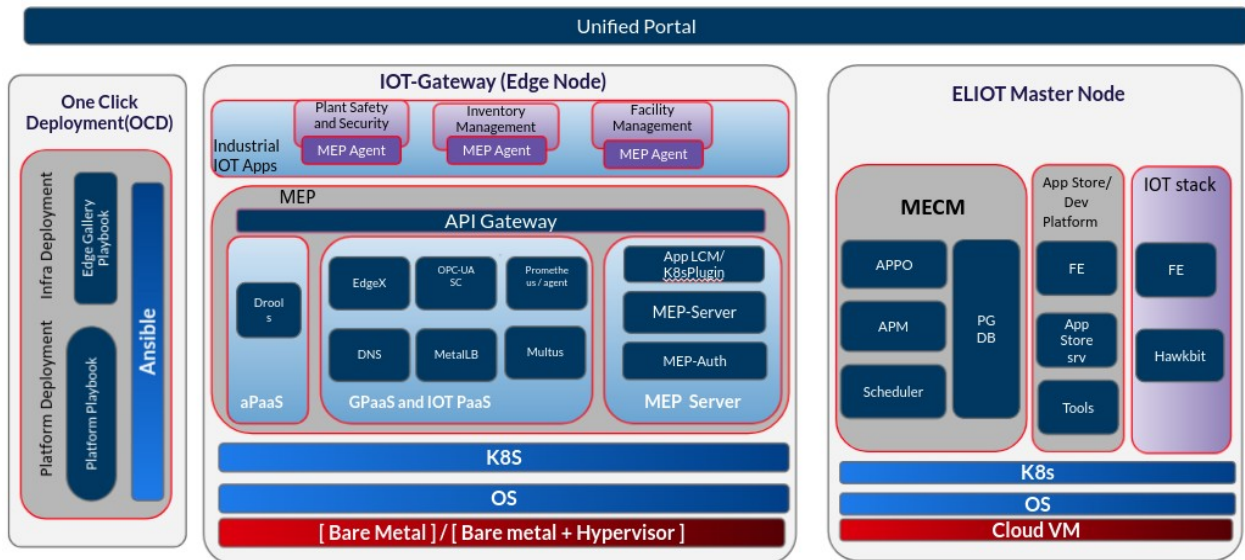


Figure 2: Software Architecture

Overview

ELIOT is project under Akraino approved blueprint family and part of Akraino Edge Stack, which intends to develop a fully integrated edge network infrastructure and running edge computing applications on lightweight Edge Nodes. ELIOT targets on making the edge node a lightweight software stack which can be deployed on edge nodes which have limited hardware capacity by leveraging lightweight OS, container running environment and container orchestration applications.

EdgeX and OPC-UA framework integrated on ELIOT platform for enable industrial IOT use cases. Portal for platform manage is integrated and single click BP installation is provided for quickly deploy Eliot on multiple platforms. ELIOT CLI is provide to interactively connect and manage platform. Interested developer can use these utilities to deploy ELIOT and mange with ease.

Key features in Release 5:

- Upstream project EdgeGallery upgrade from 0.9 to 1.1 which added new Features as below:
 1. Edge Portal
 2. ATP(application test),
 3. VM based workload.
- OCD scripts optimisations for easier up gradation of EdgeGallery versions.
- Bug fixing:
 1. local storage issues for Hawkbit PVCs
 2. OPC-UA container python version fix

For more information: <https://wiki.akraino.org/display/AK/ELIOT+%3A+Edge+Lightweight+and+IoT+Blueprint+Family>

Akraino R5 is now available! For more information: <https://www.lfedge.org/projects/akraino/> or <https://wiki.akraino.org/>

[BACK]



Akraino Edge Stack is an open source project under the LF Edge umbrella that creates edge software stacks that supports high-availability cloud services optimized for edge computing

systems and applications. It offers users new levels of flexibility to scale edge cloud services quickly, to maximize the applications and functions supported at the edge, and to help ensure the reliability of systems that must be up at all times. The Akraino Edge Stack platform integrates multiple open source projects to supply a holistic Edge Platform, Edge Application, and Developer APIs ecosystem.

- Akraino uses the “blueprint” concept to address specific Edge use cases to support an end-to-end solution.
- A blueprint is a declarative configuration of the entire stack-- i.e., edge platform that can support edge workloads and edge APIs.
- To address specific use cases, a blueprint architecture is developed by the community and a declarative configuration is used to define all the components used within that architecture such as hardware, software, tools to manage the entire stack, and method of deployment (Blueprints are maintained using full CI/CD integration and testing by the community for ready download and install).

For more information: <https://www.lfedge.org/projects/akraino/> or <https://wiki.akraino.org/>.

[SIDEBAR]



Akraino is part of the LF Edge umbrella organization that establishes an open, interoperable framework for edge computing independent of hardware, silicon, cloud, or operating system. By bringing together industry leaders, LF Edge creates a common framework for hardware and software standards and best practices critical to sustaining current and future generations of IoT and edge devices.

LF Edge Projects address the challenge of industry fragmentation, and collaborates with end users, vendors, and developers to transform all aspects of the edge and accelerate open source developments.

[Insert Logos for: Akraino, Baetly, Fledge, EdgeX Foundry, Glossary of Edge Computing Home Edge, Project EVE]

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