Akraino R7 includes " CFN (Computing Force Network) Ubiquitous Computing Force Scheduling Blueprint " that provides multi-cloud scheduling and management solution based cloud native for industry users. These blueprints are tested and validated on real hardware supported by users and community members.

Akraino Blueprint: CFN (Computing Force Network) Ubiquitous Computing Force Scheduling Blueprint
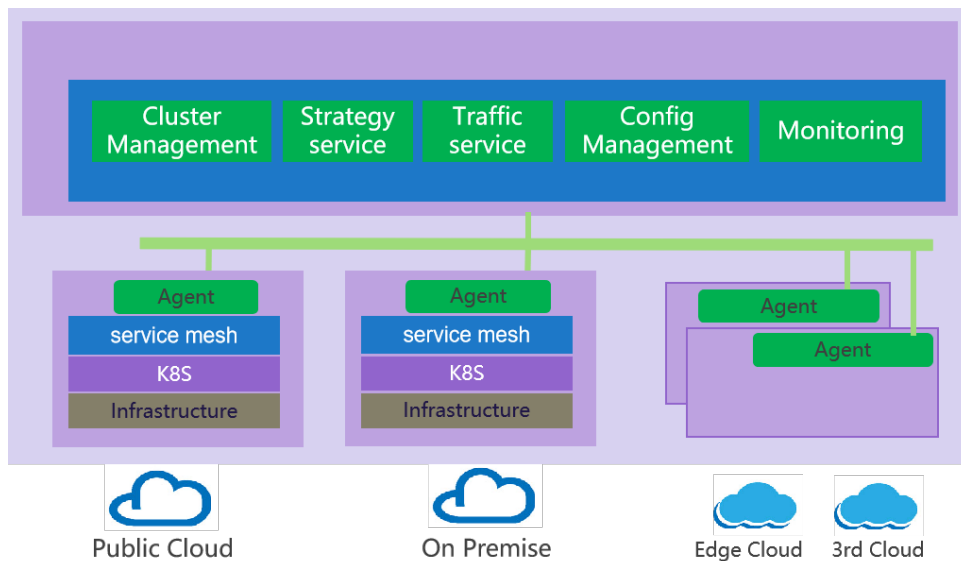
[Figure: Diagram of CFN (Computing Force Network) Ubiquitous Computing Force Scheduling Scheme]

Overview

CFN (Computing Force Network) Ubiquitous Computing Force Scheduling Blueprint mainly focuses on the technical scheme verification and real business scenario test of ubiquitous computing force scheduling, aiming to provide enterprise customers with a unified ubiquitous computing force management and scheduling platform that could manage public cloud, on premise, edge cloud and external third parties' computing force.

Ubiquitous computing force scheduling technology is based on fully absorbing the multi-level ubiquitous computing force resources at the cloud edge of the whole society, comprehensively considering the real-time state of the network, the mobile location of users, data flow and other factors, realizing unified management of computing force, cross-layer and agile deployment and dynamic adjustment of applications, and reducing the cost and complexity of operation and maintenance .

Real World needs:

-92 percent of respondents reported having a multi-cloud strategy* and has multi cloud vendors.

-Hybrid cloud management including public cloud, on premise and edge cloud.

-Multi-cluster deployment strategy to achieve high availability.

-Disaster recovery scenario. The application system is usually deployed in the geo-redundant mode.

Key Features and Implementations of Blueprint R7

■ Scheduling computing force by cluster weight;

■ Rescheduling computing force when a cluster resource is abnormal;

For more information:

[CFN (Computing Force Network) Ubiquitous Computing Force Scheduling - Akraino - Akraino Confluence](#)

Akraino R7 is now available! More details available here:

https://wiki.akraino.org/display/AK/Releases

Akraino Edge Stack, an open source project under the LF Edge umbrella that aims to create 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.
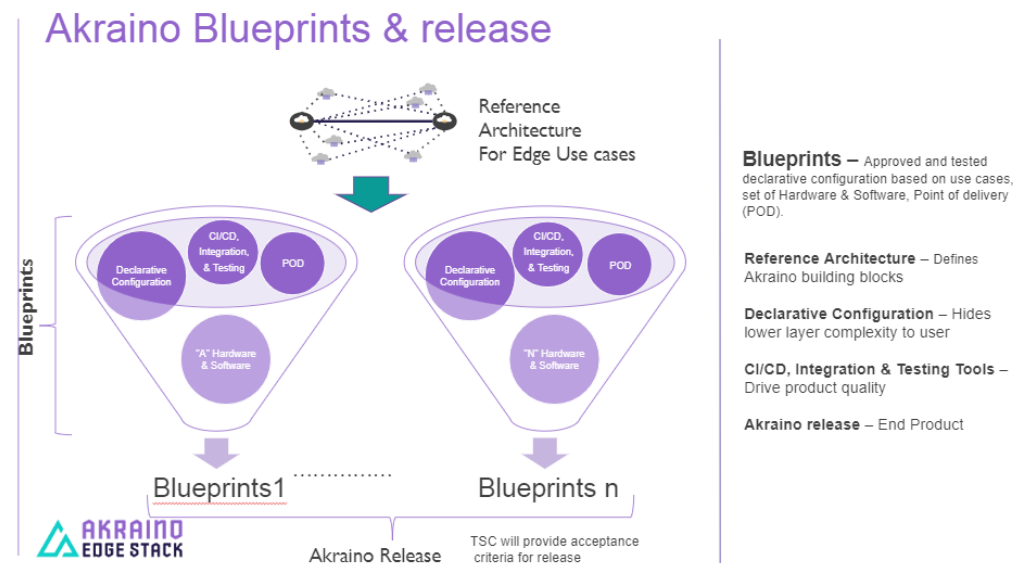
- Akraino uses the "blueprint" concept to address specific Edge use cases to support an end-to-end solution.
- A blueprint is a declarative configuration of the entire stack-- i.e., edge platform that can support edge workloads and edge APIs.
- To address specific use cases, a blueprint architecture 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/.

LF EDGE

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.

AKRAINO EDGE STACK

www.lfedge.org